

Document Informati	on				
Project					
Project Acronym	Pegaso	Grant agreement n°	244170		
Full project title	People for Ecosystem-based Governance in Asse Sustainable development of Ocean and coast	essing			
Funding scheme	Collaborative large-scale integrating project				
Project start date	February 1, 2010	Project duration	48 months		
Call topic	ENV.2009.2.2.1.4 Integrated Coastal Zone Manag	gement			
Web site	www.pegasoproject.eu				
Document					
Deliverable number	D4.4 Due date 31/10/20	13 Submission date	30/01/2014		
Deliverable title	Report , accompanying supporting materials and g methods and application for multi-scale ICZM acro				
Authors	Stefano Soriani, Fabrizia Buono, Marco Tonino, Monica Camuffo (UNIVE)				
Reviewers	Julien Le Tellier (Plan Bleu); Gunter English (PAP	PRAC)			
Work Package	WP4 Tools				
Work Package Leader	Denis Bailly (UBO)				
Lead beneficiary	UNIVE				
Dissemination level	Public				
Nature	Report				
N° of pages (incl. cover)	100				





Leader Task 4.4

Partner name: UNIVE

Contact: Stefano Soriani

e-mail: soriani@unive.it

Pegaso Project

People for Ecosystem based Governance in Assessing Sustainable development of Ocean and coast

Funded by the European Union under FP7 – ENV.2009.2.2.1.4 Integrated Coastal Zone Management

Specific Programme FP7 Collaborative Projects Large scale integrating Project

Grant agreement nº: 244170

Participatory methods for ICZM implementation

Date	January, 2014
Author	Stefano Soriani, Fabrizia Buono, Marco Tonino, Monica Camuffo.
Resume	The aim of this document is to support PEGASO CASES team in the development of participatory strategies for each phase of the ICZM process offering guidelines and a selection of available participatory methods. The report contains also the participatory experiences of the CASEs developed during the life-time of the project.
Deliverable title	D4.4 Report , accompanying supporting materials and guidelines for the use of participatory methods and application for multiscale ICZM across the Mediterranean and Black Sea Basins.
Contact	stefano.soriani@unive.it





Partner name: UNIVE

Contact: Stefano Soriani
e-mail: soriani@unive.it

Table of contents

Table of contents	2
1_Introduction	3
1.1_What is Participation?	4
1.2_Participation for ICZM	5
1.3_Who is a stakeholder?	7
2_The participation within ICZM phases for the CASES	g
2.1_Establishment	11
2.2_Setting the Vision	13
2.3_Analysis and futures	14
2.4_Designing the future	15
2.5_Realising the Vision	15
3_List of participatory methods	17
3.1_Participatory methods and approaches related to ICZM phases	18
References	19
Annex 1: Participatory methods description	
Annex 2: IMAGINE methods description	XXIII
Annex 3: Particinatory experiences in the CASEs	XXXII



1_Introduction

Public participation is widely recognised as a necessary tool to ensure a successful implementation of environmental policies¹: the Conference on Environment and Development (Earth Summit) in Rio de Janeiro in 1992, Principle 10 (UNCED, 1992a) and Agenda 21 (UNCED, 1992b) both called for increased public participation in environmental decision-making and led to the adoption in Europe of the Aarhus Convention (UN ECE, 1998). Furthermore participation has become a fundamental pillar of environmental processes as described in the Water Framework Directive (2000/60/EC), the 2002 EU Recommendation on ICZM (2002/413/EC) and the Mediterranean Protocol on ICZM (UNEP-MAP, 2008).

Public participation tends to make the planning process more effective, equitable and hence legitimate (Buanes *et al*, 2005) promoting democratic values based on subsidiarity principles.

Every environmental policy asks for different participation processes according to the process aim (e.g. gaining information, perspectives, or consensus), the available tools (e.g., decision support systems), the process phase and the level of involvement, interest and knowledge of stakeholders (Hage *et al*, 2009).

Accordingly, Integrated Coastal Zone Management (ICZM), dealing with contrasting perspectives and interests in coastal areas, needs to embed participation through the different steps of the development and implementation of its strategy.

Within PEGASO, participation is a cross-cutting issue and the basis for the integration of the tools developed (e.g. scenarios, indicators, LEAC and economic assessment). PEGASO "Collaborative Application SitES" (CASES), with different scales, coastal issues, expertise and experiences, will particularly need to apply participation adapting it to their needs and characteristics.

In order to bridge the gap between science and decision makers at the CASES scales, this document provides a common basis to support teams (in particular participatory facilitators) in the development of participatory moments for each phase of the ICZM offering guidelines and a selection of available participatory methods.

¹ Reed, 2008; Tompkins et al, 2007; Buanes et al, 2005; Beierle, 2002



1.1_What is Participation?

Participation can be defined as a process where individuals, groups and organisations choose to take an active role in making decisions that affect them (Reed *et al*, 2009).

Since the Conference on Environment and Development of 1992, public participation has been recognised as a necessary element of all environmental procedures like environmental assessment, local Agenda 21, and ICZM.

The most famous categorization of participation is the so called "Ladder of participation" (Arnstein, 1969). Table 1 below shows Arnstein's ladder of citizen participation proposing eight levels, starting from "Manipulation" and ending with "Citizen control". It shows the different ways in which the organisation responsible for activity (e.g. an authority) can involve participants, in this case citizens. This was the first contribution advancing the idea of establishing a structured framework of engaging a community and using consultation within a participatory framework of decision making.

ARNSTEIN'S LADDER OF CITIZENS PARTICIPATION

Level 1	Manipulation	Assume a passive audience, which is given information that
Level 2	Education	May be partial or constructed
Level 3	Information	Tell people what is going to happen, is happening, or has happened
Level 4	Consultation	People are given a voice, but no power to ensure their views are heeded
Level 5	Involvement	People's voice has some influence, but institutional power holders still make decisions
Level 6	Partnership	People negotiate with institutional power holders over agreed roles, responsibilities, and levels of control
Level 7	Delegated power	Some power is delegated
Level 8	Citizens control	Full delegation of all decision-making and actions

Table 1 Arnstein's ladder of citizen participation (Arnstein, 1969)

An effective participation process within environmental management brings several opportunities: it allows to obtain information that would not be available otherwise, it minimizes the uprising of conflicts and it leads to a greater quality and durability of decisions (Santos *et al*, 2006; Reed,



2008). Furthermore, participation benefits include widening the representation of interests involved in decision-making, improving local "ownership" of strategies, having a positive impact on the legitimacy of policies and decision-making, ensuring that projects meet citizen's needs (Fletcher, 2003).

Notwithstanding, stakeholder participation can also pose challenges. Involving stakeholders can be costly, time-consuming, labour-intensive, confrontational, and can ultimately delay development and implementation of policies. Additionally, if improperly managed, stakeholders participation can create new conflicts or escalate existing ones (NOAA, 2007).

The participatory process has to deal with the existing institutions and mechanisms of governance. Therefore, understanding local forms of participation, prevalent democratic traditions and views on citizen participation in politics is crucial to design an effective participation framework. How much the decision making power is devolved to the public must be clearly defined in order to avoid a failure of the process (Albert and Passmore, 2008). Indeed, the lack of transparency regarding the way the result of public debates and dialogues are incorporated in the decision process can lead to a sense of frustration for those who took part in it, weakening the whole process.

The participants power in affecting decisions is crucial for the success of the participatory process (Reed, 2008) but at the same time attention must be paid to avoid participatory process consolidating or enhancing power disparity, related to differences in age, gender, culture and/or socio-economic background. Moreover difficulties in the process can be related to the presence of intransigent, not representatives stakeholders or with an overwhelming power. However the participatory process is never purely consensual: as Billé (2008) argued it is necessary that involved parties become fully aware of the power relationships among stakeholders, also through a conflict phase.

Finally, although challenging, a participatory process offers the opportunity to foster deliberation and to encourage social learning thanks to the interaction of different actors, their representations and perceptions; it allows to create new alternatives (Delli Priscoli, 2003), and to contribute to social consensus building (Newman, 2005).

The following section presents the role of participation in ICZM and describes how to tailor the participatory process within the PEGASO CASES.

1.2_Participation for ICZM

Active public participation is an essential requirement of the ICZM process and should have first priority in the planning and in the review of coastal zone management decisions and actions (UNEP-MAP, 2008; Stojanovic *et al*, 2004; UNCED, 1992 (a); Edwards *et al.*, 1997). For instance, article 14 of the Protocol on Integrated Coastal Management on the Mediterranean (UNEP, 2008)



foreseen the appropriate involvement of all stakeholders in the formulation and implementation of coastal and marine strategies, plans, programmes or projects in order to guarantee efficient governance of the ICZM process.

Coastal areas are places where human pressure is the most concentrated and where current and potential conflicts of land use are the most critical. Coastal ecosystems are not only amongst the most important from a social perspective, but also the most threatened from an ecological perspective. Therefore, the adoption of a participatory approach in ICZM is highly recommended in order to cope with increasing pressures coming by the multiple resources demands

According to Fletcher (2003) there are at least three practical reasons for public participation in the ICZM process:

- 1. the value of input of those who rely on the coast can provide insight into the design of the ICZM process;
- 2. the support of the users for development and implementation of an ICZM programme is crucial for its success; and,
- 3. increasingly, governments are required to develop public-private partnerships to fully accomplish resource management goals.

Moreover, as the "IMAGINE" experiences within MAP's CAMPs (Bell S., Coudert E. (2006).) have shown, participation in ICZM allows:

- 1. the effective involvement of several stakeholders from various sectors who convene, often for the first time, to address a territorial management issue; and,
- 2. a relevant stimulating effect: breaking down barriers between specialisations and/or sectors.

The involvement of local communities and of the different actors in the process can enhance the legitimisation of decisions, it ensures that their needs are met, and that local knowledge is included in the decision-making process.

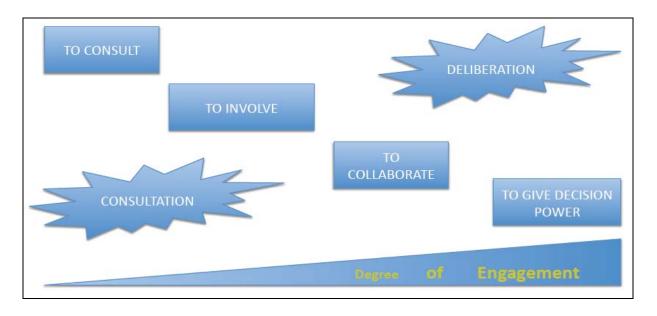


Fig. 1 The relation between participation steps and engagement power.



Although the benefits of such approaches to ICZM are evident, there are some challenges before arriving to the full realisation of participatory planning and management processes. Given the global nature of coastal and marine issues, interests may range from local to national to international. Furthermore, the scope and the diversity of coastal sectors are broad, therefore trust and cooperation among stakeholders can be problematic. Coastal communities and even stakeholder groups are heterogeneous and multi-dimensional and conflicts, divisions and inequalities are likely to exist among them. Therefore, giving everyone the floor to contribute and express themselves is a very crucial point when setting up a participatory process.

The following paragraph aims at helping in understanding what and who are the stakeholders in a ICZM process.

1.3_Who is a stakeholder?

As defined by Freeman (1984) a **stakeholder** is who is affected by the decisions and actions taken by policy makers and who has the power to influence their outcome. Actually the definition of what a stakeholder is opens broad debates, because strictly seen, everybody can be considered as a potential stakeholder.

Accordingly, understanding who should be involved and on which level within an environmental management process is a complex issue. It is very important to understand how different stakeholders are related to each other and how they are related to the resources to be managed.

The 2008 Protocol on ICZM in the Mediterranean devotes an entire article to the participation specifying who should be included in the participatory process. Article 14 of the Protocol states that:

"the Parties shall take the necessary measures to ensure the appropriate involvement in the phases of the formulation and implementation of coastal and marine strategies, plans and programmes or projects, as well as the issuing of the various authorizations, of the various stakeholders, including:

- the territorial communities and public entities concerned;
- economic operators;
- non-governmental organizations;
- social actors;
- the public concerned".

This Protocol article is meant to be put in practice in the PEGASO project. Participation should be tailored and adapted to the context and objectives of the CASES, and possibly integrated with other tools applied (e.g. indicators, scenarios).



In PEGASO CASES, according to the main coastal issues identified, objectives for the ICZM strategy have to be set. Objectives can be reached through the development of an end product (e.g. an atlas, a model, a plan).



Fig. 2 The relationship between coastal issues, objectives, end products.

In the PEGASO CASES a stakeholder is not only the person or the body who is going to use the end product but also all those who are going to influence or be interested in any way by the End product (in its development and application).

Example

In the North Adriatic Case one of the End products is a Decision support tool for the assessment of the climate change impacts and risks in the coastal zone. The stakeholders were identified among:

- those one who could use the tool in coastal planning (e.g. environmental and planning office at national, regional, province and municipality level; water authorities, river basin authorities);
- the ones **who could provide support and/or knowledge** (e.g. Regional Environmental protection agency);
- the ones **who could be interested in the output of the end product** (e.g. tourism and fishery category association, environmental associations, general public).

There are different levels of stakeholders participation in the CASES:

- information (e.g. presentation of results during final workshops)
- consultation (e.g. to have feedback in the CASES work plan)
- involvement (e.g. work on tools during local workshops)

In the next chapter guidelines are offered to guide CASES in an effective implementation of participation through the ICZM phases.



2_The participation within ICZM phases for the CASES

In the PEGASO CASES *participation* is more than just a tool: it is a fundamental pillar of the process of ICZM development as well as a cross-cutting component of the integrated PEGASO tool box (e.g. indicators, scenarios).

A common general participation framework can be proposed to all the CASES. Anyway, the differences in the social, environmental and political context wherein the CASES are developed; the strengths, skills and resources (both human and financial) of the CASES team have to be considered.

Therefore the choice of the particular participatory method to be used will depend on:

- **Project context** (i.e. project goals, objectives and anticipated outcomes).
- Community context (the willingness to participate, socio-cultural aspects).
- **Project parameters** (including the project size, budget, timeline and resources allocated).
- **Project team** (i.e. skills of team and availability of the members).

As shown in **Figure 3**, the development of an ICZM plan follows the 5 phases depicted in the following scheme. Although the phases of ICZM are presented here as steps it is worth to remind that ICZM is an iterative, continuous, proactive and flexible process.



Fig. 3 The ICZM phases



Participation can be implemented by means of approaches, methods and tools.

An **Approach** can be considered as systematic combinations of tools and strategies/concepts, held together by a guiding principle, and serving the achievement of a certain goal².

A **method** in this context can be considered as a structured way of realising a particular participatory intervention.

A **tool** can be defined as certain exercises to cultivate and implement collaborative research, analysis, planning and action Typical tools in this sense are e.g. Mapping, Ranking, Diagrams³.

This document focuses on participatory methods in order to meet the specific needs of the CASES. Some of the methods are taken from Internet sites about participation while other specific methods (workshops) refer to the IMAGINE approach (see Annex 2).

PEGASO CASES are really different one to each other, also regarding to their ICZM starting phase. Moreover, due to time constraints the accomplishment of all the ICZM phases is hardly reachable in the majority of the CASES.

This document provides a selection of participatory methods chosen according to the following criteria:

- 1) Applicability to PEGASO CASE work: selected methods should be:
 - easily applied in the CASES,
 - well-proven (i.e. have already been successfully applied elsewhere) and
 - easy-to-learn (i.e. do not need extensive training).
- 2) **Diversity**: at least 3 methods are presented in each ICZM phase in order to offer a freedom of choice according to the needs of the CASES.
- 3) **Specificity**: proposed methods should describe a single and concrete intervention.

It is worth to remind that:

- the use of a particular participatory method depends on the context, the skills and the resources (both human and financial) of the CASE team;
- a specific participatory method can be sometimes used in more than one phase;
- the participatory process is adaptive: a specific suite of methods initially chosen can be changed according to the evolution of the process.

³ For further information: FAO website: for example http://www.fao.org/docrep/x5307e/x5307e00.htm#Contents

² For further information: http://www.fao.org/Participation/ft_find.jsp



In the following paragraphs, for each ICZM phase the suggested participatory moments needed are described proposing a suite of possible participation methods to fulfil the objectives of each phase.

