1ST FORUM OF THE EU STRATEGY FOR THE ADRIATIC AND IONIAN REGION

DUBROVNIK, CROATIA
12-13 MAY 2016

#EUSAIR
Parallel Session I
"Reconciling conflicting interests in a shared maritime space"

Dubrovnik – 13th of May 2016
Aquaculture Spatial Planning: The case of Greece

Nikos Anagnopoulos

Panhellenic Association for Small-Medium sized Aquaculture Enterprises
Panhellenic Association for Small-Medium sized Aquaculture Enterprises

Panhellenic Association for Small-Medium sized Aquaculture Enterprises (PAN.A.S.ME.A.E.) is a productive association which has been set up in November 2009. Its main objective is to highlight the problems of the small-medium sized Aquaculture Enterprises which are facing the effects of the economic crisis.

PAN.A.S.ME.A.E. consists of 60 Small-Medium sized Aquaculture Enterprises with operating farms all over Greece, located especially in island and outermost regions. The total production of PAN.A.S.ME.A.E. Members represent about 25% of the annual marinefish aquaculture production.

PAN.A.S.ME.A.E. Cooperates closely with the Federation of Greek Maricultures (F.G.M.) for issues concerning the development of the Greek Aquaculture Industry.

PAN.A.S.ME.A.E. has been actively involved together with F.G.M. in the formation of the “Special Spatial Planning Framework for the Greek Aquaculture” which has been approved with 31722/04-11-2011 Ministerial Decision, as well as in the conduction of further spatial analysis (allocation of Zones for Organized Development of Aquaculture-Z.O.D.A.) in specific areas with aquaculture activity.
One of the 4 pillars of the Action Plan accompanying the EUSAIR is BLUE GROWTH.
The objective of this pillar, is to drive innovative maritime and marine growth in the Region by promoting sustainable economic development and jobs and business opportunities in the Blue economy, including fisheries and aquaculture.
Under BLUE GROWTH basic aims are:
- to create high-skilled job and economic opportunities, by focusing on research and innovation
- to improve fisheries and aquaculture profitability and sustainability by improving data collection, monitoring and control, implementing multiannual fisheries management plans at sea basin level, harmonising standards, improving skills and capacity to comply with EU rules and standards and increasing the added value of local seafood value chains, etc).
- to improve administrative and institutional capacities, maritime services and better governance, including data sharing, joint planning and coordinated management of existing resources (e.g. maritime spatial planning and integrated coastal management).
Maritime Spatial Planning and Integrated Coastal Management

The selection of areas allocated to aquaculture is crucial for supporting the sustainable development of aquaculture, as underlined by FAO, which endorses the Ecosystem Approach to Aquaculture, EAA. In fact, aquaculture, has an impact on the environment, which should be minimized, in order to comply with EU Directives, such as WFD and MSFD, and with regional conventions, such as the Barcelona Convention, for the protection of marine ecosystems.

On the other hand, aquaculture requires good water quality and access to commercialization infrastructure. Aquaculture needs also space, and, therefore, may conflict with other economic activities taking place in coastal areas such as Ionian-Adriatic region (Renewable energy installations, Maritime shipping and fishing activities, Ecosystem conservation, Tourism installations, Multiple pressures on coastal resources etc). As a result, the identification of Zones for Organized Development of Aquaculture (Z.O.D.A.) is a complex task, which should be dealt with in the framework of a comprehensive spatial planning and, in EU countries, will have to be achieved through the implementation of the Maritime Spatial Planning (MSP) Directive 2014/89/EC.

The complexity is reinforced by the fact that the responsibility for the regulation of coastal activities is spread among many different Public Authorities which adopt in most cases different approaches.
The Case of Greece

The last 25 years, aquaculture has become one of the most important productive sectors in the country with around 800 units of marine aquaculture (300 fish and 500 mussels) and 120 Freshwater units. Mariculture offers 120,000 tn/year, having more than 40% of the European market share. In the Ionian (Epirus, Western Greece, and Ionian Islands Regions) there is more than 35% of the total production with significant number of farms in Aitoloakarnania, Kefalonia, Thesprotia and Amvrakikos areas.
Spatial Planning Framework for the Greek Aquaculture

• Ministerial Decision 31722/04-11-2011 “Approval of a Special Spatial Planning Framework and Sustainable Development for Aquaculture and its strategic environmental impacts assessment”.

• The Framework regulates aquaculture spatially, both at sea and inland waters.

• It covers all aquatic organisms (animals and plants) with economic interest.

