



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

Summary AUSTRIA

“National Strategic Plan for Aquaculture and Fisheries of Austria for the period 2021-2027”

1. State of the aquaculture sector

The aquaculture sector in Austria consists of three different economic sectors, which are very different from a production point of view:

- plain pond farming for the production of carp and miscellaneous by-fish;
- the production of salmonid (trout type) with water-concrete content in flow-through plants, and
- technology-emphasised production in recirculating plants (in buildings in basins).

The main species produced are trout and carp. Aquaculture is small-scale in Austria and comprises 492 farms with corresponding market performance. The fish produced for human consumption in Austria in 2018 included 2,912 tonnes of salmon (salmonids), 713 tonnes of carp species (cyprinids) and 458 tonnes of other freshwater fish.

2. Objectives for 2021 to 2027

The national overall objective is “Securing a sustainable Austrian aquaculture and fisheries sector”. In order to achieve this overall objective, the following objectives are set:

- Increase the annual production of freshwater fish from inland fisheries from 160 tonnes (year 2018) to 200 tonnes per year in 2027. This represents an increase of 25 %. The

increase is also to be achieved through the exploitation of previously under-used species.

- Adaptation of the aquaculture and fisheries sector to climate change (Fit for Climate Change) and further orientation towards sustainability and biodiversity.
- Increasing domestic sustainable production to increase self-sufficiency.
- Increasing the quality of domestic products and regional added value from aquaculture and fisheries.
- Safeguarding and improving the competitiveness of the domestic aquaculture and fisheries sector and reducing the administrative burden.

Growth target

Annual production of freshwater fish (from aquaculture and lake fisheries) is expected to increase from 4,244 tonnes in 2018 to 6,345 tonnes in 2027. This represents an overall increase of almost 50 %.

- Increase the annual production volume of freshwater fish in the aquaculture sector from 4,084 tonnes in 2018 to 6,145 tonnes in 2027. This represents an increase of approximately 50 %. For each production sector, this means:
 - Trout production: New production sites and the application of innovative technologies will aim to increase production from around 2,913 tonnes (year 2018) by around 45 % to 4,200 tonnes per year in 2027.
 - Carp pond farming: By emphasising the nature conservation and landscape function, the aim is not to increase production through intensification, but primarily to rebuild or revitalise pond plants. This is expected to increase from 713 tonnes (year 2018) by around 12 % to around 800 tonnes per year in 2027.
 - Recirculation systems: The new installation of recirculating plants is expected to increase production volumes from 458 tonnes (year 2018) by around 150 % to 1,145 tonnes per year in 2027. However, in order to increase production, the high quality of products must be maintained or increased. It is also important to ensure that energy efficiency is managed and that renewable energy sources are used wherever possible. In addition to the African Wels, the production of other fish species and aquaculture products will be increased in order to increase product diversity.

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. Climate change adaptation and mitigation

¹ COM(2021)236 final

In order to adapt to climate change, the testing and introduction of adapted high quality restocking fish species for aquaculture should be supported.

However, attention must be paid to the risk of spreading potentially invasive species. In the case of existing salmonid producers, in view of the emerging climate change, opportunities should be created to provide fish with the necessary water in emergency situations during extreme weather conditions, such as floods, extreme heat periods (for example, by halving the residual water supply in the short term or recovering the wastewater as residual water).

2. Regulatory and administrative procedure

The administrative burden is to be further reduced by harmonising the various Länder guidelines and procedures with the 'Guidelines for the construction of aquaculture facilities/fisheries facilities' issued by the BMLRT on harmonised Austrian guidelines and uniform application by the district administrative authorities. In a second step, further administrative simplification is to be achieved by creating a 'one-stop-shop aquaculture' interface per Land for the pooling of all necessary information and the processing of authorisation procedures. It is recommended to establish registers of all civilian technicians' offices in the area with the planning of aquaculture facilities. However, the implementation of this measure requires a political decision by the Länder.

3. Animal health and public health

Adequate treatment options and therapeutic methods need to be developed. As in the case of hygiene and disinfection, environmentally sound methods should be taken into account.