All the mentioned participatory methods are then resumed in Table 2.

Finally, in Annex 1 methods are shortly described presenting previous experiences in coastal management (preferably from OURCOAST project database http://ec.europa.eu/environment/iczm/ourcoast.htm) and links to detailed descriptions. IMAGINE methods (workshops) are reported in Annex 2. Finally, annex 3 presents the experiences of CASEs in the implementation of participatory methods and the main lessons learned from stakeholders involvement.

2.1_Establishment

Core questions of the ESTABLISHMENT phase

- Have you identified your coastal zone boundaries, drivers and pressures?
- Have you established an ICZM steering group including the main stakeholders of the area?

This is the starting point for the ICZM development: all CASES are at least at this stage since CASES team are aware of the existence of coastal issues that are to be considered and managed throughout an innovative, proactive, forward looking and integrated strategy.

In the *Establishment phase* the main participatory objective is to ensure full engagement of stakeholders and the public in the plan process and its implementation.

It is important to identify a list of stakeholders for every one of the end-product that is going to be developed within the CASE.

In this phase is also important to apply participation in the identification of the coastal zone boundaries and in the analysis of the coastal zone according to the drivers and pressures.

Participatory objective:

-to identify all the stakeholders for every end-product by means of a stakeholder analysis; -to identify the coastal zone boundaries, drivers and pressures.

Participatory action: the Stakeholder Analysis

In order to understand who are the stakeholders for the CASE there is the need to develop a **stakeholder analysis**: a procedure based on a range of tools for the identification and description



of stakeholders, their interrelationship (vertical and horizontal), interests and objectives; additionally it examines the question of how and to what extent stakeholders represent various segments of society (Pomeroy and Douvere, 2008).

There are seven major attributes to take into account regarding the stakeholders analysis in ICZM (adapted from Vierros et al., 2006):

- a. the various stakeholders related to the coastal zone;
- b. the group/coalition which belong to and can reasonably be associated with;
- c. the kind and level of interest (and concerns) they have in the coastal zone;
- d. the importance and the influence that each stakeholder has;
- e. the stakeholders' position towards the development of an integrated management of the coastal zone;
- f. the multiple "hats" they wear;
- g. the network to which they belong.

Suggested participatory methods

In order to carry on a stakeholder analysis⁴ different methods and approaches can be adopted:

Methods:

- Expert panel
- Field trip
- Focus group
- Mediation and Negotiation
- Open space technology
- Snowball samplings

In order to carry on an analysis of the coastal boundaries, the drivers and pressures of the coastal zone the following method can be used:

- IMAGINE Workshop 1

⁴ By filling the CASES Identification Document, PEGASO CASES have already carried on a preliminary stakeholder analysis by using a matrix that allows also to assess the importance, power, knowledge and attitude of the stakeholders. However, further methods and tools for the stakeholder analysis are here described.



2.2_Setting the Vision

Core questions of SETTING THE VISION phase:

Have you agreed with stakeholders on a set of ICZM objectives?

In the Setting the Vision phase the main participatory objective is to fully engage the stakeholders into the process. In this phase stakeholders should actively contribute to the identification of the coastal issues. This phase is crucial also in knowledge development offering the opportunity to share different perceptions and representations of coastal issues. Within PEGASO the main coastal issues have been already identified by the CASES team, therefore stakeholders should contribute mostly by amending, revising and validating them, furthermore contributing to recognise the priorities to deal with in the CASE.

This mutually supported process should outline the inherent conflicts and synergies between the top-down and bottom-up issues proposed.

Participatory objective:

- to fully engage stakeholders in the definition of the coastal issues and priorities to deal with in the ICZM strategy.

Suggested participatory methods

In order to fully involve stakeholders in the identification of coastal issues and priorities, the following tools, methods and approaches can be adopted:

Methods

- Brainstorming
- European Assessment Scenario Workshop (EASW)
- Future search conference
- Key stakeholders interviews
- Mediation and Negotiation principles
- Open Space Technology



IMAGINE Workshop 2

2.3_Analysis and futures

Core questions of the ANALYSIS AND FUTURES phase:

- Have you developed an analysis process in order to gain objectives of the previous ICZM phase (e.g. maps, indicators)?
- Have you developed potential future situations by means of scenario building?

In the *Analysis and futures* phase the main participatory objective is to integrate in the analysis process and scenarios building all the local values and knowledge of stakeholders.

In the Scenario building phase in particular, participatory process should be maximized in order to provoke debate about common future, expand the range of options, expose existing conflicts and uncertainties; clarify and communicate technical analysis.

Participatory objective:

- to fully engage stakeholders in the discussion of the analysis and scenarios generating process

Suggested participatory methods

In order to fully involve stakeholders in the discussion of the analysis process and in the scenario building phase the following tools, methods and approaches can be adopted:

Methods

- Backcasting
- Future search conference
- Open Space Technology
- Scenario testing
- Sketch Match
- IMAGINE Workshop 3 and 4



2.4_Designing the future

Core questions of DESIGNING THE FUTURE phase:

• Have you developed a shared action plan for ICZM implementation?

In the Plan and adoption phase the main participatory objective is to involve stakeholders to review and amend the Plan that would then be adopted.

Participatory objective:

- to fully engage stakeholders in the definition, discussion and the review of the Plan

Suggested participatory methods

In order to fully involve stakeholders in the plan review the following methods and approaches can be adopted:

Methods

- Focus group
- Logical framework matrix
- Mediation and Negotiation principles
- Open Space Technology
- IMAGINE Workshop 5

2.5_Realising the Vision

Core questions of REALISING THE VISION phase

• Have you realised concrete management actions as a result of an ICZM programme?

In the *Realising the Vision* phase the participation moments could regard the monitoring and evaluation of the results of the strategy adopted.



Suggested participatory methods

In order to fully involve stakeholders in the monitoring and evaluation of the results, the following methods can be adopted:

Methods

- Citizens monitoring
- Field trips
- Mediation and Negotiation principles
- Open Space Technology



$3_List\ of\ participatory\ methods$

ETHODS	PAGE	Annex
1. Backcasting	II	A.1.1
2. Brainstorming	Ш	A.1.2
3. Citiziens monitoring	IV	A.1.3
4. European Awareness Scenario Workshop (EAS	SW) V	A.1.4
5. Expert Panel	VI	A.1.5
6. Field trips	VII	A.1.6
7. Focus Group	VIII	A.1.7
8. Future Search Conference	IX	A.1.8
9. Key stakeholder interviews	X	A.1.9
10. Logical Framework Matrix (Logframe)	XI	A.1.10
11. Mediation and Negotiation principles	XII	A.1.1
12. Open Space Technology	XIII	A.1.12
13. Scenario testing	XIV	A.1.13
14. Sketch Match method	XV	A.1.14
15. Snowball sampling	XVI	A.1.15
16. IMAGINE Workshop 1	XVII	A.2.1
17. IMAGINE WORKSHOP 2	XVIII	A.2.2
18. IMAGINE Workshop 3 and 4	XIX XX	A.2.3
19. IMAGINE Workshop 5	XXI	A.2.4



3.1_Participatory methods and approaches related to ICZM phases

			Objective	Required Skill level of the facilitators 1 to 5 (1 beginners, 5 expert)	ICZM Phase considered				
		Participatory method			1 Establishment	2 Setting the Vision	3 Analysis &Futures	4 Designing the Future	5 Realising the Future
	1	Backcasting	Analysis of alternative future options.	4			~		
	2	Brainstorming	To develop creative solutions to problems.	1		~			
	3	Citizens monitoring	To track and analyse progress towards jointly agreed results and deciding on corrective action	3					~
	4	European Awareness Scenario Workshop (EASW)	To develop future strategies.	4		~			
	5	Expert panel	To hear a variety of informed ('expert') viewpoints	2	~				
	6	Field trips	To let people to 'see for themselves' the place where a development is proposed to be placed,	1	~				~
	7	Focus Group	To discover the key issues of concern for selected groups.	3	~			~	
Method	8	Future Search Conference	To develop a series of options for the future, and agree on a plan of action.	4		~	~		
	9	Key stakeholder interviews	To elicit detailed information and opinions on an issue.	3		~			
	10	Logical Framework Matrix (Logframe)	To set out the logic of an ICZM intervention and to describe the important assumptions and risks that underlie this logic	4				~	
	11	Mediation and Negotiation principles	To deal with conflict in a creative and positive way, and to find a solution.	5	~	~		~	~
	12	Open Space Technology	To let discuss stakeholders about topics according to their interest in a prevailing climate characterised by uncertainty, ambiguity and a low level of trust.	3	~	~	~	~	~
	13	Scenario testing	To test alternative (hypothetical) futures so as to make better choices today.	4			~		
	14	Sketch Match	To analyze and work out the spatial problems in a specific region.	5			~		
	15	Snowball sampling	To identify people with particular knowledge, skills or characteristics that are needed as part of a committee and/or consultative process.	2	~				
IMAGINE	16	Imagine workshop 1	to study and understand the context, with a holistic vision of the coastal areas: drivers, pressures, and state	4	~				
	17	Imagine workshop 2	To select indicators.	5		~			
	18	Imagine workshop 3 and 4	To model and explore the trends and the alternatives regarding the future of the area (scenario building).	5			~		
	19	Imagine workshop 5	To define an action or a monitoring plan, and publishing the outputs	3				✓	

Table 2: Participatory methods and ICZM phases



References

- Albert A., Passmore E., (2008). Public Value and Participation: A Literature Review for the Scottish Government. Scottish Government Social Research
- Arnstein S. R. (1969). A Ladder of Citizens Participation Journal of the American Institute of Planners 35:216-224
- Beierle, T.C. (2002). The quality of stakeholder-based decisions. In: Risk Analysis 22, 739–749. Blackwell Publishing.
- Bell S., Coudert E. (2006). A practitioner's guide to "Imagine", the systemic and prospective sustainability analysis

 Guide d'utilisation de 'Imagine': Analyse Systémique et Prospective de Durabilité. Blue Plan Papers n°3. Plan Bleu RAC / UNEP-MAP.
- Billé R.(2008). Integrated coastal zone management: four entrenched illusions, Surv. Perspect. Integr. Environ. Soc., 1, 75–86.
- Buanes A., Jentoft S., Maurstad A., Søreng S. U., Karlsen G. R. (2005). Stakeholder participation in Norwegian coastal zone planning. In: Ocean & Coastal Management 48, 658–669.
- Coudert E., Larid M. (2006). IMAGINE: A set of tools and methods to assist integrated coastal zone management in the Mediterranean. Plan Bleu RAC, MAP/UNEP, 2006.
- Delli Priscoli J. (2003).Participation, Consensus Building, and Conflict Management Training Course (Tools For Achieving PCCP), Institute for Water Resources, USACE, (SC-2003/WS/57), UNESCO/ IHP/ WWAP/IHP-IV/ Technical Documents in Hydrology/ PC-CP series/ no. 22
- Edwards, S.D., Jones, P.J.S. and Nowell, D.E. (1997). Participation in coastal zone management initiatives a review and analysis of examples from the UK. Ocean and Coastal Management 36:143–165
- FAO website (http://www.fao.org/Participation/ft find.jsp)
- Fletcher S. (2003). Stakeholder representation and the democratic basis of coastal partnerships in the UK. In: Marine Policy 27, 229–240
- Freeman R. E., Strategic Management, a stakeholder approach ,1984, Boston, Pitman.
- Hage M., Leroy P., Petersen A. C. (2009). Stakeholder participation in environmental knowledge production. In: Futures, 2010 (in press).
- Newman, J., (2005). Participative governance and the remaking of the public sphere.In: J. NEWMAN, ed, Remaking Governance, Peoples, Politics and the Public Sphere. University of Bristol: The Policy Press. pp.119-138.
- NOAA Costal service center (2007). Introduction to stakeholder participation. In: www.csc.noaa.gov



- Pomeroy R. and Douvere F. (2008). The engagement of stakeholders in the marine spatial planning process. In: Marine Policy 32, 816–822.
- Reed M. S. (2008). Stakeholder participation for environmental management. A literature review. In: Biological Conservation 141, 2417–2431.
- Reed M. S., Graves A., Dandy N., Posthumus H., Hubacek K., Morris J., Prell C., Quinn C. H., Stringen L. C. (2009). Who's in and why? A typology of stakeholder analysis methods for natural resource management. In: Journal of Environmental Management 90, 1933–1949
- Santos R., Antunes P., Baptista G., Mateus P., Madruga L. (2006). Stakeholder participation in the design of environmental policy mixes. In: Ecological Economics 60, 100–110
- Stojanovic T., Ballinger C., Lalwani C. (2004). Successful integrated coastal management: measuring it with research and contributing to wise practice, Ocean & Coastal Management 47 (2004) 273–298
- Tompkins E. L., Few R., Brown K. (2007). Scenario-based stakeholder engagement: Incorporating stakeholders preferences into coastal planning for climate change. In: Journal of Environmental Management 88, 1580–1592, (2008).
- UN/ECE (1998). 'Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters' ECE Committee on Environmental Policy, Aarhus, pp. 28.
- UNEP MAP, (2008). ICZM Protocol in the Mediterranean
- United Nations Conference on Environment and Development (UNCED) (1992a). Rio Declaration on Environment and Development. The United Nations Conference on Environment and Development", Rio de Janeiro 3-14 June 1992.
- United Nations Conference on Environment and Development (UNCED) (1992b). Agenda 21 United Nations, Rio de Janeiro. The United Nations Conference on Environment and Development", Rio de Janeiro 3-14 June 1992.
- Vierros M., Douvere F., Arico S. (2006). Implementing the ecosystem approach in open ocean and deep sea environments. An analysis of stakeholders, their interests and existing approaches. UNU-IAS.



Annex 1: Participatory methods description



A.1.1 Backcasting

Objectives:

Backcasting allows a group of people to weigh up the implications of different future options or policy goals.

Method:

- 1. Define future goals and objectives, projecting 25-50 years into the future.
- 2. Specify the scenario by analysing the technological and physical characteristics of a path that would lead towards the specified goals.
- 3. Evaluate the scenario in terms of physical, technological and socio-economic feasibility and policy implications.
- 4. Brainstorm ways this desired end-point can be achieved, working backwards to the present.

Example

Guadalenti´n (Spain) and the Vald'Agri (Italy) workshops about the developing of local scenarios. Kok et al, Multi-scale narratives from an IA perspective: Part II. Participatory local scenario development, Futures 38 (2006) 285–311 (http://www.ibcperu.org/doc/isis/6964.pdf)

Source:

http://www.dse.vic.gov.au/effective-engagement/toolkit/tool-backcasting

To deepen your knowledge on backcasting:

Quist J,, Vergragt P. Past and future of backcasting: The shift to stakeholder participation and a proposal for a methodological frameworkFutures 38 (2006) 1027–1045

(http://www.transitiepraktijk.nl/files/2006%20Past%20and%20future%20of%20backcasting%20The%20shift%20to%20stakeholder%20participations%20Vergragt.pdf)



A.1.2 Brainstorming

Description:

Brainstorming allows to develop creative solutions to problems. It works by focusing on a problem, and then having participants come up with as many deliberately unusual solutions as possible and by pushing the ideas as far as possible.

Method:

- 1. Select participants from as wide a range of disciplines with as broad a range of experience as possible. This brings many more creative ideas to the session.
- 2. Select a leader for the session, who can:
 - Outline any criteria that must be met.
 - Keep the session on course.
 - Encourage an enthusiastic, uncritical attitude among brainstormers.
 - Encourage participation by all.
- 3. Set times for the whole brainstorming session, and for generating ideas.
- 4. Keep fresh ideas coming, and welcome creativity.
- 5. Do not allow any one train of thought to dominate for too long.
- 6. Do not criticise or evaluate during the brainstorming session (criticism stifles creativity and spoils the fun).
- 7. Record ideas no matter how unrealistic, until there are no more ideas, or the time allocated for generating ideas is up.
- 8. Record all ideas on a whiteboard or projector so that all participants can see all the ideas.
- 9. Encourage 'spark off' associations from other people's ideas, or combinations of ideas.
- 10. Either evaluate solutions at the end of the brainstorming session to agree on the most practical way forward, or record the session either as notes, tape recording or video for later evaluation.

