Consultation on challenges and research priorities in Mediterranean Aquaculture

Contribute to the Research Agenda

AQUAMED WP7 – Research Needs and Recommendations

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GFCM - Committee on Aquaculture (CAQ) - 8th Session 13-15 March 2013 - Paris, France



CONSULTATION ON MED AQUACULTURE

Consultation based on active partecipation **Stakeholders** >150 stakeholders (SHs) fr consultation in **Rome (Nov 2012)**

Stakeholders consultation on line (Jan.2013)

- AC DB Research Institutions & Research Projects
- Survey on Production Sector
 - Survey Istitutional &Social

- Research needs
- Perception on the MSHP
- Future trend and scenarios
- Preparation of the survey

search and

e)

Priorization of

- Challenges and constraints
- Research Key Goal
- MEDITERRANEAN
- ture PRODUCTION SECTOR

2 on line survey and 1

to

Analysis at country level

orrage research needs

lge gaps and challenges

Strategic Research Agenda for Mediterranean **Aquaculture**

All sectors covered (Fish & Shellfish, Marine & Freshwater)

AQUACULTURE RESEARCH PRIORITIES FOR MEDITERRANEAN REGION

ON LINE-SURVEY (hosted by the GFCM-SIPAM WEB SITE)





4 Sessions

- I. Personal information
- 2. Mediterranean aquaculture sector by 2030
- 3. Challenges to aquaculture development
- 4. Research Needs Thematic Research Areas (Key Goals- SubGoals)

English

http://forms.gfcmsecretariat.org/s3/Aquaculture_Research_Priorities

French

http://forms.gfcmsecretariat.org/s3/Priorités_Recherche_Aqua culture2013

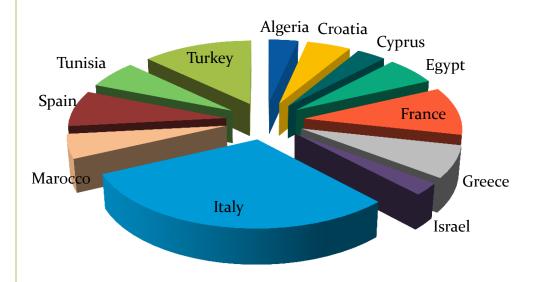
Croatian

http://forms.gfcmsecretariat.org/s3/Istra-iva-ki-prioriteti-u-akvakulturi

Partecipants in Survey: breakdown by country

I. Personal information

Expertise
Country
Production Systems & Size
Species



Rate of reply to survey: 40%

Country	Count	Percent
Algeria	4	3.4%
Croatia	6	5.2%
Cyprus	4	3.5%
Egypt	7	6.1%
France	12	10.3%
Greece	8	6.9%
Israel	3	2.6%
Italy	35	30.17%
Morocco	6	5.2%
Spain	9	7. 8%
Tunisia	7	6.0%
Turkey	15	12.9%
Total	116	



Participants in Survey: breakdown by stakeholders

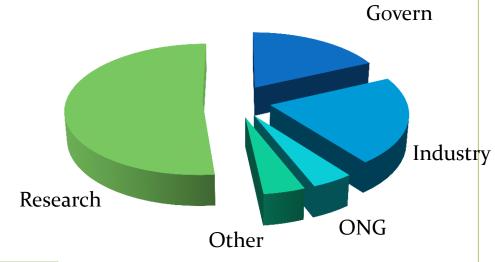
I. Personal information

Expertise

Country

Production Systems & Size

Species



Expertise	Count	Percent
Research	60	51.7%
Industry	25	21.6%
Governance	21	18.1%
NGO	5	4.3%
Other	5	4.3%

N =116



Analysis

- Mediterranean level
- EU vs NON EU countries
- Country level
- Production sectors
- Freshwater
- Marine
- Mollusc
- Small vs Big Country Producers
 (Sipam 2011)

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2. MED aquaculture sector by 2030

