“Shaping a Circular Blue Economy in the Mediterranean”

BLUEfasma White Paper:
Proposing solutions to overcome barriers and support blue Circular Economy in Mediterranean fishery and aquaculture sectors

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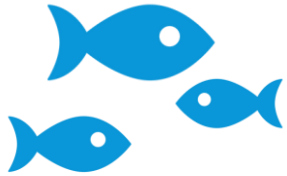
// How can circular practices benefit the economy?

Andrea Alvito, PhD
IMC – Internatonal Marine Centre, PP7

Fisheries and aquaculture play an important role in achieving food security, livelihoods and economic development.

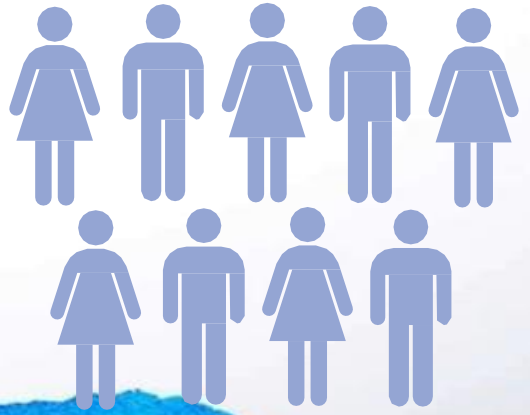
EU



resources

€19.1 billion

538.350 employed (EC, 2020)



The EU internal production covers more than 2/3 of its consumption of pelagic fish and more than 1/2 of its consumption of molluscs.

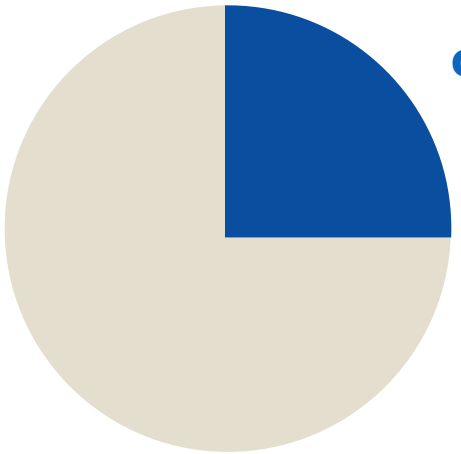
Fifth-largest producer of fishery and aquaculture products

3% of global production (EUMOFA, 2021)

The average person living in the EU consumes 24.4 kg of fish or seafood per year

Fisheries and aquaculture play an important role in achieving food security, livelihoods and economic development.

75%of fish consumed come from the wild



25%of fish consumed come from the aquaculture

In 2019 downward trend of EU catches and a subsequent increase in imports (EUMOFA, 2021).

Methodological Background

- Collection of all the relevant EU and National legislation to identify all the updated documents on the relevant topics
  - sustainable aquaculture
  - production and consumption in the primary sector
  - circular economy

- Mapping of relevant UE initiatives

- Analysis of the relevant scientific literature, reports from the international institutions / relevant project, civil society stakeholders / circular economy promoters / relevant market players, statistical reports

Drivers and barriers on Circular Economy in the sustainable fishing and aquaculture sector

Cultural/Social

Economic/Market

Istitutional/Governance

Technological/Environmental

Drivers and barriers on Circular Economy in the sustainable fishing and aquaculture sector

Cultural/Social

COSTUMER

Costumer culture to buy new products

Lack of consumer awareness on the externalities of products, including food

Reduced willingness to pay

Drivers and barriers on Circular Economy in the sustainable fishing and aquaculture sector

Cultural/Social

PRODUCERS

resistant company culture

demographic characteristics

Local communities could play an important role in supporting sustainable fisheries and aquaculture

Drivers and barriers on Circular Economy in the sustainable fishing and aquaculture sector

Institutional

EU policies are currently the main driver in the adoption of a Circular Economy in fishing and aquaculture.

little or no targeted indication for fisheries or aquaculture

Drivers and barriers on Circular Economy in the sustainable fishing and aquaculture sector

Institutional

Delays in the adoption of the Maritime Spatial Planning

Lack of homogenity

limited circular procurement

Drivers and barriers on Circular Economy in the sustainable fishing and aquaculture sector

Tecnological factors

→ **Promote the eco-design**

→ **Life cycle assessment (LCA)**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Interreg Mediterranean
BLUEfasma
Project co-financed by the European Regional Development Fund
Produce
Distribute
Use
Reuse / Recover

Proposals to foster CE in fishing and aquaculture

Prop. 1 - Improve attitudes towards a circular fishing and aquaculture by:

-Promoting **knowledge of circularity** through a more **integrated and collaborative production (and consumption) system** to promote sharing economy and the valorisation of unused values (considering the possibility that more than one stakeholder uses the same good several times).

-Adopting a **targeted communication strategy** to inform other researchers, policy and decision makers and consumers about the best practices and technologies so that they will support the adoption of secondary raw materials and remanufactured goods.

-**Upskilling the fishing and aquaculture workforce** to be able to make the transition toward a sustainable and circular fishing and aquaculture. Providing complete information and technological knowledge on the environmental, social, and economic benefits that could be achieved.

Proposals to foster CE in fishing and aquaculture

Prop. 2 - A review of the current legislation which aims to:

-Adopt **end-of-waste criteria** for promotion and easy re-use of fishing and aquaculture waste.

-Make **IMTA** (Integrated Multi-Trophic Aquaculture), **biofloc and aquaponics** possible in EU countries and encourage related research and **technology transfer**.

-Adopt **sectoral and targeted eco-labelling and certification schemes quality standards**, and product stewardship for secondary raw materials to improve the marketability of the products.

-Promote a **higher integration in the adoption of EU legislation** and reduce heterogeneity among Member States' legislations.

Proposals to foster CE in fishing and aquaculture

Prop. 2 - A review of the current legislation which aims to:

-Support the adoption of the most relevant policies, especially the adoption of **Maritime Spatial Planning** in member countries and the related coastal regions.

-Introduce **agri-environmental payments** for the (positive) **externalities** provided by (sustainable) fishing or (sustainable and/or organic) aquaculture to effectively support ecological transition in the sector.

-Eliminate virgin material subsidies and introduce **taxes or economic incentives** to internalize externalization and make secondary raw materials more achievable.

-Promote measures to reduce marine litter and pollution related to fishing gear abandonment or losses through the application of existing legislation and the promotion of new circular tools (such as return deposit).

Proposals to foster CE in fishing and aquaculture

Prop. 3 - Develop reliable and efficient economic tools by:

-Developing Circular Economy consistent **business models** for secondary raw materials and by-products to achieve more lucrative markets. It is a strong requirement for opening up these opportunities to the fishing and aquaculture sector.

-Promoting **information on the benefits** (savings) achievable by an **efficient use of resources** (energy efficiency and precision aquaculture).

-Promoting **information on the benefits** (additional earnings and reduced costs) of **circular waste management** (side streams and by-products) and **secondary raw materials**.

-Promoting **circular (public) procurement** to support secondary raw material and remanufactured product markets and low impact products.

Proposals to foster CE in fishing and aquaculture

Prop. 4 - Improve technological aspects through:

-Promoting the **eco-design** of the whole aquaculture processes from the initial phase of facility design to waste management, re-use and remanufacturing, including energy efficiency and precision aquaculture technologies and practices.

-Reviewing current **LCA** and other **indicators** in order to demonstrate the effective performance of secondary raw materials.

-Promoting the diffusion of **new materials and tools** to reduce the environmental impact related to fishing gear, especially plastic pollution.

Thank you for the attention