INCOME DIVERSIFICATION OPPORTUNITIES AND ACCESS TO EU FUNDING FOR SMALL-SCALE FISHERIES IN THE EU

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FOREWORD

Small-scale fisheries (SSF) play a vital role in supporting the livelihood of coastal communities and local economies, and are known to have a smaller impact on the environment when compared with large-scale fisheries.

Over the past few decades, intensive fishing practices have caused a dramatic decline in marine biodiversity with serious consequences on the resilience of SSF.

To make matters worse, the current system does not allow a fair allocation of fishing opportunities in the EU, as required by the Common Fisheries Policy, and causes SSF to face increasing competition from other fleet segments.

To ensure a fair transition towards a more sustainable fishing industry and the achievement of Green Deal objectives, it is essential to recognise the importance of small-scale fisheries and secure their future through the sound implementation of available EU instruments by Member States and local authorities.

With this study, we aim to provide an overview of the status of SSF in the EU, as well as the EU funding opportunities currently available for SSF and best practices promoting income diversification for the segment.

Facilitating access to EU funding and scaling up best practices for income diversification will be crucial to ensure the segment's resilience.

In this report, the researchers provide a comprehensive analysis of key elements promoting successful income diversification initiatives and access to funding for SSF, as well as the main obstacles to unlocking their full potential.

The recommendations will prove valuable to policymakers and stakeholders across the EU to improve the resilience of SSF at the national and local level.

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EXECUTIVE SUMMARY

Current status of small-scale fisheries in Europe

European small-scale fisheries (SSF) represent a cultural tradition and a key driver for the sustainable blue economy of coastal communities, safeguarding traditional fishing techniques and contributing to the preservation of national and regional cultural heritage. SSF are generally embedded in distinct local contexts, traditions and environments, resulting in a variety of fishing technologies and practices. For this reason, defining SSF is not an easy task. In this report, following the latest EU definition (Regulation (EU) 2021/1139), SSF are considered "marine and inland fishing vessels of an overall length of less than 12 metres and not using towed gear … or … fishers on foot, including shellfish gatherers".

In Europe, FDI data (reference year 2020) show that SSF comprised 63% of EU fishing vessels. The countries with the highest number of SSF vessels are located in the Mediterranean (i.e. Greece, Italy and Croatia). In terms of landings, SSF represent only a small fraction (5%) of the overall European landings (FDI, 2020). However, the quality of seafood products landed by SSF is generally higher if compared with that of other fisheries. The value of landings by SSF represented 13% of all EU landings in 2019 (AER, 2021). SSF landings are often targeted towards supplying fish and fishery products to local and domestic markets, as well as subsistence consumption.

In Europe, this sector is under pressure from various sources, such as illegal, unreported and unregulated (IUU) fishing, recreational fisheries, competition with large-scale fisheries in the market, conflicts with other marine users for space (e.g. aquaculture, energy production) and resources (e.g. other fisheries exploiting the same stocks as SSF), the growing impact of top predators on catches and gears (e.g. dolphins, porpoises), and the increase in non-indigenous species (e.g. silver-cheeked toadfish). All these pressures, along with other risks deriving from the general depletion of fish stocks (and the consequent decrease in landings), the fluctuating prices of both fish and fuel, the uneven distribution of fishing opportunities compared with other fleet segments, and the increased pollution from anthropogenic activities, are likely to result in a further reduction of SSF income in the near future.

Multifunctionality: an opportunity for European SSF

Multifunctionality is widely recognised as a tool for income diversification. In the context of fisheries, it has been investigated in several studies and projects carried out at the local, EU and international level. It has also been addressed in the main EU policy instruments that have been implemented in various programming periods. Multifunctionality in fisheries can take different forms: from the diversification of primary production activities (e.g. gears and technologies) to the introduction of complementary activities within the fisheries sector (e.g. adding value in the fish supply chain) and outside it (e.g. environmental services, social services). Since the concept of multifunctionality is closely linked to the concepts of adaptability and transferability, it is a particularly interesting opportunity for the SSF sector. Indeed, SSF are by nature characterised by pluriactivity due to their intrinsic resilience, described as "adaptability and transformability" (Walker et al., 2004). SSF apply a variety of livelihood strategies involving flexibility within fisheries, geographical mobility and diversification. According to Salmi (2015), fishers are trying to adapt their strategies with other activities, interests and ideologies, such as the protection of biodiversity, leisure use and tourism. Multifunctionality in the context of the SSF sector can be the answer to declining profitability and employment, and to the sustainable use of resources in coastal communities.

Despite its relevance for the SSF sector and the efforts made by the EU to promote the diversification of activities, its full potential still needs to be unlocked. In this report, a review of the best practices in policies, programmes and

projects across the EU towards multifunctionality have been outlined to help depict the state of play and identify the development trajectories for multifunctionality in SSF. In this context, a better understanding of the state of play of SSF and the main challenges at EU and Member State (MS) level is a prerequisite. Therefore, the key facts and figures have been summarised as well.

Within the framework of EU fisheries and environmental policies, the relevance of SSF for the blue economy of coastal communities has been progressively increasing. Calls for greater levels of support to SSF have been on the rise since the adoption of the reformed Common Fisheries Policy (CFP) in 2013.

EU funding for SSF

The desk analysis accomplished in this report intends to showcase successful elements and obstacles resulting from the use of EU funds such as the European Maritime and Fisheries Fund (EMFF), Interreg and research programmes in the period 2014-2020 for SSF at EU and MS level. Bottom-up and participatory approaches, interactive engagement of key SSF actors, increased cooperation between SSF/research bodies/governments/NGOs/civil society, empowerment of human resources with new skills and competences, and valorisation of the practical knowledge of small-scale fishers can be listed as successful elements stemming from some of the operations funded by the EU in recent decades and described in this report. However, there is still a long way to go. Data from the evaluation of the performance of the EMFF (i.e. the main financial tool for the fisheries sector for the period 2014-2020) in relation to SSF are still not satisfactory compared with the ambitions and planned resources. Indeed, the lack of availability of specific data on SSF operations at national level (MS are not obliged to provide data filtered by sector), constraints in implementing operations such as a lack of interest from potential beneficiaries and difficulties in reaching the SSF category were reported as critical issues in EMFF implementation. Moreover, administrative burdens, complex application and implementation procedures and insufficient information for potential beneficiaries are still the main common obstacles to efficient and effective use of EU funding opportunities. Additionally, the SSF sector is composed of a large number of micro-enterprises, leading to an atomised entrepreneurial landscape which tends to be marginalised in decision-making processes, as many operators are not affiliated to formally recognised organisations or associations and there are few channels through which to participate.

Concerning income diversification in SSF, in addition to initiatives carried out by Fisheries Local Action Groups (FLAGs), which are considered the “natural partner” of SSF, the Interreg programmes have made a contribution by co-financing projects aimed at valorising SSF sustainability and promoting multifunctionality. Nevertheless, those initiatives were often confined to pilot initiatives with a short lifespan, and a quadruple helix approach (i.e. public authorities, industry, academia and citizens) has not been fully operationalised.

Looking at the programming period 2021-2027, income diversification in SSF may see a renewed opportunity for development since it is embedded in key topics of the 2030 EU strategies and programmes. A favourable and integrated policy framework can actually support and facilitate multifunctionality uptake in SSF with tools and resources. It can also ensure the durability and capitalisation of best practices, the development of new projects and initiatives, and greater cooperation between the different actors in the SSF sector.

INTRODUCTION

The small-scale fisheries (SSF) sector accounts for about 63% of the vessels in the EU commercial fleet (FDI 2020 data), representing a key driver for the development of the blue economy of coastal communities.

Thanks to the technical features of the fishing gears adopted by this sector (e.g. passive gears with low impact on the seabed and high selectivity), it is globally recognised that SSF generate a smaller impact on the environment and lead to more sustainable exploitation of marine resources when compared with large-scale fisheries.

Moreover, SSF are commonly acknowledged as a cultural tradition, and safeguarding traditional fishing gears and methods contributes to the protection of national and regional cultural heritage.

Despite its relevance for coastal communities, there is a lack of data on SSF which hampers an understanding of the real trends and socio-economic impact and the adoption of conventional top-down models for their management. Furthermore, this sector is composed of a large number of micro-enterprises, leading to an atomised entrepreneurial landscape which is often marginalised in decision-making processes, as many operators are not affiliated to formally recognised organisations/associations.

In recent programming periods, the EU has paid increasing attention to this form of fishing, since it is a significant source of livelihood for coastal communities. The 2014 Regulation on the European Maritime and Fisheries Fund (EMFF) also places a particular emphasis on SSF in terms of support for innovation and income diversification. The integration of tourism and fisheries to provide new products and services represents, for instance, a lever for complementary activities, making the best use of the cultural, environmental and social value embedded in SSF activities. SSF may also contribute to environmental protection, since it is compatible with the objectives of Marine Protected Areas (MPAs). Research and experience have shown that co-management of SSF, including in MPAs, helps restore the health of the marine environment through more equitable decision-making and better outcomes for fishers. In this context, capacity-building actions for co-management and the development of new skills for fishers, as well as the exchange of best practices, play an important role.

1. AIMS OF THE REPORT

In Europe, SSF provide crucial employment, preserve cultural heritage and sustain livelihoods for people in coastal communities. Yet in most European countries, this sector is under pressure from various sources. This report intends to contribute valuable inputs for supporting the diversification of SSF income, while ensuring that the available compensation provided by the EU is accessible to this segment.

To that end, the document focuses on EU policies and financial instruments (type and level of implementation) and initiatives and projects aimed at training and reskilling fishers to face these socio-economic challenges and develop/strengthen complementary activities.

The report includes a catalogue of best practices to showcase the role of small-scale fishers in MPA co-management, stewardship of marine resources and fisheries-related tourism initiatives, as well as their contribution to the EU blue economy in general.

2. TERMS AND DEFINITIONS

Abbreviations and acronyms

ACFR	Advisory Committee on Fisheries Research
AER	Annual Economic Report of the EU fishing fleet
AIR	Annual Implementation Report
CFP	Common Fisheries Policy
CLLD	Community-Led Local Development
EAF	Ecosystem Approach to Fisheries
EASME	Executive Agency for Small and Medium-sized Enterprises
EFH	Essential Fish Habitat
EMFF	European Maritime and Fisheries Fund
EMFAF	European Maritime Fisheries and Aquaculture Fund
EFF	European Fisheries Fund
EISMEA	European Innovation Council and Small and Medium-sized Enterprises Executive Agency
EC	European Commission
ERDF	European Regional Development Fund
ESIF	European Structural and Investment Funds
EU	European Union
FAO	Food and Agriculture Organisation of the United Nations
FAME	Fisheries and Aquaculture Monitoring and Evaluation
FARNET	Fisheries Areas Network
FDI	Fisheries Dependent Information
FLAGs	Fisheries Local Action Groups
FPN	Stationary uncovered pound nets
FPO	Pots and Traps
FRA	Fisheries restricted area
FYK	Fyke nets
GFCM	General Fisheries Commission for the Mediterranean
GNC	Encircling gillnets
GND	Driftnets
GNS	Set gillnets (anchored)
GSA	Geographical Subarea
GT	Gross Tonnage

GTN	Combined gillnets-trammel nets
GTR	Trammel nets
IUU	Illegal, Unreported and Unregulated fishing
LHM	Handlines and pole-lines (mechanised)
LHP	Handlines and pole-lines (hand-operated)
LLD	Drifting longlines
LLS	Set longlines
LOA	Length Overall
LSF	Large-Scale Fisheries
LTL	Troll lines
MA	Managing Authority
MPA	Marine Protected Area
MS	Member State
MSY	Maximum Sustainable Yield
NGO	Non-Governmental Organisation
NMP	National Marine Park
OP	Operational Programme
RF	Recreational Fisheries
RPOA-SSF	Regional Plan of Action for SSF in the Mediterranean and Black Sea
SAC	Scientific Advisory Committee on Fisheries
SSF	Small-Scale Fisheries
SSCF	Small-Scale Coastal Fisheries
SWOT	Strengths, Weaknesses, Opportunities and Threats
TA	Technical Assistance
TL	Total Length
UP	Union Priority
VMS	Vessel Monitoring System

Glossary

Active fishing gear – Gear which moves in the way of fish to capture it, such as trawls, seines, dredges, etc.

Catch – The total number or weight of individuals caught during fishing operations, including fish that were caught and released.

Common Fisheries Policy – The CFP is the fisheries policy of the European Union and includes a set of rules for sustainably managing European fishing fleets and conserving fish stocks.

Fisheries Areas Network – The network of people implementing CLLD under the EMFF.

Fishing effort – The amount of fishing gear of a specific type used on the fishing grounds over a given unit of time (e.g. total number of fishing days by fleet segment).

European Maritime and Fisheries Fund – One of the European Structural and Investment Funds (ESIF), it supports the implementation of the reformed Common Fisheries Policy (CFP) and the EU Integrated Maritime Policy.

Fisheries Dependent Information – The collection of catch and effort data, as well as biological sampling from commercial fisheries.

Large-scale fisheries – In contrast with the EU definition of SSF, vessels that do not belong to SSF belong to LSF (i.e. vessel length >12m, use of active fishing gear).

Passive fishing gear – Gear which is left in place for a period before retrieval. It may either attract fish using bait, or passively wait for a fish to swim into a net or trap. Examples of passive gear are gillnets, trammel nets, pots, traps, longlines, etc.

Small-scale coastal fisheries – EU definition (Regulation (EU) 2021/1139): fishing activities carried out by: (a) marine and inland fishing vessels of an overall length of less than 12 metres and not using towed gear as defined in point (1) of Article 2 of Council Regulation (EC) No 1967/2006 (28); or (b) fishers on foot, including shellfish gatherers.

Sustainable blue economy – All sectoral and cross-sectoral economic activities throughout the internal market relating to oceans, seas, coasts and inland waters, covering the Union's insular and outermost regions and landlocked countries, including emerging sectors and non-market goods and services, aimed at ensuring environmental, social and economic sustainability in the long term and which are consistent with the SDGs, and in particular SDG 14, and with Union environmental legislation. The term marks the new focus, outlining the transition from the previous concept of "blue growth" that was established back in 2012.

3. SSF IN THE EU: AN OVERVIEW

This chapter gives a picture of the state of play and challenges of the SSF sector in the EU, in terms of key figures for the SSF fleets, together with a simplified SWOT (Strengths, Weaknesses, Opportunities, Threats) analysis of the sector.

Key information on landing biomass, value of landings, number of vessels and landings by species was obtained from the Fisheries Dependent Information (FDI; reference year 2020), a database developed by the European Commission to support the management of fishing effort management regimes (available at https://stecf.jrc.ec.europa.eu/dd/fdi). Additional information was gathered from the Annual Economic Report of the EU fishing fleet (AER, 2021) for the reference year 2019.

The simplified SWOT analysis was elaborated by reviewing technical reports, studies and publications, and findings from stakeholder consultations held under EU projects and research activities.

Defining SSF is not an easy task (Davies et al., 2018). In fact, the analysis carried out by Pascual-Fernandez et al. (2020) on European SSF revealed huge variations among countries. In contrast to the relatively simple EU definition of SSCF which reads "fishing activities carried out by: (a) marine and inland fishing vessels of an overall length of less than 12 metres and not using towed gear as defined in point (1) of Article 2 of Council Regulation (EC) No 1967/2006 (28); or (b) fishers on foot, including shellfish gatherers" (Regulation (EU) 2021/1139), this sector is actually very diverse. The main reason for this is that SSF are usually embedded in distinct local contexts, traditions and environments, resulting in a wide variety of fishing technologies, practices and cultures.

In Denmark and Germany, vessels with an overall length of around 17-24 metres are considered small-scale, while in other countries (e.g. Greece, Portugal), an overall length of 12 metres is considered too large (Pascual-Fernandez et al., 2020) (Table 1). In many countries, small-scale fisheries include vessels using active fishing gear, such as shore seine (Croatia), purse seine (Malta) and trawling (various countries).

In Belgium, Denmark, Estonia, France, and Sweden, additional features – such as engine power, gross tonnage and trip duration – are also included in the definition of small-scale fisheries. There are only eight countries in which the EU definition of SSF matches the national one. However, in this report we will base our study on the EU definition.

Table 1. Definitions of SSF across European countries. VL = vessel length (m); engine power is expressed in kW, gross tonnage in GT and trip duration in hours (h). ND = not defined.

Country	Name for SSF	VL	Gear type	Other
Belgium	Small coastal fisheries	ND	all	≤221 kW, <70 GT, <48 h
Bulgaria	SSF	<12 m	passive	
Croatia	Small coastal fisheries	<12 m	passive, shore seine	
Cyprus	Small-scale inshore vessels	<12 m	passive	
Denmark	Coastal fisheries	<17 m	all	Bordata <48 h (80%)
Estonia	Coastal fisheries	<12 m	all	<183 kW, <38 GT
Finland	Coastal fisheries	<12 m	passive	
France	Small fisheries	<12 m	all	<24 h
Germany	SSF	<24 m	all	
Greece	Coastal fisheries	ND	passive	

Ireland	Inshore fisheries	<12 m	all	
Italy	Small-scale coastal fisheries	<12 m	passive	
Malta	SSF	<12 m	passive, purse seine	
Netherlands	Remaining coastal fisheries	ND	all	
Poland	SSF	<15 m	passive	
Portugal	Local artisanal fisheries	<12 m	passive	
Romania	Small-scale coastal fisheries	<12 m	passive	
Slovenia	Small coastal fisheries	<12 m	passive	
Spain	Small-scale gears	ND	all	
Sweden	Coastal SSF	<12 m	passive	<24 h
UK	Inshore fleet	<10 m	all	

Modified from Pascual-Fernandez et al., (2020).

Information on landing biomass, value of landings, number of vessels and landings by species was obtained from the Fisheries Dependent Information (FDI; reference year 2020), a database developed by the European Commission to support the management of fishing effort management regimes (available at *https://stecf.jrc.ec.europa.eu/dd/fdi*). In order to identify vessels belonging to the SSF segment, the following data were selected: (i) vessels belonging to the <12m vessel length classes (i.e. VL0006, VL0010, VL0612, VL1012); (ii) passive gear (i.e., FPN, FPO, FYK, GNC, GND, GNS, GTN, GTR, LHM, LHP, LLD, LLS, LTL). Vessels were assigned to the SSF category only when both criteria were met. The remaining fleets (e.g. trawling, dredges, seines, etc.) will be categorised as "Others".

Additional information was obtained from the Annual Economic Report (AER, 2021), for the reference year 2019.

3.1 European SSF in numbers

In the following sub-chapter, data elaborated from the FDI database (reference year 2020) and information extracted from the AER (reference year 2019) have been used.

Overall, out of the 71,699 fishing vessels belonging to the European fleet and operating in 2020, 44,871 belonged to the SSF segment (63% of the total number of vessels) (FDI data, 2020).

The highest number of SSF vessels was observed in Greece (12,930), followed by Italy (8,099) and Croatia (5,298), confirming the importance of this sector in the Mediterranean (Figure 1).

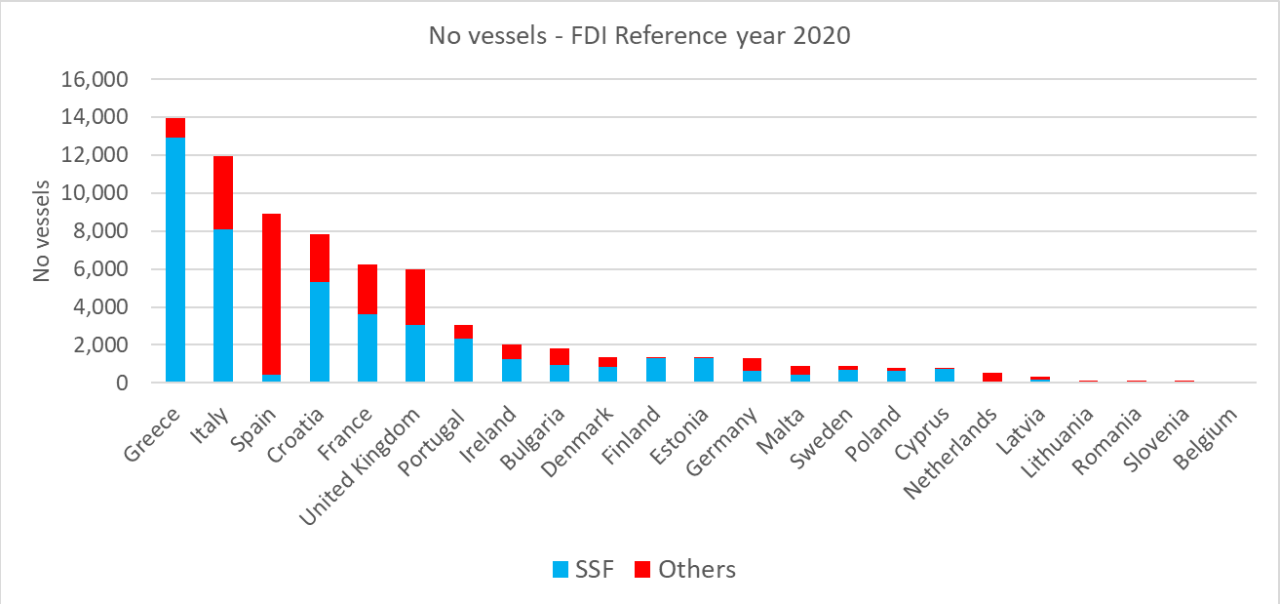


Figure 1. Number of fishing vessels by country, divided into SSF and other fleets

In terms of landings, it should be noted that catch data are often missing and reported as "confidential" in the FDI database. However, from the available data, the overall landings were dominated by other fleets (3,781,194 tonnes; 95%), while SSF contributed only 5% (205,147 tonnes).

Spain, UK, Denmark and France recorded the highest landings, but the overall trend confirms the marginal contribution of SSF (Figure 2).

The AER (2021) for the reference year 2019 indicated that the number of SSF vessels corresponded to 70% of the EU fishing fleet, but in terms of GT, they represented only 7%. The value of landings by SSF represented 13% of all EU landings in 2019, as in 2017 and 2018.

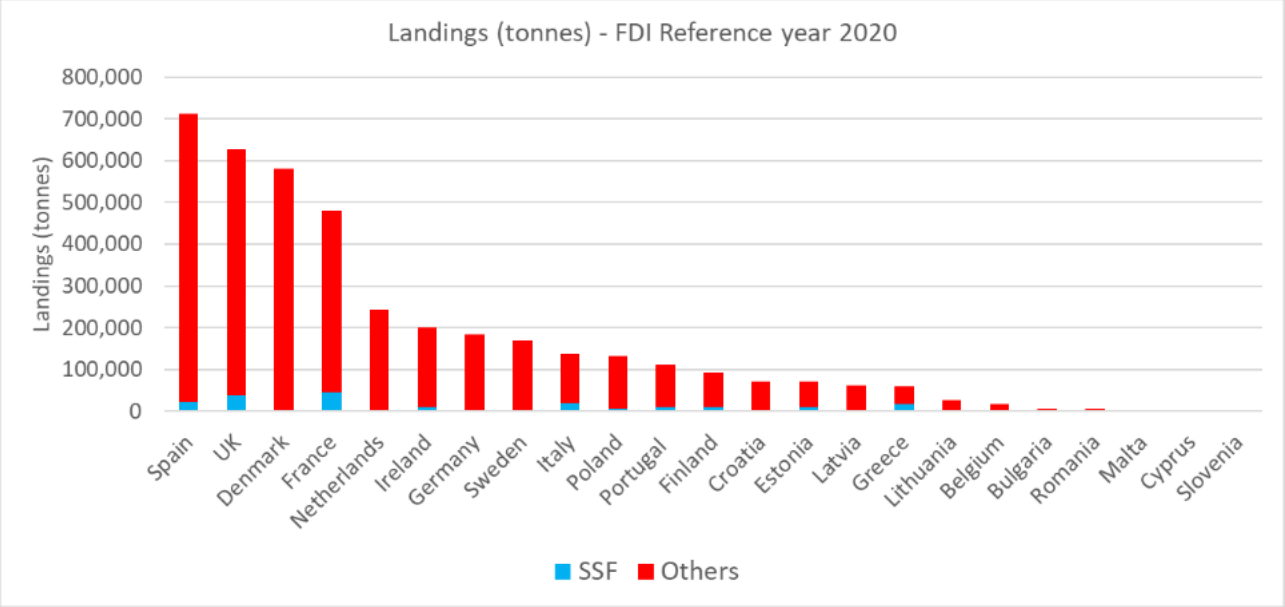


Figure 2. Landings (tonnes) by country, divided into SSF and other fleets

From the FDI data (2020), the value of landings reflects the general trend. However, the relative contribution of SSF to overall income is higher due to the increased value of SSF products in terms of unit price (Figure 3). In general, the average price per kg of seafood products caught by SSF (EUR 4.44/kg) is actually three times that of the other fleets (EUR 1.39/kg).

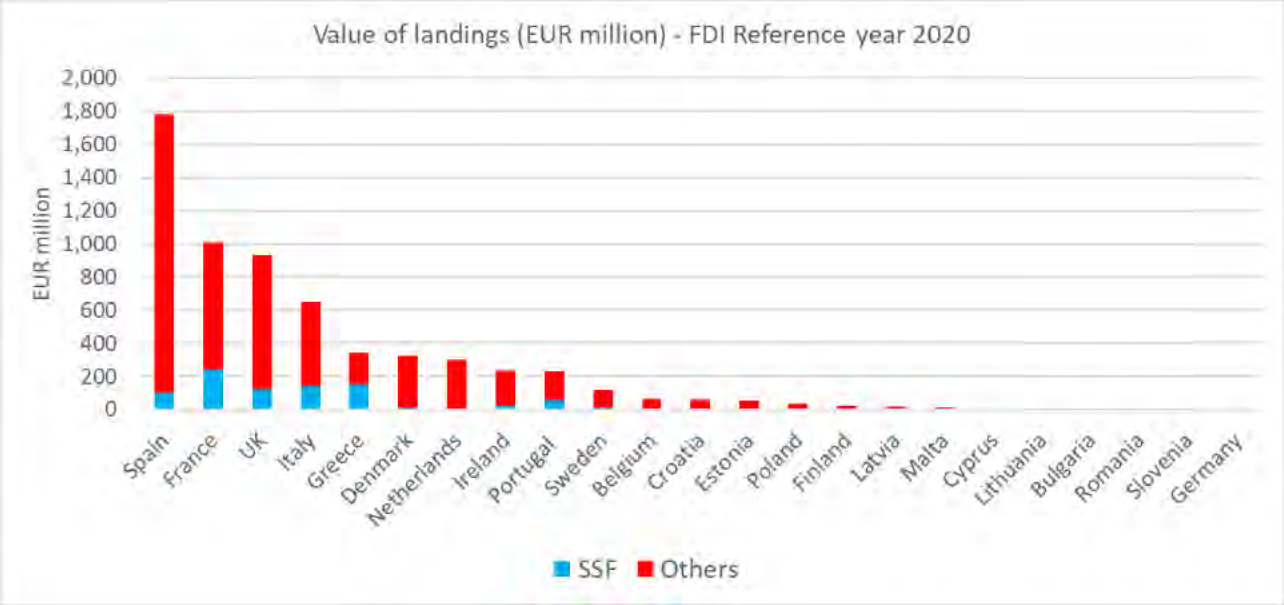


Figure 3. Value of landings (in EUR million) by country, divided into SSF and other fleets

3.2 European SSF: key challenges for the sustainable blue economy

SSF can be broadly characterised as a dynamic and evolving sub-sector of fisheries, employing labour-intensive harvesting, processing and distribution technologies to exploit marine and inland water fishery resources. The activities of this sub-sector, conducted full-time or part-time, or just seasonally, are often targeted towards supplying fish and fishery products to local and domestic markets, as well as subsistence consumption. However, export-oriented production has increased in many SSF because of greater market integration and globalisation. While typically men are engaged in fishing and women in fish processing and marketing, women are also known to engage in near-shore harvesting activities and men are known to engage in fish marketing and distribution. Other ancillary activities such as net-making, boat-building, engine repair and maintenance, etc. can provide additional fishery-related employment and income opportunities in marine and inland fishing communities.

SSF operate at widely differing organisational levels, ranging from self-employed single operators through informal micro-enterprises to formal sector businesses. This sub-sector, therefore, is not homogenous within and across countries and regions, which must be taken into account when formulating strategies and policies for enhancing its contribution to food security and poverty alleviation (ACFR Working Party).

The last decade has seen significant changes in the SSF sector and a rapid increase in global production. This, in turn, is in response to the rising demand for fish and fishery products, the huge growth in world trade of fish and fisheries products, particularly in value terms, and an overwhelming call for more responsible and sustainable management of marine resources. Despite its relevance for coastal communities, there is a lack of data on SSF which hampers an understanding of the real trends and socio-economic impact and the adoption of conventional top-down models for their management. Furthermore, this sector is composed of a large number of micro-enterprises, leading to an atomised entrepreneurial landscape which tends to be marginalised in decision-making processes, as many operators are not affiliated to formally recognised organisations or associations, with no channels through which to participate (ARIEL, 2018).

A better understanding of the state of play and development trajectories of SSF is one of the key challenges for decision-makers and scientists across Europe. Several initiatives in the form of projects, thematic studies and surveys have been put in place to identify the framework conditions in which SSF stakeholders operate, so as to address their

day-to-day needs sustainably and provide effective institutional and scientific support.

The following simplified SWOT matrix summarises the common strengths, weaknesses, opportunities and threats of the EU SSF sector, according to the desk analysis by country presented in this report.

STRENGTHS	WEAKNESSES
• Ancient traditions with historical/ cultural value • Integration of SSF in local communities • Importance of SSF for nutrition, livelihoods, income and poverty eradication in coastal communities • Traditional involvement of women in all stages of the fish value chain • Increased demand from consumers of sustainability and high-quality seafood products • High selectivity of passive gears • Low environmental impact • Low impact on resources • High quality of landings/products • Short supply and distribution chain • Stewardship of marine resources • Contribution to ecosystem-based approach to fishery management • Valuable local ecological knowledge for scientific purposes • Fewer spatial and temporal restrictions than large-scale fisheries • Versatility of fishing activity due to seasonality of resources and gears • Possibility of managing the offer in time and space, offering homogeneous quality products on the market throughout the year	• Decrease in landings • Low incomes • Ageing and technically obsolete fishing fleet • Lack of interest/capability in using innovative technologies/modern equipment • Fishing days limited by weather conditions • Lack of interest of young people • Insufficient training for fishers • Low level of cooperation among fishers • Top-down approach from the competent authorities • IUU (illegal, unreported and unregulated) fishing • Poor management and lack of control enforcement • Lack of infrastructures for local processing and storage of seafood products • Difficulties in accessing markets • High certification costs • Conflicts with other marine users for space and resources • Competition with large-scale fisheries in the market • Impact of top predators on catches and gears • Limited statistics and reliable data for scientific and management purposes • Unrecognised and undervalued contribution of women in SSF • Unemployment stemming from the seasonality of fishing activities • Lower level of monitoring • Lack of communication with local authorities • Lack of awareness and ability to access EU funding opportunities • Lack of representativeness and aggregation, marginalisation in decision-making process

OPPORTUNITIES	THREATS
• Multifunctionality for income diversification • New sources of income and new jobs • Blue economy framework • Exploitation of the advantages of fishing areas to improve their attractiveness as sustainable tourism destinations • Broader diversification of coastal areas into sectors not directly related to fishing, such as environmental, research, social services, renewable energies or other emerging sectors • Development of traceability and certification schemes for seafood products • Sharing of good practices at national and European level • Development of participatory approaches and interactive engagement of SSF operators • Interregional projects capitalisation • European funding panorama • Empowerment of SSF communities to participate in decision-making processes and to assume responsibilities for sustainable use of fisheries resources • Cooperation between SSF operators and research/academia • Increasing the role of SSF in scientific monitoring • Development of marketing strategies • Development of ICT tools to promote access to the market and direct selling • Promotion of short supply circuits, high-quality seafood products and markets • Growing consumer demand for fisheries products • Increasing awareness among consumers of SSF sustainability and seafood quality • Valorisation of traditional knowledge and practical experience • Renovation of small fishing ports and strengthening of economic activities in small harbours • Modernisation of engines and improvement of health, safety and working conditions • Increasing use of technological innovations for integrated and sustainable fisheries management • Modernisation and improvements in fishing gear and introduction of new technologies • Possibility of collaboration between the different MPAs • Co-management in MPAs • Protection of cultural heritage	• Fluctuations in fuel costs • Low or fluctuating price of fish • Depletion of fish stocks • Decreasing income • Rising unemployment • Increasing age of fishers • Increase of conflicts with other marine users for space and resources • Degradation of coastal habitats and ecosystems • Lack of long-term planning • Loss of local traditions • Administrative burden • Increase in pollution and microplastics from anthropogenic activities • Increase in non-indigenous species and meridionalisation/ tropicalisation effects • Lingering effects of economic crisis and low access to credit • Increased competition from other (EU/non-EU) markets

4. EUROPEAN SSF GOVERNANCE: FINANCIAL INSTRUMENTS, BEST PRACTICES AND CASE STUDIES TOWARDS MULTIFUNCTIONALITY

This chapter provides an overview of the main financial tools supporting and leveraging SSF at the EU and local level and their level of effective implementation. It includes a special focus on key issues and best practices related to income diversification and multifunctionality within the SSF sector.

Given the crucial role of SSF for the livelihoods of coastal communities in Europe, the European Union has put in place several policy and financial instruments to support the development of and to strengthen this sector. However, since SSF are embedded within complex systems in which social and ecological systems are mutually dependent, they must be managed by an integrated approach (Ruiz-Diaz et al., 2020).

Numerous efforts have been made towards a more comprehensive and holistic policy framework which considers and addresses the multiplicity of socio-economic needs, while preserving the health of the marine ecosystem. Despite ambitious goals for sustainable management of fish stocks, the Common Fisheries Policy (CFP) must be implemented jointly with other pieces of legislation, such as the Marine Strategy Framework Directive and the Technical Measures Regulation.

Within the framework of EU fisheries and environmental policies, the relevance of SSF for the blue economy of coastal communities has been progressively increasing. Calls for greater levels of support to SSF have been on the rise since the adoption of the reformed CFP in 2012. Studies and reports have been produced which look at the linkages between blue growth, the sustainable blue economy and SSF, and at the increasing role of small-scale fishers in marine stewardship. Moreover, research and interregional cooperation programmes have launched calls for financing blue growth and sustainable blue economy projects and networks, offering further opportunities to focus on SSF.

4.1 EU financial opportunities for SSF

4.1.1 Programming period 2014-2020

4.1.1.1 EUROPEAN MARITIME AND FISHERIES FUND

The European Maritime and Fisheries Fund (EMFF) (Regulation (EU) No 508/2014) was the specific financial instrument for implementing the CFP for the programming period 2014-2020. In 2021, it was replaced by the European Maritime, Fisheries and Aquaculture Fund (EMFAF). According to Article 5 of the Regulation, the main objectives of the EMFF were:

- promoting competitive, environmentally sustainable, economically viable and socially responsible fisheries and aquaculture;
- fostering the implementation of the CFP;
- promoting a balanced and inclusive territorial development of fisheries and aquaculture areas;
- fostering the development and implementation of the Union's IMP in a manner complementary to cohesion policy.

To achieve those goals, the EMFF set the following Union Priorities (UP) (Table 2):

1. Sustainable fisheries (26.3%). To strike a balance between human fishing capacity and available natural resources, to fish more selectively and to reduce unintended catches.
2. Sustainable aquaculture (20.0%). To make the sector more successful and competitive by focusing on quality, health and safety, as well as eco-friendly production; and to provide consumers with high-quality, highly nutritional, and trustworthy product
3. Implementing the CFP (19.4%). To improve data collection, scientific knowledge, control and enforcement of fisheries legislation.
4. Employment and territorial cohesion (9.6%). To help coastal and inland fisheries and aquaculture communities gain more value for their products and diversify their economies into other maritime fields such as tourism or direct sales.
5. Marketing and processing (18.4%). To improve market organisation, market intelligence and consumer information in the world's largest seafood market.
6. Implementing the integrated maritime policy (1.2%). To improve marine knowledge, better plan activities at sea, promote cooperation in maritime surveillance and manage sea basins according to their individual needs.

The remaining 5.2% consists of technical assistance (TA) to help Member States implement the above priorities.

Table 2. EMFF contribution in the 2014-2020 programming period by priority (in EUR thousand and percentage of total). Source: European Union Support (2019)

MS	UP 1	UP2	UP3	UP4	UP6	Technical assistance	Total per MS	Total per MS	%
BE	14 375,00	6 725,00	14 245,00	0,00	4 161,00	940,00	1 300,00	41 746,00	0.73
BG	14 424,00	25 531,00	9826	16 119,00	8 471,00	2 325,00	4 125,00	80 824,00	1.42
CZ	0,00	22 647,00	2 653	0,00	4 100	0,00	1 707	31 108	0.55
DK	79 017,00	22 019,00	70 546,00	7 518,00	14 839,00	2 500,00	11 914,00	208 355,00	3.66
DE	52 250,00	63 097,00	59 695,00	21 810,00	11 631,00	2 500,00	8 613,00	219 596,00	3.86
EE	16 755,00	7 172,00	13 962,00	26 282,00	28 648,00	2 325,00	5 824,00	100 970,00	1.78
IE	27 795,00	14 900,00	69 791,00	6 000,00	19 782,00	5 335,00	4 000,00	147 602,00	2.60
EL	119 025,00	62 394,00	70 433,00	59 925,00	59 777,00	4 446,00	12 778,00	388 778,00	6.84
ES	300 323,00	189 051,00	154 233,00	109 255,00	288 725,00	5 218,00	64 822,00	1 111 628,00	19.55
FR	121 918,00	122 647,00	123 003,00	21 128,00	170 106,00	4 991,00	24 184,00	587 980,00	10.34
HR	84 329 576,00	51 514 186,00	34 824 000,00	23 548 850,00	42 267 938,00	1 000 000,00	15 158 588,00	252 643 138,00	4.44
IT	187 329,00	76 266,00	102 429,00	42 888,00	91 657,00	4 446,00	32 247,00	537 263,00	9.45
CY	13 598,00	8 491,00	9 006,00	4 935,00	1 158,00	1 400,00	1 125,00	39 715,00	0.70
LV	43 907,00	32 523,00	10 367,00	12 750,00	30 286,00	2 500,00	7 500,00	139 834,00	2.46
LT	11 209,00	18 199,00	7 960,00	9 875,00	11 585,00	930,00	3 672,00	63 432,00	1.12
HU	1 703,00	24 709,00	2 451,00	0,00	9 196,00	0,00	352,00	38 412,00	0.68
MT	8 548,00	2 319,00	8 692,00	0,00	407,00	1 360,00	1 300,00	22 627,00	0.40
NL	31 182,00	5 962,00	51 938,00	0,00	4 959,00	2 500,00	4 980,00	101 523,00	1.79
AT	33,00	4 103,00	1 400,00	0,00	1 287,00	0,00	140,00	6 965,00	0.12
PL	169 117,00	162 948,00	23 627,00	79 700,00	61 603,00	2 350,00	31 873,00	531 219,00	9.34
PT	89 625,00	65 000,00	55 447,00	32 710,00	121 518,00	5 335,00	22 850,00	392 485,00	6.90
RO	4 752,00	89 489,00	12 943,00	37 428,00	11 240,00	2 500,00	10 067,00	168 421,00	2.96
SI	2 649,00	4 880,00	3 798,00	5 809,00	3 181,00	617,00	1 985,00	22 920,00	0.40
SK	0,00	7 581,00	1 057,00	0,00	3 377,00	0,00	937,00	12 953,00	0.23
FI	13 245,00	13 327,00	30 018,00	3 926,00	6 770,00	4 446,00	2 659,00	74 393,00	1.31
SE	23 658,00	11 871,00	60 401,00	8 343,00	5 573,00	4 446,00	5 864,00	120 156,00	2.11
UK	67 487,00	19 327,00	97 634,00	13 584,00	27 244,00	5 335,00	12 528,00	243 139,00	4.28
Total per priority	1 498 262,00	1 134 700,00	1 102 384,00	543 537,00	1 043 554,00	69 743,00	294 507,00	5 686 691,00	100

The Fund envisages measures ranging from the reduction of fishing effort to incentive measures, financial support for permanent or temporary cessation of fishing activities, promotion of increased selectivity and the diversification of forms of income.

EMFF SUPPORT FOR THE SSF SECTOR

The EMFF recognises the relevance of SSF, granting incentives:

- to mitigate the effects of climate change;
- to protect fish stocks through specific monitoring to assess the state of resources;
- to pursue multifunctionality and income diversification.

Subject to certain conditions and with higher rates of public support which can range from 20% to 80%, the Fund supports SSF in terms of:

- investments in fishing boats and equipment, e.g. replacing or modernising main or ancillary engines, investing in new gears and onboard equipment to improve selectivity, protect biodiversity, minimise unwanted catches and improve energy efficiency;
- investments in equipment to add value to catches;
- investments in complementary activities for income diversification;
- investments in human resources, from health and safety on board to new skills.

The SSF sector is also given priority in the guidelines for applicants, who are prioritised in the ranking when projects are assessed (e.g. BG, HR, LT). While SSF may benefit from this preferential treatment, according to the FAME Report 2020, the EMFF reporting streams (AIR and Infosys) do not contain detailed reporting provisions on SSF. To determine EMFF support for various policy objectives within the CFP, IMP and Europe 2020 strategy, and also for specific topics such as SSF, in the FAME Report links had to be established between the EMFF articles and SSF, as shown in the table below.

Links between the EMFF articles and SSF topics

EMFF articles	SSF topics
26	Innovation
28	Partnerships between scientists and fishermen
29(1,2)	Promotion of human capital, job creation and social dialogue 1 (a) Professional training, lifelong learning, joint projects, the dissemination of knowledge of an economic, technical, regulatory or scientific nature and of innovative practices, and the acquisition of new professional skills, in particular linked to the sustainable management of marine ecosystems, hygiene, health, safety, activities in the maritime sector, innovation and entrepreneurship 1 (b) Networking and exchange of experiences and best practices between stakeholders, including among organisations promoting equal opportunities between men and women, promoting the role of women in fishing communities and promoting under-represented groups involved in small-scale coastal fishing or in on-foot fishing (c) social dialogue at Union, national, regional or local level involving fishermen, social partners and other relevant stakeholders 2 The support referred to in paragraph 1 may also be granted to spouses of self-employed fishermen or, where and in so far as recognised by national law, the life partners of self-employed fishermen
30	Diversification and new forms of income
31	Start-up support for young fishermen
32	Health and safety
34	Permanent cessation of fishing activities
38	Limitation of the impact of fishing on the marine environment and adaptation of fishing to the protection of species
39	Innovation linked to the conservation of marine biological resources
40(1) (a, b, g, h, i)	Protection and restoration of marine biodiversity and ecosystems and compensation regimes in the framework of sustainable fishing activities

41 (2)	Energy efficiency and mitigation of climate change
	22. Support for the replacement or modernisation of main or ancillary engines may be granted only: (a) for vessels up to 12 metres in overall length, provided that the new or modernised engine does not have more power in kW than the current engine
42	Added value, product quality and use of unwanted catches
43(3)	Fishing ports, landing sites, auction halls and shelters.
	3. Support investments in the construction or modernisation of shelters
63	Implementation of community-led local development strategies
69	Processing of fishery and aquaculture products
70	Compensation regime
76	Control and enforcement

In the FAME Report, which includes data on all operations supported from 2014 to 2020 by Member States, the following results on EMFF implementation in relation to SSF were reported:

OPERATIONS LINKED TO SSF VESSELS

Data on operations involving SSF vessels (which were selected purely on the basis of a vessel length of less than 12 metres) show that:

- the total eligible EMFF expenditure declared by beneficiaries to the Managing Authority was EUR 123,569,169, compared with the initial commitment for SSF of EUR 178,347,883;
- the EMFF supported 13,123 unique vessels, of which 5,349 belonging to SSF (41%);
- the EMFF supported 35,756 operations, of which 13,580 (38%) were for SSF vessels;
- the average EMFF commitment per supported SSF vessel amounted to about EUR 33,300, while the average EMFF spending per vessel was EUR 23,100.

This segment thus received 25% of the EMFF spending dedicated to specific vessels (EUR 124 million out of EUR 500 million).

DIVERSIFICATION OF INCOME, ADDING VALUE

The EMFF Regulation envisages that Union Priority 4 funding – as set out in Article 63 – can be used to achieve the following objectives.

Adding value	Adding value has different meanings in different MS contexts. Specific definitions for how adding value is relevant can be found in the OP of each MS with examples including: investments in fishing activities; producer or product certification; building the capacity of current or potential fishers to carry out their activities; developing the marketing, processing and distribution of fisheries and aquaculture products (Miret-Pastor et al., 2020).
Diversification of fisheries activities into other sectors	Examples include supporting diversification inside and outside commercial fisheries, lifelong learning and job creation in the fisheries and aquaculture areas by operations related to fisheries and aquaculture (e.g. diversification into new markets and lines of production) and diversification into other sectors such as tourism and gastronomy.

Environmental protection, climate change mitigation	Examples include protection and valorisation of local environmental assets; raising environmental awareness among fishermen and the local community; and minimising the negative impact of fisheries and aquaculture activities on the environment and climate.
Promotion of social wellbeing and cultural heritage in fisheries and aquaculture areas, reinforcing the role of fishing communities	This includes capacity building, education and training opportunities, providing services; and addressing social issues such as the role of women in fisheries, generational renewal, and the exclusion of vulnerable groups (the unemployed, ethnic minorities and migrants).

According to the Technical Report issued by FARNET in 2017, Fisheries Local Action Groups (FLAGs) are one of the possibilities offered by the EMFF to support SSF.

AIR data showed that:

- A total budget of EUR 547 million was allocated for community-led local development (CLLD) under the Union Priority 4 of "increasing employment and territorial cohesion", by specifically pursuing the "diversification of activities within fisheries and into other sectors of the maritime economy".
- EUR 364 million was committed to Union Priority 4, corresponding to 66.5% of the available allocation for the priority. In 2020, FARNET reported 348 active FLAGs implementing CLLD across EU Member States.
- Article 63 on CLLD is listed in the "Top five measures" by EMFF amount committed in the following MS: Bulgaria, Cyprus, Germany, Estonia, Spain, Finland, Croatia, Latvia, Lithuania, Polonia, Sweden, Slovenia.

From the 2017 and 2018 EMFF stakeholder consultation in view of the new fund post-2020, several inputs were collected from the public sector, industry, NGOs and academia which confirmed the need to provide more support to SSF. They also recognised the importance of community-led local development and would like to see this play a wider role in the development of the blue economy at local level (Van de Walle and Soetendale, 2017).

Community-led local development

CLLD is a specific sub-national tool – common for all the ESI Funds in the programming period 2014-2020 – for mobilising and involving local communities and organisations to contribute to achieving the Europe 2020 Strategy goals of smart, sustainable and inclusive growth, fostering territorial cohesion and reaching specific policy objectives. CLLD is a result of the successful LEADER bottom-up approach in the EU over the past 20 years. Since 2007, local development has also been used within the EMFF to support the sustainable development of fishing communities, shown to have considerable potential to explore innovative solutions addressing their multiple challenges. Under Priority Axis 4, the EMFF has provided support for the sustainable development of fisheries areas, by ensuring that the actions undertaken by the FLAGs build on the unique strengths and opportunities of each fisheries area; exploit new markets and products; and incorporate the knowledge, energy and resources of local actors from all sectors. FLAGs bring together the private sector, local authorities and civil society organisations and local projects based on a local strategy addressing the economic, social and/or environmental challenges of a specific area. The EU Commission set up the FARNET Support Unit to assist in the implementation of CLLD under the EMFF.

PROFESSIONAL TRAINING

To promote human capital, job creation and social dialogue, the EMFF supports:

- "Professional training, lifelong learning, joint projects, the dissemination of knowledge of an economic, technical, regulatory or scientific nature and of innovative practices, and the acquisition of new professional skills, in

particular linked to the sustainable management of marine ecosystems, hygiene, health, safety, activities in the maritime sector, innovation and entrepreneurship". Under Article 29, it is specified that support shall be limited to training on board a small-scale coastal fishing vessel owned by a professional fisherman of at least 50 years of age, formalised by a contract between the trainee and the owner of the vessel that is recognised by the Member State concerned, including courses on sustainable fishing practices and the conservation of marine biological resources as defined in Regulation (EU) No 1380/2013. The trainee shall be accompanied on board by a professional fisherman of at least 50 years of age.

According to the FAME Report 2020, trainees on SSF was one of the measures attracting the least interest: the total amount allocated for Article 29(3) was EUR 7,716,536, of which less than 3% was committed by the MA (EUR 20,663). The spending performance was EUR 13,870, corresponding to 63% of the committed amount.

Under Article 82, the EMFF supports the implementation of a Union control, inspection and enforcement system. As reported in the 2018 Study on "Training of Fishers" (Ackermann et al., 2018) requested by the PECH Committee, the available financial means for education and training and the way these means were applied varied per EU MS. Some of the EU Member States did not make use of EU funds to educate/train fishers (e.g. Netherlands), while other EU MS heavily rely on this fund to offer subsidised education/training for fishers (e.g. Ireland). In addition to the EMFF, other financial means were also available for the training and education of fishers in several MS. Some MS offered education and training to fishers financed through the state budget, while there was also an example of education and training being paid for by a fund partially financed by the fishing industry itself (OPCA in France). Despite the available funds and subsidies offered in EU MS, access to education and training remains challenging for fishers due to time constraints and lost revenue through lost fishing time.

CRITICAL ISSUES ABOUT EMFF IMPLEMENTATION IN THE SSF

From the desk analysis based on the data available, it emerged that EMFF performance in relation to SSF is still not satisfactory compared with the ambitions and planned resources. This may be due to:

- lack of availability of specific data on SSF operations at national level, since MS are not obliged to provide data filtered by sector;
- constraints in implementing operations.

Several MS reported in their AIR difficulties in implementing operations: lack of interest from potential beneficiaries, partly due to the eligibility criteria, complex procedural requirements, lack of participation, or difficulties in reaching SSF operators.

From the SSF operators' side, difficulties in accessing funds were outlined in the framework analyses carried out under EU projects tackling the SSF state of play and development trajectories. For instance, from the ARIEL project (Interreg ADRION, 2019) reports on the SSF state of play in Adriatic and Ionian regions, based on the consultation of more than 100 SSF stakeholders, the following constraints emerged:

- lack of communication with the local administration;
- lack of awareness of EU funding opportunities;
- structural problems for the sector which prevent modernisation and the adoption of innovations. Stakeholder consultation and audits revealed that the majority of fishermen are advanced in years and are less capable of handling new technological equipment in an adequate and efficient manner. Moreover, it became clear that older fishermen are not prepared to join networks and/or clusters, and are less willing to adopt innovations;
- lack of SSF representativeness and aggregation, with marginalisation in decision-making processes.

Given the difficulties for small-scale fishers in managing the administrative procedures to access EU funding, between March and May 2021, WWF and Blue Seeds launched a pre-financing scheme in the form of a call for grants for small-scale fishers in the Mediterranean, aimed at supporting access to the EMFF in the transition to sustainability. As a result, 42 small-scale fishers from Italy, Croatia, Slovenia and Spain were selected to receive upfront capital (from EUR 5,000 to EUR 20,000), as well as the technical assistance needed to prepare the EMFF funding application.

4.1.1.2 RESEARCH AND INTERREGIONAL PROGRAMMES

In addition to the EMFF, which is the financial instrument for the EU's maritime and fisheries policies, the EU offers several funding opportunities for promoting the sustainable use of marine resources, innovation speed-up and exchange within the regional system.

HORIZON 2020 PROGRAMME (H2020)

The H2020 Programme – with nearly EUR 80 billion of funding available over 7 years (2014 to 2020) – was the financial instrument implementing the Innovation Union, a Europe 2020 flagship initiative aimed at securing Europe's global competitiveness. Seen as a means to drive economic growth and create jobs by coupling research and innovation, Horizon 2020 sought to achieve this with its emphasis on excellent science, industrial leadership and tackling societal challenges. The goal was to ensure Europe produces world-class science, remove barriers to innovation and make it easier for the public and private sectors to work together in delivering innovation.

Under the EMFF 2014-2020, the European Commission tasked the Executive Agency for Small and Medium-sized Enterprises (EASME) with implementing some of the EMFF actions under direct management, representing a budget of EUR 340 million for the programme period. The European Commission set up EASME to manage several EU programmes on its behalf. It provided support to beneficiaries and managed significant parts of COSME, LIFE, Horizon 2020 Programmes and the EMFF. Regarding the EMFF in particular, the EASME tasks supported the European Commission in implementing procurement (purchase of services) and grants (contribution to specific actions), focusing on the following issues:

- integrated governance of maritime and coastal affairs;
- cross-sectoral initiatives such as integrated maritime surveillance, maritime spatial planning, marine data and knowledge;
- sustainable economic growth, employment, innovation and new technologies within emerging and prospective maritime sectors;
- scientific advice and knowledge for fisheries in and beyond EU waters, covering environmental, economic or social aspects;
- fisheries control and enforcement within a regional perspective to foster cooperation between Member States.

As of 1 April 2021, EASME ceased its operations and a new agency, the European Innovation Council and Small and Medium-sized Enterprises Executive Agency (EISMEA), was established. Therefore, since 2021, support for the fisheries fund has been delegated to the European Climate, Environment and Infrastructure Executive Agency (CINEA), established in February 2021. CINEA's mission is to support stakeholders in delivering the European Green Deal through high-quality programme management that helps to implement projects contributing to decarbonisation and sustainable growth. CINEA is expected to manage a budget of up to EUR 15 billion for Horizon Europe under the 2021-2027 Financial Framework (*https://cinea.ec.europa.eu/*).

INTERREGIONAL PROGRAMMES

European Territorial Cooperation, also known as "Interreg", provides a framework for the implementation of joint actions and policy exchanges between national, regional and local actors from different Member States. Interreg is built around three strands of cooperation:

1. Cross-border (Interreg A).
2. Transnational (Interreg B).
3. Interregional (Interreg C).

The 2014-2020 Interreg period was based on 11 priorities laid down in the ERDF Regulation contributing to the delivery of the Europe 2020 strategy for smart, sustainable and inclusive growth (Figure 4).

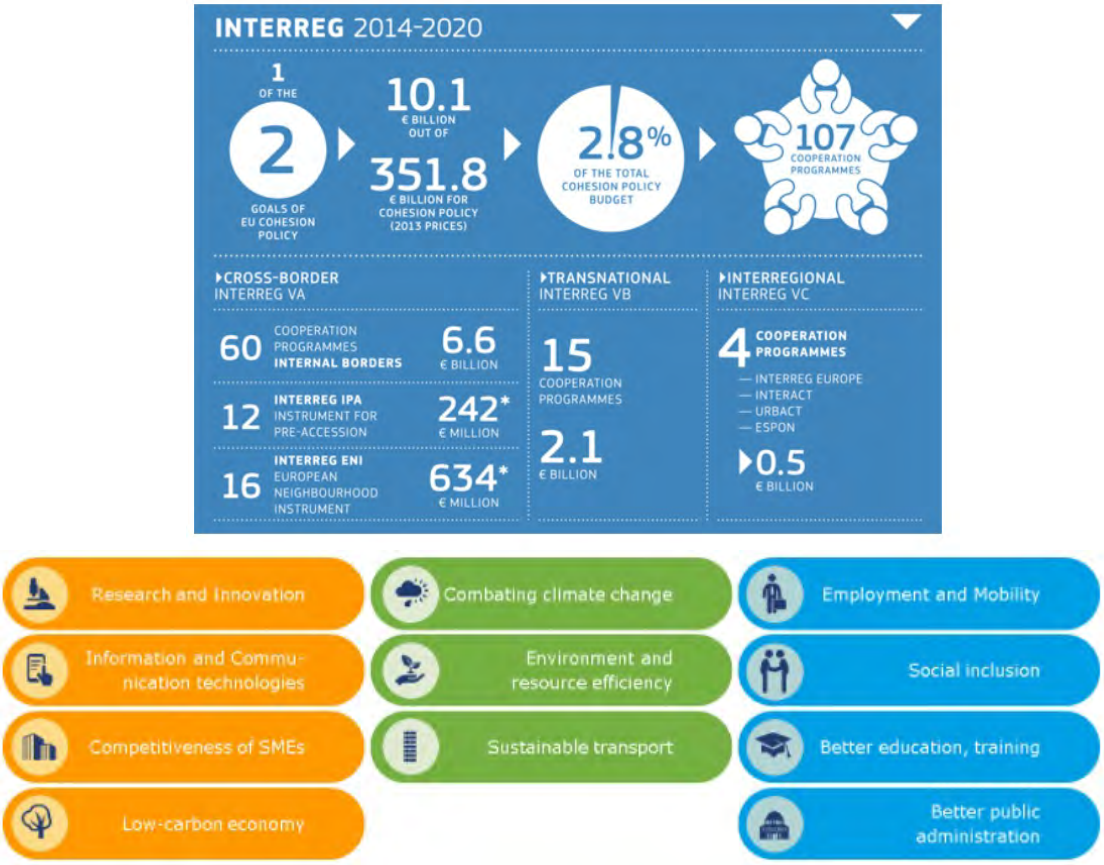


Figure 4. Interreg 2014-2020 programme at a glance. Source: *https://ec.europa.eu/regional_policy/en/policy/cooperation/european-territorial/*

The Interreg programmes have co-financed several transnational and cross-border projects contributing to a common and shared governance for environmental protection and sustainable use of marine resources. In some of those projects, SSF have been directly tackled. Indeed, given the transboundary and shared nature of fish stocks and resources and the complex ecological, economic and societal challenges, a common and transnational approach is needed to better understand threats and opportunities for more successful management policies and practices. This in turn will ensure environmental and socio-economic sustainability. In the Interreg programming period 2014-2020, public administration, academia and research bodies, SME and business support associations and NGOs worked together in partnership to implement cross-border and transnational projects covering fisheries, sustainable use of marine resources, environmental protection and innovation. This cooperation delivered strategic and operational tools for sustainable co-management of the marine ecosystem towards more cost-effective and sustainable solutions, science-based policies, enhanced skills and competences, improved biological and production data collection and assessment, and viability and sustainability of ecosystem functions. In Best Practices Box No 1, projects directly tackling SSF and involving its operators are briefly presented.

