





## **ARIEL project cod.278**

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## **POLICIES BEST PRACTICES CATALOGUE**

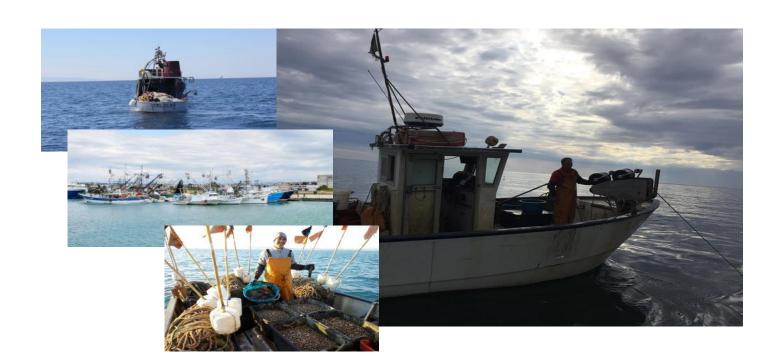
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### THE ARIEL PROJECT

ARIEL is a project co-financed by the INTERREG V B ADRION 2014-2020 Programme – Axis 1 Smart and innovative region (https://www.adrioninterreg.eu/).

ARIEL aims to promote technological and non-technological solutions for innovation speed-up and up take in small-scale fisheries (SSF) and aquaculture (AQ) among scientists-policy-makers-entrepreneurs, acting as a knowledge network and considering in a single frame the complex ecological, economic and societal challenges.





The **ARIEL partnership** is composed by 8 scientific and institutional organizations from 4 Countries:















Lead Partner: CNR-IRBIM Ancona (IT)

- 1. Marche Region, Region of Sicily (IT)
- 2. Institute of Oceanography and Fisheries (HR)
- 3. Public Institution RERA SD for Coordination and Development of Split Dalmatia County (HR)
- 4. Hellenic Centre for Marine Research (GRE)
- 5. Region of Western Greece (GRE)
- 6. Ministry of Agriculture and Rural Development (MEN)
- 7. University of Montenegro Institute for marine biology (MEN)

**Project duration:** 30 months (1.1.2018- 31.12.2020)

**Project budget**: € 1 249 234.50



### BACKGROUND

For smart growth, the ADRION Programme gives special attention to the promotion of innovation under the Blue Growth initiative that outlines important competitive advantages of the area. The ARIEL project focuses on speeding-up and transferring innovation in two key drivers for the Adriatic and Ionian Regions: the small-scale fisheries and aquaculture sector. Innovation may take different forms: technological, non- technological, organizational ... and a «new idea that proves successful in practice». In this context, and increased capacity of key innovation actors of small-scale fisheries and aquaculture to attract and develop innovation within regional system is a key challenge. Public administrations at national and local level can play their full role in this process by establishing the framework conditions for innovation up taking, accompanying the SSF and AQ operators from the innovation discovery process to their operations financing. In this pattern, the interactive engagement of local and transnational SSF and AQ actors promoted by ARIEL is essential.

Starting from the needs and challenges arisen from the SSF and AQ consultation at local and transnational level carried out within the project, the ARIEL partnership worked to identify and collect across Europe policies, measures and strategies that can serve as best practices for the setting-up of regional and transnational innovation system for the small-scale fisheries and aquacultures sectors. Those practices may also come from different sectors. Best practices serving the document scope relate to the following topics:

- ⇒ Approaches towards interactive engagement of stakeholders for innovation speed-up at EU and local levels
- ⇒ Supporting small-scale and aquaculture operators in accessing to funds and knowledge
- ⇒ Interregional cooperation
- ⇒ Knowledge networks and training

### WHAT IS A BEST PRACTICE?

The concept of best practices, in general, represents methods or techniques that have consistently shown results superior to those achieved with other means in a given situation and that could be adapted for other situations. This must be shown to work effectively and produce successful outcomes by the evidence provided by subjective and objective data sources.





### INTRODUCTION

### The EU Small -scale fisheries

The considerable role of small-scale fisheries (SSF) in the Mediterranean and Black Sea has long been recognized SSFs contribute about half of the world catches in terms of absolute amount and two-thirds of the fish destined for direct human consumption (FAO, 2015)<sup>1</sup>. EU fleets are dominated by SSF vessels, representing 85% of all fishing vessels and 40% of the employment in the fishing sector. In fact, SSF can be particularly important as a source of employment in remote coastal areas and as contributor to the local economy. Making up the overwhelming majority of the fishing fleet in this region, they contribute significantly to food security and provide valuable employment opportunities, particularly in vulnerable coastal communities. SSF also play a key role in maintaining local traditions and cultural heritage in the region, creating added value for other related sectors, such as the region's restaurant and tourism industries.

### SSF in Adriatic and Ionian Region

In this basin most SSFs exploit areas that can be reached in a few hours from the home harbour (Bastardie et al., 2017)<sup>2</sup>. Adriatic and Ionian SSFs are active full-or part-time throughout the year and use a wide range of fishing strategies that can be described in terms of target species, fishing gear, fishing grounds, and métiers. Changing resource availability involves frequent seasonal changes of gear and grounds. The wide habitat heterogeneity of the macro-region - where the seabed is mostly sandy and muddy in the North-western Adriatic and mostly rocky in rest of the Adriatic and most of Ionian - entails that SSFs employ a variety of passive gears during the year, including gillnets, trammel nets, and traps, to catch a pool of target species in coastal areas (Grati et al., 2010<sup>3</sup>; Fabi & Grati, 2008<sup>4</sup>).

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<sup>&</sup>lt;sup>1</sup> FAO, 2015. FAOSTAT. Food and Agriculture Organization of the United Nations, Rome, Italy.

<sup>&</sup>lt;sup>2</sup> Bastardie et al., 2017. Spatial planning for fisheries in the Northern Adriatic: working toward viable and sustainable fishing. Ecosphere. <a href="https://doi.org/10.1002/ecs2.1696">https://doi.org/10.1002/ecs2.1696</a>

<sup>&</sup>lt;sup>3</sup> Grati et al., 2010. Age and growth of the black scorpionfish, *Scorpaena porcus* (Pisces: Scorpaenidae) from artificial structures and natural reefs in the Adriatic Sea. Scientia Marina 4: 677-685.

<sup>&</sup>lt;sup>4</sup> Fabi & Grati, 2008. Selectivity of gill nets for *Solea solea* (Osteichthyes: Soleidae) in the Adriatic Sea. Scientia Marina 2: 253-263.





