The "Mussel case-study": Overview of the European mussel farming and main issues at stake

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Summary

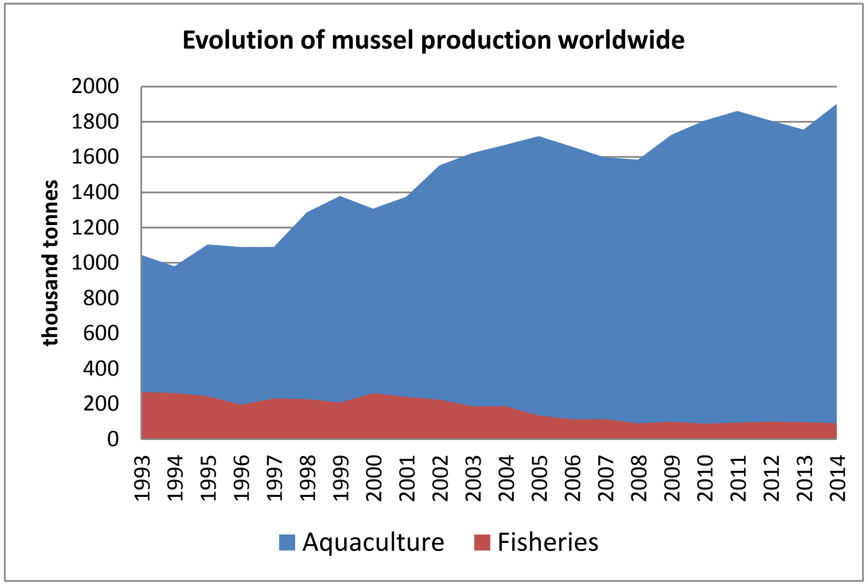
Overview of the European mussel farming industry and its competitive environment

- Trends in production and evolution of the EU market share in world supply
- Main striking evolutions in terms of external trade (EU28 imports and exports)
- Structure of the EU mussel farming sector and indicators of profitability

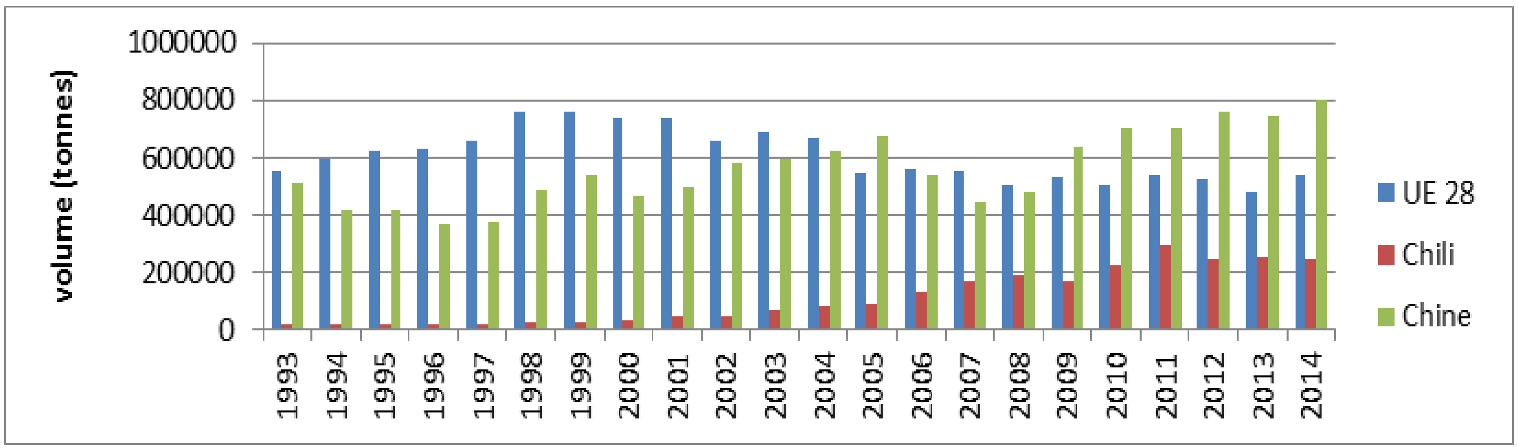
Main issues at stake for the Mussel farming sector

- Bottlenecks identified by the participants
- Challenges as regards the development of sustainable European aquaculture
- Examples of room for improvement to be analysed within the SUCCESS project

Evolution of the world supply of mussels (FAO Fishstat)

