



# Regional scheme for the development of marine aquaculture (SRDAM) and access to new farming sites on French Mediterranean coast

Catherine MARIOJOULS\*, Sophie GIRARD\*\*

\*AgroParisTech, Paris, France

\*\* Ifremer, Brest

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# Outline

- Introduction
- What is SRDAM ?
- Methodology
- Results
- Discussion and questions

# Introduction: programme SUCCESS, WP3, RFI

- Programme EU H2020 **SUCCESS** (2016-18):  
“Strategic Use of Competitiveness towards Consolidating the Economic Sustainability of the European Seafood Sector”
- **WP 3: European fisheries and aquaculture sectors**
- **Task 3.3a - Identification of “room for competitiveness improvement” (RFI) at the primary sector level**
- **Case Study “Seabass & seabream farming”, France**  
“Study of SRDAMs as a possible tool to improve access to new sites for marine fish farming on French Mediterranean coast”

# Marine fish farming in France: a low development

**4920 T in 2016** (source CIPA)  
seabass, seabream, meager, turbot

An **absence of development over the last 20 years**, attributed to:

- the difficult access to new farming sites in coastal zones,
- to regulatory constraints,
- to a lack of social acceptability.



*Source: Gloria Maris Group*

**BUT in recent years, public policies in favor of developing aquaculture:**

- EU level, **Strategic Guidelines for the Sustainable Development of EU Aquaculture**, including the priority “improving access to space and water”
- Member States : Multiannual National Strategic Plans for promotion of sustainable aquaculture
- In France: PNSPDA  
SRDAM

# What is SRDAM ?

- SRDAM (*Schéma Régional de Développement de l'Aquaculture Marine*)

= Regional schemes for the development of marine aquaculture

- introduced by the French Law on modernisation of agriculture and fisheries (Loi de Modernisation de l'Agriculture et de la Pêche, 27<sup>th</sup> July 2010)
- “In order to insure the development of aquaculture in harmony with other coastal activities”. (Source: Circulaire DPMA, 2011)

- How ?

- Inventory of existing aquaculture sites
- Inventory of suitable sites for aquaculture

a work piloted by DIRM (Inter-regional Directorate for the Sea), including a wide consultation of stakeholders

- For ?

- Use by administration during examination of new application for authorization of fish farming
- (but only a
- Use by fish farmers looking for sites
- And future inclusion in marine spatial planning

They are expected to allow access to new fish farming sites

# The SRDAMs for the 3 Mediterranean administrative regions

- Provence - Alpes - Cote d'Azur (PACA),
  - Languedoc Roussillon (LR, in Occitania)
  - Corsica
- approved in 2015



## Did they allow the creation of new farms ?

### Objectives of our study:

- to understand the building and the contents of the SRDAMS
- to look at the changes occurred after the publication of SRDAMS in 2015
- to analyze the possible constraints to an extension of marine fish farming allowed by these new tools

# Methodology

- Desk work
- 13 interviews (1-2 h)
  - 5 in the national administration:
    - national scale (2),
    - Inter-regional scale (**DIRM Méditerranée**),
    - Corsica region (2),
  - 1 in regional administration : in Corsica
  - 4 in the fish farming sector:
    - 2 CEO of the two main marine fish farming companies
    - national syndicate SFAM
    - Corsica syndicate of fish farmers
  - 3 in the research sector: IFREMER (2), Stella Maris - University of Corte (Corsica).



