

MEDITERRANE-ON- SUSTAINABLE AQUACULTURE INDICATORS IN THE MEDITERRANEAN SEA

1ST MEDITERRANE-ON WORKSHOP 10-11 JUNE 2010



Fundación Biodiversidad



APROMAR

Asociación Empresarial de Productores de Cultivos Marinos



SPANISH AQUACULTURE OBSERVATORY FOUNDATION

WORKING FOR THE SPANISH AQUACULTURE.....

PATRONAGE



IN 2008



IN 2002

GOALS

PROMOTE AQUACULTURE IMAGE AND ITS PRODUCTS THROUGH THE SOCIAL COMMUNITY

SERVE AS A PLATFORM TO ANALYSE AND MONITOR THE AQUACULTURE DEVELOPMENT IN SPAIN

REFERENCE POINT TO THE SCIENTIFIC, TECHNOLOGY AND INDUSTRY COMMUNITY

PROMOTE SPANISH AQUACULTURE INTERNATIONALLY, IN EUROPE AND LATIN AMERICA

SPANISH AQUACULTURE OBSERVATORY FOUNDATION

WORKING FOR THE SPANISH AQUACULTURE.....

WORKING LINES



1. BRINGING AQUACULTURE CLOSER TO SOCIETY AND MEDIA: WORKSHOPS FOR THE MEDIA, EXHIBITIONS,...



2. STRENGTHENING THE BOND BETWEEN I+D+i AND PRODUCERS



3. PUBLISHING AND TRAINING LINE



4. SUSTAINABLE ENVIRONMENT AND DEVELOPMENT:



5. INTERNATIONAL COOPERATION



INTERNATIONAL UNION FOR CONSERVATION OF NATURE



IUCN HELPS THE WORLD FIND PRAGMATIC SOLUTIONS TO OUR MOST PRESSING ENVIRONMENT AND DEVELOPMENT CHALLENGES. IT SUPPORTS SCIENTIFIC RESEARCH, MANAGES FIELD PROJECTS ALL OVER THE WORLD AND BRINGS GOVERNMENTS, NON-GOVERNMENT ORGANIZATIONS, UNITED NATIONS AGENCIES, COMPANIES AND LOCAL COMMUNITIES TOGETHER TO DEVELOP AND IMPLEMENT POLICY, LAWS AND BEST PRACTICE.

IUCN IS THE WORLD'S OLDEST AND LARGEST GLOBAL ENVIRONMENTAL NETWORK - A DEMOCRATIC MEMBERSHIP UNION WITH MORE THAN 1,000 GOVERNMENT AND NGO MEMBER ORGANIZATIONS, AND ALMOST 11,000 VOLUNTEER SCIENTISTS IN MORE THAN 160 COUNTRIES.

IUCN'S WORK IS SUPPORTED BY MORE THAN 1,000 PROFESSIONAL STAFF IN 60 OFFICES AND HUNDREDS OF PARTNERS IN PUBLIC, NGO AND PRIVATE SECTORS AROUND THE WORLD

THE IUCN GLOBAL MARINE PROGRAMME'S WORK IS ORGANISED UNDER EIGHT BROAD THEMES. FISHERIES & AQUACULTURE GMP'S PROGRAMME OF ACTIVITIES ON THIS THEME INCLUDES WORK ON:

1. FISHERIES GOVERNANCE
2. CERTIFICATION
3. SUSTAINABLE AQUACULTURE
4. ILLEGAL UNREPORTED AND UNREGULATED (IUU) FISHING
5. CORRUPTION IN FISHERIES

SPANISH ASSOCIATION OF MARINE FISH FARMERS



APROMAR IS A NATIONAL ORGANIZATION WITH PROFESSIONAL SCOPE, RECOGNIZED SINCE 1986 AS A PRODUCERS ORGANIZATION.