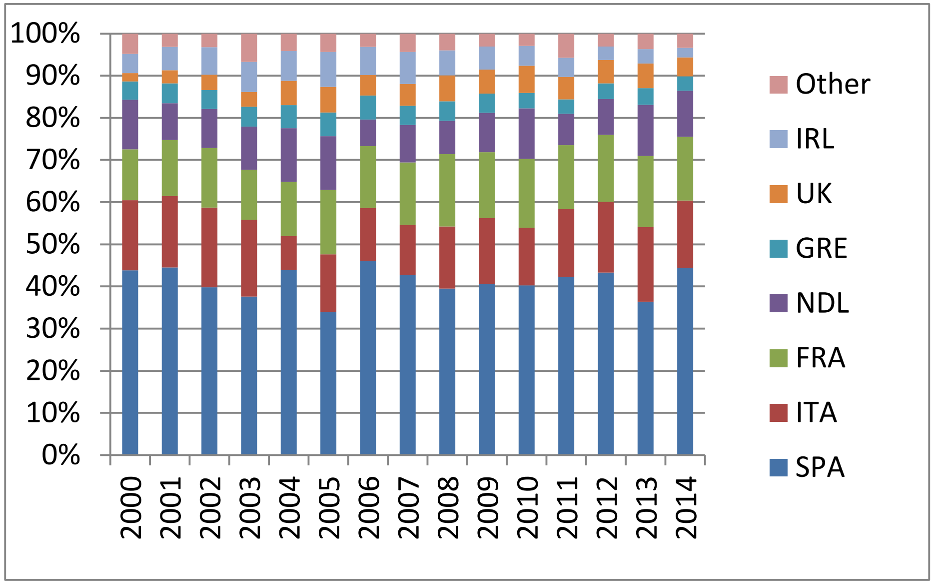


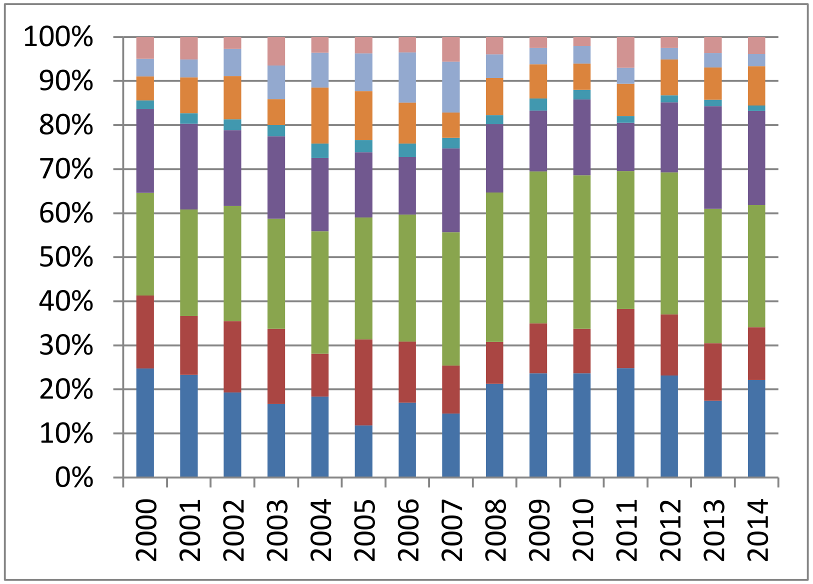
Top 10 countries	Ranking (volume)	thousand tonnes
China	1	806
Chili	2	245
Spain	3	221
Thailand	4	127
New Zealand	5	98
France	6	81
Italy	7	79
Corean Rep.	8	58
Netherlands	9	54
Danemark	10	43



Evolution of the aquaculture production of mussels from China, EU28 and Chile

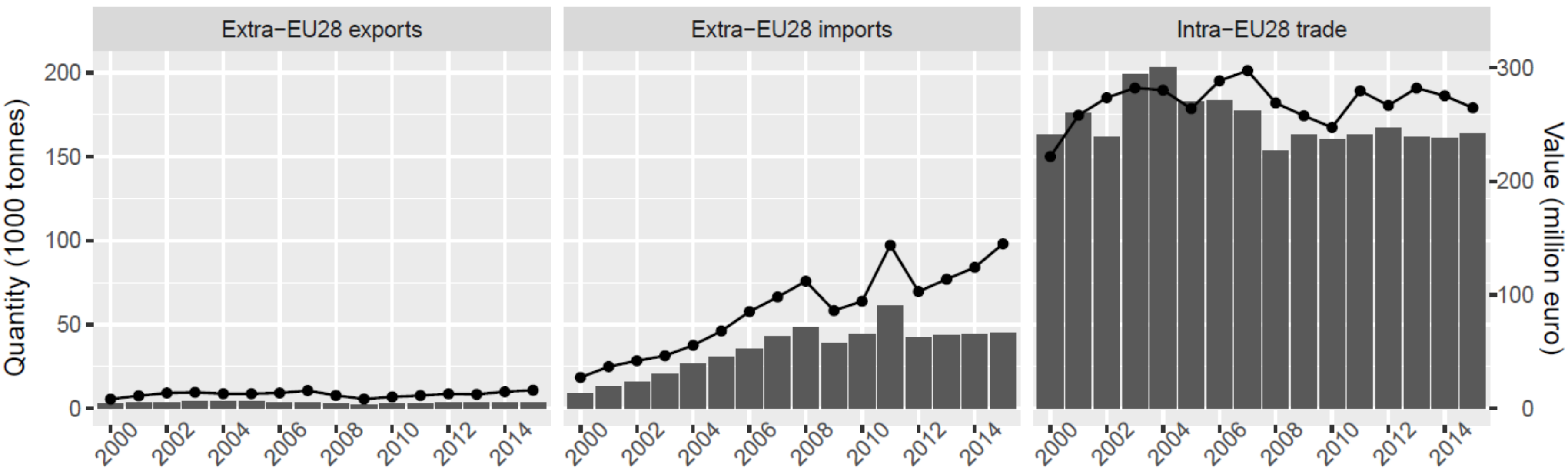
Main players of the European aquaculture supply of mussels (FAO Fishstat)