As briefly outlined before, the ARIEL partnership carried out a series of SSF and AQ stakeholder consultations and auditing activities in order to identify the needs and challenges of these sectors at local and transnational level through the implementation of a SWOT analysis. This enabled us to detect common threats and weaknesses as well as strengths and opportunities, which were subsequently used as a starting point for the identification and collection of across-Europe policies, measures and strategies that can serve as best practices for the setting-up of regional and transnational innovation systems for the SSF and AQ sectors and which are presented in this catalogue.

The results of the ARIEL SWOT analysis for the SSF Sector in ADRION Regions is shown below:

### The SSF simplified SWOT table in ADRION regions

STRENGTHS	WEAKNESSES
<ul> <li>⇒ Long tradition of SSF in the region</li> <li>⇒ Low environmental impact</li> <li>⇒ Low impact on resources</li> <li>⇒ Short supply and distribution chain</li> <li>⇒ Generally high quality of landings/products</li> </ul>	<ul> <li>⇒ Vessel age</li> <li>⇒ Low level of cooperation</li> <li>⇒ Illegal fishing</li> <li>⇒ Differences in SSF products pricing in different areas</li> <li>⇒ Low human capital</li> <li>⇒ Lack of interest/capability to use innovative technologies/modern equipment</li> <li>⇒ Lower level of monitoring</li> </ul>
OPPORTUNITIES	THREATS
<ul> <li>⇒ Growing consumer demand for fisheries products</li> <li>⇒ Traditional and cultural heritage protection</li> <li>⇒ Improvement in SSF operatives cooperation</li> <li>⇒ Modernisation and improvements in fishing gear and introduction of new technologies</li> <li>⇒ Cooperation with scientific/research institutions</li> </ul>	<ul> <li>⇒ Overexploitation from other metier and/or foreign vessels</li> <li>⇒ Pollution through anthropogenic activities</li> <li>⇒ Lingering effects of economic crisis, low access to credit, high input cost (fuel)</li> <li>⇒ Increased competition from other (EU/non-EU) markets</li> <li>⇒ Growing number of top predators</li> </ul>

(ARIEL, 2018)





### The EU Aquaculture

Aquaculture is the fastest growing animal food producing sector in the world and is an increasingly important contributor to global food supply and economic growth (STECF, 2016)<sup>1</sup>. Aquaculture production in EU reached 1.33 million tonnes and EUR 4.51 billion in 201 (STECF, 2016). This corresponds to a 4% decrease from 2012 production figures. Employment in the EU aquaculture sector is about 69,700 people. Based on the data available for both 2012 and 2014, the employment increased by 1% during this two-year period. The sector is dominated by SMEs; the 90 % of which are microenterprises, most of which are concentrated in Greece, Spain, France, Italy and the United Kingdom, making up 77% in volume and 76 % in value of EU totals (STECF, 2016; DG MARE website<sup>2</sup>). The number of enterprises with more than 10 employees has increased from 1,040 in 2012 to 1,230 in 2014 corresponding to an increase of 21% (STECF, 2016).

### Aquaculture in the Adriatic and Ionian Region

Aquaculture is a key sector for blue growth in the Adriatic and Ionian Region. The growth in aquaculture production is mainly stemming from the optimum seed production techniques for European seabass and gilthead seabream and to the application of modern farming techniques. In the last decades, the development of intensive offshore aquaculture including the production of mussels has increased drastically in the region. Aquaculture is a well-established activity in countries like Greece and Italy, but also a promising emerging industry in the rest of the ADRION countries. The total production value of aquaculture in ADRION countries is estimated at 968,743 thousand \$ (FAOSTAT, 2016³). The lion share of this value belongs to Greece (59%), followed by Italy and Croatia (31% and 9%, respectively). The rest of the countries share only 0.5% of production value. There are 8 species that contribute to the 98.4% of the production value. Among them, Gilthead seabream and European seabass are almost equally contributed to about 74% of production value. Japanese carpet shell and Mediterranean mussels are ranking in the 3rd and 4th place with 11% and 7% share, respectively. Finally, Atlantic bluefin tuna, Red porgy, Meagre and grooved carpet shells present remarkable shares in the total production value with an aggregated share of 7% (ARIEL, 2018).

On the next page the results of the ARIEL SWOT analysis for the AQ Sector in ADRION Regions are shown:

<sup>&</sup>lt;sup>1</sup> STECF, 2016. Eds: Simmonds J.,Osio G.C. and Mannini A. Scientific, Technical and Economic Committee for Fisheries (STECF)- Mediterranean assessments part 1 (STECF-16-22). Publications Office of the European Union

<sup>&</sup>lt;sup>2</sup> DG MARE website: <a href="https://ec.europa.eu/info/departments/maritime-affairs-and-fisheries">https://ec.europa.eu/info/departments/maritime-affairs-and-fisheries</a> en

<sup>&</sup>lt;sup>3</sup> FAOSTAT, 2016. <a href="http://www.fao.org/statistics/en/">http://www.fao.org/statistics/en/</a>





