

## Aim

The primary goal of FutureEUAqua is to effectively promote the sustainable growth of climate change-resilient, environmentally friendly organic and conventional aquaculture of major fish species and low trophic level organisms in Europe, to meet future challenges with respect to the growing consumer demand for high quality, nutritious and responsibly produced food.

## Expected benefits of FutureEUAqua

- New opportunities in value chains, markets, growth and jobs
- Contribute to future EU and international policies on aquaculture
- Improve consumer awareness and social acceptability of aquaculture products
- Boost productivity and resilience of sustainable aquaculture practices
- Increase availability, accessibility and affordability of food and feed while conserving natural resources and contributing to climate change mitigation
- Improve professional skills and competences

## The Consortium

FutureEUAqua's consortium gathers 32 different Small and Medium-sized Enterprises (SMEs), Associations, Research Institutes (RTD) and other companies from 9 different countries.



**Future growth in sustainable, resilient and climate friendly organic and conventional European aquaculture**

[www.futureeuaqua.eu](http://www.futureeuaqua.eu)

**Project coordinator**

Åsa Maria Espmark

Work programme topic addresses: H2020-BG-2018-1

@futureeuaqua

Asa.Espmark@nofima.no



This project has received funding from the European Union's Horizon 2020 research and innovation action under grant agreement no. 817737

## Following the whole value chain from egg to fork



### Sustainable breeding



### Ingredients & feed



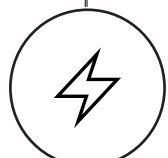
### Consumer and regulatory activities



### Quality and safety of aquaculture products



### Monitoring technologies



### Production systems

### Sustainable breeding

This work plan will assess how the current breeding programmes for salmon, seabass, seabream and rainbow trout can respond to future demands for novel feed compositions, and make further improvements to disease resistance, climate resilience and animal welfare.

**How well are the current breeding practices and methods equipped to respond to future challenges?**

### Ingredients & feed

This work plan will fine-tune feed formulations for smart, optimised and better performing conventional and organic aquaculture. Ingredients and tailored-made low eco-footprint aquafeeds will be selected, ensuring higher fish performance, nutritional quality and safety.

**How can we improve feed to ensure optimal nutrition, safety and performance?**

### Consumer and regulatory activities

This plan will identify communication strategies to increase consumer awareness and the social acceptability of aquaculture. The plan will also assess the challenges related to space needed for the different aquaculture production systems and provide suggestions on how to change the regulatory framework to allow for continued and sustainable growth of the sector.

**How can we improve consumer perceptions of the sector?**

### Quality and safety of aquaculture products

This plan will develop minimally processed fish products to valorise aquaculture raw materials and to identify optimal packaging to ensure quality and safety.

**Can we adapt post-harvest processing methods and packaging to improve the quality and safety of fish products?**

### Monitoring technologies

This plan will look at the impact of housing environments and innovative diets on fish health and welfare using a wireless communication system to integrate KPIs. This system will track the activity patterns and physiological status of the fish using sensory signals and remote monitoring.

**Can we monitor fish patterns and traits to determine key performance indicators?**

### Production systems

This work plan will analyse the sustainability and resilience in Recirculating Aquaculture System (RAS), Integrated Multi-Trophic Aquaculture (IMTA) and open cage aquaculture systems, looking at nutrient flows and water quality with an emphasis on production, economic profitability and environmental impact.

**How can we improve nutrient flows and water quality in different aquaculture systems?**