LIFE+ 2014-2020 PROGRAMME

Established by Regulation (EU) No 1293/2013 of the European Parliament and of the Council of 11 December 2013, the general objectives of the LIFE Programme 2014-2020 were:

- to contribute to the shift towards a resource-efficient, low carbon and climate-resilient economy, to the protection and improvement of the quality of the environment and to halting and reversing biodiversity loss, including the support of the Natura 2000 network and tackling the degradation of ecosystems;

- to improve the development, implementation and enforcement of Union environmental and climate policy and

legislation, and to act as a catalyst for, and promote, the integration and mainstreaming of environmental and climate objectives into other Union policies and public and private sector practice, including by increasing the public and private sector's capacity;

- to support better environmental and climate governance at all levels, including better involvement of civil society, NGOs and local actors.

To pursue those objectives, the Programme envisaged the following sub-programmes:

- the sub-programme for Environment;
- the sub-programme for Climate Action.

Each sub-programme established a list of thematic priorities for funding.

The total budget allocated for the programming period was EUR 3,456,655,000, with an EU co-financing rate ranging from 50% to 75% for traditional nature and biodiversity projects, integrated projects and technical assistance projects, and up to 100% for capacity-building projects.

With regard to fisheries-related topics, the LIFE programme has co-financed activities aimed at improving the ecosystem-based approach and the conservation status of habitats and species, including marine habitats.

During the period 2014-2020, the LIFE+ Programme co-financed projects aimed at:

- reducing the interactions of dolphins with fishing activities, with the objective of safeguarding the species and limiting the economic damage suffered by fishermen (LIFE DELFI project);
- reducing the accidental catch of sea turtle (TARTALIFE project);
- supporting the implementation of EU environmental and maritime policy by using a stakeholder-led approach to contribute to the development of marine strategies, particularly under the Marine Strategy Framework Directive (MSFD), for the achievement of good environmental status of marine waters (CSP project).

4.1.2 Programming period 2021-2027

The programming period 2021-2027 is expected to focus attention and support the transition towards the sustainable blue economy for a more prosperous future for coastal communities.

The new programming will go even further in strengthening local partnerships and technology transfers in all sectors of the blue economy, including aquaculture and coastal tourism.

4.1.2.1 EUROPEAN MARITIME, FISHERIES AND AQUACULTURE FUND

Regulation (EU) 2021/1139 of the European Parliament and of the Council of 7 July 2021 established the new fisheries fund: the European Maritime, Fisheries and Aquaculture Fund (EMFAF).

The EMFAF priorities are the following:

1. fostering sustainable fisheries and the restoration and conservation of aquatic biological resources;
2. fostering sustainable aquaculture activities, and processing and marketing of fishery and aquaculture products, thus contributing to food security in the Union;
3. enabling a sustainable blue economy in coastal, island and inland areas, and fostering the development of fishing and aquaculture communities;
4. strengthening international ocean governance and enabling seas and oceans to be safe, secure, clean and sustainably managed.

SSF IN THE EMFAF

Financial means to support the SSF sector are available under the EMFAF. With the aim of encouraging sustainable fishing practices, the EMFAF should give those operators preferential treatment through a maximum 100% aid intensity rate, except for operations relating to the first acquisition of a fishing vessel, the replacement or modernisation of an engine, and operations that increase the gross tonnage of a fishing vessel for the purposes of improving safety, working conditions or energy efficiency. In addition, Member States should consider in their programme the specific needs of small-scale coastal fishing and describe the types of actions considered for its development. The Managing Authority must endeavour to consider the specificities of small-scale coastal fishing operators for possible simplification measures, such as simplified application forms.

SSF in the EMFAF at a glance

Legal basis: Regulation (EU) 2021/1139 of the European Parliament and of the Council of 7 July 2021 establishing the European Maritime, Fisheries and Aquaculture Fund and amending Regulation (EU) 2017/1004.

Total financial allocation: the financial envelope for the implementation of the EMFAF for the period from 1 January 2021 to 31 December 2027 is EUR 6,108,000,000 in current prices.

Definitions of SSFC: “Small-scale coastal fishing” means fishing activities carried out by (a) marine and inland fishing vessels of an overall length of less than 12 metres and not using towed gear as defined in point (1) of Article 2 of Council Regulation (EC) No 1967/2006 (28); or (b) fishers on foot, including shellfish gatherers.

Aid intensity rate: 40%-100% (subject to certain conditions), simplified application form.

4.1.2.2 COMMUNITY-LED LOCAL DEVELOPMENT IN THE PROGRAMMING PERIOD 2021-2027

Nicolosi et al. (2021), in the introduction of the article "Small-Scale Coastal Fisheries in the Midst of Adaptation and Diversification: Insights from Southern Italy", gave an overview of the 2021-2027 CFP and the new community-led local development (CLLD) strategy since FLAGs were confirmed as important tools for the 2021-2027 fisheries policy of the third period of local development support in fisheries and aquaculture areas in Europe. The close cooperation and integrated use of the Funds to deliver local development strategies should be strengthened. Local action groups, representing the interests of the community, should be an essential principle responsible for the design and implementation of CLLD strategies. To ensure coordinated support from different Funds to CLLD strategies and to facilitate their implementation, the use of a "Lead Fund" approach should be encouraged.

The new strategy must be aimed at integrated and dynamic local development (in response to the new needs that gradually emerge). It must also ensure that the projects and initiatives developed at the local level reinforce each other with a view to mutual interaction. Recent experiences, such as the 2008 financial crisis, the migrant crisis in Europe a few years later and, more recently, Covid-19, highlight how a good strategy is one capable of providing the territory and communities with the means to react and adapt to uncertain circumstances. The partnership between Local Action Groups and Fisheries Local Action Groups (LAGs/FLAGs) must also ensure the change that fishing and coastal areas need, namely changes that are more targeted, more innovative and more responsive to local challenges (e.g. circular economy in fisheries and aquaculture areas).

The FARNET Guide #20 "Forward-looking strategies for fisheries areas" outlines the challenges for the next 10 years, namely:

- sustainable food systems;
- climate change mitigation and adaptation;
- cleaner seas (including marine litter), balanced ecosystems and protection of marine biodiversity;
- developing business opportunities, including sustainable aquaculture and other blue growth sectors;
- a place for the young: within fisheries and the broader community;
- safe, quality jobs and social inclusion for all;
- a stronger role in governance and an improved image for fisheries.

4.1.2.3 HORIZON EUROPE 2021-2027

Horizon Europe is the EU's research and innovation programme for 2021-2027 with a budget of EUR 95.5 billion. The new programme tackles climate change, helps to achieve the UN's Sustainable Development Goals and boosts the EU's competitiveness and growth.

The programme facilitates collaboration and strengthens the impact of research and innovation in developing, supporting and implementing EU policies while tackling global challenges. It supports the creation and better dispersal of excellent knowledge and technologies. It creates jobs, fully engages the EU's talent pool, boosts economic growth, promotes industrial competitiveness and optimises investment impact within a strengthened European Research Area.

The Horizon Europe Framework Programme – under the Innovation Actions and "Fair, healthy and environmentally friendly food systems from primary production to consumption" – launched thematic calls for projects aimed at contributing to the European Green Deal objectives, the farm-to-fork strategy for a fair, healthy and environmentally friendly food system, the EU bio-economy and sustainable blue economy strategies. Expected results are:

- advancing the digital transition for fisheries inspection and control and delivering data for fisheries science,

management and monitoring in a cost-efficient way to fully achieve the objectives of the CFP;

- delivering innovative technological solutions such as machine learning and artificial intelligence and advanced sensing technologies to support biologically complex data analysis;
- devising new monitoring and control strategies to stop illegal, unreported and unregulated fishing and promote sustainable fisheries in the EU and globally;
- creating a new generation of jobs in the EU requiring digital and high-tech know-how applied to fisheries;
- improving the professional skills and competences of those working and being trained to work within the blue economy;
- focusing on sustainably fished or farmed nutritious seafood with a low ecological and carbon footprint, which is well communicated, well accepted and preferred by consumers;
- identifying key bottlenecks to achieve a fully transparent seafood value chain in Europe, including the assessment of criteria for consumers' non-acceptance;
- ensuring lasting cooperation on data and information-sharing between fishers, aquaculture producers, industry, retail sector, public authorities, scientific or knowledge centres, digitalisation companies and consumers, implementing innovative tools, including labelling in support of and complying with the current relevant legal framework and the future EU framework for food sustainability labelling. Full life cycle analyses that include environmental impact with an extended variety of monitored and communicated indicators on the environmental and climate footprint of seafood products supported by digital transition;
- raising public awareness and providing education to reach and engage with more citizens to achieve a carbon footprint reduction in the seafood supply chain;
- facilitating social innovation for short-chain, slow seafood solutions;
- promoting traditional or indigenous knowledge and skills or cultural culinary heritage and short-food chains with potential integration in ecotourism (*https://ec.europa.eu/info/funding-tenders*).

4.1.2.4 LIFE PROGRAMME 2021-2027

LIFE contributes to the transformation of the Union into a climate-neutral and resilient society, by supporting the implementation of the EU's climate policy as part of the Green Deal for Europe and preparing the EU for the climate challenges in the coming years and decades.

The LIFE 2021-2027 is divided into four sub-programmes:

1. "Nature and Biodiversity";
2. "Circular Economy and Quality of Life";
3. "Climate Change Mitigation and Adaptation";
4. "Clean Energy Transition".

LIFE 2021-2027 specific objectives

- To develop, demonstrate and promote innovative techniques, methods and approaches for reaching the objectives of Union legislation and policy on climate action and to contribute to the knowledge base and to the application of best practices.
- To support the development, implementation, monitoring and enforcement of relevant Union legislation and policy

on climate action, including by improving governance at all levels, through enhancing capacities of public and private actors and the involvement of civil society.

- To catalyse the large-scale deployment of successful technical and policy-related solutions for implementing relevant Union legislation and policy on climate action by replicating results, integrating related objectives into other policies and into public and private sector practices, mobilising investment and improving access to finance.

The LIFE work plan 2021-2024 intends to give continuity to the traditional bottom-up approach. Under the sub-programme "Nature and Biodiversity", it supports actions aimed at implementing practical, effective measures to improve the conservation status of species and habitats, ecosystems' health and related services, governance to facilitate behavioural change and/or change in practices, including in marine areas, as well as the conservation of natural resources. Moreover, under the sub-programme "Circular Economy and Quality of Life", the work plan envisages actions on products which are safe and sustainable by design, on circular, sustainable production and consumption, and on the repair, reuse, remanufacturing and recycling of materials and products. It includes sustainable technologies, tools and approaches developed within the sustainable blue economy, such as the improved recyclability of offshore renewable energy infrastructure or repair/reuse of fishing nets and fisheries/aquaculture by-products (e.g. fish scales, shells, etc.).

4.1.2.5 THE NEW INTERREG PROGRAMMING PERIOD

Interreg is the Union's instrument to support cooperation across regions and countries: a new generation of Interreg programmes in and outside the EU will further develop joint services and strengthen solidarity. The legal basis of the new Interreg is Regulation (EU) 2021/1059 of the European Parliament and of the Council of 24 June 2021 on specific provisions for the European territorial cooperation goal (Interreg) supported by the European Regional Development Fund and external financing instruments. The Regulation lays down rules for the European territorial cooperation goal (Interreg) with a view to fostering cooperation between Member States and their regions inside the Union and between Member States, their regions and third countries, partner countries, other territories or overseas countries and territories, or regional integration and cooperation organisations.

In the programming period 2021-2027, Interreg will continue to support cross-border mobility and efforts to develop environmental protection, emergency services, skilled jobs and access to public services for the next EU generation. In addition, two new objectives will steer territorial cooperation:

1. better cooperation governance;
2. a safer, more secure Europe.

The ERDF resources for Interreg programmes amount to EUR 8,050,000,000 in 2018 prices. This represents the overall resources available for budgetary commitment from the ERDF, ESIF and Cohesion Fund for the 2021-2027 programming period, as set out in Article 109(1) of Regulation (EU) 2021/1060. The resources are allocated as follows:

- 72.2% for a total of EUR 5,812,790,000 for land and maritime cross-border cooperation ('strand A');
- 18.2% for a total of EUR 1,466,000,000 for transnational cooperation ('strand B');
- 6.1% for a total of EUR 490,000,000 for interregional cooperation ('strand C');
- 3.5% for a total of EUR 281,210,000 for outermost regions' cooperation ('strand D').

As regards fisheries-related topics, the new Interreg programming period is expected to help to meet the environmental objectives set by the EU and included in the EU Green Deal. Details of these can also be found in the EU Communication on a Sustainable Blue Economy and in the EU Biodiversity Strategy for 2030, the Barcelona Convention and the Convention on Biological Diversity.

The Interreg Programmes will promote the capitalisation, dissemination and exchange of best practices that stem from projects and initiatives carried out in the previous programming periods (e.g. Interreg Europe Programme), as well as the implementation of pilot actions for sustainable use of marine resources, spatial planning and coastal management, sustainable tourism, SME competitiveness and innovative eco-business models (e.g. Interreg Euro-MED Programme).

Best Practice Box No 1

INTERREG PROJECTS ON SSF

The boxes below contain a list of projects – financed by the Interreg Programmes – with a direct focus on SSF that may serve as best practices for the purposes of this report.

Interreg ADRION 2014/2020

Project title and acronym: ARIEL "Promoting SSF and aquaculture networking in Adriatic and Ionian Region"

Duration: 2018-2020

Countries involved: Italy, Croatia, Montenegro, Greece.

Key words: innovation, environmental and socio-economic sustainability, training and capacity building, income diversification, adding value and access to market.

Project goals related to SSF: ARIEL aims to promote technological and non-technological solutions for innovation uptake in small-scale fisheries (SSF) among scientists, policymakers and entrepreneurs in the Adriatic-Ionian basin, considering the complex ecological, economic and societal challenges within a single framework. In addition, the project is aimed at establishing a fully functional knowledge network of SSF actors at regional and transnational level, supporting public authorities in developing a favourable legislative and programming framework and science-based policies, while helping SSF enterprises to make their business more sustainable and competitive. ARIEL has adopted an interactive and participatory approach towards SSF actors' engagement, based on the successful experience of the "European Innovation Partnership in Agriculture" initiative (EIP-AGRI).

Project activities related to SSF: pilot actions to facilitate the innovation discovery process and the exchange of technological and non-technological solutions for the day-to-day practical needs of SSF enterprises by means of innovation brokering activities and interactive stakeholder engagement; to stimulate multilevel dialogue among SSF key players and their partnerships; to improve gear selectivity and reduce bycatch (e.g. more selective trammel nets, rainbow nets); to reduce damage from predation (Dolphin Deterrent Devices); to improve access to the market (Virtual Marketplace for SSF); to promote income diversification (business plan for fishing tourism).

Milestones: regional and ADRION reports on SSF state of play including SWOT matrices, audit tools to detect the level of and attitude to innovation, common transnational methodology for innovation brokering activities and innovation brokering events, Chart of Innovation Services and Joint Research Agenda, ARIEL Knowledge Network and Platform.

Total budget: EUR 1,249,234

EU contribution:

- ERDF budget: EUR 904,453
- IPAII budget: EUR 157,396

More info at: *https://ariel.adrioninterreg.eu/*

Interreg ITALY – CROATIA 2014/2020

Project title and acronym: "Adri.SmArtFish – Valorisation of SMall-scale ARTisanal FISHery of the Adriatic coasts in a context of sustainability"

Duration: 2019-2022

Countries involved: Italy, Croatia.

Key words: SSF sustainability valorisation, adding value, income diversification, certification and traceability, new competences at fishermen level.

Project goals related to SSF: Adri.SmArtFish is aimed at valorising SSF sustainability, strengthening its role in the North Adriatic Sea area (GSA 17) in the near future by fostering their potential for innovation within a blue growth context, through the adoption of an ecosystem-based management approach. Moreover, the project is intended to boost SSF resilience and sustainability and to increase market value.

Project activities related to SSF: setting up and testing a shared protocol on SSF sustainability by the direct involvement of SSF associations at local level, implementing pilot actions to improve access to the market, direct selling and consumer awareness, and to promote income diversification, developing an EU certification trademark based on sustainable criteria, setting up and operating two associations for SSF valorisation.

Milestones: report on SSF vulnerability to climate change in GSA, assessment of the vulnerability of SSF to climate change, shared sustainable fisheries protocol for SSF, regulation of use of certified SSF mark, SSF association bylaws.

Total budget: EUR 3,240,000

EU contribution:

- ERDF budget: EUR 2,760,000

More info at: *https://www.italy-croatia.eu/web/adrismartfish*

Interreg MED 2014-2020

Project title and acronym: "Pharos4MPAs"

Duration: 2017-2020

Countries involved: Italy, France, Greece, Spain, Slovenia, Albania.

Key words: sustainable management of human activities and the protection of Mediterranean ecosystems.

Project goals related to SSF: the PHAROS4MPAs project explores how Mediterranean MPAs are affected by activities in the growing blue economy. It provides a set of practical recommendations for regional stakeholders on how the environmental impacts of key sectors can be prevented or minimised. Encouraging international collaboration across MPA networks and cooperation between state, industry and other actors, the aim of PHAROS4MPAs is to enhance MPA management effectiveness and improve the conservation of marine ecosystems across the whole of the Mediterranean. PHAROS4MPAs also focuses on SSF.

Project activities related to SSF: development of a set of recommendations for dealing with interactions between MPAs and SSF in the Mediterranean Sea, including three different stakeholder groups: public authorities, MPA managers, small-scale fishers.

Milestones: safeguarding MPAs in the growing Mediterranean blue economy, recommendations for SSF, policy brief

for SSF.

Total budget: EUR 1,179,496

More info at: *https://pharos4mpas.interreg-med.eu/*

Interreg MED 2014/2020

Project title and acronym: "MPA Networks"

Duration: 2020-2022

Countries involved: Albania, Croatia, France, Greece, Italy, Slovenia, Spain.

Key words: SSF sustainability, co-management, MPA management, new competences at the level of SSF fishers, environmental and biodiversity protection.

Project goals related to SSF: the project is aimed at improving marine biodiversity protection by strengthening effective MPA management through networking at different levels, testing and capitalising on solutions, transferring knowledge, and building capacities. The MPA Networks project focuses on providing sustainable solutions to challenges requiring an approach that goes beyond MPA boundaries. These challenges include the general question of management effectiveness, and more specifically the management of SSF in MPAs, the conservation of mobile species and the development of sustainable financing mechanisms for MPAs. The expected result is that MPAs are empowered to serve their purpose and deliver results that will benefit nature and sustain our livelihoods.

Project activities related to SSF: the project carried out nine pilot actions tackling SSF in seven pilot areas: from monitoring and data gathering from fishers' logbooks for the evaluation of fishing annual harvest flow to the management of SSF and training.

Milestones: evaluation report of the methodologies implemented in relation to general management effectiveness, fisheries, mobile species and financing topics; tools to support management will be shared among the Mediterranean community of MPA managers; training material.

Total budget: EUR 2,664,000

- ERDF: EUR 2,264,000

More info at: *https://mpa-networks.interreg-med.eu/*

Project case studies at a glance

Portofino MPA case study:

The MPA will test the governance tool (engagement and discussion with local fishers) and continue monitoring SSF. Additionally, they will carry out natural capital accounting to assess how conservation measures and ecological benefits generate socio-economic benefits (especially for fishers).

Torre del Cerrano MPA case study:

The MPA implements on-site activities related to the management of SSF issues, focusing on streamlining fishing activities by reducing the fishing effort while preserving the livelihood of local communities.

Torre Guaceto MPA case study:

The main goal of the pilot action was the collection and organisation of data on small-scale local artisanal fishing already available in the Marine Protected Area. The challenge was to encourage fishers to shift towards sustainable activities regarding the use of marine resources. The pilot actions sought to:

- improve the balance between the fishing fleet and the resources available for fishing activities;
- contribute to the reduction of the fishing fleet while preserving jobs in coastal communities;
- demonstrate the feasibility and viability of maritime activities other than fishing;
- train fishers to encourage sustainable activities regarding the use of marine resources.

Thanks to this approach, local fisheries operators agreed to collaborate on the definition of management rules for the MPA. The pilot action increased fishers' awareness of the key features of artisanal fishing activities (namely, seasonality and selectivity). Guidelines have been drawn up to improve the sustainability of fisheries, with specific rules on gear and seasonal activity. In addition, the collected data can be used to detect signs of climate change along the Adriatic coast, and to validate ecosystem and climate models.

Strunjan MPA case study:

The MPA implements actions to improve the management of professional fisheries, increase monitoring, define conservation measures for marine mammals and identify necessary protection regimes for the conservation of a Natura 2000 site on the edge of the MPA.

INCA NMP case study:

The NMP pilot action focuses on establishing the conditions for sustainable SSF and recreational fishing management by dissemination of best practices and a monitoring system for fisheries/fish stocks.

Best Practice Box No 2

SSF INITIATIVES, NETWORK AND ORGANISATIONS

The boxes below contain a list of European initiatives supporting the development and representativeness of SSF that may serve as best practices for the purposes of this report.

TOO BIG TO IGNORE

Type of initiative: network

Created following the inaugural World SSF Congress, held in Bangkok, Thailand in 2010, "Too Big to Ignore" is a global research network and knowledge mobilisation partnership that focuses on addressing issues and concerns affecting the viability and sustainability of SSF. The network involves 27 countries in Europe, North America, Latin America, Africa, Asia and Oceania. Its aim is to:

- promote recognition and understanding of the importance of SSF;
- explore SSF potential contributions to economic growth and development, environmental sustainability, stewardship and community resilience;
- assess SSF vulnerability to anthropogenic global change processes;
- encourage policy discussions and contribute information for improving decision-making about SSF;
- advance knowledge and build local and global capacity in research and governance for the future of SSF.

The network carries out several activities such as organising meetings, webinars and congresses, developing capacity in transdisciplinary research, and producing papers, reports and briefings. The network is funded by the Social Sciences and Humanities Research Council of Canada, with a contribution from team members and partners.

More info at: *http://toobigtoignore.net/*

LIFE "LOW IMPACT FISHERS OF EUROPE"

Type of initiative: organisation

The LIFE platform is an umbrella organisation run by fishermen for fishermen. Established in 2012 at the European Artisanal Fishermen's Congress, LIFE's mission is to achieve conditions in which fishing is done sustainably and small-scale, low-impact fishers in Europe can maximise its social and economic viability. The LIFE platform enables European small-scale, low-impact fishers to develop and communicate collective positions and to influence the development and implementation of policies and legislation, including the CFP. LIFE acts as a platform for and promotes the creation of regional and national low-impact fishing organisations in EU Member States where representation is lacking. The platform aims to achieve sustainability in fishing, through management that:

- grants the right to fish to those who fish sustainably;
- eliminates fleet overcapacity where it exists, while preserving jobs in small-scale, low impact fisheries;
- ends harmful subsidies and unsustainable and destructive fishing practices;
- restores the health of seas in Europe and the rest of the world.

The organisation has more than 30 members across Europe. The platform works via a management board of working fishermen who are representatives of their local fishing communities. Day-to-day tasks are carried out by the executive director with the support of a Brussels-based secretariat and its regional coordinators.

More info at: *https://lifeplatform.eu/*

FRIENDS OF SSF

Type of initiative: network

The Friends of SSF platform is a regional network of actors sharing common interests and objectives for the sector. The platform is aimed at promoting transnational cooperation and building synergies through ongoing work in the region. It plays an integral role in the implementation of the Regional Plan of Action for SSF in the Mediterranean and the Black Sea (RPOA-SSF). The platform was officially launched on 26 September 2018 at the "High-level conference on sustainable SSF in the Mediterranean and the Black Sea", with the signing of the Platform Charter outlining the following commitments:

- increase knowledge on SSF and support data-gathering at local, national and Mediterranean and Black Sea level;
- develop and implement initiatives and projects to share and implement sustainable environmental and socio-economic solutions together with researchers, decision-makers, SSF actors and their associations;
- formulate advice on SSF.

The founding members are: GFCM (Coordinator), WWF (Coordinator), AKTEA, CHIEAMB, LIFE, MEDAC, MEDPAN

More info at: *https://www.fao.org/CGPM/activities/fisheries/small-scale-fisheries/friends-of-ssf/en/*

ARIEL KNOWLEDGE NETWORK

Type of initiative: network

The ARIEL network is a voluntary and informal association set up to promote cross-border dialogue, an interactive approach to innovation and knowledge exchange between SSF and aquaculture actors. It enables its members to collaborate on areas of common interest, with the aim of contributing to the smart, sustainable growth of coastal communities in the Adriatic-Ionian macro-region. Established in 2019 under the ARIEL project (Interreg ADRION 2014-2020), the network's strategic and operational goals are:

- to expand and follow up on the ARIEL cooperation and knowledge network with multilevel actors of SSF and aquaculture at regional and transnational level;
- to share and exchange knowledge;
- to endorse horizontal and quadruple helix approaches and cooperation among SSF and aquaculture stakeholders as a key to achieving innovation;
- to support the development of a favourable legislative and programming framework and science-based policies;
- to support SSF and aquaculture enterprises in making their business more sustainable and competitive, ensuring favourable conditions for this;
- to provide/support access to tools, services and technological infrastructure to speed up innovation and promote knowledge of innovative technologies for SSF;
- to provide innovation support services for small-scale operators;
- to scout further cooperation opportunities at regional, national and transnational level within the framework of the signatories' respective institutional duties and responsibilities.

The current network members are:

National Research Council – Institute of Biological Resources and Marine Biotechnologies (Italy), Marche Region – Fisheries Economy Department, Sicily Region – Mediterranean Fisheries Department (Italy), University of Palermo (Italy), ASSAM – Agency for the Agrifood Sector Service of Marche (Italy), Institute of Oceanography and Fisheries (Croatia), Public Institution RERA SD for Coordination and Development of Split Dalmatia County (Croatia), Ministry of Agriculture and Rural Development of Montenegro, University of Montenegro – Institute for Marine Biology (Montenegro), Hellenic Centre for Marine Research (Greece), Region of Western Greece (Greece).

More info at: *https://www.arielbluecommunity.eu/membership/*

4.2 Multifunctionality in the context of SSF: an opportunity

Multifunctionality in the context of fisheries has been investigated in several studies and projects carried out at the local, EU and international level.

Starting with the shift of rural development away from an emphasis on food production and towards a variety of new forms of natural resources observed in recent years, Salmi (2015) analyses the adaptation of fisheries within a post-productive setting and the opportunities presented by new forms of multifunctional activities in the article "Constraints and opportunities for small-scale fishing livelihoods in a post-productivist coastal setting". Recent transitions have been observed in many coastal areas, with fisheries contemplating new activities related to tourism, recreation and nature conservation. Within this context, the SSF sector is characterised by pluriactivity due to its intrinsic resilience, described as "adaptability and transformability" (Walker et al., 2004). Indeed, by their nature SSF apply a variety of livelihood strategies involving flexibility within fisheries, geographical mobility and diversification. Fishermen are trying to adapt their strategies with other activities, interests and ideologies, such as the protection of biodiversity, leisure use and tourism (Salmi, 2015).

Multifunctionality in the context of SSF can address the declining profitability and falling employment in the fisheries sector. The possibility of diversification is relevant for many types of areas, offering fishermen, their families and other members of the fishing community an opportunity to create additional sources of employment and income, while providing services that help fisheries areas remain viable places to live, fish and do business.

The FISHINMED project, co-financed by the ENPI CBC Mediterranean Programme 2007-2013, collected definitions and best practices related to SSF multifunctionality interpreted as:

1. Diversification of primary production activities (e.g. new fishing techniques and gear) – i.e. diversification within the fisheries sector.
2. Diversification of activities within the fish value chain (often regarding those adding value to fish products: short circuits such as direct sales, marketing strategies, etc.).
3. Pluri-activity, whereby fishermen and their families continue to earn income from traditional fishing while carrying out integrative activities, such as fishing tourism or restaurants and catering.
4. Broader diversification of the fisheries area into sectors not directly related to fishing, such as environmental, research, social services, renewable energies or other emerging sectors.

Other ancillary activities such as net-making, boatbuilding, engine repair and maintenance, etc. can provide additional fisheries-related employment and income opportunities in marine and inland fishing communities.

At the EU level, the EMFF Regulation envisages support for investments contributing to income diversification for fishermen. Support for the development of complementary activities, including onboard investments, angling tourism, restaurants, environmental services related to fishing and educational activities around fishing is provided for in Article 30 "Diversification and new forms of income". Although the EMFF allocation under Article 30 in the period 2014-2020 was EUR 37,899,442, the MS Managing Authorities committed only 13% of the amount (corresponding to EUR 4,753,167) and the spending performance (eligible expenditure declared by beneficiaries to MA) was less than half of the MA commitment (43%, or EUR 2,043,570).

In addition, giving the promising results in the period 2007-2014, the implementation of CLLD (Article 63) and FLAG cooperation (Article .64) were also expected to contribute to diversification inside or outside commercial fisheries, as well as lifelong learning and job creation in fisheries areas in 2014-2020. While FLAG support is not restricted to a specific segment of the fleet, in practice the SSF sector is the natural partner of most FLAGs. This segment has

close ties with the local area and is likely to be most interested in the type of focused support a FLAG can provide. The relevance of the CLLD approach was confirmed by the EMFF allocation in the period 2014-2020: according to the FAME Report 2020, Article 63 is one of the best-performing measures overall, with EUR 265.9 million in EMFF commitments. "Running costs and animation", with EUR 79.9 million in commitments (30% of total commitments under Article 63), is still top. The less popular types of operations were those with value-adding diversification, socio-cultural and environmental objectives, according to the FAME Report. In this context, the role of FARNET is quite important since it can help in identifying and disseminating best practices on SSF multifunctionality at the FLAG level and in setting up new projects on a local and transnational scale.

In this chapter, successful stories from FLAG projects addressing the diversification of activities within the fish value chain and broader diversification of the fisheries area into sectors not directly related to fishing, such as environmental, research, social services are outlined in Best Practice Box Nos 3 and 4 and Case Study Box No 1. The best practices were:

- "Pescado artesanal", in the area of the Ria de Pontevedra FLAG, which is an online platform and a communication campaign to increase the consumption of artisanal seafood. It has created new links between fishers, consumers and restaurants, and has empowered SSF operators with new skills for using new technologies.

- "MedAves Pesca" project, where the Oeste FLAG, together with the Portuguese NGO SPEA, enabled better communication and interaction with the fisheries sector. The project focused on adapting fisheries practices while fishing in the Ilhas Berlengas area to prevent seabirds from dying and effectively involved 21 fishermen in planning and implementing co-management.

At MS level, the full implementation of complementary activities in fisheries varies significantly due to the national regulatory framework and interpretation. In the case of fisheries-related tourism, within a multifunctionality approach, it is extremely relevant for the SSF sector as a vehicle for integrative activities. As reported in the European Parliament resolution of 4 July 2017 (2016/2035(INI)): there is no common definition of fisheries-related tourism, nor is there any legal basis; whereas, for example, tourism of this type is considered an occupation in Italy, but in France is classed as a sideline activity; whereas, depending on the legal status accorded to it, significant differences can arise as regards tax arrangements, licensing procedures, qualification requirements, safety equipment, etc. There have been growing calls for a comprehensive and harmonised definition of fisheries-related tourism at the EU level, while distinguishing between its various forms.

Another key issue related to multifunctionality in SSF is the estimation of the income generated from activities diversification. For this purpose, a case study of pescatourism in Italy recently published in the scientific journal Ocean & Coastal Management (Romanelli and Meliadò, 2021) has been used as an example in this chapter (see Case Study Box No 1). From the data collected in 2011-2012 in Italy, it seems that the average daily income of vessels engaged in pescatourism was 50% higher than the income generated by commercial fishing activities. The only exception to this was recorded in the Adriatic Sea.

Despite its relevance and the growing interest, the full potential of multifunctionality in fisheries still needs to be unlocked. Further efforts should be made to depict the state of play and identify gaps and obstacles hindering its development, as well as the potential avenues for SSF in order to adapt new activities and the governance instruments and methodologies for supporting diversification.

Best Practice Box No 3

DIVERSIFICATION OF ACTIVITIES WITHIN THE FISH VALUE CHAIN

Best practices:
FLAG project
Country: Spain

Topics addressed: short supply chain, adding value to SSF

Title and description: Pescado artesanal

Pescado artesanal is an online platform and marketing campaign aimed at increasing the consumption of artisanal seafood. The online platform pools the products of four auctions, making local seafood more accessible to buyers.

The area of the Ria de Pontevedra FLAG is home to four fish and seafood auctions predominantly marketing artisanal fishery products. Despite each auction's specialisation, competition from the bigger Vigo fish auction is fierce and these smaller auctions face difficulties in attracting customers. Sales volumes declined, ultimately threatening the viability of these markets and leading to lower prices. The aim of the project was to increase the attractiveness of the local seafood offer and link different parts of the value chain (fishermen, auctions, fishmongers, distributors, restaurants and consumers). The key activity of the project was to develop an online sales platform (*pescadoartesanal.com*) that virtually pools the supply of the auctions and thereby offers a wider range of products to potential customers. The platform instantly informs fish buyers what will be available at the four auctions via a single information point. The platform was set up by the FLAG on behalf of the Cofradias, although its day-to-day running is now in the hands of the trained members of these associations. In parallel, creating a collective brand, Pescado Artesanal, ensured coherence when promoting local seafood. Fishmongers and restaurants buying from the platform are encouraged to use the brand to showcase their local sourcing.

Main results:

- new links throughout the seafood chain (fishmongers, fishermen, restaurants, etc.) and training fishermen to use the new technologies required for the platform;
- 10 restaurants and 20 fishmongers using the brand;
- increased visibility of SSF seafood.

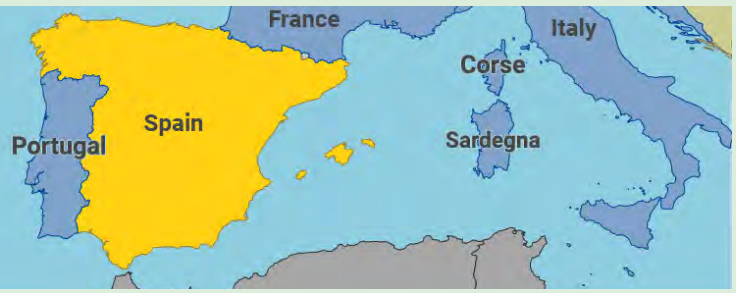
Budget: EUR 67,719

- EU contribution (EMFF): EUR 50,789
- Public contribution (national): EUR 16,929

Best Practice Box No 4

BROADER DIVERSIFICATION OF THE FISHERIES AREA INTO SECTORS NOT DIRECTLY RELATED TO FISHING, SUCH AS ENVIRONMENTAL, RESEARCH, SOCIAL SERVICES

Best practices:
FLAG project
Country: Spain



Topics addressed: diversification of activities, surveillance in MPAs, co-management

Title and description: MPAs: under fishers' surveillance

With support from the FLAG, local fishers from Murcia are helping enforce protection measures and halt poaching in the region's oldest fisheries marine reserve, Cabo de Palos. Its improved protection has led to an increase in endemic species. For some time, the Cabo de Palos marine reserve has been patrolled by a company hired by the regional administration. However, poaching continued unabated, with illegal fishers simply adapting to the timing of the regular patrols. Then, in 2018, the FLAG decided to fund a new initiative from the Cofradía (fishing organisation) of Cartagena. Thanks to a FLAG grant, the local Cofradía has been able to pay a local fisher to stop fishing for three months over the summer, and instead use his boat to carry out additional surveillance in the reserve during these critical months. Upon finding illegal activity, the fisher signals to the person that they cannot fish and calls out the region's coast guard to officially sanction the poachers. This has led to better prosecution of illegal fishing, while also acting as a deterrent to would-be poachers in the area.

Main results: this collaboration between the regional administration and local fishers has made a real difference to enforcing protection measures. The professional fishers know which boats are allowed to fish, when and where – and which should not be fishing. Thanks to this project, fishers have been empowered to protect their resource and have taken ownership of fishing controls. They have seen that it pays off with improved fish stocks and better acceptance of and compliance with fishing regulations by the sector itself. Moreover, pressure on fishing has been reduced during the summer months, as there is one less fishing vessel operating, with that one vessel focusing on control activities.

The FLAG project replicated a WWF-funded pilot project from 2017. This allowed them to take advantage of the lessons learned by a private fund to make a public investment. Establishing a rotation of vessels allowed fishers to share the responsibility by all being involved in the project activities. Nevertheless, for this type of collaboration between public administrations and fishers to be effective, communication and mutual trust are fundamental. This seasonal initiative could also be taken as a pilot for increasing support during the whole year.

Budget: EUR 40,940

- EU contribution (EMFF): EUR 34,799
- Public contribution (national): EUR 6,141

Topics addressed: environmentally sustainable fisheries, training, co-management

Title and description: MedAves Pesca project

Through the MedAves Pesca project, the Oeste FLAG joined forces with the Portuguese NGO SPEA to enable better communication and interaction with the fisheries sector. This joint project focused on adapting fisheries practices while fishing in the Ilhas Berlengas area to prevent seabirds from dying. Two methods were tested in close cooperation with local fishermen.

Main results:

- 21 fishermen from 5 vessels who are testing the 2 developed measures;
- 182 fishing trips during which adaptation measures were tested to prevent seabirds from dying;
- 48 fishing trips with a fishing observer onboard and 134 fishing trips monitored by the captain's boats.

It was essential to involve the fishermen from the outset in the project's design to guarantee its successful implementation. One of the key points was to ensure that there were enough resources for the dissemination actions. It was crucial to adapt the format of the communication activities to specifically target the fisheries communities, as the project promotors wanted them to join the project and have a bigger impact.

Budget: EUR 260,085

- EU contribution (EMFF): EUR 195,064
- Public contribution (national): EUR 65,021

Topics addressed: training for fishers, income diversification, marine resources protection

Title and description: FISHEKO Operation

The company designed and implemented 5 communication training sessions for around 30 local fishers free of charge. Training addressed the lack of space for both fishing and recreational activities, and the plastics problem

along Slovenia's coastline. The training not only focused on this specific initiative, but included several themes that could help the fishers diversify their own activities, such as sightseeing tours. During the training, the problem of plastics and microplastics in the marine environment was explained, along with how they impact fishers and the public.

Main results:

- 15 vessels were involved in the campaign in the year 2020 and the same number is expected in forthcoming years;
- awareness-raising on the management of local resources.

Once the fishers completed the training, the same local company offered to pay them (for their crew and vessel maintenance) for each day they carried out awareness-raising activities instead of fishing. On those days, any fishers who wanted to could visit anchored vessels at the ports and explain to people about the environmental harm caused by single-use plastics. The fishers then provided people with a biodegradable package of utensils, such as forks, knives and plates. The fishers were free to choose the timing and selected days in the months when the area was most crowded, thus reducing the fisheries pressure on the local area during those periods.

Budget: EUR 215,890

- EU contribution (EMFF): EUR 149,467
- Public contribution (national): EUR 49,822
- Private contribution: EUR 3,674

Case Study n. 1

BROADER DIVERSIFICATION OF THE FISHERIES AREA INTO SECTORS NOT DIRECTLY RELATED TO FISHING, SUCH AS ENVIRONMENTAL, RESEARCH, SOCIAL SERVICES

SSF AND RENEWABLE ENERGY: THE CASE OF OFFSHORE WIND FARMS

Given that offshore wind energy potential is most utilised in the North Sea, Baltic Sea and Eastern Atlantic, conflicts between offshore wind farming and commercial fisheries have mostly been relevant in those sea basins. In recent years, facilitated by the introduction of the EU MSP Directive, Member States have been making efforts to adopt a more integrated approach to planning for offshore wind energy. Member States keen to develop offshore wind farming, such Poland and Estonia, are now looking to MSP to address those conflicts in a proactive way (MSP Platform Conflict Fiche 5: offshore wind and commercial fisheries).

Offshore renewable energy is the fastest-growing sector of the blue economy in Europe, with considerable potential to deliver technological development and job opportunities. Direct employment in the EU more than doubled between 2014 and 2016 to around 160,000, and in 2017 exceeded the total employment in the EU fishing fleet (EU Commission, 2018).

Fishing and vessel traffic are usually prohibited in offshore wind farms, reducing the area available for fishing and representing barriers to navigation. During construction, offshore wind farms can jeopardise parts of fish habitats, such as spawning and nursery grounds, as their location (shallow areas closer to the coast, on sandy banks) are often areas particularly suitable for offshore wind farms. At the same time, during their operational lifetime, offshore wind farms can contribute to preserving fish stocks by offering artificial reefs where fish can feed and cannot be captured.

Conflicts between the offshore wind and fisheries sectors can occur over different temporal scales (e.g. permanent, temporary and seasonal). They are mainly related to: (i) accidental damage and ship strikes; (ii) construction and operation of offshore wind farms, which can affect commercial fishing through the disturbance of mobile species by noise and also cause direct damage to sessile species; (iii) spatial exclusion, which can lead to a reduction in or loss of access to traditional fishing grounds; (iv) obstruction of navigation routes to and from fishing grounds, which can lead to increased steaming times; (v) offshore wind farming, which may be perceived as the latest in a long line of restrictions, threatening not only livelihoods but a traditional way of life.

Mitigation of such conflicts could be achieved through: (i) strategic solutions designed to prevent conflicts as much as possible; (ii) solutions that deal with an existing conflict; (iii) more localised solutions for mitigating conflicts.

Strategic solutions include: (i) using high-level policy to ensure impacts are considered; (ii) acknowledging the special status of fishers in the MSP planning process; (iii) drawing on fishers' knowledge to create an evidence base; (iv) choosing suitable offshore wind farm locations with care; (v) setting up a liaison group for MSP early on; (vi) using the MSP plan to favour synergies and co-existence; (vii) allowing some types of fishing in offshore wind farms under certain conditions; (viii) supporting fisheries by designating migration corridors; (ix) allowing fishing vessels to transit offshore wind farms; (x) aligning construction phases with fisheries seasons; (xi) supporting collaborative arrangements between sectors; (xii) using an adaptive approach based on coordinated research and monitoring; (xiii) producing guidance notes and licensing manuals; (xiv) considering technical solutions (e.g. careful siting of offshore wind farms, careful timing of construction work, configuration of turbines to allow navigation and fishing in between, adequate cable burial, bunching of cables in corridors, appropriate marking and lighting of developments, adequate early consultation with the fishing industry, and associated safety zone proposals).

Case Study n. 2

PLURI-ACTIVITY, INTEGRATIVE ACTIVITIES

PESCATOURISM IN ITALY

A recent paper published in the scientific journal Ocean & Coastal Management by Romanelli and Meliadò (2021) analysed fishing tourism activities in Italy.

In 1992, Italy became the first EU and Mediterranean country to allow sightseeing trips (from mid-spring to mid-autumn, during daylight hours and in fairly calm sea conditions) on SSF fishing vessels and on boats serving mariculture plants. This kind of activity was called "fishing tourism" or "pescatourism". Tourists can pay to go on a trip and observe the fishing operations and catches, which are often cooked and eaten directly onboard.

In 1999, the pescatourism season was extended to April (in exceptional cases, tourists can embark in other months if the boat has been specially authorised and if the sea is relatively calm). Larger boats (>12 m LOA) that stop to use trawl and purse seines were also allowed to engage in pescatourism under national legislation (MIPA, 1998 and 1999).

From the data collected in 2011-2012, it seems that the average daily income of vessels involved in pescatourism was 50% higher than the income generated by commercial fishing activities, the only exception being recorded in the Adriatic Sea (i.e. pescatourism: EUR 357 per vessel per day; commercial fishing: EUR 420 per vessel per day) (Figure 5; Romanelli and Meliadò, 2021). In addition, a sharp decline in fishing days was observed in all areas. Therefore, in line with the principles of the Common Fisheries Policy, pescatourism could contribute to long-term environmental, economic and social sustainability.

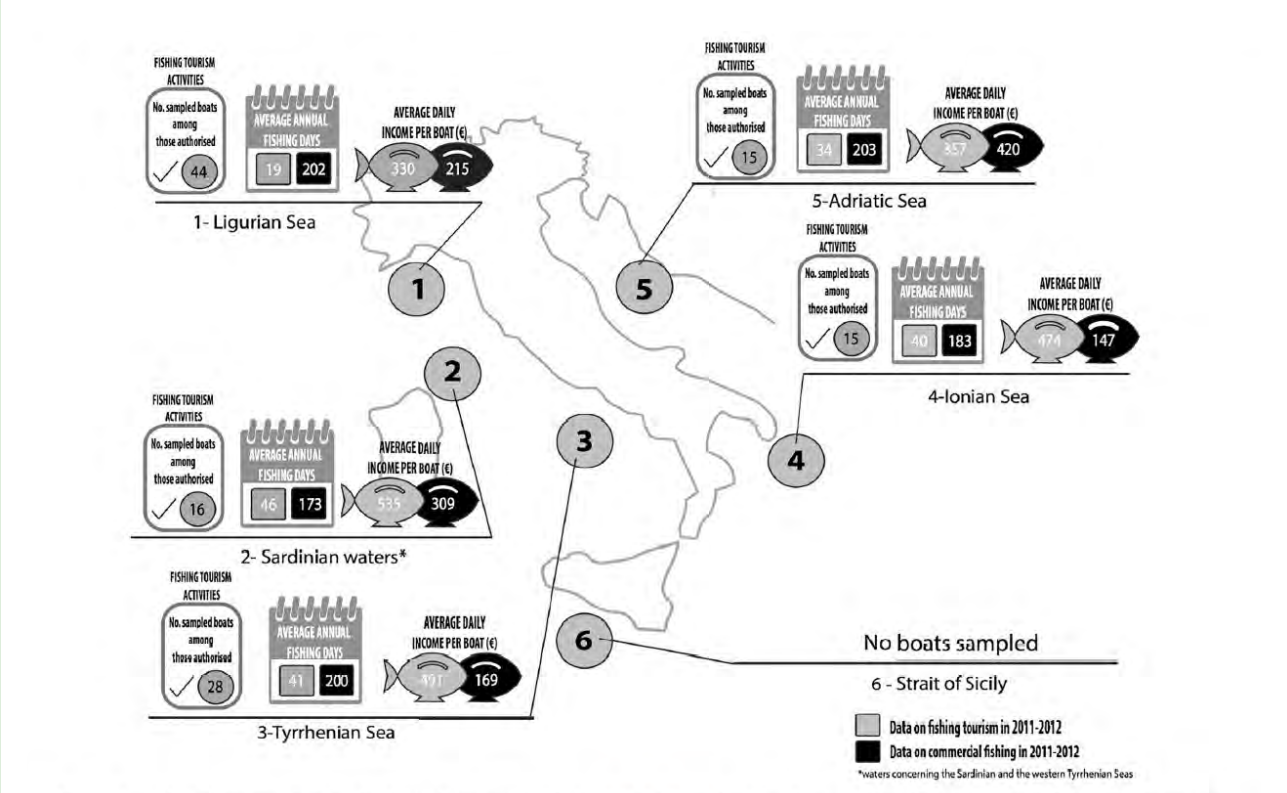


Figure 5. Map of Italian seas with pools of authorised boats sampled during 2011-2012 and details of the stated mean annual days at sea spent locally on pescatourism and commercial fishing operations and related daily income. Data are from Meliadò (2013), without any variability estimate. Modified from: Romanelli and Meliadò (2021).

Romanelli and Meliadò reported that in 2012, all professional fishing boats became eligible for pescatourism (Repubblica Italiana, 2012a), but that bottom or mid-water trawl nets had to be kept ashore during the tourism activity. For a long time, pescatourism was explicitly intended as an ancillary activity to professional fishing, provided that the latter activity prevailed (or was equal) in terms of days at sea (Repubblica Italiana, 2004 and 2012a). However, this limit was recently removed (Repubblica Italiana, 2012b).

National surveys aimed at assessing this activity in 1997 and 2004 showed that only 50% of the vessels sampled engaged in pescatourism, spending on average from 18 to 34 days at sea with tourists (Mamone et al., 1998; CENASCA, 2006). In a similar study performed in 2011-2012, only 34 out of the 59 boats authorised in Liguria actually carried tourists (Meliadò, 2013).

In general, at the national level the number of authorised boats has increased over time: 160 in 1996-1997, 460 in 2004, and 575 in 2015-2016 (Mamone et al., 1998; CENASCA, 2006; Romanelli, 2019). A more recent survey was performed in 2020 and confirmed that only a small percentage (26%) of the authorised vessels engage in pescatourism (i.e. 148 vessels out of 575 units).

Sardinia was the Italian region that had focused the most on pescatourism over the years, although perhaps more boats could have been authorised given the length of its coastline (Pala, 2019). While the relatively high number of vessels authorised to conduct pescatourism in the Veneto and Emilia-Romagna regions was probably linked to the local popularity of recreational fishing charters (i.e. recreational fishing with hooks and rods onboard chartered vessels that do not engage in professional fishing and lack any motorised deck gear to haul nets, longlines or traps; Malvasi, 2016; Mamone et al., 1998). Consequently, some boats authorised for pescatourism engage in fishing charter tourism within the limits imposed for pescatourism (e.g. no more than 12 people onboard for safety reasons). Many vessels involved in pescatourism are larger and equipped with more powerful engines compared with an average SSF vessel, probably because the size of the vessel is a prerequisite for keeping fares down and offering a higher degree of comfort (Romanelli and Meliadò, 2021).

Romanelli and Meliadò (2021) also underlined that in some areas the declared revenues for days spent with tourists were higher than from those recorded by the same boats for commercial fishing operations. Thus, the net gains could have been more satisfactory, although some additional expenses were likely necessary (e.g. for meals, if offered).

The same authors also affirmed that the existence of considerable differences in fishing tourism intensity along the Italian coast showed that local factors (e.g. nature of the coast, accessibility from land of the most interesting sites, number of pleasure boats, socio-economic profile of tourists) play a decisive role in the success of this type of business. Therefore, actions aimed at increasing this activity should be conceived and implemented for small coastal sectors, in relation to the nature of the places and local tourism. However, on a national and regional scale, newspaper articles and advertisements would be useful to spread the message that pescatourism contributes to the survival and sustainability of traditional SSF and can support the tourism of many coastal sites (Galeotti, 2019). Moreover, it would be useful if the short training courses on fishing tourism included the experiences of fishermen from the local area or from other areas who have been carrying out this activity for a long time (Pala, 2019).

PESCATOURISM IN GREECE

Within the framework of the ARIEL project, an economic analysis of the potential performance of pescatourism was carried out for two Greek fishers with vessels less than 12 metres. It was estimated that a total of EUR 5,850 to EUR 6,400 was needed as a start-up budget for investing in this kind of activity. In particular, the costs included fishing gears (EUR 300 to EUR 700), certification (EUR 500), rescue equipment (EUR 400 to EUR 700), toilet (EUR 1,000 to EUR 1,100), repairs and maintenance (EUR 1,050 to EUR 1,100), marketing (EUR 1,400) and capacity building (EUR 900 to EUR 1,200).

The study pointed out that the fishers' families had the available budget (in the form of savings) and that they had decided to utilise these savings rather than apply for a bank loan. The analysis also showed that the business had the available resources to cover all its operating costs and that there were no cashflow problems, as the low operating costs were covered by the fishing activity.

The fisher could offer three different fishing tour packages (a 2-hour fishing trip, a 4-hour fishing trip and tailor-made fishing trips). The aim was to gradually increase the proportion of 2-hour packages, as the company believed that this product had higher demand and hence potential for development in the area. Therefore, the number of 2-hour fishing trips relative to the total number of trips is set to increase in the next 5 years. About 10 to 15 2-hour trips could be organised twice a day (one in the morning and the other in the afternoon).

As an example, the 2-hour tour could include a demonstration of trammel net fishing. It is important to emphasise that the fishing effort should be very low (trammel nets of about 300 m), as the fishing is mainly for demonstration purposes and hence the fishing effort is kept to a minimum. In addition, due to its limited size the gear occupies a small part of the vessel, leaving more room for fishing with fishing rods or other hand lines. The tour could include a quick stop for swimming or relaxing, snacks and refreshments. A 4-hour tour could include all the aforementioned activities, but with a longer swimming stop, while an 8-hour tour could include a meal onboard.

The expected revenues in the medium term (five-year horizon) ranged from EUR 13,957 to EUR 19,540 in the case of pescatourism, and from EUR 4,800 to EUR 8,580 in the case of associated fishing activity. The fisher's involvement in the fishing tourism activity has significant potential, as it offers promising economic outcomes for the fishing enterprise: after five years, gross and net profits are much higher, while the Family Fishing Income (an index of family welfare) has increased by about 50%.

SSF AND AQUACULTURE: SEABREAM PREDATION IN BIVALVE FARMING

Bivalve predation by seabream has been observed worldwide and is a major concern for bivalve farmers. Bivalve losses due to gilthead seabream (Sparus aurata) predation is a major problem in many Mediterranean areas. In French Mediterranean lagoons, a survey of 135 farmers indicated that 93% of them were affected by seabream predation (Gervasoni and Giffon, 2016).

To limit losses, 85% of surveyed bivalve farmers protect bivalves against seabream by deploying nets around the tables. However, this incurs significant financial and logistical costs, including purchasing nets, their deployment and maintenance, and potentially reduced bivalve growth due to reduced current flow and food delivery. A collaboration between bivalve farmers and fishermen could be a sustainable solution for bivalve farming, by regularly fishing seabream between tables and within protective nets, thus reducing predation pressure (Richard et al., 2020). In this sense, allowing SSF to set their nets inside mussel farms could represent: (a) an additional source of income for fishers (wild seabream has a high economic value in the market); and (b) a reduction of the economic loss for mussel farmers (by limiting the predation of seabream on bivalves). However, particular attention should be paid to the fact that dense aggregations of wild seabream inside mussel farms would strongly increase the vulnerability of this species to fishing gears (e.g. gillnets and trammel nets). This could lead to overexploitation of the stock, and hence this fishing practice might not be sustainable in the medium and long term. Additional scientific studies are needed to explore this potential opportunity for SSF.

5. CONCLUSIONS AND RECOMMENDATIONS

The review of the EU regional, national and transnational best practices towards multifunctionality in the SSF sector led to the identification of key successful elements, as well as obstacles hindering the unlocking of its full potential..

Successful elements from the best practices review

To be worthy of the name, a best practice must prove its effectiveness, transferability and durability in practice. The table below lists the successful common "horizontal" elements of the best practices presented in the previous chapters of this report.

Successful elements of the best practices

- *Bottom-up approach and interactive engagement of SSF key actors.*
- *Increased cooperation of SSF with research bodies, governments, NGOs and civil society.*
- *Empowerment of human resources with new skills and competences, e.g. by means of training, as well as the valorisation of the practical knowledge of small-scale fishers.*
- *Empowerment of SSF through improved leadership, ownership, cooperation and coordination.*
- *Engagement of small-scale fishers in planning and implementing technical pilot actions, events and any other initiatives expected in projects that are focused on the fisheries sector, marine resources protection and income diversification.*
- *Better communication with stakeholders in the fisheries sector: enterprises, academia and research, policymakers, NGOs and civil society.*
- *A policy framework able to support and facilitate multifunctionality with tools and resources, and able to ensure the durability of and capitalisation on best practices.*

The use of more selective gears, protocols for improving the sustainable exploitation of marine resources, the contribution to data collection and environmental monitoring are examples of increased cooperation of small-scale fishers with research bodies based on mutual "trust". For instance, the involvement of fishers in testing pilot actions, measures and tools developed by research/academia can help shift small-scale fishers from stakeholders to key actors to increase sustainability. On the other hand, research should bridge the gap between the laboratory and practices, providing protocols and tools that take into consideration the day-to-day needs and challenges of small-scale fishers (e.g. the use of Dolphin Deterrent Devices for mitigating conflicts between SSF and dolphins).

The empowerment of small-scale fishers with new skills is also a result of the increased cooperation with research/academia and, in some cases, of proper use of EU funds (e.g. training activities implemented by FLAGs, interregional projects). For example, this could include the development of ICT tools for both improving seafood product traceability and collecting real-time data for end-users' needs, virtual marketplace apps for direct selling of seafood products, marketing and branding initiatives that require appropriate training, and new competences.

The MPA case studies presented in the report are examples of co-management operationalisation based on the creation of appropriate spaces for interaction between the various parties who have a stake in the limited resources (e.g. SSF, managers, research/academia, public authorities, NGOs, civil society).

Good communication of SSF values in terms of their contribution to the sustainable use of marine resources, cultural heritage and socio-economic development of coastal communities is essential to raise awareness of civil society, including users of marine resources, consumers and students. Public demonstrations and initiatives (e.g. awareness campaigns, festivals, cookery demonstrations, technical workshops, etc.) planned and arranged with the direct involvement of small-scale fishers and their associations can help at different levels: (i) in reaching potential buyers; (ii) in understanding consumer preferences; (iii) in increasing sectoral representativeness; (iv) in promoting a "culture" of the sea; and (v) in raising awareness of the potential advantages of multifunctionality.

Multifunctionality implies innovation, which is often not fully exploited by SSF operators. The innovation brokering approaches (i.e. based on the European Innovation Partnership in Agriculture) for SSF which were applied under pilot projects (e.g. the ARIEL project) suggested how innovation support services can speed up innovation and facilitate uptake. The interactive engagement of multiple actors in SSF sectors can actually help in: (i) fostering a better understanding of the innovation state of play, attitudes and expectations; (ii) scouting and leveraging funding opportunities (i.e. public and private funds); (iii) promoting complementary use of funds; (iv) creating networks and partnerships to implement new activities; and (v) valorising the existing knowledge.

To be effective, multifunctionality also has to be feasible for small-scale fishers. With regard to fishing-related tourism, the support received by fishers in their business plan development has facilitated their understanding of the potential advantages of diversification.

Obstacles to multifunctionality

Given their "transferability" potential, the successful elements outlined in this report can help in overcoming some of the obstacles hindering the development and full implementation of multifunctionality in SSF, which have been reported at EU and MS level by the different stakeholders operating in the small-scale fisheries sector.