## The AQ simplified SWOT table in ADRION regions

STRENGTHS	WEAKNESSES
<ul> <li>⇒ Active and dynamic sector         <ul> <li>Increased efficiency</li> <li>Participation in EU programs and projects</li> <li>Foreign investments</li> <li>Increased exports</li> <li>Active participation of actors in policy measures' public consultations</li> <li>High level of exports</li> </ul> </li> <li>⇒ Important economic sector for local communities         <ul> <li>Provide income and employment</li> <li>Support rural/regional development in areas with limited economics alternatives</li> </ul> </li> <li>⇒ Many entrepreneurs are relatively open for new ideas and clustering/networking</li> <li>⇒ Close collaboration with regional authorities</li> <li>⇒ Optimal coastal climatic conditions and geographical characteristics</li> <ul> <li>Quality of production</li> <li>Fast growth of spawn/juveniles</li> <li>Potential for new cultural species</li> </ul> <li>⇒ Improved public perception / Acceptance by locals</li> </ul>	<ul> <li>⇒ High level of risk on investment</li> <li>⇒ Short-term/opportunistic thinking</li> <li>⇒ Financial distress</li> <li>○ Threaten (economic) sustainability/resilience</li> <li>○ Discourage investments on equipment and human capital</li> <li>⇒ Hard price competition among enterprises in the sector</li> <li>⇒ Negative environmental impact of aquaculture</li> <li>○ Introduction of alien species and new diseases</li> <li>○ Discharge of organic matter and nutrients</li> <li>○ Release of chemicals</li> <li>○ Introduction (intentional or unintentional) of alien species</li> </ul>
OPPORTUNITIES	THREATS
<ul> <li>⇒ Low competition by alternative activities</li> <li>⇒ Growing consumer demand for fish and fisheries</li> <li>⇒ EU / National Policies</li> <li>∘ Measures supporting innovation uptake, modernization &amp; clustering/networking</li> <li>∘ Research Projects</li> <li>∘ Join in FLAGs</li> <li>∘ Raising awareness on associating schemes like clusters and producers' organizations</li> <li>∘ Support supplementary activities (e.g. tourism)</li> <li>∘ Public commitment to support the sector development</li> <li>⇒ Collaboration with research/academia</li> </ul>	<ul> <li>⇒ Hard global competition         <ul> <li>Need for organizational innovations</li> <li>Need for new marketing tools</li> <li>Difficulties to meet consumers' demand</li> <li>Human capital deficiency</li> </ul> </li> <li>⇒ Not well-adjusted EU-policy measures/actions</li> <li>⇒ Administration burdens / Bureaucratic obstacles / complex, multitudinal and partially overlapping legislation.</li> <li>⇒ Prolonged financial crisis</li> <li>⇒ Low fish prices</li> <li>⇒ No consistency in policy design</li> <li>⇒ Climate change</li> <li>⇒ Environmental degradation stemmed from different economic activities</li> </ul>

(ARIEL, 2018)





# BEST PRACTICES TYPE: APPROACHES TOWARDS INTERACTIVE ENGAGEMENT OF STAKEHOLDERS FOR INNOVATION SPEED-UP AT EU AND LOCAL LEVELS

Stakeholder engagement and participatory approach are ideally recognized as a challenge for achieving good governance at EU and local levels. Other than for the simplest of tasks, policy design requires continuous collaboration with a range of stakeholders at multiple political, policy-making, managerial and administrative levels as well as the engagement of local "downstream" implementation actors such as end users, frontline staff and a range of local service agencies. Ansell et al. (2017) emphasize the need for policies to be designed in a way that "connects actors vertically and horizontally in a process of collaboration and joint deliberation.

### The Community-Led Local Development Approach

The 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 arises from the success of the LEADER bottom -up approach in EU over the past 20 years. Since 2007, local development has also been used within the European Maritime and Fisheries Fund (EMFF) to support the sustainable development of fishing communities, shown to have a great 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 Fisheries Local Action Groups (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 organizations and local projects based on a Local Strategy addressing 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.





### MANK FLAG EXPERIENCE: OPEN – WATER MUSSELS FARM IN KERTEMINDE BAY

**Country:** Denmark





<u>Topic addressed and policy context</u>: EMFF 2014/2020. Adding value to aquaculture, business support, employment

### **Description:**

The Mank FLAG launched a project for an open-water mussel's farm to tackle the decline of fishing activities that is affecting the Kerteminde Bay. Built on a study conducted by a local research centre, showing that the waters surrounding Kerteminde provide optimal conditions for raising mussels, on 2018, the Kerteminde Organic Mussel Farm established a pilot farm to test different mussel's production methods. The goal is to produce high quality mussels in less than one year instead of two. The pilot farm is expected to be fully operational by 2020 with total of 400 full-time equivalent jobs. The project involves different local actors: from production to processing and sales business as well as research centres.

### **Budget:**

FLAG Grant: € 53.600 EMFF contribution: €24.900

Public contribution (national): €28.700 Beneficiary contribution: € 69.400

<u>More info at:</u> https://webgate.ec.europa.eu/fpfis/cms/farnet2/on-the-ground/good-practice/projects/denmarks-first-open-water-mussel-farm\_en





# BALTIC SEA COAST FLAG EXPERIENCE: DEVELOPMENT AND TESTING OF ENVIRONMENTALLY-FRIENDLY FISH TRAPS







**Country:** Germany

<u>Topic addressed and policy context</u>: EMFF 2014/2020. Sustainable fisheries, adding value to local catch, promotion of SSF, new technologies.

### **Description:**

The Baltic Sea Coast FLAG in cooperation with the NGO NABU and other local fishermen developed a joint project on the use of an innovative baited fish trap for the fishing grounds of the Probstei Coast in the aim of reducing unwanted bycatch of marine mammals and birds. During the test phase, 30 of the alternative fish traps were used for day-to-day fishing. Their new conical shape also makes them stackable. Both the conventional gillnets and new fishing gear are being used at the same time so that efficiency can be compared. An accompanying scientific programme is testing a number of variables, such as catching positions, water depth, light attraction and species of bait (herring, sprat and sand eel). This is accompanied by a monitoring programme and a protocol for the fishermen.

### **Budget:**

FLAG Grant: € 11.316 EMFF contribution: €9.618

Public contribution (from 3 municipalities): € 1.698

<u>More info at:</u> https://webgate.ec.europa.eu/fpfis/cms/farnet2/on-the-ground/good-practice/short-stories/fish-traps-alternative-gillnet-fishing-german-baltic-sea\_en





GALEB FLAG EXPERIENCE: "FISHERMEN RECOMMEND"

QUALITY BRAND IN DALMATIA

**Country:** Croatia



**Topic addressed and policy context**: EMFF 2014/2020. Added value to fisheries, traceability.

### **Description:**

In Dalmatia, the Galeb FLAG provided grants local fishermen and restaurants to create the 'Fishermen recommend' scheme and quality label, endorsing local fish products. The aim is to support the local fishermen in selling their products at a better price as well as in promoting the region as tourist destination with exceptional gastronomy thanks to its quality fish products. The project is to produce quality labels that will be assigned to catering facilities according to the recommendation of fishermen and shellfish growers. To obtain the label, restaurants shall meet three main requirements:

- Purchase products that are part of the scheme directly from the fishermen
- Have fish as a prominent product on their menu
- Offer at least a few dishes with undervalued species, such as anchovy or sardine, usually unpopular among tourists despite their high nutritional value.

