



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

Summary GERMANY

“National Strategic Plan Aquakultur NASTAQ 2021-2030 for Germany”

1. State of the aquaculture sector

Aquaculture in Germany stretches from semi-natural, extensively managed pond plants, through flow facilities and grids, to closed water circulation facilities. In the marine environment, shellfish farming is also part of aquaculture. Currently, there are only a few commercial aquaponics plants in Germany which produce small quantities of fish, mostly linked to the production of lettuce and spice plants (e.g. basil). Research is also carried out in some universities and institutes. According to official statistics, approximately 18,500 tonnes of edible fish were produced for the market in carp ponds, cold and hot water systems and network pens in 2019. In the field of marine aquaculture, around 19,400 tonnes of bivalve molluscs were produced in Germany in 2019. The main species are raised in Germany: carp, trout and mussels and in less proportion: crayfish (*Astacus astacus*), African whales, European eel, Zander, European Wels, Tilapia, and shrimps (especially *Litopenaeus vannamei*).

2. Objectives for 2021 to 2027

- Maintenance, stabilisation and expansion of existing aquaculture production capacities.
- Increasing the production of fish and other aquaculture products in sustainable production ("growth").
- Conservation of pond landscapes with their typical extensive farming methods and their dual function for fishing industry and public welfare (nature conservation, landscape, water balance).

- Image enhancement of local aquaculture products and strengthening regional marketing.
- Adapting aquaculture to climate change and increasing resilience.

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

For inland

Operational objective (OZ): Establishing aquaculture to strengthen of areas with structural change.

- Initiation of the dialogue process at the level of the federal states and anchoring the goal in relevant planning processes: Designation of suitable sites, inclusion of technical, cycle-based aquaculture facilities (RAS) in the funding. Joint Task "Improvement of the Regional Economic Structure" (GRW).

For North Sea coast

OZ: Long-term spatial planning safeguarding of defined areas for shellfish culture management.

- Initiation of the dialogue process at the level of the federal states and anchoring the goal in relevant planning processes.

For Baltic coast

OZ: Development of marine aquaculture.

- Dialogue process with the Federal Water and Shipping Directorate (WSV): Designation of winding areas from the point of view of the WSV.
- Launch of a dialogue with the Federal Ministry of Transport (BMVI) and the WSV and, where appropriate, the authorities responsible for combating clearance in MV and SH: Designations of species for marine aquaculture.

¹ COM(2021)236 final

2. Regulatory and administrative procedures

For inland

OZ 1: Simplification of “outdoor construction” in the context of the planning and construction of aquaculture facilities.

- Enshrining the concept of professional fishing industry (instead of inland fishing) in the Land Building Regulations
- Establishment of an aid scheme for the application of the right to the construction of aquaculture facilities.

OZ 2: Simplification of Authorisation of: Netting systems

- Pilot feasibility studies including the integration of nutrient compensation mechanisms.

OZ 3: Long-term conservation of aquaculture stocks.

- Examination of the privileged of aquaculture analogous to land-economy and expiration of water rights permits for existing installations.

For Baltic coast

OZ 1: Planning and legal certainty for investors and approval authorities.

- Development of a water law "authority standard" for the approval of IMTA.

OZ 2: Designation of shellfish production areas.

- Dialogue process with supreme food supervisory authorities of the federal states of MV and SH

3. Climate change adaptation and mitigation

- Reduction of effects of rising temperatures on the functioning of aquaculture facilities.
- Mitigating climate related deficiencies in water quality in carp farming and trout production.
 - Technology (ventilation, effluent treatment, warning systems, etc.); This requires targeted support schemes for the technical development of farms, training and further training in technical aquaculture and support for technical assistance for the conversion of existing facilities.