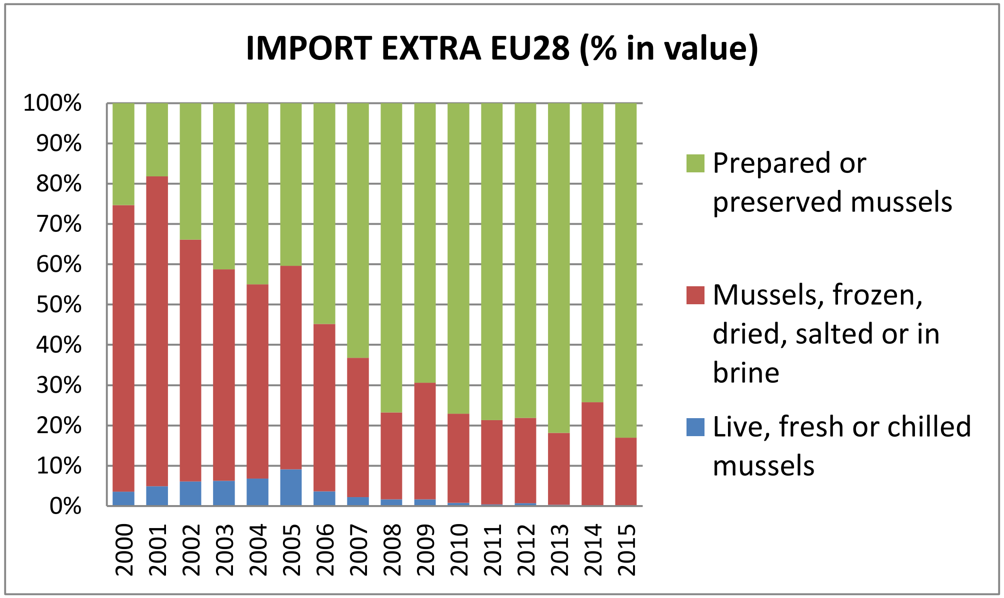
- In volume, Spain exceeded 40% of the EU28 production during the 2000-2014 period (in average)
- Top 4 producers (SPA, ITA, FRA, NDL) reached 82%
- In value, the share of the Top 4 is nearly the same, but the ranking is modified (FRA, SPA, NDL, ITA) due to the higher valorisation of blue mussels

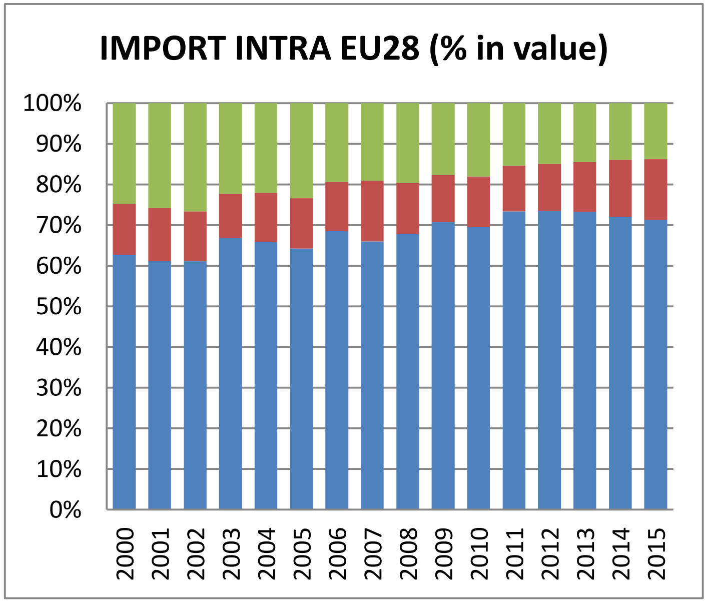
Intra & Extra EU28 trade of mussels (Eurostat COMEXT)



- Supply deficit of the mussel EU28 market trade
- Very few Extra-EU28 exports but conversely increasing Extra-EU28 imports in volume and value (line above)
- Exchange flows (imports) of mussels mainly at intra-EU level