• The largest part is referred to marine aquaculture, as it is the sector with the need for spatial regulation.

• Encourages the creation of Zones for Organized Development of Aquaculture (Z.O.D.A.) and sets out the process.

• Refers to major environmental requirements.

  **Purpose:**

To record, clarify and serve the basic spatial needs of aquaculture units in a way that their operation does not conflict with the development of other activities and not degrade the environment irreparably.
Spatial Planning Framework for the Greek Aquaculture – Basic provisions

The Framework prescribes a zoning system for organizing aquacultures. However, it’s permitted, in some cases, to install single units.

Aquaculture Development Areas (A.D.A.)

Marine aquaculture activities develops in wider sea areas, with common characteristics, which on spatial terms constitute broader areas for receptors (ZONES for ORGANIZED DEVELOPMENT of AQUACULTURE–Z.O.D.A.) and single units operating in A.D.A..

Outside A.D.A., the installation of single units is permitted only in the following cases:

• Pilot units under special requirements
• Combined planning of touristic facilities or diving parks with (small capacity) aquaculture units in the context of agrotourism.
• Uninhabited islands mainly close to the borders, remote areas.
Map of the Spatial Planning Framework and Sustainable Development for Aquaculture (A.D.A.) in Ionian Sea
Installation of Z.O.D.A. within A.D.A. in Ionian Sea (Region of Epirus-Prefecture of Thesprotia)
Criteria and compatibilities for establishing receptors & single units of aquacultures

The boundaries of the leased marine area should be spaced in certain distances from:

• Functioning touristic facility and existing residential developments.
• Incompatible uses (industrial plants, mining facilities, etc.).
• Harboring facilities, handling oil or industrial units presenting serious risks for marine pollution.
• Diving parks (with the exception of combined use) and beaches designated for swimming.
• Airports that are on the coastline.
• Wind farms.
• Professional fishing activity, with the exception of an agreement between the 2 parties.
Criteria for marine aquaculture units

- Minimum depth of the sea.
- Distances between units.
- Maximum percentage for coverage of the leased area.
- Velocity of currents.

Prohibitions for marine aquaculture units

- In areas used as military areas, navigation channels or cables structures or pipes for energy transfer etc.
- In areas where the sea bed is covered by protected species (Posidonia oceanica, Cymodocea nodosa, Zostera marina and Zostera noltii) or species under restrictions defined by EU and national legislation.
Current status for Procedure for establishing Z.O.D.A. in Greece

There are numerous applications (accompanied with the respective studies) which have been submitted to the Greek Ministry of Environment and Energy, for the establishment of Z.O.D.A. in A.D.A. all over Greek coastal waters, according to the provisions of Law 2742/1999, the Ministerial Decision 17239/2002 and the Ministerial Decision 31722/04-11-2011 for the “Approval of a Special Spatial Planning Framework and Sustainable Development for Aquaculture and its strategic environmental impact assessment”.

Especially for the Ionian-Adriatic Macro region, applications have been submitted by Management Bodies for the establishment of Z.O.D.A in Thesprotia Prefecture, Echinades Islands and Aitolia-Akti, Island of Kefalonia, Island of Oxia, Gulf of Amvrakikos.

Co financing of studies (EU – National Funds)
Conclusion

• Aquaculture plays a key role in the EUSAIR strategy, as part of pillar 1
• Aquaculture Spatial Planning is of great economic significance and should be part of Maritime Spatial Planning in EU, and Regional Level, especially in areas with intense human activities such as ADRION Region.

**Possible implementation of a project in ADRION region with main aims to:**

✓ Develop a general methodology, based on a spatially explicit multi-criteria evaluation, for supporting public authorities in the identification of A.D.A.
✓ Test and apply the methodology in specific sub-regions.
✓ Test and apply tools for optimizing the selection of individual sites within an A.D.A. at selected pilot sites, investigating different scenarios of diversification of aquaculture activities.

• These objectives will be achieved taking into consideration the main aquaculture typologies which are presently operational in the region.
• Crucial to exploit the experience gained through the implementation of good practices on the field of Maritime and Aquaculture Spatial Planning in the Region (e.g. ADRIPLAN, Studies for the Establishment of Z.O.D.A. in different Countries etc.)
• Creation of a common spatial planning understanding throughout the region, encourages cross–border cooperation, as all the countries are under the same regulations and comprehend each others practices.
• Promotion of cross – sector cooperation (such us tourism, renewable energy sources, fisheries etc) – reduction of conflicts.