Obstacles to multifunctionality in SSF

- *Science and research-driven approach, where new ideas resulting from research are put into practice through one-way (linear) knowledge transfer.*
- *Lack of valorisation of practical knowledge and lack of mutual learning.*
- *Scarce knowledge of social innovation approaches.*
- *Poor attitude of SSF actors towards innovating practices, products and services.*
- *Insufficient knowledge of how to innovate, e.g. adoption of technological and non-technological solutions for adding value to SSF practices and products.*
- *Lack of long-term training programmes tailored to SSF specific needs and building new competences.*
- *Conflicts with other marine users for space and resources at local level.*
- *Scarce knowledge of the socio-economic feasibility of multifunctionality activities.*
- *Lack of awareness of the social, economic and environmental benefits of multifunctionality.*
- *Lack of communication with local authorities.*
- *Administrative burden for accessing grants.*
- *Lack of a common and harmonised defined methodology to collect, benchmark and elaborate data and information for periodically monitoring the state of play of multifunctionality in SSF and addressing policies and measures.*
- *Lack of awareness and ability to access EU funding opportunities.*
- *Lack of representativeness and aggregation, marginalisation of small-scale fishers in the decision-making process.*
- *Difficulties in reaching out to SSF stakeholders with information.*
- *Poor integration/complementarity between sectoral policies (e.g. tourism, fisheries).*
- *Poor integration between programmes and related funding instruments (e.g. EMFF, ESF, ERDF).*
- *Top-down approach from the competent authorities.*

Despite the successful elements of the case studies described in the report, the creation of a harmonised framework to support SSF multifunctionality able to tackle sustainability objectives while addressing day-to-day needs and preserving income is still a challenge and is often confined to pilot initiatives with a short lifespan.

Recommendations

The desk review of the state of play, best practices, effectiveness and impact of the financial tools towards multifunctionality in the EU SSF sector presented in the report may be an opportunity for further consideration and recommendations, in order to contribute to better and more effective governance of SSF income diversification in the period 2021-2027.

Recommendations box

- *Leveraging and joining complementary resources in terms of knowledge and funds.*
- *Capitalisation on and cross-fertilisation of previous and ongoing initiatives and projects at regional and transnational level.*
- *New approaches and tools for SSF interactive engagement.*
- *National and local authorities should establish the conditions for adequate representativeness of SSF actors in national and local associations.*
- *A steady provision of updated and more detailed data on SSF from the national authorities.*
- *Participation of small-scale fishers in decision-making.*
- *SSF representatives should be encouraged and supported to practise or perform multifunctionality.*
- *Raising awareness and building capacity of SSF on local, national and EU funding opportunities to diversify their income.*
- *Training programmes tailored to SSF specific needs.*
- *Direct involvement of small-scale fishers and associations in research and interregional cooperation projects.*
- *Setting-up of a comprehensive database of SSF best practices across the EU.*

Several efforts have been made towards the operationalisation of quadruple approaches to SSF, since the involvement of enterprises, research/academia, governments and civil society in planning and implementing measures and projects is widely recognised as a key factor in maximising opportunities on a regional, national and transnational scale. EU funds already address this challenge, but they can be further used to empower individual helices at the local level and to improve local capacities for interaction. SSF actors should be reached and systematically involved in order to collect data, identify needs and promote the aggregation and mutual exchange of experiences and ideas to be put into practice. In this context, public institutions can act as mediators of public innovation, facilitating this bottom-up process and providing common tools for networking and partnership. The EIP-AGRI initiative and the "pilot" application of the innovation brokering activities to SSF within the ARIEL project may serve as an inspirational case study for fostering the interactive engagement of SSF stakeholders, encouraging them in planning and implementing co-management and setting up new partnerships and projects predicated on multifunctionality. It is widely recognised how the involvement of fishers in co-decision-making and co-creation contributes to the acceptance of technical and management measures.

Encouraging the participation of SSF stakeholders and their direct involvement in interregional cooperation projects, for instance, can enable the exchange of knowledge, approaches and tools from different contexts, laying the foundation for a harmonised framework for SSF multifunctionality while considering local specificities. Making the best use of the wealth of practical knowledge and experience – from this and other sectors – –should be a priority.

Income diversification within the SSF sector is already addressed by EU policies and financial tools, although several constraints in relation to the use of funds from/to SSF fishers have emerged in practice. In some cases, a whole range of projects cover similar issues. Very often they partially overlap in such a way that the activities are led by the same partners, case studies take place in the same areas, and the targeted or surveyed population of actors is identical. In such cases, the findings should be reviewed and consolidated to optimise the planning of future projects. This would avoid unnecessary repetition and costs, while achieving the necessary harmonisation and rationalisation in EU funding utilisation.

In relation to the level of implementation of the EMFF, public authorities have reported difficulties in reaching out to small-scale fishers with information (e.g. information on calls for grants, consultation, etc.). These elements seem to contribute to the lack of awareness of EU financial tools in support of SSF, and the lack of response from small-scale fishers to calls for grants. EMFF MA also noted the poor quality of applications. However, potential SSF beneficiaries of EU funds blamed the administrative burden and complex administrative procedures for accessing grants and managing projects. In addition, at the local level CLLD does not always yield the expected contribution to SSF diversification.

Small-scale fishers should be informed with tailored campaigns on local, national and EU funding opportunities to diversify their income. Training programmes tailored to SSF specific needs, including the administrative aspects of applying for grants and projects, should be promoted and implemented.

6. COUNTRY FICHES

This chapter contains a short fiche for each EU coastal country, including the following key data:

- *SSF key figures based on FDI data (2020), FAO country profiles, FARNET country factsheets, thematic publications and papers.*
- *Total EMFF budget and financial performance by country and thematic objectives with a focus on the allocation, commitments and spending performance related to SSF. Data are based on the information available in the FAME Supporting Unit – EMFF Implementation Report 2019 issued on December 2020 and the FARNET database.*
- *Main interregional cooperation and research projects (national and international scale) focusing on SSF in the period 2014-2020. Key figures are based on a desk survey of the INTERACT database (via keep.eu), programmes and project websites.*

This chapter also includes national and local best practices and relevant case studies for the SSF sector.

6.1 Bulgaria

GENERAL OVERVIEW

The Republic of Bulgaria is situated in the Eastern Balkan Peninsula, bordering five countries – Greece and Turkey to the south, Macedonia and Serbia to the west, while the Danube defines the border with Romania in the north.

Bulgaria has a population of around 7.1 million and a surface area of 110,994 km2 (0.3% of which is water). The Bulgarian Black Sea coastline is 378 km long.

The fisheries sector has three main sub-sectors: (a) marine capture fisheries and mariculture; (b) inland fisheries (freshwater aquaculture and fishing); (c) the Danube fisheries.

Over 99% of capture fisheries production is from the Black Sea (FAO, 2020).

The fisheries and aquaculture sectors do not play an important role as a source of employment, with the number of workers estimated to be in the region of 1,800, a large proportion of whom are part-time employees. The aquaculture sector employs about 1,000 people (FAO, 2020).

SSF in Bulgaria emerged largely after 1990, coinciding with the decline of LSF (Raykov, 2020). SSF now represent the bulk of the Bulgarian fisheries sector in terms of the number of vessels (about 90% from FDI data). All fishing activity is carried out close to the shore and vessels are concentrated at a limited number of landing sites.

The state of fish stocks in the Black Sea is poor, which is probably the reason for the low incomes and declining interest of young people in joining SSF (Raykov, 2020). In addition, the zoning of no-take areas has had a significant impact on Bulgarian SSF, which are badly organised and generally have little influence on fisheries policy (Raykov, 2020). It is the general opinion of fishers that the fish stocks are shrinking for various reasons: water pollution, insufficient regulation and control of fishing practices and stocks, and lack of care for the preservation of biodiversity in the Black Sea.

Raykov (2020) reported that SSF have been adversely affected by tourism. Fishing stations and passive gears (i.e. uncovered pound nets) have been moved far away from tourist attractions near the coast, without considering the suitability (i.e. sheltered coast, migration routes, spawning and nursery grounds, etc.) of established fishing points and passive gears that have been used for years.

SSF in Bulgarian waters are significantly affected by adverse weather conditions and a lack of sheltered areas. Other problems with SSF are the ageing fishing fleet and increased fuel costs, risks of accidents at sea, inadequate working conditions, ineffective marketing, and poor promotion of fishery products. It is argued that capacity building and information campaigns to advertise and encourage ecologically friendly and socio-economic sustainable SSF in Bulgaria are a must for this sector.

BULGARIAN SSF CRITICAL ISSUES

- Adverse weather conditions and a lack of sheltered areas.
- Ageing/technically obsolete fishing fleet.
- Increased fuel costs.
- Risks of accidents at sea.
- Decreasing trend in catches.
- Low incomes and a lack of interest of young people in joining the fishing industry.
- Inadequate working conditions.
- Ineffective marketing and poor promotion of fishery products.
- Insufficient aggregation of small-scale fishers within organisations.
- Lack of representation within national and EU institutions.
- Lack of appropriate institutional facilities to support access to funds.

Source: Pascual-Fernández et al., 2020

Raykov (2020) reported that Bulgarian SSF mostly used hooks and lines (55%), gillnets (35%) and traps (10%) to catch gobiidae (22%), turbot (Scophthalmus maximus, 16%) and scad (Trachurus mediterraneus, 12%). These species partially reflect what was reported in the FDI data (reference year 2020), where the sprat (Sprattus sprattus), bluefish (Pomatomus saltatrix) and Atlantic bonito (Sarda sarda) also make a significant contribution to Bulgarian SSF catches in terms of biomass (Figure 6).

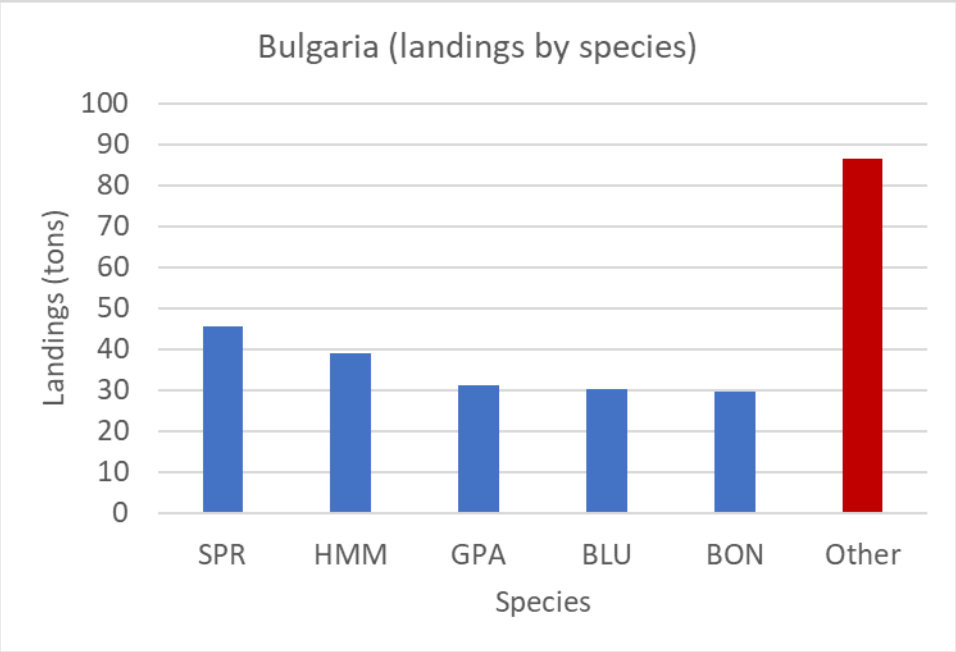


Figure 6. Landings by species of Bulgarian SSF (FDI data 2020). SPR: Sprattus sprattus; HMM: Trachurus mediterraneus; GPA: Gobiidae; BLU: Pomatomus saltatrix; BON: Sarda sarda. The category "Other" includes 21 species

Financial tools supporting SSF in Bulgaria

The main financial instrument for the Bulgarian fisheries sector is the European Maritime and Fisheries Fund managed by the National Agency for Fisheries and Aquaculture, established within the Ministry of Agriculture and Food.

The Agency is the central government's executive body for the implementation of the national policy on fishery and aquaculture and for the application of fisheries legislation in Bulgaria.

The table below shows the key figures for the EMFF allocation, commitments and financial performance in the Black Sea (BG, RO) and in Bulgaria according to the FAME Report 2020.

EMFF key data: Black Sea and Bulgaria

Sea basin/MS	Total allocation (EUR)	Total EMFF committed by MA (EUR) (Infosys, 31/12/2020))	Total eligible EMFF expenditure declared by beneficiaries to MA (EUR)	Absorption rate %	No of operations
Mar Nero	249 245 098	214 172 683	72 260 048	29%	953
Bulgaria	80 823 727	71 629 765	26 450 718	33%	453

Source: FAME Report, 2020

The Bulgarian allocation represents 32% of the total EMFF allocation for the Black Sea Basin, with a spending performance of 37% of the total eligible EMFF expenditure declared together with Romania. The average commitment

per operation in the country was EUR 158,123.10.

Bulgaria: EMFF contribution by Union Priority (EUR)

MS	UP 1	UP 2	UP 3	UP 4	UP 6	TA	Total per MS	Total per MS	%
BG	14 424	25 531	9826	16 119	8 471	2 325	4 125	80 824	1,42

Source: Member States' operational programmes. Situation as in December 2019.

In accordance with Article 18(1)(i) of Regulation (EU) No 508/2014, the Bulgarian Maritime and Fisheries Programme 2014-2020 provided a description of the action plan for the development, competitiveness and sustainability of small-scale coastal fishing, where the following bullet points were outlined to address SSF sector constraints:

- enhancing knowledge of the state of marine ecosystems and marine resources;
- developing partnerships with scientists and stakeholders;
- improving management (new gear and fishing methods, management plans, sustainable return, reinforcing regional cooperation);
- modernising the fleet in accordance with health and safety regulations;
- designing/implementing pilot and innovative programmes;
- adapting the fishing capacity to available fishing opportunities;
- implementing environmental legislation and providing compensation;
- improving energy efficiency and tackling the effects of climate change;
- diversifying income through the development of complementary activities (e.g. fisheries and tourism);
- improving production (mainly species with limited commercial value) and product certification;
- allowing new fishermen to receive support, including financial incentives;
- organising fishermen, production and marketing programmes, and creating and operating infrastructure networks;
- improving skills/knowledge through lifelong learning, the exchange of experience, the development of openness to their participation in institutions and decision-making procedures;
- improving the support infrastructure..

Subject to certain conditions and with higher rates of public support which can range from 20% to 80%, the EMFF supports SSF in terms of:

- investments in fishing boats and equipment, e.g. purchasing new engines, replacing engines, purchasing the first vessel, investing in new gears and onboard equipment to improve selectivity, protect biodiversity, minimise unwanted catches and improve energy efficiency;
- investments in equipment to add value to catches;
- investments in complementary activities for income diversification;
- investments in human resources, from health and safety on board to new skills..

The SSF sector in Bulgaria is also given priority in the guidelines for applicants, who are prioritised in the ranking when projects are assessed. However, Bulgaria noted that the quantity of upcoming and approved projects was rather poor.

According to the FAME Report 2020, the EMFF supported 8 operations linked to SSF vessels for a total eligible amount of EUR 123,523, which corresponds to the total amount committed.

MS	No of operations	Supported SSF	Committed by MA (EUR)	Eligible expenditure declared by beneficiaries to MA (EUR)
BG	8	8	123 523	123 523

Among the EMFF measures linked to SSCF topics, those related to Article 63 "Implementation of community-led local development strategies", Article 43(3) "Fishing ports, landing sites, auction halls and shelters" and Article 69 "Processing of fishery and aquaculture products" were listed in the "Top five measures" in terms of MA commitment (FAME Report, 2020).

Article	Total eligible EMFF committed by MA (EUR)	Total eligible EMFF expenditure declared by beneficiaries to MA (EUR)	No of operations	Spending performance (% declared in total committed)
63	17 978 210	1 672 198	43	9%
43(3)	9 507 794	3 937 080	6	41%
69	8 979 613	4 852 727	52	54%

However, from the FAME Report analysis, the spending performance was extremely low for CLLD, which is widely considered one of the most relevant approaches to promote income diversification and capacity building at SSCF level.

CLLD challenges 2014-2020	CLLD objectives 2014-2020
• Increasing the attractiveness of the fisheries areas. • Enhancing organisational and administrative capacity at the local level. • Mobilising local human resources and reducing economic dependency on fisheries activities.	• Diversifying activities. • Promoting social wellbeing and cultural heritage. • Enhancing and capitalising on environmental assets.

Although the number of FLAGs has increased from 6 to 9 (4 inland and 5 in the Black Sea), compared with 2007-2013, the total budget for CLLD has been reduced (from EUR 19.5 million to EUR 17.9 million). As a result, the average budget per FLAG is lower (falling from EUR 3.6 million to EUR 2.2 million).

ISSUES AFFECTING EMFF PERFORMANCE IN BULGARIA

- Complicated application process for beneficiaries due to complex public procurement procedures.
- Need to obtain private funding for project implementation.
- Insufficient interaction between producers and processors.
- Restriction of fishing days due to environmental conditions in the Black Sea.

In addition to the EMFF, Bulgaria can apply to other funds to support the blue growth of its communities. Bulgarian beneficiaries took part in several research and interregional projects co-financed by the EU in the last programming period. Bulgaria is eligible for the EU programmes shown in the box below.

Programmes 2014-2020

2014 - 2020 Black Sea Basin ENI CBC
2014 - 2020 ESPON 2020
2014 - 2020 INTERACT III
2014 - 2020 INTERREG V-A Greece - Bulgaria
2014 - 2020 INTERREG V-A Romania - Bulgaria
2014 - 2020 INTERREG VB Balkan-Mediterranean
2014 - 2020 INTERREG VB Danube
2014 - 2020 Interreg Europe
2014 - 2020 Interreg IPA CBC Bulgaria - Former Yugoslav Republic of Macedonia
2014 - 2020 Interreg IPA CBC Bulgaria - Serbia
2014 - 2020 Interreg IPA CBC Bulgaria - Turkey
2014 - 2020 URBACT III

The graph below shows the number of projects, partnerships and budget sizes per theme in the programming period 2014-2020, for a total budget of EUR 284,367,275 (total number of projects: 800) (Figure 7).

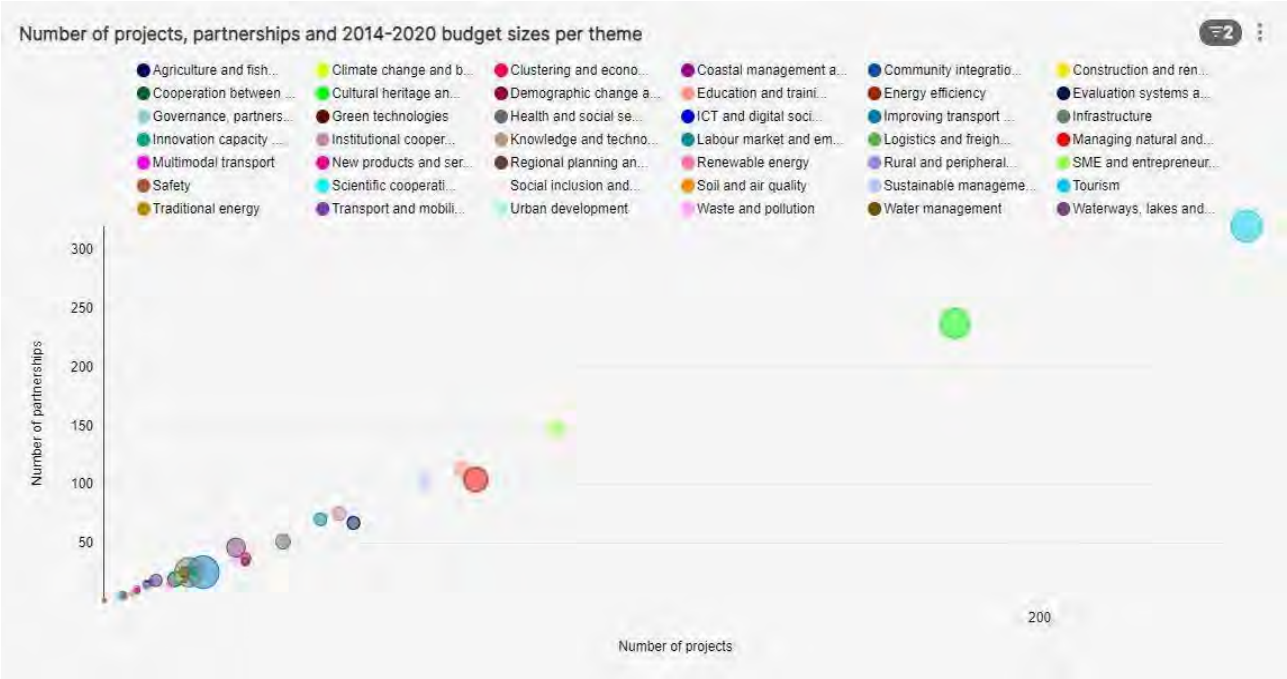


Figure 7. Bulgaria. Number of projects, partnerships and 2014-2020 budget sizes per theme. Source: *https://keep.eu/countries-and-regions/*

In Figure 8, the projects were selected from the Keep database by theme of interest in relation to SSF topics:

- tourism;
- sustainable management of natural resources;
- agriculture, fisheries and forestry;
- coastal management and maritime issues.

Out of a total of 800 projects, 354 covered the aforementioned topics for a total budget of EUR 90,458,537. Tourism seemed to be the leading topic of the projects financed. Despite its relevance, the theme of coastal management and maritime issues remains underexploited within the framework of the projects financed.

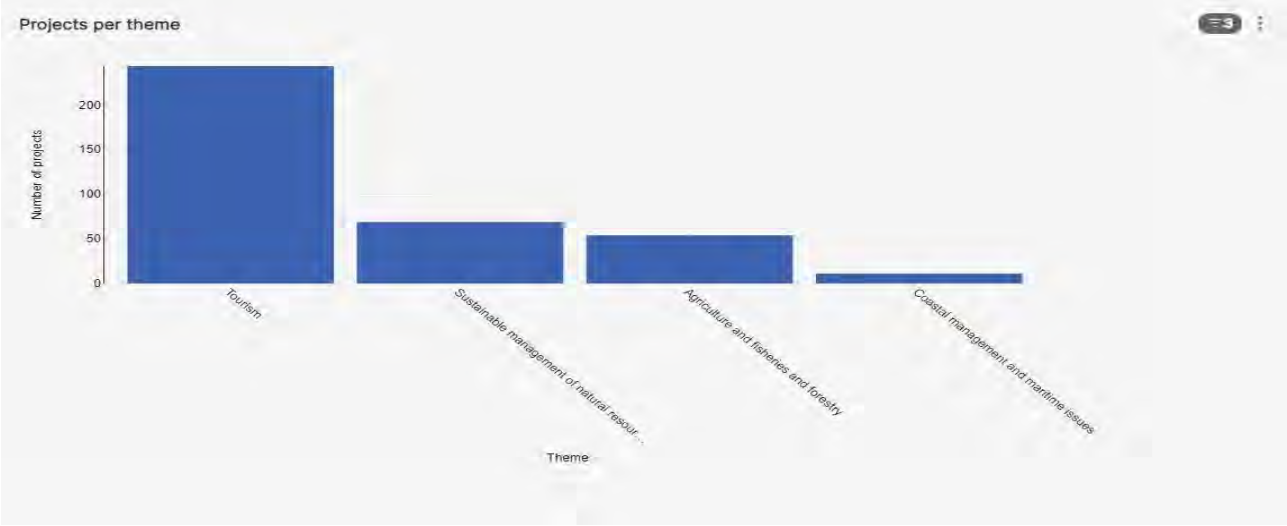


Figure 8. Bulgaria. Number of projects by theme. Source: *https://keep.eu/countries-and-regions/*

SSF projects and best practices in Bulgaria

BEST PRACTICES: BG #1

Country: Bulgaria, Romania

Programme: DG MARE call for proposals "Support measures for SSF" (2014).

Topics addressed and policy context: improving the degree of involvement of the small-scale fishing sector in industry organisations; facilitating the involvement of the small-scale fishing sector in setting up new advisory councils; promoting the exchange of good practices that will further increase the participation of the small-scale fishing sector in the advisory and decision-making processes being carried out under the new regionalised common fisheries policy.

Title: pilot project "European Association of fishermen in the Black Sea" – Support measures for small-scale fishing.

Description: the project, promoted by SP Consult BG, was co-financed under the DG MARE call MARE/2014/04 "Support measures for small-scale fishing". The aim was to raise awareness and give a greater role to SSF in future policy-making decisions at national and EU levels by integrating good ecologically friendly practices in the Black Sea region. Among its activities, the project included training for SSF representatives in the following areas:

- policy-making;
- better use of the good practices implemented at EU level;
- how to make SSF organisations more prominent and influential for the future of the Black Sea region;
- the role of Advisory Councils (AC) at EU level;
- identification of existing best practices in the area and those most suitable for the Black Sea region.

Budget: total project amount: EUR 177,767

- EU contribution: EUR 159,990

More info at: *http://smallscalefishing.eu/en/project-info/*

BEST PRACTICES: BG #2

Country: Bulgaria, Spain, France, Italy

Programme: EASME/EMFF

Topics addressed and policy context: coastal tourism, diversification of income, environmental protection

Title: "ArtReefs: innovative tools for coastal tourism"

Description: the ArtReefs project promotes the use of custom-designed artificial reefs (ARs) as versatile infrastructure to generate innovative tourism packages, complementary economic activities and beneficial services for nature, leading to the creation of jobs and greater cooperation between IMP-related stakeholders, including in SSF.

Budget: EUR 209,401

- EU contribution (80%): EUR 167,520

More info at: *http://www.artreefs.eu/*

6.2 Croatia

GENERAL OVERVIEW

The Republic of Croatia covers 56,542 km2 and has a population of 4.6 million. Its coastal length is approximately 6,000 km, since it comprises more than 1,000 islands which account for nearly 9% of the total Mediterranean coastline. The total surface area of its coastal and territorial waters is around 31,000 km2.

The main institution managing the fisheries sector is the Ministry of Agriculture. Within it, there are several key directorates, the most important being the Directorate of Fisheries, responsible for implementing EU regulations on the CFP. The Veterinary and Food Safety Directorate manages the legal framework regarding food safety, animal by-products, disease control and veterinary inspection. The Directorate for Professional Support for the Development of Agriculture and Fisheries is involved in educating fishermen and helping them with the legal framework related to the sector. The Directorate of Fisheries has regional offices in all coastal counties. The regional offices issue recreational and commercial fishing permits, collect catch data and administer documents related to fishing.

The fisheries sector is regulated by the Marine Fisheries Act (Narodne novine – Official Gazette 62/2017, 14/2019), which allows: (a) commercial fishing; (b) small-scale coastal fishing; (c) sport and recreational fishing; (d) fishing for scientific and aquarium purposes; (e) fishing tourism.

Prior to its accession to the EU, Croatia had a very specific category of non-commercial fishery called "small-scale fishery for personal needs or subsistence fisheries". Under the regulations in force, this required registration in the commercial category after Croatia acceded to the EU on 1 July 2013. The key distinguishing features between commercial and subsistence fishers were the purpose of their activity, the type and quantity of fishing gear allowed and the daily catch limits. Commercial fishing is a profit-making activity, while fish and other marine organisms caught in the course of subsistence fishing were not to be placed on the market and were intended solely for personal use. After a transition process which ended in April 2015, the subsistence fishery category ceased to exist and some of the subsistence fishers registered under small coastal fisheries, while others joined the recreational category. To obtain new commercial licences for the small coastal fishery category, fishers have to be of an advanced age (more than 60 years old) and disadvantaged social status (monthly income of less than EUR 400). However, potential new holders find it hard to fulfil their professional obligations (e.g. keeping accounts). Therefore, being unable to comply with all the legal requirements, many small coastal fishers no longer work in fisheries but are redirecting their efforts towards more tourism-related activities. Those who opted for recreational fisheries are also disappointed, as this fishing category prohibits the use of any kind of net and restricts fishers exclusively to hook and line fishing. With these requirements, most coastal inhabitants have been forced to give up the tradition that they believed they had been entitled to since time immemorial (Sanja Matić-Skoko and Nika Stagličić, 2020).

Sports and recreational fisheries in Croatia are very popular. Permits can be purchased from authorised dealers, from the regional offices of the Directorate of Fisheries or online from its website. The number of recreational fishers in Croatia was reported to stand at around 25,000 from 1979 to 2007. However, in recent years, expert opinion suggests that the number of recreational fishers is three times higher, especially during the summer months (about 75,000). Therefore, recreational catches may have a significant impact on near-shore marine resources and are in direct competition with local SSF (Sanja Matić-Skoko and Nika Stagličić, 2020).

Moreover, SSF associated with tourism provide an added value to tourism services, although currently, there are no estimates of fisheries' contribution to this value. However, these fisheries do fit well within the national strategic guidelines for tourism development, the aim of which is to develop the tourism offer on the basis of high-quality services. The characteristics of "fishing villages", especially on the islands, represent a significant asset in terms of overall tourism development. Similarly, SSF have significant cultural value and as such are part of the identity of the islands' populations (Sanja Matić-Skoko and Nika Stagličić, 2020).

Under the ARIEL project, the Institute of Oceanography and Fisheries in Split carried out consultations at small-scale fishers' level to gain a better understanding of their day-to-day needs, critical issues and attitude to innovation.

CROATIAN SSF CRITICAL ISSUES

- Conflict with other activities and users of coastal zones (e.g. recreational fishers, maritime transport, MPAs, other fishing segments).
- Extortionate administration.
- Heterogeneousness among SSF actors.
- Lack of communication.
- Slow progress in the development of processes and programmes that are under way. FLAGs have only just been established, so it is too soon to see the results of such cooperation.
- Lack of promotional activities.
- Insufficient knowledge and skills to use innovative technology.
- Limited maritime infrastructure and limited access to landing places.
- Resistance to co-management.
- Dispersal of fishermen across the coast and islands complicates cooperation and communication.
- Difficulties in making unique rules due to the essential differences between SSF fishing areas.

Source: Pascual-Fernández et al., 2020

Multipurpose SSF vessels predominantly use different types of fixed nets (gillnets and trammel nets) and operate from the shore and in coastal waters, in limited areas and during limited periods (Matic-Skoko and Stagličić, 2020).

Matic-Skoko and Stagličić (2020) reported Cephalopoda (Octopus vulgaris and Sepia officinalis), Solea sp. and Spicara smaris as the most important species landed by the Croatian SSF fleet. However, from FDI data (2020), it seems that Merluccius merluccius, Sparus aurata, grey mullet (Mugilidae) and Triglidae represent important taxa for this activity (Figure 9).

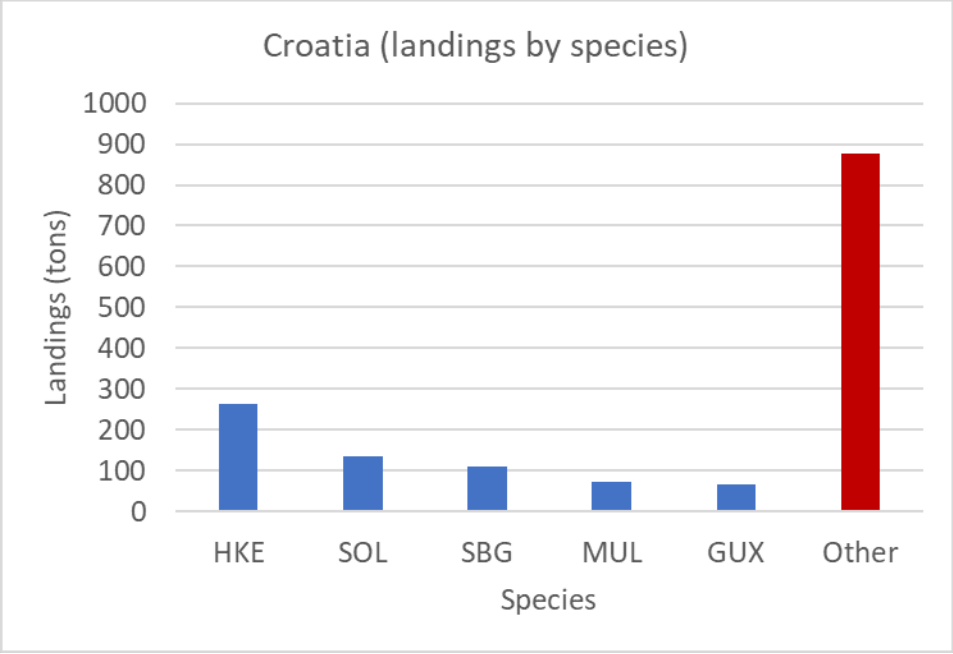


Figure 9. Landings by species of Croatian SSF (FDI data 2020). HKE: Merluccius merluccius; SOL: Solea solea; SBG: Sparus aurata; MUL: Mugilidae; GUX: Triglidae. The category "Other" includes 119 species.

Financial tools supporting SSF in Croatia

The main financial instrument for the Croatian fisheries sector is the European Maritime and Fisheries Fund managed by the Ministry of Agriculture.

The table below shows the key figures for the EMFF allocation, commitments and financial performance in the Mediterranean Sea and in Croatia according to the FAME Report 2020.

EMFF key data: Mediterranean and Croatia

Sea basin/MS	Total allocation (EUR)	Total EMFF committed by MA (EUR) (Infosys, 31/12/2020)	Total eligible EMFF expenditure declared by beneficiaries to MA (EUR)	Absorption rate %	No of operations
Mediterranean	1 263 946 368	706 587 712	313 956 830	24,8%	12 534
Croatia	252 643 138	173 859 608	98 300 837	31%	3 198

Source: FAME Report, 2020

The Croatian allocation represents 29% of the total EMFF allocation for the Mediterranean Sea Basin, with a spending performance of 31% of the total eligible EMFF expenditure. The average commitment per operation in the country was EUR 56.395.

Croatia: EMFF contribution by Union Priority (EUR)

MS	UP 1	UP 2	UP 3	UP 4	UP 6	TA	Totale per MS	Totale per MS	%
HR	84 329 576	51 514 186	34 824 000	23 548 850	42 267 938	1 000 000	15 158 588	252 643 138	4,4

Source: Member States' operational programmes. Situation as in December 2019.

Subject to certain conditions and with higher rates of public support which can range from 20% to 80%, the EMFF supports SSF in terms of:

- investments in fishing boats and equipment, e.g. purchasing new engines, replacing engines, purchasing the first vessel, investing in new gears and onboard equipment to improve selectivity, protect biodiversity, minimise unwanted catches and improve energy efficiency;
- investments in equipment to add value to catches;
- investments in complementary activities for income diversification;
- investments in human resources, from health and safety on board to new skills.

The SSF sector in Croatia is also given priority in the guidelines for applicants, who are prioritised in the ranking when projects are assessed.

According to the FAME Report 2020, the EMFF supported 174 operations linked to SSF vessels for a total eligible amount of EUR 493,455, which corresponds to more than 50% of the MA committed budget.

MS	No of operations	Supported SSF	Committed by MA (EUR)	Eligible expenditure declared by beneficiaries to MA (EUR)
HR	174	122	942 098	493 455

Among the EMFF measures linked to SSF topics, those related to Article 63 "Implementation of community-led local development strategies" – confirming that the largest amount of EMFF support was committed to the implementation

of CLLD – and Article 76 "Control and enforcement" were listed in the "Top five measures" in terms of MA commitment (FAME Report, 2020).

Article	Total eligible EMFF committed by MA (EUR)	Total eligible EMFF expenditure declared by beneficiaries to MA (EUR)	No of operations	Spending performance (% declared in total committed)
63	24 235 739	1 516 186	15	9%
76	19 291 089	7 063 747	3	37%
69	13 807 616	11 327 971	43	82%

In relation to CLLD, since the country joined the EU only in 2013 and the first FLAG was established in 2017, FARNET was not able to summarise and evaluate their strategic objectives and challenges (FARNET).

CLLD challenges 2014-2020

- Sustainable economic development of coastal and island communities dependent on fisheries by adding value to fisheries-related activities and diversification of activities from other relevant sectors, thus increasing income and employment opportunities.
- Strengthening small-scale infrastructure development and promoting social cohesion in coastal and island communities.
- Encouraging collective and strategic thinking in fishing communities to enable them to shape their own future, and promoting the active participation of fishermen in the strategic planning of local development.
- Integrating and optimising inclusion of the fisheries sector in local development to maximise synergy and minimise possible conflicts of interests in fisheries areas.
- Strengthening awareness of fishing communities of the need to protect the environment, nature and biodiversity, thereby increasing their resilience and reducing their vulnerability.
- Establishing adequate mechanisms for maximising complementarity and synergy with other EU funds.
- Providing a platform for exchange of best practices and experiences within the framework of the EU Strategy for the Adriatic and Ionian Region and other fields of cross-border cooperation.

The current number of FLAGs in Croatia is 14, with an average budget per FLAG of EUR 1,978,895. The Croatian Managing Authority launched a membership-based network which includes FLAGs, potential FLAGs, and other fisheries CLLD actors in 2016. The aim is to provide assistance in implementing measures supporting CLLD within the OP 2014-2020: from the distribution of information to capacity building, exchange of best practices, support for FLAG cooperation within Croatia and promotion of CLLD.

ISSUES AFFECTING EMFF PERFORMANCE IN CROATIA

- Insufficient quality of applications.
- Challenges with applying the CLLD approach for the first-time implementation of local strategies.

In addition to the EMFF, Croatia can apply to other funds to support the blue growth of its communities. Croatian beneficiaries took part in several research and interregional projects co-financed by the EU both during the pre-accession phase and in the programming period 2014-2020. Croatia is eligible for the EU programmes shown in the box below.

Programmes 2014-2020

2014 - 2020 ESPON 2020
2014 - 2020 INTERACT III
2014 - 2020 INTERREG V-A Hungary - Croatia
2014 - 2020 INTERREG V-A Italy - Croatia
2014 - 2020 INTERREG V-A Slovenia - Croatia
2014 - 2020 INTERREG VB Adriatic - Ionian
2014 - 2020 INTERREG VB Central Europe
2014 - 2020 INTERREG VB Danube
2014 - 2020 INTERREG VB Mediterranean
2014 - 2020 Interreg Europe
2014 - 2020 Interreg IPA CBC Croatia - Bosnia and Herzegovina - Montenegro
2014 - 2020 Interreg IPA CBC Croatia-Serbia
2014 - 2020 URBACT III

According to the *Keep.eu* database, in the programming period 2014-2020, Croatian beneficiaries were involved in 640 projects for a total amount of EUR 248,594,690. Of these, 222 projects – for a total budget of EUR 98,117,021 – covered the following topics:

- tourism;
- sustainable management of natural resources;
- coastal management and maritime issues;
- agriculture, fisheries and forestry.

Tourism seemed to be the leading topic of the projects financed, followed by the sustainable management of natural resources, coastal management, and agriculture, fisheries and forestry (Figure 10).

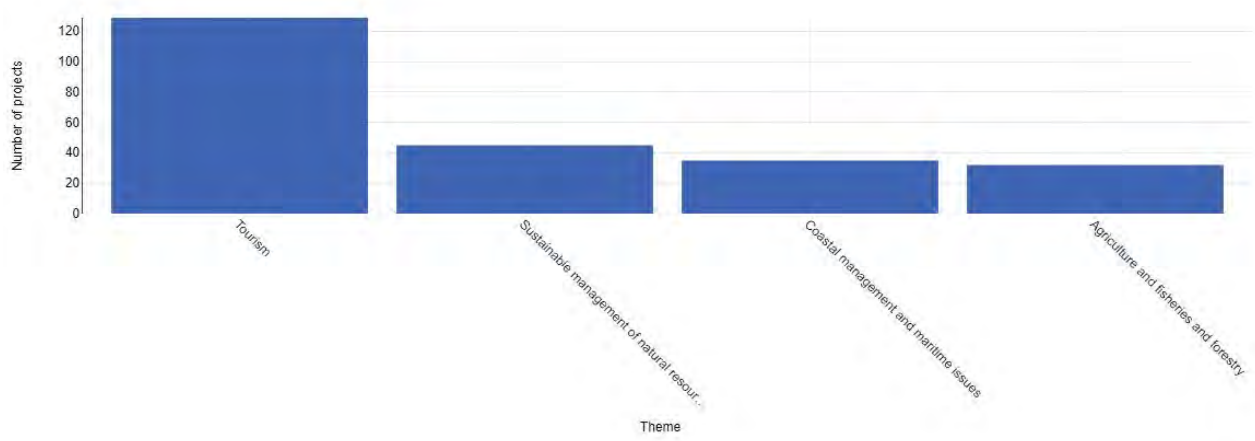


Figure 10. Croatia. Number of projects by theme. Source: *https://keep.eu/countries-and-regions/*

SSF projects and best practices in Croatia

Croatian beneficiaries have been involved in several cooperation projects financed by the European Union, including the following, which directly addressed SSF in the programming period 2014-2020:

- AdriSmArtFish (Interreg Italy-Croatia 2014-2020);
- FAIRSEA (Interreg Italy-Croatia 2014-2020);

- ARIEL and ARIEL Plus (Interreg ADRION 2014-2020);
- FishMPABlue 2 (Interreg MED 2014-2020).

BEST PRACTICES: HR #1

A FOCUS ON…

FishMPABlue2 in Croatia

The project helped fishers diversify their activities into fishing tourism and develop new skills, while reducing their fishing effort in the MPA.

15 fishers are represented on the Telašćica Nature Park co-management board, although the entire community numbers around 25 fishers ranging in age from 23 to 70.

The Croatian Directorate of Fisheries recently endorsed these efforts by recognising and supporting the work in Telašćica and Lastovo Nature Park MPAs and agreeing to enforce the management plans that will be included in national legislation by the end of 2019. With this, Croatia is set to become a co-management pioneer in the Mediterranean. This is a good example of a management plan for fisheries being developed using a bottom-up approach involving fishers, scientists, non-governmental organisations and government.

BEST PRACTICES: HR #2

FOCUS SU…

ARIEL in Croatia

The project helped to provide a better understanding of the day-to-day needs of SSF to support sector innovation. The interactive approach to innovation led to the identification of feasible solutions to the practical problems, to be put in place in cooperation with scientific institutions.

Small-scale fishers were trained on key issues such as:

- spatial conflict management;
- marketing and branding for market, process and product innovation;
- sustainable fishing techniques.

Small-scale fishers cooperated with scientific institutions in testing the following pilot solutions:

- Dolphin Deterrent Devices (DDDs) to reduce/prevent harm to dolphins;
- “listara” trammel nets fitted with a technical device aimed at reducing bycatch;
- selective trammel nets having an 80 mm and 84 mm mesh size (stretched) aimed at reducing the bycatch.

ARIEL and FAIRSEA

The selectivity-related outcomes of ARIEL pilot actions in terms of 40 vs 42 mm “listara” trammel nets were used as a basis for one of the FAIRSEA project scenarios, namely the pilot action in Croatia’s Istria region. The FAIRSEA project and its WP5 are focused on the full development of a participatory process for the definition of management scenarios for an ecosystem-based approach derived from case studies. In Istria, FAIRSEA simulated the increase in mesh size of trammel nets for catching sole (Solea sp.) (based on ARIEL outputs where this pilot action was proposed and accepted as an innovation idea) and the resulting effects on stock and marketing price, as well as the economic consequences for fishermen.

6.3 Cyprus

GENERAL OVERVIEW

The Republic of Cyprus is the third-largest island (after Sicily and Sardinia) in the Mediterranean Sea. It lies approximately 75 km south of Turkey and about 1.450 km south-east of the Greek mainland.

Fisheries are not an important economic sector in Cyprus and do not make a substantial contribution to the national gross domestic product, resulting in their marginalisation. This became particularly evident after the economic crisis which affected Cyprus in 2013, leading to a bailout from the European Financial Stability Mechanism. Since then, the prioritisation of economic growth has meant that more economically important sectors have become the principal actors in negotiations over the use of marine space.

The main policy instrument for the Cypriot fishing fleet is the Cypriot Fisheries Law (Fisheries Law ΚΕΦ.135), which regulates, inter alia: how licences are issued; the categorisation of different fishing fleets; penalties and their enforcement; maintenance of the fishing vessel register; the use of fishing gears; the prohibition of the use of toxic substances and dynamite for fishing (Hadjimichael, 2015). Since the SSF activities take place within the country's 12 nautical mile limit, management of fisheries resources falls under national jurisdiction rather than under the Common Fisheries Policy.

The Ministry of Agriculture, Rural Development and Environment (Department of Fisheries and Marine Research – DFMR), in cooperation with the Directorate-General for European Programmes, Coordination and Development, is the responsible authority for preparing the "Thalassa" operational programme. The Thalassa programme is the European Maritime and Fisheries Fund's Operational Programme for Cyprus. The DFMR is responsible for conducting fisheries research, collecting fisheries data and developing the government's fisheries policy.

Hadjimichael (2015) depicted the state of play of SSF in Cyprus and the main technical and institutional factors affecting its development. In addition to the historical changes and financial crisis, Hadjimichael focused on the analysis of the conflicts, competition and overuse of the marine space as one of the most critical issues for Cyprus's SSF and blue growth in general: spatial competition with other sea users and activities (e.g. oil and gas industry), competition with marine species (dolphin damage to gears and catches). Compensation schemes in the form of de minimis aid and/or EMFF grants have tried to address these issues. Moreover, small-scale fishers have complained about the top-down approach from the competent authorities and marginalisation in decision-making, aggravated by the lack of technical background of small-scale fishers and their associations.

CYPRIOT SSF CRITICAL ISSUES

- Top-down approach from the competent authorities, particularly with regard to decision-making.
- Lack of involvement of SSF operators in decision-making.
- Lack of technical background of staff at SSF organisations.
- Lack of technical resources.
- Competition with predators and marine species.
- Increasing pressures and conflicts between Cypriot coastal zone users (e.g. recreational fishers).
- Lack of catch-control and activity on the part of recreational fishers, who sometimes illegally sell their catch to restaurants for a lower price.
- Hydrocarbon reserves within the Cypriot Exclusive Economic Zone (EEZ).
- Competition with aquaculture.

Source: Pascual-Fernández et al., 2020

The Cypriot small-scale fishing fleet is considered the backbone of fishing in Cyprus, constituting its largest fishing sector. Small-scale fishers have always been part of the lower class of Cypriot society, and they are now becoming

marginalised, both figuratively and literally, at sea (Hadjimichael, 2020). The fleet's numbers are set by the national Fisheries Law at a maximum of 500 per year, although a smaller number of permits have been issued in the past few years. Over the years, a number of factors, including overfishing, ecosystem changes and an increase in fuel costs, have made the profession unviable. In terms of regulations, Cyprus's accession to the European Union and the need to comply with the Common Fisheries Policy have not had a direct impact on small-scale fishers, but rather an indirect one due to the loopholes Cyprus has attempted to find in order to maintain the status quo. More recently, however, where conflicts over marine and coastal space have increased, the small-scale fishing sector has been further overlooked in favour of other forms of economic development considered to be more profitable. The profession of small-scale fishers in Cyprus has undergone dramatic changes, with not only a decline in marine resources, but a reduction in marine space. It appears the rise of economically more important activities in marine areas have been given priority over SSF; consequently, small-scale fishers have been left to defend the importance of their profession in solitude.

Hadjimichael (2020) reported that SSF landings in Cyprus were mainly composed of picarel (Spicara spp. and Spicara smaris), bogue (Boops boops), red mullet (Mullus barbatus), surmullet (Mullus surmuletus), common pandora (Pagellus erythrinus) and cephalopods such as common octopus (Octopus vulgaris), musky octopus (Eledone moschata), common squid (Loligo vulgaris) and cuttlefish (Sepia officinalis). The fleet also lands relatively large quantities of seabream (Diplodus spp.), Mediterranean parrotfish (Sparisoma cretense) and rabbitfish (Siganus spp).

The FDI data (reference year 2020) partially confirm this information, with the bogue and picarel (Spicara smaris) among the most abundant species in landings (Figure 11). The two exceptions are the comber (Serrabus cabrilla), which is not mentioned by Hadjimichael (2020), and non-indigenous species (Lagocephalus spp). However, it should be noted that this latter invasive species is common in the tropical waters of the Indian and Pacific oceans and is a recent Lessepsian migrant into the eastern Mediterranean Sea. Having entered through the Suez Canal, it is now spreading towards the western Mediterranean. Similar to other puffer fish, the silver-cheeked toadfish is extremely poisonous if eaten because it contains tetrodotoxin in its ovaries and to a lesser extent its skin, muscles and liver, which protects it from voracious predators.

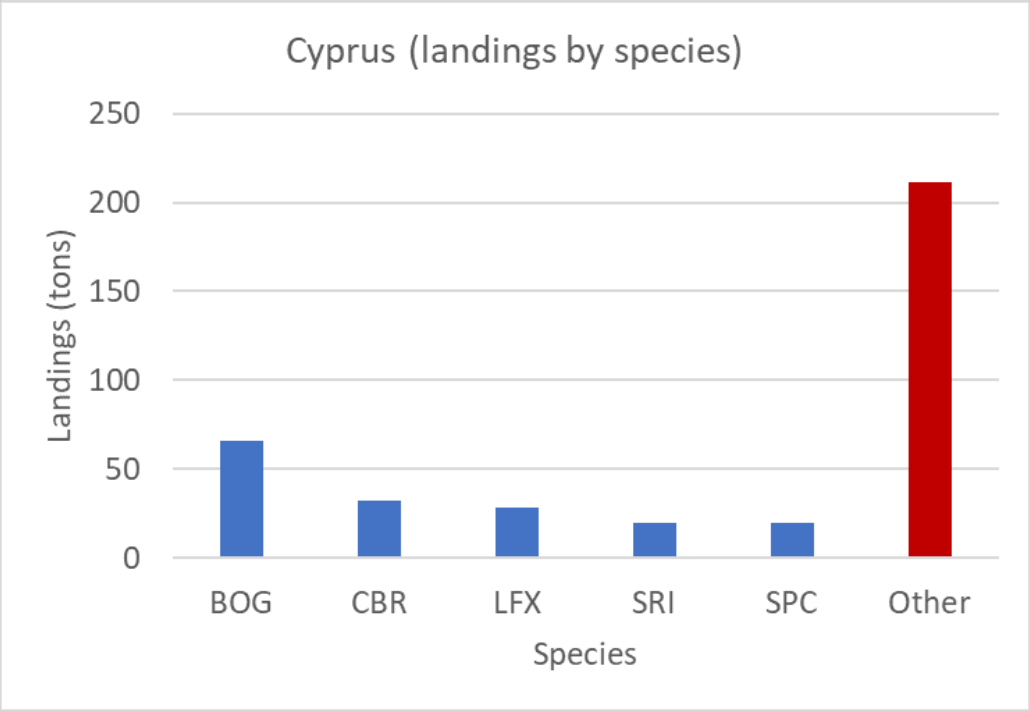


Figure 11. Landings by species of Cypriot SSF (FDI data 2020). BOG: Boops boops; CBR: Serranus cabrilla; LFX: Lagocephalus spp.; SRI: Siganus rivulatus; SPC: Spicara smaris. The category "Other" includes 113 species.

Financial tools supporting SSF in Cyprus

The main financial instrument for the fisheries sector in Cyprus is the European Maritime and Fisheries Fund managed by the Directorate General for European Programmes, Coordination and Development. The "Thalassa" Operational Programme was prepared considering the consultation process held with the competent ministries, local authorities, social and economic partners and bodies of the wider public and private sector, and also through informal dialogue with the European Commission. The OP includes the financing of projects in the fisheries sector, with emphasis on helping small-scale fishers and their communities diversify their economic activities and finance projects aimed at creating jobs, improving the quality of life in coastal areas, and stimulating innovation. Support for the aquaculture sector by funding productive investments and creating appropriate infrastructure for offshore aquaculture units is also vitally important. The OP also includes measures for the control of fishing activities, data collection and integrated maritime policy. In addition, considerable emphasis is placed on measures for the marine environment, while the environmental dimension is incorporated in most of the programme measures.

The co-financing rate of individual projects ranges between 50% and 75%. The potential beneficiaries include fishermen, vessel owners, aquaculture units, processing units, collective organisations, private and public bodies, etc.

The table below shows the key figures for the EMFF allocation, commitments and financial performance in the Mediterranean and in Cyprus according to the FAME Report 2020.

EMFF key data: Mediterranean and Cyprus

Bacino marittimo /MS	Total allocation (EUR)	Total EMFF committed by MA (EUR) (Infosys, 31/12/2020)	Total eligible EMFF expenditure declared by beneficiaries to MA (EUR)	Absorption rate %	No of operations
Mediterranean	1 256 164 135	884 733 038	416 147 985	33,1%	18 338
Ciprus	39 715 209	33 391 128	15 920 533	40,1%	1 071

Source: FAME Report, 2020

The Cyprus allocation represents 3% of the total EMFF allocation for the Mediterranean Basin. The average commitment per operation in the country was EUR 31,177.

Cyprus: EMFF contribution by Union Priority

MS	UP 1	UP 2	UP 3	UP 4	UP 6	TA	Total per MS	Total per MS	%
CY	13 598	8 491	9 006	4 935	1 158	1 400	1 125	39 715	0,70

Source: Member States' operational programmes. Situation as in December 2019.

An action plan in the Thalassa OP for the development, competitiveness and sustainability of small-scale coastal fishing is not necessary as Cyprus has fewer than 1,000 small-scale coastal fishing boats.

The Thalassa OP launched calls for supporting SSF in terms of:

- investments in the modernisation of fishing vessels to mitigate the effects of climate change and to improve energy efficiency;
- investments in the modernisation of fishing vessels to improve working conditions, health and safety and hygiene;
- investments in complementary activities for income diversification.

The "Thalassa" Operational Programme 2014-2020 includes:

- a compensation scheme for fishermen for damage to catches caused by marine mammals – Measure 1.19 (Article 40.1);
- grants for funding the purchase of equipment for repelling marine protected species – Measure 1.18c (Article 40.1), co-financed by the European Maritime and Fisheries Fund (75%) and the Cyprus Government (25%). Two calls were planned, the first for the period 2015-2019 and the second for the period 2020-2023.

According to the FAME Report 2020, the EMFF supported 390 operations linked to SSF vessels for a total eligible amount of EUR 2,495,428, which is almost equal to the amount committed by the MA.

MS	No of operations	Supported SSF	Committed by MA (EUR)	Eligible expenditure declared by beneficiaries to MA (EUR)
CY	452	390	3 516 637	2 495 428

Among the EMFF measures linked to SSF topics, those related to Article 43(3) "Fishing ports, landing sites, auction halls and shelters" ("the EMFF may support investments in the construction or modernisation of shelters"), Article 63 "Implementation of community-led local development strategies" and Article 76 "Control and enforcement" were listed in the "Top five measures" in terms of MA commitment (FAME Report, 2020).

Article	Total eligible EMFF committed by MA (EUR)	Total eligible EMFF expenditure declared by beneficiaries to MA (EUR)	No of operations	Spending performance (% declared in total committed)
43(3)	6 016 270	1 767 423	8	29%
63	5 004 871	1 702 600	30	34%
76	4 885 444	1 872 341	46	38%

In relation to CLLD, which is widely considered one of the most relevant approaches to promote income diversification and capacity building at SSF level, FARNET reported in the period 2014-2020 an increased budget compared with the programming period 2007-2013 (from EUR 2 million to EUR 7 million), as well as an increased number of FLAGs (from 1 to 3). This implies a slightly higher average budget per FLAG (up from EUR 2 million to EUR 2.3 million).

CLLD challenges 2014-2020	CLLD objectives 2014-2020
• Rising unemployment. • Increasing average age of fishermen. • Insufficient training for young people. • Excessive recreational fishing and overfishing. • Heavy tourist development.	• Creating new sources of income and new jobs. • Developing sustainable aquaculture. • Capitalising on opportunities provided in the blue economy. • Exploiting the comparative advantages of the fisheries areas to improve their attractiveness as sustainable tourist destinations. • Protecting the marine environment and biodiversity.

Moreover, for Cypriot professional small-scale fishers, the Department of Fisheries and Marine Research of the Ministry of Agriculture, Rural Development and Environment provided – for the period 2019 – financial support in the form of de minimis aid:

- as compensation for damage caused by dolphins to fishing gear (the budget allocated was fully spent);
- as compensation for the impacts caused by the construction and operation of the VTTV Oil Marine Jetty in the Vasilikos area (the budget allocated was fully spent; WTO, 2021).

Type of intervention	Amount spent 2014-2020
EMFF – Compensation scheme for fishermen for damage to catches caused by marine mammals – Measure 1.19 (Article 40.1)	36.643 (2015-2019)
EMFF – Grants for funding the purchase of equipment for repelling marine protected species – Measure 1.18c (Article 40.1)	3.108(2020)
De *minimis* aid – Compensation for damage caused by dolphins to fishing gear	580 474 (2015-2019) 24 918(2019) 167 180(2020)
De *minimis* aid – Compensation for the impacts caused by the construction and operation of the VTTV Oil Marine Jetty in the Vasilikos area	14 882

As a result of the Covid-19 pandemic, Cyprus has modified its Operational Programme and reallocated EUR 1.6 million of public funds to compensate companies for financial loss caused by the outbreak. The fisheries sectors received EUR 445,500 to compensate economic losses from the cessation of fishing activity. Out of 275 applications submitted, 251 were approved, mostly for small-scale coastal fishing vessels and multipurpose vessels. The share of SSF was significant, as this sector includes self-employed businesses who were able to use the funds as a form of income replacement (DG Mare, 2021).

In addition to the EMFF, Cyprus can apply to other funds to support the blue growth of its communities. National and local beneficiaries took part in several research and interregional projects co-financed by the EU in the last programming period. Cyprus is eligible for the EU programmes shown in the box below

Programmes 2014-2020

2014 - 2020 ESPON 2020
2014 - 2020 INTERACT III
2014 - 2020 INTERREG V-A Greece - Cyprus
2014 - 2020 INTERREG VB Balkan-Mediterranean
2014 - 2020 INTERREG VB Mediterranean
2014 - 2020 Interreg Europe
2014 - 2020 Mediterranean Sea Basin ENI CBC
2014 - 2020 URBACT III

The graph below shows the number of projects, partnerships and budget sizes per theme in the programming period 2014-2020, for a total budget of EUR 58,752,673 (Figure 11).