### **Budget:**

FLAG Grant: € 5.000

EMFF contribution: € 4.250

Public contribution (national): € 250

<u>More info at</u>: https://webgate.ec.europa.eu/fpfis/cms/farnet2/on-the-ground/good-practice/short-stories/new-quality-label-croatia-promotes-restaurants-serving\_en





# FLAG SATU MARE EXPERIENCE: SUSTAINABLE DEVELOPMENT OF FISHERIES

Country: Romania



**Topic addressed and policy context**: Sustainable development of the fisheries sector in the FLAG Satu Mare region

### **Description:**

The SATU MARE Flag comprises a local development strategy in the fisheries sector of the Satu Mare county in the northwest of Romania. Apart from its local municipalities, the Satu Mare FLAG members include five fish farms, four organisations involved in recreational fishing, three accommodation providers, an accountancy firm and the local LEADER LAG. The FLAG's strategy is focused on sustainable development. It pursues the development and diversification of economic activities, the development of tourism in relation to existing natural resources, the development of aquaculture, and the provision of further educational opportunities in the area. Objectives:

- Sustainable development of the fisheries sector in the FLAG Satu Mare region.
- Boosting economic growth through long-term investments.
- Strengthening the competitiveness of the region.
- Development of various economic activities in the fisheries sector, including fishing tourism.
- Conservation and protection of the environment.
- Promotion of the region and its natural and cultural heritage.
- Improving the quality of life of the region's inhabitants.

Until date, the operation of the FLAG has increased the level of cooperation between public and private sector stakeholders. It has designed and implemented a local development strategy in the fisheries sector to meet the needs of the region and increase its productivity.

#### **Budget:**

The project is funded through the Operational Program for Fisheries and Maritime Affairs and has received active support from public authorities. Private investments amount to more than €860 000, in addition to €2 000 000 in funding.

More info at: https://www.flagsatumare.ro





### The EIP-AGRI approach to innovation: The Operational Groups

Smits et al. (2010)¹ distinguish two views on innovation policy: the systems of innovation approach versus the macro-economic approach. The macro-economic approach is the linear model of innovation from (basic) research via R&D to a commercial application. The main policy instrument is science or research policy. The systems of innovation approach focus on the interaction between different stakeholders in the innovation process. The main rationale is that there are systemic (network) problems in the system or the creation of new innovation systems. Therefor an innovation policy is needed. However, that innovation policy makes choices and is much more context specific.

Under the European Innovation Union context, on 2012 the European Commission launched the European Innovation Partnership for Agricultural productivity and Sustainability (EIP-AGRI). EIP is a new approach to research and innovation, helping to pool expertise and resources by bringing together public and private sectors at EU, national and regional levels, combining supply and demand side measures. The EIP-AGRI aims to foster a competitive and sustainable agriculture and forestry sector that "achieves more from less". It contributes to ensuring a



steady supply of food, feed and biomaterials, and to the sustainable management of the essential natural resources on which farming and forestry depend, working in harmony with the environment. To this, the EIP-AGRI brings together innovation actors (farmers, advisors, researchers, businesses, NGOs, etc) and helps to build bridges between research and practice. The EIP-AGRI adheres to the "interactive innovation model" which brings together specific actors (e.g. farmers, advisors, researchers, businesses, etc) to work together in multi-actor projects to find a solution for a specific issue or developing a concrete opportunity. In these so-called Operational Groups, new insights and ideas will generate and existing tacit knowledge will be built into focused solutions that are quicker put into practice. Such an approach will stimulate innovation from all sides and will help to target the research agenda. The number of Operational Groups that have joined the EIP-AGRI network is constantly growing. To date more than 1000 Operational Group projects are already up and running. The new approach has been included in to the rural development policy 2014-2020, the Rural Development Programmes:

- may provide funding to set up and run 'Operational Groups' working on pilot projects to develop new products, to cooperate among small operators, to promote products
- can support knowledge transfer, advisory services, investments in physical assets and the establishment of networks or innovation support services.

<sup>&</sup>lt;sup>1</sup> Smits et al. 2010. A system-evolutionary approach for innovation policy. In R. Smits, S. Kuhlmann, & P. Shapira (Eds.), The Theory and Practice of Innovation Policy. An International Research Handbook: An International Research Handbook (pp. 417-448). Cheltenham, UK: Edward Elgar Publishing. https://doi.org/10.4337/9781849804424





In fact, Innovation Support Services and brokering play a crucial role in getting many worthwhile projects off the ground.

Moreover, the Horizon 2020 calls include in particular several opportunities to support multinational innovation projects in agriculture, through thematic networks and through multi-actor projects involving different types of actors such as farmers, advisors, researchers, and agribusiness.

### Operational Groups and LEADER Local Action Groups (LAGs)

OG and LAGS have in common that they capture ideas from interested actors and foster the setting up of projects. However:

- LAGs act on the basis of a comprehensive 7-year local development strategy and need to
  work on the basis of a socio-economic balanced partnership. LAGs will approve several
  projects to implement this strategy.
- *EIP-AGRI Operational Group* is *built around a single innovation project*, which is targeted towards finding a solution for a specific issue. *Project implementation is limited to a few years*, to the time it takes to develop the innovative solution/opportunity. The *Operational Group is not bound to a specific territory or an upfront fixed strategy* and it exists only to carry out that project. Its composition is variable and flexible: it involves the mix of partners best tailored to the project objectives.





## INNOVARCHE - INNOVATION SUPPORT SERVICE IN MARCHE REGION

nnova marche

**Country**: Italy

<u>Topic addressed and policy context</u>: Rural Development Plan 2014/2020 of Marche Region. Innovation speed-up and uptake in the agro-food sector.

### **Description:**

Innovation support services', and in particular 'innovation brokering', can play a crucial role in getting worthwhile projects off the ground by bringing people together. Many individuals and organisations across Europe are offering support to Operational Groups. This can be in the form of brokerage in the early stages of a project: identifying partners, clarifying objectives, and even helping to write the funding application. Innovation support services may organise brokerage events or set up online platforms where people can meet and begin to make plans for their innovation project. Innovation support can then also be in the form of facilitation during the lifetime of the project. Innovation brokers takes many forms: from single experts to agencies appointed for the purposes. Under the Marche RDP 2014/2020 Measure 20 "Technical assistance", the Marche Region Managing Authority appointed its Regional Agency for Agrofood sector services – ASSAM – for acting as public innovation broker with the following tasks:

- Facilitate the regional actors mobilization for innovation speed-up
- Inform and communicate the financial opportunities for funding innovative projects
- Support the innovation discovery process, ideas generation and the OG setting-up around these ideas and solutions
- Accompanying the OG setting –up by means of bottom-up initiatives for ideas and knowledge circulation, networking and partnering
- Provide assistance to the OG setting –up and to the activities monitoring

To this, the INNOVAMARCHE common platform has been set-up by ASSAM, serving as virtual place where business, researchers and institution can exchange knowledge, information as well as working tool for the institutions to monitor the OG activities, providing on –time support. From 2016, ASSAM is accompanying the process that led to the setting –up of 49 OG at regional level for a total contribution of € 15.932.885.