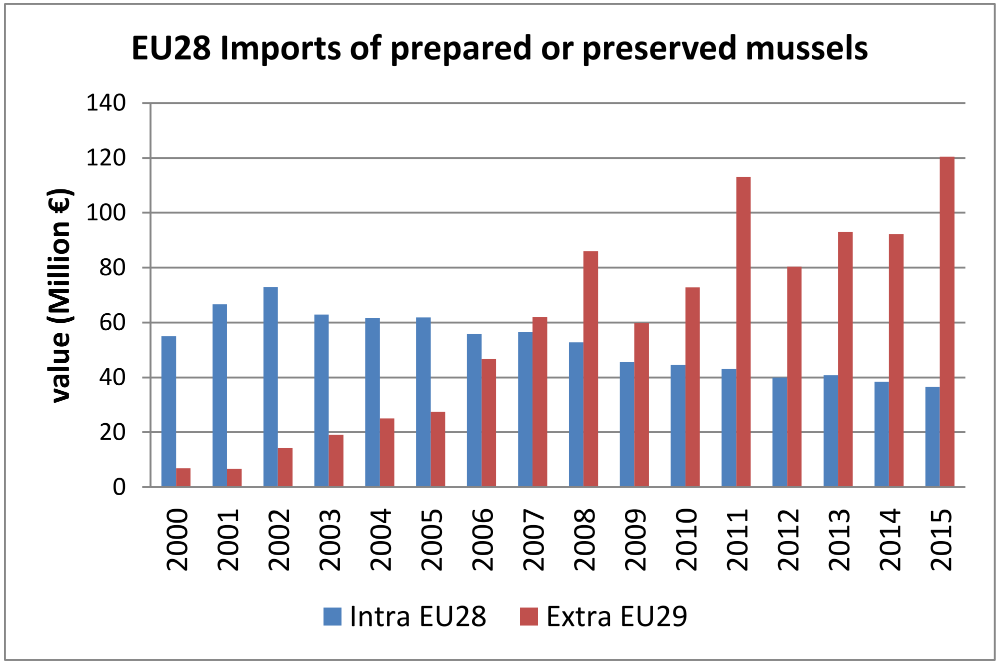
Intra & Extra EU28 imports of mussels by type of product
(Eurostat COMEXT)

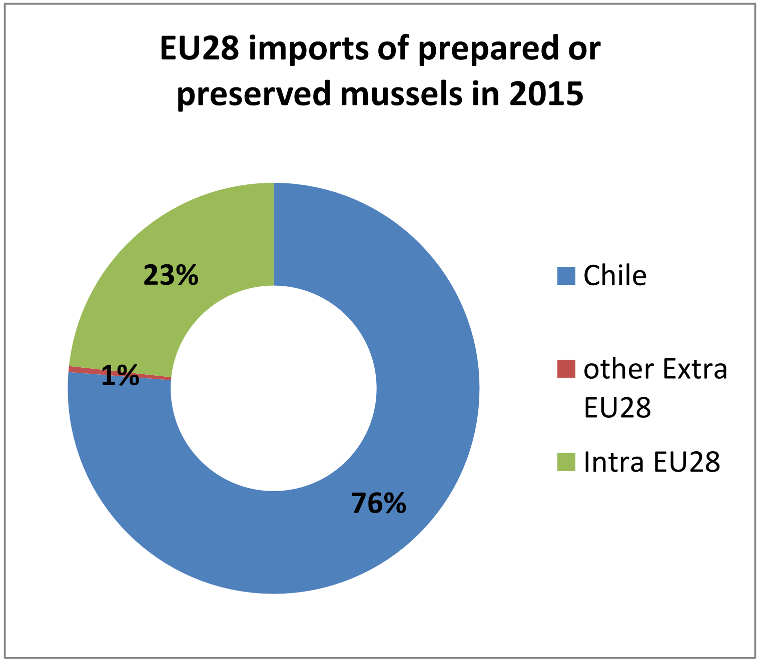




- Extra-EU imports are exclusively made of processed mussel products (increase of preserved mussels at the expense of other products)
- Intra UE trade is still dominated by live, fresh or chilled mussels

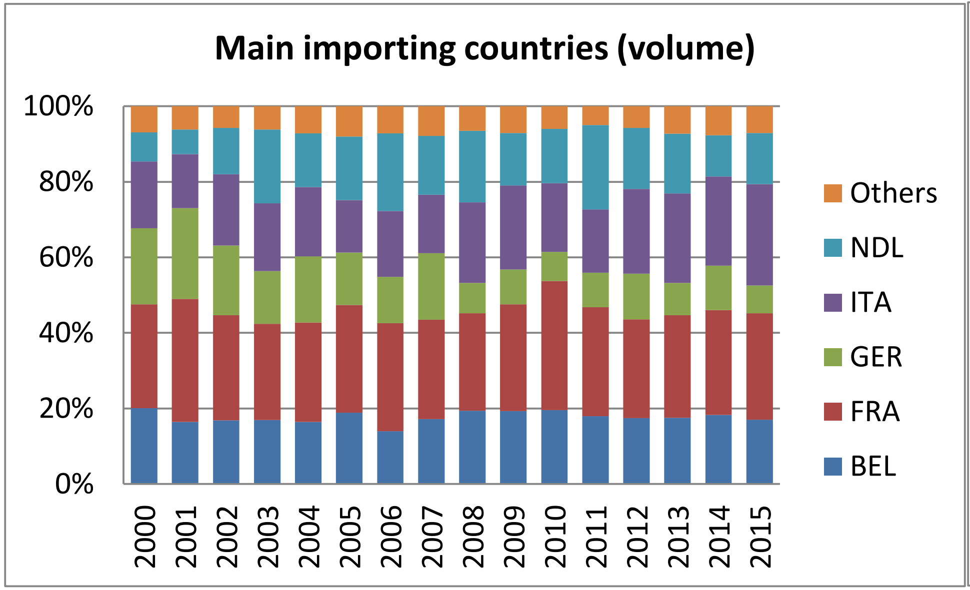
Evolution of EU28 imports of prepared or preserved mussels (Eurostat COMEXT)