- Partial circulation of rearing water (e.g., forel production). Support for refurbishment measures to cover sub-circuits.
- Adapted water management in ponds interconnected systems.
- Production of corresponding guides, e.g., for multi-annual pond spraying.
- Implementation of targeted research projects in cooperation with practical operators to adapt to changed environmental-conditions and use of climate-resilient fish strains.
- Reduction of the “ecological footprint” of the Aquaculture through Energy saving and increasing sustainability.
 - Production of guidance on how to reduce the ecological footprint in aquaculture.

4. Producer and market organisations

- An association of producers in the processing and processing of aquaculture products; Exploiting the synergy effects of common processing structures (machinery, personnel) and producing a stable and wide range of products.
- Establishment of regional producer groups.

5. Control

OZ: Traceability system accepted by operators and used.

- Improving information on operators.

6. Diversification and adding value

OZ 1: Promoting quality and added value through certification.

- Certification of aquaculture products and environmentally friendly processing methods.

OZ 2: Increasing diversification.

- Promote initiatives to diversify aquaculture businesses.

7. Animal welfare

OZ: Appropriate guidance on the welfare of-aquaculture in the world and the community.

- Development of a systems for the evaluation and restoration of environmental performance of aquaculture.

8. Communicating on EU aquaculture

OZ 1: Raising the image of aquaculture products.

- Regional and supra-national information campaigns to educate consumers to increase acceptance of this form of production.

OZ 2: Increasing knowledge of aquaculture as a production method.

- Regional and supra-regional information campaigns to inform consumers.

OZ 3: Increasing the value of local aquaculture products.

- Promotion of the high product quality and safety of domestic products, highlighting the high animal welfare, environmental and social standards in Germany.

9. Integration in local communities

- Support for process — FLAGs or in which LEADER actors — fishing industry groups can feed into local development processes and regional value chains.
- Integration of aquaculture actors into local development-processes (e.g., including FLAGs through the CLLD principle) and regional value chains

10. Data and monitoring

- Explore the usefulness of existing data collections for better data requirements and searches, develop cross-sector synergies, e.g., use of data such as environment impact and environmental performance.
- Duplication of data collection is avoided.
- Data collected on aquaculture are protected in the interests of data-protection and can therefore be protected for highly sensitive purposes.
- Counting of fish predators by neutral third parties to avoid conflicts of interest.
- Improving the validity of technical production data through control surveys (e.g., at selected reference farms).

11. Knowledge and innovation

OZ 1: Application of a nationwide coordinated strategy with structural and content-related proposals for aquaculture research in Germany.

- Update of DAFA Strategy on Aquaculture —research in Germany
- Coordination of aquaculture research in Germany on the basis of the agreed strategy.

OZ 2: Optimisation of the master's degree Aquaculture.

- Improving higher education at Integration of the expertise available in Germany and/or the courses already in place to aquaculture research strategy.

OZ 3: Modern tech curricula adapted to technologies and on-call training.

- Regular adjustment the curricula of the profession training on contemporary demands.

OZ 4: Cooperation on vocational training.

- Continuation of the work of vocational training centres and greater cooperation between training companies in order to provide apprentices with extensive expertise.

OZ 5: Extension and maintenance of KLA.

- Qualification of KLA drivers by organising, –financing and marketing– special training and training measures for fish farmers and cross-entrants.

OZ 6: Expansion of academic training in the field of Aquaculture.

- Expansion of training opportunities (e.g., needs for trained production managers of aquaculture enterprises).

OZ 7: Practical academic training.

- Cross-linking of vocational training and academic education

4. Funding

The strategic and operational objectives of this National Strategic Plan will be reflected in the operational programme for the EMFF/EMFAF and will be supported by public funding, within the limits of the possibilities offered therein. The European Agricultural Fund (EAFRD) can act as a lead fund for implementing the participatory local development (CLLD) strategy in LEADER areas. The European Regional Development Fund (ERDF), the European Maritime and Fisheries Fund (EMFAF), the European Social Fund (ESF) and the Just Transition Fund (JTF) are also used in Germany. In light of this, individual funding strategies have to be coordinated between the funds.