More info at: https://www.innovamarche.it/





# <u>BEST PRACTICES TYPE</u>: SUPPORT TO SMALL-SCALE FISHERIES OPERATORS: KNOWLEDGE, FUNDS, INVOLVEMENT IN DECISION-MAKING

The legislative proposal by the European Commission proposal on the European Maritime and Fisheries Fund (EMFF) Regulation for the programming period 2021-2027 - that would amount to € 6.140.000 000 - includes an entire section devoted to small scale fisheries with two key articles on action plans and investments (Ruciński and O'Riordan, 2018)<sup>1</sup>. Within their regional Operational Programmes, all Member States must submit an action plan for small-scale coastal fisheries. In the current EMFF, this obligation applies to Member States with more than 1000 small-scale fishing boats and is very generally worded. Furthermore, the Commission proposal calls for small scale fisheries to be given "preferential treatment through a 100% aid intensity rate, including for operations related to control and enforcement, with the aim of encouraging sustainable fishing practices." This enormously raises the importance of consultations in respect of shaping each national Operational Programme, and for SSF to fully engage in such consultations (Ruciński and O'Riordan, 2018)<sup>1</sup>. Despite the financial opportunities for supporting small-scale fisheries in the EFF and EMFF, some obstacle hindered the uptake of the related measures such lack of interest—i.e. no or limited proposals were submitted for funding approval, lack of organization, administrative burden. Fishers reportedly lacked access to all the information required in order to capitalise on funding. It is therefore suggested that the fishers concerned did not receive enough technical support (DG MARE, 2011)<sup>2</sup>. According to the Research for PECH Committee - Small-scale Fisheries and "Blue Growth" in the EU, there is a limited knowledge concerning the Blue Growth strategy amongst SSF stakeholders, which shows the need for better communication and a more integrated approach. The main concerns were generally in the area of the CFP and the current struggle of SSF, primarily due to limited allocation of quota species and the current overexploitation of many stocks (Policy Department for Structural and Cohesion Policies, European Parliament, 2018). Through its structural funds the European Union (EU) has invested €1.17 billion in the aquaculture sector over the period 2000-2014. However, the ex-ante evaluation of EFF outlined that there were no clear linkages between the use of EFF and improvements in the economic performance or productivity and the measures taken did not provide sufficient results. The EMFF allocated to about the 20% of funds to promote sustainable aquaculture in line with the MS multiannual strategic plans.

<sup>1</sup> Ruciński M. and O'Riordan B..2018. A Blue Revolution in the Making and a chance not to be missed for small-scale fishers!. https://lifeplatform.eu/new-european-maritime-and-fisheries-fund/

<sup>&</sup>lt;sup>2</sup> Blomeyer & Sanz: Kim Stobberup, María Dolores Garza Gil, Aude Stirnemann-Relot, Arthur Rigaud, Nicolò Franceschelli, Roland Blomeyer. 2017. Research for PECH Committee - Small-scale Fisheries and "Blue Growth" in the EU. DG for Internal policies.

<sup>&</sup>lt;sup>3</sup> Guillen at.al, 2019. Aquaculture subsidies in the European Union: Evolution, impact and future potential for growth. Marine Policy 104: 19-28.





For the period 2014/2020, the national expenditure is expected to more than double while the EU expenditure increase more than 3-fold compared to the two previous programming periods (Guillen at.al, 2019. However, to address and promote an efficient use of EU funds, technical support services were established at national and local level.

### **BIM - IRELAND'S SEAFOOD DEVELOPMENT AGENCY**

**Country:** Ireland



<u>Topic addressed and policy context:</u> EMFF 2014/2020, national government. Development of sustainable and competitive seafood industry

### **Description:**

BIM is the Irish State Agency responsible for developing the Irish seafood industry. BIM's mission is to support and enable an increase in value creation of a sustainable Irish seafood sector across the supply chain, from catch to consumer. BIM provides several services:

- Advisory on new fishing and fish farming opportunities using technical innovation, and gear modifications and other Technical Conservation Measures (TCMs) and trials
- · Advisory on product development, improving efficiency, labelling
- Advisory on environmental sustainability
- Training on fishing, fish farming and seafood processing
- Grants across the seafood industry

BIM also set –up a Seafood Innovation Hub offering the opportunity to test and trial a company's innovative product and process ideas in a dedicated facility, before committing to full commercialisation and capital investment costs.

BIM's Seafood Innovation Hub has an overall space of 768sqm, including the following state-of-the-art facilities:

- Product processing
- Product development kitchen
- Innovation & product concept room
- Two business incubation units
- Reception and administration

More info at: http://www.bim.ie/





# PILOT PROJECT "EUROPEAN ASSOCIATION OF FISHERMEN IN THE BLACK SEA" - SUPPORT MEASURES FOR SMALL-SCALE FISHING

Country: Bulgaria, Romania

Topic addressed and policy context: DG MARE call for proposals "Support measures for SSF" (2014). 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

### **Description**:

The project, promoted by SP Consult BG, has been co-financed under the DG MARE call MARE/2014/04 "Support measures for small-scale fishing" with the aim of increasing the awareness and the role of SSF in the future policy making decisions on national and EU levels by integrating good ecologically-friendly practices in the Black Sea Region. Among its activities, the project included the SSF representatives training in the following areas:

- how to make policy
- better use of the good practices implemented on EU level;
- how to make SSF organizations more important and considerable for the future of the Black Sea region
- the role of Advisory Councils (AC) on EU level;
- which are the existing, best practices in the area and which are the most suitable for the Black Sea region

#### **Budget:**

Total amount of the project: € 177 767

Total amount of the EU contribution: € 159 990

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





### "SINIS" EUROPEAN INFO DESK



**Country:** Italy

<u>Topic addressed and policy context:</u> EMFF 2014/2020. Business support, access to funds for SSF and AQ operators.

### **Description:**

The European info desk "Sinis" is promoted by the Italian LAG and FLAG "Pescando" (Sardinia Region) with the aim of improving the knowledge about EU, national and regional programming instruments so to facilitate the access to funding opportunities for green and blue economy operators. The desk provides customized assistance to identify and apply to the most suitable tools for financing projects and ideas of local operators. The info desk web-site provides searching tools to find information about previous and forthcoming calls, deadlines and news.