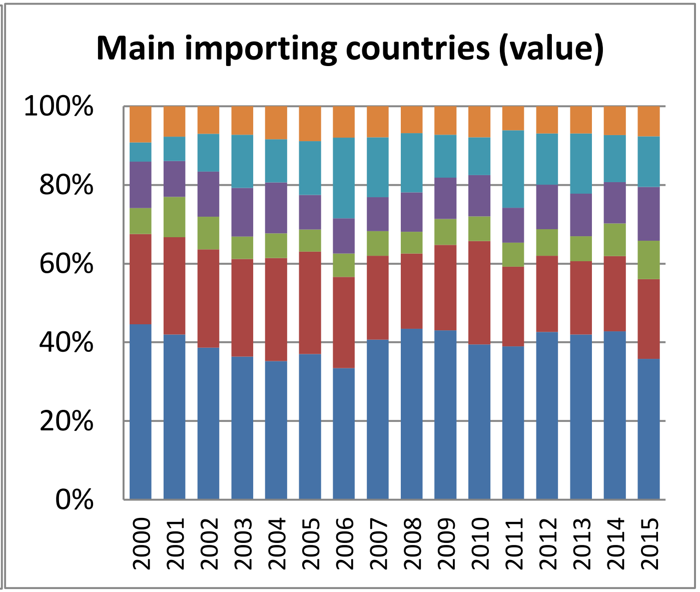




- As concerns the supplying in preserved mussels, extra-EU imports have been progressively expanding and competing with intra-EU imports
- Chile became the leader with 76% of the market share of EU28 imports of preserved mussels in 2015

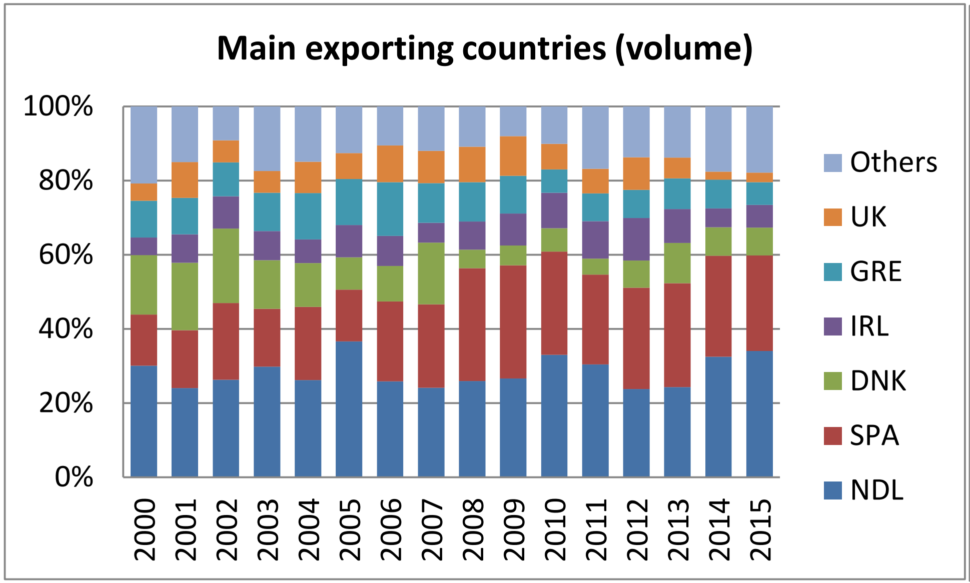
Main importing countries of live, fresh or chilled mussels (Eurostat COMEXT)