Production volume

Seafood consumption

Seafood import

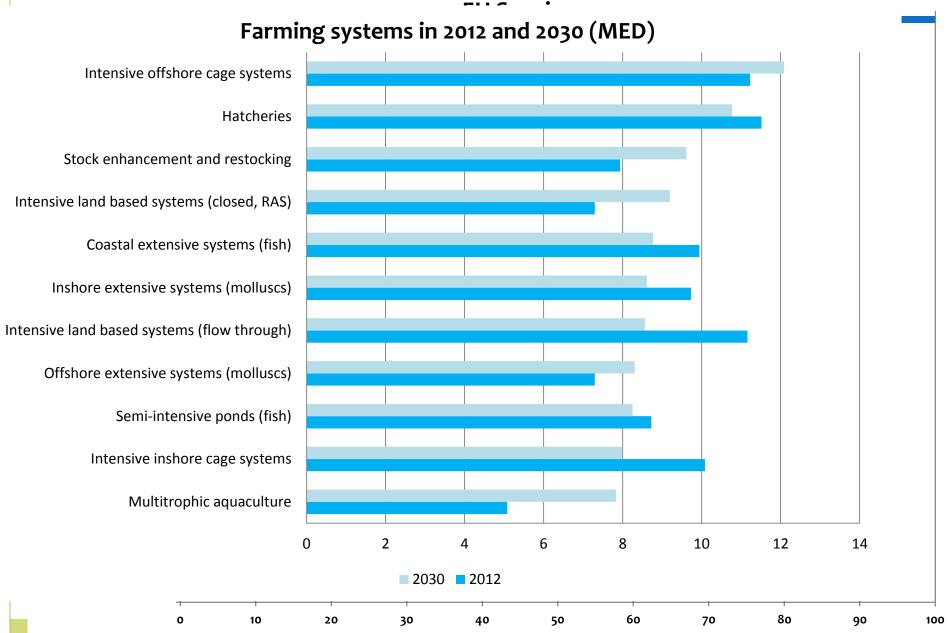
Trend in the number of farmed species

Importance of the aquatic species

Which husbandry systems/ activities

Contribution of Aquaculture to sustainability

NON EU Species



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3. Challenges and constraints (86)

Technical (13)

Environmental (8)

Governance (8) -Administration (13) -Policies (8) -Access to capital and financing

Market and economic Social Social Social aspects (7) - Poor Capacity &Extension Service (10)

TOP 15 CHALLENGES (Fish & Shellfish, Marine &Freshwater)		
Administrative	Licence/authorization procedure (time)	65,06
Policies	Lack of long-term spatial planning for aquaculture development	63,12
Market	High investment cost (e.g. for long aquaculture cycles)	60,55
Policies	Weak policies on market	60,23
Administrative	Overlapping of many legislations and Ministries	59,58
Policies	Insufficient political commitment to aquaculture development	59,26
Social aspects	Lack of media campaign on aquaculture-related benefits (and response to misleading claim)	59,26
Access to capital and financing	Shortage of financial resources for new investment and modernization	59,10
Policies	Lack/poor information on aquaculture strategies at country/basin level	58,62
Policies	Insufficient awareness of importance of aquaculture at decision making level	57,97
Access to capital and financing	Lack of business risk management (through governmental programme)	57,81
Social aspects	Lack of self-regulatory initiatives between producers, retailers, consumers association	57,65
Access to capital and financing	Reluctance of financial institutions to support aquaculture as commercial enterprise	56,68
Social aspects	Conflicts with other sectors (fisheries, tourism, energy sector)	56,36
Poor capacity, Extension service & Research	Inadequate research/ farmer/extension linkage	56,20

TOP 15 CH	ALLENGES (Fish & Shellfish, Marine &Freshwater)	Score
Governance	Licence/authorization procedure (time)	65,0
Governance	Overlapping of many legislations and Ministries	59,58
	Lack of long-term spatial planning for aquaculture development	63,12
	Weak policies on market	60,2
Policies	Insufficient political commitment to aquaculture development	59,2
	Lack/poor information on aquaculture strategies at country/basin level	58,62
	Insufficient awareness of importance of aquaculture at decision making level	57,97
Economic	High investment cost (e.g. for long aquaculture cycles)	60,5
Social aspects	Lack of media campaign on aquaculture-related benefits (and response to misleading claim)	59,2
	Lack of self-regulatory initiatives between producers, retailers, consumers association	57,6
	Conflicts with other sectors (fisheries, tourism, energy sector)	56,3
	Shortage of financial resources for new investment and modernization	59,10
Access to capital and financing	Lack of business risk management	57, 8
illialicilig	Reluctance of financial institutions to support aquaculture as commercial enterprise	56,6
Poor capacity, Extension service & Research	Inadequate research/ farmer/extension linkage	56,2

Key Challenges

- Governance and policies for aquaculture
 Insufficient political commitment to aquaculture development
 - Lack of policy measure
- Lack of long term spatial planning
- Red tape and licensing procedures
- - Conflict with other secon
- Lack of access to capital and funds
- Inadeguate linkage between Industry-Research-Extension service trough the value chain
- Lack of self initiatives among producers, retailers
- Technical constraints less urgent

Developing the Vision

Jsing identified Thematic Areas within the aquaculture value chain



Developing ideas and achieving consensus through discussion and debate

- 34 meetings
- 5 international workshops
- >400 participants

Source: Aquainnova (EATiP)

4 Sessions

- 1) Personal information
- 2) Mediterranean aquaculture sector by 2030
- 3) Constraints to aquaculture development
- 4) Research needs Thematic Research Areas (Key Goals- SubGoals)