More info at: http://www.sportelloeuropasinis.it/





### **BEST PRACTICES TYPE: INTERREGIONAL COOPERATION**

In addition to the EMFF, which is the financial instruments of the EU maritime and fisheries policies, the EU offers several funding opportunities for the promoting sustainable use of marine resources, innovation speed-up and exchange in regional system. Within the EMFF, the European Commission delegates the Executive Agency for Small and Medium-sized Enterprises (EASME) the implementation of part of the EMFF actions under direct management, representing a budget of €340 million for the programme period. EASME aims at supporting policy development by the European Commission and implemented by way of 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 within and beyond EU-waters, covering environmental, economic or social aspects
- ⇒ fisheries control and enforcement within a regional perspective to foster co-operation between Member States

### THE INTERREG PROGRAMMES

The European Territory Cooperation, also called "Interreg", provides a framework for the implementation of joint actions and policy exchanges between national, regional and local actors from different Member States. Interreg built around three strands of cooperation: cross-border (Interreg A), transnational (Interreg B) and interregional (Interreg C). The 2014-2020 period of Interreg is based on 11 investment priorities laid down in the ERDF Regulation contributing to the delivery of the Europe 2020 strategy for smart, sustainable and inclusive growth. Within the Adriatic and Ionian regions, previous and current INTERREG programmes co-financed several transnational and cross-border projects contributing to a common and shared governance for environmental protection, sustainable use of marine resources. In particular, some of the projects currently under implementation result from a capitalization pattern, which includes making the best use of those good practices developed in the previous initiatives as well as the exploitation of the networks created.





### **BEST PRACTICES TYPE: SPATIAL PLANNING**

Reducing maritime conflicts between different users and sectors, ensuring environmental protection and increasing the cross-border cooperation for a sustainable and effective management of marine spaces are key challenges of EU, national and regional policies. The EC launched on 2007 the Integrated Maritime Policy<sup>1</sup> (COM, 2007) 575 final and SEC (2007) 1278) which addresses interactions between all EU policies and maritime. The Integrated Maritime Policy constitutes the overall framework for integrated action in the maritime field, and its environmental pillar, the Marine Strategy Framework Directive (Directive 2008/56/EC of the European Parliament and of the Council of 17 June 2008) constitutes the general basis for implementing an ecosystem approach to the marine environment. On 2014, EU have adopted legislation to create a common framework for maritime spatial planning in Europe outlined in the Directive 2014/89/EU of the European Parliament and of the Council. Within the fisheries sector, conflicts in the use of the sea between marine nature conservation and fishery interests are common and increasing. Historically, fishing (along with shipping) is the sector whose spatial claim has the longest tradition for marine areas (Hassler et al., 2017)<sup>2</sup>. Conflicts over access exist between existing or new marine uses. Having a highly diversified sector (variety of gear types and specific sea uses, fishing species and types of vessels) could be positive for dealing with potential spatial barriers. However, such fragmentation makes fishers a weaker party relative to other stakeholders, limiting their ability to influence the process in an MSP stakeholder exchange. From the mapping, activities carried out on SSF under the ARIEL project, also in the ADRION area spatial conflicts emerged as a weakness, closely linked to a poor or lacking stakeholder's involvement in co-decision and co-management process and implementation. Since the management of marine areas is complex and involves different levels of authorities, economic operators and other stakeholder, Member States shall ensure a participatory approach in preparing their maritime spatial plans which identify the spatial and temporal distribution of relevant existing and future activities and uses in their marine waters. Member States shall consider economic, social and environmental aspects to support sustainable development and growth in the maritime sector, applying an ecosystem-based approach, and to promote the coexistence of relevant activities.

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<sup>&</sup>lt;sup>1</sup> Integrated Maritime Policy https://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2007:0575:FIN:EN:PDF

<sup>&</sup>lt;sup>2</sup> Hassler et al., 2017. Ambitions and Realities in Baltic Sea Marine Spatial Planning and the Ecosystem Approach. BONUS BALTSPACE D2:2. Policy and Sector Coordination in Promotion of Regional Integration. Huddinge: Södertörn University.





# DISPLACE - A SPATIAL MODEL OF FISHERIES TO HELP MARITIME SPATIAL PLANNING

DISPLACE
A spatial model of fisheries to help maritime spatial planning

Sea Basin: Adriatic Sea

<u>Topic addressed and policy context:</u> the coordination and integration of different spatial activities in marine areas with the purpose of reducing potential inefficient management and detrimental use of space in accordance with the aims of the EU Marine Spatial Planning Directive (MSPD; regulate uses of the marine environment), the EU Common Fishery Policy (CFP; apply MSY-approach and minimizing effect of fishing on the marine ecosystem), and the EU Marine strategy Framework Directive (MSFD; achieve Good Environmental Status for fish and shellfish stocks in EU waters.

### **Description:**

The DISPLACE tool is modelling platform for spatial fishery planning and effort displacement developed by the Technical University of Denmark, Institute for Aquatic Resources (DTU-Aqua). It has been adopted and tested in Adriatic Sea on the Italian & Croatian demersal fisheries under the ECOSEA (co-financed under the IPA Adriatic Programme 2007-2014) and ECOAST (cofinanced by COFASP-ERAne), then it has been capitalized in the DORY project (co-financed by INTERREG VA Italy-Croatia 2014-2020). The model is spatial explicit and can be adapted to the spatial and temporal scales that matter to policy makers. DISPLACE is a spatial impact assessment tool that can be used to evaluate the consequences of spatial fisheries plans on the sustainability and the economy of fisheries. By analysing fishers' decision making consequences and predicting likely responses of fisheries to spatial management options, the DISPLACE modelling approach is assessing whether actual fishing opportunities and technical management measures (e.g. regulation of gears, spatial restriction for fishing, etc.) perform well by ensuring sustainable fishing and food provision to the value chain without affecting important fisheries economics. In this context DISPLACE now provides scenario-based assessment and projections of the amount of income generated by national fishing fleets (or other finer fleet segments level economics and fishing harbour communities) over months, quarters and years as long as national input data are available. The model uses available information into a form that reflects the dynamic of the commercial harvested stocks and the associated fisheries, and allows the yield and the response of the populations of fish to different harvesting strategies and spatial plans to be estimated. DISPLACE allows contributing to marine spatial planning for evaluating the effects on exploited stocks and fisheries by conducting impact assessment on stocks and fisheries of marine management measures, and ultimately incorporating other utilization of the sea such as energy production, transport, or recreational use e.g. offshore windmill farms, large marine constructions, NATURA 2000 areas, transport routes of commercial shipping, pipelines, cables.