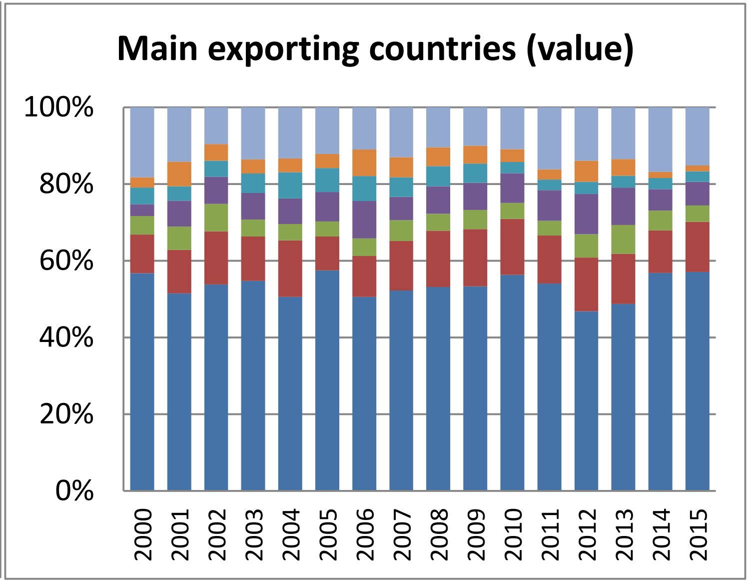


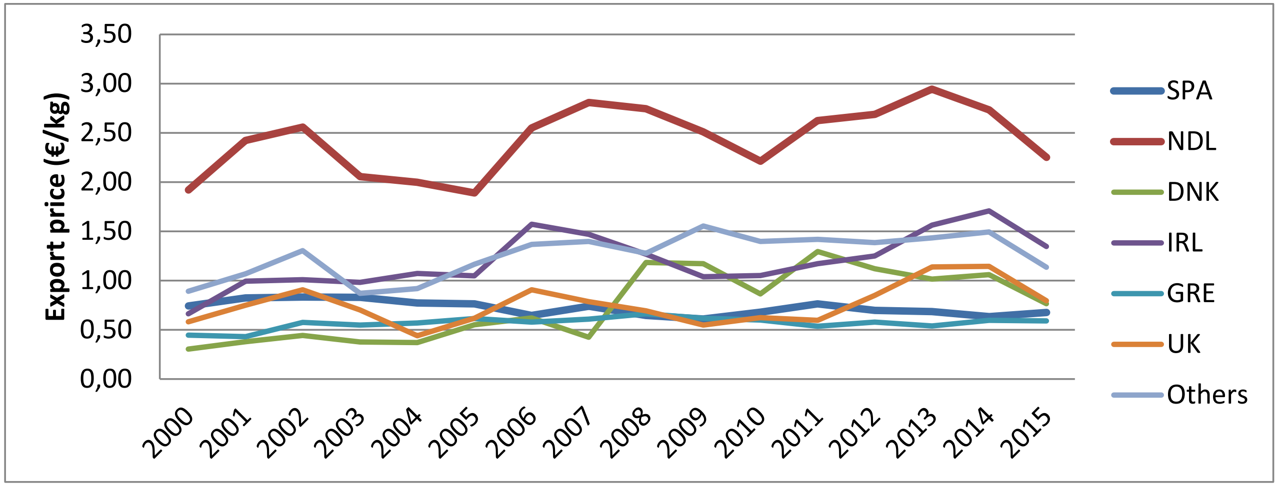


- For the bulk of the intra-EU market (live, fresh or chilled mussels), the main importing countries in volume are France, Italy and Belgium while in value Belgium represents the main outlet, followed by France

Main exporting countries of live, fresh or chilled mussels (Eurostat COMEXT)







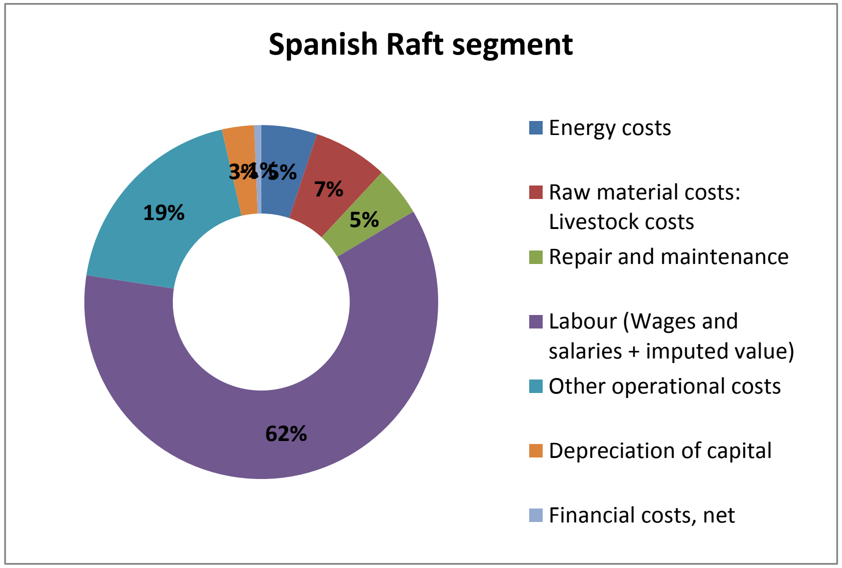
Structure and employment of the main Mussel farming segments (STECF aquaculture data – average 2013/2014)

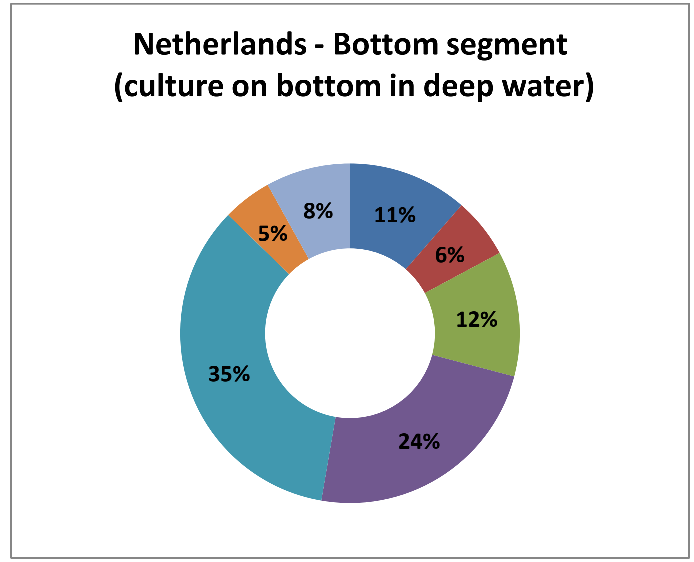
	NDL Bottom	FRA Bottom	SPA Raft	ITA Long-line (2013)
Number of enterprises	56	285	2 034	159
Number of employees	na	1 819	8 600	996
Number of FTE	154	1 077	2 312	829
Total mussel sales (tonnes)	41 812	59 155	190 062	67 385
Mussel price indicator	1,40	1,87	0,50	0,73
Number of FTE/enterprises	2,8	3,8	1,1	5,2
ratio Employees/FTE	na	1,7	**3,7**	1,2
Total mussel sales/FTE (tonnes)	272	55	82	81
Total value of assets/FTE (1000 €)	545	181	95	68