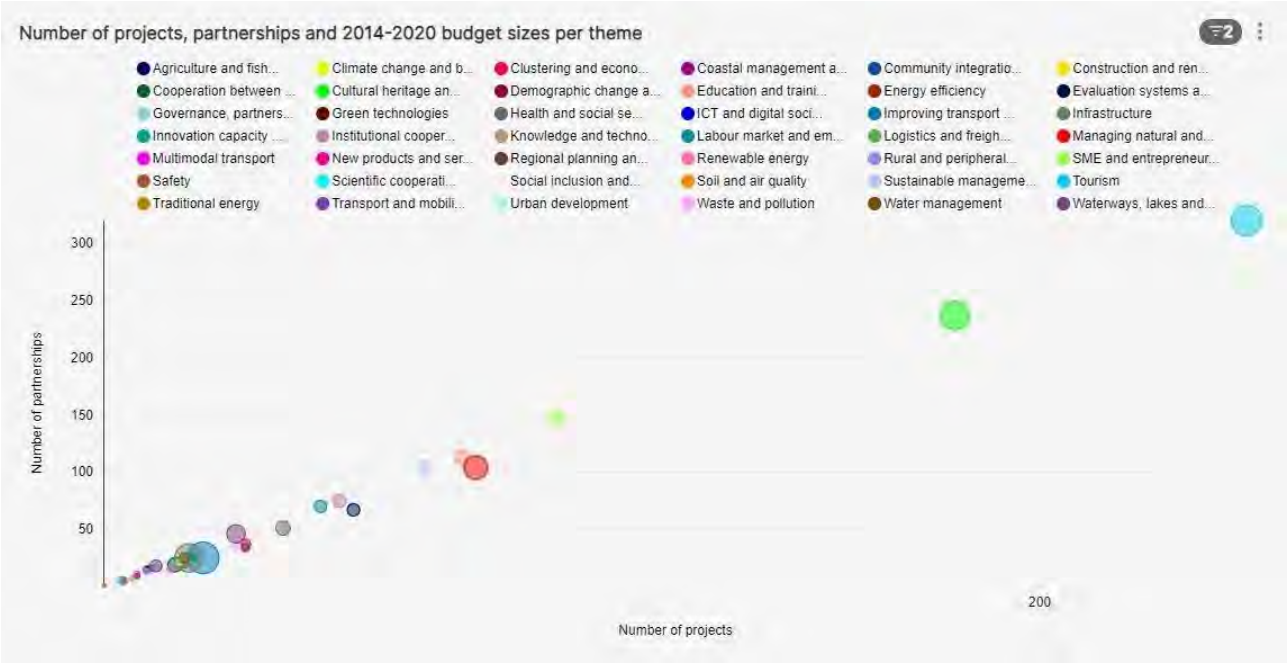


Figure 11. Cyprus. Number of projects, partnerships and 2014-2020 budget sizes per theme. Source: *https://keep.eu/countries-and-regions/*

In the graph in Figure 12, the projects were selected from the Keep database by theme of interest in relation to SSF topics:

- tourism;
- sustainable management of natural resources;
- agriculture, fisheries and forestry;
- coastal management and maritime issues.

Out of a total of 150 projects, 58 covered the aforementioned topics for a total budget of EUR 21,204,043. Tourism seemed to be the leading topic of the projects financed. Despite its relevance, the theme of coastal management and maritime issues remains underexploited within the framework of the projects financed.

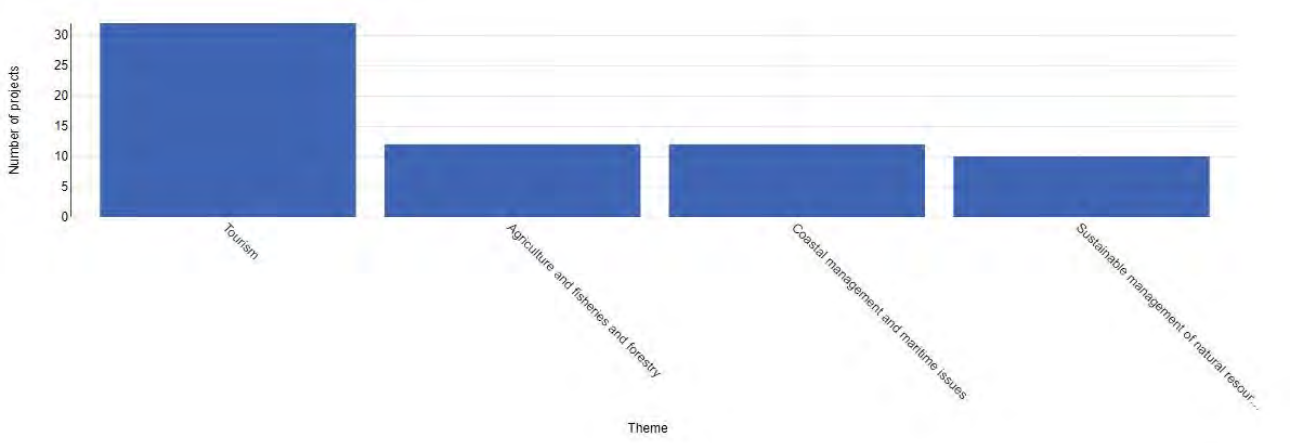


Figure 12. Cyprus. Number of projects by theme. Source: *https://keep.eu/countries-and-regions/*

SSF projects and best practices in Cyprus

BEST PRACTICES: CY #1

Country: Cyprus

Programme: EMFF+ Larnaca District Development Agency

Topics addressed and policy context: tourism, diversification of income, environmental protection

Title: "Zygi Boat Adventure: Fishing at Zygi Village – An Authentic Cypriot Experience"

Description: the Zygi Boat Adventure is a local initiative co-funded by the EMFF and the Larnaca District Development Agency. The aim is to promote income diversification by means of fisheries-related tourism in the Larnaca district fishing village of Zygi. The village is in a beautiful location close to a fishing reserve. The fishing trips take place in a traditional fishing boat with the local fishermen casting their nets for the morning catch. The trips include professional tour guides to entertain tourists with stories of the sea and the history of fishing on the island, as well as diving and snorkelling experiences.

The initiative has been included in the catalogue of SSF multifunctionality best practices of the FishinMed "Mediterranean Network of sustainable small-scale fishing communities" project financed by the ENPI CBCMED Programme.

More info at: *http://www.zygiboatadventures.com*

BEST PRACTICES: CY #2

Country: Cyprus

Programme: EMFF+ National contribution, FLAG project

Topics addressed and policy context: education and training, tourism, income diversification

Title: training fishermen with new skills

Description: following a consultation for the development of the Larnaca Famagusta FLAG strategy, local fishermen expressed their interest in training on themes such as the legal and technical requirements to engage in direct sales and pescatourism. The Larnaca Educational Centre has developed and provides a certified training programme of 180 hours on the following topics: marketing, communications, promotion, new technologies and IT, logistics, legislation,

and health and safety legislation. A total of 35 fishermen were involved and, after the training, one of the fishermen launched a pescatourism business, while four others increased their income through the development of direct sales activities.

Budget: EUR 112,000

EMFF: EUR 56,000

National co-financing: EUR 56,000

More info at: *www.zygiboatadventures.com*

BEST PRACTICES: CY #3

Country: Cyprus, Greece, Italy, Albania, France and Spain

Programme: Interreg VB Mediterranean 2014-2020

Topics addressed and policy context: coastal tourism, artisanal fisheries, income diversification

Title: TOURISMED

Description: TOURISMED is a project aimed at testing and transferring a fishing tourism business model in Mediterranean coastal territories as a way to promote a sustainable approach to tourism, while fostering the preservation of the marine ecosystem and traditional fishing culture of the Mediterranean Basin.

These areas face the common challenge of finding new solutions for the worrying depletion of marine resources, the decline of the artisanal fishing sector and the negative impacts of tourism such as social dislocation, loss of cultural heritage and ecological degradation. As a response, the project objective is to promote fishing tourism as a sustainable coastal and maritime tourism practice in the Mediterranean region.

Expected changes concern an improved use of resources by artisanal fishers, a diversification of income in the sector and a better valorisation of traditional coastal heritage and local seafood.

Budget: EUR 2,157,900

ERDF, IPA/IPA II co-financing: EUR 1,700,620

More info at: *https://tourismed.interreg-med.eu/*

BEST PRACTICES: CY #4

Country: Cyprus, Italy, Spain, France, Croatia, Belgium

Programme: Interreg VB Mediterranean 2014-2020

Topics addressed and policy context: coastal and maritime tourism

Title: MITOMED+

Description: the main objective of MITOMED+ is to enhance the sustainability and responsibility of maritime and coastal tourism. The project also sought to:

- increase knowledge and social dialogue regarding the development of coastal tourism in each partner region for

better decision-making;

- improve coastal tourism planning at destination level and its coordination for transnational governance and mainstreaming of the outcomes into local, regional and national policies.

Budget: EUR 2,2650,000

ERDF co-financing: EUR 2,252,500

More info at: *https://mitomed-plus.interreg-med.eu/*

6.4 Denmark

GENERAL OVERVIEW

Denmark is a typical low-lying country, with several hundred islands and the highest altitude being 173 metres above sea level. The country is characterised by a long coastline of approximately 7,300 km. Except for the southern border with Germany, Denmark is surrounded by sea, i.e. the North Sea, Skagerrak, Kattegat and the Baltic Sea. The total area is 43,094 km2 and the population is 5.8 million (2020). Most of the country is cultivated, i.e. approximately 60% is agricultural farmland, 16% is forest or heath, 7% is lakes, rivers and wetland areas, and 11% is covered by roads and built-up areas.

The fishing sector plays an important role in the Danish economy: in 2017, the country was the EU's largest producer of fisheries products and the ninth largest as concerns aquaculture production.

Denmark's fisheries regulations are subject to the CFP, the primary regulation addressing fisheries in the shared European Exclusive Economic Zone (EEZ). Thus, Denmark's national fisheries regulations are framed by the EU requirements for the North Sea and the Baltic Sea and by third-party agreements with Norway, the Faroe Islands and other non-EU countries fishing in the northwest Atlantic. Nonetheless, how Denmark decides to manage its total allowable catches (TAC) from its EU allocation is within national jurisdiction. Therefore, how EU regulations are transposed and how the related obligations are met is a national matter. The Ministry of Food, Agriculture and Fisheries and the Danish national parliament (Folketinget) set fisheries policy for the Danish fleet by means of annual directives. The Fisheries Law of 1999 is the national legislation for fisheries in Denmark (Hegland and Raakjær, 2008).

Since 2007, Denmark has fully implemented catch shares – primarily in the form of individual fishing quotas (ITQs) – to manage both its pelagic and demersal stocks. However, the introduction of tradable quotas evolved over a period of five years, starting with the pelagic sector, which had advocated for the management structure (Hegland and Raakjær, 2008; Christensen, Raakjær and Olesen, 2007).

The Danish fishing sector is varied in terms of target species, fishing gear and vessel size. The fishing can be divided roughly into three main categories: (a) fishery for industrial species; (b) pelagic fishery for consumption species; (c) demersal fishery for consumption species (white fish, flatfish, Norway lobster and deepwater prawns).

The small-scale fleet belongs to the latter category (Hegland and Raakjær, 2008; Eurofish, 2017). There is no official definition of "SSF" in Denmark; however, there is a politically negotiated definition of "coastal fisheries" for the purpose of regulation. The definition of coastal fisheries used in the fishing regulation refers to vessels under 17 metres with 80% of their fishing trips being for less than 48 hours (Landbrugs- og Fiskeristyrelsen, 2017). In her dissertation "In Place of Fishing: Coastal Communities in Transition" (2016), Kristen Ounanian explores how various coastal communities navigate change to new configurations through three case studies, including Denmark, for which she provides a well-structured framework analysis of the fisheries sector and a focus on the challenges of coastal fisheries. When tradable quotas were introduced in 2007, fishermen who fished in this manner had the option of taking 20% more Atlantic cod and sole quota than they would have been allotted had they agreed to remain in coastal fisheries. Coastal fishermen are allowed to lease quota from outside the coastal fishermen's pool, but non-coastal fishermen cannot lease the coastal fisheries quota. There are also "less active vessels" (mindre aktiv fartøjer), which were allotted shares outside the tradable quota system. These are often single fishermen, who made less than 224,000 Danish kroner in the qualifying period and were given a "block" of quota, which can be sold or leased, but not to another fisherman with quota or even another less active vessel permit (Høst, 2012). These less active fishers are allowed to lease quota to supplement their share (Høst, 2012). In addition to a four-vessel ownership cap in the demersal ITQ fleet, the Danish Ministry tried to create caps on allocation (Høst, 2012).

However, as reported by Ounanian, within a few years of the coastal fisheries operation, cracks had already begun to appear. To begin with, there were internal disagreements within the Danish small-scale sector and its advisory body as to what constitutes small-scale and coastal fisheries. Moreover, with the market forces of the ITQ system having a strong influence outside coastal fisheries, with quota prices becoming more and more attractive outside the coastal fisheries sector, it is a challenge to maintain the numbers in this segment. Some see that asking coastal fishermen to carry on the legacy and heritage themselves by selling quota below the price they could get outside coastal fisheries requires them to act against their own individual economic interests, when no one else in Danish fisheries is obliged to

play by those rules. Moreover, there are still barriers to entry since young people cannot afford to buy quota, whereas the first generation of quota recipients received theirs free of charge. There is some quota set aside in the Fish Fund for young new entrants, but many regard this as insufficient. A young person can no longer invest in a small boat and earn and save money through small-scale fisheries because the cost of quota is prohibitively high (Ounanian, 2016)

Many of the small-scale vessels are operated by part-time fishers, who are considered important for keeping small harbours and coastal communities alive. It is assumed that many owners of boats under 10 metres fish mainly for social and recreational purposes and are not financially dependent on fisheries. In recent years, the small-scale fishing sector in Denmark has faced an interesting time, as a majority in the Danish parliament recently voted for a new agreement called the "Growth and Development Package for Danish fishing", specifically aimed at enhancing the small-scale sector through a protected coastal fishing scheme (Landbrugs- og Fiskeristyrelsen, 2017).

With regard to diversification and multifunctionality, Ounanian reported how in Danish coastal fishing landing places, tourism has become a source of alternative income for small communities, as small-scale fishing has declined or disappeared completely. In some places, local municipalities support small-scale fishing mainly because of tourism and not because fishing itself is viewed as a viable industry. For locals, some of the side effects of a transition from a small fishing village to a tourist destination are rising house prices and a shift away from an active fishing community to a more or less active and lively village during the summer season, followed by an inactive winter season, when shops are closed and it is hard to find full-time employment. Although there are several well-known coastal fishing tourist sites, studies show that the potential earnings from tourists buying fish from small vessels, or eating locally caught fish sold in a harbour restaurant, are not fully capitalised on everywhere (Therkelsen and Halkier, 2015).

Creating a direct link between SSF fishers and consumers is still a challenge. However, several initiatives have been put in place to develop new partnerships and branding for SSF products: some SSF fishers have set up a text messaging service to let consumers know what the catch of the day is, while others have arranged to deliver direct to Copenhagen's top restaurants, which appreciate the narrative of local small-scale fishers. Among the "best practices", Thorupstrand fishers have entered into a partnership with one of the largest retailers in Denmark – COOP – with a view to creating a unique brand. In 2013, these fishers opened their own fish shop on a fishing boat in the centre of Copenhagen.

DANISH SSF CRITICAL ISSUES

- Fully implemented discard ban in certain areas, even though these fishers are responsible for the smallest amounts of discards.
- Top predators (seals).
- SSF harbours are at a distance from fish auctions and receive lower prices for their catches.
- Conflicts with other marine space users.
- Development and use of harbour areas for purposes other than fishing (e.g. marinas).
- SSF are often not perceived as a "viable" industry by the local authorities.
- Prohibitively high cost of quota.
- Internal disagreements within the Danish small-scale sector and its advisory body as to what constitutes small-scale and coastal fisheries.
- Difficulties faced by younger generations in becoming self-employed fishers because of the significant investments they must make to buy quotas and vessel capacity.
- Low (or fluctuating) prices of fish.
- Policies designed for large-scale vessels that do not consider the challenges and nature of smaller vessels. For instance, when areas are closed for long periods for conservation purposes, larger vessels can move to other areas, whereas small vessels are more likely to be limited to their local area.
- Illegal, unreported and unregulated (IUU) fishing regulations and food safety regulations pose a comprehensive and sometimes unmanageable burden for a one-person boat owner.

Source: Pascual-Fernández et al., 2020

Historically, small-scale coastal fishing with nets, hooks and traps has been essential for Danish coastal communities (Autzen and Winter, 2020). Today, however, small-scale fishing with Danish seine, hooks, and nets is increasingly less important in Danish fisheries in general, despite its significant role for some local economies (NaturErhvervstyrelsen, 2016; Miljø- og Fødevareministeriet, 2016).

There is no official definition of SSF in Denmark, which belongs to the demersal fisheries sector targeting cod, flatfish and Norway lobster (Hegland and Raakjær 2008; Eurofish 2017). Such information is mostly in line with that obtained from the FDI data (2020), which show that European plaice and cod dominated SSF landings in Denmark (Figure 13).

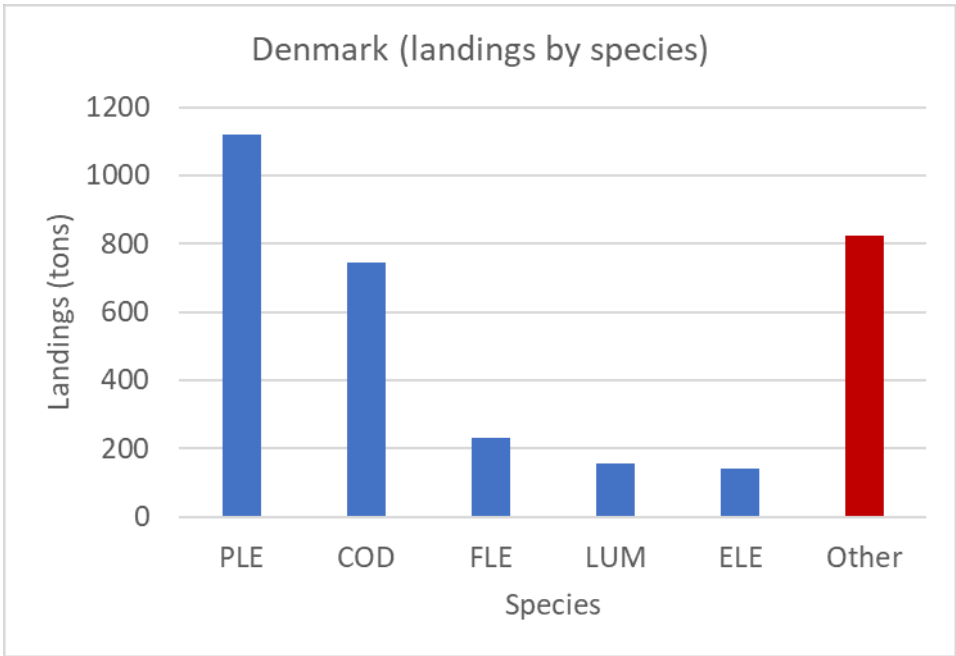


Figure 13. Landings by species of Danish SSF (FDI data 2020). PLE: Pleuronectes platessa; COD: Gadus morhua; FLE: Platichthys flesus; LUM: Cyclopterus lumpus; ELE: Anguilla. The category "Other" includes 47 species.

Financial tools supporting SSF in Denmark

The main financial instrument for the Danish fisheries sector is the European Maritime and Fisheries Fund managed by the Ministry of Agriculture.

One of the main objectives of the Danish programme is to facilitate the implementation of the discard ban. EMFF support will therefore target investments aimed at reducing and handling unwanted catches. Other areas that will receive significant support are protection of marine biodiversity and restoration of rivers to protect biodiversity and facilitate fish migration. This is confirmed by the FAME Report data, where Article 40 tops the Danish measures in terms of commitments and implementation.

The table below shows the key figures for the EMFF allocation, commitments and financial performance in the North Sea Basin and in Denmark according to the FAME Report 2020.

EMFF key data: North Sea/Denmark

Sea basin/ MS	Total allocation (EUR)	Total EMFF committed by MA (EUR) (Infosys, 31/12/2020)	Total eligible EMFF expenditure declared by beneficiaries to MA (EUR)	Absorption rate %	No of operations
North Sea	571 225 991	467 294 595	313 956 830	50%	5 932
Denmark	208 355 420	178 315 041	104 304 139	57%	2 161

Source: FAME Report, 2020

The Danish MA commitment represents 36% of the total EMFF commitment for the North Sea Basin, with a spending performance of 33% of the total eligible EMFF expenditure declared. The average commitment per operation in the country was EUR 81,669.

Danimarca: Contributo del FEAMP per priorità dell'Unione

MS	UP 1	UP 2	UP 3	UP 4	UP 6	TA	Total per MS	Total per MS	%
DK	79 017	22 019	70 546	7 518	14 839	2 500	11 914	208 355	3,7

Source: Member States' operational programmes. Situation as in December 2019.

According to the FAME Report 2020, the EMFF supported only 22 operations linked to SSF vessels for a total eligible amount of EUR 190,372, which is almost equal to the amount committed by the MA.

MS	No of operations	Supported SSF	Committed by MA (EUR)	Eligible expenditure declared by beneficiaries to MA (EUR)
DK	22	17	190.305	190.372

Among the EMFF measures linked to SSF topics, those related to Article 40 "Protection and restoration of marine biodiversity and ecosystems and compensation regimes in the framework" and Article 76 "Control and enforcement" were listed in the "Top five measures" in terms of MA commitment (FAME Report, 2020).

Article	Total eligible EMFF committed by MA (EUR)	Total eligible EMFF expenditure declared by beneficiaries to MA (EUR)	No of operations	Spending performance (% declared in total committed)
40	43 297 839	15 847 561	1 125	37%
76	30 862 973	14 880 946	137	48%

Despite the relevance of CLLD for the diversification of coastal communities, Article 63 is not among the top five measures in terms of commitments and implementation. This confirms the scarce allocation of funds under UP4.

CLLD challenges 2014-2020

- Economic growth.
- Social inclusion and job creation, with a focus on projects that support the marketing of fisheries products and the diversification of fisheries businesses.

Compared with the 2007-2013 period, the budget for CLLD has been reduced from EUR 24.9 million to EUR 8.8 million, and the average budget per FLAG has almost halved. The number of FLAGs has fallen from 16 to 10, covering 16 municipalities with an average budget per FLAG of EUR 1,566,332 (FARNET, 2020).

In addition to the EMFF, Denmark can apply to other funds to support the blue growth of its communities. Danish beneficiaries took part in several research and interregional projects co-financed by the EU in the programming period 2014-2020. Denmark is eligible for the EU programmes shown in the box below.

Programmes 2014-2020

2014 - 2020 ESPON 2020
2014 - 2020 INTERACT III
2014 - 2020 INTERREG V-A Germany - Denmark
2014 - 2020 INTERREG V-A Poland - Denmark - Germany - Lithuania - Sweden (South Baltic)
2014 - 2020 INTERREG V-A Sweden - Denmark - Norway (Öresund - Kattegat - Skagerrak)
2014 - 2020 INTERREG VB Baltic Sea
2014 - 2020 INTERREG VB North Sea
2014 - 2020 Interreg Europe
2014 - 2020 URBACT III

According to the *Keep.eu* database, in the programming period 2014-2020, beneficiaries from Denmark were involved in 272 projects (for a total budget of EUR 118,450,244), of which 44 (for a total budget of EUR 18,569,301) covered the following topics (Figure 14):

- tourism;
- sustainable management of natural resources;
- coastal management and maritime issues;
- agriculture, fisheries and forestry.

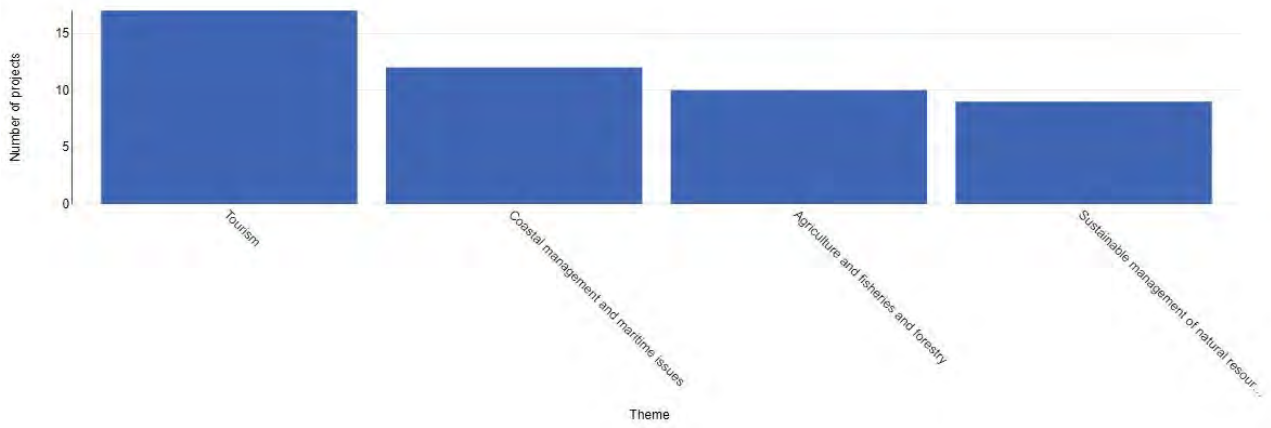


Figure 14. Denmark. Number of projects by theme. Source: *https://keep.eu/countries-and-regions/*

Progetti legati alla piccola pesca e best practice in Danimarca

BEST PRACTICES: DK #1

Additional funding opportunities

THE VELUX FOUNDATIONS

Velux is a Danish foundation that, through its environmental funding programme, has funded a range of different action-oriented projects, with low-impact (non-trawling) fishing as one focal area. Since 2015, this funding has been essential for small-scale fishers and their organisational structures, which would not have had the economic capital to participate in discussions, make reports, engage in collaborations and do political work without this financial support. Moreover, some of these projects, not directly focused on low-impact fishing but sustainable fishing in general, have established and maintained a continuous dialogue about the sustainability of fisheries between actors from the food sector (public and private), as well as environmental organisations, the Danish Marine Stewardship Council office and fishers' organisations. These facilitated discussions have worked as a platform for new alliances (relational power processes) where stakeholders have found common ground and begun to collaborate. Effectively, questioning the credibility of the MSC label in Denmark, several actors supporting the development of the NaturSkånsom label have openly contested the definition of sustainability employed by MSC in discussions, in particular pointing to the negative effects of bottom trawling, which makes up a large share of Danish certified fisheries.

Granted projects:

- Securing of low-impact small-scale fisheries for the future.
- Development of a labelling system for low-impact fisheries.
- Business plan for Low-Impact Coastal Fisheries' Organisations – Producers' Organisation (FSK-PO).
- Partnership for Sustainable Fisheries 2021-2023.

More info at: https://veluxfoundations.dk/en

BEST PRACTICES: DK #2

Ecolabelling scheme

NATURSKÅNSOM: the Danish ecolabelling scheme

In 2020, the Ministry of Environment and Food implemented the new state-led ecolabelling scheme NaturSkånsom. NaturSkånsom's criteria are based on the regulatory definitions of "coastal fishing vessels" and "low-impact fishing gear" and stock assessments (from the International Council for Exploration of the Sea – ICES). The new labelling scheme is intended to harness the political will to support and develop the coastal fishing sector, with a focus on "low-impact" fishing methods in the context of environmental sustainability. The reactions of Danish environmental organisations to NaturSkånsom's implementation are examples of the relational power, which was essential for the whole process of creating NaturSkånsom. The WWF Fish Guide now includes information on NaturSkånsom. On the day NaturSkånsom was launched, the Danish Society for Nature Conservation added the label to its homepage (among other places) stating, "we are delighted about this label because it considers both the fish population and the methods used to catch the fish. Low-impact [skånsomt] fishing affects the marine environment much less than fishing with the bottom-dredging method".

Compared with MSC, the NaturSkånsom goes further in its guarantee. While a fish caught with bottom trawling can be certified as sustainable according to MSC standards, that is a total no-go if a fisher wants to sell his/her catch as NaturSkånsom. NaturSkånsom is framed politically as part of the solution to a defined issue of safeguarding small-scale fishing and promoting more environmentally friendly fishing (Autzen and Hegland, 2021).

BEST PRACTICES: DK #3

Country: Denmark, Poland, Germany, Lithuania, Sweden

Programme: Programme 2014-2020 Interreg V-A (South Baltic)

Topics addressed and policy context: increased development of the South Baltic area's natural and cultural heritage assets into sustainable tourist destinations; preserving and protecting the environment and promoting resource efficiency; income diversification.

Title: CATCH – Coastal Angling Tourism – a development opportunity for the South Baltic Region.

Description: coastal angling tourism offers a unique development opportunity for the South Baltic Region, especially for less developed coastal regions and even outside the holiday season. It is a new tourism trend and facilitates the diversification of coastal tourism with promising market opportunities. CATCH seeks to increase the capability of coastal communities to establish sustainable angling tourism, delivering improved measures for tourism providers and combining all new knowledge in an innovative information and knowledge platform on coastal angling tourism. The project provided angling tourists and inhabitants with the necessary information to plan, book and take an angling trip to unique coastal sites. To ensure durability, platform-selling tools have been created and implemented in new tour packages.

Budget: total amount of the project: EUR 1,596,700

ERDF contribution: EUR 1,327,205

More info at: *http://www.catch-southbaltic.eu*

BEST PRACTICES: DK #4

Country: Denmark

Programme: EFF 2007-2013

Topics addressed and policy context: diversification, seasonality, adding value to local products and undervalued species

Title: FLAG Project

Description: on the island of Læsø, a local fisherman used Axis 4 to invest in developing a new range of products based on an undervalued species, the weever fish. By adding value to this local resource and creating an "iconic" product, he is encouraging more people to discover both the fish and the island. The development of "smoked weever fish" has added a new product to the range of local delicacies on offer to residents and visitors at the fishing port of Østerby. As the fish is smoked at the nearby smokehouse, owned by a local fishmonger, the full added value of the product is retained on the island. As for the restaurant itself, it has been a huge success: its income doubled from the first business year to the second, followed by a 20% increase the following year. A comparative analysis of the dishes sold per day shows that weever fish, with 50 servings per day, is now one of the restaurant´s most popular dishes (alongside its fish patties and ahead of Norwegian Lobster, with approximately 30 servings per day).

6.5 Estonia

GENERAL OVERVIEW

Estonia, facing the Baltic Sea and Gulf of Finland, has a coastline of 3,700 km. This excludes its islands, which number more than 1,500. Estonia's diverse terrain includes rocky beaches, old-growth forests and many lakes, the biggest being Lake Peipus. Tallinn is the main commercial port, while Pärnu is the most important fishing port.

EUROFISH reports the following data for the reference year 2017:

- 68 companies involved in the processing and canning of fish, crustaceans and molluscs, which employ 1,583 people;
- 51,876 tonnes processed in 2017, with frozen saltwater fish accounting for just over 50% of this (30,923 tonnes); other major products are fish fillets in batter or breadcrumbs, including fish fingers, and canned sardines, sardinella, brisling and sprats, whole or in pieces;
- the value of the processing industry in 2017 was EUR 105 million, and a large share of the product range is sold on the domestic market;
- exports totalled approximately EUR 146 million and a little over 100,000 tonnes, of which 39% and 59% respectively is exported to non-EU countries;
- the largest markets in volume terms are Ukraine, Belarus, Denmark and Finland, while the Nordic countries, Finland, Sweden and Denmark are the largest destinations in terms of value. The main items exported are frozen herring, frozen and canned sprats, and battered fish fillets.

Estonian fisheries are divided officially by the Estonian Ministry of Rural Affairs into the following categories: (1) ocean fisheries (kaugpüük); (2) coastal fisheries (rannakalandus); (3) Baltic Sea open-sea fisheries or trawling (Läänemere traalpüük); (4) inland fisheries (sisepüük); (5) recreational fisheries; (6) aquaculture.

Coastal and inland fisheries are defined by boat size and fishing capacity. The maximum boat length is 12 metres and the maximum fishing capacity is 183 kW and 38 gross tonnage (GT). Coastal fishery is allowed within 20 nautical miles of the coast or inside the 20 metre isobath zone (Ministry of Rural Affairs 2013). SSF is carried out in the Estonian coastal fisheries areas, inhabited by approximately 175,000 people, excluding the country's major cities. The management of SSF is divided among three institutions:

- the Estonian Ministry of Rural Affairs (responsible for the development of the market organisation system, the award of structural support and state aid and the management of commercial fishing);
- the Ministry of the Environment;
- the Environmental Inspectorate.

Because of the low quantities and labour characteristics (fishing is done only as a part-time job), fishers spend only a few hours a day on the water, sometimes fishing only at weekends. Plaan (2020) in his paper on "A Critical Insight into Fisheries Policies and Its Effects on SSF in Estonia" provides a review of the SSF sector in Estonia, focusing on the main challenges and the support received from national and EU funds. Despite the significant changes after the Soviet Union collapse which affected the entire economy including fisheries, the situation in the SSF sector looks promising, in part thanks to the EFF and EMFF. SSF benefited from the 2007-2013 EFF grants: 61 harbours and landing sites were renovated, 8 harbours received investments to build cold storage and 28 fishers upgraded their fleet. Fisheries funding has been used to offer different courses and educational trips to other SSF in Europe, resulting in a well-trained generation of young fishermen (Fisheries Information Centre, 2017). While most of the fish is still bought by large fishmongers, many communities are increasingly processing, branding and selling the catch themselves, enhancing the value of their catch within the community: all fishery areas (except Lake Võrtsjärv) have their own small regional fish processing plant(s) and several areas have created their own local brand. The SSF sector has also diversified its economic activity and tourism is becoming a supplementary source of income, since the fisheries

activity takes place mainly in spring and autumn. In a few fishery areas (Hiiumaa, Harjumaa), fishers organise fishing tours for tourists. Rural and fishery-related tourism is supported at the state level and has become an important characteristic of small-scale fishing communities.

However, the following critical points (Plaan, 2020) affect the SSF sector:

- low income of SSF compared with the average Estonian salary;
- dependence on external financial support;
- an ageing fishing population.

The Estonian Ministry of Rural Affairs reports low salaries as one of the main factors that have caused young people to leave fishing communities. It is also one of the major reasons why the average age of small-scale fishers is increasing and why the population declined between 1999 and 2008.

ESTONIAN SSF CRITICAL ISSUES

- Low income compared with Estonian salaries.
- Economic instability and conflict with government officials.
- Increased impact of predators (seals and cormorants).
- High costs of investment in gears and licences.
- Mistrust between fishers and fisheries officials, and in some cases, between fishery scientists.
- Lack of skills to apply to national and EU funding calls.
- Overlapping tasks of the organisations that manage the sector.

Source: Pascual-Fernández et al., 2020

SSF are conducted in an area which is defined in Estonia as the coastal fisheries area. This includes sea coasts, lakes or ponds and river estuaries, where the fishing sector provides significant employment. It excludes larger cities within the coastal fisheries area. As mentioned above, SSF are divided into Baltic Sea coastal fisheries and inland fisheries (Plaan, 2020).

Plaan (2020) reported that the most important coastal fisheries species exploited by SSF in Estonia are Baltic herring (Clupea harengus) and European perch (Perca fluviatilis). The FDI data (2020) confirmed that information, showing that Estonian SSF landings predominantly consisted of herring (Figure 15)

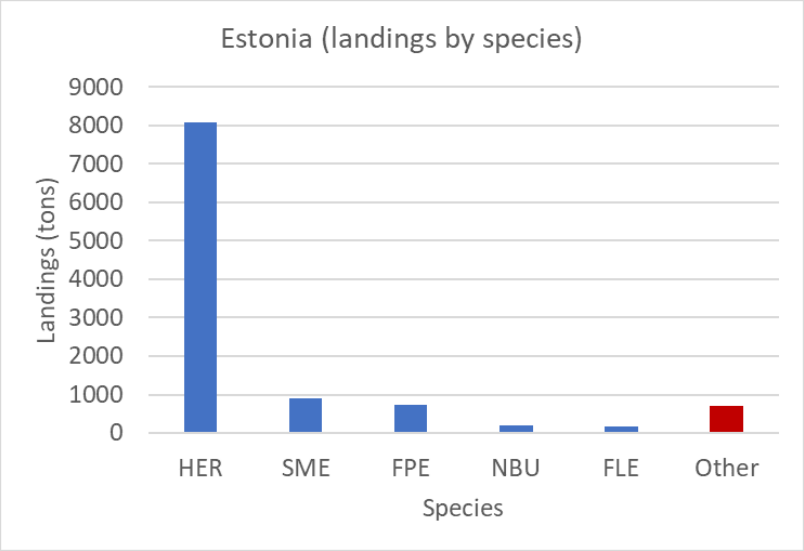


Figure 15. Landings by species of Estonian SSF (FDI data 2020). HER: Clupea harengus; SME: Osmerus eperlanus; FPE: Perca fluviatilis; NBU: Neogobius melanostomus; FLE: Platichthys flesus. The category "Other" includes 29 species.

Financial tools supporting SSF in Estonia

The main financial instrument for the Estonian fisheries sector is the European Maritime and Fisheries Fund managed by the Ministry of Rural Affairs.

One of the main objectives of the Estonian programme is to grant support for the transition to environmentally and ecologically sustainable fisheries, conservation measures and protection. This is confirmed by the FAME Report data, where Article 40 tops the Estonian measures in terms of commitments and implementation.

The table below shows the key figures for the EMFF allocation, commitments and financial performance in the Baltic Sea and in Estonia, according to the FAME Report 2020.

EMFF key data: Baltic Sea/Estonia

Sea basin/MS	Total allocation (EUR)	Total EMFF committed by MA (EUR) (Infosys, 31/12/2020)	Total eligible EMFF expenditure declared by beneficiaries to MA (EUR)	Absorption rate %	No of operations
Mar Baltico	1 030 005 010	809 269 783	481 116 819	78,6%	15 285
Estonia	100 970 418	82 611 336	52 565 880	57%	1 392

Source: FAME Report, 2020

The Estonian MA commitment represents 10% of the total EMFF commitment for the Baltic Sea Basin, with a national spending performance of 64% of the total eligible EMFF expenditure declared at country level. The average commitment per operation in the country was EUR 62,886.

Estonia: Contributo del FEAMP per priorità dell'Unione

MS	UP 1	UP 2	UP 3	UP 4	UP 6	TA	Totale per MS	Totale per MS	%
EE	16 755	7 172	13 962	26 282	28 648	2 325	5 824	100 970	1,78

Source: Member States' operational programmes. Situation as in December 2019.

According to the FAME Report 2020, the EMFF supported only 104 operations linked to SSF vessels for a total eligible amount of EUR 1,565,140, almost matching the amount committed by the MA.

MS	No of operations	Supported SSF	Committed by MA (EUR)	Eligible expenditure declared by beneficiaries to MA (EUR)
EE	106	104	2 226 979	1 565 140

Among the EMFF measures linked to SSF topics, those related to Article 69 "Processing of fishery and aquaculture products" and Article 76 "Control and enforcement" were listed in the "Top five measures" in terms of MA commitment (FAME Report, 2020).

Article	Total eligible EMFF committed by MA (EUR)	Total eligible EMFF expenditure declared by beneficiaries to MA (EUR)	No of operations	Spending performance (% declared in total committed)
69	17 389 335	13 513 322	80	78%
76	6 200 863	2 942 090	26	47%

The main goal of the Estonia CLLD 2014-2020 is to ensure balanced territorial development of fisheries areas, supporting the restructuring of the SSF sector. Currently, Estonia has 8 FLAGs. According to the FARNET country profile, the CLLD amount for the programming period 2014-2020 was EUR 30,920,088, for an average budget per FLAG of EUR 3,865,011.

The FAME Report outlined the following results in terms of implementation:

- The values of the result indicators for the completed projects differ from the data in the national registers. The most likely reason for the inaccuracy of performance indicators lies in differing interpretations of the indicators.
- As of the end of 2018, 25% of the objectives of local development strategies had been met, 38% of objectives had been partially met, 20% of the objectives had not yet been met, and for 17% the fulfilment of the objectives cannot be assessed.
- Initiative groups implement strategies only partly in line with initial plans.
- The level of detail of the objectives described in the development strategies influences the assessment of their achievement. In other words, the more general the goal, the easier it is for the initiative group to achieve the goal.

CLLD challenges 2014-2020	CLLD objectives 2014-2020
• Ensuring balanced territorial development of fisheries areas. • Supporting the restructuring of the SSF sector.	• Renovation of small fishing ports and revival and strengthening of economic activity in small harbours. • Increasing the value of local fisheries products – including through small-scale processing and marketing activities. • Supporting fishermen to diversify their activities. • Creation or restoration of spawning grounds. • Social welfare activities, including promoting fisheries and maritime cultural heritage. • Cooperation between FLAGs.

In addition to the EMFF, Estonia can apply to other funds to support the blue growth of its communities. Estonian beneficiaries took part in several research and interregional projects co-financed by the EU in the programming period 2014-2020. Estonia is eligible for the EU programmes shown in the box below.

Programmes 2014-2020

2014 - 2020 ESPON 2020
2014 - 2020 Estonia - Russia ENI CBC
2014 - 2020 INTERACT III
2014 - 2020 INTERREG V-A Estonia - Latvia
2014 - 2020 INTERREG V-A Finland - Estonia - Latvia - Sweden (Central Baltic)
2014 - 2020 INTERREG VB Baltic Sea
2014 - 2020 Interreg Europe
2014 - 2020 URBACT III

According to the Keep.eu database, in the programming period 2014-2020, beneficiaries from Estonia were involved in 261 projects for a total budget of EUR 83,850,508, of which 69 (for a total budget of EUR 38,356,056) covered the following topics (Figure 16):

- tourism;
- sustainable management of natural resources;
- coastal management and maritime issues;
- agriculture, fisheries and forestry.

Figure 16. Estonia. Number of projects by theme. Source: *https://keep.eu/countries-and-regions/*

SSF projects and best practices in Estonia

BEST PRACTICES: EE #1

Sustainable marine resources management solutions

BALTIC SEA SEAL AND CORMORANT TNC PROJECT

Baltic Sea Seal and Cormorant TNC project was established by 14 FLAG units from Finland, Sweden, Estonia and Germany to investigate the economic and social impacts of increasing seal and cormorant populations on Baltic small-scale coastal fisheries. The aim of the project was to find and develop sustainable marine resources management solutions to ensure the future of SSF in the Baltic Sea area. The Baltic Sea seal and cormorant populations have grown dramatically in recent years and are causing serious damage to traditional small-scale fishing which uses equipment like gillnets and traps. Baltic fishermen argue that increasing populations of seals and cormorants are a serious threat to the small-scale fishing sector. New methods have to be developed and tested. Baltic FLAG units share concerns and developmental needs, so it is reasonable to cooperate closely on these issues. The Baltic FLAG cooperation project has already started, with a recapitulation of a large amount of academic research regarding the impact of seal and cormorant populations on the small-scale coastal fishery in the Baltic Sea Region. The aim is to send a joint message from these fishermen to decision-makers at a local, regional, national and EU level to find ways to mitigate the negative impact of this predation. As a result, a network and platform for an exchange of experiences and best practice will be formed for FLAGs and their stakeholders in the Baltic Sea Region.

More info at: *https://balticfisheries.com/*

BEST PRACTICES: EE #2

Country: Estonia, Denmark, Netherlands, Finland, Sweden, Poland

Programme: DG MARE

Topics addressed and policy context: adding value, increasing SSF representation by building capacity and increasing the participation of small-scale fishers in decision-making processes

Title: BANS "Support measures for Small-Scale Fishing in the Baltic and North Sea"

Description: the aim of the project was to build the capacity of European small-scale, low-impact fishers and their organisations, enabling them to participate in decision-making processes across the board that affect their livelihoods. It will also support the exchange of information and experience of good practice to achieve those aims. The main objective of the project was to strengthen the small-scale, low-impact fishers active in the Baltic Sea and North Sea, with a particular focus on:

- successfully influencing fisheries policies at European, regional and national level;
- helping small-scale, low-impact fishers optimise the added value obtained for their products;
- identifying common interests and needs;
- promoting initiatives, projects and cooperation among fishermen around the region to facilitate the exchange of best practice;
- ensuring active representation of small-scale fishers in advisory councils;
- enabling the creation and development of networks of small-scale fishers.

More info at: *https://lifeplatform.eu/eu-projects/?lang=it*

6.6 Finland

GENERAL OVERVIEW

In Finland, the fisher lifestyle is well regarded and the opportunities for fishing are abundant, as there are 188,000 lakes, 314,000 km of coastline and extensive archipelago regions (OECD, 2008).

The average age of Finnish coastal small-scale fishers was 60 years old, but most professional fishers were younger. In the Archipelago Sea, only 17 fishers out of 146 professionals were under 35 years of age (Saarinen, 2005).

The uncertainty and seasonality of income limits the possibilities of SSF to achieve year-round employment exclusively from fisheries. Thus, most Finnish small-scale fishers combine fishing revenues with other income sources. These pluriactive strategies are, however, not visible in official statistics (Salmi and Mellanoura, 2020).

FINNISH SSF CRITICAL ISSUES

- High average age of fishers.
- Lack of interest from newcomers.
- Uncertainty and seasonality of incomes.
- Low price of fish due to imported and farmed fish.
- Ownership of fishing grounds (by private owners, companies, communities, etc.).
- Seal predation on gillnets.
- Finland's EU membership since 1995 has reduced SSF competitiveness and prices of fish products on the Finnish food market.
- The total ban of drift net fishing in the Baltic Sea since 2008 (to protect porpoises).
- Most of the financial support for SSF is available only to professional fishers (i.e. those who earn more than 30% of their total income from fishing).

Source: Pascual-Fernández et al., 2020

The vast majority of Finnish commercial fisheries can easily be labelled as SSF, although this term is seldom used in Finland. Instead, fishers are categorised according to various parameters: the fishing location (coastal, open sea, lake fishers), the length of the boat, fishing gear, target fish species and the importance of fishing income (Salmi and Mellanoura, 2020).

Small-scale fishers have adapted their fishing practices to the fluctuating seasonal availability of the targeted fish species. Fishing is typically discontinued for the ice cover period of 3-6 winter months. Nevertheless, some fishers also operate during the winter (Salmi and Mellanoura, 2020).

Gillnet and trap fisheries are commonly used in Finland by SSF (Huhmarniemi and Salmi, 1999). The coastal SSF benefit from Baltic salmon (Salmo salar) and European whitefish (Coregonus lavaretus) stocking programmes that aim to compensate for catch losses caused by damming of spawning rivers (Karlsson and Karlström, 1994).

FDI data (2020) showed that Finnish landings were dominated by herring (Clupea harengus) and European smelt (Osmerus eperlanus), while the European whitefish (Coregonus lavaretus) represented only a small fraction of SSF landings (Figure 17).

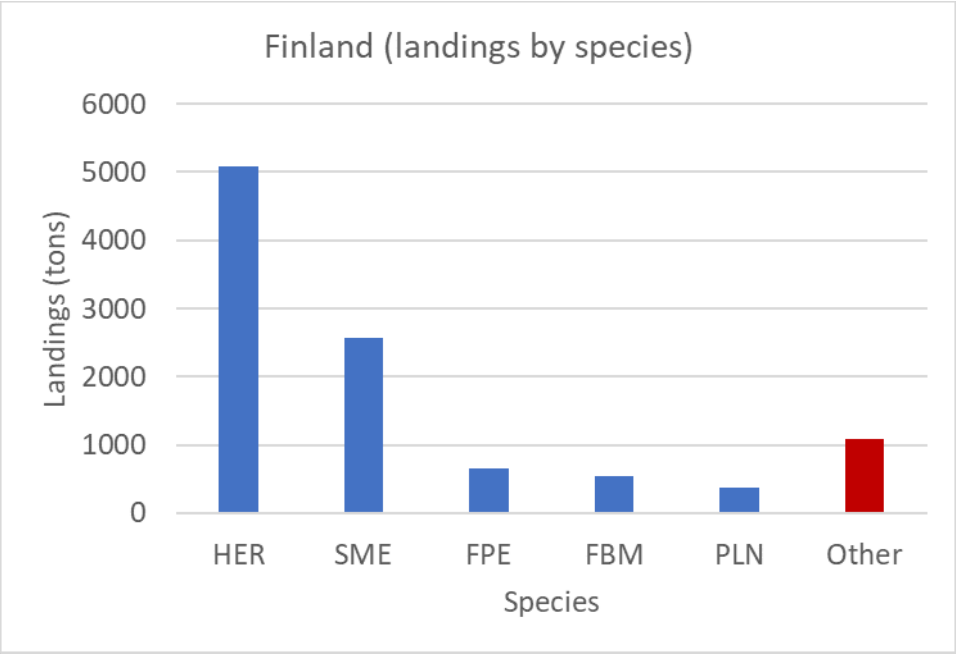


Figure 17. Landings by species of Finnish SSF (FDI data 2020). HER: Clupea harengus; SME: Osmerus eperlanus; FPE: Perca fluviatilis; FBM: Abramis brama; PLN: Coregonus lavaretus. The category "Other" includes 15 species.

Financial tools supporting SSF in Finland

The main financial instrument for the Finnish fisheries sector is the European Maritime and Fisheries Fund managed by the Ministry of Agriculture and Forestry. The objective of the Finnish Operational Programme is to create a competitive setting for the fisheries sector, encouraging and enabling the sustainable growth and reform of the sector's value chain. The measures under the programme are expected to remove obstacles to developing the sector, improve the competitiveness of companies and promote the generation of new business.

The table below shows the key figures for the EMFF allocation, commitments and financial performance in the North Sea Basin and in Finland according to the FAME Report 2020.

EMFF key data: Baltic Sea/Finland

Sea basin/MS	Total allocation (EUR)	Total EMFF committed by MA (EUR) (Infosys, 31/12/2020)	Total eligible EMFF expenditure declared by beneficiaries to MA (EUR)	Absorption rate %	No of operations
Mar Baltico	1 030 005 010	809 269 783	481 116 819	78,6%	15 285
Finlandia	74 393 168	68 583 974	52 516 079	70,6%	2 372

Source: FAME Report, 2020

The Finnish MA commitment represents 8% of the total EMFF commitment for the Baltic Sea Basin, with a spending performance of 77% of the total eligible EMFF expenditure declared. The average commitment per operation in the country was EUR 33,503,00.

According to the FAME Report, the Finnish EMFF committed amounts were the most significant for data collection and control. This is confirmed by the FAME Report data, where Article 76 tops the Finnish measures in terms of commitments and implementation.

Finland: EMFF contribution by Union Priority

MS	UP 1	UP 2	UP 3	UP 4	UP 6	TA	Total per MS	Total per MS	%
FI	13 245	13 327	30 018	3 926	6 770	4 446	2 659	74 393	1,31

Source: Member States' operational programmes. Situation as in December 2019.

According to the FAME Report 2020, the EMFF supported 900 operations linked to SSF vessels for a total eligible amount of EUR 1,397,460, almost matching the amount committed by the MA.

MS	No of operations	Supported SSF	Committed by MA (EUR)	Eligible expenditure declared by beneficiaries to MA (EUR)
FI	900	346	1 463 779	1 397 460

Among the EMFF measures linked to SSF topics, those related to Article 76 "Control and enforcement" and Article 43 "Fishing ports, landing sites, auction halls and shelters" were listed in the "Top five measures" in terms of MA commitment (FAME Report, 2020).

Article	Total eligible EMFF committed by MA (EUR)	Total eligible EMFF expenditure declared by beneficiaries to MA (EUR)	No of operations	Spending performance (% declared in total committed)
76	3 517 140,00	2 069 947,00	19	59%
43	3 921 071,00	2 623 440,00	78	88%

The main goal of the Finnish CLLD 2014-2020 is to boost and optimise activities throughout the entire value chain and promote innovation across sectoral boundaries. Compared with 2007-2013, the total budget for CLLD has increased slightly, so the average budget per FLAG remains similar while the number of FLAGs increased from 8 to 10. In the programming period 2014-2020, the average budget per FLAG was EUR 940,000.

CLLD challenges 2014-2020	CLLD objectives 2014-2020
• A decline in the number of commercial fishermen, which could lead to a situation where this valuable natural resource is underutilised. • The vulnerability of the fisheries sector to market fluctuations. • Low profitability in some fisheries sectors. • An increase in the seal and cormorant populations in coastal areas. • Environmental degradation, especially eutrophication in the Baltic Sea. • Conflicts with other stakeholders, with commercial fisheries often competing with recreational fishing and environmental conservation.	• Boosting and optimising activities throughout the entire value chain. • Promoting innovation across sectoral boundaries, creating new ways of thinking and doing business, while also ensuring the sustainable use of natural resources. • Encouraging and supporting open-mindedness, cooperation, continuous know-how development and calculated risk-taking, which are the cornerstones of the fisheries CLLD strategy.

In addition to the EMFF, Finland can apply to other funds to support the blue growth of its communities. Finnish beneficiaries took part in several research and interregional projects co-financed by the EU in the programming period 2014-2020. Finland is eligible for the EU programmes shown in the box below.

Programmes 2014-2020

2014 - 2020 ESPON 2020
2014 - 2020 INTERACT III
2014 - 2020 INTERREG V-A Finland - Estonia - Latvia - Sweden (Central Baltic)
2014 - 2020 INTERREG V-A Sweden - Finland - Norway (Botnia Atlantica)
2014 - 2020 INTERREG V-A Sweden - Finland - Norway (Nord)
2014 - 2020 INTERREG VB Baltic Sea
2014 - 2020 INTERREG VB Northern Periphery and Arctic
2014 - 2020 Interreg Europe
2014 - 2020 Karelia ENI CBC
2014 - 2020 Kolarctic ENI CBC
2014 - 2020 South-East Finland - Russia ENI CBC
2014 - 2020 URBACT III

According to the *Keep.eu* database, in the programming period 2014-2020, beneficiaries from Finland were involved in 619 projects (for a total budget of EUR 214,447,901), of which 165 (for a total budget of EUR 62,450,178) covered the following topics (Figure 18):

- tourism;
- sustainable management of natural resources;
- coastal management and maritime issues;
- agriculture, fisheries and forestry.

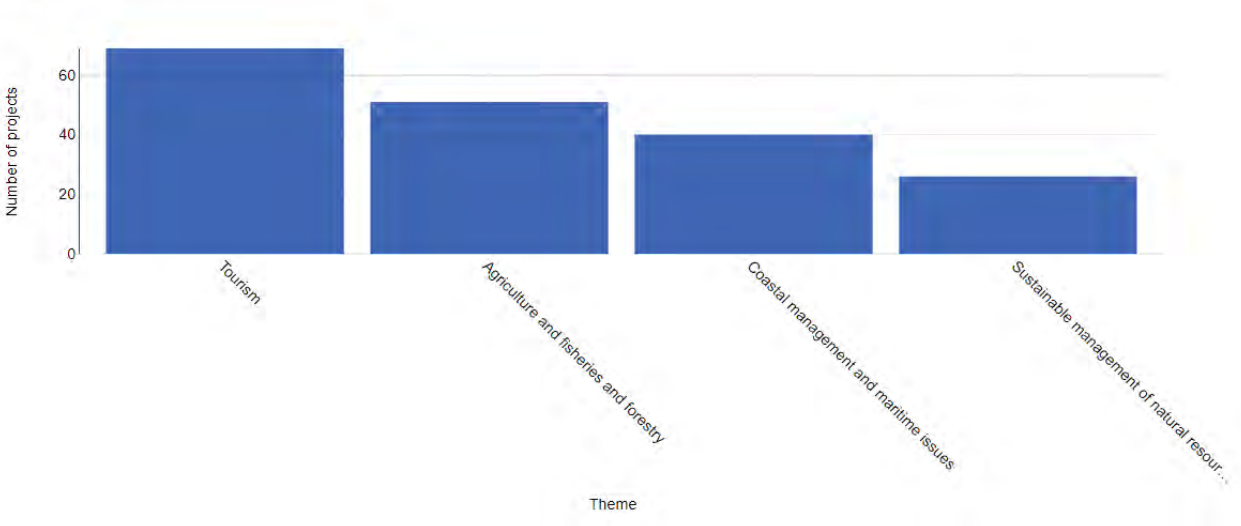


Figure 18. Finland. Number of projects by theme. Source: *https://keep.eu/countries-and-regions/*

BEST PRACTICES: FI #1

Multifunctionality, diversification

Country: Finland

Programme: EFF – FLAG project

Topics addressed and policy context: direct sales and/or short circuits, new products, processing, new marketing strategies

Title: multiple use of fish skin

Description: the project promotes the tanning and multiple use of fish skin through training, the sourcing of raw material, product design and marketing. The aim was to prove that fish are not only a valuable food source, but can provide raw material for other more durable products, such as leather for clothing items. The initiative was led by the Korsholm Adult Education Centre in cooperation with Ostrobothnian Fisheries Association and its Fisherwomen's and Österbotten FLAG.

More info at: https://balticfisheries.com/

BEST PRACTICES: FI #2

Traceability, data collection

Country: Finland

Programme: EMFF – FLAG project

Topics addressed and policy context: new technology, traceability, fisheries resources

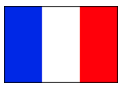
Title: mobile app for reporting catch data

Description: the project was aimed at developing and testing a system allowing fishers to collect and report their catches using a simple app on their smartphones. The information is fed directly into the database of the Finnish Natural Resources Institute, allowing catches and fish stocks to be monitored on a regular basis. For this, the FLAG brought together app developers, fisheries management authorities and research centres, as well as securing funding under Article 44.3 of the EMFF. The project was designed to improve the ecological sustainability of inland fisheries by facilitating access to reliable and transparent catch-data in real time.

The project is a successful example of how new technologies can improve data collection on SSF. Similar apps can be used in other inland areas and for coastal fisheries to facilitate the collection of data necessary to effectively inform fisheries management and policy.