More info at: <a href="https://displace-project.org/blog/">https://displace-project.org/blog/</a>





SPATIAL PLANNING: DESIGNATED AREAS FOR ORGANIZED AQUACULTURE

**Country**: Greece



<u>Topic addressed and policy context:</u> Development of Designated Areas for Organized Aquaculture in Greece.

### **Description:**

The basis for the development of Designated Areas for Organized (Intensive) Aquaculture (D.A.O.A.) in Greece was laid with the framework of Decision No 17239/02 of the Ministry of Environment, Regional Planning & Public Works. This decision specifies the supporting documents, procedures and conditions for the location of D.A.O.A. in accordance with the guidelines of the Special Framework for Spatial Planning and Sustainable Development for Aquaculture for the location of marine aquaculture activities at national level, which came into effect with Joined Ministerial Decision (JMS) No 31722/11. The overall goal of the establishment of D.A.O.A.s is to reduce operational cost of production by concentrating AQ production units in specific areas, and to create favourable conditions for sustainable expansion of AQ activities. Each D.A.O.A. is headed by a responsible Management Body which represents the different local stakeholders (AQ producers) of the D.AO.A.

With the aforementioned JMS, potential areas for organized intensive aquaculture in Greece are divided into five (5) categories (A-E) by considering their existing level of aquaculture development, future development potential and the cultural and environmental status of the surrounding areas. Furthermore, in order to effectively implement the planning and organization of D.A.O.A. and to address the possible impact of their implementation, the JMS sets out a variety of measures and guidelines, including the installation and operation of monitoring systems and programs for production, environmental parameters and product quality, the collection and management of animal by-products resulting from AQ activities, the promotion of innovation, research and technological development in Greece through functional structures of guidance, support, monitoring and exploitation of the results by those involved, and the strengthening and promotion of products produced in existing and new markets, by the management bodies of the DA.O.A.s. There are currently 24 proposals for D.A.O.A. in Greece in various stages of development, of which 3 are located in the Region of Western Greece (RWG). More specifically, the 3 D.A.O.A. of RWG are located in areas of category A, which are already highly developed in terms of aquaculture activities and with a significant concentration of existing production units. They are further characterized by particularly favourable marine environmental conditions for the development of aquaculture, good connectivity to urban centres and/or other centres of human consumption, and favourable conditions for development of aquaculture and related activities in terms of prohibitive and/or competitive uses. The final approval for the establishment of the D.A.O.A. by the responsible Ministries is expected in the fall of 2021.

More info at: https://www.poay-echinadon.gr

Greek Government Gazettes ФЕК 1175B/2002 & ФЕК 2505B/2011





### **BEST PRACTICES TYPE: IMPROVED SUSTAINABILITY OF THE SEAFOOD PRODUCT**

As global demand for seafood continues to grow, the fishing industry is under intense pressure to enforce responsible fishing practices to avoid overexploitation and damage to marine ecosystems. At the same time, the rapidly growing aquaculture industry, which now supplies more than half of seafood consumed today, must find ways to better manage its fish farms and hatcheries to promote food safety and animal welfare, while reducing its negative environmental and social impacts (Bureau Veritas)<sup>3</sup>. In the last decade, a range of drivers within the seafood sector has incentivized the application of traceability to issues beyond food safety and inventory management. Some of the issues motivating the expanded use of traceability within the global seafood sector include: increased media attention on the legal and social risks within some seafood supply chains, governmental traceability requirements, private-sector sustainability commitments, and others (Lewis and Boyle, 2017)<sup>4</sup>. Traceability information is increasingly leveraged for marketing and promotion purposes. Consumers are becoming more attracted to the story behind their seafood than the sustainability or nutritional aspects of the products, and some companies are tapping into opportunities for point-ofsale story telling about a product's source. Although market infrastructure is in place to connect the technology to users, there is no policy to clarify the standards required, the data rules that apply and the groups that must meet these requirements. Policy makers are now making efforts to move seafood traceability to the next level. The EU has implemented laws making food traceability, including seafood, compulsory. Additionally, it has implemented vessel registry and catch certificate requirements to combat IUU challenges. Recent EU traceability regulations address documentation of product origin, whole chain transparency and counteracting illegal trade (Jostrom and Edwards, 2015) <sup>5</sup>.In this context, certification of traceability and quality of seafood is becoming an acceptable cost for companies. Seafood certifications, or eco-labels, aim to incentivize seafood producers to act in a sustainable manner and, on the other hand, they help consumers in responsible buying. Consortia and producers are adopting eco-friendly certification and in some regions, such as the Marche, quality and sustainability of seafood products have been encouraged by the institutions that are working on the development of traceability schemes (e.g. seafood products under the umbrella brand "QM- Quality from Marche").

<sup>&</sup>lt;sup>3</sup> https://certification.bureauveritas.com/seafood

<sup>&</sup>lt;sup>4</sup> Lewis Sara, Boyle Mariah. 2017/08/01. The Expanding Role of Traceability in Seafood: Tools and Key Initiatives VL - 82- 10.1111/1750-3841.13743. Journal of Food Science

<sup>&</sup>lt;sup>5</sup> Fish 2.0. 2015. Market Report: Traceability An Investor Update on Sustainable Seafood.

<sup>6</sup> AdriSmart.Fish: https://progeu.regione.emilia-romagna.it/en/smartfish/themes/project





In addition, some interregional projects are promoting the setting-up of specific and cross-border labels such as AdriSmart.Fish project<sup>6</sup> - co-financed by Italy-Croatia programme - that intends to develop and register a Sustainable Fishery 'label' as well as for the application to internationally recognised sustainability certification (e.g.MSC) or the small-scale fisheries in GSA17 (FAIRSEA project, 2019).