# A planning process

- starting from the sites proposals by professionals (large use of IFREMER inventory, 1999)
- crossed with physical or environmental criteria (geolocated data) to characterize the main issues:
  - criteria regarding the issues for fish or shellfish farming:
    - at sea: depth, wind, swell, water quality, distance to coast, distance to landing point,
    - onshore: distance to coastline, present land uses, underground water resources, maximum altitude, zone with technological risks
  - criteria regarding the issues of potential conflicts with other users:
    - navigation (all types, including in particular fishing)
    - air traffic
    - mooring zones
  - criteria regarding the issues for protection of natural environment :
    - existing protected zones (under various statutes)
    - zones with vulnerable benthic biocenoses (Posidinia meadows, coralligenes, etc)
- building of data base and GIS (using SI REMCO, IFREMER 2007), mapping
- Selection / exclusion



# Method of elaboration: six successive phases

- 1 - collection of information and data from the State services (existing sites) and from professionals (proposals for suitable sites),
- 2 - elaboration of a project of directory of the existing sites and a project of directory of the suitable sites,
- 3 - regional working meetings between State services, professionals or their representatives, regional territorial collectivity,
- 4 - consultation of the public services and institutions, of the professionals and of the territorial collectivities at regional and departmental scales,
- 5 - consultation with stakeholders (local authorities, public institutions, professionals, civil society); presentation before the Façade Maritime Council; putting at public's disposal,
- 6 - adoption of the scheme by the regional prefect.
- + environmental study and presentation / Environmental Authority, for advice

