



BULLETIN 3 - JULY 2011

Welcome to the third issue of the Pegaso project (People for Ecosystem-based Governance in Assessing Sustainable development of Ocean and coast). Pegaso is a collaborative project between 25 Mediterranean and Black Sea institutions and organisations that seeks to identify the instruments needed, and to build the capacity for implementing the principles of the new Protocol for Integrated Coastal Zone Management (ICZM) in the Mediterranean and its applicability in the Black Sea. The ICZM Protocol is a novel agreement that sets the basis for integrated coastal management in riparian countries based on the ecosystem approach.

The Pegaso Project is funded by the European Union within FP7 programme (ENV.2009.2.2.1.4) and started in February 2010. The core of the project is the development of an ICZM Governance Platform that could be used to share data and information to bridge the science and decision-making; producing innovative tools and testing them in countries, case studies and in the whole basin. Doing that, Pegaso will produce a common understanding on priority issues and institutional perspectives affecting the coastal and marine areas of the two regional seas.

In this bulletin, some of our partners introduce various activities that have been carried out over the last months (from January to July 2011) as well as the work and the views of the end-users community.

More information about the project is available at: <http://www.pegasoproject.eu>

Pegaso News

2nd General Meeting of Pegaso, Romania

The 2nd General Pegaso Meeting took place from the 4th to the 8th of July at the Danube Delta National Institute for Research and Development in Tulcea, Romania. More than 65 experts from the partners' institutions attended this event. To ensure that the Pegaso project responds to the different stakeholder's needs, the meeting was also attended by the members of the End Users Committee.

The meeting provided crucial guidance to the partners and guest participants on progress in all work packages of the project as well as the conceptual and operational basis to develop the regional assessment (governance, cross-cutting sectors, state of the environment, balance between different stakeholder's interest) for the Mediterranean and the Black Sea. Moreover, it provided an added value experience to test the different components of the Shared ICZM Governance Platform

(Pegaso Consortium, Scientific Advisory Group, End Users Committee and CASES sites) on how they could bridge the gap between scientists and end-user communities and support the implementation of the Mediterranean ICZM Protocol and a similar process in the Black Sea.

The SDI (Spatial Data Infrastructure) and geonode building is under development, and should make solid inroads in coming months. In addition, the CASES (Collaborative Application Sites) will now develop an implementation plan aligned with the ICZM tools (indicators, LEAC, participatory methods, scenarios, socio-economic assessments) and the training needs for each site.

The meeting also devoted substantial time for brainstorming on the ICZM principles and the ecosystem approach. This discussion will continue in coming months. Furthermore, the meeting reviewed and agreed on the Pegaso

external and internal communication plan. The communication plan will facilitate better understanding of the project results by the stakeholders and the public in addition to improved communication among the partners.

During the last two days, there were several group exercises to practice and understand some of the tools and their applicability. Interesting debates took place on issues such as the extension to the marine environment of the tools developed basically for land, the needs for capacity building and the proposed framework.

Finally, participants had the opportunity to make a cruise trip along the Danube Delta Biosphere Reserve. The trip also offered the opportunity for further discussions on strategies and mechanisms to bring the conceptual ideas into practice as well as for enjoying the scenery and the rich wildlife of the Danube Delta.



End Users Committee - What should be the priority issues, burning threats and main drivers ahead for consideration by the Pegaso Regional Assessment?

To identify priority issues and main drivers for the regional assessment to be conducted for the Mediterranean and Black Sea coastal zones, a series of consultations were discussed with the End Users Committee. The results of these discussions highlighted the important natural and socio-economic drivers for coastal management that is characteristic for seas and the local CASE sites, as well as the priority needs to drive investments and funding.

The End Users Committee offer the following suggestions as initiatives to overcome the problems:

- Place the environment into an economic context develop tools for economic assessment especially adapted to decision makers;
- Consider the past, present and future trends at several scales (Mediterranean and Black Sea basins, intraregional, national and local level);
- Provide tools and approaches for broad and systematic monitoring for data collection, early warning systems, pollution control, capacity building, effective communication with decision-makers, and participatory processes for facilitating decision making with consensus;
- Develop means for compliance with European Directives and for justifying management policies;
- Promote the establishment of ecosystem based management and the use of effective spatial planning

In addition, the opinions of the End User Committee highlight the following needs at different levels:

- *“In the Mediterranean as well as in the Black Sea countries, many issues like water quality and pollution from land-based sources, overfishing and fish stock management, urban sprawl, are not local or short-term and require transversal approaches. All these issues can have consequences far beyond local perimeters and national boundaries. ICZM process and projects too often focus on the land part of the coast, where many problems and threats concentrate or appear. However, the demand for maritime space and resources is exploding. More attention should be given to cross-sectoral and transboundary maritime issues such as marine protected areas, maritime transport, fishing, energy...”* (Mr. Christophe Le Visage, France).