Example

PEGASO Georgia CASE (see Annex 3, pag. LXVI).

Source

http://www.dse.vic.gov.au/effective-engagement/toolkit/tool-brainstorming



A.1.3 Citizen Monitoring

Objective

The aim of citizen monitoring is strengthening primary stakeholders' involvement as active participants to track and analyse progress towards jointly agreed results and deciding on corrective action. Moreover it allows a cyclical learning process to reflect continuously on the effects of the actions and to create conducive conditions for change and action.

Methods / Tools

Steps for citizen monitoring implementation

Building commitment and engagement at the community level;

- Deciding on who participates and how this will evolve;
- During the process:
 - Jointly establishing goals and expectations;
 - o Tracking progress and information collection,
 - o Joint analysis, sharing results and identifying action points
- Communication and feed-back systems to community; to program, other stakeholders and fora

Tools required:

- Community Score Card (CSC)
- Consulting and Monitoring Groups (CMGs)
- Community-based monitoring (CBMES)

Examples

Database of citizen monitoring projects

http://scienceforcitizens.net/finder/?subject=13&terms=&difficulty=NONE&nearby=&duration_type=NONE&search_button.x=67&search_button.y=3&search_button=Search

http://www.progettosubambiente.org/

http://uwspace.uwaterloo.ca/bitstream/10012/970/1/cahunsbe2004.pdf

Sources

Goffredo S., Piccinetti C., Zaccanti F. 2004: Volunteers in marine conservation monitoring: Mediterranean Hippocampus Mission, a study on the distribution of seahorses carried out in collaboration with recreational scuba divers. Conservation Biology 18: 1492-1503



Hunsberg C.,2004, Exploring links between citizen environmental monitoring and decision making: three canadian case



A.1.4 European Awareness Scenario Workshop (EASW)

Objective:

The European Awareness Scenario Workshop, also known by the acronym EASW is a method of promoting discussion and participation. It is especially effective in local contexts and it is intended to foster debate on issues related to ecology and urban environment and, more generally, to encourage social participation in programs aimed at sustainable development in an area.

Method:

A EASW is built on three main activities:

- a. the development of scenarios
- b. stakeholder mapping;
- c. EASW workshop for the development of visions and ideas.
- Activities a. and b. are preparatory for the workshop and involve a small group of participants (mainly experts) to chose issues to be discussed. In this phases the discussion should be about scenarios considering "how" the issues can be considered and "who" should solve these problems. In this phase the stakeholders participating at the EASW should be identified.
- 2. The workshop can last one or more days and need to be coordinated by a specific Facilitators team. The workshop is structured in 2 phases: future visions elaboration and ideas and action development.
- 3. In the vision (10 years scenario) elaboration phase, participants, after a brief introductory session, should work divided in 4 groups of interest, according to the same social group (citizens, administrators, economic sector, technicians)
- 4. All stakeholders discuss together on the chosen scenarios in order to identify the main emerging issues
- 5. Stakeholders are now divided in 4 mixed group in order to identify a maximum of 5 ideas to solve the discussed issues.
- 6. All stakeholders meet finally together in order to vote the most significant ideas. Top rated ideas will finally be at the root of the local action plan developed by the participants to solve the problems under discussion.

Example:

EASW was used in the Torre Guaceto MPA within the project Wetland II (Interreg IIIB-CADSES 2000-2006) to elaborate a shared model for the development of the Marine Protected Area (http://www.natreg.eu/uploads/best-practice/val econ bertuzzi.pdf)



Source: http://socialni-dialog.si/pdf/easw_en.pdf

http://cordis.europa.eu/easw/



A.1.5 Expert panel

Objectives:

Expert panels allow to hear a variety of informed ('expert') viewpoints from which to decide on recommendations or courses of action in relation to an issue or proposal; it is used when highly specialised input and opinion are required for a project.

Method:

- 1. Select panelists on the basis of expertise, ensuring issues/groups of relevance are represented.
- 2. Allow time for contacting experts for the panel, and negotiating a mutually suitable time. For very busy people, this can mean planning some months in advance.
- 3. Employ a skilled and unbiased moderator.
- 4. Provide background briefing information to panelists.
- 5. Determine ground rules for the panel.
- 6. Allow public input if possible and appropriate (see also: Fishbowls).
- 7. Determine course of action.
- 8. Present the outcomes of the panel discussions.

Example:

- PEGASO North Adriatic CASE (see Annex 3, pag. XXXIII).
- PEGASO Aegean Islands CASE (see Annex 3, pag. XLIII).
- The Case study of Byron Shire Council (BSC) in New South Wales, showcases an excellent example of how a group with a limited budget used Expert Panel method in order to increase community education, inform decision-makers and raise the level of awareness about a particular issue.

(https://app.secure.griffith.edu.au/03/toolbox/casestudy_list.php)

Source:

https://app.secure.griffith.edu.au/03/toolbox/display tool.php?pk1=39



A.1.6 Field trip

Objectives:

Field trips aim to let people to 'see for themselves' the place where a development is proposed to be placed, or to have a demonstration of a technique.

Method:

- 1. Publicise the field trip
- 2. Select times that suit the largest number of participants (e.g. select from after hours for full-time workers, daytime for retirees or parents with small children).
- 3. Field trips can run from several hours to full days to allow the greatest number of participants to attend (depending on the time participants can spare; distance to be traveled; availability of expertise and/or case studies).
- 4. Advertise the agenda and times of key presentations in appropriate place, e.g. local media; posters at local stores and libraries. This will allow participants to attend for shorter periods if necessary, and will allow them to choose sessions of interest.
- 5. Ensure adequate staff on site to provide assistance (e.g. give directions; be available for first-aid; organise food and drink (catering, set-up and clean away), etcetera.
- 6. Create and display signs that publicise the location of field trip through attachment of maps/directions with a pre-posted agenda.
- 7. Ensure all publicity (signs, media releases, brochures) provide directions from major routes near the site.
- 8. Allow time for participants to approach experts for one-to- one discussions.
- 9. .Provide printed public information materials during the field trip for interested participants.
- 10. Appoint staff to act as note takers during the discussions.
- 11. Provide feedback forms/survey/response sheets to facilitate public input.
- 12. Pay attention to duty of care/safety issues. If site is difficult to access or contains elements of risk, make necessary preparations to avoid accidents with an emphasis on participants with disabilities.
- 13. Organise catering if appropriate
- 14. Ensure toilets are available

Source:

https://app.secure.griffith.edu.au/03/toolbox/display_tool.php?pk1=42



A.1.7 Focus Groups

Objectives:

Focus groups are a technique used to find out what issues are of most concern for a community or group when little or no information is available.

Method:

- 1. Randomly select 6-10 people affected by or interested in the community issue to make up the focus group.
- 2. Book venue and arrange catering if meeting goes across a meal time.
- 3. Hire a facilitator.
- 4. Prepare preliminary questions.
- 5. Send reminders to participant with time, date, venue and questions.
- 6. Brief participants and the facilitator on the aims and objectives of the session.
- 7. Establish ground rules: keep focused, maintain momentum, get closure on questions.
- 8. Encourage shy participants if they feel anxious about revealing their opinions/feelings.
- 9. Engage a co-facilitator to record issues raised by individuals (may use audio, a/visual, and/or written notes).
- 10. De-brief the participants and the facilitator.
- 11. Compile a report of proceedings for the organisers, and offer a copy to the participants.

Example:

- Al Hoceima PEGASO CASE (see Annex 3, pag. LVI).
- Focus groups experience in Estonia, The Netherlands and Sweden.

http://ec.europa.eu/ourcoast/download.cfm?fileID=814

Source:

http://www.dse.vic.gov.au/effective-engagement/toolkit/tool-focus-groups



A.1.8 Future Search conference

Objective:

A future search conference helps a group of people attempt to create a shared community vision of the future, and agree on a plan of action.

Method:

- 1. Canvas people to be invited to be part of the future search.
- 2. Book venue.
- 3. Hire a facilitator.
- 4. Advertise event.
- 5. Brief participants and the facilitator on the aims and objectives of the session.
- 6. Provide a background briefing for participants if required.
- 7. Conduct discussion. One methodology for conducting the discussion outlined by Emery identifies five stages to the process:
 - External environment: 'the futures we are currently in' are described by the participants.
 - Desirable futures: groups construct a list of desirable futures that build upon the current situation.
 - Desirable futures are transmitted into more explicit pictures.
 - Testing desirable futures against the reality of the current situation and the criteria generated earlier in the meeting.
 - Discussing the implementation of the desirable future, based on current circumstances and resources.
- 8. Record issues raised by individuals and report back in the plenary sessions.
- 9. Compile a report of proceedings.

http://www.dse.vic.gov.au/effective-engagement/toolkit/tool-future-search-conference



A.1.9 Key Stakeholder Interviews

Objectives:

Stakeholder interviews aim to elicit detailed information and opinions on an issue through wideranging discussion rather than specific questioning.

Method:

- 1. Select interviewees according to designated criteria (areas of expertise, representation of groups, complementary of skills for committees).
- 2. Arrange times and places for interviewing. Better quality information will be forthcoming if the interviewee is in a familiar setting, so it may be easier for the interviewer to go to them
- 3. Ensure uninterrupted time for at least one hour.
- 4. Check all equipment and take spare tapes, batteries, pens, etc. to avoid any interruptions during the interview.
- 5. Try to transcribe interview notes as soon as possible after the interview, while nuances, body language and asides are still in the interviewer's memory.
- 6. Prepare a report, including the verbatim interviews, and offer copies to the interviewees.

Example

- PEGASO North Adriatic CASE (see Annex 3, pag. XXXIII).
- PEGASO Aegean Islands CASE (see Annex 3, pag. XLIII).
- PEGASO Bouches du Rhône CASE (see Annex 3, pag. XLVII).

Source:

http://www.dse.vic.gov.au/effective-engagement/toolkit/tool-key-stakeholder-interviews

A Key stakeholder interview guide:

http://www.esf-agentschap.be/uploadedFiles/Voor_ESF_promotoren/Zelfevaluatie_ESF-project/m_e_tool_series_indepth_interviews.pdf

A specific form of stakeholder interviews is semi-structured interviewing (SSI).

Please see the following links for more information on SSI.

http://www.fao.org/docrep/x5307e/x5307e08.htm



A.1.10 Logical Framework Matrix (Logframe)

Objectives:

The Logical Framework Matrix method aim to set out, by participatory consensus building, the logic of an ICZM intervention and to describe the important assumptions and risks that underlie this logic; moreover this method aims to create the basis for progress monitoring and evaluation by establishing objectively verifiable indicators and sources of verification, agreed by main stakeholders.

Method:

The Logframe is usually established by stakeholder discussions in the context of a workshop setup. The Logframe is a planning table that consists of 4 lines for Overall Objectives, Project Purpose, Results, and Activities and 4 columns for Project Description, Objectively Verifiable Indicators, Sources of Verification, and Assumptions. The planning table is elaborated in the following way.

1. Complete the first column for the Project Description by ensuring that the logical levels are correct:

Overall Objectives: the wider sectoral or ICZM objectives to which the

intervention is designed to contribute

Project Purpose: the sustainable benefits to be delivered to the project

beneficiaries, institutions or systems.

Results: the deliverables and services to be provided by the

intervention

Activities: how the deliverables and services will be achieved.

- 2. Identify external factors which will affect implementation and long-term sustainability but lie outside its control. State these factors as assumptions (i.e. in terms of the desired situation). Assess the relevance of the assumptions and state the relevant assumptions in the last column of the Logframe.
- 3. Complete the Logframe by stating Objectively Verifiable Indicators and Sources of Verification in the columns 2 and 3 of the matrix.
- 4. During implementation, use the logframe to monitor indicators and assumptions. React on relevant developments by contacting key stakeholders and by finding agreements on changes to the intervention logic.

Examples:

http://ec.europa.eu/enlargement/fiche_projet/document/Annex%201%20-%20Logframe%20Matrix.pdf



Source:

http://ec.europa.eu/europeaid/how/delivering-aid/project-approach/index_en.htm

 $http://ec.europa.eu/echo/files/policies/evaluation/watsan 2005/annex_files/ECHO/ECHO 10\% 20-\% 20 ECHO\% 20 Project\% 20 Cycle\% 20 Management\% 20 Guideline.pdf$



A.1.11 Mediation and Negotiation principles

Objectives:

Negotiation and mediation are methods aiming at dealing with conflict in a creative and positive way, and to find a solution or a way for people to hear and appreciate the differences between their perspectives.

Method:

Negotiation and mediation are highly specialised activities and a simplistic methodology is not available. Specialists are generally required for negotiation and mediation. The following excerpt has been provided as an introduction:

- Analyse the interest of the parties: this is important to understand the perceptions, the style of negotiation, and the interests and principles of the counterparts, as well as one's own.
- 2. Plan the negotiation, and determine:
 - What are the expectations from the negotiation?
 - What are the terms of the negotiation?
 - What are the non-negotiable terms and what can be modified?
 - What is the minimum that an agreement can be reached on?
 - What is the negotiation strategy?
 - What are the most important interests of the other parties?
 - How does one interact with or manage people?
- 3. Select the appropriate negotiation technique from among the following:
 - Spiralling agreements: begin by reaching a minimum agreement, even though it is not related to the objectives, and build, bit by bit, on this first agreement.
 - Changing of position: formulate the proposals in a different way, without changing the final result.
 - Gathering information: ask for information from the other party to clarify their position.
 - Making the cake bigger: offer alternatives that may be agreeable to the other party, without changing the terms.
 - Commitments: formalise agreements orally and in writing before ending the negotiation.
- 4. Negotiate: be sensitive and quick to adapt to changing situations, but do not lose sight of the objective. Avoid confrontational positions and try to understand the interests of the other party. Some aspects that could interfere with the negotiation are:
 - Personal positions and interests.
 - Psychological and emotional aspects of the persons (place, placement of chairs, body language, gestures, etc.).
 - Difficulties in communication (differences in languages, different meanings of the same words, etc.).



Source

http://www.dse.vic.gov.au/effective-engagement/toolkit/tool-mediation-and-negotiation



A.1.12 Open Space Technology

Objectives:

Open space technology aims to provide an event which is relevant, timely, and participatory. Its relevance is determined by the participants, who determine the agenda, the length of the event, and the outcomes.

Method:

- Determine whether the open space technology process is the most appropriate technique for your situation, considering the people who are likely to take part and their preferences and attitudes, and the venues available to you.
- 2. Select venue, facilitators and prepare information (open space technology can be successfully used in conjunction with other techniques such as conferences and workshops).
- 3. Publicise the event.
- 4. Describe process and rules to the participants, as outlined below:
 - Principles: Whoever comes are the right people: Whatever happens is the only thing that could have: Whenever it starts is the right time: When it's over, it's over.
 - Law of two feet: The law of two feet: people are honour bound to walk away from proceedings and sessions which they believe are irrelevant.
 - Follow due process.
- 5. One by one, each person who wishes to, steps into the centre of the circle and announces their name and topics they feel passionate enough about to be willing to lead a break out session on that topic.
- 6. Each passionate person writes the topic on a piece of paper along with time and venue for a discussion.
- 7. Following announcements of topics by passionate people, the market place becomes open. The marketplace is a wall where all the topics, times and venues are posted to allow participants to decide which session to sign up to.
- 8. Those who announced the topics facilitate the individual discussions and appoint people to record minutes on provided computers.
- 9. Reconvene into the larger group and report back, or combine reports into one document and ensure widespread dissemination to all those who took part, and all those likely to make a decision.