+ bilateral  
meetings by  
DIRM

Participation  
of fish  
farmers  
syndicates

Participation  
of fishermen  
syndicates

# The content the Mediterranean SRDAMs

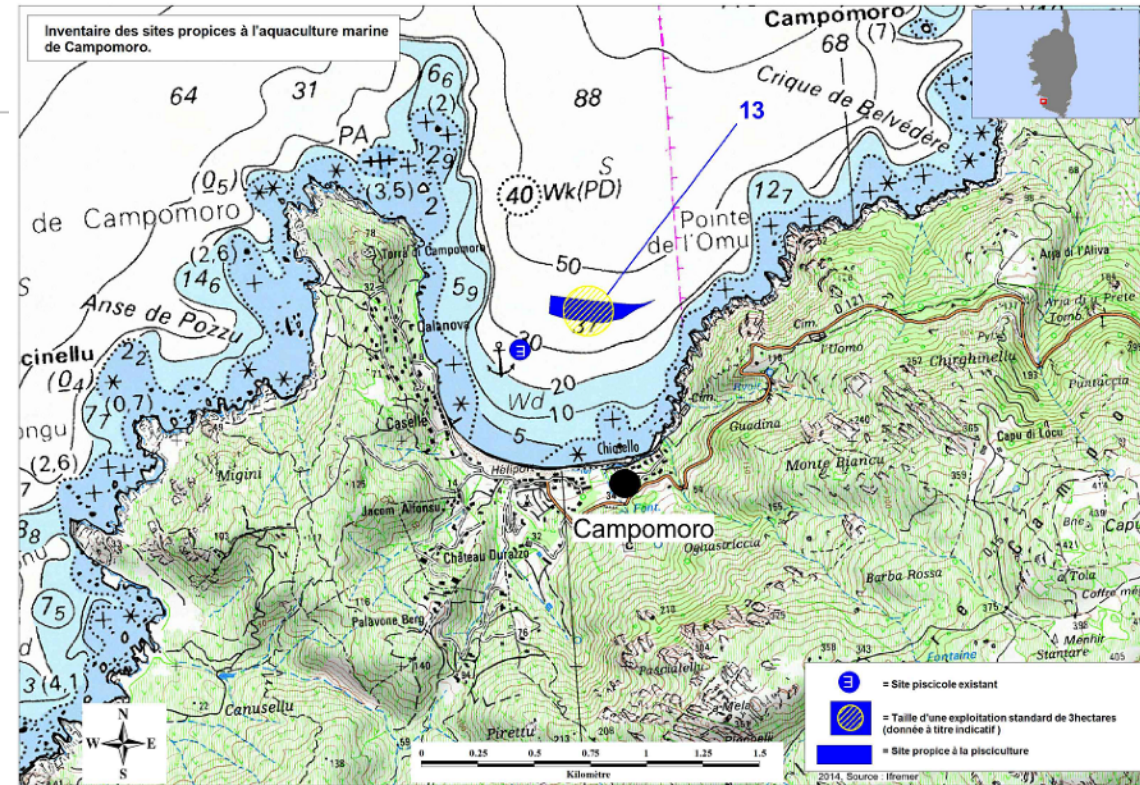
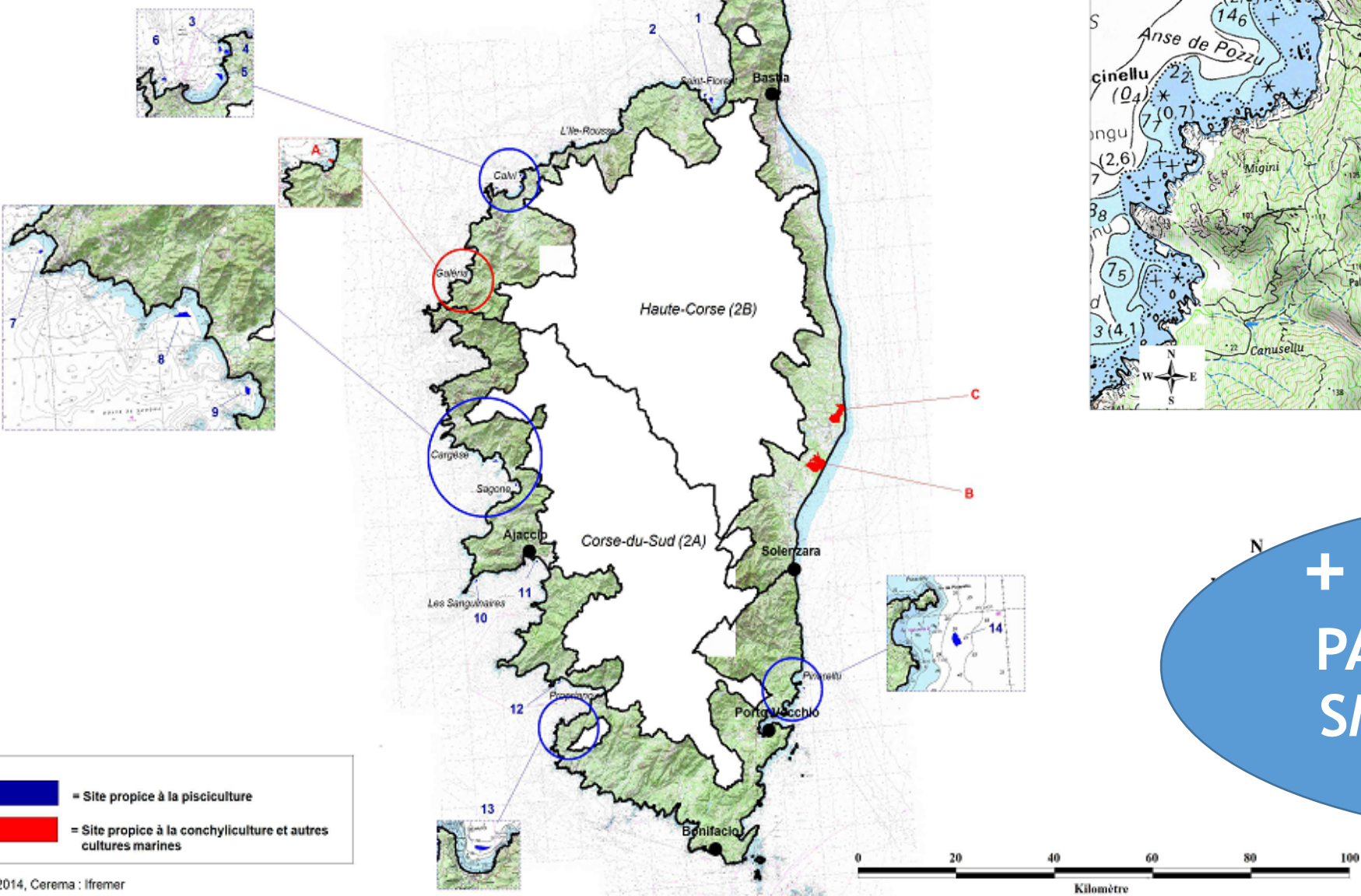
- Existing sites, suitable sites