APROMAR'S MAIN GOAL IS TO PROMOTE THE DEVELOPMENT OF A SUSTAINABLE AQUACULTURE, WATCHING OVER QUALITY AND FOOD SAFETY OF THEIR PRODUCTS, BEING ENVIRONMENTALLY RESPONSIBLE AND TAKING CARE OF THE WELFARE OF THE REARED ANIMALS.

•APROMAR IS A MEMBER OF THE SPANISH NATIONAL ADVISORY BOARD OF MARINE AQUACULTURE FARMS (JACUMAR), HIGHEST ORGANISM OF THE SPANISH MINISTRY OF THE ENVIRONMENT AND RURAL AND MARINE AFFAIRS (MARM) RELATED WITH AQUACULTURE, WHO DEFENDS PRODUCERS INTERESTS AND SHOWS THE PROBLEMS AND NECESSITIES OF THEIR MEMBERS.

•IS ALSO MEMBER OF THE SPANISH INSTITUTE OF OCEANOGRAPHY (IEO) MINISTER OF ADVICE AND MEMBER OF THE FISHERIES CONSULTIVE COMMITTEE, ASSESSMENT AUTHORITY OF THE SECRETARY GENERAL FOR FISHERIES.

•APROMAR BELONGS TO THE EUROPEAN AQUACULTURE SOCIETY (EAS) AND THE FEDERATION OF THE EUROPEAN AQUACULTURE PRODUCERS (FEAP). THROUGH THIS LAST ONE PARTICIPATES IN THE CONSULTIVE COMMITTEE OF FISHERIES AND AQUACULTURE (CCPA) OF THE EUROPEAN UNION.

•IS ALSO IN AQUAFLOW, INTERNATIONAL NET THAT LINKS ALL EUROPEAN I+D ACTIVITIES.

•TO DEFEND ITS MEMBERS INTERESTS IS PRESENT IN EVERY FORUM, SYMPOSIUMS WORKSHOPS, EXHIBITIONS, CALLS, ETC. WHERE RELEVANT ISSUES FOR PRODUCERS ARE CONSIDERED.



- ✓ IS A BIODIVERSITY FOUNDATION FUNDED PROJECT LEADED BY FOESA WITH TWO MAIN PARTNERS: IUCN & APROMAR
- ✓ DURATION: 1ST JANUARY-31 DECEMBER 2010
- ✓ 2 MULTI-STAKEHOLDER WORKSHOPS TO IDENTIFY AND AGREE ON THE SPECIFIC INDICATORS THAT CAN BE USED TO MEASURE PROGRESS TOWARDS SUSTAINABLE MEDITERRANEAN AQUACULTURE
- ✓ IT IS THE SUCESSOR TO THE “GUIDES FOR THE SUSTAINABLE DEVELOPMENT OF MEDITERRANEAN AQUACULTURE” WHICH HAVE HELPED TO PUSH FORWARD OUR KNOWLEDGE OF THE EFFECTS OF AQUACULTURE IN THE MEDITERRANEAN
- ✓ MEDITERRANEO-ON’S MAIN GOAL IS TO ENSURE THAT SUSTAINABILITY BECOMES NORMAL PRACTICE IN THIS INDUSTRY IN TERMS OF THE ENVIRONMENT, SOCIAL AND ECONOMIC SUCCESS INTO THE FUTURE

OBJECTIVES

COMPILATION OF PREVIOUS INFORMATION:
ECASA, CONSENSUS,...

