



Measuring the Economic Effects of Regulations on Aquaculture in the EU

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The challenges faced by the EU Seafood sector (fisheries and aquaculture)

- Europe (especially the EU) consumption depends on imports
- Limits for the supply from aquaculture
 - Inshore (e.g. space)
 - Offshore (e.g. cost and risk)
 - Inland (e.g. regulatory constraints)
- European Seafood producers (capture fisheries and aquaculture) are competing on the global markets: inputs And outputs
- Under current trade agreement, European Seafood producers are not able to reap the full benefits of the seafood market
- The H2020 *SUCCESS* project aims at improving the competitiveness and the economic sustainability of the European Seafood sector (Blue Growth – BG – Agenda)



SUCCESS

Strategic Use of Competitiveness towards Consolidating the Economic Sustainability of the european Seafood sector

Coordinator



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Consortium overview

- 4 Universities
 - 7 National Fisheries / Marine Institutes (data provision)
 - 8 Industry partners (producers – fisheries and aquaculture; trading companies - tests)
 - 5 Consultancy companies (market analysis; value chain; software / web development)
- + Stakeholders (EEAB; EUSG): incl. US and Australian experts (Carole Engle; Gunnar Knapp; Madan Dey...)

Project general description

- What is the project about?
 - Improving the competitiveness of the European fisheries and aquaculture industries
 - Increasing the value of European fisheries products
 - Increasing the demand for European fisheries products
- What are the main objectives?
 - analyse the present and expected future bottlenecks for competitiveness of European fisheries and aquaculture sectors (= the challenges).
 - investigate the potential for new markets and marketing tools to increase revenue
 - identify innovations to improve efficiency and reduce production costs

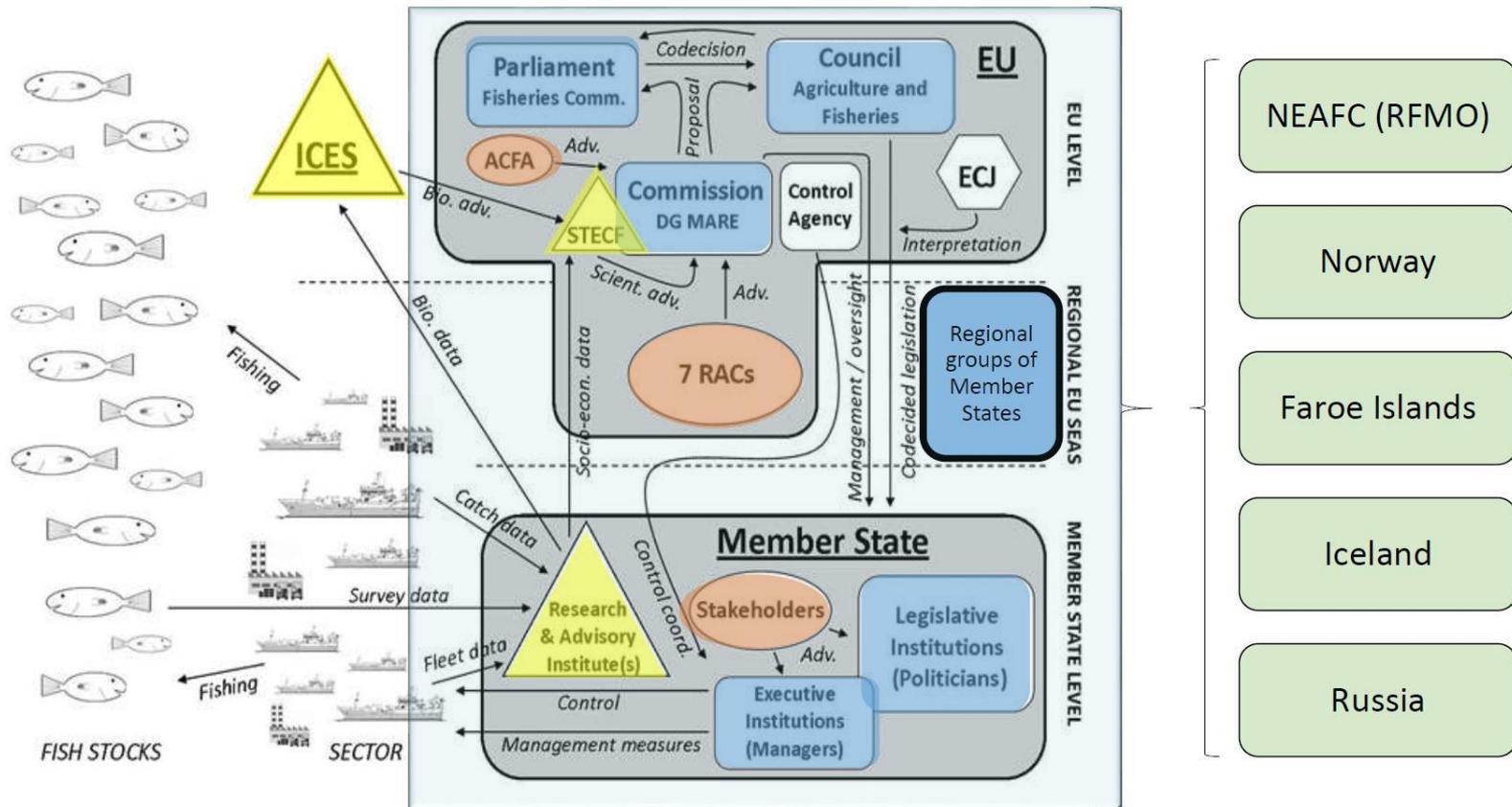
Focus on the effects of regulation

- “**Task 3.1** is dedicated to the description of governance and regulation systems in the fisheries and aquaculture sectors insofar as they could influence their competitiveness and sustainability....
- ... Task 3.1 will examine the role played by different regulation tools (right-based management systems, fishing and farming regulation schemes, producer’s organizations) in structuring the primary sectors and organizing the first hand sales”.
- The effects of regulation can be positive (Best practices / Success stories) – central importance for the project.
- However, too often, the regulations are considered by the industry as a source of both intangible (time) and tangible costs.
 - Focus of the presentation

with first a introduction to the general framework of the CFP (Common Fishery Policy)

Why regulation is so important?