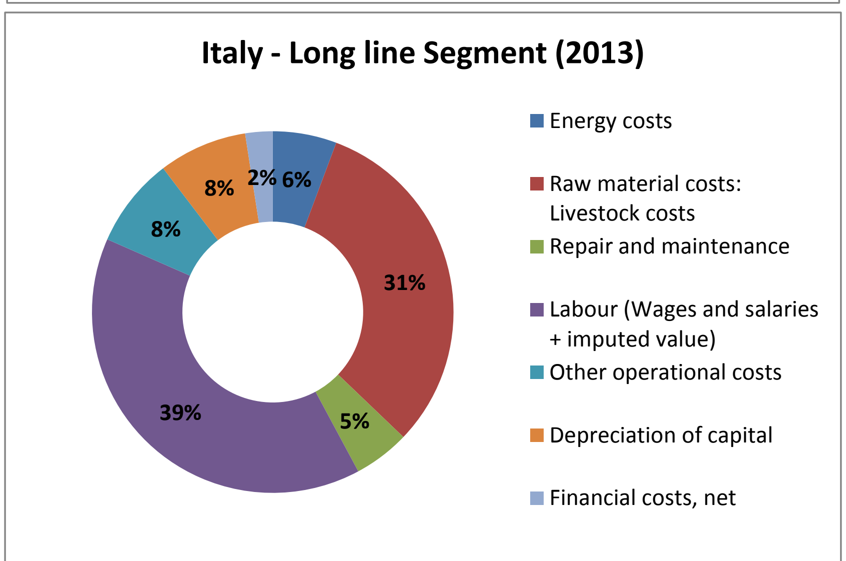
- Mussel farming in the Top4 EU producer countries relies on different species & production system
- Higher valorization for blue mussels than for Mediterranean mussels
- More capital intensive PS, more concentrated production in the Netherlands
- High level of employment, pluriactivity and part-time jobs in Spain (labour intensive PS)

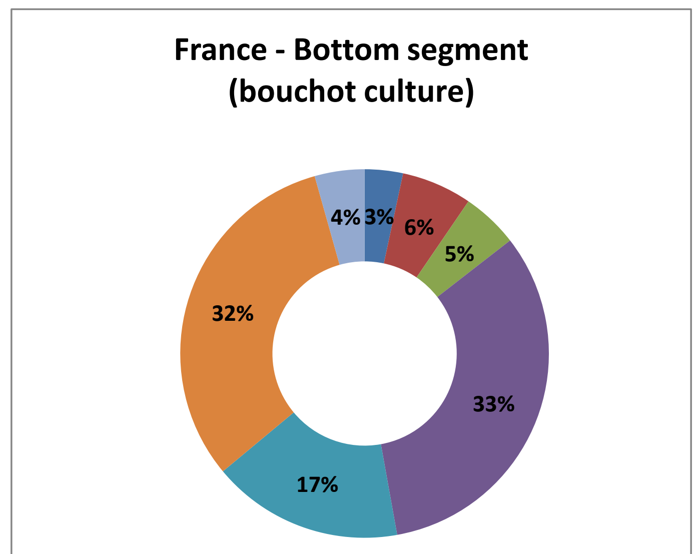
Cost structure of the main Mussel farming segments

(STECF aquaculture data – average 2013/2014 except for Italy)

