

## Workshop on allocated zones for Aquaculture (AZA) WGSC-SHoCMed . SEVILLA

**ctaqua** CENTRO TECNOLÓGICO  
DE LA ACUICULTURA

*Investigación aplicada a la acuicultura*



*Fundación Centro Tecnológico Acuicultura de Andalucía*

Juan Manuel García de Lomas Mier. Gerente

### What is Ctaqua?

The Aquaculture Technology Centre of Andalusia, is a private Foundation established as a non-profit entity in October 2007.

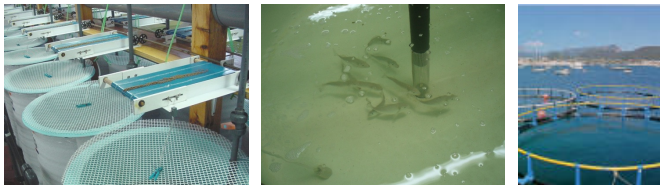
It is located in El Puerto de Santa Maria and its patronage has 21 private companies and 7 public institutions (government and business associations among them).



**ctaqua**

**ctaqua** CENTRO TECNOLÓGICO  
DE LA ACUICULTURA

## ¿What is Ctaqua?



## Mission

Promote competitive innovation of enterprises, in response to aquaculture business sector needs through the development of applied research at the various production processes

ctaqua

ctaqua CENTRO TECNOLÓGICO DE LA ACUICULTURA

## ¿What is Ctaqua?



## Objective

Collaboration with enterprises to increase profitability and competitiveness ... .. through innovation and technological development



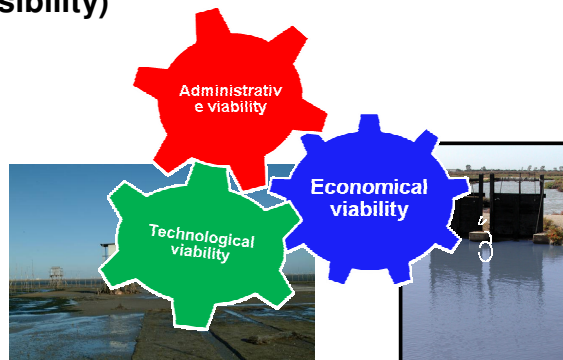
ctaqua

ctaqua CENTRO TECNOLÓGICO DE LA ACUICULTURA

## How to identify an Aquaculture Area of Interest?

\* Environmental sustainability.

- Compatibility with other uses (administrative feasibility)
- Profitability (economic feasibility)
- Available technology (technological feasibility)



General considerations

ctaqua CENTRO TECNOLÓGICO DE LA ACUICULTURA

ctaqua CENTRO TECNOLÓGICO DE LA ACUICULTURA

General considerations



Given the variability and complexity of aquaculture facilities in Andalusia, the Declaration of Areas of Interest must be the result of a multidisciplinary work including : Aquaculture Technical specialists (technological development), legal and administrative specialists (Administrative development) and Economy specialists (economical development).

All the studies must have the three reports included. Any statement that does not have any of these reports will be incomplete.

The feasibility analysis should distinguish between:

- absolute technological unfeasibility (very unlikely), and

- technological unfeasibility due to economical reasons (the most common cause).



Profitability and overall viability of the company.

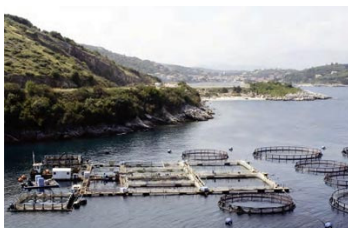


General considerations

ctaqua CENTRO TECNOLÓGICO DE LA ACUICULTURA

Planning taking into account the technical and economical feasibility (as general rule for all regions in Spain and for all EU countries) would prevent unfair competition and promote equal opportunities.

It is a must and it is urgent to request the compliance with this principle to all aquaculture product imports from third countries



General considerations

ctaqua CENTRO TECNOLÓGICO DE LA ACUICULTURA

Technological feasibility should be analyzed for each cultivation area:

- Offshore Aquaculture
- Coastal aquaculture.
- Intertidal aquaculture
- Freshwater Aquaculture

We must support R&D&I activities to develop the right technology for all the areas, in order to make them economically feasible.



General considerations

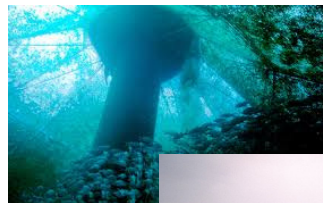
ctaqua CENTRO TECNOLÓGICO DE LA ACUICULTURA

ctaqua CENTRO TECNOLÓGICO DE LA ACUICULTURA

offshore aquaculture.

Important aspects to take into consideration:

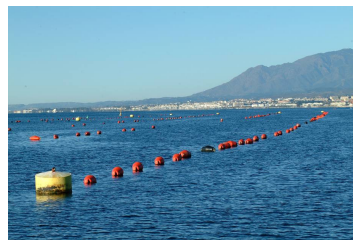
- Remote control and monitoring of the installation.
- Remote supply of food with outdoor and underwater cameras.
- In-situ power generators (currents, tides, solar or wind power).
- Development of fishing equipment and fish transport.
- Etc..





**Important aspects to take into consideration :**

- Proximity to in-land facilities.
- Strength of materials.
- Control of losses (theft, escapes, etc.).
- Presence of toxins.
- Etc.



**Important aspects to take into consideration :**

- Control of theft and bird predation.
- Development of environmentally friendly equipment.
- Waste recovery.
- Development of alternative energy sources (solar, wind, etc.).
- Differentiated Marketing.
- Etc.



**Important aspects to take into consideration:**

- Implement recirculation technology.
- Effluent control and recycling of waste.
- Improved feed utilization.
- Regularization on the Granting public water use and discharge permits.
- Etc.



- Multidisciplinary evaluation in the report.
- Uniform requirements for all producers.
- Priority List of technological development.
- Environmental and economic sustainability.
- Coordinated work of different administrations.



**ctaqua** CENTRO TECNOLÓGICO  
DE LA ACUICULTURA

Fundación Centro Tecnológico de Acuicultura de Andalucía



JUNTA DE ANDALUCÍA  
CONSEJERÍA DE INNOVACIÓN, CIENCIA Y EMPRESA

[www.ctaqua.es](http://www.ctaqua.es)