Example

- Application of Open Space Technology (OST) at 2nd PEGASO CASE Meeting (see Annex 3, pag. LXXVIII)
- The Brisbane (Australi) Social forum (2002 and 2003) and the World Social Forum (2002 and 2003) in Brazil are two cases where OST was successfully applied. These example highlights the capability of the this participatory method to be easily applicable for few participants (20 persons) up to thousands of people.
 For more information see the link below.



https://app.secure.griffith.edu.au/03/toolbox/casestudy_list.php

Source:

http://www.dse.vic.gov.au/effective-engagement/toolkit/tool-open-space-technology

An user's guide http://www.openspaceworld.com/users_guide.htm



A.1.13. Scenario testing

Objectives:

Scenario testing is a way to test alternative (hypothetical) futures so as to make better choices today. Scenario testing is useful to identify general, broad, driving forces, which are applicable to all scenarios,

Method:

- 1. Invite participants who have knowledge of, or are affected by, the proposal or issue of interest.
- 2. Invite participants to identify the underlying paradigms or unwritten laws of change; trends or driving forces and collect into general categories (e.g. economy, socio/political and wildcards or uncertainties).
- 3. Consider how these might affect a situation, either singly or in combination, using these steps:
 - Review the big picture
 - Review general approaches to future studies
 - Identify what you know and what you don't know
 - Select possible paradigm shifts and use them as an overall guide
 - Cluster trends and see which driving forces are most relevant to your scenario
- 4. Create alternative scenarios (similar to alternate scenes in a play) by mixing wildcards with trends and driving forces. Keep the number of scenarios small (four is ideal because it avoids the 'either' 'or' choice of two, and the good/bad/medium choice of three).
- 5. Write a brief report that states assumptions and future framework; provides observations and conclusions, gives a range of possibilities, and focuses on the next steps coming out of this study. Each scenario should be about one page.

Source:

http://www.dse.vic.gov.au/effective-engagement/toolkit/tool-scenario-testing



A.1.14 Sketch Match (interactive design)

Objectives:

Sketch Match⁵ is an interactive planning method, developed by Dutch Government Service. A Sketch Match is a series of interactive design sessions lasting up to three days in which participants (citizens, policymakers, farmers and other stakeholders), under supervision of a spatial designer and a process supervisor, analyze and work out the spatial problems in a specific region. With this method, local residents, experts and policy-makers together figuratively board a raft, or in English play an existing match, to draft plans for a specific, well-defined area. The challenge usually involves finding solutions to spatial planning issues that meet a range of different objectives relating to agriculture, water, nature, recreation, cultural history and rural housing. These different aspects are well discussed and weighted before the actual process of designing possible land use scenarios for the studied area.

The result of a Sketch Match is a spatial design, in the form of a ground plan, map, book, visual story, model, 3-D GIS visualization, or whatever form suits the project best.

Method:

Every Sketch Match consists of three phases:

1. Registration and preparation;

STEP 1 Describe the assignment and define the objectives

STEP 2 Decide on the format of the sketch match

STEP 3 Decide on date and invitations

STEP 4 Facilitation arrangements

STEP 5 Send invitations

STEP 6 Organise a venue

STEP 7 Collecting information and participants

2. Sketch Match Session;

The participants are invited to express their expectations regarding the SketchMatch work session.

After summarising the expectations and the problems all the participants are invited to go on the field trip to see the real situation of the study area in the field.

The Sketch Match session- consists in forming work groups which analise: qualities, problems and potentials.

3. Completion.

Main issues found by the work groups.

Development of the principles.

Integration of all the issues and solutions in one that every stakeholder agrees with.

⁵ The SketchMatch is <u>not</u> aimed at making policy decisions. However, the 'spatial development sketches' which will be generated, need to be realistic and in line with existing policy lines.



Example:

- Danube Delta PEGASO CASE (see Annex 3, pag. LXI).
- The project "Room for the River in Cat's Bend, Romania" aims to develop a number of spatial draft plans for integrated flood management in the Galaţi-Tulcea region in Romania. The project is initiated by the Dutch Government Service for Land- and Water management (Dienst Landelijk Gebied, DLG). Together with the Dutch HKV-Consultants, DLG has formed an international consortium with 4 Romanian partners: Danube Delta National Institute, World Wildlife Fund Romania (WWF), Eco-Counselling Galaţi and ALMA-RO, Bucharest.

Source:Room for the River in Cat's Bend Romania – INTERNAL REPORT- DDNI Contact. http://www.icid2011.nl/files/pdf/Paper%20I-3%20Zeeman.pdf



A.1.14 Snowball Sampling

Objectives:

Snowball sampling is designed to identify people with particular knowledge, skills or characteristics that are needed as part of a committee and/or consultative process. Using this approach, a few potential respondents are contacted and asked whether they know of anybody with the characteristics that you are looking for in your research.

Method:

- 1. Draft up a participation program (likely to be subject to change, but indicative).
- 2. Approach stakeholders and ask for contacts.
- 3. Gain contacts and ask them to participate.
- 4. Community issues groups may emerge that can be included in the participation program.
- 5. Continue the snowballing with contacts to gain more stakeholders if necessary.
- 6. Ensure a diversity of contacts by widening the profile of persons involved in the snowballing exercise.

Source:

http://www.dse.vic.gov.au/DSE/wcmn203.nsf/LinkView/D340630944BB2D51CA25708900062E98 38C091705EA81A2FCA257091000F8579



Annex 2: IMAGINE methods description



"Imagine" – The Systemic and Prospective Sustainability Analysis

Context:

Plan Bleu and Dr Simon Bell (Open Systems Research Group, Open University, UK) have developed, tested and consolidated the "Imagine" method which aims at facilitating the shaping of a sustainable development vision and an area project by committing stakeholders within a participatory process.

Originally designed to conduct systemic and prospective sustainability analysis, the "Imagine" approach was used in several Coastal Area Management Programs (CAMPs) implemented by the Mediterranean Action Plan (MAP); "Imagine" has been successfully used in Malta (2000-2002), Lebanon (2002-2003), Algeria (2003-2004), Slovenia (2005) and Cyprus (2006-2007). In this context, Plan Bleu has supported the work of the local teams to facilitate the implementation of the method and to apply it in the CAMPs. Users of this method have been trained and, in some cases, have encouraged its use in other similar projects.

Description:

By using several tools "Imagine" aims at:

- (i) Building a sustainable development vision and an area project by mobilizing actors within a participatory process;
- (ii) Describing, assessing and examining as completely as possible the level of sustainability of a local (eco-socio)system in the past, present and future;
- (iii) setting goals to be achieved and following progress of the system towards sustainable development.

Outputs / Results :

- 1- Supporting a participatory dynamic,
- 2- Building scenarios, exploring the future,
- 3- Defining and selecting a set of indicators to measure the sustainable development of an area in the past, the present and the future,
- 4- Developing and implementing an action plan, and disseminating the outputs.

Method / Approach

"Imagine" approach includes 4 stages implemented in 4 or 5 workshops. It is a dynamic process and a lively approach in constant development according to the different frameworks in which it is used. The 4 stages are the followings:

- 1st stage: studying and understanding the system, with a holistic vision of the territories, of the pressures and state. Identification of the main issues and the relevant indicators.
- 2nd stage: connecting and studying. A minimal and maximum value is given to each indicator, between which the criteria for adhering to sustainable development are assessed; this is what is called the Band of Equilibrium.
- 3rd stage: modelling and exploring through scenario method the trends and the alternatives regarding the future of the area. Diagrammatic representation of indicators



compared to the band/belt of equilibrium provides a visual image of the "sustainability" of the area and of its possible futures.

• 4th stage: suggesting and acting: definition of an action / monitoring plan.

Source:

http://www.planbleu.org
For further information please see the document
"A practitioner's guide to "Imagine" – the Systemic and Prospective Sustainability Analysis" at
http://www.planbleu.org
http://www.planbleu.org/publications/cahiers3_imagine_uk.pdf
http://www.planbleu.org/publications/cahiers3_imagine_fre.pdf



A.2.1 Workshop 1 - Understanding the context

The (eco)systemic approach allows to study a (coastal) area as a whole.

Objective

The systemic approach allows studying a (coastal) area as a whole.

The "Imagine" Workshop 1 allows to studying and understanding the context, with a holistic vision of the territories: drivers, pressures, and state. This allows identifying the main issues (burning threats) and the relevant indicators.

Methods / Tools

- Soft Systems Methodology
- Rich pictures
- Root definitions with six following items CATAOC (customers, actors, transformation, assumption, owner, constraints) or BITAOC (beneficiary, implementer, transformation, assumption, owner, constraints).
- Activity model: the purposeful activities necessary to achieve an agreed transformation.
- Actives listening: to ensure that participants are effectively "hearing" each other
- Logical framework: a four by four matrix for organizing the main themes of a project.

Examples

- 1. Report from the 1st Workshop in Cyprus, 23th 24th November, 2006 http://www.planbleu.org/publications/PAC Cyprus 1st Workshop.pdf
- 2. Report on the first SPSA Workshop in Slovenia, 12th 13th, January 2005 http://www.planbleu.org/publications/pac_slovenie_atelier1.pdf
- 3. Report on the first SPSA Workshop in Boumerdès, 9th 10th, February 2003 http://www.planbleu.org/publications/pac_alger_atelier1.pdf
- 4. Workshop I, 30th September –1st October, 2002, CAMP Lebanon http://www.planbleu.org/publications/pac_lib_I_final.pdf
- Report on the Training Workshop on the Systemic Sustainability Analysis within CAMP « Malta » 27, 28 & 29 March 2000 http://www.planbleu.org/publications/pac mlt annex1.pdf

Sources

- "A practitioner's guide to "Imagine" the Systemic and Prospective Sustainability Analysis" at: http://www.planbleu.org/publications/cahiers3_imagine_uk.pdf
- IMAGINE : A set of tools and methods to assist integrated coastal zone management in the Mediterranean



 $http://www.planbleu.org/publications/Imagine_VertigoUk.pdf$



A.2.2 Workshop 2 - Connecting and investigating

Objective

The sustainability indicators allow positioning the area in the process of sustainable development: agreeing sustainability indicators (SIs) to assess their meaning and agreeing with stakeholders on what is the acceptable / sustainable value. A minimal and maximum value is given to each indicator, between which the criteria for adhering to sustainable development are assessed; this is what is called the Band of Equilibrium.

Methods / Tools

- Sustainability indicators
- Band of equilibrium
- Feasibility analysis
- Matrix development
- Focus group
- Actives listening: to ensure that participants are effectively "hearing" each other
- Logical framework: a four by four matrix for organising the main themes of a project

Examples

- Report from the 2nd Workshop, 20 21 February, 2007 http://www.planbleu.org/publications/PAC_Cyprus_2nd_Workshop.pdf
- 2. Report on the second SPSA Workshop in Slovenia, 9th 10th, February 2005 http://www.planbleu.org/publications/pac slovenie atelier2.pdf
- 3. Report on the second SPSA Workshop in Algiers, 10th 12th, May 2003 http://www.planbleu.org/publications/pac_alger_atelier2.pdf
- 4. Workshop II, 13th-14th December, 2002, CAMP Lebanon http://www.planbleu.org/publications/pac_lib_II_final.pdf
- Report on the Second Training Workshop on the Systemic Sustainability Analysis within CAMP « Malta » 29 – 30 May 2000 http://www.planbleu.org/publications/pac_mlt_annex2.pdf

Sources

- "A practitioner's guide to "Imagine" the Systemic and Prospective Sustainability Analysis" at: http://www.planbleu.org/publications/cahiers3_imagine_uk.pdf
- IMAGINE : A set of tools and methods to assist integrated coastal zone management in the Mediterranean

http://www.planbleu.org/publications/Imagine_VertigoUk.pdf



A.2.3 Workshops 3 and 4 - Modelling and exploring

Objective

These workshops aim at "modeling and exploring" (scenario building) the trends and the alternatives regarding the future of the area. The prospective and scenario methods allow to clarifying present actions and building scenarios in the light of the past trends as well as possible alternatives. Diagrammatic representation of indicators compared to the band of equilibrium provides a visual image of the "sustainability" of the area and of its possible futures.

Methods / Tools

- Scenarios making
- Radial diagrams (AMOEBA)
- Prospective analysis
- SWOT and "what if" Analysis
- Actives listening: to ensure that participants are effectively "hearing" each other
- Logical framework: a four by four matrix for organising the main themes of a project

Examples

- Report from the 3rd Workshop, 3rd April 2007 http://www.planbleu.org/publications/PAC_Cyprus_3rd_Workshop.pdf
- 2. Report on the 3rd SPSA Workshop in Slovenia, 6th 7th, April 2005 http://www.planbleu.org/publications/pac_slovenie_atelier3.pdf
 - Report on the 4th 'Imagine' Workshop, 22nd 23rd May, 2005 http://www.planbleu.org/publications/pac_slovenie_atelier4.pdf
- 3. Report on the 3rd SPSA Workshop in Algiers, 12th 13th, October 2003 http://www.planbleu.org/publications/pac_alger_atelier3.pdf
 - Report on the 4rd SPSA Workshop in Algiers, 16th 17th, May 2004 http://www.planbleu.org/publications/pac_alger_atelier3.pdf
- 4. Workshop III, 28th 29th May, 2003, CAMP Lebanon http://www.planbleu.org/publications/pac_lib_III_final.pdf
 - Workshop IV (Final Workshop), 13th-14th August 2003, CAMP Lebanon http://www.planbleu.org/publications/pac_lib_IV_final.pdf
- 5. Report on the 3rd Training Workshop on the Systemic Sustainability Analysis within CAMP « Malta », 2nd 4th October 2000 http://www.planbleu.org/publications/pac mlt annex3.pdf



Report on the Fourth Training Workshop on the Systemic Sustainability Analysis within CAMP « Malta », 5th – 7th February 2001

http://www.planbleu.org/publications/pac_mlt_annex4.pdf

Sources

- "A practitioner's guide to "Imagine" the Systemic and Prospective Sustainability Analysis" at: http://www.planbleu.org/publications/cahiers3_imagine_uk.pdf
- IMAGINE : A set of tools and methods to assist integrated coastal zone management in the Mediterranean

http://www.planbleu.org/publications/Imagine_VertigoUk.pdf



A.2.4 Workshop 5 - Suggesting and acting

Objective

This workshop aims at defining an action or a monitoring plan, and publishing the outputs. Based on the expertise of local stakeholders, the participatory process gives them the means to design and control their own management/development.

Methods / Tools

- Brainstorming and / or marketing (forum)
- Actives listening: to ensure that participants are effectively "hearing" each other
- Logical framework: a four by four matrix for organising the main themes of a project

Examples

- 1. Report on the 5th 'Imagine' Workshop, 22nd 23rd June, 2005 http://www.planbleu.org/publications/pac_slovenie_atelier5.pdf
- 2. Report on the 5th SPSA Workshop in Algiers, 5th 6th, December 2004 http://www.planbleu.org/publications/pac_alger_atelier5.pdf
- 3. Report on the firth workshop on the systemic sustainability analysis within camp « Malta », 14th–15th May 2001. http://www.planbleu.org/publications/pac_mlt_annex5.pdf

Sources

- "A practitioner's guide to "Imagine" the Systemic and Prospective Sustainability Analysis" at: http://www.planbleu.org/publications/cahiers3 imagine uk.pdf
- IMAGINE : A set of tools and methods to assist integrated coastal zone management in the Mediterranean

http://www.planbleu.org/publications/Imagine_VertigoUk.pdf

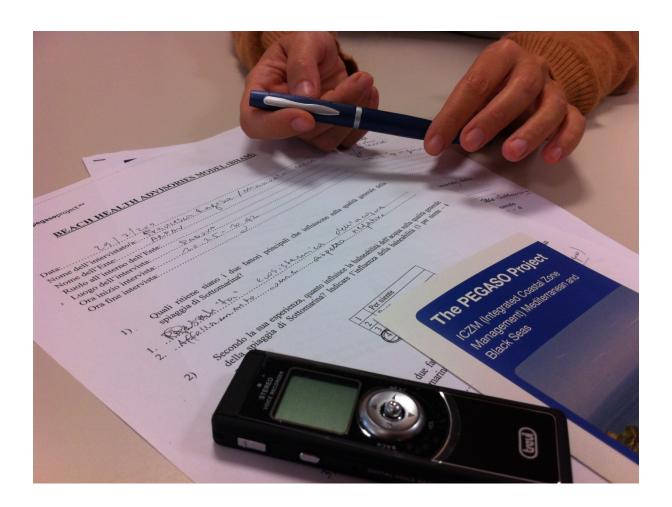


Annex 3: Participatory experiences in the CASEs



Semi-structured interviews for the development of the BHAM (beach health advisory model) North Adriatic CASE

Fabrizia Buono, Marco Tonino





Background

One of the main issues in the management of the North Adriatic coastal areas is bathing water quality. In order to support coastal municipalities in the management and monitoring of bathing water quality, Ca' Foscari University has developed a short-term forecasting model named Beach Health Advisory Model (BHAM). The Model reproduces general pattern of bacteria dispersion based on time series of local environmental forces (rain intensity, solar radiation and currents among the others) and bacteria counts.

