



Optimizing land-based fish production in next generation digital recirculation

<http://www.digiras.org/>



Project consortium includes 2 large, 1 medium, 1 small and 1 micro sized enterprises:



Portfolio of Outputs and Commercialisation Needs



Outputs

Microbial water quality analysis



TRL 6

Procedures for mapping & absolute quantification of priority microbes in fish & production environments using DNA/RNA-based technologies. Potential of machine learning supported NGS data processing for developing early warning tool demonstrated.

H2S- Sensor



TRL 4

Cost-effective hydrogen sulfide sensor prototype with high sensitivity developed.

Covalent Organic Framework Based Absorbent



TRL 3

Novel approach for absorption of off-flavour compounds demonstrated

Fish Welfare Monitoring System



TRL 6

Novel fish welfare monitoring technology based on camera systems (under & over water) and machine learning assisted fish behavioural analysis established.

Microalgae Bioreactor



TRL 3

Use of microalgae for recovering nutrients and production of fatty acid rich biomass from RAS water demonstrated.

Commercialisation Needs

More R&D for process optimisation and technology development

Further development and testing of prototypes

Extended testing and optimisation in commercial systems

Licensing and spin-off

Marketing and promotion