CREATION OF A STABLE GROUP OF EXPERTS IN
SUSTAINABILITY AND AQUACULTURE

DEFINITION OF SUSTAINABLE AQUACULTURE
INDICATORS IMPLEMENTED IN REARED SPECIES
PRODUCTION PROCESSES

PROVIDE TO ALL AQUACULTURE
STAKEHOLDERS THE NECESSARY INDICATORS
TO MAKE AQUACULTURE PROFITABLE IN ALL
ASPECTS

DISSEMINATION OF MEDITERRANEON IN AT
LEAST THREE REFERENCE SYMPOSIUMS OR
WORKSHOPS (AE2010)

TRANSFER RESULTS TO PRODUCERS THROUGH
WEB TECHNOLOGIES



EXPECTED OUTCOMES

STARTING POINT DOCUMENT

GROUP OF MEDITERRANEAN EXPERTS
ARRANGEMENT

TWO WORKSHOPS TO ESTABLISH SUITABLE
INDICATORS

PRELIMINAR DOCUMENTS FOR THE
WORKSHOPS

FINAL DOCUMENT IN SPANISH, ENGLISH &
FRENCH

PROJECT COMMUNICATION IN THREE
MEETINGS

MATERIAL EDITION OF THE PROJECT :
FOLDERS, BROCHURES, WEB SITE

DELIVERY MATERIAL (FINAL DOCUMENT,
BROCHURES, ETC)



WHY SHOULD WE MAKE THIS EFFORT?

WITH THE INCREASING DEMAND FOR SEAFOOD IN EUROPE AND THE DECLINING RETURN FROM WILD FISHERIES, AQUACULTURE IS SEEN AS THE INDUSTRY THAT WILL MEET THIS GAP IN THE FUTURE

COMPETITION IN THE MEDITERRANEAN WITH OTHER COASTAL INDUSTRIES, AS TOURISM, IS BECOMING A MAJOR PROBLEM FOR THE DEVELOPMENT AND EXPANSION OF THE ACTIVITY

SOCIETY HAVE A STRONG NEGATIVE IMAGE DUE TO ITS BELIEVE FOR BEING HIGHLY POLLUTANT

ECONOMIC, SOCIAL AND ENVIRONMENT ARE AMONG THE MOST IMPORTANT ISSUES FOR THE SUSTAINABLE AQUACULTURE SUCCESS AND NEED TO BE CARRIED OUT IN ACCORDANCE WITH BEST PRACTICE GUIDELINES

ETC...

CONCEPTS

WHAT IS AN INDICATOR?

AS MARÍA MOLINER (1975) DEFINED IN HER DICTIONARY, AN INDICATOR IS A "SIGN OR OTHER THING THAT CAN BE USED TO INDICATE SOMETHING; FOR EXAMPLE THE ROUTE OR PATH TO FOLLOW OR THE MOVING DIRECTION OF A CERTAIN PIECE OF THE MECHANISM"

SUSTAINABLE DEVELOPMENT?

INVOLVES DEVISING A SOCIAL AND ECONOMIC SYSTEM, WHICH ENSURES THAT THESE GOALS ARE SUSTAINED, I.E. THAT REAL INCOMES RISE, THAT EDUCATIONAL STANDARDS INCREASE, THAT THE HEALTH OF THE NATION IMPROVES, THAT THE GENERAL QUALITY OF LIFE IS ADVANCED"

SUSTAINABLE AQUACULTURE?

IS A SYSTEM THAT CAN EVOLVE INDEFINITELY TOWARD GREATER HUMAN UTILITY, GREATER EFFICIENCY OF RESOURCE USE AND A BALANCE WITH THE ENVIRONMENT WHICH IS FAVOURABLE TO HUMANS AND MOST OTHER SPECIES."

CRITERIA FOR THE INDICATORS

- EASY UNDERSTANDING
- SUITABLE TO SELF-EVALUATION
- BASED ON LIGHT CALCULATION
- SMART: SPECIFIC, MEASURABLE, ACHIEVABLE, RELEVANT, TIME BOUND

MEDITERRANEAN APPROACH

21 KEY COUNTRIES: ALBANIA, ALGERIA, BOSNIA-HERZEGOVINA, CYPRUS, CROATIA, EGYPT, SLOVENIA, SPAIN, FRANCE, GREECE, ISRAEL, ITALY, LEBANON, LYBIA, MALTA, MORROCO, SYRIA, SERBIA, TUNISIA, TURKEY & MONTENEGRO

EXCLUDED: MONACO AND PALESTINIA (NO PRODUCTION)



INDICATORS TO CONSIDER: EMPLOYMENT, BIODIVERSITY FARMED, CONSUMPTION, PRODUCTION, ENERGY CONSUMPTION, ETC...

