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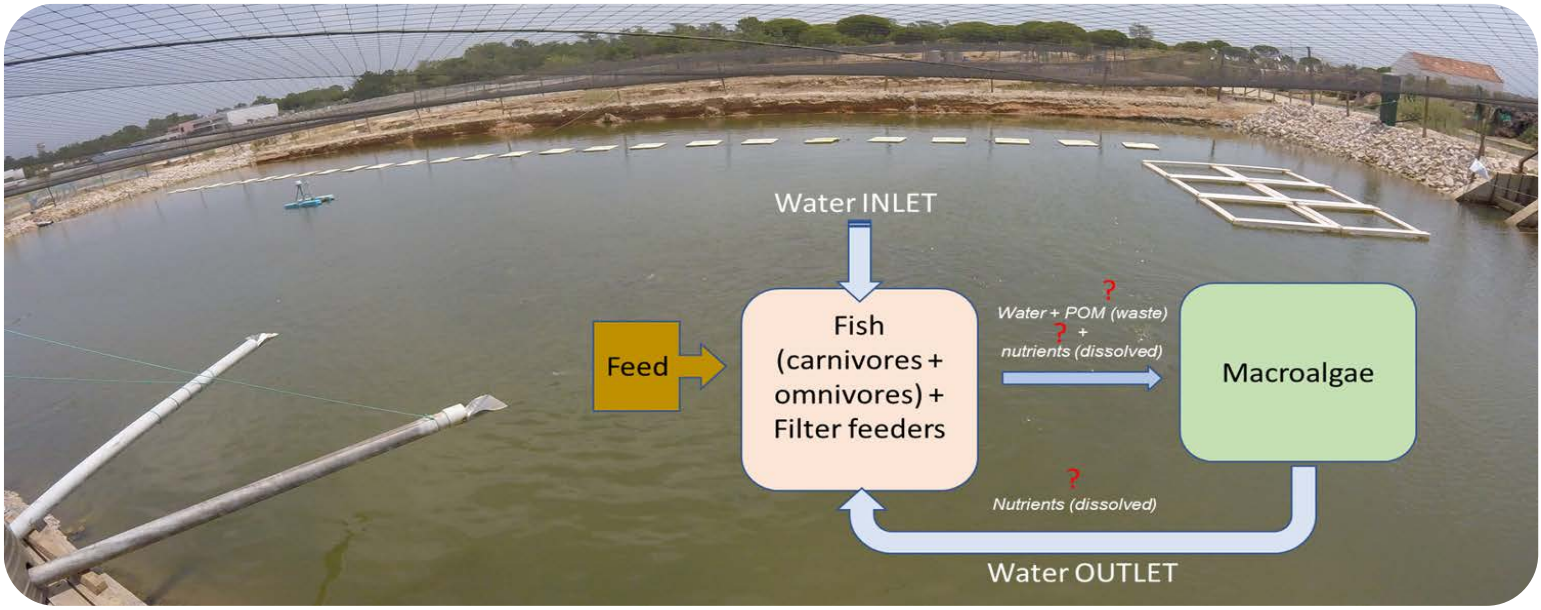
Integrate Aquaculture:
an eco-innovative solution to
foster sustainability in the
Atlantic Area

www.integrate-imta.eu



ABOUT INTEGRATE

Despite being a key driver of the maritime economy in the European Atlantic Area, Atlantic aquaculture faces significant challenges: environmental management at farming sites, the European north-south divide, regulatory hurdles, long licensing processes, low levels of consumer knowledge and acceptance, competition for space with other maritime activities, etc. INTEGRATE contributes to overcoming these challenges by facilitating the transition towards commercial Atlantic Integrated Multi-Trophic Aquaculture (IMTA).

WORK PACKAGES

1. Project coordination
2. Project communication
3. Capitalization
4. Understanding IMTA best-practices in the Atlantic Area

5. IMTA's environmental contribution

6. Defining a Framework for IMTA development: Action Plans for the Atlantic Area

QUICK FACTS

PROGRAMME	**INTERREG ATLANTIC AREA**
DURATION	**June 2017 –May 2020 (36 months)**
PARTNERSHIP	**8 partners from Spain, Portugal, France, Ireland and United Kingdom** **11 associated partners**
COORDINATOR	**Fundación Centro Tecnológico Acuicultura de Andalucía (CTAQUA)**

Interreg Atlantic Area
European Regional Development Fund
EUROPEAN UNION

Work Package 5

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SUMMARY OF WORK PACKAGE 5 - IMTA's environmental contribution

INTEGRATE's environmental assessment of IMTA is based on the data provided by the pilot actions implemented in Work Package 4:

1. New eco-friendly technologies and high value seaweeds (*Codium tomentosum*, *Palmaria palmata*, *Porphyra purpurea*, *Himanthalia elongata* and *Ulva spp*.) applied to IMTA.
2. Land-based eco-friendly developments of integrated *Porphyra purpurea* + oyster systems.
3. Land-based IMTA applied to semi-extensive aquaculture systems in earthen ponds:
   - 3.1. Co-culture of meagre (*Argyrosomus regius*), white seabream (*Diplodus sargus*), grey mullet (*Mugil cephalus*) and oysters (*Crassostrea gigas*) + seaweed (*Ulva spp*.) in a separate compartment.
   - 3.2. Co-culture of seabream (*Sparus aurata*) and oysters (*Magallana gigas*) + seaweed (*Ulva spp., Gracilaria gracilis*) in a separate compartment.

The pilot actions follow different approaches to IMTA and provide a better understanding of the interactions between species belonging to different trophic levels, as well as the environmental role of primary producers in nutrient cycling. Modelling tools such as mass balance are used to better understand the factors affecting growth in IMTA systems, while environmental performance is assessed through Life Cycle Assessment (LCA). Best practice guidelines will help set a standard for assessing the environmental sustainability of IMTA farms and their recognition as such in the marketplace. This sets the path for future eco-labelling of IMTA products as a means to achieve premium sales prices & good environmental performance at the farming stage.

PARTNERSHIP

- **Fundación Centro Tecnológico Acuicultura de Andalucía (ES)**
- **Irish Seaweed Consultancy (IE)**
- **Institut National Supérieur des Sciences Agronomiques, Agroalimentaires, Horticoles et du Paysage (FR)**
- **Scottish Association for Marine Science (UK)**
- **Instituto Portugês do Mar e Atmosfera, I.P. (PT)**
- **National University of Ireland Galway (IE)**
- **ALGAplus Produção e Comercialização de algas e seus derivados Lda. (PT)**
- **Centre d'Etude et de Valorisation des Algues (FR)**

TYPE OF PARTNER

- **Research and innovation organisations**
- **Small and medium enterprises**
- **Universities and higher education**
- **National public organisations**
- **Large enterprises**

Learn more at:

www.integrate-imta.eu

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