Budget: Total EUR 139,971

6.7 France



GENERAL OVERVIEW

The French Republic is a transcontinental country spanning Western Europe and overseas regions and territories in the Americas and the Atlantic, Pacific and Indian Oceans. Its metropolitan area extends from the Rhine to the Atlantic Ocean and from the Mediterranean Sea to the English Channel and the North Sea; overseas territories include French Guiana in South America, Saint Pierre and Miquelon in the North Atlantic, the French West Indies, and several islands in Oceania and the Indian Ocean. Due to its several coastal territories, France has the largest EEZ in the world.

France has a population of around 67 million and a surface area of about 640,679 km2, with a metropolitan coastline of 3,427 km.

In 2013, the French fleet included around 5,000 vessels under 12 metres, 4,326 using static gear and 666 using towed gear. This represented 73% and 11%, respectively, of the total fleet in numbers (Frangoudes et al., 2020). The small-scale fleet is spread over the North Atlantic (73%), where a higher proportion of vessels use towed gear, the Mediterranean Sea (91%) and the "Other region" area (97%), which includes French overseas regions.

Following the EU definition of SSF, FDI data (2020) show that 3,633 vessels belonged to this sector (corresponding to 58% of the national fleet) and landed 45,434 tonnes of seafood products (corresponding to about EUR 242 million) in 2020 (Figures 1, 2 and 3).

Total employment in the small-scale fleet was estimated at 8,500 crew members, and 13,500 for the whole fleet. SSF accounted for 50% of employment in the North Atlantic, which is the main area in terms of employment, with 3,785 crew members, 75% in the Mediterranean Sea and 86% for other regions. Total employment was around 8,500 persons (Frangoudes et al., 2020).

France developed its action plan for small-scale and coastal fisheries in 2015 (Renaud, 2015). The plan highlighted that 75% of the French fleet is part of the SSF category as defined by the EMFF. It should also be noted that 70% of the French fishing fleet operates within the 12 nautical mile zone, corresponding to territorial waters, where a high percentage of vessels using passive gear is concentrated (Frangoudes et al., 2020).

FRENCH SSF CRITICAL ISSUES

- SSF do not benefit from any specific policy despite their numerical importance.
- SSF are not organised in their own right.
- National and regional fisheries authorities, fisheries committees and politicians give little specific support to SSF.
- Organisational issues appear to be the main impediment to SSF empowerment.

Source: Pascual-Fernández et al., 2020

In the Atlantic and Mediterranean areas, the gears used by SSF are mostly gillnets, trammel nets, longlines, handlines, pots and traps. The choice of different gears by small-scale fishers is based on the season and targeted species, as well as the regional sea being harvested (Frangoudes et al., 2020). For example, in the Mediterranean Sea, in addition to fishing at sea, a large number of small-scale vessels operate in lagoons covering an area of 50,000 hectares and linked to the sea. Lagoon fishery is an old activity practised by vessels built solely for this purpose and using fixed gears like fyke nets. The SSF category also includes shellfish and seaweed gathering, the former being practised in all seas and the latter only along the Brittany coastline (Gariglietti-Brachetto, 2014; Delaney and Frangoudes, 2016).

Frangoudes et al. (2020) reported that the main species landed by the small-scale fleet using static gears in France are common sole (Solea solea), European sea bass (Dicentrarchus labrax) and whelk, partially confirming that observed in the FDI data (2020), where Buccinum undatum dominated the landings, representing 27% of the total SSF landings by weight (Figure 19).

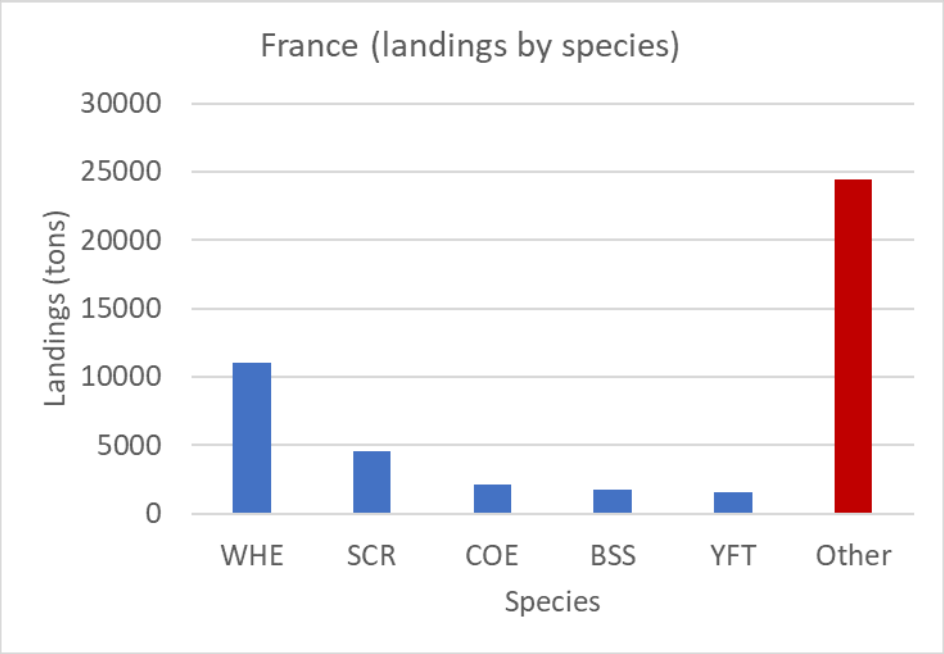


Figure 19. Landings by species of French SSF (FDI data 2020). WHE: Buccinum undatum; SCR: Maja squinado; COE: Conger conger; BSS: Dicentrarchus labrax; YFT: Thunnus albacares. The category "Other" includes 362 species.

Financial tools supporting SSF in France

The main financial instrument for the French fisheries sector is the European Maritime and Fisheries Fund managed by the Ministry of Agriculture and Food. The main goal of the French OP is to promote more competitive fisheries and aquaculture sectors based on knowledge, innovation and high employment, and promoting a more efficient use of resources through the sustainable development of its fisheries and aquaculture sectors. Funding is intended to support projects that improve the livelihood of fishing communities by increased FLAG support, and to assist French public bodies in enforcing CFP rules and providing sound data for the management of the fisheries and aquaculture sectors. In comparison with the programming period 2007-2013, there is a stronger emphasis on the preservation of resources and the marine environment, climate change and the shift towards a low-carbon economy, as well as on the development and competitiveness of businesses and in particular SMEs (OP summary).

The table below shows the key figures for the EMFF allocation, commitments and financial performance in the Atlantic Sea Basin and in France according to the FAME Report 2020.

EMFF key data: Atlantic and France

Sea basin/MS	Total allocation (EUR)	Total EMFF committed by MA (EUR) (Infosys, 31/12/2020)	Total eligible EMFF expenditure declared by beneficiaries to MA (EUR)	Absorption rate %	No of operations
Atlantic	2 502 146 056,00	1 633 127 991	1 078 132 275	43,1%	26 552
France	587 980 173	387 657 407	239 519 307	40,7%	4 182

Source: FAME Report, 2020.

Looking at the various sea basins, the EMFF financial allocation for the Atlantic Sea Basin is the most significant. The FR allocation represents 33% of the total EMFF allocation for the Atlantic Sea Basin, with a spending performance of 22% of the total eligible EMFF expenditure declared at sea basin level. The national spending performance was equal to 63% of the total committed amount, with an average commitment per operation in the country of EUR 92,763.

France: EMFF contribution by Union Priority

MS	UP 1	UP 2	UP 3	UP 4	UP 6	TA	Total per MS	Total per MS	%
FR	121 918	122 647	123 003	21 128	170 106	4 991	24 184	587 980	10,34

Source: Member States' operational programmes. Situation as in December 2019.

Subject to certain conditions and with higher rates of public support which can range from 20% to 80%, the EMFF supports SSF in terms of:

- investments in fishing boats and equipment, e.g. purchasing new engines, replacing engines, purchasing the first vessel, investing in new gears and onboard equipment to improve selectivity, protect biodiversity, minimise unwanted catches and improve energy efficiency;
- investments in equipment to add value to catches;
- investments in complementary activities for income diversification;
- investments in human resources, from health and safety on board to new skills.

According to the FAME Report 2020, the EMFF supported 120 operations linked to SSF vessels for a total eligible amount of EUR 12,051,459, almost matching the amount committed by the MA.

MS	No of operations	Supported SSF	Committed by MA (EUR)	Eligible expenditure declared by beneficiaries to MA (EUR)
FR	127	120	2 217 960	2 051 459

Among the EMFF measures linked to SSCF topics, those related to Article 76 "Control and enforcement" and Article 69 "Processing of fishery and aquaculture products" were listed in the "Top five measures" in terms of MA commitment (FAME Report, 2020).

Article	Total eligible EMFF committed by MA (EUR)	Total eligible EMFF expenditure declared by beneficiaries to MA (EUR)	No of operations	Spending performance (% declared in total committed)
76	31 475 427	16 168 375	60	51%
69	25 172 391	17 479 025	159	69%

Given that most inland fisheries areas are eligible for LEADER funding in France, EMFF CLLD focuses on coastal areas and, except for the Pays de la Loire, all coastal regions in Metropolitan France are implementing CLLD. Two of its overseas territories, Guadeloupe and Saint Martin, are also implementing CLLD (FARNET, 2017).

CLLD challenges 2014-2020	CLLD objectives 2014-2020
• Relatively poor integration of fishing communities into general territorial development, especially in the face of increasing residential activities and seasonal tourism along the French coast. • Difficulties in attracting labour to the profession and the resulting aging workforce, due to recruitment requirements and a declining image of fisheries and aquaculture as a career choice.	• Reinforcing the position of fisheries and aquaculture within the development of coastal territories and strengthening the FLAG network. • Maintaining and creating new jobs within fisheries, in particular by: (a) improving the image of the sector; (b) increasing added value for fisheries through innovative projects; (c) supporting diversification of sources of income within fisheries.

According to the FARNET country factsheet (2017), France spends 5% of its EMFF fisheries budget on CLLD, up from just 2.6% of the EFF in the 2007-2013 period. This means a total public budget of EUR 45 million available for FLAGs (up from around EUR 11 million). It also means that despite the increase in the number of FLAGs from 11 to 25, individually the FLAGs will benefit from increased funding. The average budget per FLAG was EUR 1,776,552.

In addition to the EMFF, French beneficiaries can apply to other funds to support the blue growth of their communities, taking part in several research and interregional projects co-financed by the EU in the last programming period. France is eligible for the EU programmes shown in the box below.

Programmes 2014-2020

2014 - 2020 ESPON 2020
2014 - 2020 INTERACT III
2014 - 2020 INTERREG V-A Belgium - France (France - Wallonie - Vlaanderen)
2014 - 2020 INTERREG V-A France (Guadeloupe - Martinique - Organisation Économique de la Caraïbe orientale)
2014 - 2020 INTERREG V-A France (Mayotte / Comores / Madagascar)
2014 - 2020 INTERREG V-A France (Réunion - Pays de la Commission de l'Océan Indien)
2014 - 2020 INTERREG V-A France (Saint Martin - Sint Maarten)
2014 - 2020 INTERREG V-A France - Belgium - Germany - Luxembourg (Grande Région / Großregion)
2014 - 2020 INTERREG V-A France - Belgium - The Netherlands - United Kingdom (Les Deux Mers / Two seas / Twee Zeeën)
2014 - 2020 INTERREG V-A France - Germany - Switzerland (Rhin supérieur-Oberrhein)
2014 - 2020 INTERREG V-A France - Italy (ALCOTRA)
2014 - 2020 INTERREG V-A France - United Kingdom (Manche - Channel)
2014 - 2020 INTERREG V-A France / Guiana - Brazil - Suriname (Amazonie)
2014 - 2020 INTERREG V-A France-Switzerland
2014 - 2020 INTERREG V-A Italy - France (Maritime)
2014 - 2020 INTERREG V-A Spain - France - Andorra (POCTEFA)
2014 - 2020 INTERREG VB Alpine Space
2014 - 2020 INTERREG VB Amazonia
2014 - 2020 INTERREG VB Atlantic Area
2014 - 2020 INTERREG VB Caribbean Area
2014 - 2020 INTERREG VB Indian Ocean Area
2014 - 2020 INTERREG VB Mediterranean
2014 - 2020 INTERREG VB North West Europe
2014 - 2020 INTERREG VB South West Europe
2014 - 2020 Interreg Europe
2014 - 2020 Mediterranean Sea Basin ENI CBC
2014 - 2020 URBACT III

The graph below shows the number of projects, partnerships and budget sizes per theme in the programming period 2014-2020, for a total budget of EUR 1,018,162,347 for 1,671 projects (Figure 20).

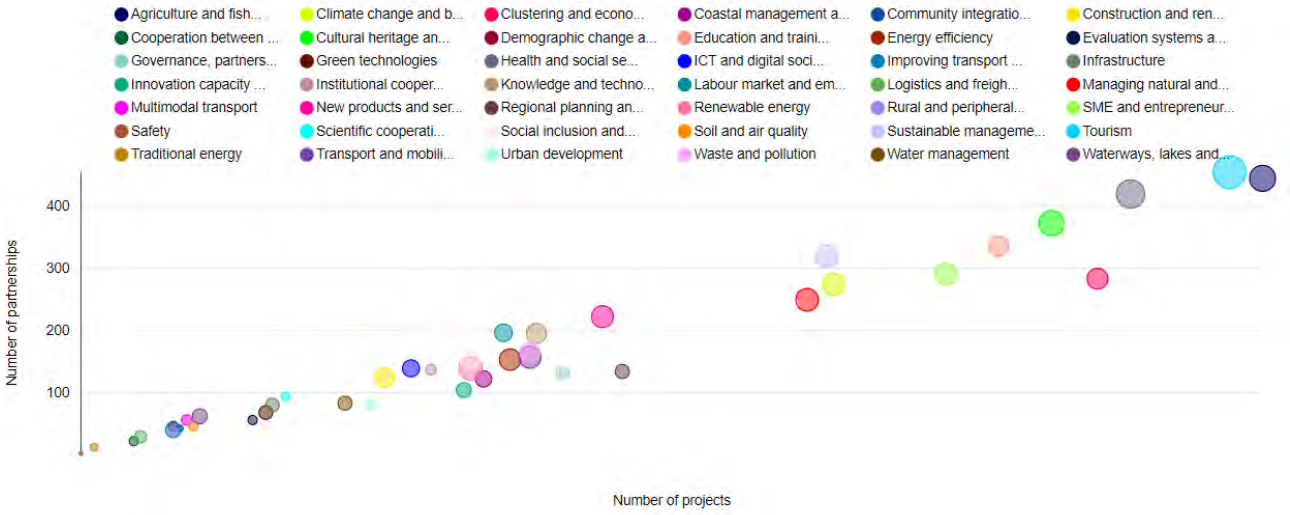


Figure 20. France. Number of projects, partnerships and 2014-2020 budget sizes per theme. Source: *https://keep.eu/countries-and-regions/*

In the graph in Figure 21, the projects were selected from the Keep database by theme of interest in relation to SSF topics:

- tourism;
- sustainable management of natural resources;
- agriculture, fisheries and forestry;
- coastal management and maritime issues.

Out of a total of 1,671 projects, 472 (for a total budget of EUR 292,015,412) related to the aforementioned topics.

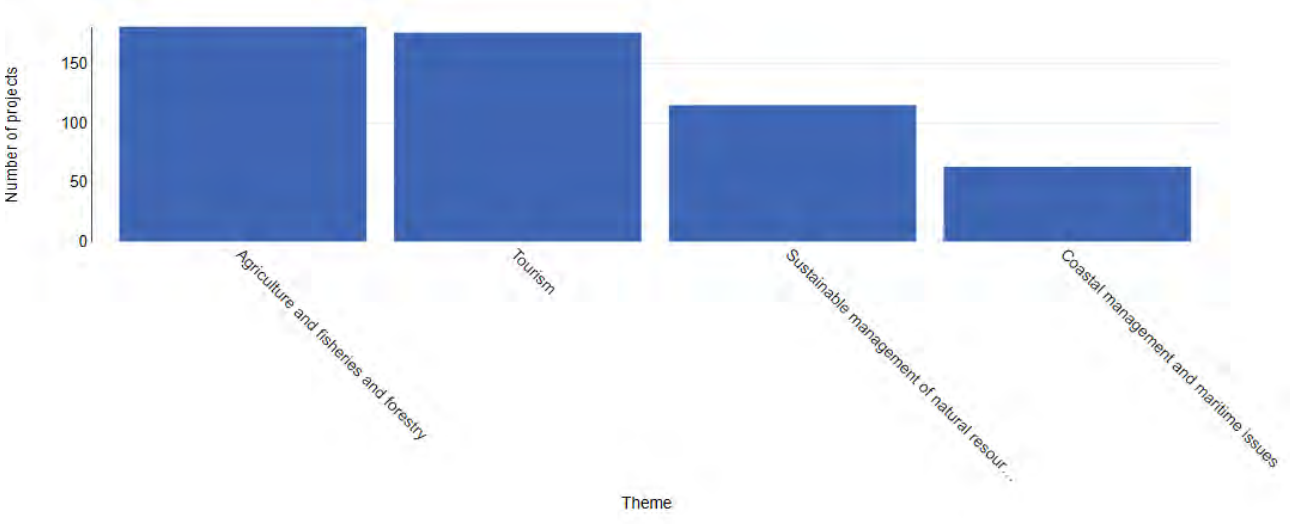


Figure 21. France. Number of projects by theme. Source: *https://keep.eu/countries-and-regions/*

Agriculture, fisheries and forestry seemed to be the leading topics of the projects financed, followed by tourism. Despite its relevance, the theme of coastal management and maritime issues remains underexploited within the framework of the projects financed. In total, 33 projects directly addressed the fisheries sector. Some of these projects can be considered “best practices” and have been outlined in the best practices box in Chapter 4.

SSF projects and best practices in France

BEST PRACTICES: FR #1

Country: France

Programme: EMFF – FLAG project

Topics addressed and policy context: reliable data, monitoring, local innovation, adding value

Title: TELECAPECHE

Description: TELECAPECHE is an e-technology system that provides real-time data to local fisheries and aquaculture committees, helping them to monitor fish stocks and adopt suitable management measures. Launched with Axis 4 support, the system's creators are now looking at some major developments using CLLD under the EMFF.

- 550 professional fishermen have used the tool;
- the tool has become an official data source for fisheries management at regional level in Brittany.

Budget: total project amount: EUR 35,180

- FLAG contribution: EUR 33,632
- CRPMEM contribution: EUR 1,548

More info at: *https://webgate.ec.europa.eu/fpfis/cms/farnet2/on-the-ground/good-practice/projects/telecapeche_en*

BEST PRACTICES: FR #2

Country: France

Programme: EFF – FLAG project

Topics addressed and policy context: diversification, fisheries by-products, innovation, circular economy

Title: FEMER peau marine

Description: the aim of the project was to develop an innovative tanning technique that would convert fish skin into high-grade leather for use in the fashion industry. Local fishermen and seafood processors were involved in providing the raw material. After this preliminary study phase, a pilot production facility was set up in 2013, with the assistance of the European Social Fund, and the first customers were identified. In November 2014, the company was formally established and the brand name, "Femer Peau Marine©", was registered. In addition to the initial financial support, the FLAG was closely involved throughout the development of the project, helping the owner to make contacts and promote the product both locally and internationally. The project is an example of how SSF communities can navigate through social, economic and environmental challenges by adapting to new contexts, needs and opportunities.

Budget: EUR 10,085

- FLAG GRANT: EUR 8,068
- Beneficiary contribution: EUR 2,017

More info at: *www.femer.fr*

BEST PRACTICES: FR #3

A FOCUS ON PHAROS4MPAS IN FRANCE

Implementing the zoning approach in the Natural Reserve of the Straits of Bonifacio

Programme/Project: Interreg MED 2014-2020/Pharos4MPAs

Topic addressed: spatial conflicts

Policy recommendation implemented: implementing the right zoning approach. Zoning approaches should aim to avoid gear interaction or conflicts of access to marine resources, both with other stakeholders (e.g. small-scale fishers) and among recreational fishers themselves (e.g. spearfishers vs boat anglers). This spatial zoning should not only mitigate conflicts between individual users and different sectors, but also contribute to diversifying catches.

The Natural Reserve of the Straits of Bonifacio provides an example of this approach, where enhanced protection zones have been established for small-scale fishers close to no-take zones. In these zones spearfishing is forbidden and recreational fishing is limited to hand-held gears, while artisanal fisheries are authorised under the same conditions as in the open exploitation zones.

As a result of this zoning, small-scale fishers' Catch Per Unit Effort (CPUE) has increased: it is now more than 2.3 times higher than in the MPA's open exploitation zone, where all types of recreational fisheries are allowed.

BEST PRACTICES: FR #4

A FOCUS ON FISHMPABLUE2 IN FRANCE

Programme/Project: Interreg MED 2014-2020/FishMPABlue2

1. Increase the cooperation between MPA managers and competent bodies on surveillance

Topics addressed: surveillance, cooperation

Policy recommendation: MPAs should enhance as far as possible their communication with competent law enforcement bodies to facilitate their intervention to prevent and sanction infringements.

In FishMPABlue2, Cap Roux MPA decided to develop and/or increase cooperation with law enforcement bodies or to set up a new surveillance authority to enhance surveillance within the MPA's borders. A cross-cutting priority for all potential strategies aimed at enhancing enforcement is the legal framework, allowing MPA managers and law enforcement bodies to have the legal instruments to pursue transgressors and enforce MPA regulations. Most of the MPA rangers have no legal power to issue fines or ask for users' ID. Therefore, they can have only a dissuasive and informative approach. An interesting case is Cap Roux MPA (France), which represents a genuine case of community-based MPA (where the management body is composed of local small-scale fishers). Its legal status is not fully recognised by the state and it has no surveillance units. FishMPABlue2 was an opportunity for the MPA management body to propose to regional and national authorities to hire a security guard and cover his salary. However, despite this bottom-up willingness for increased enforcement, administrative obstacles related to territorial jurisdictions prevented a guard from being hired. The implementation of this measure has unexpectedly highlighted a loophole in the existing legal framework, soon observed at the national level, related to the legal and administrative obstacles to recruiting a ranger for the surveillance of a marine protected area in France.

2. Valorisation of local fish and promotion of new commercial species, with support for pescatourism development

Topics addressed: multifunctionality, diversification

Pescatourism usually refers to an economic activity in which professional (usually artisanal) fishers take tourists out on their boats to introduce them to the world of fishing and carry out recreational fishing activities. Such activity usually supplements (but does not replace) incomes from normal fishing activities, and also fosters public support for the future of artisanal fisheries. It is an effective measure for reducing the fishing effort inside MPAs by diversifying fishing activities.

6.8 Germany

GENERAL OVERVIEW

The Federal Republic of Germany is the most populous Member State of the European Union (with a population of around 83 million). It is situated between the Baltic Sea and the North Sea. Its surface area is 357,022 km2 and its coastline is 2,389 km in length.

The bulk of the German fleet consists of small-scale vessels: approximately 220 shrimp trawlers fishing exclusively in the North Sea, about 60 fresh-fish cutter trawlers operating in the North Sea and Baltic Sea, all less than 24 metres in length, and just over 1,100 small vessels, employing passive gears (gillnets, fyke nets or longlines), ranging from around 5 to 18 metres in length. The latter mostly operate within sight of the Baltic shoreline and contribute less than 4% to overall German catches (Doring et al., 2020).

Following the EU definition of SSF, FDI data (2020) show that 657 vessels belonged to this sector (corresponding to 51% of the national fleet) and landed 2,772 tonnes of seafood products in 2020 (Figures 1, 2 and 3).

SSF in the North Sea and Baltic Sea have developed differently owing to the different characteristics of these two waters. The Wadden Sea is a large shallow coastal zone of the southern North Sea with a strong tidal influence. In contrast, the Baltic Sea coast is characterised by a lack of tides, low salinity (the Baltic Sea is a brackish marine ecosystem) and many small shallow lagoons (Doring et al., 2020).

The fresh-fish cutter trawler fleet catching demersal and pelagic fish species in the North Sea and Baltic Sea comprised around 60 vessels (Doring et al., 2020). The beam trawler fleet consisted of about 220 vessels fishing for brown shrimp and occasionally flatfish in the North Sea. There were about 800 vessels fishing exclusively in the Baltic Sea using passive gears.

GERMAN SSF CRITICAL ISSUES

- Increasing number of closed areas affecting SSF in economic terms.
- Competition with large-scale fisheries in the market.
- Many small-scale fishers are close to retirement with only a few younger successors.
- Financial risks resulting from uncertainties over future fishing opportunities, fishing regulations and market prices.
- Vessel quotas deter young fishers from entering the business.
- Tighter regulation is another reason why small-scale fishers leave the profession, and fishing rights are transferred to larger companies or producer organisations with more solid financial foundations.
- Individual fishers have little power over negotiations with retailers or wholesalers.

Source: Pascual-Fernández et al., 2020

According to the German definition of the small-scale sector (i.e. vessels of less than 24 metres), three different segments are considered: (i) fresh-fish cutter trawlers; (ii) brown shrimp beam trawlers; (iii) vessels using passive gear, e.g. mainly fixed nets (Doring et al., 2020). Here, we will focus on the third segment (i.e. passive gears). However, in Germany passive gears are almost exclusively used in the Baltic Sea by smaller vessels (mainly less than 10 metres), while very few vessels are involved in setting pots, traps or flatfish gillnets in the North Sea. Doring et al. (2020) reported that passive fishing in the Baltic was dominated by part-time fishers targeting herring, cod and flatfish and in the eastern, brackish parts, freshwater species. FDI data (2020) confirm that herring, freshwater species and flatfish are the most important species landed by SSF in Germany (Figure 22).

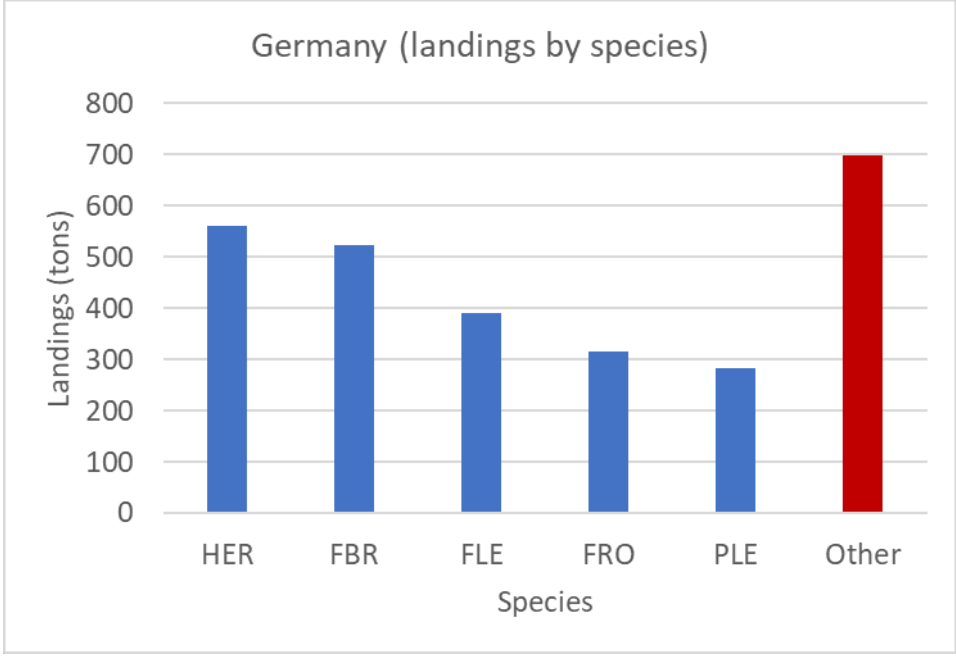


Figure 22. Landings by species of German SSF (FDI data 2020). HER: Clupea harengus; FBR: Abramis spp.; FLE: Platichthys flesus; FRO: Rutilus rutilus; PLE: Pleuronectes platessa. The category "Other" includes 41 species.

Financial tools supporting SSF in Germany

The main financial instrument for the Germany fisheries sector is the European Maritime and Fisheries Fund managed by the Federal Ministry of Food and Agriculture. The main goal of the German OP is support for the transition to environmentally and ecologically sustainable fisheries, conservation measures, and the protection and restoration of marine biodiversity. The expected results are:

- reduction of the impact of fisheries on the marine environment;
- avoidance and reduction of unwanted catches;
- protection and restoration of aquatic biodiversity and ecosystems;
- increase in the competitiveness and viability of fisheries enterprises and improvement of safety and working conditions;
- development of professional training, new professional skills and lifelong learning (German OP summary).

The table below shows the key figures for the EMFF allocation, commitments and financial performance in the North Sea Basin and in Germany according to the FAME Report 2020.

Dati principali FEAMP: North Sea e Germania

Sea basin/MS	Total allocation (EUR)	Total EMFF committed by MA (EUR) (Infosys, 31/12/2020)	Total eligible EMFF expenditure declared by beneficiaries to MA (EUR)	Absorption rate %	No of operations
North Sea	571 225 991	467 294 595	285 860 136	43,1%	5 932
Germany	219 596 276	163 053 659	116 498 861	53,1%	2 959

Source: FAME Report, 2020.

Looking at the sea basin, the DE allocation represents 38% of the total EMFF allocation for the North Sea Basin, with a spending performance of 41% of the total eligible EMFF expenditure declared at sea basin level. The national spending performance was equal to 71% of the total committed amount, with an average commitment per operation in the country of EUR 55,104.

France: EMFF contribution by Union Priority

MS	UP 1	UP 2	UP 3	UP 4	UP 6	TA	Total per MS	Total per MS	%
DE	52 250	63 097	59 695	21 810	11 631	2 500	8 613	219 596	3,86%

Source: Member States' operational programmes. Situation as in December 2019.

Subject to certain conditions and with higher rates of public support which can range from 20% to 80%, the EMFF supports SSF in terms of:

- investments in fishing boats and equipment, e.g. purchasing new engines, replacing engines, purchasing the first vessel, investing in new gears and onboard equipment to improve selectivity, protect biodiversity, minimise unwanted catches and improve energy efficiency;
- investments in equipment to add value to catches;
- investments in complementary activities for income diversification;
- investments in human resources, from health and safety on board to new skills.

According to the FAME Report 2020, the EMFF supported 117 operations linked to SSF vessels for a total eligible amount of EUR 1,377,716, matching the amount committed by the MA.

MS	No of operations	Supported SSF	Committed by MA (EUR)	Eligible expenditure declared by beneficiaries to MA (EUR)
DE	345	117	1 395 580	1 377 716

Among the EMFF measures linked to SSCF topics, those related to Article 63 "Implementation of community-led local development strategies" and Article 76 "Control and enforcement" were listed in the "Top five measures" in terms of MA commitment (FAME Report, 2020).

Article	Total eligible EMFF committed by MA (EUR)	Total eligible EMFF expenditure declared by beneficiaries to MA (EUR)	No of operations	Spending performance (% declared in total committed)
76	21 745 546	19 575 439	46	90%
63	14 061 118	8 263 355	139	59%

CLLD in Germany seeks to address key challenges such as the high unemployment rate and low GPD per capita in some fisheries areas. Compared with the previous programming period, the number of FLAGs has increased from 19 to 23, while the total budget for CLLD has decreased from EUR 33.6 million to EUR 24.6 million. This means that the average budget per FLAG will fall from EUR 1.5 million to EUR 0.82-0.85 million. The average budget per FLAG was EUR 831,615 (FARNET, 2016).

CLLD challenges 2014-2020	CLLD objectives 2014-2020
• A decline in fish stocks has affected the fisheries sector. • Economic indicators such as unemployment rate or GDP per capita are below average in German fisheries areas. • Vulnerability of the sector to market fluctuations. • Environmental degradation, especially eutrophication in the Baltic Sea.	• To give more consideration to the multi-sectoral needs of fisheries areas (tourism, heritage, local products, etc.). • To develop capacity and know-how within FLAGs. • To simplify administrative procedures. • To encourage cooperation and the exchange of experience with other programmes. • To promote networking with other regions and the sharing of information on projects and policies.

ISSUES AFFECTING EMFF PERFORMANCE IN GERMANY

- Lack of EMFF funding for some measures and lack of national co-financing for other measures.
- No applications were submitted by the SSF fleet for support under Article 41(2). As long as fish stocks (in this case, cod and herring in the western Baltic Sea) are not within safe biological limits, support under the EMFF Regulation is not permitted.

In addition to the EMFF, German beneficiaries can apply to other funds to support the blue growth of their communities, taking part in several research and interregional projects co-financed by the EU in the last programming period. Germany is eligible for the EU programmes shown in the box below.

Programmes 2014-2020

2014 - 2020 ESPON 2020
2014 - 2020 INTERACT III
2014 - 2020 INTERREG V-A Austria - Germany / Bavaria (Bayern - Österreich)
2014 - 2020 INTERREG V-A Belgium - Germany - The Netherlands Euregio Meuse-Rhin / Euregio Maas-Rijn / Euregio Maas-Rhein
2014 - 2020 INTERREG V-A France - Belgium - Germany - Luxembourg (Grande Région / Großregion)
2014 - 2020 INTERREG V-A France - Germany - Switzerland (Rhin supérieur-Oberrhein)
2014 - 2020 INTERREG V-A Germany - Austria - Switzerland - Liechtenstein (Alpenrhein - Bodensee - Hochrhein)
2014 - 2020 INTERREG V-A Germany - Denmark
2014 - 2020 INTERREG V-A Germany - The Netherlands
2014 - 2020 INTERREG V-A Germany / Bavaria - Czech Republic
2014 - 2020 INTERREG V-A Germany / Brandenburg - Poland
2014 - 2020 INTERREG V-A Germany / Mecklenburg - Western Pomerania / Brandenburg - Poland
2014 - 2020 INTERREG V-A Germany / Saxony - Czech Republic
2014 - 2020 INTERREG V-A Poland - Denmark - Germany - Lithuania - Sweden (South Baltic)
2014 - 2020 INTERREG V-A Poland - Germany / Saxony
2014 - 2020 INTERREG VB Alpine Space
2014 - 2020 INTERREG VB Baltic Sea
2014 - 2020 INTERREG VB Central Europe
2014 - 2020 INTERREG VB Danube
2014 - 2020 INTERREG VB North Sea
2014 - 2020 INTERREG VB North West Europe
2014 - 2020 Interreg Europe
2014 - 2020 URBACT III

The graph below shows the number of projects, partnerships and budget sizes per theme in the programming period 2014-2020, for a total budget of EUR 869,070,990 for 1,616 projects (Figure 23).

Figure 23. Germany. Number of projects, partnerships and 2014-2020 budget sizes per theme. Source: *https://keep.eu/countries-and-regions/*

In the graph in Figure 24, the projects were selected from the Keep database by theme of interest in relation to SSF topics:

- tourism;
- sustainable management of natural resources;
- agriculture, fisheries and forestry;
- coastal management and maritime issues.

Out of a total of 1,616 projects, 315 (for a total budget of EUR 160,584,169) related to the aforementioned topics.

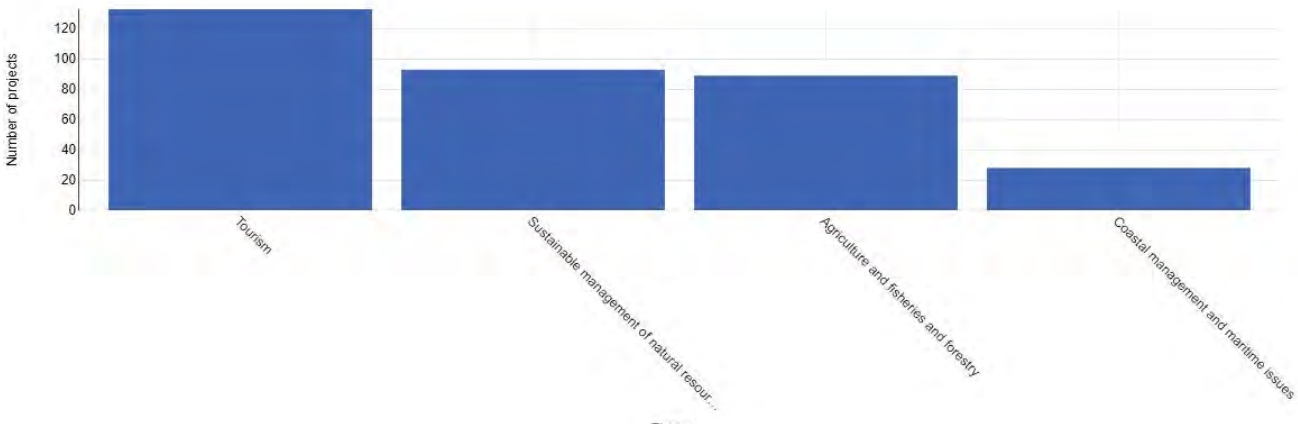


Figure 24. Germany. Number of projects by theme. Source: *https://keep.eu/countries-and-regions/*

Tourism seemed to be the leading topic of the projects financed, followed by sustainable management of natural resources. Despite its relevance, the theme of coastal management and maritime issues remains underexploited within the framework of the projects financed.

6.9 Greece

GENERAL OVERVIEW

Greece has a population of about 11 million and a surface area of 131,957 km2, including between 1,200 and 6,000 islands/islets (depending on the definition). The country is characterised by a mountainous landscape and a vast coastline (more than 15,000 km), which has resulted in the existence of numerous small ports and havens.

The Mediterranean Sea is highly oligotrophic and is considered a "biodiversity hotspot" (Bianchi and Morri, 2000). This has resulted in multi-species fisheries and a pre-industrial model of fisheries development (Olympitou, 2010). Moreover, the lack of a processing sector and of a large export trade have resulted in the majority of fish products being sold in local markets: characteristics that still largely apply to this day (Tzanatos et al., 2020).

As a result, SSF have acquired major importance in coastal areas both as a source of high-quality food and as a means of employment for insular and coastal populations which have strong nautical and fishing traditions. These factors, combined with the poverty traditionally associated with the rural sector, have meant that SSF are extremely important, with Greece having the largest fishing fleet in the European Union (Tzanatos et al., 2020). In 2018, the registered professional fishing fleet in Greece consisted of 14,935 fishing vessels. Of these, 14,431 (96.6%) could be characterised as belonging to the small-scale fishing fleet, according to the Common Fisheries Register, as they are not allowed to use otter trawls or purse seines. According to the Common Fisheries Register, this fleet is officially distributed over 185 ports. However, because only ports with port authorities are entered in the register, the actual distribution of the fleet is scattered over many more locations (Tzanatos et al, 2020). The large number of home ports, resulting in a large number of landing sites, is one of the main challenges for monitoring fishing activity.

Following the EU definition of SSF, FDI data (2020) show that 12,930 vessels belonged to this sector (corresponding to 93% of the national fleet) and landed 16,374 tonnes of seafood products (corresponding to about EUR 153 million) in 2020 (Figures 1, 2 and 3).

In 2017, Greek small-scale fishing vessels had an average overall length of 6.9 metres, a capacity of 2.4 gross tonnes and a main engine power of 21.0 hp (Tzanatos et al., 2020).

GREEK SSF CRITICAL ISSUES

- One of the main challenges for monitoring fishing activity is the large number of home ports, resulting in a large number of landing sites.
- Small-scale fishers are relatively old, with only 28% being under 40 and 21% over 60.
- Women carry out a large part of the "invisible work" related to SSF, in many cases not recognised legally.
- Conflicts with trawlers, purse seines and recreational fisheries for space and resources.
- Competition with aquaculture for space and in the market.
- Fiberglass vessels with powerful engines generate high operating costs due to increased fuel prices.
- The socio-economic crisis seems to have led to an increase in the number of recreational fishers selling their catches (which is illegal), increasing the conflicts with professional small-scale fishers.
- The legal framework for obtaining or retaining a professional fisher licence is relatively ambiguous.
- Internal competition, low educational level and the solitary nature of the fishing profession appears to impede collective participation.
- The majority of SSF cooperatives were not very successful, leading to bankruptcy.
- As fishers are often ignorant of market mechanisms and lack business flexibility, they often fail to benefit from EU funding schemes and collaboration with the relevant scientists.
- Modernisation of the SSF organisational and legal context.

Source: Pascual-Fernández et al., 2020

A variety of fishing gears are used by the Greek SSF, although the gear licences indicated the prevalence of nets (i.e. gillnets and trammel nets) and set longlines (Tzanatos et al. 2005). Over 95% and 85%, respectively, of vessels are licensed for these, with the percentage of all other gear licences being less than 20%.

Important métiers are those that use nets to catch striped red mullet (Mullus surmuletus), red mullet (Mullus barbatus), bogue (Boops boops), red porgy (Pagrus pagrus), spiny lobster (Palinurus elephas) and hake (Merluccius merluccius). Longlines mainly target common dentex (Dentex dentex), red porgy (Pagrus pagrus), scorpionfish (Scorpaena scrofa), white seabream (Diplodus sargus) and common two-banded seabream (Diplodus vulgaris). Drifting longlines target swordfish (Xiphias gladius) and albacore (Thunnus alalunga), while trolling lines target species like bonito (Sarda sarda), albacore (Thunnus alalunga) and dusky grouper (Epinephelus marginatus) (Tzanatos et al., 2020).

FDI data (2020) partially confirm that reported by Tzanatos (2020), even though the two cephalopods Octopus vulgaris and Sepia officinalis were the two most important species landed by Greek SSF in terms of biomass (Figure 25).

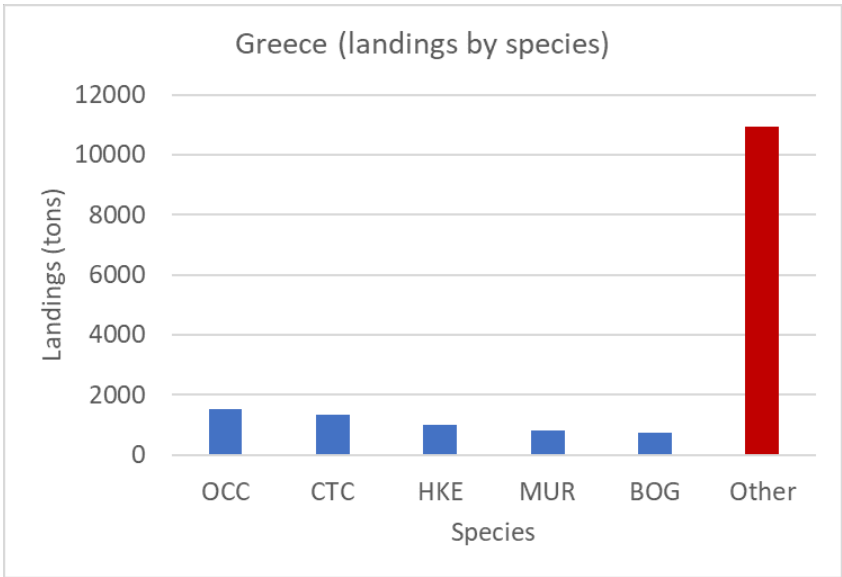


Figure 25. Landings by species of Greek SSF (FDI data 2020). OCC: Octopus vulgaris; CTC: Sepia officinalis; HKE: Merluccius merluccius; MUR: Mullus surmuletus; BOG: Boops boops. The category "Other" includes 145 species.

Financial tools supporting SSF in Greece

The main financial instrument for the Greek fisheries sector is the European Maritime and Fisheries Fund managed by the Ministry of Rural Development and Food. The main goal of the Greek OP is to enhance the competitiveness of aquaculture and processing sectors, the viability of the sea fisheries sector and the sustainable development of traditionally fisheries-dependent areas. The table below shows the key figures for the EMFF allocation, commitments and financial performance in the Mediterranean Sea Basin and in Greece according to the FAME Report 2020.

EMFF key data: Mediterranean and Greece

Sea basin/MS	Total allocation (EUR)	Totale FEAMP impegnato dall'Autorità di Gestione (EUR) (Infosys, 31/12/2020)	Total eligible EMFF expenditure declared by beneficiaries to MA (EUR)	Absorption rate %	No of operations
Mediterranean	256 164 135	884 733 038	416 147 985	33,1%	18 338
Grecia	388 777 914	287 900 156	88 665 539	28,1%	2 338

Source: FAME Report, 2020.

The Greek allocation represents 31% of the total EMFF allocation for the Mediterranean Sea Basin, with a spending performance of 65% of the total commitment at country level EMFF and an average commitment per operation in the country of EUR 123,139,500.

Greece: EMFF contribution by Union Priority

MS	UP 1	UP 2	UP 3	UP 4	UP 6	TA	Total per MS	Total per MS	%
EL	119 025	62 394	70 433	59 925	59 777	4 446	12 778	388 778	6,84

Source: Member States' operational programmes. Situation as in December 2019.

According to the FAME Report 2020, the EMFF supported 743 operations linked to SSF vessels for a total eligible amount of EUR 15,813,816, almost matching the amount committed by the MA.

MS	No of operations	Supported SSF	Committed by MA (EUR)	Eligible expenditure declared by beneficiaries to MA (EUR)
EL	796	743	18 104 094	15 813 816

Among the EMFF measures linked to SSCF topics, those related to Article 76 "Control and enforcement" and Article 69 "Processing of fishery and aquaculture products" were listed in the "Top five measures" in terms of MA commitment (FAME Report, 2020).

Article	Total eligible EMFF committed by MA (EUR)	Total eligible EMFF expenditure declared by beneficiaries to MA (EUR)	No of operations	Spending performance (% declared in total committed)
76	44 924 484	964 028	8	2%
69	36 064 610	9 321 809	66	26%

Having implemented the LEADER rural development programme since the early 1990s, Greece has a long tradition of bottom-up local development of fisheries. CLLD has the potential to build on this experience to address some of the weaknesses in its fisheries and aquaculture sector and to forge links with other sectors (e.g. science, tourism, etc.) to diversify its activities.

CLLD challenges 2014-2020	CLLD objectives 2014-2020
• Sustainable development while halting certain negative developments. • Improving diversification.	• Promoting economic development and social inclusion. • Creating new jobs in coastal communities that depend on fisheries and aquaculture. • Diversifying activities within and outside fisheries, including in other sectors of the marine economy, and promoting the sustainable development of related products.

According to the FARNET country factsheet (2017), the total budget for CLLD has increased from EUR 42 million to over EUR 70 million, while the number of approved FLAG strategies has also risen from 11 to 33 (implemented by 30 FLAGs). Given the increased number of FLAGs, the average budget per FLAG strategy is lower than in the previous period (down from an average of EUR 3.8 million to just over EUR 2 million). The average budget per FLAG was EUR 2,136,364.

In addition to the EMFF, Greek beneficiaries can apply to other funds to support the blue growth of their communities, taking part in several research and interregional projects co-financed by the EU in the last programming period. Greece is eligible for the EU programmes shown in the box below.

Programmes 2014-2020

2014 - 2020 Black Sea Basin ENI CBC
2014 - 2020 ESPON 2020
2014 - 2020 INTERACT III
2014 - 2020 INTERREG V-A Greece - Bulgaria
2014 - 2020 INTERREG V-A Greece - Cyprus
2014 - 2020 INTERREG V-A Greece - Italy
2014 - 2020 INTERREG VB Adriatic - Ionian
2014 - 2020 INTERREG VB Balkan-Mediterranean
2014 - 2020 INTERREG VB Mediterranean
2014 - 2020 Interreg Europe
2014 - 2020 Interreg IPA CBC Greece - Albania
2014 - 2020 Interreg IPA CBC Greece - Republic of North Macedonia
2014 - 2020 Mediterranean Sea Basin ENI CBC
2014 - 2020 URBACT III

The graph below shows the number of projects, partnerships and budget sizes per theme in the programming period 2014-2020, for a total budget of EUR 274,715,295 for 670 projects (Figure 26).

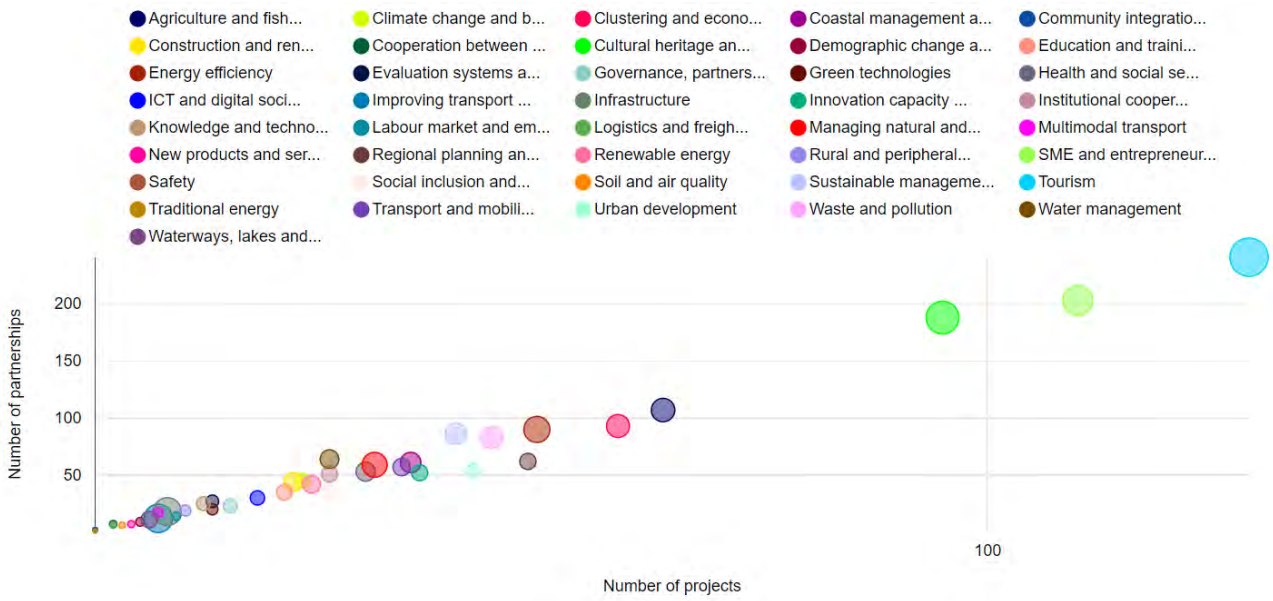


Figure 26. Greece. Number of projects, partnerships and 2014-2020 budget sizes per theme. Source: *https://keep.eu/countries-and-regions/*

In the graph in Figure 27, the projects were selected from the Keep database by theme of interest in relation to SSF topics:

- tourism;
- sustainable management of natural resources;
- agriculture, fisheries and forestry;
- coastal management and maritime issues.

Out of a total of 249 projects, 25 (for a total budget of EUR 94,447,130) related to the aforementioned topics.

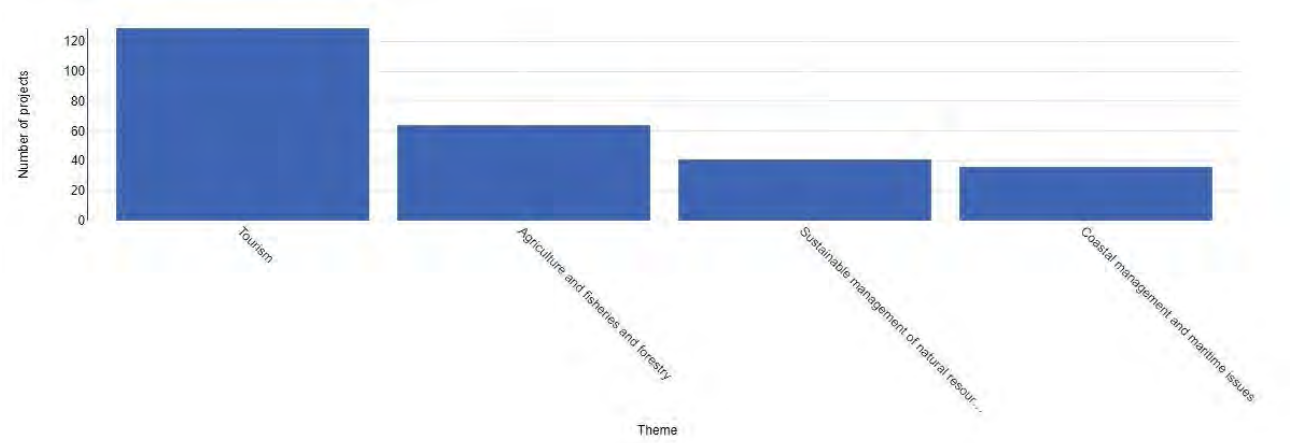


Figure 27. Greece. Number of projects by theme. Source: *https://keep.eu/countries-and-regions/*

Tourism seemed to be the leading topic of the projects financed, followed by agriculture, fisheries and forestry. Despite its relevance, the theme of coastal management and maritime issues remains underexploited within the framework of the projects financed. Some of these projects can be considered "best practices" and have been outlined in the best practices box in Chapter 4.

SSF projects and best practices in Greece

BEST PRACTICES: GR #1

Country: Greece

Best practices: project

Topics addressed: selectivity, data collection

Title and description: TRAPS "Fishing with deepwater traps for crawfish, shrimp, lobster and fish"

The aim of the TRAPS project was to study the dynamic behaviour, output and selectivity of traps to improve output and selectivity and ensure the preservation of marine biological resources and the long-term income of fishers in the Kalymnos region. The investigation of the output of traps was carried out with specific research in the main fishing fields in the Dodecanese region and in the South Aegean in general, in cooperation with the Association of Coastal Fisheries of Kalymnos (IPAPANTI).

Main results: based on the study and analysis of the collected data, the most efficient and simultaneously functional traps were identified as those targeting Norway lobster (Nephrops norvegicus). The mesh size (5 mm or 22 mm) of the trap, as well as the fishing time (less or more than 18 hours) did not appear to influence the efficiency of the traps.

BEST PRACTICES: GR #2

A FOCUS ON PESCATOURISM IN GREECE

Multifunctionality in SSF

Programme/Project: Interreg ADRION 2014-2020/ARIEL

Topics addressed: income diversification, fishing tourism

Policy recommendation implemented: promote SSF multifunctionality

The aim of the ARIEL project was to promote innovation in SSF in the Adriatic and Ionian Regions by facilitating the identification of feasible technological and non-technological solutions for the day-to-day needs of SSF operators. The pilot action implemented in Greece by the Hellenic Centre for Marine Research sought to promote income diversification at SSF fishers' level.

To that end, three pilot business plans on pescatourism were carried out for three SSF companies to estimate start-up costs, forecast revenue and identify marketing tools to support the activities.

Regulatory framework at a glance: Under the ARIEL project, a review of the existing regulatory framework was carried out to pave the way for implementation of the pilot actions, consisting of the development of a business plan for SSF enterprises looking to diversify their income with pescatourism activities.

According to the Greek Law 4582/2018, pescatourism in Greece is considered part of rural tourism. The Common Ministerial Decision 414/2354 sets out the terms and conditions for professional fishers who want to add pescatourism to their professional fishing activities and describes the licensing procedure. Although there is a legal framework for pescatourism, many stakeholders mentioned that there are cases where fishers engage in pescatourism without the necessary licence. Furthermore, in other cases, although they may have the licence, which is fairly easy to obtain from regional authorities, it is much harder to meet the actual legal requirements. Therefore, some vessels engage in pescatourism without complying with the legal provisions. This underlines the need for better enforcement by the competent authorities and is linked to the widespread problem of responsibilities being fragmented at different administrative centres. Article 9 of Presidential Decree 917/1979 lists the necessary equipment for a fishing vessel to be eligible for pescatourism and the legal requirements prior to the vessel's departure from port. Finally, pescatourism is sometimes combined with sport fishing activities, whereas there should be a clear distinction between the two, as pescatourism may only be carried out by traditional fishers.

Challenges:

- better enforcement of the activity in Greece, as in some cases the legal requirements are not met;
- promotion and branding of pescatourism linked exclusively with the SSF sector, to distinguish it from other types of recreational/sport fishing products that act as direct competitors by providing services that include pescatourism but have nothing to do with the original pescatourism by professional fishers;
- more professional attitude at SSF fishers' level.

6.10 Ireland

GENERAL OVERVIEW

Geopolitically, Ireland is divided between the Republic of Ireland (officially named Ireland), which covers five-sixths of the island, and Northern Ireland, which is part of the United Kingdom. In 2016, the population of Ireland was about 6.6 million. The surface area of Ireland extends for 84,421 km2, with 7,527 km of coastline.

In Irish fisheries management, the term "inshore" is used more than "small-scale" when describing and defining fleet sectors. According to the Department of Agriculture, Food and the Marine (DAFM), "Irish inshore fishing boats are deemed to be sea-fishing boats of less than 12m overall length". This 12-metre threshold is used to define which vessels can participate in the management framework for SSF recently established in Ireland, the National Inshore Fisheries Forum (NIFF) and its regional subgroups (Fitzpatrick et al., 2020). The definition of "inshore" used in Irish fisheries management does not map exactly onto the EU's definition of "small-scale", as the Irish inshore fishing fleet includes towed and non-towed gears.

The majority of Irish small-scale vessels are registered in the polyvalent segment, which is the largest and most diverse segment composed of approximately 1,726 vessels using a range of gears and targeting a mix of fisheries (Fitzpatrick et al., 2020).

Following the EU definition of SSF, FDI data (2020) show that 1,277 vessels belonged to this sector (corresponding to 63% of the national fleet) and landed 10,252 tonnes of seafood products (corresponding to about EUR 26 million) in 2020 (Figures 1, 2 and 3).

IRISH SSF CRITICAL ISSUES

- There is currently a feeling of frustration among certain inshore fishers that consultative processes lead to reports that are then ignored or sidelined by the Government.
- Inshore fishermen have finite resources in terms of time and finances to devote to the participatory process.
- The quota allocation process, particularly for non-shellfish species, can be very problematic for inshore fishers.
- Entry costs to the inshore sector are prohibitively high (e.g. ranging from EUR 80,000 to as much as EUR 300,000).
- Low membership rates of inshore fishermen in Producer Organisations.

