

Fisheries, Aquaculture and Marine research in FP7 – State of play – future after 2013



Meeting Directors-General for Fisheries Hungary - 6 June 2011

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Food, Agriculture and Fisheries, and Biotechnology

Knowledge-Based Bio-Economy (KBBE)

The presentation shall neither be binding nor construed as constituting commitment by the European Commission



Overview

1. Opportunities and challenges

2. EU instruments for supporting R&I in Fisheries, Aquaculture and Marine Sciences

3. Areas where MS intervention is needed

Food, Agriculture and Fisheries, and Biotechnology Knowledge-Based Bio-Economy (KBBE)





Opportunities: Sea and Oceans provide an essential part of our wealth and well-being

• Between 3 and 5 % of Europe's Gross Domestic Product (GDP).

• Aquaculture accounts for 19 % of the Union's total fisheries production. By 2030, aquaculture will provide more than half of the fish consumed worldwide.

• Marine biotechnologies sector is expected to grow at a rate of 10% per year with a current global market of €2,4 billion

Food, Agriculture and Fisheries, and Biotechnology Knowledge-Based Bio-Economy (KBBE)





Opportunities: Importance of coastal zones (GDP in euro per inhabitant)







Challenges: Marine ecosystems are exposed to a variety of pressures

e.g. Eutrophication

Satellite Picture of Algal Bloom in the Baltic — June 2005.

e.g. Impact of climate change



Invasive species



Coastal erosion

Red mullet: increase in Celtic and North Sea (ICES)





Challenges: trend of EU Fisheries

Status of EU quota stocks over time



Source: Net Benefits - A sustainable and profitable future for UK fishing, 2004.





Addressing the deep-rooted problem of fleet overcapacity: a priority for the CFP reform

Trends in the EU fishing fleet capacity (in terms of kW), 1992-2008 (Source: EC, 2008)





Challenges: stagnation of EU aquaculture production



Overall EU production ~ 1.3 Mt (17%) Value ~ 3 Billion€ (24%) Employment ~ 65 000 FTE Species & use : 10-15 major animal species (> 100 overall) , mainly for human consumption





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Research Area







Food, Agriculture and Fisheries, and Biotechnology Knowledge-Based Bio-Economy (KBBE)



Research & Innovation in support to EU policies

Research Policy	Maritime Policy	Environmental Policy
 The European Research Area: New Perspectives Joint Research programming EU Strategy for Marine and Maritime Research Europe 2020 « innovation Union » 	 "Integrated Maritime Policy for the European Union" Spatial planning, EMODNET (European marine data network) Regional integration 	 Water Framework Directive Marine Strategy Framework Directive (GES)
Fisheries Policy	Food Safety Policy	Animal Health Policy
- Reform Common Fisheries	- White Paper on Food	- Community Action Plan
Policy (CFP) - New Data Collection Framework - Revised Strategy for the	Safety COM (1999) - Organic production and labelling of organic products	on the Protection and Welfare of animals 2006- 2010 - Animal Health Strategy





European Research Area

EU Instruments for supporting R&I in F-A & Marine Sciences

7th EU Framework Programme (2007-2013) Total 53 billion €



Data Collection Framework: 85 M€/year European Fisheries Fund (EFF) support to innovation





FP7 tools in support to F-A and marine science

Theme	Duration	M€	N° projects
Theme 2 (KBBE)	2007-2010	125	47
Theme 6 (ENV)	2007-2010	214	46
« The Ocean of Tomorrow » joint call	2010-2011	79	9
Support to SMEs	2007-2010	53	48
R&I Infrastructure	2007-2010	100	Around 20
Training & Capacity building	2007-2010	76	188
European Technology Platforms (2)	2007-2010	3	EATIP (Aqua)- EFTP (Fisheries)
Networking of National programmes for R&D (3)	2007-2010	6	SeasEra, Biotech, Seafood
Article 185 – common programmes between MS	2012-2013	50	Bonus

More information at: <u>www.ec.europa.eu/research/bioeconomy</u>





FP7 in support to F-A and marine Biotechnology

Competitiveness of Fisheries and Aquaculture sectors





Seafood security and safety



From bioprospecting to new products









OCEAN.2011-1 Multi-use off-shore platforms

Funding scheme: EU contribution: 14 M€ Collaborative Project Up to 3 projects may be funded (various designs)



Objectives:

