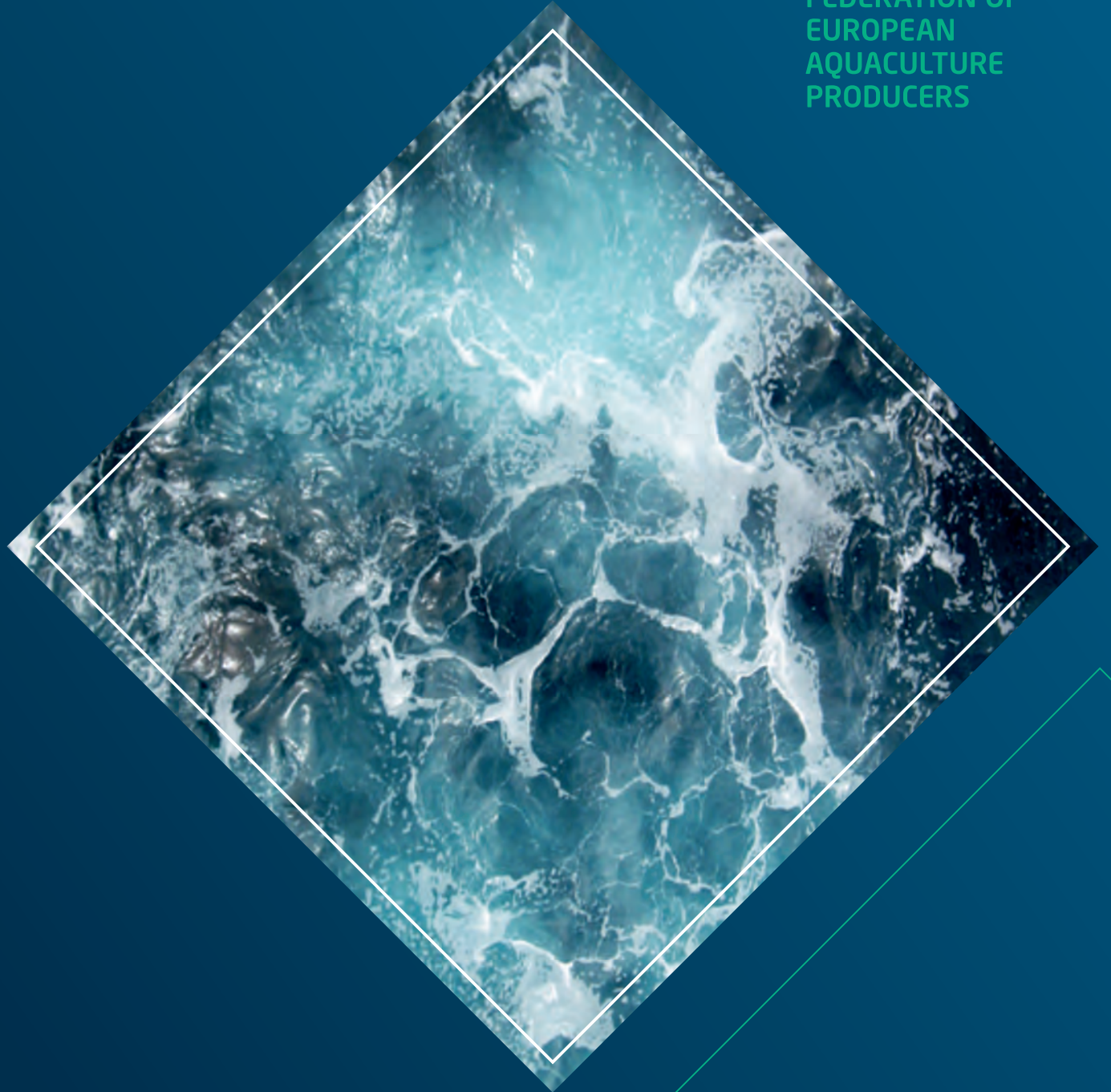




FEDERATION OF
EUROPEAN
AQUACULTURE
PRODUCERS



ANNUAL
REPORT

2023



FEDERATION OF
EUROPEAN
AQUACULTURE
PRODUCERS

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FEAP
in 2023



Foreword by the FEAP President

Mrs Lara Barazi-Geroulanou

This year continues to be a time marked by the uncertainty caused by the Russian invasion of Ukraine and by the skyrocketing costs of fish feed, energy, other production inputs, and freight. However, the first sale prices of most farmed fish species have not compensated for such increased expenditure. European fish farming undertakings have been resilient in front of the challenges of these last years, like the covid-19 crisis, but the sector continues to underperform in all dimensions when compared to its potentiality. The Strategic guidelines for a more sustainable and competitive EU aquaculture for the period 2021 to 2030, published by the European Commission in 2021, address the bottlenecks that are holding back aquaculture in Europe but bold actions are needed at EU, national and regional levels to unlock its potential.

The FEAP strives to increase its influence on the European legal framework which continues to be one of the main bottlenecks for the development of the sector. This has been carried out mostly through interactions with the European Commission and the European Parliament. But also with participation in the AAC and the MAC, through contacts with the Committee of the Regions, the European Economic and Social Committee, and by means of promoting research projects that can support future policies. Furthermore, a close collaboration is maintained with other sectoral organisations like FEFAC, EFFAB, the European Livestock Voice, the Global Roundtable on Marine Ingredients, and, certainly, with EATiP. However, FAO, with its Blue Transformation, continues to be the reference for FEAP, and close cooperation with it takes place at several levels.

Another value of FEAP continues to be its position as a forum for the exchange of expertise and knowledge between our member national associations. The extra effort to increase the outward communication capabilities of our federation is already providing important results.

Finally, I would like to congratulate the recipient of the 2023 FEAP Excellence in Aquaculture Award **Mr. Gustavo Larrazábal**, a pioneer in the development of seabass and seabream production in Europe. His enthusiasm and hard work boosted Mediterranean aquaculture and influenced the development of other species. Engineer by education, he initiated his path in aquaculture in 1984 in Spain and drives today with mastery one of the most successful fish farming companies in Europe: Aquanaria SL. Gustavo has been President and a key member of the Board of APROMAR since 1986, and Vice-president of the FEAP from 2003 until 2019.

Above all, he has been President of the European Aquaculture Technology and Innovation Platform (EATiP) since its creation until this summer. Innovation is the DNA of European aquaculture and Gustavo's contribution to the establishment and consolidation of EATiP has been historical, emphasizing the relevance of innovation for sustainability, promoting technological advancements, and nurturing young professionals in the sector.



