



Multi-annual National Strategic Plans for the development of sustainable Aquaculture for the period 2021 to 2030

Summary CYPRUS

“Multi-annual National Strategic Plan Aquaculture 2021-2030”

1. State of the aquaculture sector

Marine aquaculture accounts for more than 99 % of total national aquaculture production and also has the greatest potential for growth. In contrast, freshwater aquaculture is restricted by the reduced availability of fresh water and the high operating costs associated with the implementation of water recirculation systems. The most important species of marine fish grown in Cyprus are sea bream (*Sparus aurata*) and sea bass (*Dicentrarchus labrax*). To a lesser extent, other species such as the meagre (*Argyrosomus regius*), rabbitfish (*Siganus rivulatus*), common pandora (*Pagellus erythrinus*), red porgy (*Pagrus pagrus*) and red seabream (*Pagrus major*) are also grown. The species of shrimp grown in Cyprus is Indian shrimp (*Parapenaeus indicus*) and Pacific white shrimp (*Penaeus vannamei*). All fattening farms of sea fish are operated using the high seas cage farming method. Marine fish/shrimp hatcheries operate on an intensive basis in agricultural coastal areas. The shrimp farm is unique in the Mediterranean due to the biotechnology it has developed, and the breeding takes place in land ponds. Freshwater farms focus mainly on the fattening of freshwater fish species such as rainbow trout (*Oncorhynchus mykiss*) and sturgeon (*Asipenser sp.*). Their facilities consist of cement tanks and use water from neighbouring springs and seasonal streams, with one of them implementing a recirculation system. In 2018, the aquaculture production was 7424 tonnes with a value of 45,9 M€.

2. Objectives for 2021 to 2027

- To contribute to food security in the Union through competitive and sustainable aquaculture and corresponding markets.

- The development of a sustainable blue economy and the promotion of prosperous coastal communities

Growth targets

The overall objective for production is to maintain the increasing trend observed over the past 15 years. The target value is to increase annual production by 1500 tonnes over the next 10 years (raise production up to 8924 Tm).

3. Objectives for Measures for 2021 to 2027 responding to the 13 key areas listed in the “*Strategic Guidelines for a more sustainable and competitive EU aquaculture for the period 2021 to 2030*”¹

1. Access to space and water

Land-based aquaculture units:

- Ensure that aquaculture is included in the Policy Statement and related development plans in a way that ensures the functioning of existing ones and the possibility of creating new farms.
- Ensure that freshwater aquaculture farms have access to the necessary quantities of water in such a way that the fish stocks can be maintained and be economically viable throughout the year.

Coordination with the relevant services is a key condition for the sustainability and development of this activity. The development and implementation of the relevant policy should consider the economic viability of the units and ensure the necessary water supply for their operation, as well as the livelihood and well-being of organisms cultivated with a balance between development and conservation of the environment.

Open Sea aquaculture:

In Cyprus, due to the limited coastline, the existence of many users, as well as the major tourism industry, aquaculture should be integrated within the framework of a single maritime and coastal spatial planning with a view to establishing aquaculture zones.

The aim of the creation of aquaculture zones is to regulate the spatial structure, in order to ensure the protection of the environment and to create a viable sector of the economy that is integrated harmoniously and functionally into the network of activities carried out in the coastal zone and maritime space. A siting study has already been carried out and the corresponding Strategic Environmental Study is currently being examined by the competent authority of the State. In addition, in the context of the

¹ COM(2021)236 final

above action, a new study is expected to be carried out for the establishment of offshore aquaculture zone(s) in excess of 4-5 kilometres from the coast and at depths greater than 100.

2. Regulatory and administrative procedures

More generally, the procedures and the regulatory framework are not very complex, and we do not consider that the time needed for obtaining an aquaculture licence or for increasing production capacity hinders the further development of this activity in Cyprus. The establishment and designation of marine aquaculture zones will be an important factor in reducing the time for issuing new offshore aquaculture permits. Given that these zones will be predefined considering the various environmental and socio-economic considerations such as other marine users, development projects, etc., it is expected that it will significantly reduce the time taken to obtain environmental approval. For onshore aquaculture units, the procedure and time needed to obtain planning permission have significantly improved in recent years.