Initial considerations

The development of a coastal bathing water quality model requires the involvement of stakeholders dealing with spatial planning and water resources management (e.g. rivers, coastal waters, sewage systems) in order to collect the best information to satisfy local management requirements. In the Case study area of Sottomarina beach, the followings 6 public bodies were identified as stakeholders:

- Veneto Region, Department of water protection,
- Veneto Environmental Agency protection (ARPAV) –internal water office,
- Veneto Environmental Agency protection (ARPAV) –coastal water office,
- Municipality of Chioggia, Environment, Tourism and cultural activities office,
- Chioggia Water treatment plants,
- Water Basin Authority

Modifications and realization

In order to evaluate and contribute to the further development of the model, stakeholders were involved in a consultation process. In particular the participatory strategy meant to:

- Gain comprehensive information regarding territorial characteristics.
- Validate/modify the parameters considered within the model.
- Obtain data and foster collaboration on further development of the model.

In order to achieve the aforementioned objectives semi-structured interviews with key stakeholders were conducted. Stakeholders were firstly contacted by an e-mail briefly explaining the model as well as the objectives and the expected time needed in order to conduct the interview. Secondly in order to organize practical details of the interview (e.g. time, place) phone calls were preferred.



Semi-structured interviews were chosen as participatory method because they offer the possibility of being directed towards specific points (e.g. factors influencing water quality in the Sottomarina beach). The interviews were conducted during the months of July, August and October 2011. Out of six stakeholders contacted, five accepted to take part to the interview. The interviews started with generic questions aiming at gradually leading the discussion towards attitude about bathing water quality issues and perceived most affecting factors. The structured provided also a set of closed format questions, meant to probe more on technical aspects related to factors influencing bathing water quality of the study area. Finally, the interviewed were asked for additional data, further stakeholders to involve as well as willingness to collaborate to the next step of the model development. All the interviews were recorder and transcribed; they ranged between 2 hours and 30 minutes.

Experiences made and lessons learned

The interviews achieved the set objectives and provided useful information for the further development of the model. In our opinion, however, some remarks should be highlighted:

- 1) In order to optimize time availability, all the interviews should be scheduled in the same period. We had to stop the interviews due to summer holidays break and restart afterwards; the break has slowed down the activities within the CASE.
- 2) Stakeholders sometimes have the tendency to wander, therefore the interviewer should be able to lead them towards the focus topic.
- 3) Especially when data and further collaboration are required it is extremely important to send a feedback on the outcomes to the stakeholders.



Development of a Panel Expert for the DSS DESYCO

(DEcision support SYstem for COastal climate change impact assessment)

in the North Adriatic CASE

Fabrizia Buono, Marco Tonino





Background

Climate change is a crucial issue for the North Adriatic CASE, therefore within the activities of the CASE a Decision Support System (DESYCO) has been developed. Objective of the DSS is to understand the risks linked to climate change on the coastal areas of Veneto and Friuli Venezia Giulia Regions.

Initial considerations

The DSS DESYCO (DEcision support SYstem for COastal climate change impact assessment) assesses climate change impacts on vulnerable coastal areas (beaches, lagoons, delta, estuary, agricultural and urban areas). In order to improve the usefulness of the DSS for the planning and management bodies of the coastal area of Veneto and Friuli Venezia Giulia regions a participatory strategy was developed. Stakeholders were selected based on the knowledge regarding coastal areas planning and management bodies of the two regions (Table 1). Furthermore, an internet research allowed to identify and directly contact the person responsible for each office.

- Regions: Veneto, Friuli- Venezia Giulia
- Provinces: Gorizia, Rovigo, Trieste, Udine, Venezia
- Muncipalities: Caorle, Cavallino-Treporti, Chioggia, Duino Aurisina, Eraclea, Grado, Jesolo, Lignano Sabbiadoro, Marano Lagunare, Monfalcone, Muggia, Porto Tolle, Porto Viro, Rosolina, San Michele al Tagliamento, Staranzano, Trieste, Venezia
- Harbour authorities: Venezia, Trieste, Chioggia, Monfalcone
- River basin authorities: Alto Adriatico, Po
- Venice water authority
- Maritime infrastructure authorities: Gorizia, Rovigo, Trieste, Udine, Venezia
- Regional environment protection agencies: Veneto, Friuli-Venezia Giulia
- Marine Protected Area of Rimini Miramare
- National institute for environmental research
- Adriatic euroregion
- Civil protection: Veneto, Friuli-Venezia Giulia

Table 2: DSS stakeholders



Modifications and realization

Once completed the stakeholders analysis, the UNIVE group responsible for the development of the participation strategy proceeded with the development of a brochure explaining the features of the DSS and the objectives of the participatory meeting (see Annex 1). Invitation letter and brochure were sent to all the stakeholders one month before the set data for the meeting (29th of June).



Figure 1: Presentation of the DSS DESYCO

The decision to adopt the Panel Expert could be justified by the fact that this method allows to hear a variety of informed ('expert') viewpoints from which to decide on recommendations or courses of action in relation to an issue or proposal. In the case of the DSS we needed to have highly specialized opinions and suggestions about the DSS output and how to adjust them in order to answer to the stakeholders needs.

The Panel titled "Climate change, Integrated Coastal Zone Management and DSS: the importance of stakeholders involvement" was hosted in the headquarters of the Ca' Foscari University the 29th of June 2012. The Panel was aimed at discussing with the stakeholders a Regional Risk Assessment (RRA) methodology for the prioritization of areas and targets potentially at risk to the climate change impacts and the Decision Support System which implements the RRA methodology. In particular it meant to:

- Present DSS features and capabilities.
- Understand how to modify the DSS outputs in order to better answer the need of coastal areas management bodies.
- Contribute of the proposed tool in the definition of ICZM policies

Around 30 person took part to the meeting (including 6 organizers and 6 speakers), almost all the participants attended the entire meeting. The Panel started in the morning with a series of presentations regarding the Pegaso Project and ICZM, DSS and their potential in the analysis and assessment of coastal management and climate change as well as a presentation wholly dedicated to the functioning of the DSS DESYCO.



In the afternoon the workshop aimed to gather opinions and suggestions of the stakeholders on technical aspects of the DSS. The following issues were analyzed in detailed:

- Graphic aspects of the DSS (e.g scale, clearness of legend).
- Communication of the risks of climate change in the coastal areas of Veneto and Friuli Venezia Giulia.
- Spatial resolution and visualization typologies.



Figure 2: Facilitation of the Panel

- Information need to be added to each kind of map.
- How to improve the DSS output in order to be more effective in the context of ICZM in Veneto and Friuli Venezia Giulia.

Experiences made and lessons learned

One of the main aim of the PEGASO project is "bridging the gap between Science and Policy makers": the workshop represented an important opportunity to be in contact with relevant stakeholders of the North Adriatic area in order to create a connection between scientist, providing new methodologies and tools supporting the ICZM implementation, and potential endusers, that can use these tools.

During the workshop all the set objectives have been achieved. More specifically the participant have described their needs and evaluated the proposed tool suggesting improvements and identifying possible concrete applications. The workshop allowed to define a list of improvement of the proposed tool that is now under revision; moreover, the it represented an opportunity to enter in contact with the end-users and start a collaboration that can continue in the coming months.

However, the meeting let emerge some problems related to the high specific language implied by scientists which is not always shared by the other field experts. The fact of having sent the brochure with all the explanations of the terminology used within the DSS before the meeting has somehow reduced this communication problem. Therefore, it is advisable to inform the stakeholders on aims and topics of the participatory event in advance, providing all the necessary information in order to achieve the objective of the meeting.



Experience in participatory methods in the Nile Delta CASE

Suzan Kholeif









Background

Nile Delta is the delta formed in Northern Egypt where the Nile River spreads out and drains into the Mediterranean Sea in a relatively recent geological ages. Its area is about 20000 km2 and it extends from Alexandria in the west to Port Said in the east and covers nearly 240 km of Mediterranean coastline. Coastlines in Nile Delta are naturally subjected to erosion, accretion and sea-level rise. The coastal resources are expected to suffer direct impacts through sea level rise and inundation of low elevation areas. It is estimated that a sea level rise combined with local Nile Delta subsidence will lead to negative impacts on the low level coastal zones by submerging some of the north parts of the Nile Delta, affecting the aquifer near the coast; also would affect quality of agricultural and reclaimed lands.

Initial considerations

Most of the economic activities in Egypt are running or taking place in the Nile Delta such as farming, mining, fishing, harbor, industrial area, tourism resort and archeological tourism (pharaonic, Coptic and Islamic in Rosetta town), aquaculture fish farming and transportation with associated infrastructure such as the coastal road. Sometimes these activities increase the conflicts of interest among stakeholders and give



the opportunity for political influence to take place whenever it is positive or negative decision. Hence, an Integrated Coastal Zone management plan is required to solve the conflict of interest among stakeholder and to preserve the ecosystem and achieve the sustainable development.

The participatory approach is the tool which has been applied in the Nile Delta pilot case to formulate the key issues and to develop the integrated development land use map and ICZM plan. In this context and after consultations with the Egyptian Environmental Affairs Agency-EEAA, it has been agreed to launch a working group called the "Nile Delta Coastal Management Group" consisting of stakeholders from the coastal provinces, coastal development, and the Policy bodies of the Nile Delta region. The Coastal Group of PEGASO' Nile Delta pilot case has been established by NIOF Decree No"1' with a specific mandate and membered by the stakeholders and specialists from the coastal provinces, coastal development, and the policy bodies in the Nile Delta region, to study and discuss the key issues and develop the plan for Nile Delta ICZM.

Nile Delta Coastal Group includes two representatives from



- 1. National Institute for Fisheries and Oceanography (NOIF).
- Egyptian Environmental Affairs Agency (EEAA) .
- 3. General Authority for Fish Resources and Development (GAFRD) .
- 4. Egyptian Shore Protection Authority (SPA).
- 5. Coastal Research Institute (CoRI).
- 6. General Organization for Physical Planning, Ministry of Housing.
- 7. National Centre for Planning State Land Uses (NCPSLU).
- 8. The three Coastal Governorates (three representatives from each governorate)
- 9. Egyptian ICZM experts who have been involved in other developments projects

The mandate of this coastal Group are:

- 1. Identify the key issues (pressure) experienced by the study area
- 2. Compilation of development plans and programs in the study area
- 3. Analysis and evaluation of plans and programs and identify conflicts between them
- 4. Participation in the preparation of integrated coastal management plan for the study area
- 5. Development of policies proposed to implement the plan
- 6. Approved the Final product of PEGASO project (proposed Nile Delta Integration Coastal zone Management Plan)

The coastal group conducts several meeting to discuss the land use planning in the Nile Delta and other issues that hinder the sustainable development in area. In the first meeting they identified the geographic coverage area for PEGASO' case study which includes the three coastal governorates (Dakahlia , Kafir El-Shaiekh and El-Bohera) with landward limited 5 km and then they identified the action plan as follow:

- 1. Review as much as possible all plans and decrees issued for study area
- 2. Review as much as possible all previous work done
- 3. Identified the gaps and conflicts in plan among stockholders
- 4. Identified the opportunities for economic development.
- 5. Propose the modification needed to land use plan

Modifications and realization

In order to formulate the feedback from Nile Delta coastal group to propose an integrated coastal zone management plan for the Nile Delta, four subgroups have been formulated from the coastal group each one responsible for a field in relation to one of the key issue. These subgroups are:

- I. Land use subgroup
- II. Shore line management subgroup
- III. Natural resources subgroup
- IV. Water quality subgroup



Each subgroup has followed the identified action plan and prepared a report that is discussed in general coastal group meeting, six meeting have been held for this purpose and the output from this meeting will be used for integrated coastal zone management proposed plan for the Nile Delta case.

Experiences made and lessons learned

- The work done through PEGASO 'Nile Delta case put from the beginning in synergy with country integrated coastal management processes and in line with the national strategy for integrated coastal management, which has been prepared by the EEAA. So, PEGASO project' Nile Delta case has received a full support from most of the national policy makers at ministerial level.
- Planning a sustainable use of coastal resources should indeed be designed according to the specific characteristics, nature and environmental issues affecting those coasts.
- Increase the cooperation and coordination among stakeholders. It is crucial to involve stakeholders from the beginning when you put country development plans. They can help in solving the problems that take many years without solutions.

It is important to promote the stakeholders' awareness by means:

- ✓ Stakeholders have to be informed regularly about sustainable coastal development plans.
- ✓ Quality of coordination, collection, and communication of information as well as data exchange between stakeholders
- ✓ Keep them updated by the country needs so that they can share experience to solve
 problem facing sustainable development
- ✓ Make all information available for stakeholders
- ✓ Dissemination of coastal management practices (guidelines, directives, codes of practice, etc.)
- ✓ Promotion for capacity building programmes for ICZM.



EXPERIENCE IN PARTICIPATORY METHODS AND APPLICATIONSin the Aegean Island CASE

Alexis Conides and Dimitris Klaoudatos

Background

H.C.M.R. team has begun since 2010, to collect data and information in order to build a library on Participatory Methods to be incorporated to the UNIVE first version document on PM for Integrated Coastal Zone Management. A tentative list of sources is the following:

- Elliott J. et al., 2005 Participatory Methods Toolkit. A practitioner's manual
- Sette, C., & Watts, J., 2010. Group Facilitation Skills for Participatory Decision-Making
- The World Bank, 2004. Monitoring and evaluation
- Douthwaite et al., 2007. Participatory Impact Pathways Analysis: A practical method for project planning and evaluation.

The package was intended for internal circulation for the Hellenic Centre for Marine Research staff participating in the CASES study so that to be updated on the possibilities of methods to be applied, their requirements and the stakeholders for which each one is appropriate and the type of information are seeked.

In addition, Hellenic Centre for Marine Research elaborated on an internal document regarding the creation of a list of all possible stakeholders in Integrated Coastal Zone Management in Greece and the target area of CASES including contact details and role in Integrated Coastal Zone Management so that when the specific task starts, the final sub-group of the stakeholders will be immediately available. According to this document, there have been recognized 21 stakeholders from which 4 are considered as primary and should form the core of the project.

A stakeholder tree including associations is illustrated in Fig. 1.

Two primary stakeholders were conducted: the Directorate of Planning – Ministry of Environment, Energy and Climate Change and the Region of South Aegean Sea (Cyclades and Dodecanese Prefectures). Both stakeholders have formed a network of cooperation from before and therefore it was easy to involve them in PEGASO and establish their willingness to participate in stakeholder group. Both are stakeholders which have an administration role in Integrated Coastal Zone Management and legislation regarding Integrated Coastal Zone Management; the former, on a national scale and the latter on the regional scale (covering all Cyclades Islands). Through the Region of South Aegean, the Prefecture of Cyclades will be accessible.



At the same time, a long cooperation with the local fisheries administration offices of the Cyclades Prefecture has been exploited so that through them, the existing sport-fishing and professional fishing, aquaculture and fisheries products sectors of Cyclades Prefecture is directly accessed. Hellenic Centre for Marine Research and the Naxos Fisheries Administration have over 15 years of cooperation in training seminars in which H.C.M.R. staff participated as key speakers, in research projects and the National program for Fisheries Data Collection in which Naxos Island was a primary data collection node.