Source: Pascual-Fernández et al., 2020

The majority of Irish vessels under 12 metres in total length target shellfish using static gears (63% of the Irish fleet, Fitzpatrick et al., 2020). However, there are also a significant number of active vessels under 12 metres in length that use towed gears such as trawls and dredges, and if the small-scale fleet is defined to include all active vessels under 12 metres, the percentage rises to 86%. These vessels fish almost exclusively within the 12 nautical mile limit with the majority of their activities being within the 6 nautical mile limit (Tully, 2017). The most significant inshore fisheries, both by volume and value, are for brown Crab (Cancer pagurus), whelk (Buccinum undatum) and lobster (Homarus gammarus). Other significant shellfish fisheries are for shrimp (Palaemon serratus), velvet crab (Necora puber), spider crab (Maja brachydactyla), native oyster (Ostrea edulis), razor clams (Ensis sp) and scallop (Pecten maximus). Significant finfish species targeted by inshore vessels include pollock (Pollachius pollachius), hake (Merluccius merluccius), cod (Gadus morhua), mackerel (Scomber scombrus), herring (Clupea harengus) and sprat (Sprattus sprattus) (Fitzpatrick et al., 2020).

FDI data (2020) confirm that reported by Fitzpatrick et al. (2020), showing that Cancer pagurus and Buccinum undatum largely dominate Irish SSF landings (Figure 28).

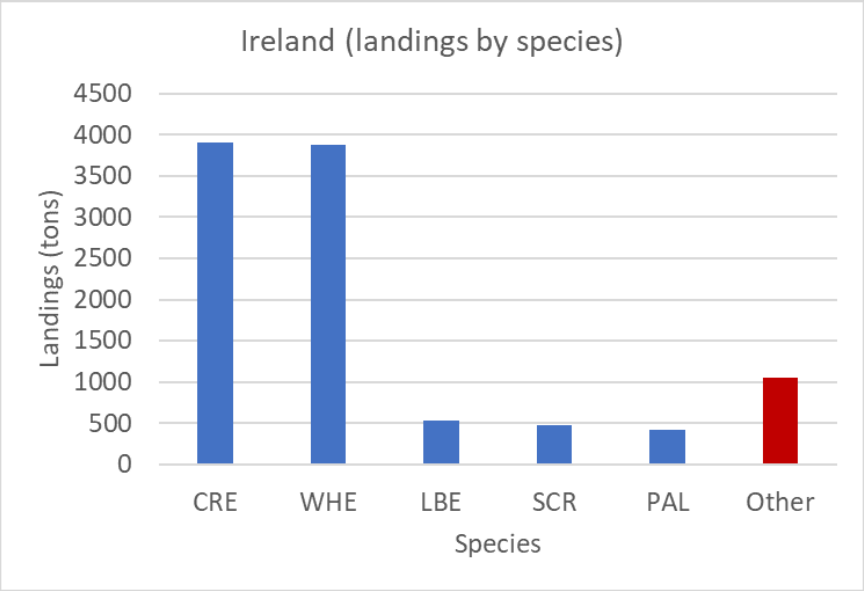


Figure 28. Landings by species of Irish SSF (FDI data 2020). CRE: Cancer pagurus; WHE: Buccinum undatum; LBE: Homarus gammarus; SCR: Maja squinado; PAL: Palaemonidae. The category "Other" includes 17 species.

Financial tools supporting SSF in Ireland

The main financial instrument for the Irish fisheries sector is the European Maritime and Fisheries Fund managed by the Department of Agriculture, Food and the Marine, Agencies and Programmes Division, National Seafood Centre, Clonakilty Co. Cork. The main goal of the Irish OP is to help in adjusting fleet capacity to available resources and in supporting the fishing fleet in meeting the obligation to land all catches, as well as investing in port infrastructure. In the OP, the SSF segment was expected to receive higher prominence, at the level of both representation and funding (Irish OP summary). The table below shows the key figures for the EMFF allocation, commitments and financial performance in the Atlantic Sea Basin and in Ireland according to the FAME Report 2020.

EMFF key data: Atlantic Sea Basin and Ireland

Sea basin/ MS	Total allocation (EUR)	Total EMFF committed by MA (EUR) (Infosys, 31/12/2020))	Total eligible EMFF expenditure declared by beneficiaries to MA (EUR)	Absorption rate %	No of operations
Atlantico	256 164 135	884 733 038	416 147 985	33,1%	18 338
Ireland	147 601 979	130 793 490	113 006 310	76,6%	2 738

Source: FAME Report, 2020.

The total EMFF allocation in Ireland is equal to 6% of the total amount allocated at sea basin level, with a spending performance of 10% compared with the total eligible expenditure declared by the MA at sea basin level. The average commitment per operation in the country was EUR 47,769,72.

EMFF key data: Atlantic Sea Basin and Ireland

MS	UP 1	UP 2	UP 3	UP 4	UP 6	TA	Total per MS	Total per MS	%
EI	27 795	14 900	69 791	6 000	19 782	5 335	4 000	147 602	6,90

Source: Member States' operational programmes. Situation as in December 2019.

According to the FAME Report 2020, the EMFF supported 73 operations linked to SSF vessels for a total eligible amount of EUR 547,874, almost matching the amount committed by the MA.

MS	No of operations	Supported SSF	Committed by MA (EUR)	Eligible expenditure declared by beneficiaries to MA (EUR)
EI	99	73	549 595	547 874

Among the EMFF measures linked to SSCF topics, those related to Article 76 "Control and enforcement" and Article 43 "Fishing ports, landing sites, auction halls and shelters" were listed in the "Top five measures" in terms of MA commitment (FAME Report, 2020).

Article	Total eligible EMFF committed by MA (EUR)	Total eligible EMFF expenditure declared by beneficiaries to MA (EUR)	No of operations	Spending performance (% declared in total committed)
76	31 275 881	27 821 032	26	89%
43	7 578 830	7 531 336	4	99%

In the programming period 2014-2020, the main goal of the CLLD was to create new sources of income and new jobs, promoting marine and eco-tourism by taking advantage of the local biodiversity and protected habitats. Compared with the programming period 2007-2013, the number of FLAGs increased from 6 to 7, still covering 100% of the coastline. The total budget for CLLD has increased significantly (from EUR 0.778 million to EUR 12 million), so the average budget per FLAG is much higher (from EUR 0.26 million to budgets ranging from EUR 1.3 million to EUR 1.9 million). In 2014-2020, the average budget per FLAG was EUR 1,714,286.

CLLD challenges 2014-2020	CLLD objectives 2014-2020
• Creation of new jobs. • Creation of new sources of income.	• To promote marine and eco-tourism by taking advantage of the local biodiversity and protected habitats. • To leverage synergies with national/local tourism initiatives and boost the business potential of small-scale coastal fishing vessels.

In addition to the EMFF, beneficiaries from Ireland can apply to other funds to support the blue growth of their communities, taking part in several research and interregional projects co-financed by the EU in the last programming period. Ireland is eligible for the EU programmes shown in the box below.

Programmes 2014-2020

2014 - 2020 ESPON 2020
2014 - 2020 INTERACT III
2014 - 2020 INTERREG V-A United Kingdom - Ireland (Ireland - Wales)
2014 - 2020 INTERREG V-A United Kingdom-Ireland (Ireland-Northern Ireland-Scotland)
2014 - 2020 INTERREG VB Atlantic Area
2014 - 2020 INTERREG VB North West Europe
2014 - 2020 INTERREG VB Northern Periphery and Arctic
2014 - 2020 Interreg Europe
2014 - 2020 Ireland - United Kingdom (PEACE IV)
2014 - 2020 URBACT III

The graph below shows the number of projects, partnerships and budget sizes per theme in the programming period 2014-2020, for a total budget of EUR 201,774,700 for 332 projects (Figure 29).

Figure 29. Ireland. Number of projects, partnerships and 2014-2020 budget sizes per theme. Source: *https://keep.eu/countries-and-regions*

In the graph in Figure 30, the projects were selected from the Keep database by theme of interest in relation to SSF topics:

- tourism;
- sustainable management of natural resources;
- agriculture, fisheries and forestry;
- coastal management and maritime issues.

Out of a total of 332 projects, 84 related to the aforementioned topics for a total budget of EUR 41,228,246.

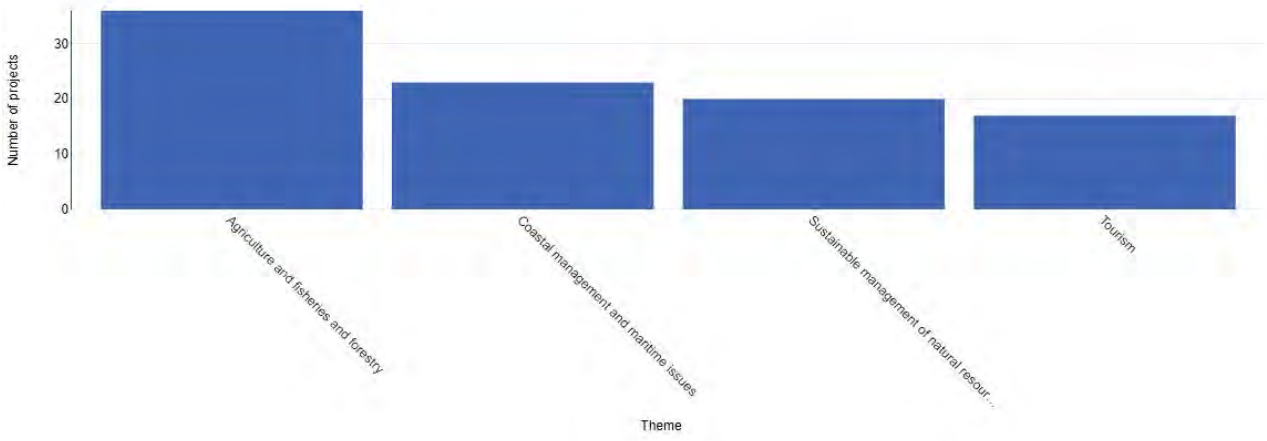


Figure 30. Ireland. Number of projects by theme. Source: *https://keep.eu/countries-and-regions/*

Agriculture, fisheries and forestry seemed to be the leading topics of the projects financed, followed by coastal management and sustainable management of natural resources.

BEST PRACTICES: IE #1

Country: Ireland

Best practices: EMFF/FLAG Project

Topics addressed: diversification, tourism, education

Title and description: Achill Experience, Aquarium and Visitor Centre

Achill Island, a major focus of recreational fishing tourism until the 1980s, suffered a decline due to the reduction (or elimination) of certain species. Although it continued to be an important enclave of tourism, the lack of any indoor tourist activities made it less attractive to tourists. Local fishermen were therefore invited to provide the most unusual catches available in local waters, such as multi-coloured lobsters, to showcase the wealth of local fisheries through the creation of the first local aquarium in Co. Mayo. The project created an aquarium and a fishers' heritage museum, attracting visitors even in the low tourist season, recruiting volunteers, retired fishers and fisheries-related workers.

Main results:

- New indoor tourist facility in Achill.
- 98,000 tourists and 1,500 students have visited the centre since 2016.
- 6 full-time and 3 part-time jobs created in the local area.
- Local network with other tourist stakeholders created.

Budget: EUR 462,500

- FLAG grant: EUR 120,000
- Beneficiary contribution: EUR 342,500

6.11 Italy

GENERAL OVERVIEW

The Italian Republic is a country consisting of a peninsula located in the centre of the Mediterranean Sea, delimited by the Alps to the north and several islands surrounding it. With around 60 million inhabitants, Italy is the third-most populous Member State of the European Union. Italy has a total surface area of 301,340 km2 and a coastline of 7,600 km.

Small-scale fisheries are the most important fishing segment in Italy in terms of vessel and employee numbers. In 2015, this sector included 7,475 fishing vessels, representing 60.2% of the Italian fleet and 8.6% of total capacity (13,945.65 Gross Tonnage) (MIPAAF, 2015).

Following the EU definition of SSF, FDI data (2020) show that 8,099 vessels belonged to this sector (corresponding to 68% of the national fleet) and landed 18,993 tonnes of seafood products (corresponding to about EUR 142 million) in 2020 (Figures 1, 2 and 3).

Fishing gear can be modified to catch different species and specimens of varying sizes, resulting in huge diversification of fishing gear in Italian SSF and use of multiple fishing gears by the same vessel (Battaglia et al. 2017).

Most fishing vessels have limited size and engine power, operating primarily on a day-trip basis. They are mainly used in coastal areas, although some species are targeted in open sea (Raicevich et al., 2020).

ITALIAN SSF CRITICAL ISSUES

- General reduction in landings.
- Conflict with large-scale fisheries (mostly trawling) in terms of resources and space.
- IUU fishing affects SSF because it exerts unfair competition from fishing vessels without licences (or utilises prohibited fishing gear).
- Spread of non-indigenous and thermophilic species of the southern Mediterranean.
- Degradation of coastal habitats and ecosystems, with increased urbanisation and pollution in coastal areas possibly undermining the productivity of coastal ecosystems, causing a decrease in species abundance for SSF.
- Spatial conflicts with other sea users (e.g. aquaculture, transport, tourism, etc.).
- Limited capacity for collective action at national level, since they lack a single association that will represent the sector.

Source: Pascual-Fernández et al., 2020

Raicevich et al. (2020) reported that SSF contributed 16% of total Italian landings (STECF, 2016), with 11 taxa representing 50% of these landings: Sepia officinalis, gastropods (Murex spp. and Tritia mutabilis), Mugilidae, Octopus vulgaris, Merluccius merluccius, Spicara spp., Boops boops, Mullus surmuletus, Solea solea, Xiphias gladius and Squilla mantis (ISTAT, 2016). The same authors stated that these species do not fully overlap with the target species of large-scale fisheries.

FDI data (2020) fully confirm that reported by Raicevich et al. (2020), showing that the main landed taxa in terms of biomass by the Italian SSF are, in order of importance: Sepia officinalis, Octopus vulgaris, Tritia mutabilis and Mugilidae (Figure 31).

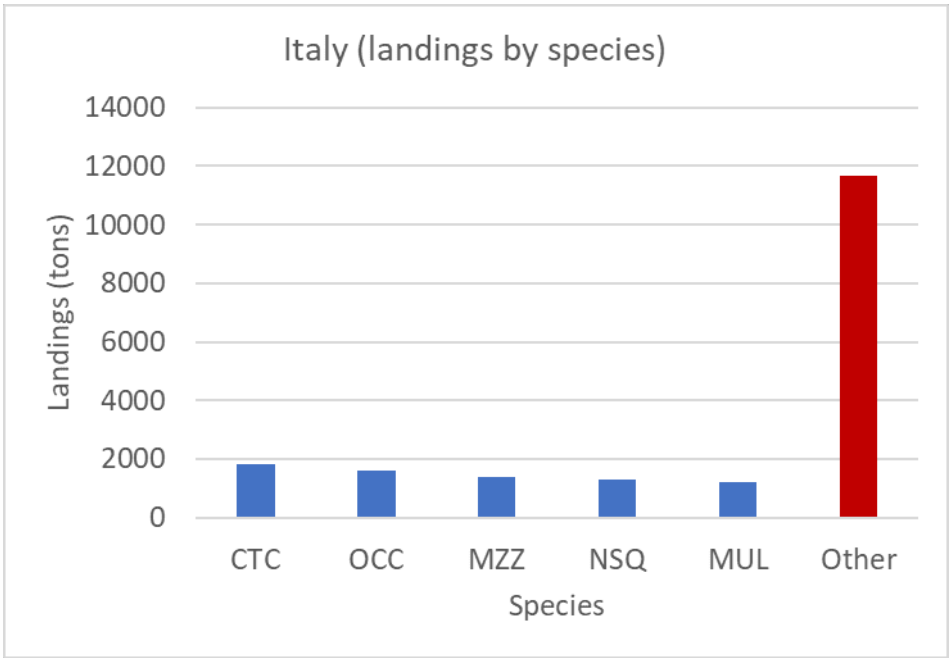


Figure 31. Landings by species of Italian SSF (FDI data 2020). CTC: Sepia officinalis; OCC: Octopus vulgaris; MZZ: Actinopterygii; NSQ: Tritia mutabilis; MUL: Mugilidae. The category "Other" includes 192 species.

Financial tools supporting SSF in Italy

The main financial instrument for the Italian fisheries sector is the European Maritime and Fisheries Fund managed by the Ministry of Agricultural, Food and Forestry Policies and Tourism (MIPAAFT) through its Directorate General for Fisheries and Aquaculture. The Ministry is responsible for the effective and correct implementation of the Operational Programme as a whole. In this sense, it indicates the common procedures to be followed by all parties in order to harmonise their implementation. The Regions have been identified as Intermediate Bodies (Article 123 of Regulation (EU) No 1303/2013) for the delegation of precise functions of the Managing Authority, regarding the implementation of the delegated measures. The tasks, functions and responsibilities of Intermediate Bodies, as well as their relations with the Managing Authority or with the Certifying Authority, are regulated by means of a formal agreement between the parties concerning the procedures, criteria and responsibilities connected with the implementation of the delegated tasks. The Intermediate Body formally delegated to carry out the activities provided for in the agreement entered into with the MA and/or CA operates on the basis of the provisions contained in EU and national legislation, as well as on the basis of the provisions of the Manual of Procedures and Controls of the delegating authority.

The main goal of the Italian OP is to enhance the competitiveness of the aquaculture sector and processing sector, the viability of the sea fisheries sector and the sustainable development of traditionally fisheries-dependent areas. The programme also seeks to address the need for protection and rehabilitation of the marine environment and its living resources, the control of fisheries activities, the collection of fisheries data and the improvement of knowledge on the state of the marine environment (Italian OP summary). The table below shows the key figures for the EMFF allocation, commitments and financial performance in the Mediterranean Sea Basin and in Italy according to the FAME Report 2020.

EMFF key data: Mediterranean Sea Basin and Italy

Sea basin/MS	Total allocation (EUR)	Total EMFF committed by MA (EUR) (Infosys, 31/12/2020)	Total eligible EMFF expenditure declared by beneficiaries to MA (EUR)	Absorption rate %	No of operations
Mediterranean	1 256 164 135	884 733 038	416 147 985	33,1%	18 338
Italy	537 262 559	356 238 359	193 624 252	39,5	11.527

Source: FAME Report, 2020.

The total EMFF allocation in Italy is equal to 43% of the total amount allocated at sea basin level, with a spending performance of 47% compared with the total eligible expenditure declared by the MA at sea basin level. The average commitment per operation in the country was EUR 30,904.

Italy: EMFF contribution by Union Priority

MS	UP 1	UP 2	UP 3	UP 4	UP 6	TA	Total per MS	Total per MS	%
IT	187 329	76 266	102 429	42 888	91 657	4 446	32 247	537 263	9,45

Source: Member States' operational programmes. Situation as in December 2019.

According to the FAME Report 2020, the EMFF supported 168 operations linked to SSF vessels for a total eligible amount of EUR 387,091.00, significantly lower than the amount committed by the MA.

MS	No of operations	Supported SSF	Committed by MA (EUR)	Eligible expenditure declared by beneficiaries to MA (EUR)
IT	168	124	1 225 581	387 091

Among the EMFF measures linked to SSCF topics, those related to Article 69 "Processing of fishery and aquaculture products" and Article 76 "Control and enforcement" were listed in the "Top five measures" in terms of MA commitment (FAME Report, 2020).

Article	Total eligible EMFF committed by MA (EUR)	Total eligible EMFF expenditure declared by beneficiaries to MA (EUR)	No of operations	Spending performance (% declared in total committed)
69	38 376 060	22 640 655	292	59%
76	31 778 408	23 298 722	2	73%

With regard to the measures related to SSF, IT reported that the quantity of upcoming and approved projects was rather poor due to the complexity of the procedures, the low aid intensity and the lack of interest from beneficiaries.

The Italian CLLD aims to improve living and working conditions in fisheries-dependent communities, addressing challenges such as increasing the competitiveness of small and micro-enterprises; promoting employment and diversification opportunities for small-scale fishers; ensuring balanced territorial development in fisheries areas, including facilitating recreational fishing and environmental conservation; and protecting the environment and cultural heritage. Compared with 2007-2013, the total budget for CLLD has increased from EUR 31.3 million to EUR 2.4 million, and the average budget per FLAG is higher (up from EUR 1 million to between EUR 1.7 million and EUR 2.4 million). The number of FLAGs in the period 2014-2020 rose from 43 to 53 and the average budget per FLAG was EUR 1,618,424.

CLLD challenges 2014-2020	CLLD objectives 2014-2020
• Increasing the competitiveness of small and micro-enterprises. • Promoting employment and diversification opportunities for fishers and fisheries actors. • Ensuring balanced territorial development in fisheries areas, including facilitating recreational fishing and environmental conservation. • Protecting the environment and cultural heritage. • Encouraging new entrants to the fisheries sector.	• Economic and social diversification linked to changes in the fisheries sector. • Renewable energy sector development (production and energy savings). • Sustainable tourism. • Landscape, land use and biodiversity (plant and animal) stewardship and protection. • Environmental and natural resource enhancement and management. • Cultural and artistic heritage linked to the territory. • Access to basic public services. • Inclusion of specific disadvantaged and marginal social groups. • Legal aid and social inclusion in high social exclusion areas. • Urban regeneration (creating services and inclusive spaces for the community). • Networks and smart communities.

ISSUES AFFECTING EMFF PERFORMANCE IN ITALY

- Quantity of upcoming and approved projects was rather poor.
- Complexity of procedures.
- Low aid intensity.
- Difficulties in reaching SSF stakeholders.
- Lack of interest from beneficiaries.
- Different procedures applied by the different IBs (Regions) hinder operational coordination between FLAGs.

In addition to the EMFF, beneficiaries from Italy can apply to other funds to support the blue growth of their communities, taking part in several research and interregional projects co-financed by the EU in the last programming period. Italy is eligible in the EU programmes shown in the box below.

Programmes 2014-2020

2014 - 2020 ESPON 2020
2014 - 2020 INTERACT III
2014 - 2020 INTERREG V-A France - Italy (ALCOTRA)
2014 - 2020 INTERREG V-A Greece - Italy
2014 - 2020 INTERREG V-A Italy - Austria
2014 - 2020 INTERREG V-A Italy - Croatia
2014 - 2020 INTERREG V-A Italy - France (Maritime)
2014 - 2020 INTERREG V-A Italy - Malta
2014 - 2020 INTERREG V-A Italy - Slovenia
2014 - 2020 INTERREG V-A Italy - Switzerland
2014 - 2020 INTERREG VB Adriatic - Ionian
2014 - 2020 INTERREG VB Alpine Space
2014 - 2020 INTERREG VB Central Europe
2014 - 2020 INTERREG VB Mediterranean
2014 - 2020 Interreg Europe
2014 - 2020 Interreg IPA CBC Italy - Albania - Montenegro
2014 - 2020 Italy - Tunisia ENI CBC
2014 - 2020 Mediterranean Sea Basin ENI CBC
2014 - 2020 URBACT III

The graph below shows the number of projects, partnerships and budget sizes per theme in the programming period 2014-2020, for a total budget of EUR 923,936,332 for 1,318 projects (Figure 32).

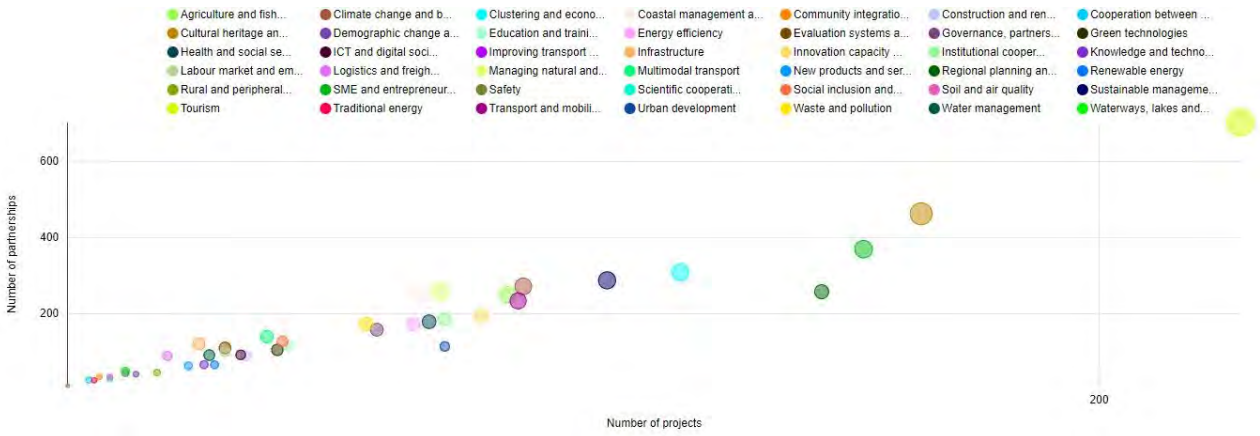


Figure 32. Italy. Number of projects, partnerships and 2014-2020 budget sizes per theme. Source: *https://keep.eu/countries-and-regions*

In the graph in Figure 33, the projects were selected from the Keep database by theme of interest in relation to SSF topics:

- tourism;
- sustainable management of natural resources;
- agriculture, fisheries and forestry;
- coastal management and maritime issues.

Out of a total of 1,318 projects, 441 related to the aforementioned topics for a total budget of EUR 350,764,888.

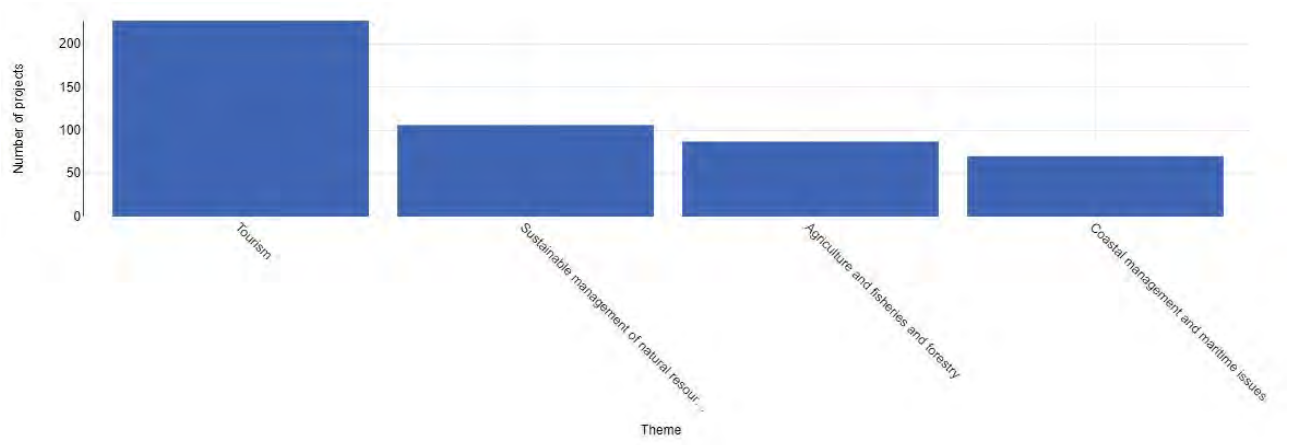


Figure 33. Italy. Number of projects by theme. Source: *https://keep.eu/countries-and-regions/*

Tourism seemed to be the leading topic of the projects financed, followed by sustainable management of natural resources.

SSF projects and best practices in Italy

BEST PRACTICES: IT #1

A FOCUS ON…

ARIEL in Italy

The project helped to provide a better understanding of the day-to-day needs of SSF to support sector innovation. The interactive approach to innovation led to the identification of feasible solutions to the practical problems, to be put in place in cooperation with scientific institutions.

Small-scale fishers were trained on key issues such as:

- spatial conflict management;
- marketing and branding for market, process and product innovation;
- sustainable fishing techniques.

Small-scale fishers were involved in consultation, innovation brokering events and pilot testing of technological and non-technological solutions to address the needs that emerged.

1 Innovation brokering for the SSF sector

The innovation brokering event was held in the Marche Region on 28 February 2019 by the regional Fisheries Economy Department in close cooperation with ASSAM (Regional Agency for Agrofood Sector Services), CNR-IRBIM (Lead partner of the ARIEL project) and the University of Macerata. The meeting, held in the form of "Open Space Technology", was attended by more than 60 people: SSF and AQ enterprises, academia, researchers, NGOs, institutions and consultants.

The innovation brokering event enabled a better understanding of dynamics and trajectories for regional innovation speed-up in SSF and aquaculture.

The active participation of enterprises throughout the entire event allowed not only the exchange of innovative ideas and new insights, but demonstrated the usefulness of the public innovation broker for the fisheries and aquaculture sector. All enterprises called for a systematic adoption of the ARIEL interactive approach, since it stimulates ideas and cooperation and reduces conflicts and complaints.

From the results of the innovation brokering, a list of pilot projects and ideas was drawn up.

Under the ARIEL project, the following pilot actions will be tested jointly by fishermen and CNR-IRBIM at regional level:

- creation of a virtual marketplace to reinforce a market that recognises and adds value to SSF seafood products obtained by more sustainable fishing practices, in a socially fair and transparent way;
- testing Dolphin Deterrent Devices for preventing/reducing dolphin damage to set gears.

2 Pilot Action: Dolphin Deterrent Devices (DDDs) to reduce/prevent dolphin damage to set gears

Two small-scale fishers belonging to the Ancona fleet (Adriatic Sea, Italy) were involved in this pilot action aimed at reducing/preventing dolphin damage to catches and nets.

DDDs can keep dolphins away from fishing nets by interfering with their echo-localisation system (sonar). The DDD is an electronic device with a 16-bit microprocessor which controls the emission circuit for the randomisation of signals and power with the output transducer. It is powered by internal (sealed) rechargeable batteries and emits an acoustic signal in case of insufficient charge. The DDDs are attached to fishing equipment (nets, longlines, etc.) and are activated automatically upon contact with water. The position of the DDDs in the nets varies depending on the type of fishing. The level of DDD emissions does not harm mammals or fish; in fact fish are not affected by the frequencies emitted.

Sampling strategy: each fisher was provided with 4 DDDs (each DDD can cover a radius of about 500 metres). The DDDs were positioned on sole gillnets at 500-metre intervals. A control gillnet without dolphin deterrents was used on the same fishing trip. Sole biomass and net damage (% of net length) were recorded on each fishing trip on both the gillnet with DDDs and the control gillnet. Samplings were carried out from 21/06/2019 to 27/08/2019 for a total of 38 fishing trips. A total of 677 kg of sole were caught with the gillnets fitted with DDDs and 561 kg with the control gillnet. Cumulative damage accounted for 13.5% of nets (270 metres) in the gillnet fitted with DDDs, and 29.15% (583 metres) in the control gillnet. The DDDs had a deterrent effect until 06/08/2019. Thereafter, it appeared that the dolphins had also started to prey on the gillnets fitted with DDDs.

Based on this experience, the fishers involved in the experiment suggested adding some buoys to the DDDs to keep them at mid-depth.

3 Pilot Action: “VirMa” – Virtual marketplace for SSF

During the innovation brokering activities carried out under the ARIEL project at regional and transnational level, several issues emerged, especially in relation to market aspects such as competition, lack of common strategies, logistical and organisational deficiencies and access to new markets. Although small-scale fishers are key players in their value chain, they receive little in the way of financial reward for their products. Aimed at achieving long-term sustainability from an economic, social and biological resource perspective, Information and Communication Technologies (ICTs) were adopted to develop a tool able to explore new markets, increase focus on promotion and marketing, and potentially help make pricing methods more transparent and consistent. The concept behind the tool is to safeguard the interests of small-scale fishers by enabling them to obtain prices and profits that let them achieve the sustainability targets.

Accordingly, to explore the potential capability of ICT tools to effectively contribute to promoting economic, social and environmental targets for SSF, the CNR-IRBIM of Ancona – under the ARIEL project – developed an experimental virtual marketplace (VirMa) for smart technology devices.

The aim of VirMa is to:

- promote access to existing and new markets for SSF products;
- improve the traceability and quality of seafood;
- encourage direct selling;
- raise consumer awareness of SSF sustainability;
- foster co-management.

VirMa's main target groups are:

- SSF fishers;
- consumers and buying groups;
- restaurants and caterers;
- research and academia.

BEST PRACTICES: IT #2

A FOCUS ON…

The PRIZEFISH project in Italy

The PRIZEFISH project is co-financed by the Interreg Italy-Croatia 2014-2020. Its aim is to implement a cross-border, territorial and socio-economic developmental change in the cooperative renewable exploitation of Adriatic fishery resources and thus in the long-term benefits for Adriatic marine ecosystems. PRIZEFISH tackles the dual territorial challenge for Italian and Croatian Adriatic fishing SMEs and Producer Organisations (POs) to be more sustainable and economically competitive in seafood markets. It does this by developing and piloting innovative fishery products with added value provided by ecolabels that meet the requirements of environmental, economic and social sustainability. This goal will be achieved through a three-pillar approach (significant research & innovation content, industry-driven and market penetration and capitalisation in fishery-based communities) and a transnational, balanced Italian/ Croatian partnership built on the quadruple helix approach: university & research institutes; fishing SMEs & POs; regional development bodies and non-profit organisations/NGOs.

1 THE PRIZEFISH APP

The Regional Agency for Agrofood Sector Services of the Marche Region (ASSAM), as project partner, developed and tested, with the involvement of the regional SSF consortium *Co.Ge.Pa*, an app to promote the direct selling of seafood products by connecting SSF fishers with potential local buyers. The app is designed to raise awareness of SSF sustainability, SSF products and SSF fishers, providing a virtual marketplace for SSF products in real time with daily catches and prices. The app is free and can be downloaded by consumers.

More info at: *info@prizefish.eu*

BEST PRACTICES: IT #3

A FOCUS ON…

Adri.SmArt.Fish in Italy

The Adri.SmArt.Fish project is co-financed by the Interreg Italy-Croatia 2014-2020. Its aim is to valorise SSF sustainability in the Adriatic.

1 Pilot action in the Marche Region

The Marche Regional Authority, in cooperation with the Regional Agency for Agrofood Sector Services of the Marche Region (ASSAM), engaged the regional SSF consortium *Co.Ge.Pa* to test the sustainable protocol for the valorisation of SSF sustainability, developed by the University of Cà Foscari, together with a set of strategic and operational actions to promote market innovation in a "Fishermen's Village". The pilot action was implemented in 2021 and consisted of:

- testing the more selective gears and sustainable practices at small-scale fishers' level, including GPS trackers to ensure seafood traceability;
- empowering small-scale fishers with new competences and skills;

- arranging awareness-raising events on SSF sustainability aimed at consumers, restaurants and students at "Fishermen's Villages" in the Marche region; events ranged from cooking demonstrations to B2B meetings and fisheries-related tourism itineraries.

The added value of pilot actions consisted of the direct engagement of SSF consortia and associations from the Adriatic region, which cooperate on an ongoing basis with research and institutional project partners.

More info at: *https://www.italy-croatia.eu/web/adrismartfish*

BEST PRACTICES: IT #4

THE TORRE GUACETO CASE STUDY

Co-management, sustainability

The Torre Guaceto MPA is located on Italy's southern Adriatic coast (in the north-eastern part of the Salento peninsula in Puglia). The MPA was established in 1991 by ministerial decree. Until 2000, the area was under the control of the Italian Coast Guard, which protected Torre Guaceto mainly by cracking down on illegal fishing. In 2001, when a nature reserve was created, responsibility for managing the area was given to the "Torre Guaceto Consortium", composed of the two municipalities with territorial jurisdiction (i.e. Brindisi and Carovigno) together with WWF Italy. The MPA covers an area of 2,200 ha, divided into 3 zones with different levels of protection, including a no-take zone. The site where Torre Guaceto was established was a stretch of coastline where fishermen have traditionally operated for generations. Fishermen regard Torre Guaceto as an area where they have fishing rights, so when the MPA was established, this led to conflict.

The artisanal fishermen have always competed to exploit the same fish stocks. The management's objective was to convince them that aiming for a moderate exploitation of fish stocks was much better than exhausting the available local resources. Collaborative exploitation would only succeed if all the fishermen worked together towards the same goal.

Under scientific supervision, an experimental fisheries protocol was defined and then implemented by the fishermen themselves in Zone C of the MPA.

The participation of fishermen in the fishing pilot scheme was voluntary. The fishermen were invited to discuss and share decisions with the MPA about the rules for managing fisheries, with the researchers monitoring activity. Fishermen who adhered to the co-management protocol (7 boats initially accepted) were allowed to fish. From the outset, the fishing effort was regulated and the nets were selected to limit the impact on predators and juveniles and on habitats and benthic communities. The fishermen are allowed to fish once a week only in Zone C of the MPA, using a trammel net (1 km instead of the usual 2-3 km) with a larger mesh size than the one commonly used (3 cm, rather than 2.4 cm). Immediately after the reopening of the fisheries, yields in the MPA were much higher than outside it; after approximately 2-3 years, catches stabilised around values that were at least double those obtained externally. The local fishermen who accepted and adhered to the protocol soon realised that the co-management protocol had several advantages. For example, fishing yields were valuable and some of the commercial fish were much larger inside the MPA. Involving local fishermen also secured their support for the MPA, leading to a 90% decrease in poaching reports within a few years.

There are plans to establish a processing laboratory for the third size class. In practice, those overlooked species (such as grey mullet) that have little market value are expected to be used to make products conserved in organic olive oil produced in the nature reserve (*https://www.europarc.org/case-studies/sustainable-fishermen-community-marine-protected-area-torre-guaceto/*).

6.12 Latvia

GENERAL OVERVIEW

Situated in north-east Europe, on the eastern coast of the Baltic Sea, the Republic of Latvia has a coastline of 494 km (accounting for 0.7% of the EU's 66,000 km coastline). Inland waters in total cover 2,340 km2, or 3.6%, of Latvia's territory. The fishing fleet comprises 703 fishing vessels: 68 fish offshore in the Baltic Sea and the Gulf of Riga, 7 are high-seas vessels and 628 are small-scale coastal fishing vessels (*https://ec.europa.eu/oceans-and-fisheries*).

Following the EU definition of SSF, FDI data (2020) show that 190 vessels belonged to this sector (corresponding to 59% of the national fleet) and landed 3,099 tonnes of seafood products (corresponding to about EUR 1.2 million) in 2020 (Figures 1, 2 and 3).

LATVIAN SSF CRITICAL ISSUES

- Depletion of fish stocks.
- Impact of hydroelectric plants.
- Prohibition of traditional fishing techniques.
- Since coastal fishing is no longer profitable and is hard work, the younger generation is not interested in living and working on the coast.
- It is too expensive for small companies to keep up with the environmental requirements for their equipment.

FDI data (2020) show that herring (Clupea harengus) and round goby (Neogobius melanostomus) dominated Latvian SSF landings by biomass (Figure 34).

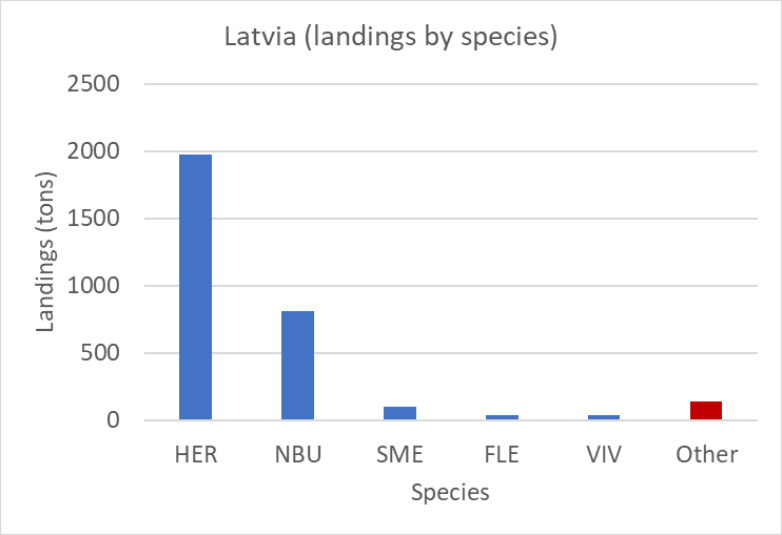


Figure 34. Landings by species of Latvian SSF (FDI data 2020). HER: Clupea harengus; NBU: Neogobius melanostomus; SME: Osmerus eperlanus; FLE: Platichthys flesus; VIV: Vimba vimba. The category "Other" includes 26 species.

Financial tools supporting SSF in Latvia

The main financial instrument for the Latvian fisheries sector is the European Maritime and Fisheries Fund managed by the Ministry of Agriculture. The main goal of the Latvian OP is to improve infrastructure for fishing ports, landing sites and shelters. Moreover, the OP seeks to promote investments in selective gears and to strike a balance between

fishing capacity and fishing opportunities (Latvian OP summary). The table below shows the key figures for the EMFF allocation, commitments and financial performance in the Baltic Sea Basin and in Latvia according to the FAME Report 2020.

EMFF key data: Baltic Sea Basin and Latvia

Sea basin/ MS	Total allocation (EUR)	Total EMFF committed by MA (EUR) (Infosys, 31/12/2020)	Total eligible EMFF expenditure declared by beneficiaries to MA (EUR	Absorption rate %	No of operations
Mar Baltico	1 030 005 010	809 269 783	481 116 819	46,7%	15 285
Lettonia	147 601 979	130 793 490	113 006 310	76,6%	2 738

Source: FAME Report, 2020.

The total EMFF allocation in Latvia is equal to 14% of the total amount allocated at sea basin level, with a spending performance of 14% compared with the total eligible expenditure declared by the MA at sea basin level. The average commitment per operation in the country was EUR 70,021.

Latvia: EMFF contribution by Union Priority

MS	UP 1	UP 2	UP 3	UP 4	UP 6	TA	Total per MS	Total per MS	%
LV	43 907	32 523	10 367	12 750	30 286	2 500	7 500	139 834	2,46

Source: Member States' operational programmes. Situation as in December 2019.

According to the FAME Report 2020, the EMFF supported 3 operations linked to SSF vessels for a total eligible amount of EUR 547,874, equal to the amount committed by the MA.

MS	No of operations	Supported SSF	Committed by MA (EUR)	Eligible expenditure declared by beneficiaries to MA (EUR)
LV	3	3	85 379	85 379

Among the EMFF measures linked to SSCF topics, those related to Article 43 "Fishing ports, landing sites, auction halls and shelters", Article 69 "Processing of fishery and aquaculture products" and Article 63 "Implementation of community-led local development strategies" were listed in the "Top five measures" in terms of MA commitment (FAME Report, 2020).

Article	Total eligible EMFF committed by MA (EUR)	Total eligible EMFF expenditure declared by beneficiaries to MA (EUR)	No of operations	Spending performance (% declared in total committed)
43	21 324 886	10 472 902	32	49%
69	17 154 595	6 745 141	95	39%
63	12 836 163	6 744 749	235	53%

In the programming period 2014-2020, the main goal of CLLD was to increase employment and territorial cohesion in fisheries-dependent areas. In the 2014-2020 programming period, CLLD was applied exclusively in the coastal regions of the Baltic Sea and the Gulf of Riga, where the majority of the fisheries activities take place (6% of Latvia's

total territory). This is a change compared with the previous period, when the country's inland territory was also included in the fisheries areas (covering 49.5% of Latvia's total territory). The total CLLD budget has increased from EUR 14.7 million to EUR 15 million. Considering the reduction in the number of FLAGs from 24 to 6, the average FLAG budget increased considerably, from EUR 0.6 million to EUR 2.5 million. In 2014-2020, the average budget per FLAG was EUR 4,211,200.

CLLD challenges 2014-2020	CLLD objectives 2014-2020
• Low productivity and income of coastal fishermen. • Fostering cooperation between fishermen. • Low population density, limiting opportunities for business and employment on the coast and local development. • Climate change impact on coastal areas.	• Adding value and promoting innovation at all stages of the fisheries and aquaculture product supply chain. • Supporting diversification within the fisheries sector, and into other sectors of the maritime economy. • Enhancing and capitalising on environmental assets, including developing activities to mitigate climate change. • Promoting fisheries or maritime cultural heritage.

In addition to the EMFF, beneficiaries from Latvia can apply to other funds to support the blue growth of their communities, taking part in several research and interregional projects co-financed by the EU in the last programming period. Latvia is eligible for the EU programmes shown in the box below.

Programmes 2014-2020

2014 - 2020 ESPON 2020
2014 - 2020 INTERACT III
2014 - 2020 INTERREG V-A Estonia - Latvia
2014 - 2020 INTERREG V-A Finland - Estonia - Latvia - Sweden (Central Baltic)
2014 - 2020 INTERREG V-A Latvia - Lithuania
2014 - 2020 INTERREG VB Baltic Sea
2014 - 2020 Interreg Europe
2014 - 2020 Latvia - Lithuania - Belarus ENI CBC
2014 - 2020 Latvia - Russia ENI CBC
2014 - 2020 URBACT III

The graph below shows the number of projects, partnerships and budget sizes per theme in the programming period 2014-2020, for a total budget of EUR 104,316,300 for 331 projects (Figure 35).

Figure 35. Latvia. Number of projects, partnerships and 2014-2020 budget sizes per theme. Source: *https://keep.eu/countries-and-regions*

In the graph in Figure 36, the projects were selected from the Keep database by theme of interest in relation to SSF topics:

- tourism;
- sustainable management of natural resources;
- agriculture, fisheries and forestry;
- coastal management and maritime issues.

Out of a total of 331 projects, 95 related to the aforementioned topics for a total budget of EUR 36,231,586.

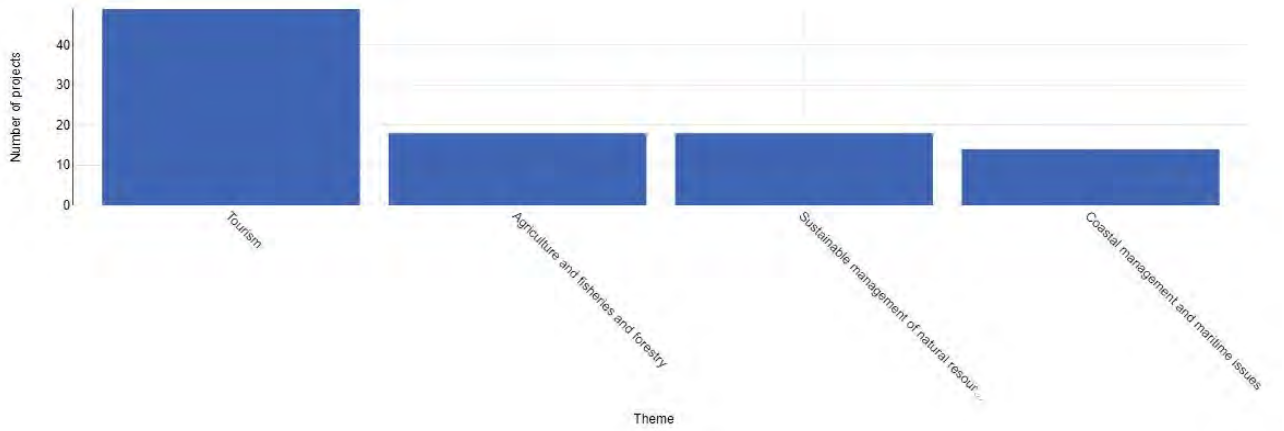


Figure 36. Latvia. Number of projects by theme. Source: *https://keep.eu/countries-and-regions/*

Tourism seemed to be the leading topic of the projects financed, followed by agriculture, fisheries and forestry.

6.13 Lithuania

GENERAL OVERVIEW

Lithuania has a relatively short coastline of only 90 km, and its territorial waters and exclusive economic zone in the Baltic Sea amount to 7,000 km2. Lithuania has significant inland waters covering 2,621 km2, or 4% of the country's territory. There are 2,827 lakes with a surface area greater than 0.5 ha (87,359 ha), 1,589 ponds (24,434 ha), and 731 rivers longer than 10 km (32,601 ha), including the largest rivers, Nemunas and Neris (*https://www.eurofish.dk/lithuania*).

Fisheries have a long tradition and play an important role in small coastal communities. The sector employs 6,037 full-time workers: 565 in fisheries, 431 in aquaculture, and 5,041 in fish processing. About two-thirds of the employees are women who are traditionally employed in the fish processing industry (*https://www.eurofish.dk/lithuania*)

Marine fisheries account for most of the total Lithuanian catch. Total capture by marine fisheries in 2018 was 70,196 tonnes, which included the Baltic Sea, long-distance ocean and coastal fisheries. Lithuania's fishing fleet numbered 147 vessels in 2018, most being small coastal fishing vessels under 12 metres long (106), while only 31 fishing vessels operate in the open Baltic Sea (*https://www.eurofish.dk/lithuania*).

Following the EU definition of SSF, FDI data (2020) show that 58 vessels belonged to this sector (corresponding to 41% of the national fleet) and landed 380 tonnes of seafood products (corresponding to about EUR 390,000) in 2020 (Figures 1, 2 and 3).

LITHUANIAN SSF CRITICAL ISSUES

- Depletion of fish stocks.
- Unemployment stemming from the seasonality of the fishing activities.
- Lack of infrastructure for the local processing and storage of fisheries products.
- Although market demand is stable throughout the year, supply is unpredictable due to seasonal fishing, which is a problem for smaller customers who are unable to pick up produce in large quantities.

FDI data (2020) show that gobid, herring (Clupea harengus) and the European smelly (Osmerus eperlanus) dominated Lithuanian SSF landings in terms of biomass, followed by Platichthys flesus and Belone belone (Figure 37). z

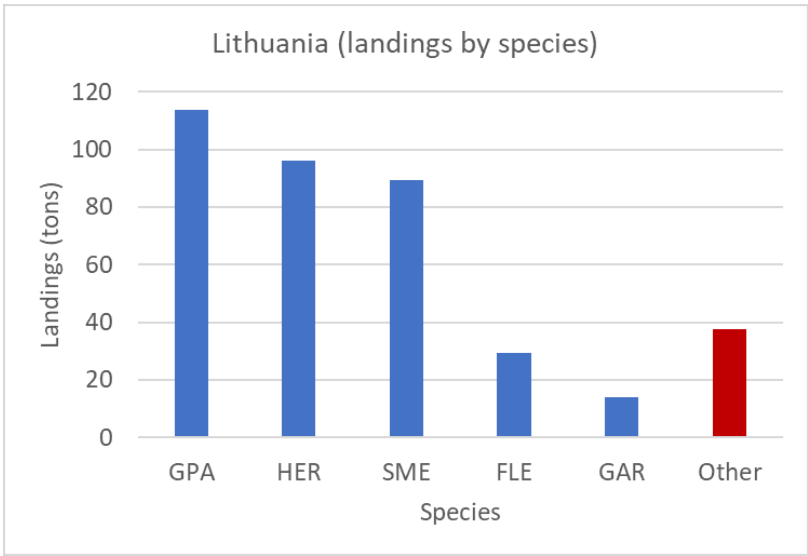


Figure 37. Landings by species of Lithuanian SSF (FDI data 2020). GPA: Gobiidae; HER: Clupea harengus; SME: Osmerus eperlanus; FLE: Platichthys flesus; GAR: Belone belone. The category "Other" includes 20 species.

Financial tools supporting SSF in Lithuania

The main financial instrument for the Lithuanian fisheries sector is the European Maritime and Fisheries Fund managed by the Ministry of Agriculture. The main goal of the Lithuanian OP is to strengthen and diversify local economic activities, promote social inclusion, and preserve natural and cultural heritage. The OP is expected to create and protect jobs for local communities, with value-adding initiatives and diversification of economic activities (Lithuanian OP summary). The table below shows the key figures for the EMFF allocation, commitments and financial performance in the Baltic Sea Basin and in Lithuania according to the FAME Report 2020.

EMFF key data: Baltic Sea Basin and Lithuania

Sea basin/ MS	Total allocation (EUR)	Total EMFF committed by MA (EUR) (Infosys, 31/12/2020)	Total eligible EMFF expenditure declared by beneficiaries to MA (EUR)	Absorption rate %	No of operations
Mar Baltico	1 030 005 010	809 269 783	481 116 819	46,7%	15 285
Lituania	63 432 222	40 472 317	25 027 277	39,5%	578

Source: FAME Report, 2020.

The total EMFF allocation in Lithuania is equal to 6% of the total amount allocated at sea basin level, with a spending performance of 5% compared with the total eligible expenditure declared by the MA at sea basin level. The average commitment per operation in the country was EUR 70,021.

Lithuania: EMFF contribution by Union Priority

MS	UP 1	UP 2	UP 3	UP 4	UP 6	TA	Totale per MS	Totale per MS	%
LT	11 209	18 199	7 960	9 875	11 585	930	3 672	63 432	1,12

Source: Member States' operational programmes. Situation as in December 2019.

According to the FAME Report 2020, the EMFF supported 9 operations linked to SSF vessels for a total eligible amount of EUR 75,281, equal to the amount committed by the MA.

MS	No of operations	Supported SSF	Committed by MA (EUR)	Eligible expenditure declared by beneficiaries to MA (EUR)
LT	10	9	75 281	75 281

Among the EMFF measures linked to SSCF topics, those related to Article 76 "Control and enforcement", Article 69 "Processing of fishery and aquaculture products" and Article 63 "Implementation of community-led local development strategies" were listed in the "Top five measures" in terms of MA commitment (FAME Report, 2020).

Article	Total eligible EMFF committed by MA (EUR)	Total eligible EMFF expenditure declared by beneficiaries to MA (EUR)	No of operations	Spending performance (% declared in total committed)
76	4 307 654	2 943 515	3	68%
69	4 256 105	3 001 378	19	71%
63	3 968 426	1 748 855	65	44%

In the programming period 2014-2020, Lithuania had 3 joint LAGs/FLAGs and 10 standalone FLAGs, covering 20

municipalities with an area of 23,515 km2. Compared with 2007-2013, the total budget for CLLD has increased from EUR 8.9 million to EUR 12.2 million, so the average budget per FLAG is slightly higher at just over EUR 1 million (up from EUR 0.89 million). In 2014-2020, the average budget per FLAG was EUR 9,682.

CLLD challenges 2014-2020	CLLD objectives 2014-2020
• Low employment levels in many communities engaged in commercial fisheries and aquaculture. • The difficulty that local fisheries products face in competing with tough competition from abroad. • A need to diversify the economies of certain fisheries communities, while taking advantage of the natural and cultural heritage that they offer.	• Adding value, creating jobs, attracting young people and promoting innovation at all stages of the supply chain of fishery and aquaculture products. • Supporting diversification inside and outside commercial fisheries, lifelong learning and job creation in fisheries and aquaculture areas. • Enhancing and capitalising on the environmental assets of fisheries and aquaculture areas, including operations to mitigate climate change. • Promoting fisheries cultural heritage in fisheries and aquaculture areas.

In addition to the EMFF, beneficiaries from Lithuania can apply to other funds to support the blue growth of their communities, taking part in several research and interregional projects co-financed by the EU in the last programming period. Lithuania is eligible for the EU programmes shown in the box below.

Programmes 2014-2020

2014 - 2020 ESPON 2020
2014 - 2020 INTERACT III
2014 - 2020 INTERREG V-A Latvia - Lithuania
2014 - 2020 INTERREG V-A Lithuania - Poland
2014 - 2020 INTERREG V-A Poland - Denmark - Germany - Lithuania - Sweden (South Baltic)
2014 - 2020 INTERREG VB Baltic Sea
2014 - 2020 Interreg Europe
2014 - 2020 Latvia - Lithuania - Belarus ENI CBC
2014 - 2020 Lithuania - Russia ENI CBC
2014 - 2020 URBACT III

The graph below shows the number of projects, partnerships and budget sizes per theme in the programming period 2014-2020, for a total budget of EUR 124,308,193 for 439 projects (Figure 38).

Figure 38. Lithuania. Number of projects, partnerships and 2014-2020 budget sizes per theme. Source: *https://keep.eu/countries-and-regions/*

In the graph in Figure 39, the projects were selected from the Keep database by theme of interest in relation to SSF topics:

- tourism;
- sustainable management of natural resources;
- agriculture, fisheries and forestry;
- coastal management and maritime issues.

Out of a total of 439 projects, 129 related to the aforementioned topics for a total budget of EUR 35,559,342.

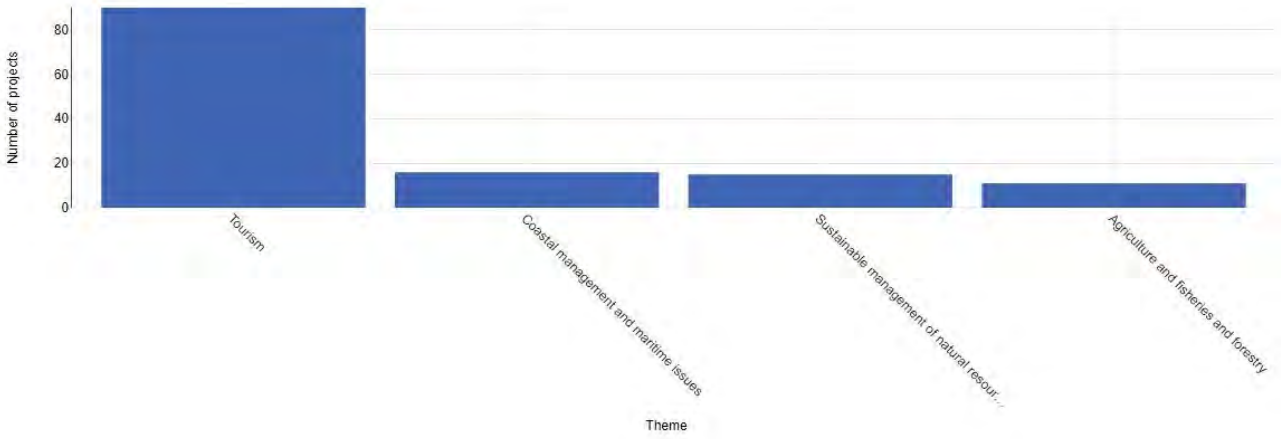


Figure 39. Lithuania. Number of projects by theme. Source: *https://keep.eu/countries-and-regions/*

Tourism seemed to be the leading topic of the projects financed, followed by coastal management and maritime issues.

6.14 Malta

GENERAL OVERVIEW

Malta is the smallest EU Member State and its coastline accounts for around 0.8% of the total EU Mediterranean coastline (Fisheries Control Directorate, 2013). The topography of the islands, with cliffs on the southern sides of Malta and Gozo, limits coastal fishermen to using certain areas more than others further away from their home ports (Vella and Vella, 2020). The geographical location of Malta – an island with high accessibility to the sea – has always been fundamental to the human link with marine resources. The SSF sector, more than any other, represents this link, one that dates back hundreds of years with fishing occupying many stretches of the accessible coastline around the island.