4. Producer and market organisations

In line with the Commission's recommendations in the "Strategic Guidelines for a more sustainable and competitive aquaculture in the EU for the period 2021-2030", support is offered to aquaculture producers in the form of workshops and advisory initiatives for the establishment of producer organisations.

5. Diversification and adding value

For the future direction of the national aquaculture sector, a focus on regionality and origin labelling, EU protection of origin (PDO and PGI), traceability, biological footprint and animal welfare is needed. Actions with a specific focus in this direction will be encouraged. Existing national quality labels and certified production methods, in

particular organic production, need to be further developed. Greater use should be made of the 'Kulinarik Network' platform and the new state-recognised 'AMA refuge Region quality label', which also guarantees consumers the best quality of food and short transport routes along the food chain. In addition, in line with the European Union Biodiversity Strategy, more diverse agro-ecosystems will be promoted. The Waldviertler carp pond farming should meet all the required criteria, as it shapes the landscape with its biodiversity and has centuries-old traditional knowledge. The overall system of agriculture, ecology, economics, history and culture should be preserved in the long term through sustainable management and adapted protection.

6. Environmental performance

The preservation of the ecosystem services of the Austrian ponds by supporting their sustainable, extensive management is a very important measure and should be continued, in particular with national funding. Efforts should be made to further increase the benefits for the environment and biodiversity by extending pond landscapes, maintaining and increasing their landings areas, through additional macrophytes or the biological management of these ponds. Such additional ecosystem services and sustainability measures shall be compensated for by additional funding. In order to increase resource efficiency, incentives should be provided to reduce water consumption, improve wastewater treatment (settling tanks, drum filters) and reduce the use of inputs, including pharmaceuticals (e.g. antibiotics) and chemicals. The latter is also linked to the expansion of organic production.

7. Animal welfare

In the interests of animal welfare, fish must also be adequately supplied with water, which means that the possibility of providing emergency supplies to the fish must be tested and subsequently enshrined in law.

8. Data and monitoring

Socio-economic data or data on environmental indicators shall be collected where necessary, but at least data on the use of antibiotics in aquaculture shall be collected.

9. Knowledge and innovation

Supporting research and the introduction of innovations in methods and practices to reduce the environmental impact and dependence on fish meal and oil, the recycling of offal, animal friendly bio feed, sustainable use of resources, energy efficiency and the circular economy, climate change adaptation strategies (technical solutions, oxygen supply, sub-cycle, etc.), improved animal welfare and new sustainable production and

breeding methods, including testing of new fish species adapted to climate change. There is also a need for research on animal feed. In this context, the question arises as to how and to what extent these products can be substituted, for example by using insect meal, algal oil or fish waste, and whether this has an impact on product quality. In addition to the suitability of new sources, it is also necessary to identify sustainable production capacity. As consumers are open to new innovative fish products (Eurobarometer, 2018), it seems useful to establish new types of aquaculture for traditional and recirculatory facilities. Appropriate knowledge of biology, rearing methods and husbandry conditions must be developed in order to be able to breed them sustainably and in accordance with the species. If these are kept in recirculation plants, additional input is needed in the field of plant technology. Training and capacity building measures will be put in place for professionalisation of the sector and development of skills. In order to disseminate new technical and scientific knowledge, methods and procedures, technical meetings and study visits are also needed, which also take place abroad. Networking of all advisory actors at the Federal Office for Water Management and the Chambers of Agriculture is necessary in order to enable a more efficient –transfer of know-how. Better equipping the Institute for Water Ecology and Fisheries of the Federal Water Management Office with staff and an experimental facility for carp pond farming is necessary for both advice and applied research.

4. Funding

The following actions will be supported by the EMFAF programme:

- The construction, extension and refurbishment and modernisation of production, processing and marketing facilities, including investments in equipment and fishing gear, remain the main measures to increase sustainable production and are therefore key elements of the National Strategic Plan. This also includes investments to diversify or expand product diversity.
- In trout farming, access to water resources will be crucial to increase production in the future. The additional technical security of installations against extreme events is an eligible measure in order to avoid losses caused by extreme situations and weather events. Under certain conditions, it will also be useful to support the conversion of flow-through facilities into sub-loop plants.

The mentioned measures in the field of research and innovation could be supported by EU Research Framework Programme Horizon Europe or at national level.