- Ms. Samira Nateche from Ministry of Environment, Algeria, emphasise that *“urgent threats in the Mediterranean coastal zones are coastal erosion; conservation of natural areas of ecological significance, specific environments such as wetlands, dunes and other vulnerable marine areas (like habitats of endangered species, Posidonia beds); and the climate change. The vulnerability of our coasts is increasing and prevention is more than necessary...”*.
- According to Mr. Bouchta El Mounni (Morocco), *“there is an urgent need to address various threats in the Mediterranean coastal zones such as shortage of water; marine pollution; coastal urbanisation; impact of tourism activities; over-exploitation of natural resources (fish, sand...); impact of climate change on coastal stability, and introduction of invasive species”*.
- According to Ms. Aroussia Khamassi from the National Office of Tourism (Tunisia), *“strong focus is needed on main threats related to the tourism sector and aggravated by conflicting uses such as degradation and loss of beaches; pollution of bathing waters; proliferation of algae, jellyfish as well as impacts of the rising sea level”*.
- Mr. Alessio Satta (Agency of Coastal Conservation in Sardinia, Italy) express that *“at the very local level, the impacts of sea level rise and coastal erosion, as well as of uncontrolled tourism development still remain as important issues. Both the “speculation factor” of tourism buildings (new legislative framework for coastal setback proved to be weak) and the development of nautical and golf tourism represent threats for losing the resilience of coastal areas. ICZM tools must be able to intervene and propose alternative solutions.”*

The ICZM Stocktake for the Mediterranean & the Black Sea

One of the key objectives of the Pegaso regional assessment is to develop an overview on the current legislative, institutional, policy and financial frameworks for ICZM governance at the different countries.

Core themes of the country level ICZM Stocktake:

- Coastal zone boundaries
- ICZM and/or coastal legislation
- Coordination
- Protection and sustainable use of the coastal zone
- Economic activities
- Coastal ecosystems, landscapes & cultural heritage
- Participation
- Awareness raising, training, education & research
- Monitoring & review
- National coastal strategies, plans and programmes, transboundary cooperation
- Environmental and strategic assessments
- Land policy
- Economic, financial & fiscal instruments
- Natural hazards & coastal erosion
- Exchange of information and activities of common interest
- Transboundary cooperation.

The questionnaires distributed to all Mediterranean and Black Sea countries contained 53 questions in 16 core themes, selected in line with the articles of the ICZM Protocol for the Mediterranean. A compilation of the responses is being prepared by PAP/RAC, the Priority Actions Programme Regional Activity Centre of the Mediterranean Action Plan. These results will be made available on-line after the approval of the Barcelona Convention Contracting Parties.

The analysis is rather complex – given the number and breadth of the questions and the diversity of legal, institutional and cultural systems across the 26 states – but will surely provide researchers and policy makers with a wealth of raw material for some time to come. The early results provide already a fascinating insight into the progress of ICZM at multiple policy and practice levels across the two sea basins.

The apparent engagement of the countries is substantially positive with 43% indicating a completed or operational status of the issues described by 53 questions on the status of ICZM, and 25% answering “*In preparation*”.

There are perhaps many potential caveats to the final figures, but the relative level of positive activity as indicated by this analysis is probably higher than would have been anticipated. If the purposes of the Articles of the ICZM Protocol is to provide a sound foundation for the effective implementation of ICZM, this simple measure would indicate that a substantial part of that foundation may already be in place at country level, and that the broad concentration of efforts should be on geographic and thematic gaps, and on supporting effective implementation.

ICZM science capacity in the Mediterranean and Black Seas

Another objective of the Pegaso projects is to integrate scientific, policy, managerial and social views and attitudes towards ICZM governance for supporting the development of integrated policies for the coastal and marine realms.

The review of scientific studies is a good way to start the analyses of scientific and policy gaps for ICZM implementation. Additionally, it provides a baseline inventory of research institutions, science capacity in ICZM work, related projects and scientific literature. The work conducted by the partner UNIGE (Univ.

of Geneva) over different web-based bibliographic engines, found out that the total number of publications and research citations on ICZM have increased exponentially over the last 20 years, with more than 511 references published between 1984 and 2010.