The fishing industry in Malta has remained small and vulnerable in various ways. The proportion of the working population depending directly on this industry for its livelihood is around 1.3%. The average value of catches is around 0.16% of national gross domestic product, excluding costs of imported inputs, such as fuel (Vella and Vella, 2020).

Following the EU definition of SSF, FDI data (2020) show that 490 vessels belonged to this sector (corresponding to 45% of the national fleet) and landed 820 tonnes of seafood products (corresponding to about EUR 4 million) in 2020 (Figures 1, 2 and 3).

Fishers have been using the same techniques and fishing areas since their ancestors' times, with knowledge about fishing zones, seasons and know-how being passed from one generation to another. This provides an important baseline for fisheries self-governance within fishing communities. These fisheries have always been characterised by small family enterprises engaging in traditional low-impact small-scale fishing methods to produce small volumes of high-value products (Dimech et al. 2009).

The Maltese SSF effort shifts seasonally among various target species and fishing grounds (Vella and Vella, 2020). For example, bottom offshore longlines are usually set in winter to target species such as dogfish, skate, ray, grouper, wreckfish and bream. In spring, most of these bottom-longliners move on to offshore pelagic longlines targeting more valuable species such as bluefin tuna and swordfish. Gillnets and trammel nets are used inshore in shallow coastal areas to target mackerel, bogue, scorpion fish, red mullet, cuttlefish and the common octopus. Traps are also used to catch coastal species such as bogue, octopus and spiny lobster. An important Maltese fishery targets dolphinfish with fish aggregating devices (FADs) (Vella and Vella, 2020).

MALTESE SSF CRITICAL ISSUES

- Target and non-target species have been declining in local landings.
- Future generations look elsewhere for their future careers, abandoning the idea of undertaking fishing as a full-time or part-time job.
- Conflicts with large-scale purse seine and IUU fishing (e.g. illegal driftnets by neighbouring countries).
- Limitations on resources and space in the multifunctional coastal zone mean that Maltese SSF are under intense spatial competition with maritime transport, industrial fisheries, tourism and recreational activities.
- MPAs include almost half of the inshore fishing zones that, together with several fishing restrictions of numerous wreck conservation sites, makes the ability of small-scale fishers to fish increasingly challenging.
- Large maritime bunkering zones limit fishing activities and may also pollute the sea.
- Increasing intolerance to dolphins that depredate SSF catches and damage fishing gear.
- Increasing pollution and port dredging works with disposal of such materials close to fishing zones is of concern to small-scale fishers.
- Due to concentration of organic wastes in aquaculture and tuna penning areas, there has been an increased abundance of the bearded fireworm (Hermodice carunculata), affecting the quality of trammel nets' catches.

Source: Pascual-Fernández et al., 2020

FDI data (2020) mostly confirmed that reported by Vella and Vella (2020), with the only exception being the silver scabbardfish (Lepidopus caudatus), which dominated Maltese landings by weight (Figure 40).

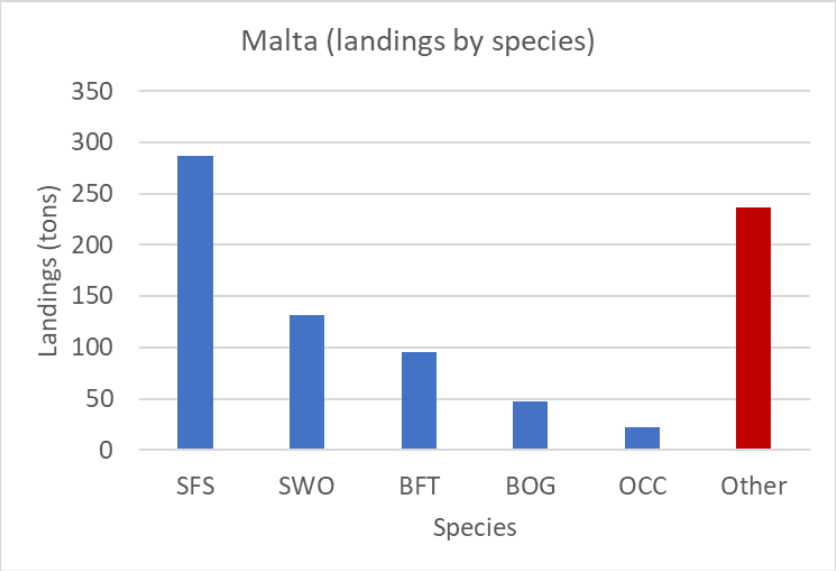


Figure 40. Landings by species of Maltese SSF (FDI data 2020). SFS: Lepidopus caudatus; SWO: Xiphias gladius; BFT: Thunnus thynnus; BOG: Boops boops; OCC: Octopus vulgaris. The category "Other" includes 120 species.

Financial tools supporting SSF in Malta

The main financial instrument for the Maltese fisheries sector is the European Maritime and Fisheries Fund managed by the Ministry for European Affairs and Implementation of the Electoral Manifesto. The main goal of the Maltese OP is help improve the infrastructure for designated landing sites and aquaculture (hatcheries). By further improving the port infrastructure with EMFF support, Malta seeks to improve the quality, control and traceability of the products landed. Within the framework of the CFP objective, the Maltese OP aims to improve and supply scientific knowledge, collect and manage data, provide support, carry out monitoring, and undertake control and enforcement (Maltese OP summary). The table below shows the key figures for the EMFF allocation, commitments and financial performance in the Mediterranean Sea Basin and in Malta according to the FAME Report 2020.

EMFF key data: Mediterranean and Malta

Sea basin/MS	Total allocation (EUR)	Total EMFF committed by MA (EUR) (Infosys, 31/12/2020)	Total eligible EMFF expenditure declared by beneficiaries to MA (EUR)	Absorption rate %	No of operations
Mediterranean	256 164 135	884 733 038	416 147 985	33,1%	18 338
Malta	22 627 422	19 661 933	13 483 706	59,6%	61

Source: FAME Report, 2020.

Compared with the Mediterranean Sea Basin, Malta's contribution to the EMFF spending performance is obviously low, given the total allocation for the country. Conversely, the spending performance at country level is equal to 69% of the total committed by the MA. The spending performance at country level is half of the total commitment and the average commitment per operation in the country is EUR 322,326,77.

Malta: EMFF contribution by Union Priority

MS	UP 1	UP 2	UP 3	UP 4	UP 6	TA	Total per MS	Total per MS	%
MT	8 548	2 319	8 692	0	407	1 360	1 300	22 627	0,40

Source: Member States' operational programmes. Situation as in December 2019.

According to the FAME Report 2020, the EMFF supported 19 operations linked to SSF vessels for a total eligible amount of EUR 44,905, matching the amount committed by the MA.

MS	No of operations	Supported SSF	Committed by MA (EUR)	Eligible expenditure declared by beneficiaries to MA (EUR)
MT	20	19	44905	44905

Among the EMFF measures linked to SSCF topics, those related to Article 43 "Fishing ports, landing sites, auction halls and shelters" and Article 76 "Control and enforcement" were listed in the "Top five measures" in terms of MA commitment (FAME Report, 2020).

Article	Total eligible EMFF committed by MA (EUR)	Total eligible EMFF expenditure declared by beneficiaries to MA (EUR)	No of operations	Spending performance (% declared in total committed)
43	7 554 737	6 297 373	5	83%
76	3 604 546	1 732 182	9	49%

In relation to Specific Objective 4 – Enhancement of the competitiveness and viability of fisheries enterprises, including of small-scale coastal fleet, and the improvement of safety or working conditions, the MT OP targeted issues under Article 30 "Diversification and new forms of income". However, according to the Final Interim Evaluation Report, further efforts will be needed to successfully address this measure. Regarding fishers' educational levels and the cost of assistance from external consultants, the Evaluation Report explains that some fishers felt that the EMFF OP and the EU in general were set up more for elite/well-established entities and did not properly consider the needs of artisanal SSF.

Malta has not adopted the strategy for CLLD.

In addition to the EMFF, beneficiaries from Malta can apply to other funds to support the blue growth of their communities. Malta is eligible for the EU programmes shown in the box below.

Programmes 2014-2020

2014 - 2020 ESPON 2020
2014 - 2020 INTERACT III
2014 - 2020 INTERREG V-A Italy - Malta
2014 - 2020 INTERREG VB Mediterranean
2014 - 2020 Interreg Europe
2014 - 2020 Mediterranean Sea Basin ENI CBC
2014 - 2020 URBACT III

The graph below shows the number of projects, partnerships and budget sizes per theme in the programming period 2014-2020, for a total budget of EUR 26,809,739 for 76 projects (Figure 41).

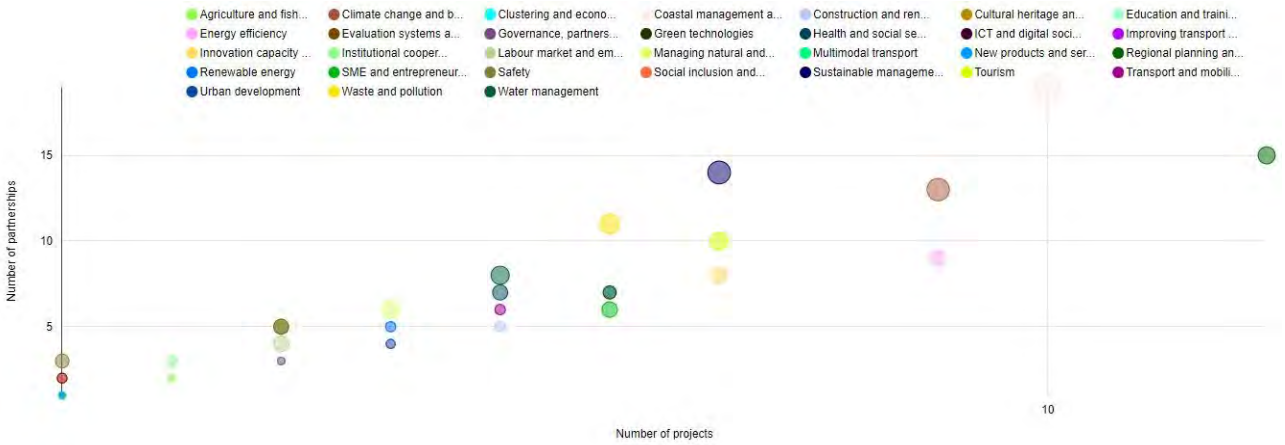


Figure 41. Malta. Number of projects, partnerships and 2014-2020 budget sizes per theme. Source *https://keep.eu/countries-and-regions/*

In the graph in Figure 42, the projects were selected from the Keep database by theme of interest in relation to SSF topics:

- tourism;
- sustainable management of natural resources;
- agriculture, fisheries and forestry;
- coastal management and maritime issues.

Out a total number of 76 projects, 22 related to the aforementioned topics for a total budget of EUR 10,332,078.

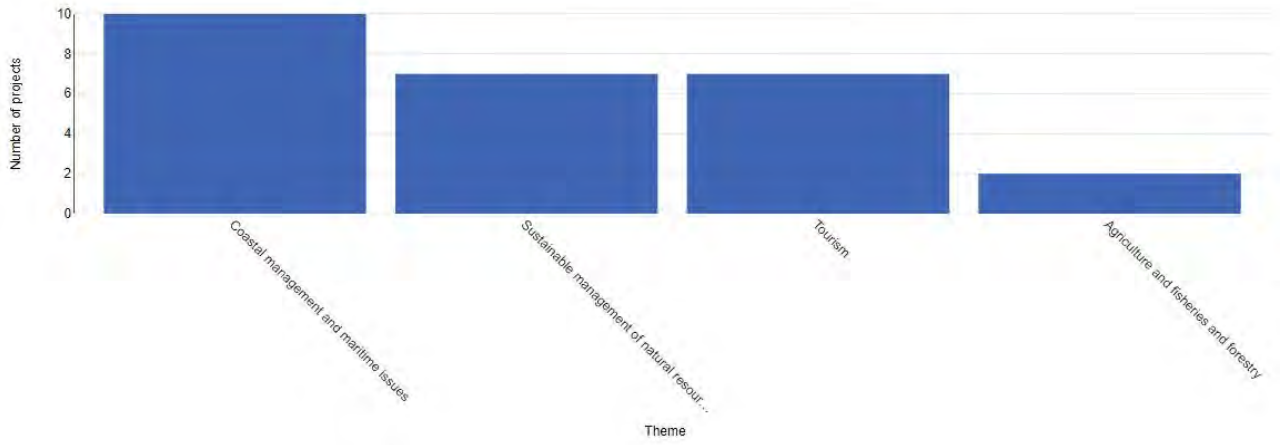


Figure 42. Malta. Number of projects by theme. Source: *https://keep.eu/countries-and-regions/*

Coastal management and maritime issues seemed to be the leading topics of the projects financed, followed by sustainable management of natural resources.

6.15 Netherlands

GENERAL OVERVIEW

The Netherlands is located in Western Europe with territories in the Caribbean (e.g. three special municipalities, the islands of Bonaire, Sint Eustatius and Saba). The country has a population of about 18 million and the mainland covers a surface area of 41,865 km2. The geography of the European Netherlands is unusual in that much of its land has been reclaimed from the North Sea and is below sea level, protected by dikes. The coastline is 451 km in length.

The contribution of SSF to the national revenue from landings is relatively small. Therefore, this sector in the Netherlands has received little attention from national fisheries management or from fisheries science (Kraan and Hoefsloot, 2020). However, SSF in the Netherlands do take place and can be characterised as a varied, flexible and culturally embedded sector.

Coastal small-scale fishing in the Netherlands is largely concentrated in the Zeeland delta and the Wadden Sea. Both regions contain a relatively large number of small-scale fishing enterprises which deploy a variety of fishing methods and gears (Kraan and Hoefsloot, 2020). The use of multiple gears combined with different activities in the fish chain characterise modern coastal SSF in the Netherlands, which results in a versatile sector with a strong adaptive capacity (Strietman and Zaalmink, 2014).

The choice of fishing method is largely determined by the seasons, weather conditions, the availability of fish species and available quota (Kraan and Hoefsloot, 2020).

Netherlands is one of the few EU Member States with more large-scale vessels than small-scale vessels. Following the EU definition of SSF, FDI data (2020) show that 17 vessels belonged to this sector (corresponding to 3% of the national fleet) and landed 20 tonnes of seafood products (corresponding to about EUR 120,000) in 2020 (Figures 1, 2 and 3).

A number of small-scale fishers in the Netherlands have obtained ecolabels for their fish. Some line fishers of seabass (Dicentrarchus labrax), the hand-rake cockle (Cerastoderma edule) fishery, the shrimp (Crangon crangon) fishery (including small-scale fishers), as well as the razor clam (Ensis directus) fishery, have obtained MSC certification (Kraan and Hoefsloot, 2020).

DUTCH SSF CRITICAL ISSUES

- Difficulties in accessing quota species.
- Landing obligation will impact fishers who catch fish species under the quota system as bycatch.
- No specific policy for SSF.

Source: Pascual-Fernández et al., 2020

Kraan and Hoefsloot (2020) reported that, while some specialised sectors still remain, such as handpicking cockles (Cerastoderma edule) or oysters (Crassostrea gigas), the majority of the Dutch SSF mostly use gillnets, beam trawl, pelagic trawl and fykes.

The same authors report that the most important target species for the Dutch SSF were the razor clam (Ensis directus), seabass (Dicentrarchus labrax) and common sole (Solea solea) (Kraan and Hoefsloot, 2020).

FDI data (2020) show that, in addition to the seabass, the European lobster (Homarus Gammarus), brown crab (Cancer pagurus), eel (Anguilla anguilla) and common cuttlefish (Sepia officinalis) represent important species landed by the Dutch SSF in terms of biomass (Figure 43).

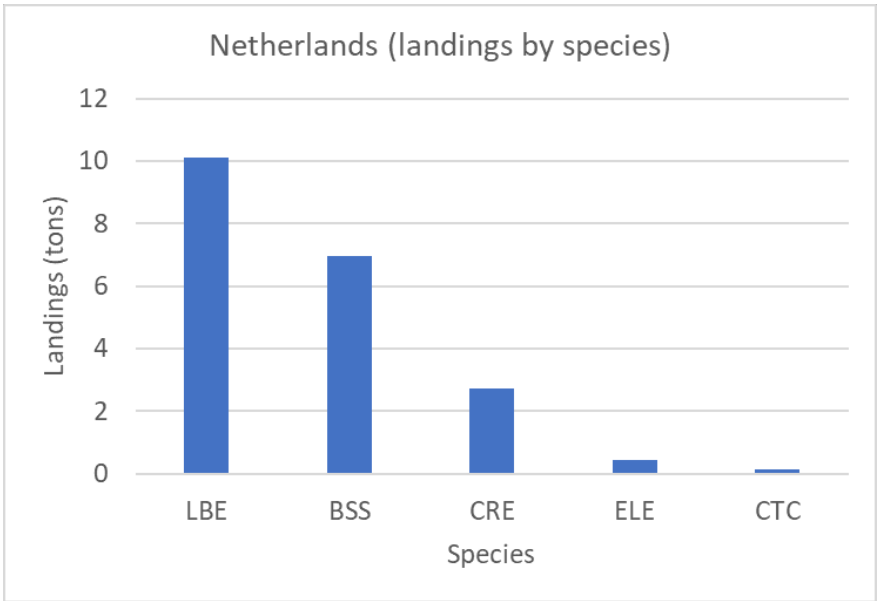


Figure 43. Landings by species of Dutch SSF (FDI data 2020). LBE: Homarus gammarus; BSS: Dicentrarchus labrax; CRE: Cancer pagurus; ELE: Anguilla anguilla; CTC: Sepia officinalis.

Financial tools supporting SSF in the Netherlands

The main financial instrument for the Dutch fisheries sector is the European Maritime and Fisheries Fund managed by the Ministry of Economic Affairs and Climate Policy. The main goal of the Dutch OP is to increase sustainability and competitiveness, and cooperation between scientists and fishermen. Moreover, the OP seeks to reduce the impact of fisheries on the marine environment, and strengthen technical development, innovation and knowledge transfer (Dutch OP summary). The table below shows the key figures for the EMFF allocation, commitments and financial performance in the North Sea Basin and Netherlands according to the FAME Report 2020.

EMFF key data: North Sea Basin and Netherlands

Sea basin/ MS	Total allocation (EUR)	Total EMFF committed by MA (EUR) (Infosys, 31/12/2020)	Total eligible EMFF expenditure declared by beneficiaries to MA (EUR)	Absorption rate %	No of operations
North Sea	1 030 005 010	809 269 783	481 116 819	46,7	15 285
Netherlands	101 523 244	88 477 043	45 945 609	45,3	520

Source: FAME Report, 2020.

The total EMFF allocation in the Netherlands is equal to 18% of the total amount allocated at sea basin level, with a spending performance of 16% compared with the total eligible expenditure declared by the MA at sea basin level. The average commitment per operation in the country was EUR 170,148.

Netherlands: EMFF contribution by Union Priority

MS	UP 1	UP 2	UP 3	UP 4	UP 6	TA	Total per MS	Total per MS	%
NL	31 182	5 962	51 938	0	4 959	2 500	4 980	101 523	1,79

Source: Member States' operational programmes. Situation as in December 2019.

According to the FAME Report 2020, the EMFF supported only 1 operation linked to SSF vessels for a total eligible amount of EUR 1,870, equal to the amount committed by the MA.

MS	No of operations	Supported SSF	Committed by MA (EUR)	Eligible expenditure declared by beneficiaries to MA (EUR)
NL	1	1	1 875	1 870

Among the EMFF measures linked to SSCF topics, Article 76 “Control and enforcement” was listed in the “Top five measures” in terms of MA commitment (FAME Report, 2020).

Article	Total eligible EMFF committed by MA (EUR)	Total eligible EMFF expenditure declared by beneficiaries to MA (EUR)	No of operations	Spending performance (% declared in total committed)
76	21 597 202	15 039 707	15	70%

Following stakeholder consultation, the Netherlands did not apply for CLLD in the programming period 2014-2020. In addition to the EMFF, beneficiaries from the Netherlands can apply to other funds to support the blue growth of their communities. The Netherlands is eligible for the EU programmes shown in the box below.

Programmes 2014-2020

2014 - 2020 ESPON 2020
2014 - 2020 INTERACT III
2014 - 2020 INTERREG V-A Belgium - Germany - The Netherlands Euregio Meuse-Rhin / Euregio Maas-Rijn / Euregio Maas-Rhein
2014 - 2020 INTERREG V-A Belgium - The Netherlands (Vlaanderen - Nederland)
2014 - 2020 INTERREG V-A France - Belgium - The Netherlands - United Kingdom (Les Deux Mers / Two seas / Twee Zeeën)
2014 - 2020 INTERREG V-A Germany - The Netherlands
2014 - 2020 INTERREG VB North Sea
2014 - 2020 INTERREG VB North West Europe
2014 - 2020 Interreg Europe
2014 - 2020 URBACT III

The graph below shows the number of projects, partnerships and budget sizes per theme in the programming period 2014-2020, for a total budget of EUR 769,420,131 for 646 projects (Figure 44).

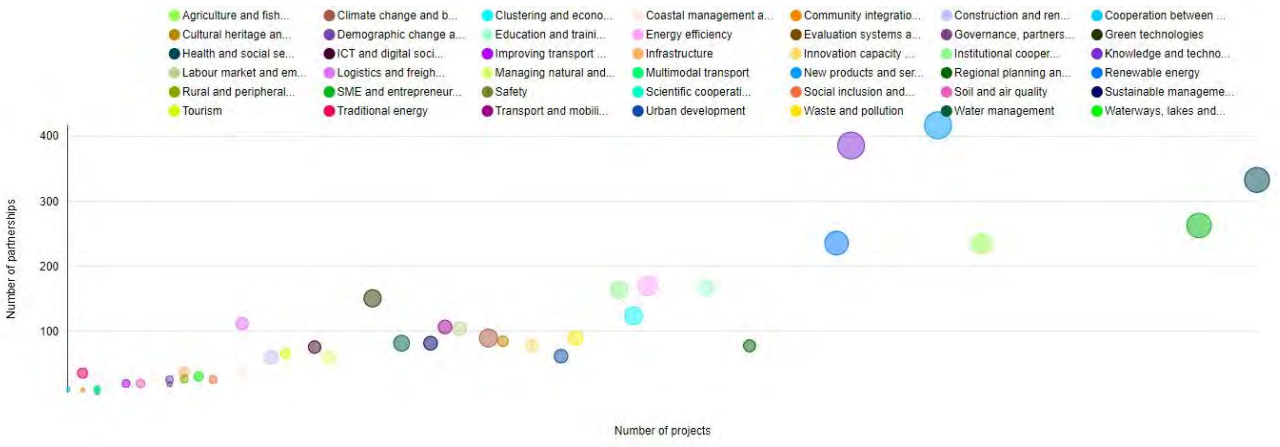


Figure 44. Netherlands. Number of projects, partnerships and 2014-2020 budget sizes per theme. Source: *https://keep.eu/countries-and-regions/*

In the graph in Figure 45, the projects were selected from the Keep database by theme of interest in relation to SSF topics:

- tourism;
- sustainable management of natural resources;
- agriculture, fisheries and forestry;
- coastal management and maritime issues.

Out of a total of 646 projects, 116 related to the aforementioned topics for a total budget of EUR 110,028,481.

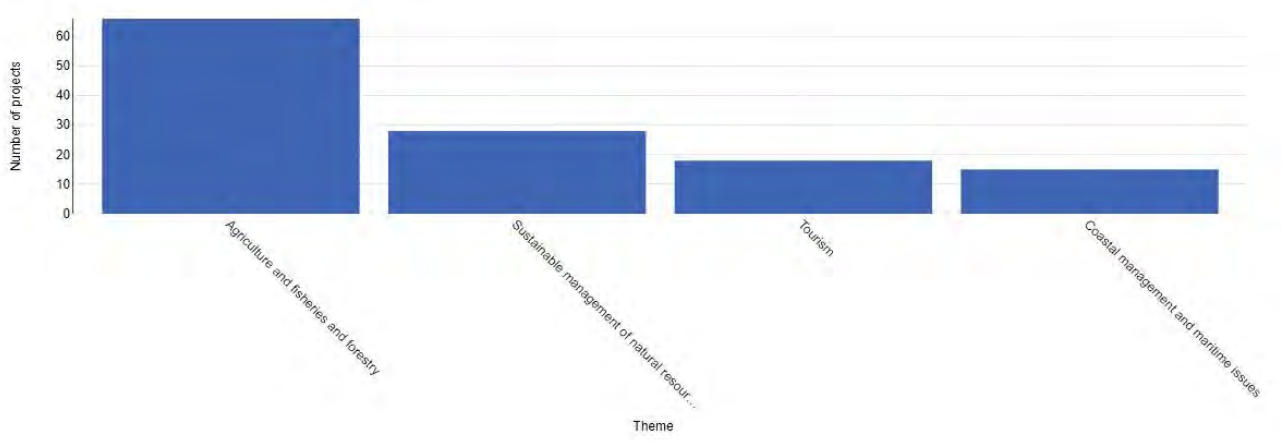


Figure 45. Netherlands. Number of projects by theme. Source: *https://keep.eu/countries-and-regions/*

Agriculture, fisheries and forestry seemed to be the leading topics of the projects financed, followed by sustainable management of natural resources.

6.16 Poland

GENERAL OVERVIEW

The Republic of Poland is a country bordering the Baltic Sea and covering an area of 312,696 km2. Poland has a population of nearly 38.5 million and is the fifth-most populous Member State of the European Union. It has a 770 km coastline. Topographically, Poland is a diverse country: although most of the central terrain is flat, elsewhere there is an abundance of lakes, rivers, hills, swamps, beaches, islands and forests.

SSF in Poland are important because of their impact on employment and the cultural heritage of coastal regions. Although the value of SSF in economic terms is not significant, they influence other economic activities in the area and are seen as an important factor in local development (Rakowski et al., 2020). For local society, SSF are an important factor in development, as these fisheries are year-round port users, a tourist attraction and part of the area's cultural heritage.

SSF in Poland can be described as multispecies fisheries, depending on fish availability (spawning, migration). Fishing gears used in the SSF are mostly passive, such as traps, gillnets, driftnets and longlines (drifting longlines).

Following the EU definition of SSF, FDI data (2020) show that 639 vessels belonged to this sector (corresponding to 80% of the national fleet) and landed 5,516 tonnes of seafood products (corresponding to about EUR 5 million) in 2020 (Figures 1, 2 and 3).

POLISH SSF CRITICAL ISSUES

- Depletion of fish stocks.
- Decrease in fish prices.
- Competition with other fishery sectors (mainly trawlers).
- Current regulations limiting the period, size or time of fishing.
- Natura 2000 areas impose many restrictions on SSF.
- Ageing fisher population with a lack of new professional entrants.
- High costs of entry, the cost of permits, certification and personal training are barriers for newcomers.

Source: Pascual-Fernández et al., 2020

The main target species of Polish SSF differ among areas (Rakowski et al., 2020). In Gdańsk Bay, gillnets are used to target cod, flounder, herring and trout, while in Puck Bay (a semi-enclosed area of Gdańsk Bay), eel is caught with fyke nets and pike with gillnets. Garfish is also an important species during its spawning season, while cod and flounder represent important target species in other coastal areas (Rakowski et al., 2020). In the brackish water of the Vistula Lagoon, the most important species are herring caught during the spring spawning season in large pound nets, eel with fyke nets and pikeperch, perch, roach, bream and trout caught with gillnets. In the Vistula Lagoon, Szczecin Lagoon and Puck Bay only freshwater and diadromous species are caught both by fyke nets and gillnets (Rakowski et al. 2020).

FDI data (2020) fully confirmed that reported by Rakowski et al. (2020), showing that flounder and herring, along with some freshwater species, are the most important species in the landings of Polish SSF in terms of biomass (Figure 46).

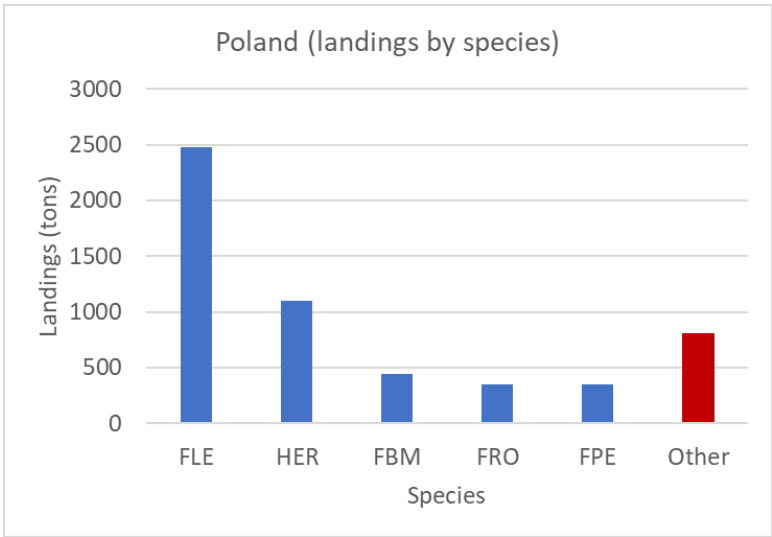


Figure 46. Landings by species of Polish SSF (FDI data 2020). FLE: Platichthys flesus; HER: Clupea harengus; FBM: Abramis brama; FRO: Rutilus rutilus; FPE: Perca fluviatilis. The category "Other" includes 30 species.

Financial tools supporting SSF in Poland

The main financial instrument for the Polish fisheries sector is the European Maritime and Fisheries Fund managed by the Ministry of Marine Economy and Inland Navigation. The main goal of the Polish OP is to maintain the equilibrium between fishing capacity and available fishing opportunities, make innovative use of unwanted catches, enhance the competitiveness of enterprises, and improve fishing port, auction and landing site infrastructure. Moreover, the OP seeks to promote measures for protecting and restoring marine biodiversity (Polish OP summary). The table below shows the key figures for the EMFF allocation, commitments and financial performance in the Baltic Sea Basin and in Poland according to the FAME Report 2020.

EMFF key data: Baltic Sea Basin and Poland

Sea basin/MS	Total allocation (EUR)	Total EMFF committed by MA (EUR) (Infosys, 31/12/2020)	Total eligible EMFF expenditure declared by beneficiaries to MA (EUR)	Absorption rate %	No of operations
Mar Baltico	1 030 005 010	809 269 783	481 116 819	46,7%	15 285
Polonia	531 219 456	414 913 757	223 123 987	42,0%	9 136

Source: FAME Report, 2020.

The total EMFF allocation in Poland is equal to 52% of the total amount allocated at sea basin level, with a spending performance of 46% compared with the total eligible expenditure declared by the MA at sea basin level. The average commitment per operation in the country was EUR 45,415.

Poland: EMFF contribution by Union Priority

MS	UP 1	UP 2	UP 3	UP 4	UP 6	TA	Total per MS	Total per MS	%
PL	169 117	162 948	23 627	79 700	61 603	2 350	31 873	531 219	9,34

Source: Member States' operational programmes. Situation as in December 2019.

According to the FAME Report 2020, the EMFF supported 578 operations linked to SSF vessels for a total eligible amount of EUR 20,644,011, equal to 74% of the amount committed by the MA.

MS	No of operations	Supported SSF	Committed by MA (EUR)	Eligible expenditure declared by beneficiaries to MA (EUR)
PL	2 965	578	27 898 745	20 644 011

Among the EMFF measures linked to SSCF topics, those related to Article 63 "Implementation of community-led local development strategies" and Article 43 "Fishing ports, landing sites, auction halls and shelters" were listed in the "Top five measures" in terms of MA commitment (FAME Report, 2020).

Article	Total eligible EMFF committed by MA (EUR)	Total eligible EMFF expenditure declared by beneficiaries to MA (EUR)	No of operations	Spending performance (% declared in total committed)
63	58 496 694	34 950 236	2 037	60%
43	48 281 637	30 160	10	0%

In the programming period 2014-2020, the main goal of the CLLD was to increase and maintain employment and new businesses. In the 2014-2020 period, the CLLD budget was significantly lower (EUR 79.7 million, i.e. 16% of the total EMFF budget) compared with the previous programming period (26% of the total EFF budget). In addition, the focus is more on the fisheries sector and job creation, and less on the development of fisheries areas. The number of FLAGs decreased from 48 to 36: most of the coastal areas previously covered by Axis 4 are still included in fisheries CLLD, but there are fewer inland FLAGs due to a stricter definition (compared with the previous period) of what can be defined as a "fisheries area". The total area covered by FLAGs has been reduced from 70,000 km2 to 57,900 km2. The average budget per FLAG was EUR 2,604,580.

CLLD challenges 2014-2020	CLLD objectives 2014-2020
• Increase in fish product consumption	• To contribute to the creation of new jobs and maintain jobs in fisheries areas. • To help create new businesses.

In addition to the EMFF, beneficiaries from Poland can apply to other funds to support the blue growth of their communities. Polish is eligible for the EU programmes shown in the box below.

Programmes 2014-2020

2014 - 2020 ESPON 2020
2014 - 2020 INTERACT III
2014 - 2020 INTERREG V-A Czech Republic - Poland
2014 - 2020 INTERREG V-A Germany / Brandenburg - Poland
2014 - 2020 INTERREG V-A Germany / Mecklenburg - Western Pomerania / Brandenburg - Poland
2014 - 2020 INTERREG V-A Lithuania - Poland
2014 - 2020 INTERREG V-A Poland - Denmark - Germany - Lithuania - Sweden (South Baltic)
2014 - 2020 INTERREG V-A Poland - Germany / Saxony
2014 - 2020 INTERREG V-A Poland - Slovakia
2014 - 2020 INTERREG VB Baltic Sea
2014 - 2020 INTERREG VB Central Europe
2014 - 2020 Interreg Europe
2014 - 2020 Poland - Belarus - Ukraine ENI CBC
2014 - 2020 Poland - Russia ENI CBC
2014 - 2020 URBACT III

The graph below shows the number of projects, partnerships and budget sizes per theme in the programming period 2014-2020, for a total budget of EUR 470,626,690 for 1,044 projects (Figure 47).

Figure 47. Poland. Number of projects, partnerships and 2014-2020 budget sizes per theme. Source: *https://keep.eu/countries-and-regions/*

In the graph in Figure 48, the projects were selected from the Keep database by theme of interest in relation to SSF topics:

- tourism;
- sustainable management of natural resources;
- agriculture, fisheries and forestry;
- coastal management and maritime issues.

Out of a total of 1,044 projects, 291 related to the aforementioned topics for a total budget of EUR 165,375,180.

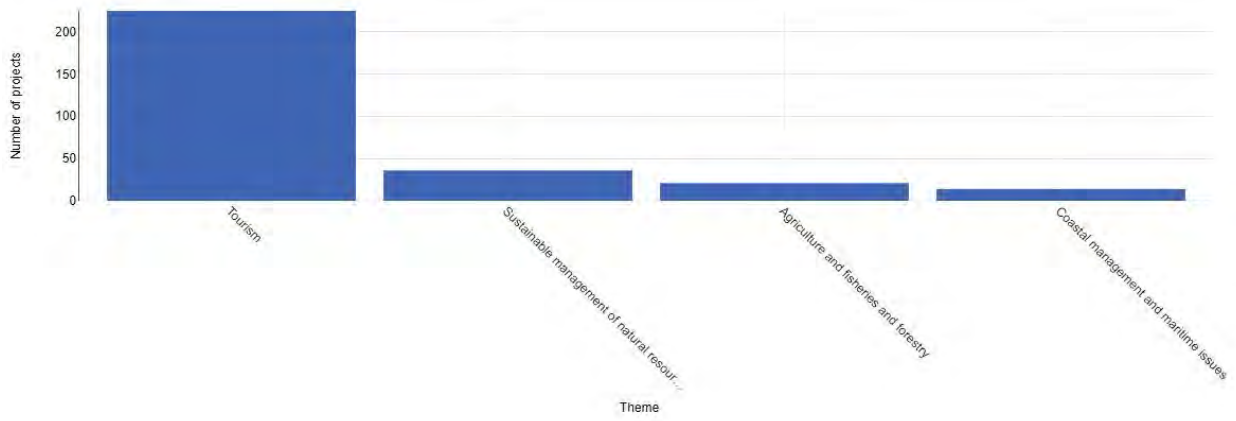


Figure 48. Poland. Number of projects by theme. Source: *https://keep.eu/countries-and-regions/*

Tourism seemed to be the leading topic of the projects financed, followed by sustainable management of natural resources.

6.17 Portugal

GENERAL OVERVIEW

The Portuguese Republic is a country whose mainland is located on the Iberian Peninsula in south-west Europe, and whose territory also includes the Atlantic archipelagos of the Azores and Madeira. It has the westernmost point in mainland Europe. Its Iberian land mass is bordered to the west and south by the Atlantic Ocean and to the north and east by Spain, the only country to have a land border with Portugal. The Portuguese coast is extensive: in addition to approximately 943 km along the coast of continental Portugal, the archipelagos of the Azores (667 km) and Madeira (250 km) are primarily surrounded by rough cliff coastlines. Portugal has a surface area of 92,212 km2 and about 10 million inhabitants.

The small-scale sector is a major component of Portuguese fisheries due to its extensive national coverage, diversity of gears used, species captured, high number of fishers and other stakeholders indirectly involved in the sector, as well as its high social and cultural importance at local, regional and national levels (Pita et al., 2015).

Portuguese fisheries (on the mainland and in the Azores and Madeira archipelagos) have traditionally been characterised as artisanal, small-scale, labour-intensive, multi-gear and multispecies fisheries. They tend to catch species with a high commercial value and supply fresh fish to the local and national markets (Pita and Gaspar, 2020). The Portuguese fishing industry lands at 163 ports all around the country.

Most of the small-scale vessels are family-owned (families usually own a single vessel), and in general the skipper is also the owner of the vessel. Traditionally, the remuneration on small-scale fishing vessels in Portugal is done through a fishing share system, i.e. the crew receives a proportion of the revenues from the sale of the catch, after deducting fishing and other costs (social security, crew insurance, operational costs, etc.) (Pita and Gaspar, 2020).

Following the EU definition of SSF, FDI data (2020) show that 2,317 vessels belonged to this sector (corresponding to 76% of the national fleet) and landed 11,168 tonnes of seafood products (corresponding to about EUR 62 million) in 2020 (Figures 1, 2 and 3).

PORTUGUESE SSF CRITICAL ISSUES

- Decrease in landings.
- Increase in operational costs.
- Low profitability.
- Competition with aquaculture products, imported seafood and illegal selling from recreational fisheries.
- Lack of political influence.
- Competition for space with other sea uses (e.g. large-scale fisheries, recreational fisheries, marine tourism).
- Many fishing gears operated by SSF are not allowed within MPAs.
- Ageing workforce and lack of generational renewal.
- Problems related to the marketing and commercialisation of products.
- Poor management and lack of control and enforcement.
- Increasingly high dependence on a limited number of species in some parts of the country (e.g. octopus).

Source: Pascual-Fernández et al., 2020

Pita and Gaspar (2020) report that Portuguese SSF exploit a multitude of species. In particular, the common octopus (Octopus vulgaris) and black scabbardfish (Aphanopus carbo) are the main target species on the mainland, while tuna, blue jack mackerel (Trachurus picturatus), red porgy (Pagrus pagrus) and blackbelly rosefish (Helicolenus dactylopterus) are the most important target species in the Azores. The same authors report that in Madeira, the two most abundant taxa are tuna and black scabbardfish.

FDI data (2020) confirm the importance of the common octopus for Portuguese SSF, although the common cuttlefish (Sepia officinalis), chub mackerel (Scomber japonicus), seabass (Dicentrarchus labrax) and conger eel (Conger conger) make a significant contribution to landings (Figure 49).

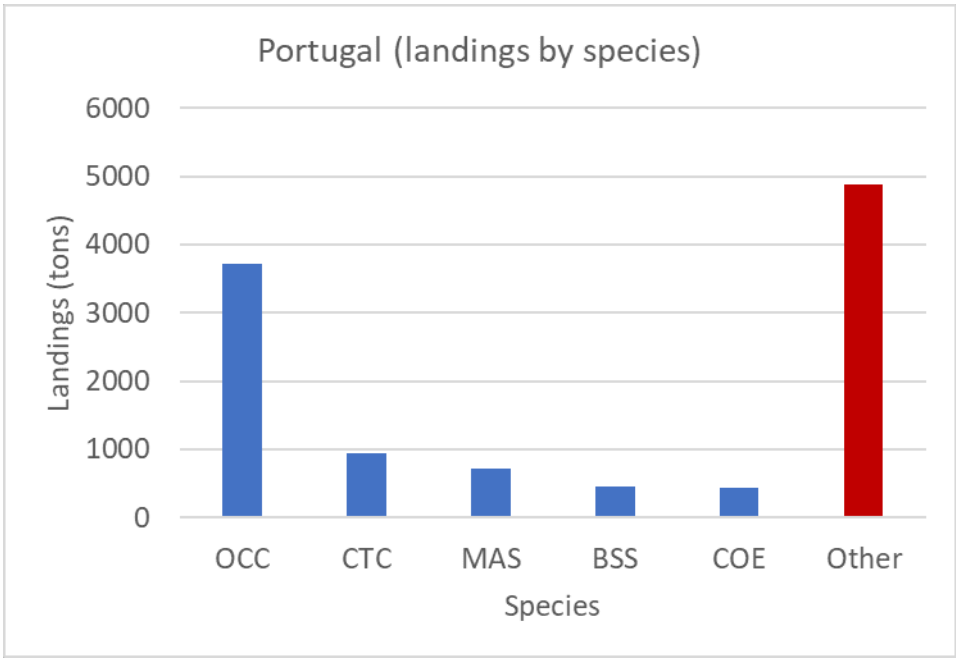


Figure 49. Landings by species of Portuguese SSF (FDI data 2020). OCC: Octopus vulgaris; CTC: Sepia officinalis; MAS: Scomber japonicus; BSS: Dicentrarchus labrax; COE: Conger conger. The category "Other" includes 208 species.

Financial tools supporting SSF in Portugal

The main financial instrument for the Portugal fisheries sector is the European Maritime and Fisheries Fund managed by the Managing Authority of the MAR 2020 programme. The main goal of the Portuguese OP is to enhance the competitiveness and viability of fisheries and aquaculture in Portugal, strengthen technological development, innovation and transfer of knowledge to fishery and aquaculture businesses, and improve the common market organisation. The table below shows the key figures for the EMFF allocation, commitments and financial performance in the Atlantic Sea Basin and in Portugal according to the FAME Report 2020.

EMFF key data: Atlantic Sea Basin and Portugal

Sea basin/MS	Total allocation (EUR)	Total EMFF committed by MA (EUR) (Infosys, 31/12/2020)	Total eligible EMFF expenditure declared by beneficiaries to MA (EUR)	Absorption rate %	No of operations
Atlantico	256 164 135	884 733 038	416 147 985	33,1%	18 338
Portogallo	392 485 464	350 701 838	182 067 664	46,4%	5 127

Source: FAME Report, 2020.

The total EMFF allocation in Portugal is equal to 16% of the total amount allocated at sea basin level, with a spending performance of 17% compared with the total eligible expenditure declared by the MA at sea basin level. The average commitment per operation in the country was EUR 123,139.

Portugal: EMFF contribution by Union Priority

MS	UP 1	UP 2	UP 3	UP 4	UP 6	TA	Total per MS	Total per MS	%
PT	89 625	65 000	55 447	32 710	121 518	5 335	22 850	392 485	6,90

Source: Member States' operational programmes. Situation as in December 2019.

According to the FAME Report 2020, the EMFF supported 659 operations linked to SSF vessels for a total eligible amount of EUR 8,471,608, almost matching the amount committed by the MA.

MS	No of operations	Supported SSF	Committed by MA (EUR)	Eligible expenditure declared by beneficiaries to MA (EUR)
PT	1 895	659	9 689 025	8 471 608

Among the EMFF measures linked to SSCF topics, those related to Article 69 "Processing of fishery and aquaculture products" and Article 43 "Fishing ports, landing sites, auction halls and shelters" were listed in the "Top five measures" in terms of MA commitment (FAME Report, 2020).

Article	Total eligible EMFF committed by MA (EUR)	Total eligible EMFF expenditure declared by beneficiaries to MA (EUR)	No of operations	Spending performance (% declared in total committed)
69	65 193 809	37 030 776	112	57%
43	46 133 503	25 511 716	109	55%

In the programming period 2014-2020, the area covered by CLLD increased from 70% to 95%, and the number of FLAGs rose from 7 to 15. The total allocation for CLLD in the last programming period was EUR 41.2 million, compared with EUR 21.5 million for the programming period 2007-2013. In 2014-2020, the average budget per FLAG was EUR 2,565,495.

CLLD challenges 2014-2020	CLLD objectives 2014-2020
• Low educational level of fishers. • Low attractiveness of fisheries for young people, mainly due to low incomes and limited alternative employment opportunities in fisheries communities. • Declining competitiveness of the fishing industry. • Conflicting demands in coastal areas. • Global warming and resource depletion.	• To further enhance the competitiveness of the fisheries sector (e.g. by strengthening local economies and promoting short supply circuits, high-quality local seafood products and local seafood markets). • To promote innovation in fisheries areas. • To improve educational and professional qualifications related to the sea and fisheries. • To promote the preservation, conservation and rehabilitation of natural resources and landscapes (e.g. by promoting maritime plans).

ISSUES AFFECTING EMFF PERFORMANCE IN PORTUGAL

- Complicated application process for beneficiaries due to complex public procurement procedures.

In addition to the EMFF, beneficiaries from Portugal can apply to other funds to support the blue growth of their communities, taking part in several research and interregional projects co-financed by the EU in the last programming period. Portugal is eligible for the EU programmes shown in the box below.

Programmes 2014-2020

2014 - 2020 ESPON 2020
2014 - 2020 INTERACT III
2014 - 2020 INTERREG V-A Spain - Portugal (Madeira - Açores - Canarias (MAC))
2014 - 2020 INTERREG V-A Spain - Portugal (POCTEP)
2014 - 2020 INTERREG VB Atlantic Area
2014 - 2020 INTERREG VB Mediterranean
2014 - 2020 INTERREG VB South West Europe
2014 - 2020 Interreg Europe
2014 - 2020 Mediterranean Sea Basin ENI CBC
2014 - 2020 URBACT III

The graph below shows the number of projects, partnerships and budget sizes per theme in the programming period 2014-2020, for a total budget of EUR 161,915,295 for 440 projects (Figure 50).

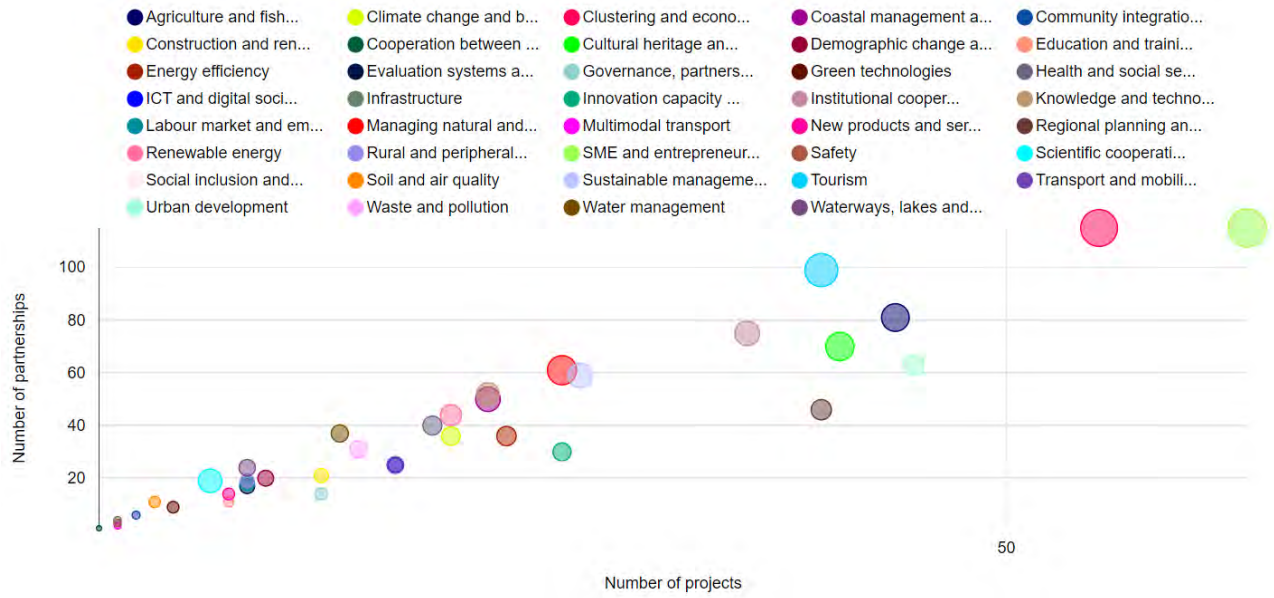


Figure 50. Portugal. Number of projects, partnerships and 2014-2020 budget sizes per theme. Source: *https://keep.eu/countries-and-regions/*

In the graph in Figure 51, the projects were selected from the Keep database by theme of interest in relation to SSF topics:

- tourism;
- sustainable management of natural resources;
- agriculture, fisheries and forestry;
- coastal management and maritime issues.

Out of a total of 440 projects, 118 related to the aforementioned topics for a total budget of EUR 45,106,827.

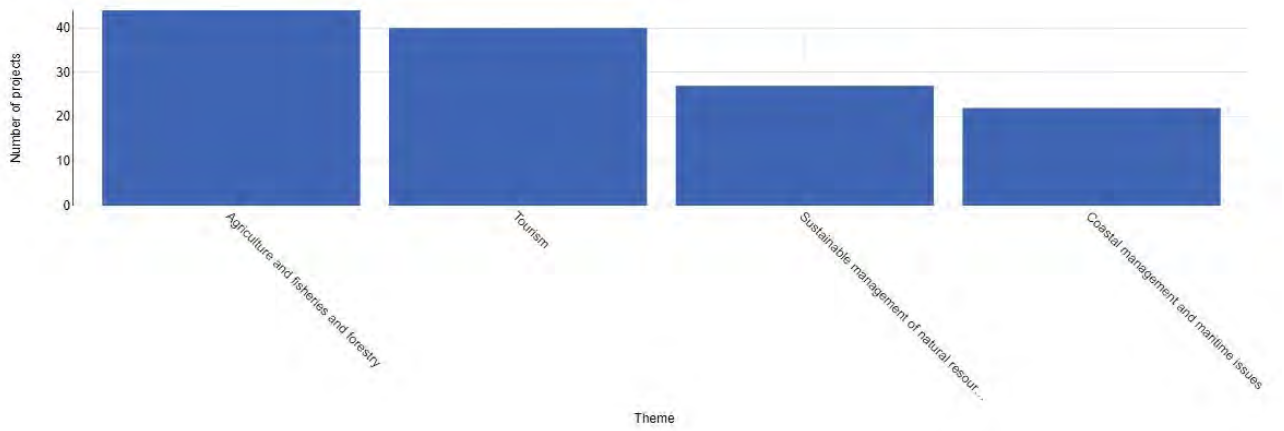


Figure 51. Portugal. Number of projects by theme. Source: *https://keep.eu/countries-and-regions/*

Agriculture, fisheries and forestry seemed to be the leading topics of the projects financed, followed by tourism. Despite its relevance, the theme of coastal management and maritime issues remains underexploited within the framework of the projects financed.

SSF projects and best practices in Portugal

BEST PRACTICES: PT #1

Country: Portugal

Best practices: EFF/FLAG Project

Topics addressed: adding value, traceability, branding

Title and description: KM 0 Brand

The aim of the project was to add value to local seafood from Minho-Lima by creating a valuable marketing tool, bringing together stakeholders from the entire chain of actors involved in the production, processing, sales, marketing and consumption of local fisheries products. The development of the brand "KM 0" started by designing a traceability system with a quality charter for a number of products from Minho-Lima. The project consisted of events, meetings and workshops attended by the different stakeholders.

Main results: this project capitalises on the strong identity of the products targeted and the broad range of different types of products, which should benefit distributers and consumers alike. The project promotes the seasonality and traceability of local catches.

6.18 Romania

GENERAL OVERVIEW

Romania has a 225 km coastline and an exclusive economic zone (EEZ) of approximately 25,000 km2. The main fishing ports along the Romanian coast are Constanța, Mangalia, Sulina and Sfântu Gheorghe. SSF are a rather marginal sector in the southern part of the Romanian coast, whereas they continue to play a significant role in remote and deprived communities in the Danube Delta to the north (Teodorescu and van den Kommer, 2020).

Nicolaev et al. (2015) describe the SSF of the Black Sea as characterised by low capital intensity, a limited number of gears and short fishing trips close to the shore.

Following the EU definition of SSF, FDI data (2020) show that 79 vessels belonged to this sector (corresponding to 61% of the national fleet) and landed 167 tonnes of seafood products (corresponding to about EUR 500,000) in 2020 (Figures 1, 2 and 3).

ROMANIAN SSF CRITICAL ISSUES

- Obsolete fishing gears and infrastructures.
- Limited incomes.
- Restrictions for SSF due to the Danube Delta biosphere (mostly for brackish water fisheries).
- Limited statistics.
- Demographic decline.
- Marginal representation in politics.

Source: Pascual-Fernández et al., 2020

Nicolaev et al. (2015) reported that the main fish species caught by SSF in the marine areas were rapa whelk, European sprat, turbot, pontic shad, whiting, anchovy and horse mackerel. Small-scale fishers mostly use gillnets, hooks, beach seines, pots and traps (Nicolaev et al., 2015).

Teodorescu and van den Kommer (2020) reported that in the period 2021-2017, the three species that were the most abundant in Romanian SSF landings were rapa welk (71%), European sprat (11%) and turbot (5%).

However, FDI data (2020) show that anchovy was the most abundant species in Romanian SSF landings, followed by turbot, horse mackerel, goby and European sprat (Figure 52).

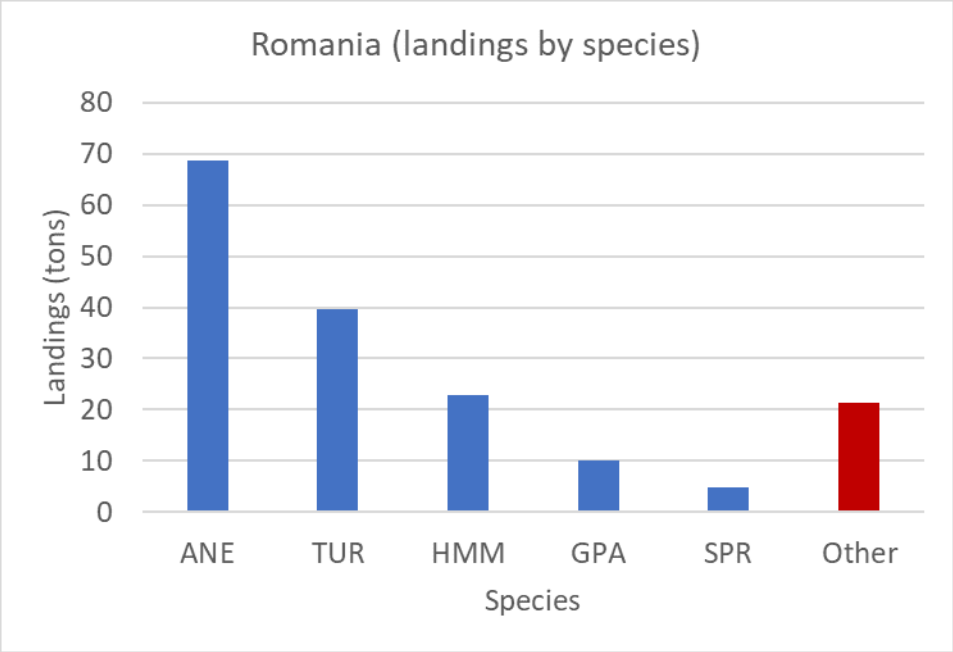


Figure 52. Landings by species of Romanian SSF (FDI data 2020). ANE: Engraulis encrasicolus; TUR: Scophthalmus maximus; HMM: Trachurus mediterraneus; GPA: Gobiidae; SPR: Sprattus sprattus. The category "Other" includes 15 species.

Financial tools supporting SSF in Romania

The main financial instrument for the Romanian fisheries sector is the European Maritime and Fisheries Fund managed by the Ministry of Agriculture and Environment.

The table below shows the key figures for the EMFF allocation, commitments and financial performance in the Black Sea (BG, RO) and in Romania according to the FAME Report 2020.

EMFF key data: Black Sea and Romania

Sea basin/ MS	Total allocation (EUR)	Total EMFF committed by MA (EUR) (Infosys, 31/12/2020))	Total eligible EMFF expenditure declared by beneficiaries to MA (EUR)	Absorption rate %	No of operations
Mar Nero	249 245 098	214 172 683	72 260 048	29,0%	953
Romania	168 421 371	142 542 918	45 809 330	27,2%	453

Source: FAME Report, 2020.

The Romanian allocation represents 68% of the total EMFF allocation for the Black Sea Basin, with a spending performance of 63% of the total eligible EMFF expenditure declared together with Bulgaria. The average commitment per operation in the country was EUR 285,085.

Romania: EMFF contribution by Union Priority (EUR)

MS	UP 1	UP 2	UP 3	UP 4	UP 6	TA	Total per MS	Total per MS	%
RO	4 752	89 489	12 943	37 428	11 240	2 500	10 067	168 421	2,96

Source: Member States' operational programmes. Situation as in December 2019.

Among the EMFF measures linked to SSCF topics, Article 63 "Implementation of community-led local development strategies" was listed in the "Top five measures" in terms of MA commitment (FAME Report, 2020).

Article	Total eligible EMFF committed by MA (EUR)	Total eligible EMFF expenditure declared by beneficiaries to MA (EUR)	No of operations	Spending performance (% declared in total committed)
63	30 529 099	3 511 219	250	12

However, according to the FAME Report analysis, the spending performance was decidedly low for the CLLD, which is widely considered one of the most relevant approaches to promote income diversification and capacity building at SSCF level.

Romania's CLLD in the programming period 2014-2020 sought to address low incomes and poverty in the fisheries sector and to encourage new investment in local communities.