3. Climate change adaptation and mitigation

Actions aimed at:

- Promote research and improve knowledge on understanding the impacts of climate change on aquaculture and therefore increase resilience.
- Implement measures to strengthen the resilience of aquaculture in response to extreme weather conditions.
- Diversification with species resilient to climate change.

4. Animal health and public health

Implement prevention and biosecurity measures to maintain the health of farmed organisms.

5. Producer and market organization

- Promotion of information campaigns on the creation of producer organisations, and on the potential benefits of their creation.
- Creation of producer organisations.

6. Diversification and added value

In order to improve competitiveness and promote environmentally, socially and economically sustainable aquaculture, the diversification of farmed species, (e.g., with species lower in the food chain or new species with good market potential), the processing/packaging of aquaculture products and the possible cultivation of organic products should be supported accordingly. Producing larger fish and diversifying the final product into smoked, fillets or other products could expand the market, add value, and improve their economic performance. This type of processing allows the products a longer shelf life and time to market while at the same time allowing some quantities of unsold fresh products to be exploited.

7. Environmental performance

Promotion, implementation, and use of renewable energy systems. A very strict legal framework including environmental monitoring has been adopted and implemented to facilitate the monitoring and assessment of the environmental impact of aquaculture farms. This framework provides an effective and comprehensive system of environmental monitoring and protection that will contribute to the objective of achieving sustainable development. Marine fattening units in Cyprus are required to draw up and submit to the competent authorities twice a year an environmental monitoring programme, based on the Aquaculture Laws and Regulations.

8. Animal welfare

In Cyprus, practices for the welfare of fish and especially for maintaining their health and well-being are at a very high level. Aquaculture farms in Cyprus are trying to follow a precautionary approach and reduce the risk by applying good aquaculture practices, such as reduced stocking densities, frequent rotation and cleanliness of cage nets, use of cage nets from alternative materials (e.g., *Dyneema*) that have a smaller surface area for the development of micro-organisms including parasites. Marine hatcheries in Cyprus, in cooperation with veterinarians, have drawn up a biosecurity protocol to prevent various diseases in general. The measures are focused on:

- Improving the knowledge of the personnel and of the support services.
- Improving the health, well-being, and welfare of farmed species, including biosecurity.
- Promoting and implementing good practices for the health, well-being, and welfare of fish in Cypriot aquaculture.
- Establishment of a national disease prevention and response plan.

9. Data and monitoring

The data shall be collected in the form of questionnaires on an annual basis, adapted accordingly for each type of aquaculture. It should be clarified that the submission of statistical data and data is an obligation for producers under the Aquaculture legislation and is an integral part of the conditions attached to all aquaculture licences. In view of all the above, actions aimed at:

- Ensuring continued implementation of the National Data Collection Programme.
- Upgrading of the National Aquaculture Database.
- Reduction/Simplification of administrative procedures and workload required to collect and process data.
- Improving data analysis capability.

10. Knowledge and innovation

Further research is needed on the development and quality assurance and sustainability of aquaculture through enhanced cooperation with scientific or other bodies and the private sector in order to carry out various research programmes and studies. Many of the R&I actions can be considered and implemented by governmental aquaculture research centres, which will promote their outcomes for implementation by the private sector if they are proven to be efficient and sustainable. Relevant actions aimed at building and improving competencies (lifelong learning), disseminating scientific and technical knowledge, innovative practices and acquiring new professional skills in the aquaculture sector, should be promoted. In addition to the above, networking is another action that can contribute to improving existing management practices and competitiveness. For this reason, similar actions relating to networking and the exchange of experience and best practices between aquaculture enterprises or professional organisations and other stakeholders, including scientific and technical, public and academic bodies at the local, regional and international levels, should also be promoted. Therefore, actions aimed at:

- Improving the knowledge and training of human resources including the acquisition of new skills.
- Promote and strengthen cooperation and networking between stakeholders (public and private) at both national, regional and international levels.
- Strengthening national participation in European and regional organisations and institutions dealing with aquaculture activity.

4. Funding

The actions set out for each priority axis under the Multiannual Strategic Plan should be promoted, supported and implemented both from national resources and from the European Maritime, Fisheries and Aquaculture Fund.