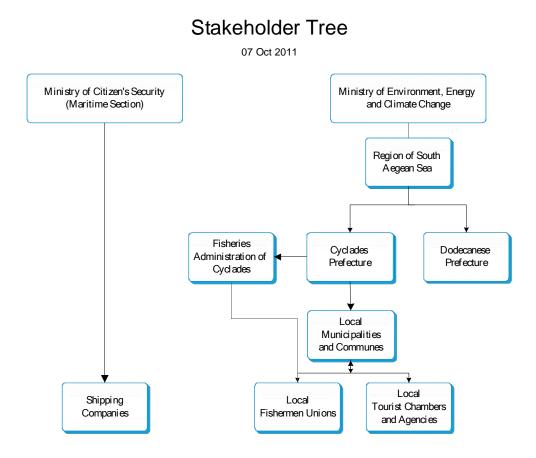


Figure 1. Tentative stakeholder tree

Methods selected

Given the experience of the team from previous projects in relation to the conflict of interest between groups in rural areas of Greece, the p.m. selected were:

- i. expert panels with local scientists and administrators
- ii. key stakeholder interviews aiming to isolate groups and at the same time make them feel comfortable with the process. Especially for the alienated groups like fishermen



iii. focus groups within social groups like fishermen etc. as an extension (second step) after key stakeholder interviews

A final stage of the methods to be used will be workshops which would bring together people from same group (within) and after the success of these, to organise workshops of broader interest and participation.

Initial considerations

These are:

- some groups of low level stakeholders are alienated from society and require personal relationships to be exploited for their participation significant matter of confidence between scientists and locals
- many administrations as well as the ELSTAT (statistical authority of Greece) do not keep data which can be used for detailed and in depth Integrated Coastal Zone Management. To further support this lately, there were significant difficulties to prepare the initial environmental assessment for Greece in accordance to the Marine Strategy Directive because there are lots of missing data in form and format required to cover these requirements.
- as experts are primarily considered the local administrators who hold also scientific degrees from Universities and which can serve as experts in the field of I.C.Z.M. and at the same time experts in administration processes.

Modifications and realization

Currently none in relation to the methodology documents.

Experiences made and lessons learned

These are:

- broadened our perception on p.m. methods as tools for science-social integration
- increased our experience in using p.m. methods
- definitely increase the awareness of the participants so far provide a different view of social relationships and effects of policy-making on social groups
- there is significant fragmentation in the administration and as a result there are policies as well as activities going on un-coordinated
- the higher level of administration does not respect the views and scientific opinions of highly skilled personnel working for the same administration.



Participative Territorial Diagnostic using semi-structured interviews in the Bouches du Rhone CASE

Lisa Ernoul

Background

The territorial diagnosis is an "inventory which is part of a strategic development approach of a territory" (Rouxel et Rist, 2000). In term of environment management, Besancenot (2008) proposed a method of "territorial diagnosis of sustainable development" based on the confrontation between sustainable development objectives and territory specificities studied for the awareness of local issues. The environmental and territorial diagnosis is made up of two distinct and complementary tasks: firstly, an institutional analysis that gives an account of the territorial agent diversity and their actions for the coastal zone management; and secondly, a multidisciplinary assessment (morphological, ecological, socio-economic indicators) of priority environmental issues. This joint work describes the past evolutions and the current and future issues according to the environmental deterioration, associated effects and answers given to deal with it. Only the institutional analysis has been completed for the CASES Bouches du Rhone. This is a description of the current management system, an identification of issues faced by territorial agents interviewed on their management activities in the coastal zone, and an identification of the main environmental issues.

Initial considerations

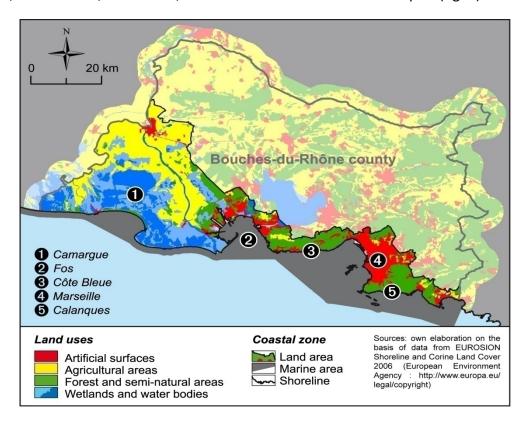
a) Territorial units

The question of which territorial unit to consider in order to meet the objectives of the environment sustainable management in the coastal zone is essential. The definition of this unit should meet two prerogatives: apprehend in its entirety the pressures and associated effects (environmental and socio-economic) in the coastal zone; and allow the definition of a management community (territorial agents, scientists, NGO, etc.). The selected territorial unit should also enforce the cohesion of the territorial offer (the coastal system in its morphological and ecological dimensions) with the territorial demand (the coastal system in its social and economic dimensions) in order to take into consideration the social ecosystem as a whole. The approach generally has various scales because the two groups cited above rarely coincide. The main territorial unit considered in this study is the coastal zone of the coastal department of Bouches-du-Rhône. The coastal zone cannot really be defined because its distribution differs



according to environmental problems studied⁶. However, it can be generally limited to "the geomorphologic area across the seashore where the interaction between marine and land parts is present through ecological systems and complex resource systems including biotic and abiotic elements coexisting and interacting with human communities and pertinent socioeconomic activities" (Protocol relative to the ICZM of the Mediterranean Sea, 2008)⁷.

As the coastal zone of Bouche-du-Rhône is a multifunctional territory in which environmental issues are numerous, five specific units of larger scales (territorial subsystems) have been defined on the basis of the land occupation and main uses and activities identified in these areas: Camargue, Golfe de Fos, Côte Bleue, roadstead of Marseilles and Calanques (fig. 1).



b) stakeholder selection

The selection of stakeholders was another important consideration. We selected at least 1 -2 stakeholders from each geographical sector ranging from site managers to local decision makers. A total of 10 stakeholders were interviewed over a 4 month period between January and April 2012 and the interviews lasted between two to four hours.

Modifications and realization

⁶ Mention the example of the water quality.

⁷ In this study, the coastal zone represents the group land-sea, the coastal area and its land part, and the coastal sea and its marine part.



The institutional analysis is a non-exhaustive inventory of agents active in the field of coastal zone management, to maintain, restore or improve the marine and coastal ecosystem quality and reduce use conflicts. The objective of this approach is to understand the current management system and collect the point of view of key agents on its functioning. The semi structured interviews aimed to:

- Identify institutional knowledge, i.e. status and missions that they are given and on which they build their legitimacy as a territorial agent;
- Collect points of view on the main environmental problems in the intervention area;
- Identify specific objectives of environmental management policies that they lead in the coastal zone (management tools, financial and human means, etc.);
- And define institutional deadlock points, i.e. pressures met by these agents that prevent them from fully achieving their objectives (problems of management measure acceptability, means and knowledge necessary to make their mission, etc.).

Morphological, ecological, socio-economic assessments of environmental issues identified as a priority were used to make a quantified diagnosis of the main "pressures/impacts" and "threats" and propose potential solutions. It consisted in answering the following questions:

- What is the extent of the principal environmental deteriorations in the coastal zone of Bouches-du-Rhône? What are the trends identified? What are the future threats (risks)?
- Which practices, uses and activities are linked to these deteriorations?
- What deterioration impacts are observed for coastal populations (activities, uses and amenities)?
- What is the nature of these answers? What means (regulatory, human, financial) have been used? What are the deterioration costs?

Experiences made and lessons learned.

- In the end, it is hard to estimate the "priority" character of issues identified on the content base of the interviews and the analysis of current planning documents. Only one problem is at the same time present in the entire coastal zone of Bouches-du-Rhône and regularly cited by the agents met: the land contamination of marine waters. However, the results of the assessment do not confer this priority character at all. We can only highlight that it is an important issue in this area, like manmade coastal spaces, coastal and maritime traffic, marine debris, fishery resource exploitation and conflicts of use.
- Interviews made with territorial agents for the institutional analysis have been useful to know their perceptions of the sustainable issues in the coastal zone of Bouches-du-Rhône. As a further step in the process, it would be interesting to propose, in the end, an extended indicator list referring to the defined issues and in which they could choose the ones they think are the most appropriate.



References:

- Besancenot F. (2008), « Réalisation d'un diagnostic territorial de développement durable. Expérimentation dans le Bassin potassique alsacien », *Développement durable et territoires* [En ligne], consulté le 14 mars 2012. URL: http://developpementdurable.revues.org/6083.
- Le Gentil E., Mongruel R., Raux P., Jacob C., Kalaydjian R. and Cadiou J. F., (2011). "A Socioeconomic Approach for Coastal Zone Assessment" *in* Özhan E. (2011), *Proceeding of The Tenth International Conference on the Mediterranean Coastal Environment*, MEDCOAST 11, 25-29 October 2011, Rhodes, Greece, Vol. 1: 157-168.
- Rouxel F., Rist D., (2000). "Le développement durable: approche méthodologique dans les diagnostics territoriaux", Lyon, CERTU, 147 pages.



Participative experiences in the North Lebanon Coastal Zone CASE

Manale Aboudagher

Background

The Lebanese CASE is being implemented on the North Lebanon Coastal Zone. The study area presents a diversity of issues and conflicting uses from an economic, social, political, regulatory and ecological perspective.

The PEGASO project therefore provides an opportunity for furthering CZM initiatives, especially through the use of the PEGASO toolbox from which the Lebanon CASE will benefit. Activities are built on the achievements of the IMAC project (www.balamand.edu.lb/imac).

The Lebanese CASE aims at creating a Coastal Forum (CF) as it was a main component of the implementation of the strategy for the North Lebanon Coastal Zone. Based on the IMAC strategy themes, the forum will be supported by all necessary studies. Its main objective is to bridge the gap between the scientific community, local community and decision makers. This is expected to be achieved through workshops to create and launch the CF and to provide the tools that will ensure sustainability of the Forum after closure of the PEGASO.

Currently, the Lebanon CASE team is in the process of choosing the indicators from the toolbox according to a specific issue of concern for the target area. This approach was selected in order to ensure sustainability of activities started six years ago and to present the benefits of advancing a process that will hopefully culminate in better management and increased awareness of coastal zone issues.

Initial considerations

Part of our contribution to the PEGASO Project was to build on the results of, and continue with the findings of, the IMAC Project (www.balamand.edu.lb/imac) that collected/calculated all the baseline data for preparing ICZM. In addition, this approach will show sustainability and progress in ICZM issues.

Since we are at Stage 5 of the ICZM phases ("PLAN" in the checklist of the First ID Document, February 2011), we are proceeding from this point onwards.

The IMAC's final products were a set of recommendations including a strategy for implementing ICZM on the Coast of North Lebanon. This strategy was buit on broad stakeholder input and



reflected the needs and vision of the local communities. Therefore, a process of intensive stakeholder participation had been designed and carried throughout the IMAC project.

Modifications and realisation

The stakeholders' involvement, along the IMAC project implementation, progressed under the following steps: (please refer to the table hereafter for document downloads)

- Compilation of lists of stakeholders from different sectors and levels of government.
- Questionnaires relevant to the project were sent out to stakeholders in order to assess their level of knowledge of ICZM, their power to affect the implementation of the project's policies and their attitude towards ICZM.
- The first stakeholder workshop was the assessment workshop, (June 2006) with representatives of various concerned groups, such as syndicates, municipalities, private sector, research institutes, regional and local NGOs, and universities (44 participants on the first day and 20 on the second). The primary objective was to evaluate the current status of the coastal zone, to actively involve all stakeholders in the IMAC project, and to introduce ICZM as a process for coastal sustainable development.
 - An intensive stakeholder involvement to establish an ICZM process continued as follows: five sectoral round table (hereafter: RT) discussions were held between July and November 2007 with the industrial, tourism, agricultural, and fisheries sectors as well as with municipalities. Ten to fourteen sector representatives participated in each RT respectively, making up a total of 59 participants. The objectives were to: a. Assess the positive and negative factors influencing sectors in the coastal zone. b. Obtain a better understanding from the sectors of their needs as well as circumstances that would contribute to improvement of the situation; and c. Assess existing collaboration and establish a network to act as a platform for sharing ideas and experiences. The outcomes of the IMAC Assessment Report, Legal and Economic Studies were presented to the participants as background information. The method of Fuzzy Cognitive Mapping was used to visualize the perceptions of the different sectors active on the coast. Furthermore, a visioning exercise was carried out to illustrate participants' vision of an ideal coast for North Lebanon. In addition, modes of sectoral and inter-sectoral communication and cooperation were discussed along guiding questions. The attendees of all RTs underscored the lack of communication that characterized relationships of stakeholders within the same sector or among different sectors. The Fuzzy Cognitive Maps produced during the workshop have been analyzed using specialized software (FCM Editor), enabling the IMAC team to develop scenarios for the coastal zone based on the maps. Furthermore, information collected during the RTs directly fed into the strategy document.



- A two day Strategy Development Workshop was held in March 2008 with 58 representatives from northern districts, officials from key ministries, municipalities, syndicates, orders, cooperatives, research institutions, regional and local NGOs and the private sector. Two different scenarios were presented to the participants: "business as usual" and "working for a better future". Participants then identified strengths, weaknesses, opportunities and threats of the two scenarios. In a second and third step, participants were asked to prioritize the identified opportunities to improve the current situation, and to define actions to realize them.
- Following this Workshop, a first draft of the IMAC Strategy Document was developed. It then underwent several rounds of reviews and amendments including review through the SMAP III Technical Assistance Team. A pre-final draft was presented to stakeholders on occasion of the IMAC training seminar in December 2008, where comments were received from stakeholders in a half day participatory session. These comments were included into the final draft document, which was translated into Arabic and sent out to IMAC stakeholders in preparation of the strategy endorsement workshop.
- The strategy was endorsed by stakeholders in a workshop that was held in February 2009 with 53 participants. During this workshop, the details of the final draft strategy were discussed in working groups and final amendments were suggested. Furthermore, this workshop was used to discuss with stakeholders representing different interests and levels of government the possibilities to establish a stakeholder forum to implement the strategy.
- The process of developing a strategy for the coastal zone of North Lebanon was accompanied by awareness raising activities and capacity development. Based on the opportunities identified to improve the coastal zone as well as questionnaires that had been filled out by stakeholders, training needs have been analyzed.
- In response to the identified general interest in ICZM issues throughout all sectors, a training concept was developed that included a general session for stakeholders from all sectors followed by sectoral (tourism, industries, fisheries, agriculture) training sessions. The three-day integrated training seminar was held in December 2008. It was closed by a joint field trip exploring different uses and issues in the target area.

Experiences made and lessons learned

- IOE team had the opportunity to gain experience in participatory processes and gain much relevant expertise.
- IOE team gained a better understanding of social, economic and environmental situations and processes in the area where the PEGASO CASE will take place



- Public always has to be informed about results through the websites, workshops, local media and/or media sets.
- The project established a broad network among authorities, NGOs, representatives of the productive sectors and other organizations that can be used by the partners for follow-up projects.
- ICZM is a process to be considered as long-term and if activities are not sustained, efforts and results will be lost.
- Sustained/targeted awareness campaigns are essential to have a productive dialogue for integration.