FEAP delivered its 2023 Award to Gustavo Larrazábal during its AGM in Malta.

An Interview for the 2023 FEAP annual report with **Delilah Al Khudhairy**

Director for Maritime Policy and Blue Economy, DG MARE

As of September 2022, Delilah Al Khudhairy is the Director for Maritime Policy and Blue Economy in the European Commission's Directorate General for Maritime Affairs and Fisheries (DG MARE). The mission of the Directorate is to drive forward maritime policy and to support and stimulate the creation of jobs, growth, and investment to unlock the economic potential of the sea. The Directorate is also responsible for aquaculture policy. Moreover, it also provides analyses on economic and social aspects of maritime affairs and fisheries management and aquaculture and has a leading role in the work in DG MARE on the Better Regulation Agenda, including on public consultations and Impact Assessments.

Prior to this, Delilah Al Khudhairy was the Director of the Directorates for Competences as well as Strategy, Work Programme and Resources at the European Commission's in-house Science and Knowledge service, the Joint Research Centre. Delilah graduated with a first-class honours B.Sc. (Eng.) and Ph. D degrees in Materials Science Engineering from London University. She was employed at British Gas PLC, UK, before joining the European Commission in 1990.



**When did you first learn about aquaculture?
What raised your first interest in aquaculture?**

I first learnt about aquaculture in the very early 80s back in the UK, when a family friend introduced me to farmed trout at a lunch event. It was delicious.

It was a time when farmed fish like salmon and trout were becoming more and more popular and more widely available in supermarkets. This is when I began to be curious about aquaculture. Farming fish seemed as natural as farming cattle.

Today, we all want continuity on our plates, and this can no longer rely on caught fish alone. And aquaculture has the potential to meet the growing demand of aquatic food and alleviating the increasing pressure this has on wild fish populations.

What is your vision for EU aquaculture under the looming EU Sustainable Food System?

The Farm to Fork strategy recognizes that aquatic food production generates a lower carbon footprint than certain animal production on land, and it calls to accelerate the shift to sustainable production of aquatic food.

The growth of protein coming from catch fisheries is marginal. There's that much we can fish. Not only has the world population more than doubled in the last 50 years, but on average, today, our consumption of aquatic food has also more than doubled during the same period.

And as the global population increases, so does the demand for aquatic food. Therefore, there's potential for aquaculture to grow. Actually, it is the fastest growing food-production sector in the world.

However, we all know that this is not the case for EU aquaculture. The way I see it, is that EU aquaculture is a sector that needs to grow to its real potential in a sustainable way. The European Commission Strategic Guidelines for a more sustainable and competitive EU aquaculture, currently under implementation, set the vision and recommend concrete action. However, it is the implementation of EU Member States' Multi-Annual Strategic Plans that should make it happen. And the Commission has committed to support EU Member States on this path for it. As the Strategic Guidelines note, aquaculture has not only the potential to contribute to a more sustainable food system, but also to reduce carbon emissions and pollution, reverse the loss of biodiversity, and create jobs in coastal and rural communities. Some of the services that the sector could provide are key for the accomplishment of the Green Deal beyond a sustainable food system.



What are the Commission's priorities for its work on aquaculture in the coming years?

The priorities until 2030 have been set in the Strategic Guidelines. Recent events (such as the impact on the sector of the war in Ukraine or extreme weather events as part of the impact of climate change) confirm that these guidelines adopted in 2021 remain more relevant than ever.

In terms of the implementation of the work plan laid down in the guidelines, we continue working on guidance documents on aspects that remain an obstacle to aquaculture development with the support of the EU Aquaculture Mechanism and in consultation with stakeholders. By the end of this year, we hope to publish two guidance documents on access to space for marine aquaculture and good practices on regulatory and administrative framework for aquaculture, respectively. Next year, we expect to have ready guidance documents on environmental performance, climate change, good husbandry practices and animal health, and access to space and water for inland and freshwater aquaculture. Work on other documents, notably regarding animal welfare, should also start next year.

As part of the objective of improving communication on EU aquaculture to the citizen, we continue working on the tools for an EU-wide campaign that should be disseminated by Member States.

We continue working on filling knowledge gaps. We are planning to launch soon a study on environmental benefits of aquaculture, which should provide us more evidence about the types of aquaculture that provide ecosystem and climate services, as well as ways to develop this type of aquaculture further. This is an important part of planning how aquaculture, nature preservation and climate change adaptation and mitigation can be combined.

Of course, funding of research and innovation will continue under the Horizon Europe programme, including Mission Oceans and Waters. We are also ensuring that results of research and innovation projects funded by the EU are made available, via the site dedicated to EU aquaculture launched last year. More importantly, we are making efforts to take duly into consideration those results in our ongoing work on the implementation of the EU strategy on aquaculture.

The tasks before us are ambitious and multiple. And we need to be able to assess their actual impact in the sector. This is why we are discussing with EU Member States the setting up a system to ensure regular monitoring of the implementation of the Strategic Guidelines and of the Member States' Multi-Annual National Strategic Plans. This monitoring should help the assessment envisaged in the Strategic Guidelines in 2025.

So there is much to do to untap the potential of aquaculture in the EU. However, we should not forget the international dimension of the sector. The EU has taken a prominent role in the work towards the approval of the final text of the FAO Guidelines for Sustainable Aquaculture. While not matching the high level of ambition of our Strategic Guidelines, the FAO guidelines cover important elements to ensure the sustainability of global aquaculture growth from the economic, social, and environmental point of view. These guidelines should become a reference for FAO Member's plans to develop aquaculture. This is why the EU should support their promotion and implementation.



What are your expectations for EU aquaculture considering consumption and perception of the activity?

In order to set expectations, we need to know what our point of departure is. According to data, extra-EU imports represent more than 70% of the aquatic food we consume in the EU. Overall, imports of Aquaculture Products have increased in value by 27% from 2021 -mainly driven by higher prices for all food commodities in 2022-. If we look at the volume of extra-EU imports of aquaculture products (only), in 2022, it increased by 0,5% compared with 2021. As small as it sounds this actually represents a five-year peak.

On consumer perception, our latest EU barometer published in 2021 highlights that 2/3 of EU consumers declare that they have no preference, they don't know, or they make a distinction depending on whether the products come from fisheries or aquaculture.