- Innovative designs for optimal coupling of various activities e.g: Ocean energy (in particular wind), aquaculture, offshore transport facilities, environmental monitoring
- Assessing the technical, economical and environmental feasibility of platforms (constructing, installing, operating, servicing, maintaining and decommissioning)

COOPERATION



Fisheries & Aquaculture Research Orientations 2012-2013

Fisheries

- Ecosystem Approach to Fisheries Management (EAFM)
- Small scale fisheries
- New tools (genetics) for improving scientific advice
- Support to Bonus 185 initiative on the Baltic Sea (Fisheries programme)

Aquaculture

- Prevention of major diseases
- Diversification of species
- Impact on ecosystems
- Selective breeding

Fisheries and Aquaculture

- Ecolabelling, certification
- ERANET on sustainable exploitation of marine resources
- Boosting innovation (sensors for data acquisition)





Orientations Work Programme 2012-2013

Emphasis on "from discovery to demonstration":

 Proof-of-concept and demonstration activities
 Knowledge transfer and dissemination mandatory or encouraged

Continued focus on strengthening SME participation:

 Around 1/5 of budget earmarked for SME participants
 More than half of topics with ring-fenced budget for Small and Medium-sized Enterprises (SMEs)

European Research Area :

Networking of Member States programmes will be encouraged on "Sustainable exploitation of marine resources" (next call)





Work Programme 2012

COOPERATION

KBBE Call 2012:

- Info Day coupled with brokerage event 15 July 2011
- Publication of WP 2012 and call 6 19 July 2011
- Deadline for the call 6 <u>15 November 2011</u>
- Call 6 budget: EUR 300 million

"The Ocean of Tomorrow" 2012

- 9 topics for Research in support to the Good Environmental Status (GES) of our Seas and Oceans
- ► INFO-DAY <u>16 June 2011 12:30-18:00</u> -
- Charlemagne Conference Centre/Room Sicco Mansholt

<u>http://ec.europa.eu/research/agriculture/ocean/ocean2642/i</u> ndex en.html



Areas where intervention of Member States is needed

- **Coordination of national programmes**
- Aligning research and innovation to the needs of « Europe 2020 », to the future research and innovation programmes and to the Common Fisheries Policy
- Inputs to the shaping of EU R&I priorities as well as to Biobased economy
- Strenghtening « Knowledge transfer and innovation»
- Reinforcing the use of scientific evidence for policy making





Coordination of National programmes between Member States on

« Healthy and Productive Seas and Oceans » <u>Covering all European Sea basins</u>





The future Common Strategic Framework

To implement the Innovation Union Policy set out in the Europe 2020 strategy

• 3 strategic objectives:

Tackling major societal challenges e.g. <u>food security and sustainable</u> <u>bioresources (including R&I efforts to support policy objectives recovery of fish</u> <u>stocks, discard ban, contribution of aquaculture)</u>

Increasing competitiveness

- Raising the levels of excellence in the research base
- To address the whole innovation chain from basic research to market uptake (« from net to plate ») through a coherent set of instruments at EU level to avoid duplication between DGs.
- **Simplification** with a single entry point

Debate with stakeholders – June/July 2011





New European Strategy & Action plan: Bio-based economy by 2020

The mature bio-based economy will help deliver global food security, improve nutrition and health, create smart bio-based products and biofuels, and help agriculture, forestry, aquaculture and other ecosystems to adapt to climate change. (BECOTEPS White Paper, March 2011)

Key issues

Support « Discard ban » for 2016

• Climate change and sustainability of bio-resources

- Industrial biotechnology, notably bio-based products
- Food Chain and closing the waste loop
- Governance, ERA, education and skills

Increase the yearly value for marine biotechnologies to 10% per year



Best use of catches (stocking, processing, coproducts

Planned adoption

Commission Communication: strategy and action plan November 2011

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Strenghtening Knowledge transfer and innovation

AQUAINNOVA: A FP7 project by the European Aquaculture Technology and innovation Platform

Involvement of stakeholders in the process of priority-setting as well as on knowledge transfer and take-up of results





Strong focus on identification and transfer of knowledge & results (from past and future FPs projects)

COOPERATION

Identification of specific RTD actions for and by industry

(including SMEs) Build on previous experiences on **dissemination of results:** (PROFET

POLICY)



Reinforcing the use of scientific evidence for policy making







