

SUMMARY REFLECTIONS

ORGANIC SECTOR AGRICULTURAL KNOWLEDGE AND INNOVATION SYSTEMS

Research and knowledge transfer for organic aquaculture are well-supported, though very few actors and institutions provide advisory services. More research and innovation are needed together with an effective knowledge exchange to allow key actors to acquire the competencies for further development of the sector.

The organic aquacultural sector in Greece, produced 1.574 metric tons of European seabass and Gilthead seabream in 2020, which is an increase of 119% compared to 2015. Greece has the highest organic production of European seabass and Gilthead seabream, a share of only about 1.6 % of the total aquaculture production of the country (EUMOFA, 2022) and well below EU average for aquaculture (8.9%). However, in 2023 the organic gilthead sea bream and European sea bass production was 735 tons (HAPO, 2024). Organic aquaculture production is also below the share of organic farmland in Greece in 2020 (10.1%). Aquaculture production growth in Greece is also lower than for the other countries analysed.

Regarding organic food processing and retail, Overall, there are some state bodies and agencies that are supporting organic processors and retailers, e.g., the Ministry of rural development and food or AgroCert. However, interviewees highlighted a lack of political leadership arising from a clear vision for organic in terms of a national strategy. In supporting processors and retailers, research institutes are playing an important role as well as private consultants and the organisation "Local food experts (LFE)", which assists food processing companies in terms of sustainable innovation, cost-efficiency and profitability.

GENERAL INFORMATION

AQUACULTURE PRODUCTION

82%

Marine
151,400 Tn

10%

Freshwater
2,452 Tn

8%

Brackish
800 Tn

SPECIES PRODUCED (% 2023)

FRESH WATER

81.6%

Trout

2%

Carp

6.2%

Eels

10.2%

Others

MARINE

80.1%

Seabass and
seabream

6.6%

Amberjack,
Meagre, Pagrus

13%

Molluscs



VOLUME OF MARINE PRODUCTION

87% Fish
13% Molluscs



VALUE OF MARINE PRODUCTION

99% Fish = 754 M€
1% Molluscs = 11,6 M€



UTILIZED AQUACULTURAL AREA (UAA)

7,730 Hectares (2023)



CONTRIBUTION OF AQUACULTURE TO TOTAL EXPORTS OF AGRICULTURAL PRODUCTS

8.8% (2022)



EXPORTS OF CULTURED FIN FISH

571.53 M€ (2023)



ORGANIC SECTOR OVERVIEW



GROWTH OF ORGANIC AREA (2015-2020)
119%



AQUACULTURE PRODUCTION (2023)
735 Tn



DOMESTIC CONSUMPTION
19.56€/Person

MAIN ORGANIC AQUACULTURE FIGURES

GILTHEAD SEA BREAM

1

EUROPEAN SEA BASS

2

SUPPORTING STRATEGIES, POLICIES & REGULATIONS

The Multi-annual National Strategic Plan for Aquaculture Development (2021-2030) stands as the sector's primary policy document. It mentions organic aquaculture only as a future option for sustainable production, while highlighting the importance of using recycled aquatic systems (RAS) and integrated multi-trophic systems (IMTA). It emphasises the need for uniform certification processes for both domestically produced and imported aquaculture products. In terms of the overall objectives of KIS the plan identifies further need of research and innovation, along with dissemination of results, promotion of cooperation among actors, networking, improvement of knowledge and training.

KEY COMPONENTS & FUNCTIONS OF AKIS FOR ORGANIC

KNOWLEDGE CREATION, RESEARCH & INNOVATION

Researchers are not linked well to policy arenas as to translate their findings into policy actions. In contrast, researchers and farmers are well connected and collaborate. Knowledge exchange with the general public and stakeholders is insufficient. Consumers are not sufficiently informed about the products available which compromise consumer choice of aquaculture products from organic production. Market data is provided by [biopoiotita](#).

ADVICE AND CONSULTANCY

The advisory services provided are considered sufficient for the few certified organic aquacultural farms. Research and academia have an important and proactive role in knowledge transfer. However, the small number of farms and experts available for extension services limit knowledge exchange and innovation needed for the further development of the sector.

EDUCATION AND TRAINING

A practice-oriented advisory system through research institutions and universities is well established. Several educational institutions in Greece provide advanced training for interested students who, upon graduation, find employment in aquaculture facilities. Some training seminars for processors are also offered.

CONCLUSIONS

More support is needed for successful business planning, from understanding the meaning of organic, prices, technical and administrative information, compliance to successful marketing strategies as B2B negotiations, branding and marketing. Restricting factors were found to be the complexity of the bureaucracy in organic aquaculture rules, regulations, and certification scheme costs and the unavailability of incentives, the price difference between the organic and conventional aquaculture products and the demand. At the same time the unavailability of organic fish feeds and juveniles are a significant bottleneck to the organic aquaculture sector. On the other hand, supporting factors are the consumer attitude and beliefs and the research towards the technical solutions and innovations in organic aquaculture. As for processing and retailing, the sector is marked by strong competition and a lack of cooperation among relevant actors.

FIND OUT MORE HERE

[Deliverable D1.1 Assessment of Knowledge and Innovation Systems for Organic Agriculture, Aquaculture and Value Chain Actors](#)



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