However, aquaculture only represents 30% of the fish we consume in the EU, out of this only 10% is EU aquaculture products. It is important to note that the share of aquaculture is increasing since 2019, and EU products need to tap into this.

Thanks to the EU barometer, we also know that there is a demand for high quality and sustainable aquaculture products in the EU. The perception from the consumer of the product itself is good, however progress must be done on the perception of the production activities which is still an obstacle for establishment of new facilities in EU.

The Strategic Guidelines acknowledges that the growth of EU aquaculture and its competitiveness rely, among others, on social acceptance and information to the consumers on the benefits and value of aquaculture activities and EU aquaculture products.

On our side, we published last year a brochure informing on aquaculture in the EU and its benefits in all languages. This brochure should be further disseminated. Moreover, as said before, we are preparing a communication campaign. The EU Aquaculture Mechanism is also producing material on different topics such as algae or organic aquaculture that are highly informative and could be widely used. Furthermore, at national level, some national strategies and EMFAF programmes also consider support and activities on communication to consumers and outreach to local communities to ensure social acceptance.

Therefore, I believe we have reasons to be positive that our aquaculture products can tap into the ascending trend of aquaculture consumption, and that image/perception of the activity by society at large can improve in the near future.

The EU Aquaculture Mechanism has developed a series of material and brochures to promote aquaculture in Europe.





What are in your view the major achievements of the European aquaculture sector in recent times?

As Commissioner Sinkevičius has noted on several occasions, aquaculture has climbed up to the top of the EU agenda. The European Green Deal and the Farm to Fork strategy stress the role of sustainable aquaculture for the green recovery agenda. It is also important to note that aquaculture has also been placed in most Member States high on the political agenda in the context of the review of their national strategies for the sector. Some Member States like France have even recognised aquaculture as a priority sector.

I would like to stress that the active and constructive role in aquaculture policy making of the EU aquaculture sector has made this progress possible.

We always proudly say that the EU Strategic Guidelines present a vision of future of EU aquaculture that is shared by the European Commission, Member States, and the sector. And I am happy to say that the sector remains involved and committed in the implementation of this vision. We can only untap the potential of this sector if we understand the opportunities and challenges that aquaculture producers and entrepreneurs face and work together with them.

An Interview for the 2023 FEAP annual report with **Miguel Bernal**

Executive Secretary of the General Fisheries Commission
for the Mediterranean (GFCM) of the FAO



Dr Miguel Bernal is the Executive Secretary of the General Fisheries Commission for the Mediterranean (GFCM) of the Food and Agriculture Organization of the United Nations (FAO). He is the responsible for implementing policies agreed upon by GFCM countries towards ensuring the sustainability of fisheries and the sustainable development of aquaculture in the Mediterranean and the Black Sea.

He has previously led the technical work of the GFCM Secretariat on fisheries-related issues, promoting modernization of work in support of decision-making, including through the publication of the biennial report on The State of Mediterranean and Black Sea fisheries. Prior to joining the GFCM, he worked in a number of top-level universities and fisheries research institutes across the world, publishing numerous scientific contributions in the fields of fisheries, ecosystem modelling and climate change.

What is your vision for EU aquaculture?

Aquaculture plays a pivotal role in contributing to food security and supporting livelihoods in coastal communities and rural areas in Europe. Especially, from a technological and operations perspective, European aquaculture stands out as one of the most innovative and environmentally friendly worldwide. However, its current contribution still falls short of its potential, considering the demand and the fact that Europe heavily relies on aquatic foods imports. Unlocking its full potential, which is our vision for the next years, necessitates focused efforts on simplifying administrative procedures and financing processes. This is precisely why the GFCM, in its 2030 Strategy, has allocated a range of activities to encourage responsible investment in the sector, aiming to improve its overall appeal.

What are the GFCM main priorities for contributing to the development of aquaculture in the EU?

The main priorities of the GFCM regarding the development of aquaculture, as thoroughly highlighted in our 2030 Strategy for sustainable fisheries and aquaculture in the Mediterranean and the Black Sea, are essentially aimed to promote efficient governance in support of responsible investment, to expand practices supporting the sustainability of the aquaculture industry, to improve the perception of aquaculture and to maximize the use of technology and information systems.

What do you see as the major challenges for the growth of EU Aquaculture?

I believe the most significant challenge confronting EU aquaculture is climate change and its far-reaching impacts. This concern prompted the recent adoption of Resolution GFCM/46/2023/9 on climate-resilient aquaculture during the 46th session of the GFCM. This resolution calls upon the countries in the region to collaborate for the development of a comprehensive regional climate adaptation plan for aquaculture in the Mediterranean and the Black Sea.

A second important challenge is the stagnation and decline of the sector in certain European countries. To address this, a fresh approach is imperative, focusing on promoting efficient policies that facilitate investment and development of the sector and encouraging the younger generation to get involved in aquaculture. This entails sharing with them the vision and business benefits of such a decision, as well as providing them with tools, including streamlined licensing and leasing procedures, and financial tools, to ensure the sustainability of their ventures.

GFCM initiated and co-organised with FEAP a training course for young women in aquaculture earlier this year in Greece. What do you think the main results are of this training?

The outcome of the program "Empowering Women Towards Sustainable Aquaculture Development," encompass the significant knowledge and hands-on experience participants gained about the sector. Beyond acquiring valuable insights, participants emerged with a profound sense of empowerment, leading to noteworthy contributions at conferences such as Aquaculture Europe and SOFAS 2023. Additionally, the program facilitated the formation of a robust collaborative group and an extensive network among participants. It still serve as a platform for launching new ideas, exploring diverse fields, enhancing personal career trajectories and fortifying self-confidence and esteem.

GFCM recently published several guidelines in order to promote and boost sustainable aquaculture in the Mediterranean region. The guidelines are linked to the GFCM 2030 Strategy for sustainable fisheries and aquaculture in the Mediterranean and the Black Sea. Can you introduce us briefly the main goals of the strategy and the guidelines?

The primary objective of the GFCM 2030 Strategy regarding aquaculture is a clear, yet ambitious, aim: to ensure the sustainable and resilient growth of the sector to its full potential. Every guideline established by the GFCM plays a pivotal role in advancing this goal, offering our stakeholders invaluable tools and resources.