	4) RESEARCH THEMATIC AREAS	Key Goals	Sub-goals
P 222	TA1-Product quality & Consumers	4	7
O.	TA2-Technology &systems	3	13
	TA3-Management of lifecycles	3	8
	TA4-Sustainable feed production	5	10
=	TA5- Interactions with environment	4	14
222	TA6-Knowledge management	4	6
-	TA7- Animal health and welfare	3	9
1	TA8-Socio-economics & Governance	5	10

TOP 10 GOALS (Fish & Shellfish, Marine & Freshwater)

	TOTAL		
22	TA6-Knowledge Management	Efficient utilisation of research outputs and knowledge transfer	77,13
3	TA8-SocioEconomics & Governance	To develop policy for national aquaculture	74,88
22	TA1-Product Quality & Consumer	To guarantee products with high quality standards and maximize human health benefits	74,24
1	TA6-Knowledge Management	Development of networks, a both national and international level, with the involvement of research scientists and stakeholders	71,66
2	TA1-Product Quality & Consumer	To guarantee the safety of aquaculture products	70,85
L	TA6-Knowledge Management	To improve communication at national level regarding the aquaculture sustainability and products quality	70,21
1	TA6-Knowledge Management	To enhance interdisciplinary research projects, scientists mobility and the training of new professional figures	70,05
	TA8-SocioEconomics & Governance	To reduce conflicts over space between aquaculture and other human activities (territorial planning)	69,57
	TA8-SocioEconomics & Governance	To guarantee the integration of aquaculture activities and aquaculture management policy with the National and European legislative frameworks	69,40
	TA7-Health & Welfare	To enhance health and resistance to pathogens	68,76

TOP 10 GOALS

		TOTAL	
		Efficient utilisation of research outputs and knowledge transfer	77,13
-	TA6-Knowledge Management	Development of networks, a both national and international level, with the involvement of research scientists and stakeholders	71,66
		To improve communication at national level regarding the aquaculture sustainability and products quality	70,21
		To enhance interdisciplinary research projects, scientists mobility and the training of new professional figures	70,05
		To develop policy for national aquaculture	74,88
•	TA8-SocioEconomics & Governance	To reduce conflicts over space between aquaculture and other human activities (territorial planning)	69,57
		To guarantee the integration of aquaculture activities and aquaculture management policy with the National and European legislative frameworks	69,40
1	TA1-Product Quality &	To guarantee products with high quality standards and maximize human health benefits	74,24
	Consumer	To guarantee the safety of aquaculture products	70,85
	TA7-Health & Welfare	To enhance health and resistance to pathogens	68,76

TOP 10 SUBGOALS

TA6-Knowledge Management	Transfer of research outputs to the industry	75,52
TA8-Socio Economics & Governance	Support to the simplification of administrative process (time, costs, burden) for licensing	71,34
TA8-Socio Economics & Governance	Staff training	70,85
TA7-Health& Welfare	Research on epidemiology of aquatic animal pathologies (bacteria, viruses, parasites and risk analysis)	70,2
TA8-Socio Economics & Governance	Support to the territorial planning and to the identification of allocated zones for aquaculture	69,8
TA1-Product Quality & Consumer	Prevention and control of contamination in aquaculture products	69,5
TA7-Health& Welfare	Development of systems for the early diagnosis of pathogens	67,7
TA1-Product Quality & Consumer	Traceability, labelling and certification of aquaculture products	67,3
TA7-Health& Welfare	Implementation of good aquaculture practices (handling, feeding, transport and stunning)	67,1
TA2-Technology & System	Technologies and systems to reduce the incidence of disease/ parasite infestations	66,8

TOP 10 SUBGOALS

		TOTAL		
TA	6-Knowledge Management	Transfer of research outputs to the industry	75,52	
	TA8-Socio Economics & Governance	Support to the simplification of administrative process (time, costs, burden) for licensing	71,34	
TA		Staff training	70,85	
		Support to the territorial planning and to the identification of allocated zones for aquaculture	69,89	
	TA7-Health& Welfare	Research on epidemiology of aquatic animal pathologies (bacteria, viruses, parasites) and risk analysis	70,21	
TA		Development of systems for the early diagnosis of pathogens	67,79	
		Implementation of good aquaculture practices (handling, feeding, transport and stunning)	67,15	
	4.0.4.0.4.0.0	Prevention and control of contamination in aquaculture products	69,57	
IA	TA1-Product Quality & Consumer	Traceability, labelling and certification of aquaculture products	67,31	
TA	2-Technology & System	Technologies and systems to reduce the incidence of disease/	66,83	

Mobilisation

Collective, coordinated and strategicg mobilisation is required

RTDi community Universities, Institutes

POLICY Regional, EU and MS

INDUSTRY SMEs, large companies

Coordinating Effort at Regional and MS Level

- 1. Validate Goals and Subgoals at sectoral level
- 2. Develop a Strategy of Actions to achieve
 - a) Research
 - b) Skills
 - c) Governace and policy
 - d) Knowledge transfer
- 3. Secure Resources (Finance, Infrastructure, Expertise)