IMAC projects'documents (follow hyperlinks for downloads)

The Coast of North Lebanon, Grasping the Opportunities (Arabic Version: Part I, Part II) English Version: Part I, Part II)	This Strategy, a result of many participatory workshops with all coastal stakeholders, sets a framework for long term sustainable management of the coast of North Lebanon and covers a wide range of issues and opportunities that are structured in five key themes representing the main aspects of the this coast.
Strategic Vision for the Management of the Coast of North Lebanon (Arabic Version/English Version)	This leaflet introduces the strategy document: "The coast of North Lebanon, Grasping the opportunities" and resumes its main chapters in a comprehensive way
IMAC Project Summaries (Arabic Version/English Version/Maps)	This document contains the summaries of major IMAC studies: "Major stakeholders on the area", "Conflicting uses", "Economic valuation study", "Assessment of the institutional and legal setting" and the General management guidelines for the coast of North Lebanon with its recommendation maps
IMAC-Round Table Discussions (Arabic Version/English Version)	This report presents the results and the analysis of the five round table discussions for the industrial, agricultural, tourism, and fisheries sectors and municipalities that took place from July until November, 2007.
IMAC-Coastal Zone of North Lebanon People & Opportunities	This report summarizes the drivers of coastal zone management issues and highlights opportunities for the sustainable development of the North Lebanon coast.
IMAC-Strategy Development Workshop Report	This report presents the outcomes of the strategy development workshop that took place on March 19 and 20, 2008.
IMAC Brochure	The Brochure describes the IMAC project in both Arabic and English and disseminates information among national and international stakeholders related to the IMAC project in particular and coastal



	zone management in general.	
Assessment of the Institutional and Legal Setting for Coastal Zone Management in Lebanon	This study assesses the legal and institutional frameworks for CZM in Lebanon and formulates recommendations for the better management of coastal zones based on existing legislations.	
Economic Valuation of the Coastal Zone of the Mohafaza of North Lebanon	This study shows the fiscal and human resource assessment of coastal municipalities in order to determine their capacity in terms of preventing environmental degradation; the "willingness to preserve" the direct and indirect resource use, which will help derive a household-based direct and indirect value of Northern Lebanon marine resource and determine ICZM responsibility choices; and an estimation of the northern coastline partial gross domestic product (GDP) by main sectors compared to the national GDP.	
Status Report	In order to provide a knowledge base for fine tuning project activities and for CZM strategy development, the project investigated the environmental, social and economic status of the Mohafaza of North Lebanon. It covers also a stakeholder analysis and identifies the main conflicting uses of the coast.	
Inception Workshop	This workshop has introduced ICZM as a process for coastal sustainable development and exchanged knowledge and information regarding the current and future status of the coastal zone of North Lebanon. It brought together members of the public and private sectors, research community, policy makers and regional stakeholders, and so established linkages between formal and informal networks and helped obtaining a better understanding of the needs and circumstances of stakeholders. It has demonstrated key information tools and resources to help establish and operate IMAC, established a network to act as a platform for sharing ideas and experiences and as a mechanism for mobilizing, lobbying, and advocacy on policy-related matters and laid the grounds for future workshops.	



EXPERIENCE IN PARTICIPATORY PROCESS in Al Hoceima CASE

Maria Snoussi, Hocein Bazaïri, Abdou Khouakhi, Nadia Mhammdi, Abdelaziz Adidi, Saïda Niazi,Otmane Raji









Background

The coastal zone of Al Hoceima benefited for the past decade from two important projects - the MAP CAMP and the "Destinations" project of the European Commission. PEGASO has capitalized these benefits especially regarding the awareness level of the local stakeholders about the ICZM principles.

All these projects had/have the same objective: to contribute to the socio-economic opening up of this area, while ensuring the protection of its coastal resources. More precisely, the projects' task is to investigate optimal ways of a balanced and sustainable development in order to enlighten the authorities and help decision-makers in their choices.

According to the Blue Plan, prospective analysis can be considered as a helpful tool in decision-making and a powerful mean to anticipate possible developments. So, to accompany the socio-economic opening up of this area and study the interactions between development policies and state of the environment, we used a prospective approach based on Indicators and Scenarios.

Initial considerations

For the prospective analysis and scenario building process in Al Hoceima CASE, several local stakeholders have been involved to exchange and share perceptions and visions about sustainability of their coastal zone. Stakeholders were selected based on the "Stakeholders Analysis" (Table 1).



Institutions	Interest	profile	Importance	Power	Knowledge	Attitude
Wilaya (Province)	Representing the government at the provincial level Coordination of the administrative activities of the province Programming and financing projects development Chairs the Regional Commission for approval/disapproval of investment projects on the coast Approval/disapproval of temporary occupation of the public maritime domain and forests	Programming project development at the municipalities Financial support of professional associations and NGOs. Approval of Development Plan and municipal budgets	5	4	5	MS
Regional Investment Center of Al Hoceima	Business Support investment. Facilitate the administrative procedure for the creation of companies through a single window. Statistics of industrial units the licensing of investment and operating public domain and forest area chairing the regional commission approves the projects investment on the coast.	The focus for the center is to encourage projects create added value. it requires the development of an environmental impact assessment for each project Mandatory notification of the Regional Inspectorate of regional planning, environment and water. Tax impact studies	5	2	4	MS
High Commissione r for Water and Forests Directorate of Al Hoceima National Park	Ensure the implementation of the policy for Forests conservation resources and Against Desertification Management of the forest area. Management of Wetlands in the province Ramsar Focal Point at the central level Reforestation and coastal dune fixation Develop strategies for the protection of wildlife and flora.	Implement strategies to protect sites of biological and ecological interests Ensure the proper management of forest resources by local control operations and application of regulations (law).	5	2	5	MS
Directorate of Al Hoceima National Park	Delimitation of maritime zones Establishment of national park Develop strategies for the protection of wildlife and flora	Protection of national park and share the resources equitably between the population	3	2	4	MS
Non- governmenta I organizations	Community participation is a fundamental concept of ICZM. This type of management makes use of the interaction and cooperation of all interested parties (social, political and scientific) in order to identify, formulate and evaluate societal objectives within a specific coastal zone, and in order to act in the best manner possible to achieve those objectives.	Community Voice Protect the advantages for civil society	2	1	4	S



The participation of the local stakeholders alongside the experts allowed to bring out existing conflicts and uncertainties, and to stimulate the debate about the desirable common future.

To maximize the benefits of the participatory process and allow all the stakeholders-even the illiterates- to express their opinions, facilitators have been trained to better communicate with them.

Realisation

Two workshops with focus groups have been organized:

During the first workshop the expert team provided to the stakeholders an explanation of the prospective sustainability analysis of the coastal zone. Participants discussed on the most relevant indicators to be applied. A total of 50 indicators, covering the four pillars of the Sustainable Development (economic, social, environmental and governance) have been proposed and discussed. Regarding data, three approaches have been used to select collectively and on a consensual basis the final 29 Indicators: (i) available and reliable data, (ii) semi-quantitative data, norms... (iii) Expert judgement. Then discussions have been dedicated to how build scenarios. Based on present and past changes, two possible futures (Business as Usual and Alternative/desirable scenarios) have been conceived and discussed with the stakeholders. 2006 was considered as baseline.

During the second workshop, the debate was focused on the impacts of the Souani tourist project on the dunes and Sfiha beach and the possible decline on water resources, forest, and fisheries of the Al Hoceïma Bay. A strong involvement of the civil society stressed the importance of the application of the PEGASO tools and the need for a dialogue and consultations among all actors concerned which would be highly based on a participatory approach.

Modification

The Al Hoceima pilot action carried out in the frame of the CAMP and PEGASO projects is a good example of ICZM implementation at the local level provided that the local actors received support and were adequately trained. The success of such local initiatives contributes to changing the attitude of all those responsible for coastal planning and management.

This was achieved through:

Upgrading of civil society and community groups through participatory workshops on ICZM, sustainability analysis and future scenarios;

Training of moderators / facilitators who served as communication relays to promote the principles of ICZM with the local population;

Elaboration by the team experts of an explanatory note of the potential impacts of the coastal tourism development on the coast of Al Hoceima Bay in terms of environmental sustainability and



socio-economic development. This note was delivered to all stakeholders including policy makers and elected officials during the CAMP.

- Elaboration of a report by local NGOs on their concerns about the tourism project's impacts on the region. This document also includes recommendations and was presented to all stakeholders as well as to the local and national press.

Finally the Inter-ministerial Committee for the evaluation of EIA has forced the developer to review the whole plan of the project.

This story is the first in terms of commitment and involvement of civil society in the management of coastal local affairs.

In conclusion, the simultaneous conditions of the pilot ICZM (PEGASO and CAMP) with the launch of the Souani tourism project was a great opportunity on the basis of consultation, training and awareness, that helped contribute to managing conflicts of interests of different stakeholders and to influence policy development towards a more sustainable and environmentally and wishes of the local population.

Experiences made and lessons learned

The results obtained allow learning operational lessons on ICZM implementation in terms of efficiency, performance and progress of governance modalities.

The following recommendations reveal fundamental ICZM principles which should be continuously applied, namely:

- Public awareness raising and participation to be carried out at the level of collective practices, dialogue, exchange of opinion and mediation. These can be realised owing to local resource persons acting as intermediaries specially trained for this purpose and whose ICZM expertise should be kept at the satisfactory level. In addition, efforts should be made towards awareness raising and training of all stakeholders concerned, especially through practical exercises to be carried out in real conditions, for example, as pilot operations.
- Data and geographic information management being of vital importance for a successful development of ICZM efforts as it ensures a link between knowledge and making right decisions. A centralised system should be created as a portal to link the existing data sources (or bases) and their proper exploitation. Such a system should be backed by a supporting structure of ICZM initiatives dedicated to coastal zone.
- Construction of sustainability indicators to complete and consolidate a range of sustainability indicators outlined within PEGASO. It should be recalled that such indicators must be a result of a collective reflection of stakeholders. Finally, searching for data for their supply should be supported.



in the Danube Delta CASE

Iuliana Nichersu, Marian Mierla, Eugenia Marin

Background

This participatory activity for Sulina pilot was carried out within PEGASO project – Work Package (WP 4).

The Sketch Match method is a workshop method developed by Netherlands Government Service for Land and Water Management (DLG) and was for the first time implement by DDNI for Sulina pilot case, based on previous experience together with the Dutch team within project Room for the River in Cat's bend, Romania⁸, funded by the Dutch programme partners for Water.

SketchMatch is an interactive planning method, developed by the Government Service for Land and Water Management in the Netherlands (DLG)9 to bring insight into spatial development issues together with regional partners. The sketch match is a method that is used to identify and visualize potential development paths and so facilitate the decision-making process for managers, policymakers and local stakeholders. It is an intensive process that organizations and other interested parties can use in their own development areas.

A SketchMatch is a series of interactive design sessions lasting up to three days in which participants (citizens, policymakers, farmers and other stakeholders), under supervision of a spatial designer and a process supervisor, analyze and work out the spatial problem in a specific region.

A SketchMatch works like a creative pressure cooker by bringing together a group of interested parties to work intensively on a common design. This creates a lot of enthusiasm and often accelerates the decision making process. This is worked out with maps and 3-D GIS visualizations. The result of a SketchMatch is a spatial design, in the form of a ground plan, map, book, visual story, model, 3-D GIS visualization, or whatever form suits the project best.

Various disciplines come together in a SketchMatch: layout, GIS, ecology, hydrology, hydraulics, socio-economy, spatial planning etc. A thorough preparation, including a clear picture of the design assignment and the players involved, is very important. It holds that if the right people with the right expectations sit down at the design table, they increase the chance of success.

⁸ http://www.dutchwatersector.com/rsr/project/50/

⁹ http://www.dienstlandelijkgebied.nl/



A good SketchMatch brings parties together as people begin to understand each other's wishes and interests. It increases the support because participants accept a common plan, which they themselves have also sketched out. In the plan, they see their own wishes and interests represented, as well as the wishes and interests of others. A SketchMatch can thus act as a crowbar widening the frameworks in a creative way. Every SketchMatch consists of three phases:

- 1. Registration and preparation;
- 2. SketchMatch Session;
- 3. Completion.

Each mentioned phase was accomplished by DDNI for Sulina pilot case study during 2 days of work between 01-02 November 2012. The workshop was held in Jean Bart Lyceum from Sulina.

Initial considerations

Located at the mouth of one of the largest river Danube, Sulina is an important boundary town with a rich cultural history (fig 1). Furthermore, Sulina is one of the main cities in the Danube Delta Biosphere Reserve Area well recognized nationally and internationally for its vast ecological value. The areas surrounding Sulina city are strictly protected areas for their great biodiversity. Therefore specific development restrictions of the area are settled and included in the general urban plan for Sulina in order to balance its economic development with coastal biodiversity conservation.

Once, Sulina was a flourishing city with more than 20,000 inhabitants and with diplomatic residences of the many countries of Europe. Nowadays, Sulina is under degradation process (economical, cultural, population point of view) being less populated 4800 inhabitants and with limited activities functioned despite of its great potential of development in particularly eco and cultural tourism. The attraction of the Sulina area for tourists should be based on its cultural heritage and the valuable and unique coastal area of the Danube Delta. New eco-tourism development should be carry out in harmony with the pristine natural values. Tourism should be allowed but in a way that does not surpass limits of environment sustainability.

Modifications and realisation

The workshop started with welcome greetings by Dr. Iulian Nichersu to all participants that attended the meeting, followed by a short introduction made by every invitee (Fig. 10). Further Mr. Nichersu held a presentation about PEGASO project and ICZM protocol (Fig. 11) reaching the following aspects:



- short introduction of the project, its main objectives & case studies;
- presentation of ICZM protocol: principles and objectives;
- Sulina case study in the context of ICZM;
- SketchMatch methodology presentation: what are the expectations?

After this introductive session, the participants were asked to express their expectations related to the application of this participatory approach for Sulina pilot case, expectations which were further written down (Table 1).

Table 1 – Expectations within Sketch Match session expressed by participants

Reliable information on coastal are management, awareness of local people and stakeholder
Results' Integration in Danube Delta Biosphere Reserve Management Plan
Results' Integration in Danube Delta Biosphere Reserve Management Plan
Results which will help improving the quality of life for local community

Practical solutions, lessons learned on how to be able to implement solutions identified for Sulina coastal area

Coastal area delimitation in Sulina

Preservation of cultural heritage in Sulina

Involvement of local people of area

Collaboration between institutions present at the session after the project is ended; institutional collaboration for integrated coastal zone management

Solutions for land issues (public vs. Private)

Further socio-economic development of the area

At the end of the 2nd day, a representative of general group formulated the possible solutions that were identified. Thus, it was observed that all the issues from both groups could be tackled by same possible solutions (which we called "non-structural"): **raising public awareness & institutional collaboration.**



Raising public awareness can be achieved through education, trainings, and courses among population (children are an important target) on ICZM topic;

Inter-Institutional collaboration: can be done by organizing regularly (mainly before the flood season) meetings between responsible departments for flood emergency from different institutions (from local, regional to national and trans-boundary level).

The "structural "possible solutions were sketched on the final map of Sketch Match and are as follows:

- Modernization of infrastructure and protection of critical infrastructure: vital lifeline facilities (roads, water supply, electricity network, telecommunications) needs reparation and integration;. Using the "location of the studied area map" and the "network and communications map" was identified a major problem regarding the lack of infrastructure and the poor quality of it. Standardization of coastal road between Sulina and Sfantu Gheorghe which can be further used for touristic purpose. Independent lighting of roads.
- Land use planning and regulations: solving the legal problems of land, delimitation of Sulina beach; changing the functionality of pastures area for city development.
- Agriculture: emphasis on cattle breeding, improving soil quality of southern pasture by channel dredging, flooding the channel from the embankment for fishing, realization of a biomass center. Renegotiation of contracts for reed collection in order to increase the access of local people to natural resources. Potential of investments in green energy.
- Industry: supporting private initiative for reopening the canning factory; shipyard project rehabilitation. Setting the administration of the harbor from River Administration of Lower Danube, Galati to Tulcea, hence all the maritime Danube taxes to be used for local investments for dredging and navigation. Development of craft construction industry and ship repair industry.
- Tourism: delineation of camping and recreational areas to avoid conflicts between stakeholders. Development and promotion of a program tourism based on the specificity of the area and Integration into major national and international tours. Change the functionality of a part of the shipyard for tourism purposes. Making public-private partnerships to promote tourism in the area.



- Fishing: one solution found during the workshop was designating an area near the Sulina free zone for developing a fish market; aquaculture upstream Danube; forestation of several flooded areas to create the fish spawning.
- Social & Cultural: the main solution and necessity for the community is to reopen the Hospital
 in Sulina in order to assure the medical care. Creating jobs through new investments in
 tourism; Establishment of small crafts workshops using the natural resources (reed);
 Enhancement of the cultural and historical heritage; necessity of architectural building
 rehabilitation through legislation.

Experiences made and lessons learned

The results presented above emphasize a future possibility of socio-economical development of Sulina town and coastal area in accordance with ICZM protocol.

The Sketch match planning methodology proved to be a success for Sulina case study, assuring a good cooperation process with different stakeholders and experts, raising awareness among stakeholders related to a sustainable use of their coastal area and their particular landscape. The success of this approach was assured as well because of the interdisciplinary topics debated during the design workshops, combining and integrated thus, the land planning with social end economical aspects.