These resources address key issues such as restocking and stock enhancement, enhancing social acceptability, streamlining aquaculture licensing and leasing processes, and mitigating potential impacts of non-indigenous farmed species. Aligned with FAO guidelines for sustainable aquaculture (GSA), our guidelines provide interested parties with a useful toolkit to enhance the sustainability of their practices.

Explore the GFCM 2030 Strategy for sustainable fisheries and aquaculture in the Mediterranean and the Black Sea





Review of the EU Strategic Guidelines

by Brian Thomsen

Chief Adviser of the Danish Aquaculture Producer Organisation, Vice-President of the Federation of European Aquaculture Producers (FEAP), Chair of Agri-Agro Innovation Denmark, Brian Thomsen has been appointed Chair of the Aquaculture Advisory Council (AAC) since September 2022.

The 2013 reform of the Common Fishery Policy (CFP) included the sustainable development of aquaculture as a pillar. Unlike fisheries, Member States (MS) have competence on most issues related to aquaculture and the CFP introduced a system of strategic coordination that a) mandates the Commission to adopt non-binding strategic guidelines on aquaculture, b) obligates the MS to draw up multiannual national strategic plans (MNSP) on aquaculture and c) establishes the exchange of information and best practices among MS.

The strategic guidelines on aquaculture for the period 2021 to 2023 includes five themes with specific actions for the Commission, the MS and the AAC. The guidelines are supported by the Council, the European Parliament, The Committee of the Regions, the European Economic Social Committee, the AAC and the FEAP.

The Commission is executing the actions notably by issuing guidance documents. All MS have drafted MNSP. The Commission holds regular meetings with MS experts and the AAC, and the AAC has issued several recommendations related to the guidelines. In this context it is important to note, that AAC recommendations always have a higher weight than those issued by a single organization or group.

It is therefore tempting to conclude that the strategic coordination is a success but a guidance and a MNSP must be accompanied by policy actions in the MS to have a real impact. Two issues are of major concern: What steps have the MS taken to meet the quantitative growth objectives in the MNAP and what is the actual uptake of the guidance documents in the MS?

However, the strategic coordination has an Achilles heel because the strategic guidelines and the MNSPs are non-binding documents.

The Union considers agriculture and fisheries as “principal areas” and the Union has a Common Agriculture Policy and a Common Fishery Policy. Aquaculture is not a principal area, and the Union does not have a Common Aquaculture Policy. This explains why policy makers in the MS does not include aquaculture in their agendas. Aquaculture plays an important role in the transition to more sustainable food systems, and it would be appropriate to consider aquaculture on an equal footing with agriculture and fisheries.

The Commission has agreed to monitor the impact of the strategic guidelines and the MNSP as of 2024. This will include an annual survey to MS experts on defined performance indicators. The baseline for the surveys will be a 5-year reference period of 2016 - 2020. We expect the survey will be launched for the first time by the beginning of next year. A more thorough assessment will be launched in 2025 and an evaluation of the strategic guidelines will be carried out in 2029.

Three tasks remain imperative: Continue efforts to support the implementation of the strategic guidelines, maintain focus on the importance of monitoring impact of the guidelines and the MNSPs and work for a Union policy that considers aquaculture on an equal policy footing with agriculture and fishery.



In 2023, FEAP has started innovating with new communication and networking actions, designed to bring inspiring ideas and solutions to its members, from National organisations to fish farming companies.

In this catalogue of actions, **the FEAP Smart Chats** are prepared with care to be fit for purpose for FEAP members and their own members:

- to hear about the views of experts,
- to exchange opinions,
- to share examples,
- to ask questions,
- to receive state-of-the-art resources and knowledge,
- to learn more according to their needs.

The Smart Chats can cover any challenge faced by fish farmers

Since March 2023, the FEAP has held 4 online SMART CHATS for its members. This initiative has encountered more and more success over the months. The potential topics are regularly presented to the FEAP community, either in the Communication Commission or during other meetings, and those receiving more interest are developed. Here are some key points from the previous Smart Chats.

Evolution in scoring nutritional quality

The first FEAP smart chat was held online on **March 21st, 2023** to answer this question: From nutriscore labels to increasing qualitative demands from the consumers, are current food quality rankings fair with farmed fish, their nutritional value and efforts of producers to comply with new trends and regulations?

Organic products

The second FEAP smart chat was held online on **May 16th, 2023** to know more about organic products (not only aquatic!) and look to where organic certification is heading.

Sustainability: from feed to farm

The third FEAP smart chat was held online on **June 26th, 2023** to provide insight and inspiration to FEAP members to promote and innovate in their sustainable practices.

Catarina Martins, Chief Sustainability and Technology officer at Mowi ASA (Norway), gave a highly interesting presentation on how to improve the sector's communication about sustainable finfish aquaculture. <https://youtu.be/RWxKQMbW3jQ>

The fish feed challenge

The fourth FEAP smart chat was held online on **November 6th, 2023** aiming at sharing with FEAP members the most up-to-date vision, hints and inspiration from the worldwide expertise of IFFO, The Marine Ingredients Organisation. <https://youtu.be/y1MeFG7Lb4s>



FEAP Member Association in the Picture: Malta

The **Federation of Maltese Aquaculture Producers (FMAP)** serves as a critical pillar in Malta's burgeoning aquaculture sector, which has evolved significantly over the years. Today, the aquaculture sector faces both unique opportunities and formidable challenges in the pursuit of sustainable seafood production.

Commercial aquaculture started in the 1980s, when the government-initiated efforts to diversify its economy, identified aquaculture as a viable option. In the early days, the main focus was on cultivating *Tilapia sp.*, however the Maltese population was not used to consuming freshwater fish and its uptake was very limited. Aquaculture quickly transitioned into the farming of European sea bass and the gilthead sea bream, two highly valued species in the Mediterranean.

These efforts were initially modest, but over time, they gained momentum.

Growth and current trends



Malta's aquaculture sector has witnessed impressive growth and diversification over the past few decades. The industry has expanded to encompass not only traditional species but also new ones like tuna, amberjack, and meagre. This diversification has not only increased production but also broadened the market's appeal.

One of the key trends in Maltese aquaculture is the integration of sustainable and responsible practices. The FMAP has played a vital role in promoting environmental stewardship within the industry. Practices such as the farming bluefin tuna further away from the coast and sea clean-up campaigns, have gained prominence to reduce the sector's environmental footprint.