Two representations of the Common Fishery Policy - CFP



Hegland, T. J., Ounanian, K., and Raakjær Nielsen, J. 2011. Decentralising the Common Fisheries Policy: getting behind the concept of 'regionalisation'.

Why regulation is so important?

Two representations of the Common Fishery Policy - CFP



Source: Gerald Van Bealsfoort, 2016 (DG MARE / EAFE Conference)

General description of the regulations in the aquaculture sector

- The Common Fisheries Policy (CFP) has been less influential in the regulation of aquaculture than legal environmental regulation.
- **However**, the reformed CFP has taken much stronger position to develop aquaculture in the EU Member States.
- **EU environmental legislation**
 - EU Water Framework Directive 2000/60/EC (WFD) establishes a framework for the national water protection policy planning
 - EU Marine Strategy Framework Directive 2008/56/EC (MSFD) serves the same purpose in marine environmental policy in EU Member States.
 - environmental assessment procedures determined in Directive 97/11/EC on the assessment of the effects of certain public and private projects on the environment
 - Natura 2000 framework (directive 92/43/EEC and directive 2009/147/EC) as well as Habitats Directive 92/43/EEC may influence aquaculture regulation and planning.

Example 1: A implementation in the case of Finland, Åland Islands and Sweden

- WFD is being implemented through River Basin Management Plans, with the ongoing planning process targeting for period 2016-2021.
- The most influential marine protection body in the Baltic Sea has been The Helsinki Commission (HELCOM) working to protect the marine environment of the Baltic Sea from all sources of pollution through inter-governmental co-operation between Denmark, Estonia, the EU, Finland, Germany, Latvia, Lithuania, Poland, Russia and Sweden.

The environmental (& general) permit system

- In mainland Finland, The Environmental Protection Act requires an environmental permit for all activities that pose a threat of environmental pollution.
- In practice, commercial aquaculture activities are always subject to an environmental permit in Finland.
- For aquaculture operation, often several permits are needed at the same time, e.g. environmental permit, water permit, veterinary permit and building permit.
- For example, the net cages of marine net cage farms are not buildings, and therefore the cages per se do not require a building permit. However, the construction of the buildings needed to support the farm does naturally require building permits.
- The administrative permit processes are usually separate from each other which can significantly prolong the process.

The environmental (& general) permit system (cont.)

- In Åland, the Åland Water Act also calls for “appropriate protective measures”. This is specified as an obligation to use the best technological solution that is economically feasible.
- Such considerations must balance cost and benefit, and at the same time take into account the affected water and its characteristics.
- Building permits on Åland are not required for aquaculture in general, but this is an issue of interpretation.
- On Åland, it is municipal competence to issue building permits for a number of constructions.

Environmental Impact Assessment

- The EIA directive (85/337/EEC) has been in force since 1985 and has been amended several times (most recently in 2014). The directive applies to a wide range of specific public and private projects which are defined in Annexes I and II:
 - **Mandatory EIA:** all projects listed in Annex I are considered as having significant effects on the environment and require an EIA
 - **Discretion of Member States (screening):** for projects listed in Annex II, the national authorities have to decide whether an EIA is needed. This is done by the "screening procedure", which determines the effects of projects on the basis of thresholds/criteria or on a case by case examination
- EIA procedure could, in principal, be applied to large aquaculture permit cases. In Finland, EIA shall be applied for projects that are specified by decree.
- Aquaculture activities are not specified in the EIA decree, so therefore the principal rule is that fish farming does not require an EIA.
- **However**, the second subsection of Section 4 of the EIA Act states that an EIA is necessary in special circumstances where a project or an alteration to a project, also taking into account the combined impact of different projects, will probably have significant adverse environmental effects comparable in type and extent to those specified in the EIA decree.

Synthesis

- In Finland, Sweden and Åland Islands, although EU environmental legislation has an impact on aquaculture regulation, national regulation is even more important.
- However, in Sweden, environmental protection interest has not limited aquaculture expansion to the extent as it apparently has in Finland and Åland Islands (Kähäri 2014).
- For instance, at the Åland Islands, expansion of cage farming has been practically prohibited.
- In general, this shows that high level of complexity, uncertainty and discretion prevails, making aquaculture fairly complicated investment sector.

Example 2: Application process for a marine aquaculture farm in Scotland (salmon) - I

Several licenses/authorization to obtain, without a one-stop shop:

1. Planning permission (specific location: surface, georeferenced location) with **Local Council**. Once granted, a lease is signed with **Crown Estate**.
2. Authorization of Aquaculture Production Businesses (APB) by **Marine Scotland**
3. Marine license (use of a well boat, obstruction to navigation) by **Marine Scotland**
4. Discharge license by **Scottish Environmental Protection Agency**,
 - I. hydrographic studies, benthic studies...
 - II. If needed (production > 100 T or surface > 0.1 ha or development in a protected area), the developer has to do an Environmental Impact Assessment.

Application process for a marine aquaculture farm in Scotland (salmon) - II

- In the process, other organizations are consulted: **Scottish National Heritage**, local **Salmon fishery board**...
- Development in England/Wales/Northern Ireland are not following the same process, as aquaculture is a devolved matter in UK => this increases the complexity for developing aquaculture businesses in UK



Thank you for your attention

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