



**FARNET TRANSNATIONAL SEMINAR FOR FLAGS
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Integrating aquaculture within local communities

Cultivating microalgae for oil extraction

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CONTEXT

- Area of important presence of micro algae
- Collaboration between the fisheries sector and the private sector in the identification and capture of the micro algae.
- Existence of fish processing companies in the area (canning company)
- Company set up by young people and with university background
- Company set up by promoters with experience in R & D of marine or fishery products and resources
- Looking for an area with possibilities to develop the project (**industrial zone investment** at a good price, presence of micro algae in the area, experience project management, and support of the FLAG in this type of projects)



OBJECTIVES OF THE PROJECT

- To Promote economic growth and encourage business creation
- To generate new products of fishing and its associates, in this case of the algae
- To strengthen the industries related with the marine plants
- To innovate with a product like the algae to obtain a rich oil in omega 3 without increasing the fish catches in omega 3.
- To create jobs
- To diversify the activities of fishing towards aquaculture
- To develop an innovative and respectful technology with the environment to obtain rich oil in omega 3

PARTNERS

- **Two young people** to set up a new business
- **Fisheries sector** - collaboration in the sampling campaigns and in the collection of the microalgae.
- **Local people** to be employed in the facilities
- **Local FLAG**

METHODOLOGY

- R&D for the design of the system
- Location of the strains/seeds of microalgae in the natural environment, and transfer to the plant
- Preparation of inoculum in the laboratory and scaling
- Cultivation and fattening of microalgae
- Processing and extraction of DHA components (oil of marine origin, rich in Omega 3). First concentrate the parts rich in omega 3 and then the separation of omega 3 from the rest of the algae
- Refining and purification
- Packaging and storage

RESULTS

- Creation of a new company and a new product in the territory
- Creation of two new jobs in the area
- Installation of a company with a high R&D component related to seafood products in the area
- Although the facility is under construction and are not ready for production yet, they have signed contracts for the new products.
- Diversification in the area
- Obtaining a new product (oil rich in Omega 3) without increasing the fishing effort
- At present, they are investigating the use of by-products for aquaculture uses
- Establish a new way of working with the resources obtained from the se, in a very friendly – environmentally way.