Additionally, the sector has embraced technological advancements to optimize production. Through its operational arm, the Federation is assisting the sector in identifying the necessary technological improvements and implementing them, such as the recent completion of a state of the art fish oil and fish meal plant. These measures are helping Maltese aquaculture farms become more efficient and environmentally friendly.

Despite its growth and positive developments, Maltese aquaculture faces several challenges:



Environmental Concerns

The Mediterranean ecosystem is fragile, and aquaculture must operate in harmony with it. Failure to implement sound environmental management can threaten the local environment, having a detrimental impact on other industries relying on the good status of the sea. The FMAP is tasked with ensuring that sustainable practices are maintained to minimize these risks. Malta, with its limited land and water resources, faces constraints in expanding aquaculture operations. Finding innovative solutions to optimize space and resource usage is crucial.



Regulatory Hurdles

Like all aquaculture industries, Maltese aquaculture must adhere to strict regulations. These regulations aim to balance economic development with environmental protection. However, navigating these rules and maintaining compliance can be cumbersome for aquaculture operators.



Market Competition

Malta's aquaculture products are mainly exported to a limited number of markets. Meeting stringent quality standards and staying competitive in international markets can be challenging. The FMAP helps by facilitating market access and promoting local products.

To address the above challenges, the mission of the FMAP is to serve as a critical link between aquaculture operators, government bodies, and other stakeholders. It plays a pivotal role in:

- Advocating for the interests of the Maltese aquaculture sector at both national and international levels.
- Promoting sustainable and responsible aquaculture practices among its members.
- Providing guidance and support to aquaculture operators to help them navigate regulatory challenges and maintain compliance.
- Facilitating research and development initiatives to enhance the industry's productivity and environmental sustainability.
- Promoting Maltese aquaculture products in domestic and international markets.

FMAP plays a central role in shaping the future of aquaculture in Malta. The industry has come a long way since its inception and continues to evolve in response to changing market demands and environmental considerations. By addressing current challenges and embracing sustainable practices, Maltese aquaculture can look forward to a promising future while preserving its rich historical roots in seafood cultivation.

Aquaculture for the next generation

Assuring continuity of the European aquaculture sector by the next generations is key. Young fish farmers are proud to bring new ideas for the sustainable development of the sector.



Pietro Bettinazzi

Age 25, Mantova, Italy.

Company : Società Agricola Naviglio s.s.

Pietro is born in a family of aquaculture producers. For him, fish are not farmed, they are part of the family.

He is working in the farm since 5 years but has grown up in the middle of this wonderful nature, and always wanted to work with his parents and grandparents. 70 years ago, the farm started growing trout and in the 2000 year it evolved into a sturgeon farm.

Pietro's aim is to improve and accompany what was done in the past to make the future more sustainable and in step with today's challenges.

Stefano Suppa

Passionate by (sea)food science

Company: Caviar Import S.r.l.,
via Piersanti Mattarella 20/B
Scorzè, Veneto, Italy

<https://caviar.it>

Born in Como, Italy, Stefano pursued his studies in Food Science and Animal Nutrition, earning degrees in 2015 and 2017, respectively.

His master's thesis at the National Institute of Nutrition and Seafood Research (NIFEES Norway) focused on the AquaFly Project, investigating the use of black soldier fly larvae as a sustainable protein source in fish feeds for farmed Atlantic salmon.

Since 2019, he has been the Quality Manager at Caviar Import Srl, overseeing product quality, compliance, certification, and managing a team, among other responsibilities.

He loves aquaculture and everything about fish and seafood in general. He also likes food science (nutrition, microbiology, chemistry, hygiene and more) so that's why he enjoys working in this particular sector.



Discussing with Pietro and Stefano, we see that young professionals are convinced and acting for aquaculture to remain an important source of food, nutrition, income and livelihoods for hundreds of millions of people around the world. As Stefano points out "It has rapidly evolved from being almost negligible to fully comparable with capture production in terms of feeding the increasing global population. The significant growth in fish consumption has enhances people's diet around the world so this the reason I see a future for young people if someone want to join in the aquaculture sector.

From their perspective and experience with innovative research and practices, some key factors for European aquaculture success are:

- Developing innovative high quality minimally processed fish products and related packaging conditions
- Monitoring the impact of housing environments and innovative diets on the fish health and welfare
- Better implementing EU legislation;
- Increasing knowledge and innovation.

How do you see the future of EU aquaculture?

Stefano: I see a huge growth for aquaculture in the next few years. The future growth is also linked to improved processing and marketing strategies to provide diversified products, which could promote sales outside the typical marketing season for various species, particularly for sturgeons and caviar market.

Pietro: I am proud of our aquaculture tradition and I am willing to make it long last as best.



Food and Agriculture
Organization of the
United Nations



General Fisheries
Commission for
the Mediterranean

FEAP activities supporting the **GFCM 2023** Strategy

The General Fisheries Commission for the Mediterranean (GFCM) of the Food and agriculture Organisation of the United Nations (FAO) released in 2021 its GFCM 2030 Strategy for sustainable fisheries and aquaculture in the Mediterranean and the Black Sea, with 5 targets but one vision. To achieve those targets, Aquaculture Guidelines have been published.

FEAP actively supports the GFCM 2030 Strategy and wishes to disseminate and promote the application of the AQUACULTURE guidelines widely.



GUIDELINES FOR
streamlining aquaculture licensing
and leasing processes



GUIDELINES ON
assessing and minimizing the
possible impacts from the use of
non-indigenous species in aquaculture



GUIDELINES IN SUPPORT OF
social acceptability for sustainable
aquaculture development



GUIDELINES ON
aquaculture restocking and
stock enhancement



[Guidelines for streamlining aquaculture licensing and leasing processes](#)

[Guidelines on assessing and minimizing the possible impacts from the use of non-indigenous species in aquaculture](#)

[Guidelines on aquaculture restocking and stock enhancement](#)

[Guidelines in support of social acceptability for sustainable aquaculture development](#)

A FEAP-GFCM workshop will be soon organised in Rome to promote the guidelines and exchange views.

FEAP actively supports the GFCM 2030 Strategy and co-organised from 11 to 18 June 2023, with its Greek member [HAPO](#), the Hellenic Aquaculture Producers Organization, an empowerment programme that drove women's leadership in sustainable aquaculture.

Empowering women towards sustainable aquaculture development FEAP and GFCM team up to promote aquaculture careers amongst young female professionals



Pioneering gender equality: an empowerment programme drives women's leadership in sustainable aquaculture development.