CLLD challenges 2014-2020	CLLD objectives 2014-2020
• To address low incomes and poverty in the fisheries sector and the increasing pressure on external migration, reducing the availability of human resources and undermining the potential to encourage new investment in local communities.	• To encourage innovative, competitive and knowledge-based fisheries and aquaculture businesses. • To promote sustainable and resource-efficient fisheries and aquaculture, including the processing of fish products. • To support employment and territorial cohesion.

In the period 2014-2020, the number of FLAGs increased from 12 to 22. Compared with 2007-2013, the total budget for CLLD has decreased from EUR 100 million to EUR 45 million. As a result, the average budget per FLAG is significantly lower (falling from EUR 3.5 million to EUR 2 million), except for the Danube Delta FLAG, which still has a budget of EUR 10 million. The average budget per FLAG in the programming period 2014-2020 was EUR 2,268.403.

ISSUES AFFECTING EMFF PERFORMANCE IN ROMANIA

- Lack of interest from local public authorities in fishing port infrastructure, considering that only the modernisation of existing infrastructure is eligible (and not the creation of new ports).
- Delays in processing payments and reimbursing expenses; long periods between the approval and signing of the contract.
- Short deadlines for the submission of technical projects.

In addition to the EMFF, beneficiaries from Romania can apply to other funds to support the blue growth of their communities, taking part in several research and interregional projects co-financed by the EU in the last programming period. Romania is eligible for the EU programmes shown in the box below.

Programmes 2014-2020

2014 - 2020 Black Sea Basin ENI CBC
2014 - 2020 ESPON 2020
2014 - 2020 Hungary - Slovakia - Romania - Ukraine ENI CBC
2014 - 2020 INTERACT III
2014 - 2020 INTERREG V-A Romania - Bulgaria
2014 - 2020 INTERREG V-A Romania - Hungary
2014 - 2020 INTERREG VB Danube
2014 - 2020 Interreg Europe
2014 - 2020 Interreg IPA CBC Romania - Serbia
2014 - 2020 Romania - Republic of Moldova ENI CBC
2014 - 2020 Romania - Ukraine ENI CBC
2014 - 2020 URBACT III

The graph below shows the number of projects, partnerships and budget sizes per theme in the programming period 2014-2020, for a total budget of EUR 473,293,786 for 826 projects (Figure 53).

Figure 53. Romania. Number of projects, partnerships and 2014-2020 budget sizes per theme. Source: *https://keep.eu/countries-and-regions/*

In the graph in Figure 54, the projects were selected from the Keep database by theme of interest in relation to SSF topics:

- tourism;
- sustainable management of natural resources;
- agriculture, fisheries and forestry;
- coastal management and maritime issues.

Out of a total of 826 projects, 219 related to the aforementioned topics for a total budget of EUR 79,190,479.

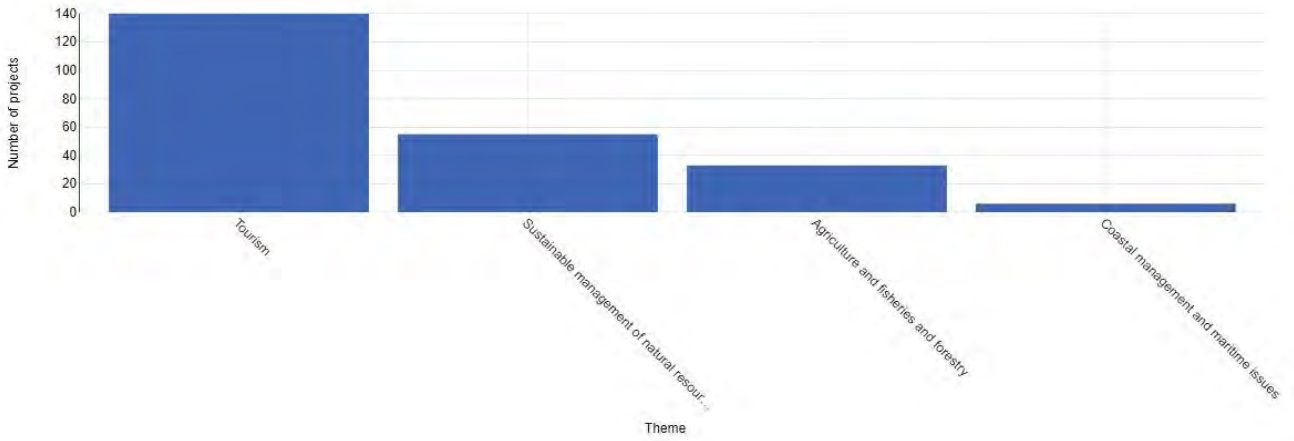


Figure 54. Romania. Number of projects by theme. Source: *https://keep.eu/countries-and-regions/*

Tourism seemed to be the leading topic of the projects financed, followed by sustainable management of natural resources. Despite its relevance, the theme of coastal management and maritime issues remains underexploited within the framework of the projects financed.

6.19 Slovenia

GENERAL OVERVIEW

The Republic of Slovenia is geographically located in central Europe, in the Gulf of Trieste, next to the Alps and bordering the Mediterranean Sea. Its coastline is less than 50 km long, stretching from the peninsula of Muggia (Italy) to the peninsula of Savudrija (Croatia).

Although the marine fishing sector is numerically small and has an insignificant influence on the national economy, it is still considered to have a strong social impact on the Slovenian coastal region in terms of employment. Moreover, fisheries are also important for maritime identity and tourism. In addition to directly creating employment opportunities, it is linked to the economy of the entire region, especially to tourism and catering (Spreizer and Caf, 2020).

The Slovenian fishing fleet mainly consists of boats that are 6 metres long and generally less than 12 metres in length (Spreiser and Caf, 2020).

Following the EU definition of SSF, FDI data (2020) show that 58 vessels belonged to this sector (corresponding to 83% of the national fleet) and landed 42 tonnes of seafood products (corresponding to about EUR 390,000) in 2020 (Figures 1, 2 and 3).

SLOVENIAN SSF CRITICAL ISSUES

- General reduction in income.
- Competition with aquaculture and tourism boats.
- Conflicts with trawling.
- Lack of effective surveillance and inspections.

Source: Pascual-Fernández et al., 2020

According to statistics collected by InfoRib (2016), the most important landed species for Slovenian SSF in 2014 in terms of quantity were the gilthead seabream (Sparus aurata), European pilchard (Sardina pilchardus) and common sole (Solea solea). Other important species were the European anchovy (Engraulis encrasicolus), flounder (Platichthys flesus) and grey mullet. In 2014, the top two gears used by Slovenian SSF were trammel nets and gillnets (Spreiser and Caf, 2020).

FDI data (2020) confirm most of the above species, the landings of Slovenian SSF being dominated by Sparus aurata and Solea solea, followed by Pagellus erythrinus, grey mullet and Scomber scombrus (Figure 55).

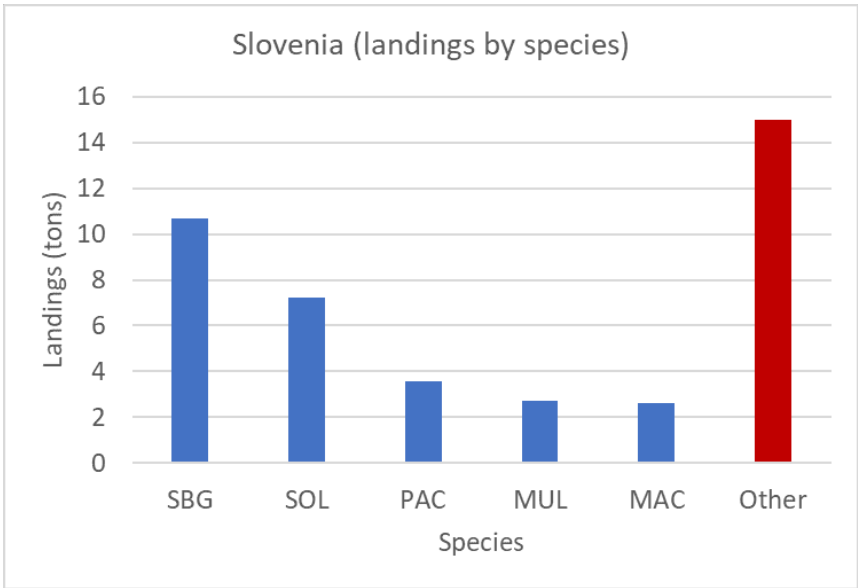


Figure 55. Landings by species of Slovenian SSF (FDI data 2020). SBG: Sparus aurata; SOL: Solea solea; PAC: Pagellus erythrinus; MUL: Mugilidae; MAC: Scomber scombrus. The category "Other" includes 62 species.

Financial tools supporting SSF in Slovenia

The main financial instrument for the Slovenian fisheries sector is the European Maritime and Fisheries Fund managed by the Ministry of Agriculture and Environment.

The table below shows the key figures for the EMFF allocation, commitments and financial performance in the Mediterranean Sea and in Slovenia according to the FAME Report 2020.

EMFF key data: Mediterranean and Slovenia

Sea basin/MS	Total allocation (EUR)	Totale FEAMP impegnato dall'Autorità di Gestione (EUR) (Infosys, 31/12/2020)	Total eligible EMFF expenditure declared by beneficiaries to MA (EUR)	Absorption rate %	No of operations
Mediterranean	1 263 946 368	706 587 712	313 956 830	24,8%	12 534
Slovenia	22 920 126	13 681 854	6 153 119	26,8%	143

Source: FAME Report, 2020.

The Slovenian allocation represents 2% of the total EMFF allocation for the Mediterranean Sea Basin, with a spending performance of 2% of the total eligible EMFF expenditure. The average commitment per operation in the country was EUR 95,677.

Slovenia: EMFF contribution by Union Priority (EUR)

MS	UP 1	UP 2	UP 3	UP 4	UP 6	TA	Totale per MS	Totale per MS	%
SI	2 649	4 880	3 798	5 809	3 181	617	1 985	22 920	0,40

Source: Member States' operational programmes. Situation as in December 2019.

Among the EMFF measures linked to SSF topics, those related to Article 63 "Implementation of community-led local development strategies", confirming the relevance of CLLD implementation, and Article 76 "Control and enforcement" were listed in the "Top five measures" in terms of MA commitment (FAME Report, 2020).

Article	Total eligible EMFF committed by MA (EUR)	Total eligible EMFF expenditure declared by beneficiaries to MA (EUR)	No of operations	Spending performance (% declared in total committed)
63	4 520 653	1 985 406	58	44%
76	1 702 836	561 998	10	33%

The Slovenia CLLD aims to address the main challenges of the fisheries areas, such as ageing small-scale coastal fishing vessels, obsolete fishing equipment, low educational level of fishermen and low incomes. Compared with the period 2007-2013, the number of FLAGs in Slovenia rose from 1 to 4 in the programming period 2014-2020, with an average budget per FLAG of EUR 1,936,531. The 2014-2020 programming period envisaged a multi-fund approach by each FLAG: the use of CLLD in three ESI Funds, namely the EAFRD, ERDF and EMFF (FARNET, 2016).

CLLD challenges 2014-2020	CLLD objectives 2014-2020
• Ageing small-scale coastal fishing vessels, obsolete fishing equipment. • Low educational level of fishermen and low incomes. • The need to strengthen links between fishermen and other sectors in the community, as well as with the scientific and research community. • Low visibility of freshwater aquaculture and lack of cooperation and integration of this sector with other sectors (e.g. tourism, culture, catering).	• Promoting economic growth, social inclusion, job creation and employability and mobility of the workforce in coastal and inland communities that depend on fisheries and aquaculture, including diversification of activities in the fisheries sector and other maritime economy sectors. • Maintaining the tradition of commercial sea fishing and conserving the natural and maritime cultural heritage of the coastal area. • A wider inclusion of local actors in local development: fishermen, mariculture workers, municipalities, scientists, institutions, NGOs and individuals in the field of cultural heritage protection, environmental organisations and other stakeholders operating in the local area. • Using the still untapped potential of freshwater aquaculture in rural areas, promoting closer links and cooperation between stakeholders, strengthening the role of sectors and seeking opportunities for additional sources of income. • Better integration and visibility of the aquaculture sector, increased added value of aquaculture products, promoting innovation at all stages of the supply chain, encouraging networking.

ISSUE AFFECTING EMFF PERFORMANCE IN SLOVENIA

- Difficulties for applicants to submit the requested documentation on time.

In addition to the EMFF, beneficiaries from Slovenia can apply to other funds to support the blue growth of their communities, taking part in several research and interregional projects co-financed by the EU in the last programming period. Slovenia is eligible for the EU programmes shown in the box below.

Programmes 2014-2020

2014 - 2020 ESPON 2020
2014 - 2020 INTERACT III
2014 - 2020 INTERREG V-A Italy - Slovenia
2014 - 2020 INTERREG V-A Slovenia - Austria
2014 - 2020 INTERREG V-A Slovenia - Croatia
2014 - 2020 INTERREG V-A Slovenia - Hungary
2014 - 2020 INTERREG VB Adriatic - Ionian
2014 - 2020 INTERREG VB Alpine Space
2014 - 2020 INTERREG VB Central Europe
2014 - 2020 INTERREG VB Danube
2014 - 2020 INTERREG VB Mediterranean
2014 - 2020 Interreg Europe
2014 - 2020 URBACT III

The graph below shows the number of projects, partnerships and budget sizes per theme in the programming period 2014-2020, for a total budget of EUR 217,718,753 for 605 projects (Figure 56).

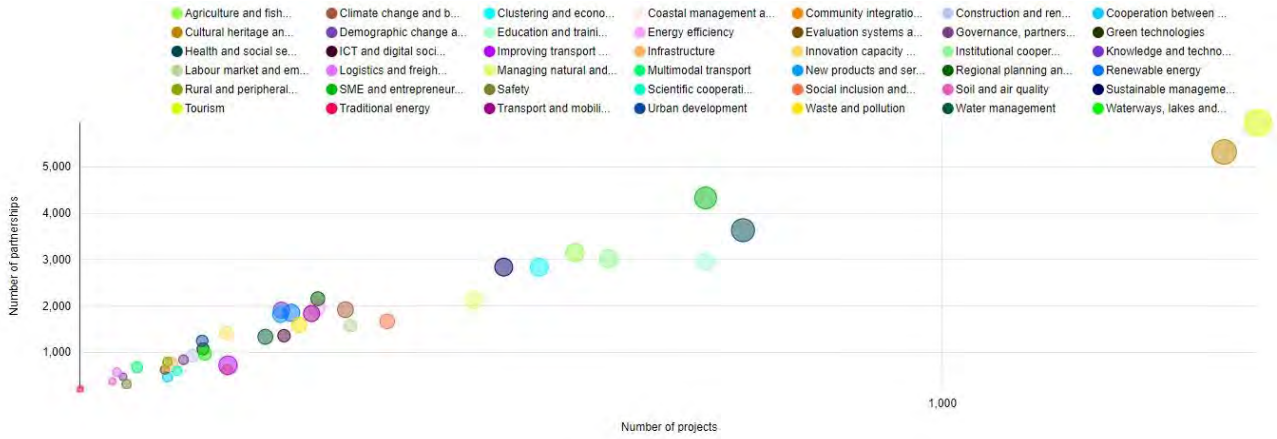


Figure 56. Slovenia. Number of projects, partnerships and 2014-2020 budget sizes per theme. Source: *https://keep.eu/countries-and-regions/*

In the graph in Figure 57, the projects were selected from the Keep database by theme of interest in relation to SSF topics:

- tourism;
- sustainable management of natural resources;
- agriculture, fisheries and forestry;
- coastal management and maritime issues.

Out of a total of 605 projects, 172 related to the aforementioned topics for a total budget of EUR 71,615,076.

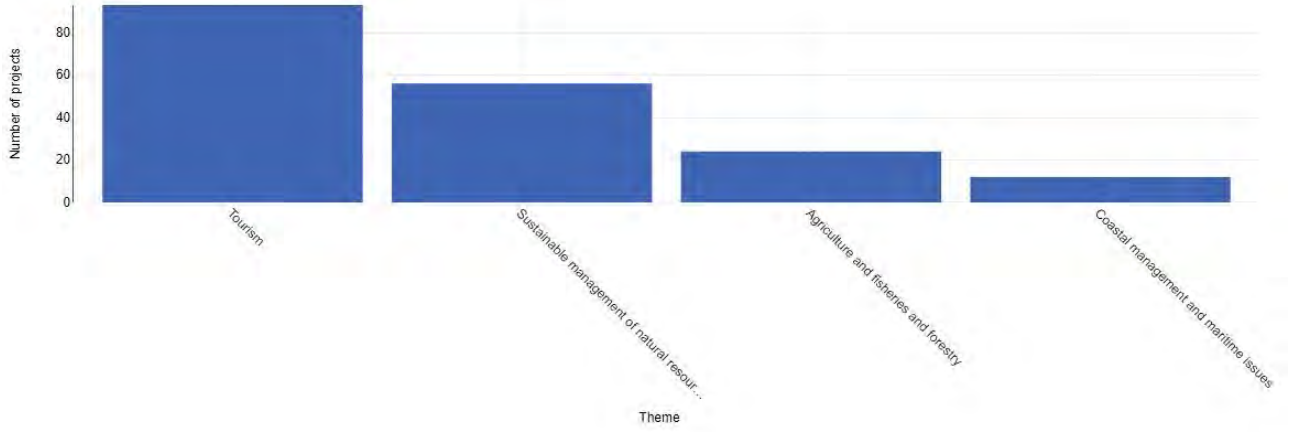


Figure 57. Slovenia. Number of projects by theme. Source: *https://keep.eu/countries-and-regions/*

Tourism seemed to be the leading topic of the projects financed, followed by sustainable management of natural resources.

6.20 Spain

GENERAL OVERVIEW

With a coastline of almost 8,000 km, Spain is home to the biggest fishing industry in the EU. Positioned at the far south-west of Europe, the country enjoys entry points into both the Atlantic and the Mediterranean, while offering good conditions for marine and freshwater aquaculture.

The coast of Spain is characterised by a rich diversity of ecosystems, including the Canary Islands, the Mediterranean, the Cantabric Sea and the Gulf of Cadiz. Owing to these contrasts in natural and human landscapes, Spanish SSF have developed with a diverse range of fleets, gears, target species and even fishing cultures across these distinct maritime regions (Pascual-Fernandez et al., 2020).

From a regional perspective, Galicia, Andalusia and the Canary Islands are the regions with the most small-scale vessels. Spanish Mediterranean fishing has some specificities, as a multi-species fishery accounting for nearly 29% of the Spanish national fleet and focused on fish of high commercial value (Pascual-Fernandez et al., 2020).

Following the EU definition of SSF, FDI data (2020) show that 418 vessels belonged to this sector (corresponding to 5% of the national fleet) and landed 21,679 tonnes of seafood products (corresponding to about EUR 99 million) in 2020 (Figures 1, 2 and 3).

SPANISH SSF CRITICAL ISSUES

- General reduction in income in the Mediterranean.
- Conflicts with recreational fisheries (e.g. selling their catch in the Balearic Islands).
- Conflicts with large-scale fleets and new coastal activities (e.g. tourism).
- Urban development reducing fishing grounds.
- Vulnerability to side effects of the TAC system (e.g. bluefin tuna).
- Economic impact of the landing obligation.
- Market challenges (e.g. improving the value of landings).
- Recruitment of young fishers has proved difficult in many areas.
- Challenges in specialisation and technological creep.

Source: Pascual-Fernández et al., 2020

From a technical point of view, the most common gears are trammel nets, long lines and gillnets (Herrera-Racionero et al., 2019). Variability in the landings of main target species is high.

Pascual-Fernandez et al. (2020) reported that the top three species landed by Spanish SSF in terms of biomass were mackerel (Scomber scombrus), octopus (Octopus vulgaris) and skipjack tuna (Katsuwonus pelamis), while in terms of landed value octopus is followed by common cuttlefish (Sepia officinalis) and seabass (Dicentrarchus labrax).

The above information fully matches with the FDI data (2020), in which mackerel, octopus and skipjack tuna dominated Spanish SSF landings, followed by conger eel (Conger conger) and albacore (Thunnus alalonga) (Figure 58).

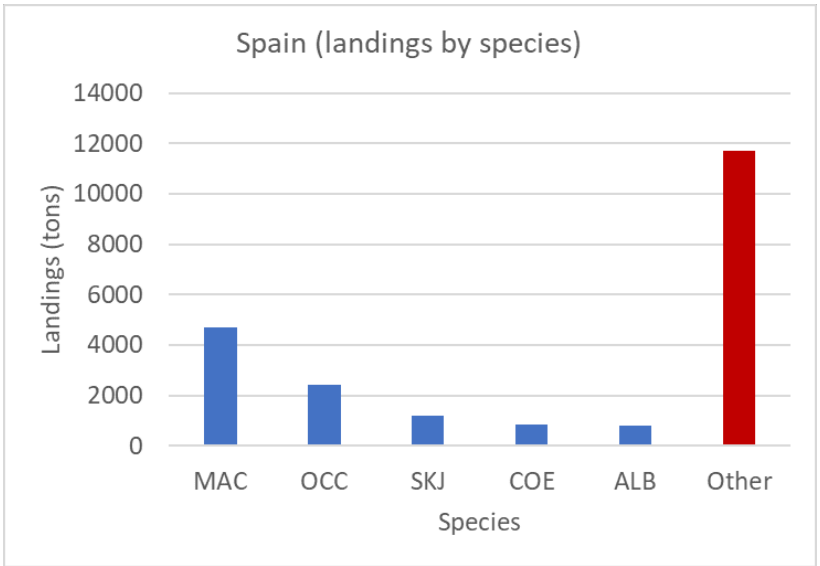


Figure 58. Landings by species of Spanish SSF (FDI data 2020). MAC: Scomber scombrus; OCC: Octopus vulgaris; SKJ: Katsuwonus pelamis; COE: Conger conger; ALB: Thunnus alalunga. The category "Other" includes 288 species.

Financial tools supporting SSF in Spain

The main financial instrument for the Spanish fisheries sector is the European Maritime and Fisheries Fund managed by the Ministry of Agriculture, Fisheries and Food. The main goal of the Spanish OP is to support the adaptation of the Spanish fleet, in a combined effort to boost the competitiveness of its fishing sector and adapt its fleet to the new regulatory obligations, particularly under the reformed CFP, in order to achieve the maximum sustainable yield in fisheries (OP summary).

The table below shows the key figures for the EMFF allocation, commitments and financial performance in the Atlantic Sea Basin and in Spain according to the FAME Report 2020.

EMFF key data: Atlantic and Spain

Sea basin/MS	Total allocation (EUR)	Total EMFF committed by MA (EUR) (Infosys, 31/12/2020)	Total eligible EMFF expenditure declared by beneficiaries to MA (EUR)	Absorption rate %	No of operations
Atlantico	2 502 146 056	1 633 127 991	1 078 132 275	43,1%	26 552
Spagna	1 111 628 369	579 267 985	413 601 915	37,2%	11 590

Source: FAME Report, 2020.

The Spanish allocation represents 44% of the total EMFF allocation for the Atlantic Sea Basin, with a spending performance of 38% of the total eligible expenditure at sea basin level and an average commitment per operation in the country of EUR 49,979.

Spain: EMFF contribution by Union Priority

MS	UP 1	UP 2	UP 3	UP 4	UP 6	TA	Total per MS	Total per MS	%
ES	300 323	189 051	154 233	109 255	288 725	5 218	64 822	1 111 628	19,5

Source: Member States' operational programmes. Situation as in December 2019.

Subject to certain conditions and with higher rates of public support which can range from 20% to 80%, the EMFF supports SSF in terms of:

- investments in fishing boats and equipment, e.g. purchasing new engines, replacing engines, purchasing the first vessel, investing in new gears and onboard equipment to improve selectivity, protect biodiversity, minimise unwanted catches and improve energy efficiency;
- investments in equipment to add value to catches;
- investments in complementary activities for income diversification;
- investments in human resources, from health and safety on board to new skills.

According to the FAME Report 2020, the EMFF supported 588 operations linked to SSF vessels for a total eligible amount of EUR 3,090,996, almost matching the amount committed by the MA.

MS	No of operations	Supported SSF	Committed by MA (EUR)	Eligible expenditure declared by beneficiaries to MA (EUR)
ES	916	588	3 445 307	3 090 996

Among the EMFF measures linked to SSCF topics, those related to Article 63 "Implementation of community-led local development strategies", Article 69 "Processing of fishery and aquaculture products" and Article 76 "Control and enforcement" were listed in the "Top five measures" in terms of MA commitment (FAME Report, 2020). The spending performance confirms the relevance of the CLLD at national level.

Article	Total eligible EMFF committed by MA (EUR)	Total eligible EMFF expenditure declared by beneficiaries to MA (EUR)	No of operations	Spending performance (% declared in total committed)
63	66 158 053	37 404 779	1 471	57%
69	89 577 360	53 163 644	589	59%

In Spain, the implementation of CLLD is organised at regional level, while the national managing authority is ultimately responsible for the programme and plays a coordinating and reporting role (FARNET, 2017). The main challenges that the Spanish 2014-2020 CLLD sought to address were: high unemployment; aging populations in fisheries areas and in the sector; conflicts between growing economic sectors (e.g. tourism) and fisheries; pressure of economic activities on the coastal environment.

CLLD challenges 2014-2020	CLLD objectives 2014-2020
• Tackling unemployment. • Aging populations in fisheries areas and in the sector. • Reconciling the presence of other growing economic sectors (e.g. tourism) with fisheries. • Pressure of economic activities on the coastal environment.	• Diversification inside and outside the fisheries sector. • Adding value to fisheries products (e.g. through direct sales and new products, labelling and quality brands, the use of less commercial species, and the use of discards for non-human use). • Improvement of the quality of the fisheries tourism offer (e.g. visibility of traditional crafts, gastronomy, quality accommodation, routes to protected areas). • Boosting innovation (e.g. to improve product quality, health, strengthen links between producers and consumers). • Supporting entrepreneurship and new technologies. • Supporting cooperation (sharing knowledge, experience and good practice).

According to the FARNET country factsheet (2017), since the 2007-2013 period, the total budget for CLLD in Spain has increased from EUR 77.7 million to EUR 126.7 million. The number of FLAGs has also risen from 31 to 41, present in all 10 coastal regions. The average budget per FLAG was EUR 3,065,503.

In addition to the EMFF, Spanish beneficiaries can apply to other funds to support the blue growth of their communities, taking part in several research and interregional projects co-financed by the EU in the last programming period. Spain is eligible for the EU programmes shown in the box below.

Programmes 2014-2020

2014 - 2020 ESPON 2020
2014 - 2020 INTERACT III
2014 - 2020 INTERREG V-A Spain - France - Andorra (POCTEFA)
2014 - 2020 INTERREG V-A Spain - Portugal (Madeira - Açores - Canarias (MAC))
2014 - 2020 INTERREG V-A Spain - Portugal (POCTEP)
2014 - 2020 INTERREG VB Atlantic Area
2014 - 2020 INTERREG VB Mediterranean
2014 - 2020 INTERREG VB South West Europe
2014 - 2020 Interreg Europe
2014 - 2020 Mediterranean Sea Basin ENI CBC
2014 - 2020 URBACT III

The graph below shows the number of projects, partnerships and budget sizes per theme in the programming period 2014-2020, for a total budget of EUR 626,701,591 for 1,065 projects (Figure 59).

Figure 59. Spain. Number of projects, partnerships and 2014-2020 budget sizes per theme. Source: *https://keep.eu/countries-and-regions/*

In the graph in Figure 60, the projects were selected from the Keep database by theme of interest in relation to SSF topics:

- tourism;
- sustainable management of natural resources;
- agriculture, fisheries and forestry;
- coastal management and maritime issues.

Out of a total of 1,065 projects, 317 related to the aforementioned topics for a total budget of EUR 178,940,734.

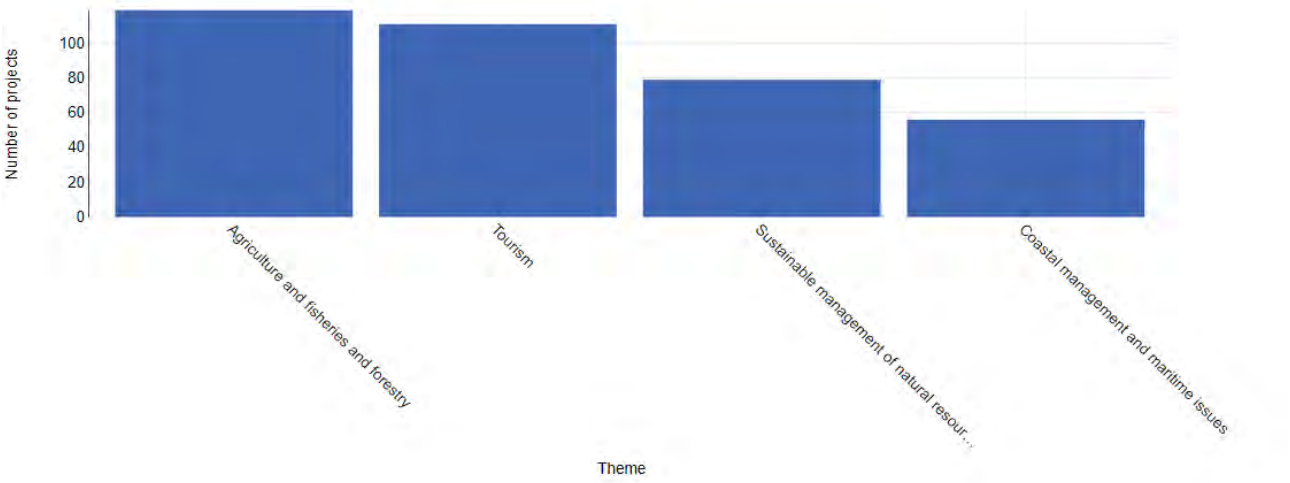


Figure 60. Spain. Number of projects by theme. Source: *https://keep.eu/countries-and-regions/*

Agriculture, fisheries and forestry seemed to be the leading topics of the projects financed, followed by tourism. Despite its relevance, the theme of coastal management and maritime issues remains underexploited within the framework of the projects financed. In total, 39 projects directly addressed the fisheries sector. Some of these projects can be considered "best practices" and have been outlined in the best practices box in Chapter 4.

SSF projects and best practices in Spain

BEST PRACTICES: ES #1

A FOCUS ON FISHMPABLUE2 IN SPAIN

Increased cooperation in Spanish MPAs

Programme/Project: Interreg MED 2014-2020/FishMPABlue2

Topic addressed: co-management

Policy recommendation implemented: creation of a permanent and formal cooperation platform

In the FishMPABlue2 project, all MPAs took the first step towards involving fishers in decision-making through the formal development of a local governance cluster. The project pilot actions sought to address the historic lack of coordination among administrative bodies. This is seen as a hindrance to the success of the Cabo de Palos and Es Freus MPAs, where several bodies are involved in MPA management. The regular meetings held and encouraged through the FishMPABlue2 project have opened up discussions to address this and to find more conducive solutions to improve the management of the area, while giving more consideration to the opinions and needs of fishers and other key stakeholders in the area.

BEST PRACTICES: ES #2

A FOCUS ON PHAROS4MPAs IN SPAIN

Programme/Project: Interreg MED 2014-2020/PHAROS4MPAs

Topics addressed: ecolabeling of sustainable SSF products, traceability

Ecolabelling can increase the value of key species and/or improve the image of other under-appreciated alternative species. The "Es Freus Marine Reserve" in the Balearic Islands, Spain, supports the local fishers' PEIX SI certification: this guarantees that the labelled products come from local SSF, and ensures their traceability from boat to plate. After a trial period, the certification procedure is now the preferred standard.

6.21 Sweden

GENERAL OVERVIEW

The Kingdom of Sweden borders Norway to the west and north, and Finland to the east. It is connected to Denmark in the southwest by a bridge-tunnel across the Öresund Strait. At 450,295 km2, Sweden is the largest country in northern Europe and the third-largest country in the European Union. Sweden has a total population of 10.4 million, but a low population density of 25.5 inhabitants per km2. Sweden has a 3,218 km coastline.

Swedish SSF contribute to local economies and coastal livelihoods, preserve cultural heritage, craftsmanship and local ecological knowledge (Garavito-Bermúdez, 2016), and are ecologically sustainable (Björkvik et al., 2020). According to the Swedish Board of Fisheries (2010), SSF have low carbon dioxide emissions, low bycatch and discards due to their use of selective gear, and a low impact on bottom sediments. SSF are also geographically confined, which means that small-scale fishers have an incentive to sustain fish stocks in the long term.

There is a pronounced difference between the ecosystems that Swedish fishers operate in. The Baltic with its low salinity is very different from the waters of the Swedish west coast, while other Swedish fishers fish in lakes and streams. There are also significant differences in terms of gears used, target species, motivations and attitudes that underpin various fishing practices (Björkvik et al., 2020).

Following the EU definition of SSF, FDI data (2020) show that 665 vessels belonged to this sector (corresponding to 76% of the national fleet) and landed 2,784 tonnes of seafood products (corresponding to about EUR 12 million) in 2020 (Figures 1, 2 and 3).

SWEDISH SSF CRITICAL ISSUES

- Hidden unemployment.
- Lack of succession and recruitment.
- Low profitability.
- Considerable start-up investments.
- Competition with large-scale fisheries.
- Extent and complexity of fisheries regulation.

Source: Pascual-Fernández et al., 2020.

According to the EU definition of SSF, the most commonly used gear types in Swedish Baltic SSF are gillnets, pound nets and set longlines (Björkvik et al., 2020).

In particular, the same authors reported that in 2015, the top three species landed by Swedish SSF in terms of biomass were cod (Gadus morhua), herring (Clupea harengus) and salmon, while in terms of landed value, cod is followed by eel (Anguilla anguilla) and herring.

This information partially matches the FDI data (2020), where herring dominated the landings of Swedish SSF, followed by cod, Norway lobster (Nephrops norvegicus), brown crab (Cancer pagurus) and mackerel (Scomber scombrus) (Figure 61).

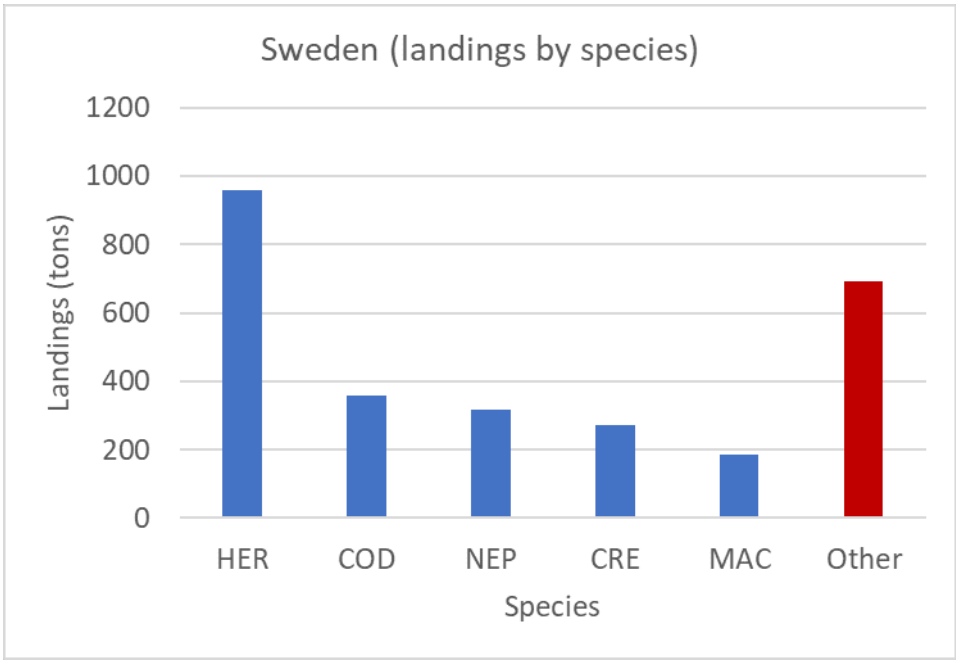


Figure 61. Landings by species of Swedish SSF (FDI data 2020). HER: Clupea harengus; COD: Gadus morhua; NEP: Nephrops norvegicus; CRE: Cancer pagurus; MAC: Scomber scombrus. The category "Other" includes 56 species.

Financial tools supporting SSF in Sweden

The main financial instrument for the Swedish fisheries sector is the European Maritime and Fisheries Fund managed by the Swedish Board of Agriculture at the Department for Agriculture and Analysis.

The table below shows the key figures for the EMFF allocation, commitments and financial performance in the Baltic Sea and in Sweden according to the FAME Report 2020.

EMFF key data: Baltic and Sweden

Sea basin/MS	Total allocation (EUR)	Totale FEAMP impegnato dall'Autorità di Gestione (EUR) (Infosys, 31/12/2020)	Total eligible EMFF expenditure declared by beneficiaries to MA (EUR)	Absorption rate %	No of operations
Mar Baltico	1 030 005 010	809 269 783	481 116 819	46,7%	15 285
Svezia	120 156 004	88 429 231	66 962 284	26,8%	897

Source: FAME Report, 2020.

The Swedish allocation represents 12% of the total EMFF allocation for the Baltic Sea Basin, with a spending performance of 14% of the total eligible EMFF expenditure. The average commitment per operation in the country was EUR 98,583.

Sweden: EMFF contribution by Union Priority (EUR)

MS	UP 1	UP 2	UP 3	UP 4	UP 6	TA	Totale per MS	Totale per MS	%
SE	23 658	11 871	60 401	8 343	5 573	4 446	5 864	120 156	2,1

Source: Member States' operational programmes. Situation as in December 2019.

Among the EMFF measures linked to SSF topics, those related to Article 76 "Control and enforcement", Article 63 "Implementation of community-led local development strategies", confirming the relevance of the CLLD implementation, and Article 69 "Processing of fishery and aquaculture products" were listed in the "Top five measures" in terms of MA commitment (FAME Report, 2020).

Article	Total eligible EMFF committed by MA (EUR)	Total eligible EMFF expenditure declared by beneficiaries to MA (EUR)	No of operations	Spending performance (% declared in total committed)
76	21 702 205	20 800 778	98	96%
63	6 682 422	3 519 587	165	53%
69	3 194 329	2 825 831	56	88%

The Swedish CLLD aims to increase the competitiveness of small and medium-sized enterprises, protect the environment (especially the Baltic Sea) and promote the sustainable use of resources. It also seeks to promote the employment and diversification of fishermen and fisheries actors. Compared with the period 2007-2013, the number of FLAGs in Sweden fell from 14 to 13 in the programming period 2014-2020, while the total budget allocated for CLLD remained stable. The average budget per FLAG was EUR 1,283.580. The 2014-2020 programming period envisaged a multi-fund approach by each FLAG: the use of CLLD in three ESI Funds, namely the EAFRD, ERDF and EMFF (FARNET, 2016).

CLLD challenges 2014-2020	CLLD objectives 2014-2020
• Increasing the competitiveness of small and medium-sized enterprises. • Protection of the environment, especially the Baltic Sea, and promotion of the sustainable use of resources. • Promotion of employment and diversification of fisherman and fisheries actors.	• Promoting instruments for environmentally sustainable, resource-efficient, innovative and competitive fisheries and aquaculture. • Increasing employment and local cohesion through community-led local development. • Promoting instruments to diversify fisheries along the delivery chain and to related sectors. • Promoting instruments to preserve and develop local fishing communities, including maritime heritage and culture.

ISSUES AFFECTING EMFF PERFORMANCE IN SWEDEN

- Long processing times for project applications and payment requests.
- The overall costs of projects and investments have increased compared with the expected costs from the previous programme period.

In addition to the EMFF, Swedish beneficiaries can apply to other funds to support the blue growth of their communities, taking part in several research and interregional projects co-financed by the EU in the last programming period. Sweden is eligible for the EU programmes shown in the box below.

Programmes 2014-2020

2014 - 2020 ESPON 2020
2014 - 2020 INTERACT III
2014 - 2020 INTERREG V-A Finland - Estonia - Latvia - Sweden (Central Baltic)
2014 - 2020 INTERREG V-A Poland - Denmark - Germany - Lithuania - Sweden (South Baltic)
2014 - 2020 INTERREG V-A Sweden - Denmark - Norway (Öresund - Kattegat - Skagerrak)
2014 - 2020 INTERREG V-A Sweden - Finland - Norway (Botnia Atlantica)
2014 - 2020 INTERREG V-A Sweden - Finland - Norway (Nord)
2014 - 2020 INTERREG V-A Sweden - Norway
2014 - 2020 INTERREG VB Baltic Sea
2014 - 2020 INTERREG VB North Sea
2014 - 2020 INTERREG VB Northern Periphery and Arctic
2014 - 2020 Interreg Europe
2014 - 2020 Kolarctic ENI CBC
2014 - 2020 URBACT III

The graph below shows the number of projects, partnerships and budget sizes per theme in the programming period 2014-2020, for a total budget of EUR 113,498,620 for 560 projects (Figure 62).

Figure 62. Sweden. Number of projects, partnerships and 2014-2020 budget sizes per theme. Source: *https://keep.eu/countries-and-regions/*

In the graph in Figure 63, the projects were selected from the Keep database by theme of interest in relation to SSF topics:

- tourism;
- sustainable management of natural resources;
- agriculture, fisheries and forestry;
- coastal management and maritime issues.

Out of a total of 560 projects, 141 related to the aforementioned topics for a total budget of EUR 31,085,089.

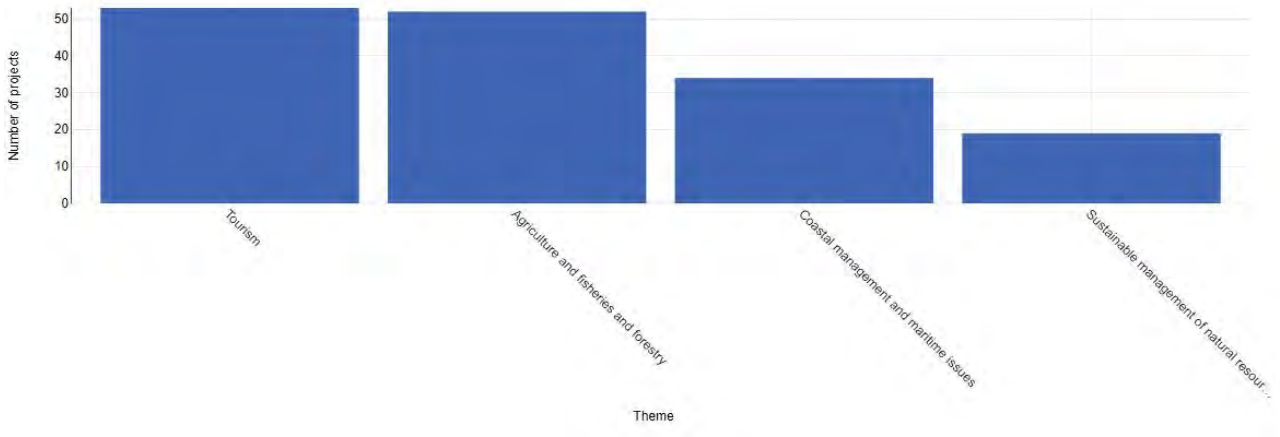


Figure 63. Sweden. Number of projects by theme. Source: *https://keep.eu/countries-and-regions/*

Tourism seemed to be the leading topic of the projects financed, followed by agriculture, fisheries and forestry.

6.22 United Kingdom

GENERAL OVERVIEW

The United Kingdom of Great Britain and Northern Ireland, commonly known as the United Kingdom (UK), is a sovereign country in north-western Europe, off the north-western coast of the European mainland. The UK includes the island of Great Britain, the north-¬eastern part of the island of Ireland, and many smaller islands within the British Isles. Northern Ireland shares a land border with the Republic of Ireland. Otherwise, the United Kingdom is surrounded by the Atlantic Ocean, with the North Sea to the east, the English Channel to the south and the Celtic Sea to the south-west, giving it the 12th-longest coastline in the world (19,717 km). The Irish Sea separates Great Britain and Ireland. The total area of the United Kingdom is 242,500 km2, with an estimated population of 68 million in 2020.

The UK is the first, and so far only, Member State to have left the European Union, after 47 years of having been part of the Union.

Traditionally, UK SSF enterprises would seek to maximise opportunities presented by the diversity of local fishing grounds either by building a portfolio of seasonal fisheries sufficient to permit year-round fishing, or by limiting their participation to a particularly lucrative fishery, combining this with other employment ashore (Symes et al., 2020)

A striking feature of inshore fishing in the UK is the concentration of commercial activity in a narrow band of 8-10 metre vessels, accounting for just over 40% of the small-scale sector, but 80% of the total catch value (MMO, 2015).

Following the EU definition of SSF, FDI data (2020) show that 3,057 vessels belonged to this sector (corresponding to 76% of the national fleet) and landed 39,080 tonnes of seafood products (corresponding to about EUR 123 million) in 2020 (Figures 1, 2 and 3).

UNITED KINGDOM SSF CRITICAL ISSUES

- Conflicts with recreational fisheries on the south coast.
- Abundant unused capacity exists within the small-scale sector.
- Opportunities for diversifying into different coastal fisheries are limited (e.g. restrictive regulation concerning access to quota-controlled species, reduction in coastal salmon licences).
- Lack of succession and recruitment.
- Landing obligation proved difficult for the <10m fleet (a vessel's monthly quota for certain species can be fully taken up after a couple of days of good fishing).
- Quota management issues.
- Market challenges (e.g. improving the value of landings).
- Renewable energy industry and the expansion of offshore windfarms along England's east coast.
- Extension of the MPA network throughout the UK's coastal waters.
- Negotiation of terms of access to the European market.

Source: Pascual-Fernández et al., 2020

Symes et al. (2020) reported that in 2014, the most important species landed by UK SSF in terms of value were seabass, sole, cod and pollack for the demersals, mackerel among the pelagics, and lobster, crab, Norway lobster and whelk for the category of shellfish.

This information partially matches the FDI data (2020), where whelk (Buccinum undatum), brown crab (Cancer pagurus), European pilchard (Sardina pilchardus), lobster (Homarus gammarus) and seabass (Dicentrarchus labrax) dominated the landings of UK SSF (Figure 64).

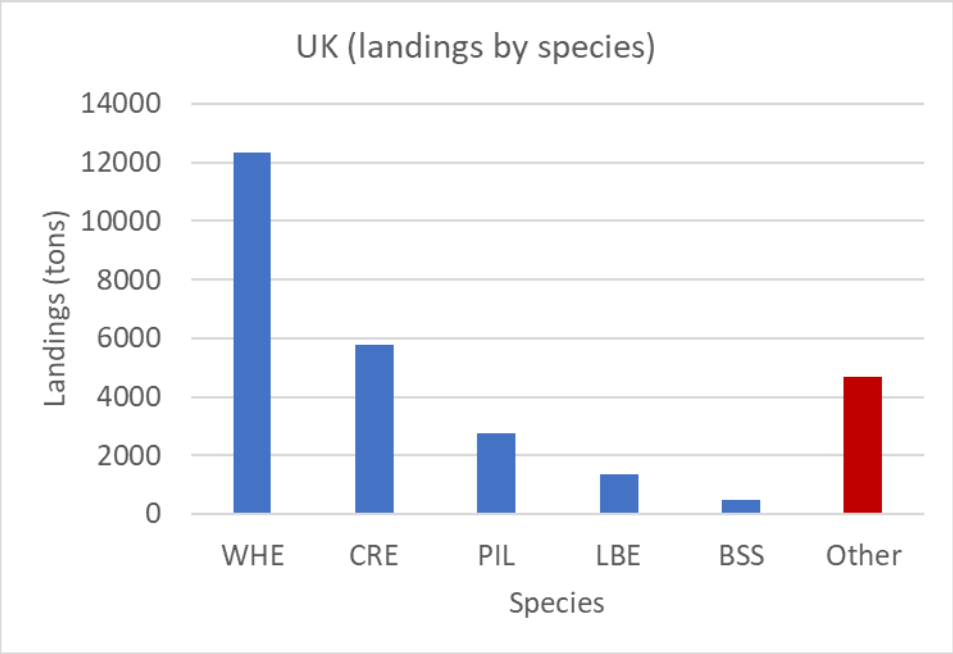


Figure 64. Landings by species of UK SSF (FDI data 2020). WHE: Buccinum undatum; CRE: Cancer pagurus; PIL: Sardina pilchardus; LBE: Homarus gammarus; BSS: Dicentrarchus labrax. The category "Other" includes 117 species.

Financial tools supporting SSF in UK

The main financial instrument for the UK's fisheries sector is the European Maritime and Fisheries Fund managed by the Marine Management Organisation. The main goal of the UK's OP is to enhance the competitiveness of SMEs in the fisheries and aquaculture sector and to promote sustainable, good-quality employment.

The table below shows the key figures for the EMFF allocation, commitments and financial performance in the Atlantic Sea Basin and in the UK according to the FAME Report 2020.

EMFF key data: Atlantic and UK

Sea basin/ MS	Total allocation (EUR)	Total EMFF committed by MA (EUR) (Infosys, 31/12/2020)	Total eligible EMFF expenditure declared by beneficiaries to MA (EUR)	Absorption rate %	No of operations
Atlantic	2 502 146 056	1 633 127 991	1 078 132 275	43,1%	26 552
UK	243 139 437	197 344 994	136 503 199	40,7%	2 688

Source: FAME Report, 2020.

Looking at the various sea basins, the EMFF financial allocation for the Atlantic Sea Basin is the second most significant. The UK allocation represents 10% of the total EMFF allocation for the Atlantic Sea Basin, with a spending performance of 13% of the total eligible EMFF expenditure declared at sea basin level. The national spending performance was equal to 69% of the total committed amount, with an average commitment per operation in the country of EUR 73,417.

UK: EMFF contribution by Union Priority

MS	UP 1	UP 2	UP 3	UP 4	UP 6	TA	Total per MS	Total per MS	%
Regno Unito	67 487	19 327	97 634	13 584	27 244	5 335	12 528	243 139	4,28%

Source: Member States' operational programmes. Situation as in December 2019.

In the description of the action plan for the development, competitiveness and sustainability of small-scale coastal fishing in the UK's OP, SSF is eligible for funding, often at preferential aid intensity rates, across a range of measures to help them meet the needs of the sector (e.g. more selective gear to reduce discards and marketing support to increase the value of SSF catch). Measures under Articles 27, 30 and 31 are intended to provide advice, support for business start-up, diversification and competitiveness which are specifically focused on improving skills in SSF. In addition, the EMFF focused on making the best use of technology to ensure compliance in the sector, and to encourage more fisheries/science partnerships to improve the quality of data (UK OP).

According to the FAME Report 2020, the UK's EMFF supported 425 operations linked to SSF vessels for a total eligible amount of EUR 3,279,901, equal to 76% of the amount committed by the MA.

MS	No of operations	Supported SSF	Committed by MA (EUR)	Eligible expenditure declared by beneficiaries to MA (EUR)
Regno Unito	689	425	4 317 182	3 279 901

Among the EMFF measures linked to SSCF topics, those related to Article 76 "Control and enforcement", Article 43 "Fishing ports, landing sites, auction halls and shelters", Article 69 "Processing of fishery and aquaculture products" and Article 63 "Implementation of community-led local development strategies" were listed in the "Top five measures" in terms of MA commitment (FAME Report, 2020).

Article	Total eligible EMFF committed by MA (EUR)	Total eligible EMFF expenditure declared by beneficiaries to MA (EUR)	No of operations	Spending performance (% declared in total committed)
76	33 968 975	13 497 861	40	49%
43	19 912 595	16 723 931	126	39%
69	16 742 445	13 231 839	148	39%
63	10 815 723	7 759 773	377	39%

The main goal of CLLD in the UK is to stimulate coastal economies to deliver growth and address the decline of traditional fishing industries, retaining skills while tackling the ageing fishing workforce and lack of new entrants to the industry.

CLLD challenges 2014-2020	CLLD objectives 2014-2020
• Implementing CFP reform. • Stimulating coastal economies to deliver growth and addressing the decline of traditional fishing industries. • Retaining skills while tackling an ageing fishing workforce and lack of young/new entrants to the industry.	• To assist fishing communities in adapting to the reformed CFP and support sustainable economic growth. • To add value to fisheries products, promoting diversification inside and outside commercial fishing and encouraging innovation at all stages of the supply chain. • To attract young people to the industry and promote social wellbeing, environment and culture are also included as objectives.

According to the FARNET country factsheet (2016), compared with the programming period 2007-2013 and excluding Scottish CLLD, the total budget for CLLD in the UK has been reduced from EUR 24.7 million in EFF to EUR 18.1 million in the EMFF, so the average budget per FLAG has fallen (from EUR 1.123 million to EUR 0.953 million). The number of FLAGs has decreased from 22 to 19.

In addition to the EMFF, UK beneficiaries can apply to other funds to support the blue growth of their communities, taking part in several research and interregional projects co-financed by the EU in the last programming period. UK is eligible for the EU programmes shown in the box below.

Programmes 2014-2020

2014 - 2020 ESPON 2020
2014 - 2020 INTERACT III
2014 - 2020 INTERREG V-A France - Belgium - The Netherlands - United Kingdom (Les Deux Mers / Two seas / Twee Zeeën)
2014 - 2020 INTERREG V-A France - United Kingdom (Manche - Channel)
2014 - 2020 INTERREG V-A United Kingdom - Ireland (Ireland - Wales)
2014 - 2020 INTERREG V-A United Kingdom-Ireland (Ireland-Northern Ireland-Scotland)
2014 - 2020 INTERREG VB Atlantic Area
2014 - 2020 INTERREG VB North Sea
2014 - 2020 INTERREG VB North West Europe
2014 - 2020 INTERREG VB Northern Periphery and Arctic
2014 - 2020 Interreg Europe
2014 - 2020 Ireland - United Kingdom (PEACE IV)
2014 - 2020 URBACT III

The graph below shows the number of projects, partnerships and budget sizes per theme in the programming period 2014-2020, for a total budget of EUR 765,508,641 for 648 projects (Figure 65).

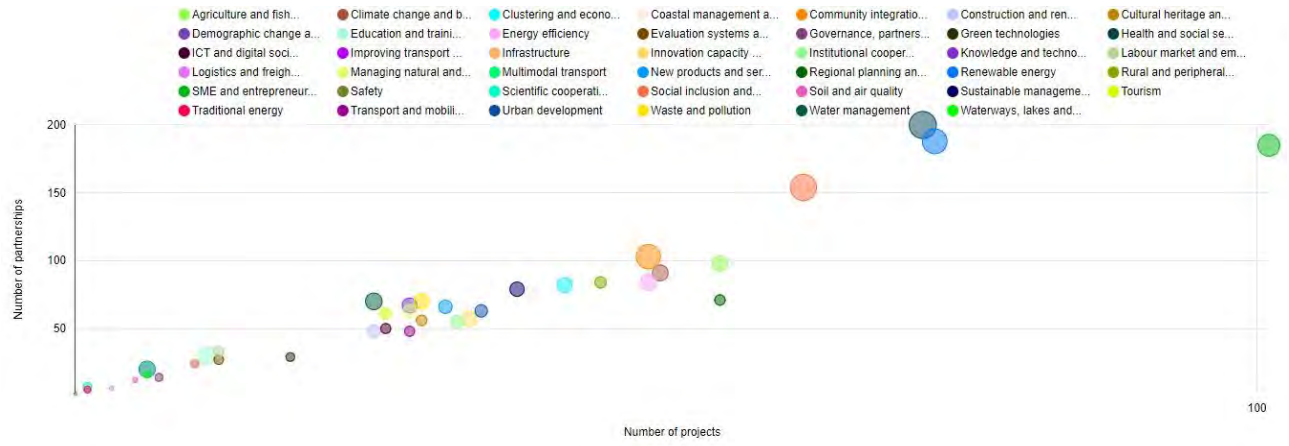


Figure 65. United Kingdom. Number of projects, partnerships and 2014-2020 budget sizes per theme. Source: *https://keep.eu/countries-and-regions/*

In the graph in Figure 66, the projects were selected from the Keep database by theme of interest in relation to SSF topics:

- tourism;
- sustainable management of natural resources;
- agriculture, fisheries and forestry;
- coastal management and maritime issues.

Out of a total of 648 projects, 138 related to the aforementioned topics for a total budget of EUR 108,630,972.

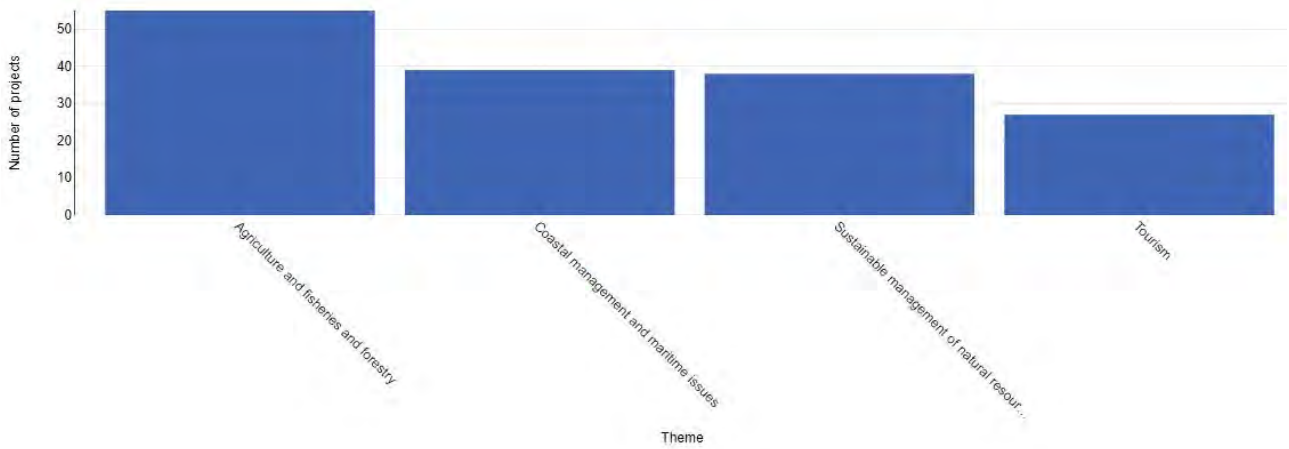


Figure 66. United Kingdom. Number of projects by theme. Source: *https://keep.eu/countries-and-regions/*

Agriculture, fisheries and forestry seemed to be the leading topics of the projects financed, followed by coastal management and maritime issues.

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