TO ALL TYPES AND SYSTEMS OF AQUACULTURE: INLAND, MARINE, PONDS, TRADITIONAL, VERTICAL, HORIZONTAL AND TO ALL FARMED SPECIES

MEDITERRANEAN COUNTRY SITUATION

Country	Area km ²	Coastline km	Inland waters	Population	PIB	Nº research centers	Fish consumption	Nº farms	Employment	Exports	Imports	Species
Spain												
France												
Slovenia												
Turkey												
etc...												

Country	
<u>History</u> Aquaculture tradition in the country	
<u>Employment</u> Temporary, permanent contracts. Women vs men, employees training,...	
<u>Biodiversity</u> Species reared:	
<u>Geographic areas</u>	
<u>Production systems</u> Intensive, semi, extensive, traditional,	
<u>Consumption</u> What % of aquaculture production consumed, representation of aquaculture within aquatic products,...	
<u>Aquaculture production reported (FAO Fishery Statistic)</u>	<p>ALBANIA</p>

INDICATORS LEVEL

FARMS

ALLOWS FARMS TO ASSESS SUSTAINABLE SITUATION AND ADOPT GOOD PRACTICES IN A SHORT TERM, ALLOWING IMPROVEMENTS ON ECONOMIC, SOCIOECONOMIC AND ENVIRONMENTAL MANAGEMENT.

COUNTRIES

COUNTRIES, GOVERNMENT ADMINISTRATIONS, CAN USE APPROPRIATE INDICATORS SUITABLE FOR THEIR EVALUATION ON AQUACULTURE SUSTAINABILITY GOVERNANCE. THEREFORE, THEY CAN BE COMPETENT & COMPARABLE WITHIN OTHER REGIONS

MEDITERRANEAN

FOR INTERNATIONAL ORGANISMS (FAO, IUCN...) TO MAKE COMPARISONS WITH OTHER REGIONS AND TO HAVE AN OVERALL VIEW OF THE MEDITERRANEAN AQUACULTURE ACTIVITY.

INDICATORS RECORD EXAMPLE

FARMS

COUNTRIES

MEDITERRANEAN
AREA

LEVEL: FARM/COUNTRY/MEDITERRANEAN

DIMENSION: ENVIRONMENT/ECONOMIC/
SOCIOECONOMIC/GOVERNANCE

PRINCIPLE:

CRITERIA:

INDICATOR:

BRIEF DESCRIPTION:

WHERE TO FIND DATA: FAO, NATIONAL
STATISTICS, FARMS, ETC...

UNIT: EUROS, TONNES, KW/YEAR...

WHO WILL MEASURE IT?

HOW TO MEASURE:

FORMULA:

FREQUENCY: YEARLY, MONTHLY...

RANK: 1-10 (1 IS NOT SUSTAINABLE, 10 IS
SUSTAINABLE)

SCORE: x/10

IMPROVEMENT ISSUES:

-
-
-
-

INDICATORS RECORD EXAMPLE

FARMS

COUNTRIES

MEDITERRANEAN
AREA

LEVEL: FARM/COUNTRY/MEDITERRANEAN

INDICATOR	NAME	SCORE
ENVIRONMENT 1		
ENVIRONMENT 2		
ENVIRONMENT 3		
ECONOMIC 1		
ECONOMIC 2		
ECONOMIC 3		
SOCIAL 1		
SOCIAL 2		
SOCIAL 3		
TOTAL/90		
TOTAL/10		

THANK YOU



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ME-DITERRANE-ON
INDICADORES DE SOSTENIBILIDAD