The workshop in Greece provided a platform for young women from the region to acquire valuable knowledge and hands-on experience in the field of aquaculture, thanks to series of theoretical sessions focused on sharing best practices, highlighting the importance of women's involvement in the sector and showcasing the GFCM, FEAP and HAPO` approach to sustainable aquaculture development.

Furthermore, the participants had the opportunity to engage in field visits across Greece to enhance their understanding of the sector by exploring different Mediterranean aquaculture environments, species, and production systems.



An aerial photograph of a rural landscape. In the foreground, a paved road curves through a field. A dark car is parked on the right side of the road, and a person is walking on the left. To the left of the road is a large, dense forest of tall, thin trees. In the middle ground, a large, irregularly shaped lake or reservoir is visible, surrounded by green fields and some reeds. The background shows rolling hills and a small town or village under a clear blue sky. A large, semi-transparent blue diagonal overlay covers the left side of the image, extending from the top left towards the bottom right.

Facts and **Figures**





European Aquaculture Production

This section gives information on fish aquaculture in Europe, provided by the FEAP Member Associations or national authorities as confirmed or provisional data. Three key production sectors are highlighted, being:

- Marine coldwater species
- Marine Mediterranean species
- Freshwater species

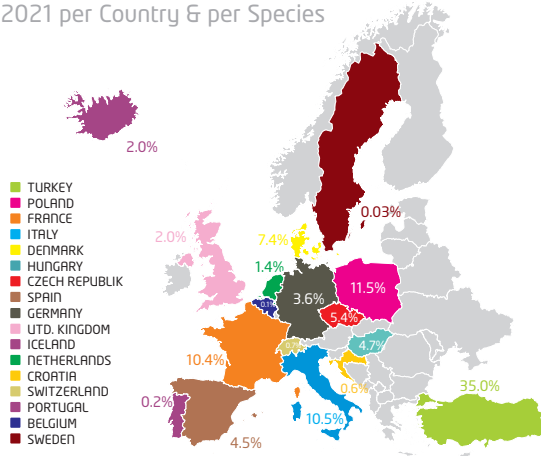
The **total European production** of fish by aquaculture is estimated to be 2,853,549 tons in 2021, indicating a small increase of slightly over 1% in total production when compared to 2020. Marine coldwater species represent 68% of total production, freshwater species 13% and marine Mediterranean 19%.

Norway remains the dominant producer in Europe with 58% of the total supply, mainly salmon but also large trout (>1.2 kg) production. The other countries that produce more than 100,000 tons annually are Turkey, United Kingdom and Greece. **The main species produced** are salmon, trout, seabream, seabass and carp which represent 98% of the total European production in 2021. The tuna production is not reported in these graphs.

The following graphics provide an overview of the key production sectors, analysed by country and by specie.

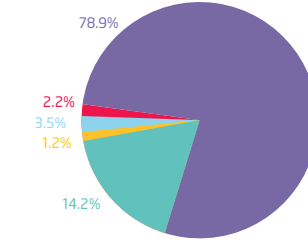
The detailed Production Report for 2022 will be available soon at our web page:
FEAP PRODUCTION REPORT - <https://feap.info/index.php/data/>

Freshwater Production
in 2021 per Country & per Species

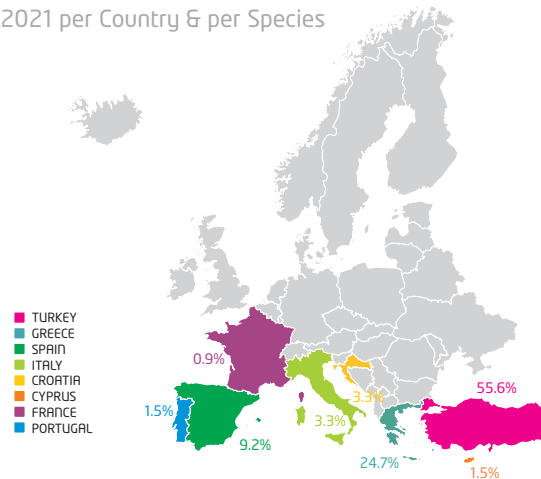


384.101 T

- TROUTS (LAND BASED LARGE AND PORTION)
- CARPS (COMMON, SILVER, BIGHEAD AND GRASS)
- CATFISHES (AFRICAN, WELS AND CHANNEL)
- EEL
- OTHER SPECIES (STURGEONS, LAND BASED SALMON AND ARCTIC CHAR, TENCH, PERCHS, ROACH...)

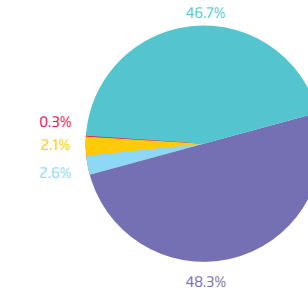


Marine Mediterranean Production
in 2021 per Country & per Species

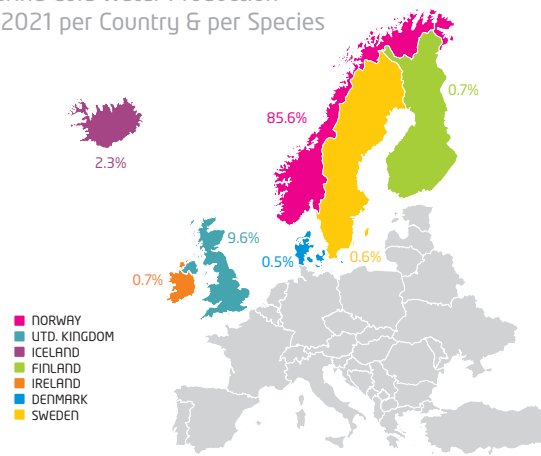


527.708 T

- SEA BASS
- SEA BREAM (+PAGRUS)
- TURBOT
- MEAGRE
- SOLE

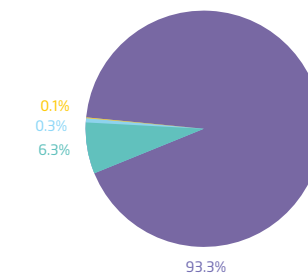


Marine Cold Water Production
in 2021 per Country & per Species



1.941.740 T

- ATLANTIC SALMON
- LARGE RAINBOW TROUT
- ARCTIC CHAR
- HALIBUT
- WHITE FISH





Research and Innovation





NewTechAqua

Expand and diversify European aquaculture production of finfish, molluscs and microalgae by developing and validating technologically-advanced, resilient and sustainable applications.