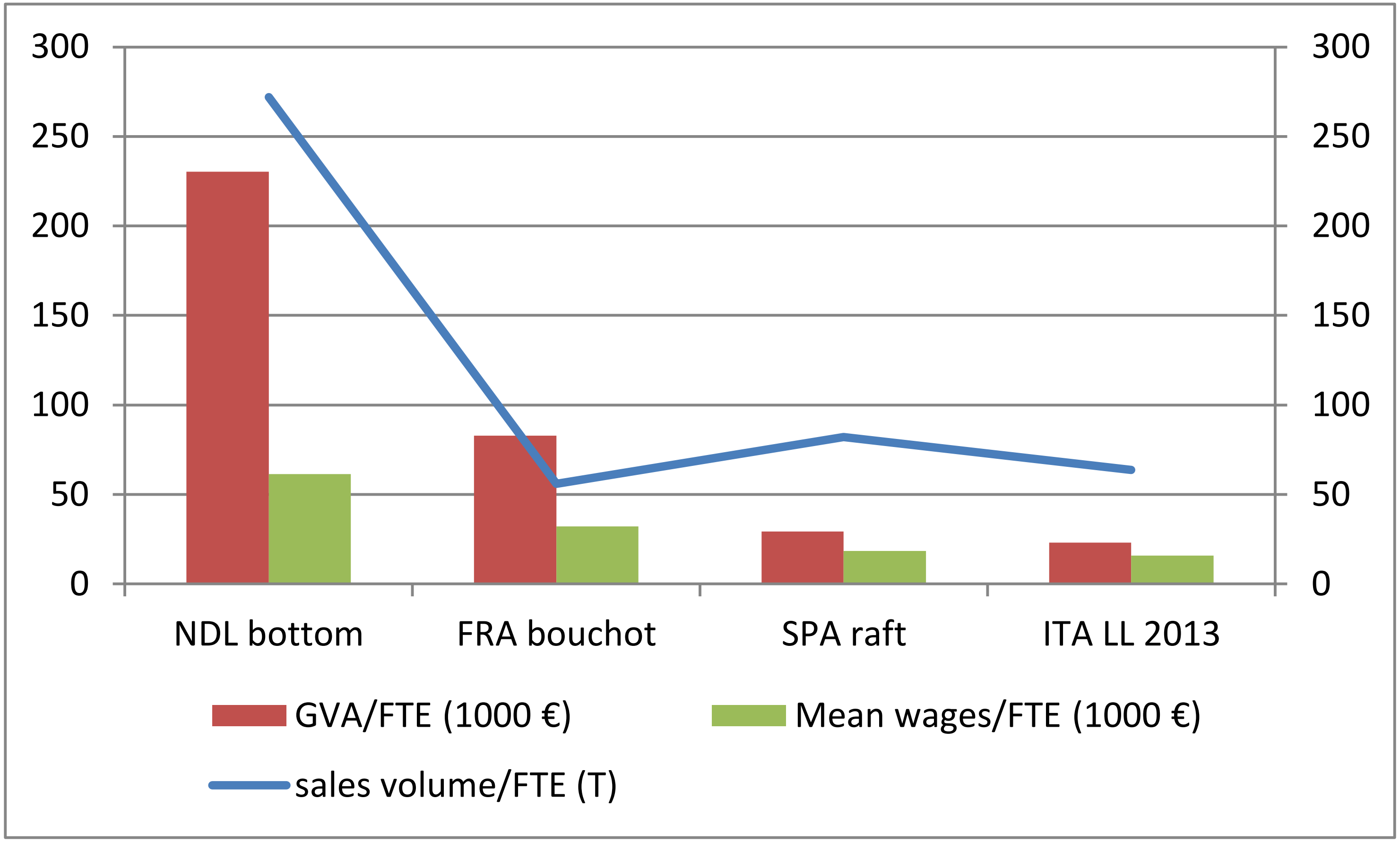








Labour productivity and remuneration of work (STECF Aquaculture data 2013/2014)



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Context /Background

- On the supply side: slightly downward trend in the European production (trend even more marked in recent years)

- Increasing deficit of the EU mussel market, but on processed products only

- On the demand side, outlooks of growth remain significant (consumer demand for affordable fresh/processed seafood produced by low-input aquaculture)
  - Increasing demand for organic products
  - Increasing demand for new valued-added products

Mussel farming case study

- **Bottlenecks identified by Mussel CS participants**
  - Environmental: water quality degradation, epizootic events, climatic factors, blooms of toxic phytoplankton, red tides, natural competitors…
  - Regulation and governance: difficult access to new farming sites or to the renewal of existing sites, insecure production rights, increasing use conflicts …
  - Structural/Economics: lack of professionalization of the activity, insufficient organisation of producers, lack of integration of dispatch/purification centres, lack of outlets on the domestic market…
  - Marketing: Insufficient valorisation of mussels at the production stage could also be considered as a bottleneck in some countries.

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General challenges

- Reducing the factor of profitability decrease due to environmental concerns or/and to unsustainable cultural practices, in particular via co-management systems

- Improving valorisation and consolidating the market power of producers along the value chain, for instance through the setting up of producer organisation or/and the involvement in labelling approaches

- General objectives have been defined in national strategic plans for aquaculture (simplification of administrative procedure, conditions of access to new sites and spatial planning tools…) but depend on priorities attributed to the shellfish farming sector in different countries

SUCCESS Mussel CS: Focus on « room for improvement »

The RFI which have been identified for further analysis are:

- Greece, ATEITH: Development of new products (unvalved mussels with extended lifespan) for targeting both traditional markets in consuming areas (i.e. Thessaloniki) and other areas with high potential due to tourism (i.e. Crete).
- Greece, ATEITH: Assessing consumer preferences in terms of certification- labelling through choice experiments. Preferences of producer certification (Organic) versus Retail certification (own retailer standards) versus No certification will be tested along with domestic origin, EU origin and Non EU origin.
- Italy, NISEA : Influence of labelling (PDO Scardovari) on the primary sector and on the coordination of the value chain (opportunities for the producers to sell their mussels in different ways, with or without label)
- France, IFREMER: Valorisation of quality and environmental attributes of mussel farming in the Norman-Breton Gulf through voluntary labelling approach (PDO, organic label) and through regulatory tools (co-management).