A review of science capacity on ICZM in the Mediterranean and the Black Sea was made through a questionnaire study sent to individual experts working in the riparian countries. The analysis of the returned questionnaires indicated that the specializations of the respondents fell mostly in natural sciences and technical fields. This biased sample of experts placed less importance to the socio-economic and political sciences for ICZM compared to natural sciences.

However, the respondents reflected that the main challenges for successful ICZM were the low levels of effective involvement of the stakeholders and interdisciplinary approaches.

The stocktake study reviewed also the major recent and ongoing coastal and marine research projects and their main outputs. The compiled projects reflected the diversity of the ecological, economic and social characteristics of the Mediterranean and Black Sea coastal areas.

Analysis of the ICZM good practices around the world and the lessons learned can be useful for the Mediterranean and the Black Sea context. A chapter of the scientific stocktake report presents the findings along these lines of a recent report prepared by IFREMER for PAP/RAC.

Creation of an ICZM professional network by using the available web opportunities such as LinkedIn and the Pegasowiki platform is also explored.

The scientific ICZM stocktake report will be made available to interested parties through the Pegaso web portal.

Pegaso CASES

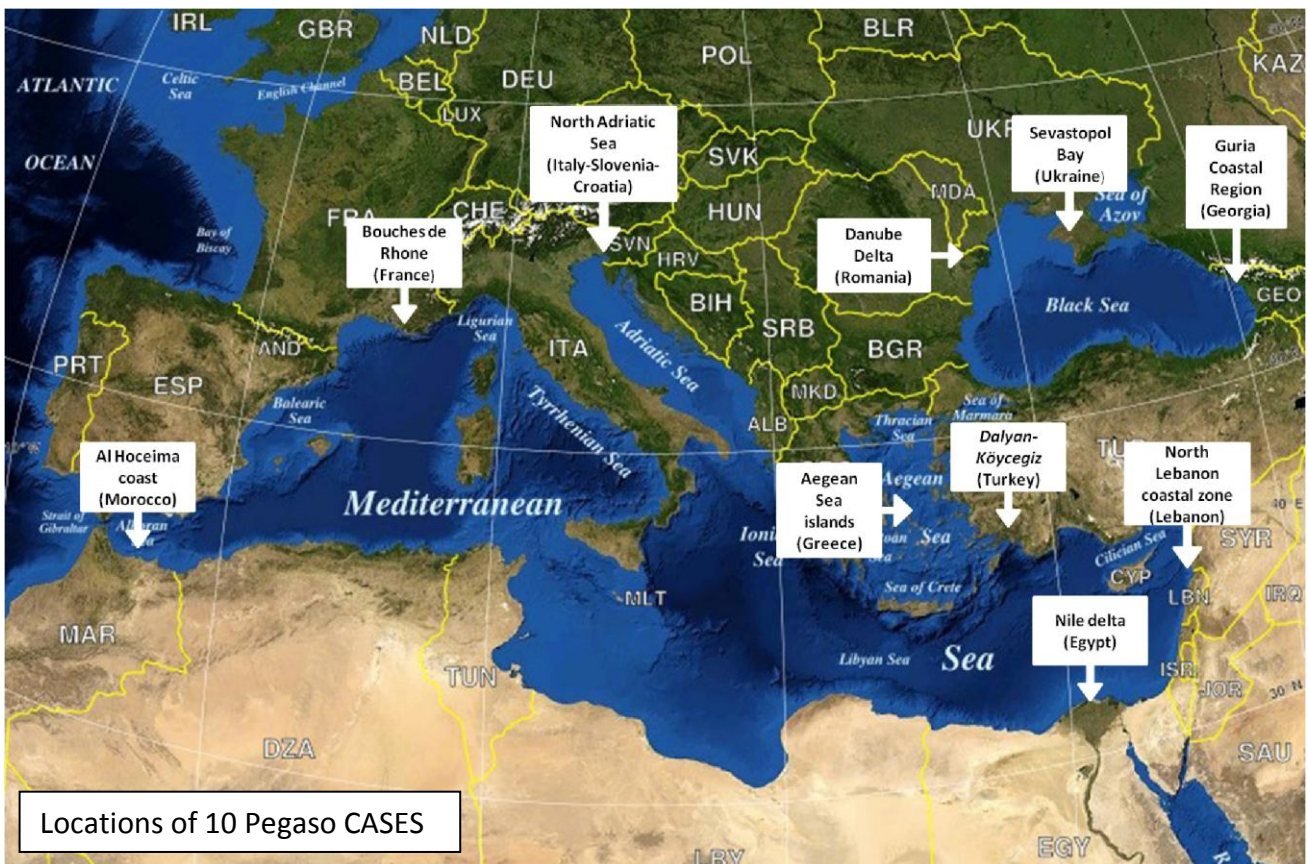
There are 10 Collaborative Application SitES (CASES) that are being studied in the scope of the Pegaso project. These sites, which are at different stages of ICZM implementation, represent a diverse cross-picture of coastal settings, key pressures, sizes and geographic locations. Seven of the CASES are located in the Mediterranean Basin (Al Hoceima coast, Bouches du Rhône, North Adriatic, Aegean Island, Köycegiz-Dalyan SPA, North Lebanon and Nile Delta) while the remaining 3 are located in the Black Sea countries (Danube Delta, Sevastopol Bay and Guria coastal region).