The NewTechAqua project organised its **Final Conference on 15 November 2023 in Brussels** to present its final results and innovations, as well as the solutions of the winners of its Award Challenge to bring economic, environmental, and social benefits to the sector.



The event - organized in Brussels at Greenovate!

Europe premises in collaboration and coorganised by FEAP and the University of Bologna - gathered policymakers, producers, researchers, and startups, and organised policy roundtables to discuss the challenges and opportunities for the future of the sector.

The solutions developed through-out the project were presented:

[Advance courses, Training workshop, and e-learning modules](#) to provide the necessary skills for a sustainable, resilient, and innovative European Aquaculture and to share recent and applied knowledge to aquaculture researchers, technical staff, and industry stakeholders.

A series of webinars were recorded and made [publicly available](#) to transfer NewTechAqua key results, sustainable solutions and recommendations to expand and diversify the EU aquaculture production of finfish, molluscs and microalgae.

Be part of the change work in aquaculture

A School campaign **#IWorkInAquaculture** to raise awareness on sustainable aquaculture practices in Europe, the benefits of fish consumption for human health and the job opportunities amongst the young generation, including educational material, such as powerpoint presentation, factsheets, videos and games, targeting secondary and high school students, to explain the important role of the aquaculture sector in the European Union, the opportunities and challenges to its development, and the job opportunities related to research and innovation.

More about the project

NewTechAqua gathers over 90 stakeholders and delivers 14 innovations for a more resilient aquaculture

NewTechAqua provided policy recommendations that contribute to enhancing EU regulations.

Legislative barriers, circularity, fish feed, organic aquaculture and diversification were some of the topics discussed in high level policy roundtables, including the participation of the Directorate-General for Maritime Affairs and Fisheries (DG MARE), and the European Aquaculture Technology and Innovation Platform (EATiP).





About FEAP





About FEAP



FEAP is the united voice of the European aquaculture production industry, being the Federation of National aquaculture associations in Europe that represent professional fish farming.



With 24 members drawn from 23 countries across the European continent, the FEAP represents:



- 2.5 million tons of produce
- Ex-farm value of over € 8 billion
- >100,000 aquaculture-related jobs in coastal & rural areas



FEAP supports and promotes the responsible development of aquaculture and provides the common positions and opinions of the European aquaculture sector.



Focused on fish farming, FEAP represents a range of different farmed species that include:



- | | |
|---------------------|---------------------|
| • Rainbow trout | • Gilthead seabream |
| • Atlantic salmon | • Turbot |
| • Carp | • Cod |
| • European sea bass | • Sturgeon |
| • Catfish | • Meagre |
| • Bluefin tuna | • Sole |
| • European eel | • Artic char |



European aquaculture rears many other species, both in fresh and salt water, and details on the levels of production reported can be found in 'Facts & Figures' at www.feap.info. Additional data on aquaculture is provided by National statistics, the FISHSTAT service of the Food and Agricultural Organization of the United Nations (www.fao.org) and the European Commission's Directorate General for Maritime Affairs and Fisheries - DG MARE (ec.europa.eu), notably through its EUMOFA service (www.eumofa.eu).



Founded in 1968, FEAP has responded to the changes and developments in European aquaculture and, in line with society's expectations, provides transparent information on activities and developments in this dynamic sector.

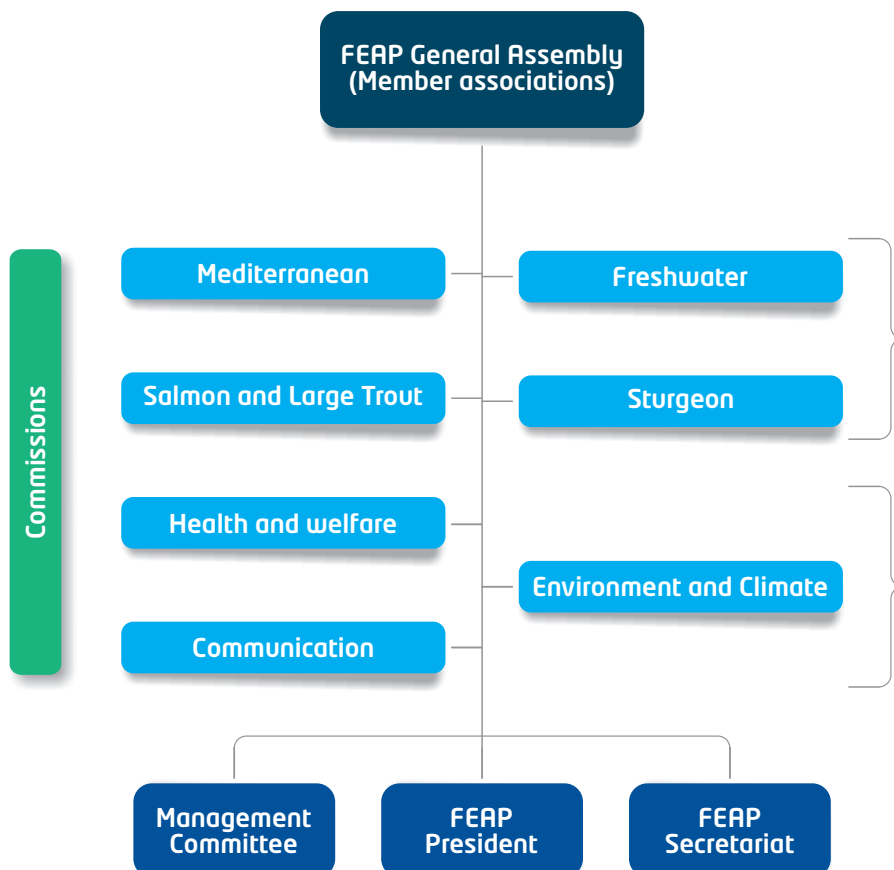


FEAP is run by professionals for professionals, meaning that all of its members are active in European fish farming and are experienced in the issues concerning aquaculture and its sustainable development in Europe.



