



Sector characteristics

Aquaculture

Aquaculture is a growing sector in many countries with the potential of significantly contributing to the national economy.

A distinction is made between extractive aquaculture (seaweed and bivalves) and fed aquaculture (fish). While the former is relatively low maintenance, the latter requires daily intervention such as feeding and usually involves sea cages.

The main challenge to enhancing production of all types of aquaculture is the lack of available space in inshore sheltered areas.

Maritime tourism

Tourism and local communities rely on attractive surroundings for a wide range of formal and informal land and water-based activities and quality of life.

Access to shallow coastal areas and unspoilt scenery are important factors for many tourist activities.

Parameters that are of importance to coastal visitors – and which can come into conflict with aquaculture - include safety, facilities, water quality, and litter.

Conflict description

Visual impacts and spatial restrictions

Aquaculture installations may reduce the visual attractiveness of a locality for tourists and residents. There may also be spatial restrictions on recreational boating and other activities (no anchor zones) to prevent damage to aquaculture installations.

Water quality

Feeding caged fish introduces a large source of nutrients to coastal areas which can lead to eutrophication. This can lead to increased algae growth, including toxic species of algae, rendering the water less suitable for recreational activities.

Impacts of tourism on aquaculture

Nutrients from waste water can run into the sea water and cause eutrophication. When sewage treatment in coastal cities is inadequate, it can have considerable negative effects. Waste water impacts can also result from boating and cruise ships, particularly affecting shellfish beds.

Drivers of conflict

Tourism as a growth sector

The coastal and maritime tourism sector is one of the five focus areas of the Blue Growth Strategy, and is therefore a top priority for the European Union. Presently, there is a trend towards diversification and more sustainable forms of tourism and eco-tourism.

Growth of aquaculture

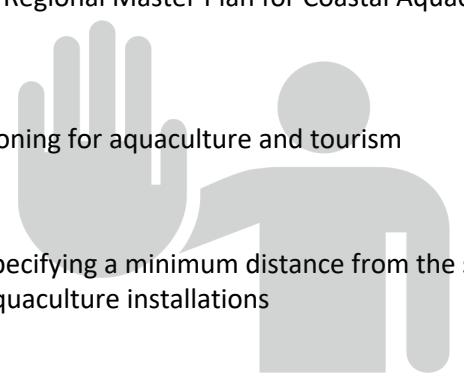
Aquaculture is also one of the Blue Growth sectors predicted to grow. Various international and national guidelines and strategies exist to boost aquaculture. Fish farming can be a major employer in coastal communities.

Space as a driver of conflict

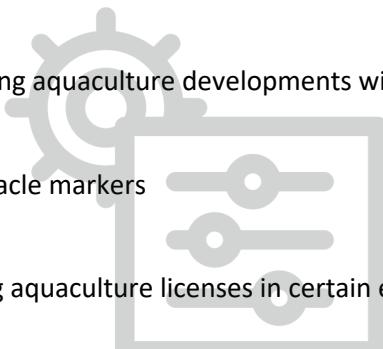
Water-based tourism and aquaculture often require similar areas, especially sheltered inshore locations protected from extreme weather. In most countries, coastal tourism is an economic force many times greater than aquaculture, leading to unequal power relations between the sectors.

Possible solutions

Prevention

- 1 A Regional Master Plan for Coastal Aquaculture
 - 2 Zoning for aquaculture and tourism
 - 3 Specifying a minimum distance from the shore for aquaculture installations
 - 4 Promoting *Aquiturismo* as synergy between the sectors
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Mitigation

- 5 Supporting tourist activities in sea gardens
 - 6 Stimulating aquaculture developments with less visual impact
 - 7 Use obstacle markers
 - 8 Rejecting aquaculture licenses in certain environments
 - 9 Information to to increase the acceptance of sustainable forms of aquaculture
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Future trends

Estimations are that the aquaculture sector will grow in the coming years. Seaweed and Integrated Multi-Trophic Aquaculture are likely to gain in significance. Technological developments are likely to enable larger (closed) systems further offshore. But there are also limiting factors, such as the energy balance of mariculture production, animal welfare issues, as well as public acceptance.

The coastal tourism sector will continue to grow in the coming years, as will the number of holiday homes on the coast and therefore property owners.

There is a trend towards more experience-based and sustainable coastal and marine tourism, which favours more isolated areas and areas visually less affected by human interference.