	Number of existing sites	Number of suitable sites
SRDAM Languedoc-Roussillon (new Region Occitanie)	5	17
SRDAM PACA (Provence, Alpes, Cote d'Azur)	15	10
SRDAM Corse	9	14

- Mediterranean SRDAMs designed also as strategic scheme:
  - devoted to a development of aquaculture keeping the present form of artisanal companies
  - Aiming to double production

# Example of SRDAM for Corsica

Inventaire des sites propices à l'aquaculture marine de la région Corse



+ in CORSICA:  
PADDUC, including  
SMVM (scheme for  
the sea)

# Other outputs of SRDAMs

- The elaboration of SRDAMs has been a huge work, done with a large concertation in the coastal zone
  - A very important input from the DIRM Méditerranée
  - A very important involvement from the professionals
  - But the SRDAMs preparation took a long time
- The elaboration of SRDAMs has been a first step for setting a methodology for spatial planning in coastal zone, bringing out difficulties
- Criteria: choice/objective
- Data : choice, availability, scale
- Degree of precision: finally, a fine precision is needed



Two years after the publication of SRDAMs:  
no creation of fish farms.....

## Why ?

- **The main constraint: administrative burden concerning the application files for fish farming authorization**
- **Other limiting factors ?**
  - **Investments ? Financing ?**
    - There are potential investors (but they may go elsewhere .... )
    - Banks, public supports : sometime slow
  - **Market : not either regarded as limiting (< high volumes)**
- **The tension between “production” and “protection” remains**
  - weak social acceptability
  - visible in local opposition
  - but also in difficulties during examination of application files for existing or new farms,

# Two years after the publication of SRDAMs: no creation of fish farms... (2)

- A great disappointment among marine fish farmers sector
  - who had put great expectations in SRDAMs
  - For access to sites, but also for improvement of social acceptability
- Some missing aspects in SRDAMs
  - Weak judicial weight
  - No mapping of land-based sites (facilities for storage), while high competition and need

# SRDAMs are a first step for MSP

- Marine Spatial Planning : due for 2021 in UE Members States
- In France : Marine Spatial Planning is part of DSF  
(Document Stratégique de Façade; « *strategic document for coastal region* »)