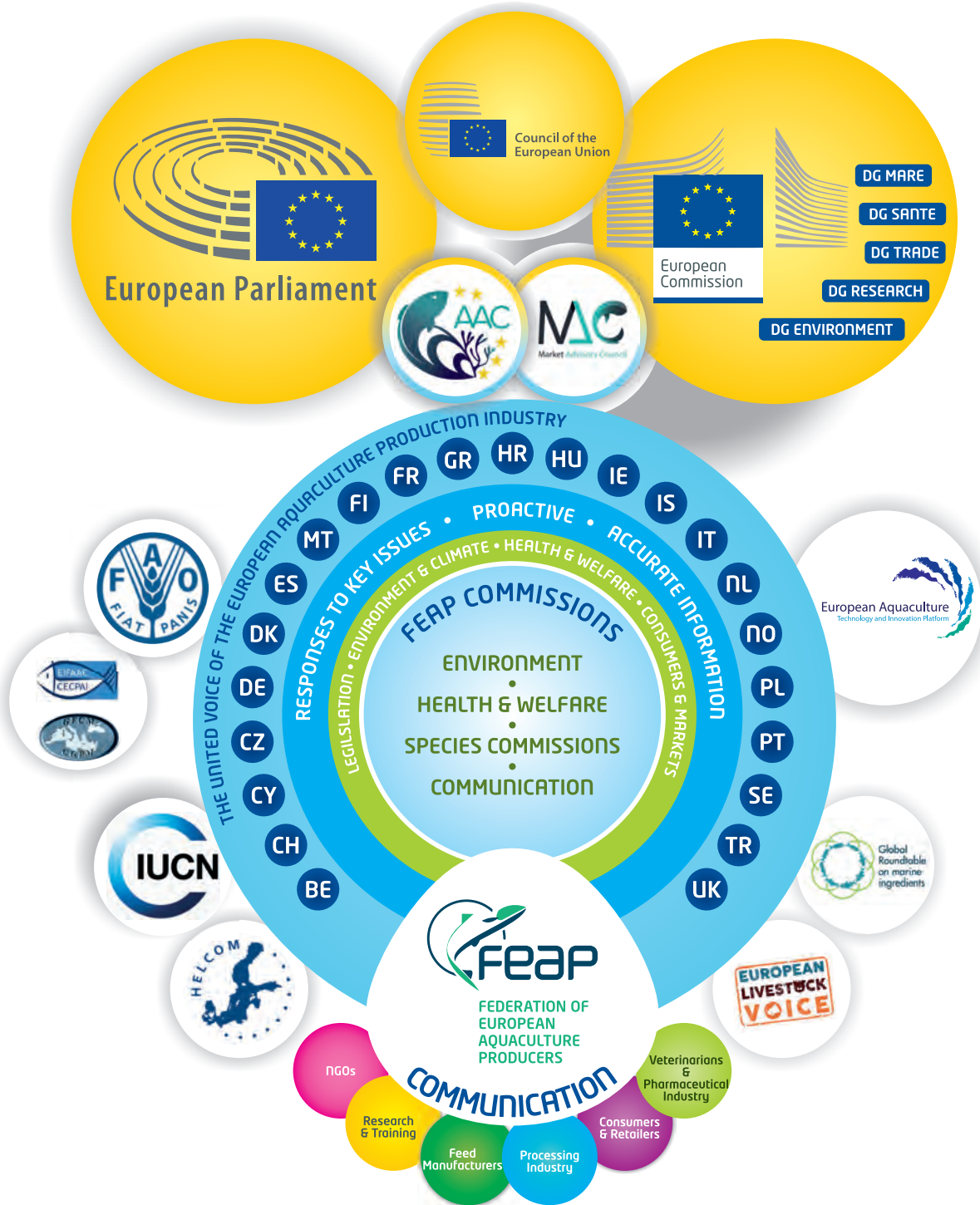
FEAP's Mission

- Pursue and improve its coordination role of the aims of its National member associations and the aquaculture profession.
- Assure a pro-active position in front of relevant authorities and interests.
- Provide accurate information and sound rationale to policy and decision makers.
- Guarantee the communication of accurate and unbiased information on aquaculture processes and products to the consumer.
- Guarantee valid, consensual and timely responses to key issues.
- Develop the structure and operations required for the representation of a dynamic and visible sector at European and global levels



FEAP's Organisational Matrix

ADVISORY ROLE



Contact us

The office holders of FEAP are:

- Lara Barazi, President
- Anna Pýc, Vice-President
- Philippe Balma, Vice-President
- Tor Anders Elvegård, Vice-President
- Brian Thomsen, Vice-President
- Jordi Trías, Vice-President
- Sigurgeir Bárðarson, Vice-President
- Marco Gilmozzi, Past President

The FEAP Secretariat:

- Javier Ojeda, General Secretary
- Catherine Pons, Office Manager
- Szilvia Mihalfy, Project Manager



Avenue des Arts 56
B-1000 Brussels
Belgium

T. +32 4 3382995
F. +32 4 3379846
E. secretariat@feap.info

www.feap.info

[feapinfo](https://www.linkedin.com/company/feap) [feapinfo](https://twitter.com/feapinfo)

National Member Associations

- Aquaculteurs de Wallonie asbl (AW)
- Croatian Chamber of Economy Aquaculture Unit (CCE - Aq. Unit)
- Cyprus Mariculture Association (CMA)
- Czech Fish Farmers Association (CFFA)
- Dansk Akvakultur (DA)
- Finnish Fish Farmers' Association (FFFA)
- Fédération Française d'Aquaculture (FFA)
- Verband der Deutschen Binnenfischerei und Aquakultur (VDBA)
- Hellenic Aquaculture Producers Organisation (HAPO)
- Hungarian Aquaculture and Fisheries Inter-branch Organisation (MA-HAL)
- Fisheries Iceland (FIS)
- Irish Salmon Growers Association (ISGA)
- Associazione Piscicoltori Italiani (API)
- Federation of Malta Aquaculture Producers (FMAP)
- Nederlandse Vereniging van viswerkers (NeVeVi)
- Norwegian Seafood Federation (FHL)
- Polish Trout Breeders Association (PTBA)
- Associação Portuguesa de Aquacultores (APA)
- Asociación Empresarial de Acuicultura de España (APROMAR)
- RecirkFisk PO
- Association suisse d'aquaculture (ASA)
- Aegean, Istanbul & Mediterranean Exporters Associations
- British Trout Association (BTA) and Salmon Scotland



FEDERATION OF
EUROPEAN
AQUACULTURE
PRODUCERS

FEAP Secretariat
Avenue des Arts 56
B-1000 Brussels
Belgium

T. +32 4 3382995
F. +32 4 3379846
E. secretariat@feap.info

www.feap.info

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