



NewTechAqua H2020 project

CIHEAM is involved in new technologies, tools and strategies for a sustainable, resilient and innovative European aquaculture

Tuesday 21 January 2020

Kick-off meeting of NewTechAqua

Bologna, Italy

By 2050, the planet will be inhabited by 9.7 billion people. This implies an unprecedented challenge for food systems that will need to substantially increase the production of safe and nutritious food, while reducing the pressure on environmental resources. Europe and the Mediterranean region will be at the forefront of this challenge and as such it will need to ensure healthy diets, by boosting innovation and investment, implementing resource-efficient circular economy principles and building climate smart food systems. The aquaculture industry has to ensure that it is possible to increase and differentiate the production of sufficient, good healthy and sustainable seafood and these aims can be achieved by enhancing innovations, technology and knowledge management while improving the understanding of the factors influencing development¹.

To this aim, **NewTechAqua, a new project funded by the EU under the Horizon 2020**, intends to expand and diversify EU production of finfish, molluscs and microalgae by developing and validating technologically-advanced, resilient and sustainable new solutions.

NewTechAqua identified a range of **challenges and opportunities** for the sustainable development of European Aquaculture:

- Use sustainable fish feeds to make aquaculture one of the most efficient producer of safe and nutritious food products
- Increase organic aquaculture production
- Improve farming production through new technologies and management systems where the precision fish farming principles and industry 4.0 revolution are key factors that could assist this aspect
- Raise robustness (disease resistance) and quality of aquatic organisms by selective breeding programmes
- Respond to disease and infections, using fewer and fewer chemical and antibiotics } Support the diversification of the aquaculture industry (new fish, new products)
- Improve aquaculture industry technology and cultivation systems that are environmentally and economically sustainable

NewTechAqua is structured in 9 Work Packages (WP). WP1 will conceive, formulate, produce and demonstrate three innovative sets of aquafeeds (pro-health, organic, zero waste). WP2 will establish new AI epidemiological models for enhancing the control of parasite outbreaks in Norwegian and Mediterranean farms. WP3 will develop innovative breeding programmes to improve performance, robustness and quality of farmed fish, molluscs and microalgae, while WP4 will achieve significant advances in reproduction technology of three emerging fish species. WP6 will develop a set of indicators to monitor and measure progress towards the expected impacts, while market uptake of NewTechAqua results and outputs will be ensured by a detailed exploitation strategy (WP7). **Finally, NewTechAqua will achieve well-targeted communication, dissemination and maximum transfer of generated knowhow and project new technologies (WP8). The lead was entrusted to the CIHEAM on WP8.**

¹ European Parliament Fisheries Committee, the European Aquaculture Technology and Innovation Platform (EATIP) 2017



The CIHEAM has the lead on the communication, dissemination and training activities, in interaction with most relevant stakeholders of the European and non-European Aquaculture actors.

CIHEAM Institutes involved in technology transfer and training

The two CIHEAM Institutes, in Bari (Italy) and Zaragoza (Spain), directly involved in the project, will ensure that scientific and technical transfer of relevance generated from NewTechAqua is transferred to a maximum audience of relevant stakeholders through appropriate tools and channels to facilitate the uptake of project findings.

The training activities will be part of the channels mobilised. The training activities will be addressed to participants coming from NewTechAqua partner countries, but also from the rest of Europe and other European Neighbouring countries, e.g. non-EU Mediterranean, where aquaculture is a relevant economic activity.

Technology transfer and training will be implemented through three types of complementary activities: 1) advanced short courses; 2) training workshops, and 3) a series of specialized webinars, organized in the two CIHEAM institutes.

Coastal development and sustainable fishing are among the strategic priorities of the CIHEAM and for which a Corporate Working Group is currently mobilized.

More about [NewTechAqua](#)

CIHEAM

Established in 1962, the International Centre for Advanced Mediterranean Agronomic Studies (CIHEAM) is a Mediterranean intergovernmental organisation. As a key player in multilateral cooperation in the fields of agriculture, food, fisheries and rural territories, its missions revolve around four main objectives:



Protection of the planet by combating waste in all its forms including waste of knowledge and know-how;



Food and nutrition security by boosting sustainable agriculture and food;



Inclusive development by investing in new generations and fragile territories;



Prevention of crises and resilience of territories.

The CIHEAM carries out its missions through the tools of specialised training, network research, cooperation, technical assistance but also political dialogue and partnerships.

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