The final sketch took into consideration all the possible solutions draw by stakeholders according to their point of view and interest, giving in this way, the possibility of a better future coastal area management. It is important that the awareness rose among the participants during the 2 days planning sessions to continue beyond the project for a better inter-institutional collaboration in Sulina.

Factors important for this session success:

- Enthusiasm and motivation of participants
- Availability of good thematically maps
- Important preparation before the workshop (2 months before and a previous non-formal meeting with stakeholders)
- Well-considered selection of participants based upon insight in the stakeholder-network.



EXPERIENCE IN PARTICIPATORY PROCESS in the Georgia CASE –Guria region Mamuka Gvilava, Amiran Gigineishvili



Photo. Public meeting and discussions with Tskaltsminda community in Lanchkhuti, Guria



Background

Coastal Village Tskaltsminda, belonging to Grmagele Community, is located in Lanchkhuti Municipality, Guria Region of Georgia, on the southern/left bank of Supsa River where it discharges to the Black Sea. Average sea level is 2 m. The village infrastructure includes public school, one hotel, other tourism facilities developing, fishing. The beaches are quite valuable with magnetite containing grey sand. BP has built and opened in 1999 Supsa Oil Terminal and Offshore Loading Facility – end point of the Baku-Supsa western route oil pipeline with 4 reservoirs of 40,000 tones capacity each.

Initial considerations

In 2008 was completed implementation of the EuropeAid funded project EU funded project Environmental Collaboration for the Black Sea (see ECBSea, 2009), which supported ICZM pilot project, with objective of setting an example of spatial planning in support of the sustainable development of the local coastal community by maintaining natural environment and simultaneously enhancing economic potential of the community, contributing into improved incomes and living conditions for local people.

Location selected for such a pilot project was Tskaltsminda village in Lanchkhuti Municipality, for which the integrated plan for sustainable development was elaborated (ECBSea, 2009). The Plans was approved by the Sakrebulo (Council) of Lanchkhuti Municipality in May, 2008.

The objective of the public meeting with the local population was to jointly review the progress with the implementation of the plan, problems encountered and perspectives for future.



Fig.1 Environmental Collaboration for the Black Sea (ECBSea) Project booklet



General Impressions

The meeting was held in the centre of Tskaltsminda, in local hotel "Prestige". Special credit should be given to strong participation of Tskaltsminda community representatives. They have fully realised the importance of the meeting, therefore were strongly engaged in the discussions and working process. This active participation pleasantly resulted in the accomplishment of all tasks set for the meeting.



Amiran Gigineishvili, Georgian CASE Coordinator for BSC PS, in the introduction has presented Pegaso project ideas to participants, explained the importance and basic principles of integrated coastal zone management, briefly presented ongoing activities under this international project, answered questions of participants.

Special importance was given to the value of active participation of Tskaltsminda population in success of the project activities in Georgian CASE. Participants appreciated the importance of public participation, which in this case means participation in local decision-making and active stewardship for the development of the village and the community and caring for its future.



Reviewing the progress with the implementation of Tskaltsminda Plan

As mentioned above, Sakrebulo of Lanchkhuti Municipality with its Ordinance No. 12, dated May 27, 2009 approved Integrated Plan for Sustainable Development of Tskaltsminda Coastal Community, prepared with support of the EU funded Environmental Collaboration for the Black Sea (ECBSea) Project. The facilitator of the public meeting, Amiran Gigineishvili reminded participants plan of action written in this document. He invited participants to express their opinion which actions were implemented and which are pending from this plan.

It appeared that following planned actions were implemented:

- Provision of water supply in two districts of the village
- Cleaning of river/stream banks from waste
- Publication of information booklet about Tskaltsminda
- Construction of sports field
- Opening of alternative kindergarten

It was highlighted that many planned actions are outstanding, including:

- Provision of public access from community centre to the beach (the territory was expropriated by the investor for the purposes of Supsa Port construction).
- Part of internal roads rehabilitated but they again need repairs.
- Sewage system is still to be arranged in the village.

Working on new project ideas





Participants through Brainstorming Methodology elaborated on following project ideas:

- Rehabilitating internal roads in several districts of the village.
- Coastal protection works.
- Organizing full board kindergarten.
- Connection of the village to water supply and canalisation system of the nearby Ureki resort.
- Transfer of abandoned road traffic police building to local community to establish new youth centre.
- Construct mini-stadium next to the newly built police headquarters.
- Shifting from collective electricity meter system to individual metering system.
- Allocating public bus to school for transportation of children to classes.

Summary and next steps

Work in target groups was summarized by Amiran Gigineishvili. He thanked participants for productive work and explained what could be the next steps in the process. Participants expressed their satisfaction to further collaborate for the benefit of the development of their community. Amiran Gigineishvili promised that as a newly elected Chairperson he will bring these meters to the attention of Lanchkhuti Municipality Sakrebulo (Local Council), initiating the proper amendments to the action plan, to reflect community project ideas as the endorsed planned activities.



References

ECBSea (2009). *Integrated Plan for Sustainable Development of Tskaltsminda Coastal Community, Georgia*. EU funded project Environmental Collaboration for the Black Sea. ISBN: 978-9941-0-1361-4. April, 2009.

www.ICZM.ge

https://sites.google.com/site/iczmgeo/Home/20090422 Tskaltsminda SD Plan ENG.pdf

ECBSea 2010. *Integrated Coastal Zone Management Strategy for Georgia*. EU funded project Environmental Collaboration for the Black Sea. Draft (version March 22, 2010).

www.ICZM.ge

https://sites.google.com/site/iczmgeo/Home/20100322_Draft_ICZM_Strategy_GEORGIA_ENG.pdf

Gvilava M., Bakuradze T. and Gigineishvili A., (2011). *Pilot Testing the Relevance of the National ICZM Strategy for the Local Coastal Planning in Georgia*, published in Abstracts of the Black Sea Outlook 2011, 3rd Bi-annual Scientific Conference, 1-4 November 2011, Odessa, Ukraine.



PARTICIPATION AT KOYCEGIZ – DALYAN SPA CASE STUDY (SOUTHERN AEGEAN COAST, TURKEY)

Erdal Ozhan

Background:

Enhancement of participation in the ICZM process was one of our main goals of our CASE study. The key stakeholders for management of the Köycegiz – Dalyan SPA were identified in 2010 as indicated in Table 1 and 2 below, and several individual acquaintance meetings with some of the were held during 2011. The purpose and the scope of Pegaso Project and the related case study in Köycegiz-Dalyan SPA were discussed.

Initial considerations:

Two approaches were selected for enhancement of participation. These were:

- a) Stakeholder meetings
- b) Questionnaire study

Modifications and realization

The first general stakeholders meeting for Köycegiz-Dalyan CASE took place on 19 January 2012. The second general stakeholder meeting was organised on 20 February 2013. The list of key stakeholders for the CASE and the representative participants to both meeting are presented in Table 1 and 2. From these tables, it is readily observed that the governmental representatives showed limited interest to the meetings, where the participation of NGOs were satisfactory. Although fisheries and boat transport cooperatives are in direct economical and ecological interaction with the region, they did not participate at both meetings. Authority vs. Interest plot for this situation would reveal a typical pattern illustrating a problem commonly encountered in participatory methods for ICZM implementation, i.e. those having authority for making decision have very little or no interest in the process of participation, and vice versa. The recent outcomes of our CASE study, which will be presented through the following pages of this report, were shared during the second meeting and feedbacks were asked from the stakeholders.



Table 1. The key stakeholders in Köycegiz-Dalyan SPA and the representatives participated in the first stakeholder meeting on 19.01.2012.

	Institute / Organization	Participants
1	Governorate of Muğla Province	-
2	Sub governorate of Köyceğiz	-
3	Sub governorate of Dalyan	-
4	Köyceğiz Municipality	The mayor
5	Dalyan Municipality	The president and 2 members of the city council
6	Provincial Directorate of the Ministry Environment and Urbanism	Departmental chief of Köyceğiz-Dalyan Specially Protected Area
7	Rectorate of Muğla University	Vice Rector
8	Muğla Sıtkı Koçman University, Faculty of Engineering	The head of department of Civil Engineering and 3 professors
9	Muğla Sıtkı Koçman University, Faculty of Fisheries	2 professors
10	Pamukkale University, Department of Biology	1 professor
11	Turkish Marine Environment Protection Association	Ortaca rep.
12	Sea Turtle Research, Rescue and Rehabilitation Centre	2 members
13	DALKO - Dalyan Fisheries Cooperative	-
14	Dalyan Motor Boat Transport Cooperative	-
15	Dalyan Association	The president and 1 member
16	Köyceğiz Nature and Environment Conservation Association	2 members
17	Köyceğiz Culture Solidarity Association	1 member
18	Nature and Animal Protection Association	3 members
19	Köyceğiz Amateur Angling Association	1 member
20	Özalp Junior Hotel	The manager
21	Mandalinn Hotel	The manager





One of the outcomes of the first stakeholder meeting was the proposal to construct a web-based forum which will be available to the public in order to increase the participation and contribution of any parties, who are interested in the management of Köycegiz-Dalyan Specially Protected Area. This instrument had to be delayed since the web site of the MEDCOAST Foundation was renewed during 2012. Another problem was the language since the MEDCOAST web site was in English. The MEDCOAST new web site is now in use and a sister web site in Turkish language is under construction. When it will be available in about 2 months, the web-based public forum will be started.

Table 2. The key stakeholders in Köycegiz-Dalyan SPA and the representatives participated in the second stakeholder meeting on 20.02.2013.

	Institute / Organization	Participants
1	Governorate of Muğla Province	-
2	Sub governorate of Köyceğiz	-
3	Sub governorate of Dalyan	-
4	Köyceğiz Municipality	-
5	Dalyan Municipality	The mayor and 3 members of the city council
6	General Directorate of Nature Conservation	Project coordinator and project field expert
7	Rectorate of Muğla University	-
8	Muğla Sıtkı Koçman University, Faculty of Engineerng	1 professor



9	Muğla Sıtkı Koçman University, Faculty of Fisheries	Head of the Department of Fisheries
10	Muğla Sıtkı Koçman University, Ortaca Vocational School	Director
11	Pamukkale University, Department of Biology	-
12	Turkish Marine Environment Protection Association	-
13	Sea Turtle Research, Rescue and Rehabilitation Centre	3 members
14	DALKO - Dalyan Fisheries Cooperative	-
15	Dalyan Motor Boat Transport Cooperative	-
16	Dalyan Association	1 member
17	Köyceğiz Dalyan Environmental Protection Association	2 members
18	Köyceğiz Nature and Environment Conservation Association	-
19	Köyceğiz Culture Solidarity Association	-
20	Nature and Animal Protection Association	1 member
21	Köyceğiz Amateur Angling Association	-
22	Özalp Junior Hotel	The manager
23	Keskin Hotel	The manager
24	Göcek Port Authority	Expert
25	Turkish Radio and Television Corporation	Reporter

Both stakeholder meetings were covered satisfactorily by the local/provincial media. The reports (in Turkish) about the first meeting can be found at the following web sites:

http://www.sondakika.com/haber-koycegiz-dalyan-da-alan-calismasi-basliyor-3279801/

http://www.ege-haberleri.com/haber/sira-koycegiz-dalyan-da 34324399

http://www.haber3.com/koycegiz-dalyanda-alan-calismasi-basliyor-1155150h.htm

http://www.azhaberler.com/haber/koycegiz-dalyan-alan-calismasi_34329673

http://www.kayserihaberim.com/mugla/koycegiz-dalyan--da-alan-calismasi-basliyor--h18343.html

The reports (in Turkish) about the second meeting can be found at the following addresses:

- http://dalamangazetesi.com/tr/akdeniz-kiyi-vakfindan-degerlendirme-toplantisi.html
- http://www.gazete5.com/haber/dalyan-kanali-tekne-trafigi-izleniyor-294745.htm



- http://www.mugladevrim.com.tr/index.php?option=com_content&view=article&id=14526:dalyan-kanal-tekne-trafii-izleniyor-&catid=1:son-haberler
- http://dalamangazetesi.com/tr/dalyan-kanalinda-tekne-trafigi-cok-yuksek.html
- http://www.gundemgazetesi.net/dalyan-kanali-tekne-trafigi-izleniyor-akdeniz-kiyi-vakfi-baskani-prof-dr-ozhan-t-11621h.htm
- http://www.haberler.com/dalyan-kanali-tekne-trafigi-izleniyor-4356028-haberi/
- http://www.marmarismanset.com/haber/marmaris 1/-dalyan-kanali-tekne-trafigi-izleniyor/17331.html
- http://www.marmarismanset.com/haber/marmaris 1/-akdeniz-kiyi-vakfindan-degerlendirme-toplantisi-dalyanda/16682.html



Experiences made and lessons learned

The results of our efforts for enhancing participation in the management of Köycegiz – Dalyan SPA indicate the followings:

- a. Effective and comprehensive participation in the process of coastal management is not an easily achievable target in a society were authority sharing and collective decision making are not inherent in culture.
- b. Consensus at both stakeholders meetings organised was that increasing public awareness and participation is crucial in achieving successful management of Köycegiz-Dalyan SPA. However, two stakeholder meetings revealed the typical constraint in terms of authority vs. interest relation



where the ones having authority for decision making do not show enough interest for participation. Public administration people are too much involved in their daily work and do not place importance to initiatives for participation that we have pursued in our CASE.

- c. People who are very much affected by the management decisions, like the Fisheries Cooperative and Boat Operators Cooperative in Köycegiz Dalyan SPA, are not aware of the advantages and benefits that participatory management could bring to them.
- d. The interest of local and regional media on management of the Köycegiz-Dalyan SPA is at high levels.



Application of Open Space Technology (OST) at 2nd PEGASO CASE Meeting

Gunter English

Background

The PEGASO CASEs (Collaborative Application SitEs) played an important role in the framework of the project. The selected CASES represented different situations and scales of the Mediterranean and Black Sea basins. The 2nd CASEs meeting was the last face-to-face meeting exclusively foreseen for the coordination and management of the different CASEs in the PEGASO planning. The meeting took place at mid-term of the PEGASO project.

Initial considerations

Before the meeting, the cooperation between CASEs and other project components was perceived as problematic. Also the cooperation amongst the CASEs themselves was perceived as needing improvement as well as the visibility of the CASE work in general, all this in view of increasing time-pressure for delivery of results. The facilitator decided that OST can be in this situation a suitable approach to give the different team members the possibility to closely interact with each other as well as to foster cooperation and to generate energy for the remaining time of the CASE work.

Modifications and realisation

In order to comply with the need for a structured evaluation of CASE progress as well as with the need to specifically address cooperation patterns, the facilitator decided to precede the OST event with a Simu-Real application on the first day of the meeting.



Figure 1: Producing the schedule for the day



However, this meant to shorten OST from the usual 2,5 days to 1 day for the OST event. The initial Simu-Real exercise helped to sensitise participants for the participatory work ahead of them. It further allowed participants to address two important aspects at the same time:

- 1. subject matter (i.e. evaluation of CASE progress)
- 2. cooperation style (i.e. analysis of previous cooperation).

Both aspects were sufficiently addressed in the realisation of the event. Thus prepared, the participants were willing to engage also in the OST application. An individual request to engage in an ordinary round table discussion was declined by the facilitator. After a short hesitation period, participants started to propose topics for the working groups. Three rounds of working groups (4 working groups in every round, i.e. 12 working groups in total) were realized.



Figure 2: working group discussion on SDI

The working group discussions were extremely rich in content. This was also visible in the meeting report, produced after the meeting. During the meeting, a high level of interaction was achieved. A short feedback round at the end allowed the participants to share some of their main findings. After the feedback round a concluding session was held.

Experiences made and lessons learned

The concluding round revealed that not all critical issues were dealt with in the working groups. It might have been better to have had another day to continue with the OST approach. Often a night in between the OST sessions and the informal discussions in the evening help to bring out important issues. Participants realise then more easily which sensitive issues are still missing to be treated in working groups. However, it became also clear that a two day meeting is not sufficient to overcome deep-rooted frustrations in relation to conflicts and cooperation problems that had their origin in the complex management of such an ambitious project.