### THE SCOTTISH ASSOCIATION OF SHELFISH GROWERS

**Country:** Scotland, UK





### **Description:**

The Association of Scottish Shellfish Growers (ASSG) applies the ASSG Code of Practice which concerns product optimization procedures in compliance with environmental policies. The objectives of the ASSG code are:

- To be implemented by all shellfish growers
- Higher quality product
- High level of shellfish health
- Shellfish growers will abide by strict hygiene regulations in order to protect consumer health
- Shellfish growers will minimize the impact of operation on the natural environment

The initiative was launched by the Scottish Shellfish Growers Association in collaboration with regional and national bodies, and so far it has resulted in:

- Increased public awareness
- Improved capacity and more effective addressing of issues
- Contributing to environmental protection
- Cooperation between the public and private sectors
- Access to new markets
- Revenue growth and higher levels of innovation

<u>Transferability</u>: There are good prospects for expansion of the use of the ASSC Code in all shellfish farming activities in Scottish waters as well as exchange of knowledge, experience and procedures regarding common aspects across the EU. It is expected that the ASSC Code will appeal to the wider international shellfish cultivation community.

### **Funding:**

The initiative is funded by various projects through support from financial institutions such as: The Crown Estate, Highlands' Council, Highlands & Islands Enterprise, the Scottish Natural Heritage Division and the EU Leader Program

More into at: https://www.assg.org.uk





### AQUACULTURE STEWARDSHIP COUNCIL - SEA BASS, BREAM & MEAGRE STANDARD

**Country:** The Netherlands

**Topic addressed and policy conte**xt: Certified Farming of Sea Bass, Sea Bream and Meagre

### **Description:**

More and more consumers around the world are interested in aquaculture products with a minimized environmental and social footprint. The Aquaculture Stewardship Council (ASC) is an independent, international non-profit organization founded in 2009 that manages the world's leading certification and labelling program for responsible aquaculture. The standards of the ASC are derived from WWF-initiated Aquaculture Dialogues, a multi-stakeholder series of dialogues held over the course of a decade and which involved around 2,000 scientists, NGOs, industry participants and other interested parties (farmers, processors, retailers and government agencies). In order for an aquatic farm to be certified by the ASC, a comprehensive series of criteria must be fulfilled, including pre-assessment, on-site farm audits and audit reports. The audit reports from all the ASC-certified farms are made available to the public via the ASC's website. Objectives of the ASC Certification:

- Recognition and reward of responsible aquaculture through the ASC Aquaculture Certification Program and seafood labelling.
- Promoting sustainable environmental and social choices when buying seafood.
- Contributing to the transformation of seafood markets towards sustainability.
- To help protect ecosystems and biodiversity.
- To set strict controls for the use of antibiotics and reduce the use of drugs and chemicals.
- Requiring best practices to combat the spread of diseases and parasites between farmed and wild fish.
- Preventing escapes from farmed fish.
- Setting strict criteria for the use of resources and the sustainability of feed.
- To regulate feeding practices and reduce the amount of feed lost into the water column.
- To maintain water quality.

<u>Transferability:</u> The ASC Certification has significantly increased environmental and social consumer awareness and offers many benefits to SMEs, from expanding their customer base worldwide to increasing the added value of aquaculture products. The practice can easily be transferred at regional levels on a worldwide level.

**<u>Funding</u>**: Derived from joint EU Projects and National Environmental and independent Organizations.

More info at: https://www.asc-aqua.org



### **BEST PRACTICES TYPE: KNOWLEDGE NETWORKS AND TRAINING**

The Blue Growth strategy identifies five key areas with high long-term growth potential among which aquaculture is listed. Innovation in aquaculture is vital for the blue economy to thrive, as the EC underlines in its Communication on Innovation in the Blue Economy. However, a number of bottlenecks seem to currently be holding back this drive for innovation. They include a lack of highly skilled professionals, an under-investment in knowledge and technology, and the transfer from research results to the commercial stage is too slow. Even if there is no specific reference to fisheries in neither of the EC Communications on 'Blue Growth' strategies, Blue Growth can offer to small-scale fisheries opportunities in terms of economic growth, employment and innovation. In this context, highly qualified and skilled professionals are required. In order 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"
- ⇒ "networking and exchange of experiences and best practices between stakeholders" (Art.29)
- ⇒ "professional training, lifelong learning, the dissemination of scientific and technical knowledge and innovative practices, the acquisition of new professional skills in aquaculture and with regard to the reduction of the environmental impact of aquaculture operation" (Art.50)

Under Art, 82, the EMFF supports the implementation of a Union control, inspection and enforcement system, eligible operations are:

- ⇒ "international training programmes for personnel responsible for monitoring, control and surveillance of fisheries activities"
- ⇒ "initiatives, including seminars and media tools, for standardising the interpretation of regulations and associated controls in the Union"

Some of the EU Member States (MS) 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 (OPCA66 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.





# OPEN EDUCATION RESOURCES: HEALTHY FISH, THE ONLINE AQUACULTURE TRAINING PROGRAM

**Country:** Spain, Italy, Croatia, Turkey

<u>Topic addressed and policy context:</u> Erasmus+. New and improved skills, standardization of training for aquaculture

### **Description:**

App\_HEALTHY\_FISH is a project funded the Erasmus+ programme (funded by the action "Strategic Partnerships" of the Erasmus+ Programme of the European Commission, KA2) whose objective is to develop a Standardized Training Program at European level for the aquaculture sector, which includes the training modules for the qualification of the professionals. It also includes the training content required to train the staff in health and welfare skills and on the physical-chemical control of fish. The project consortium is led by the Spanish marine fish farming association (APROMAR) and participated by other four partners from Spain, Italy, Croatia and Turkey. The training program - available in different languages - is hosted in the project digital platform: http://apromar.es/healthyfishapp/

More into at: <a href="http://apromar.es/healthyfishapp/">http://apromar.es/healthyfishapp/</a>

### **TOO BIG TO IGNORE**

<u>Country:</u> 27 Countries in Europe, North America, Latin America, Africa, Asia and Oceania



<u>Topic addressed and policy context:</u> improving knowledge and partnership in small scale fisheries

### **Description:**

Created following the inaugural World Small-Scale Fisheries Congress, held in Bangkok, Thailand in 2010,"Too Big to Ignore" is a global research network and knowledge mobilization partnership that focuses on addressing issue and concerns affecting viability and sustainability of small-scale fisheries. The network involves 27 countries and aims 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
- $\Rightarrow$  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 organization of meetings, webinars and congresses, development of capacity in transdisciplinary research, producing papers, reports, and briefs. The network is funded by the Social Sciences and Humanities Research Council of Canada, and with a contribution from team members and partners.

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





ARIEL web-page: https://ariel.adrioninterreg.eu/

### **DISCLAIMER**

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