The aim of the CASES is to demonstrate the application of tools, developed during the project, at different spatial scales as well as to contribute to the Regional Assessment at the scale of Mediterranean and Black Sea basins.

All CASES have already identified their main coastal issues, stakeholders and objectives to focus on and developed their work plan. During 4th - 11th April 2011, partners from CASES participated at the Pegaso Virtual Meeting and discussed how to carry out assessments within different local situations and provide useful end-products for future ICZM implementation. Participants stressed the need for sharing experiences among CASES for raising awareness of stakeholders about coastal issues and the specific (localized) approaches to address these.

Danube Delta CASE

The Romanian Black Sea coast stretches out for 244 km, depicting significant spatial differences among the Northern and the Southern parts. Along the Northern coast (Musura Bay to Cape Midia, 165 km), including the Danube Delta Biosphere reserve,



the anthropogenic impacts are relatively minor whereas along the southern coast (Cape Midia to Vama Veche, 100 km), there are major harbour facilities, industrial and tourism developments.

The delta experiences continuous natural changes and has been confronted with the impacts of climate change over the last years. Despite all these disturbances, biodiversity is still rich on the wetland habitats and several sites are designated as areas of environmental conservation.



Beach



Wetland, pollution, eutrophication

As a unique natural area in Europe, the Danube Delta is also home to 15,000 people representing at least 14 different ethnic groups. Since the collapse of the socialist regime and subsequent closing of local factories, there has been constant population

decline and gradual disintegration of the formerly urban structure. Numerous small settlements are spread out along the coast and wetlands, local communities being engaged in occupations such as fishing, aquaculture, agriculture, handcrafting and river shipping.



Sports fishing

The challenge for policymakers is to figure out how to generate economic benefits and improve living conditions of local communities in a very dynamic environment while preserving the wetland biodiversity and coastal resources. To this effect, the coastal sites that will be the focus of the Pegaso project are Sulina and Saint Georges areas. These sites are currently faced with a number of pressures and crucial issues:

- a) **Water pollution due to wastewater** discharges into the streams, rivers and coastal waters
- b) **Vulnerability** of the fragile ecosystems
- c) **Inappropriate farming practices** producing runoff and leaching of pesticides and fertilizers as well as soil and wetland salinization
- d) **Coastal erosion**, especially along the Sulina branch (north) and the Sahalin spit (south)

More specific issues are:

- a. Difficulty of public access to villages and cities, the need for replacements of old and deteriorated infrastructure.
- b. Decline of tourist numbers despite the development of new eco tourism facilities, small privately owned farms and hostels.
- c. Lack of basic educational, cultural and health related infrastructure.



New building areas.

In the scope of the Pegaso project, Danube Delta National Institute (DDNI) will contribute to coastal management efforts through the following undertakings:

- Baseline studies on physical features, current and future uses, development potentials, socioeconomic characteristics and stakeholders,

- Development and testing of new methodologies and tools for stakeholder participation and effective ecosystem-based management,
- Development of a new GIS database on resources, current uses and pressures, and management options,
- Evaluation of the entire area (coastal and marine) for present and future uses, pollution sources and water quality issues,
- Recommendations for addressing potential use conflicts.

The Danube Delta CASE, which aims to assess the opportunities versus the vulnerabilities and risks associated with long-term development of the delta's coastal and marine zone, is an exercise on ICZM. Coastal management has been a subject of interest in Romania since 2002, when the new national legislation was enacted, forming the basis for ICZM and the institutional framework.

A report on sustainable use and development of the Danube Delta will be compiled with wide spread participation, support and cooperation of the key stakeholders. With the aim of improving the overall features of wetlands, beaches, traditional settlements and urban centres, an integrated spatial plan will be prepared in collaboration with local communities.

If you wish to receive further information about the project please contact Prof Françoise Breton at:

Francoise.Breton@uab.cat