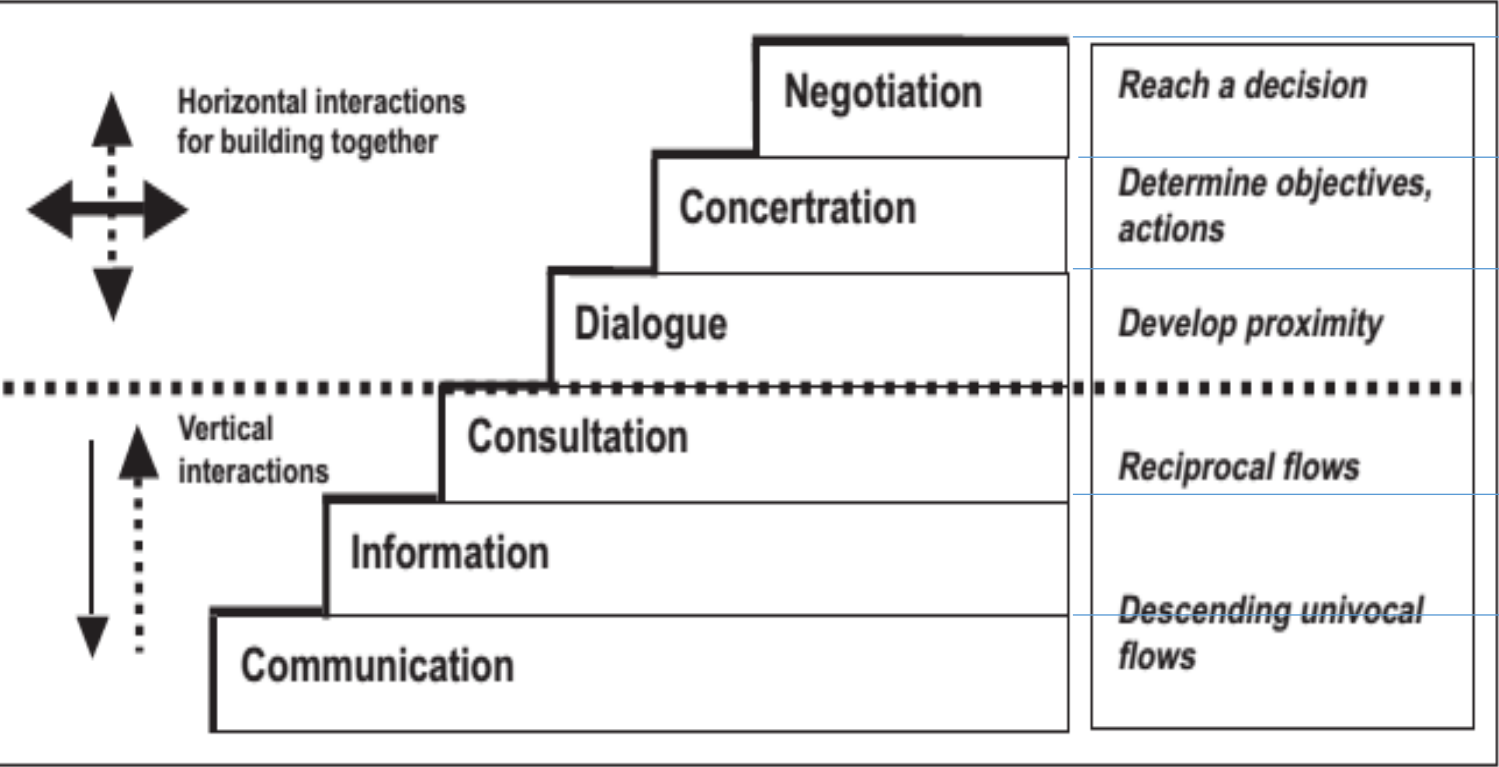
Elaborated by DIRM - under progress

- SRDAMs will be included in DSF

**For MSP, one important question :  
what participative approach with stakeholders ?**



Attempt to characterize the stakeholders participation in Mediterranean SRDAMs, using the « possible types of stakeholders participation in an MSP process », Pomeroy & Douvere 2008



Fish farmers	Fishermen	Other users	Public
X			
X			
X	X		
X	X	X	(X)
X	X		X
			X

Consultation through elected representatives (region, department, municipalities)

After : Pomeroy R., Douvere F., 2008  
- The engagement of stakeholders in the marine spatial planning process.  
Marine Policy 32 (2008) 816- 822.

# Discussion, Questions

- Time for public policies and needs of marine fish farming, a wide gap between
  - Short term needs of marine fish farming sector : simplification of administrative procedures
  - Long term work required by the MSP, both for the process itself and its implementation.
- For mapping aquaculture sites, what inclusion of environmental questions ?
  - Inclusion of Impact assessment model; exp: DEPOMOD
  - Inclusion of Carrying capacity model ?
- What Stakeholders participation in marine spatial planning ?
  - how is organized the participation ? Does it allow a real empowerment of stakeholders ?
  - Does it allow mutual understanding of activities and issues for each activity/use ?
  - Numerous works /concepts /guidelines
    - aquaculture zoning in ecosystem approach (FAO & World Bank, 2015)
    - FAO CGPM - Affected Zones for Aquaculture (Resolution GFCM/36/2012/1)

For marine fish farming, what is at stake is social acceptability, linked with “spatial acceptability” and “environmental acceptability”



Arigato

Merci

Thank you