Project co-financed by the European Regional Development Fund

Deliverable 5.3.1

Transferability plan at Mediterranean scale

Activity 5.3

Transferring tested processes, techniques, models, tools, methods and services

WP5- PAP/RAC

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The authors are grateful to all Co-Evolve partners who produced deliverables on which this report is largely based, and particularly to REMTH for their direct support in finalising this document.

List of abbreviations

ETIS:	*European Tourism Indicator System*
EU:	*European Union*
ICZM:	*Integrated Coastal Zone Management*
GDP:	*Gross Domestic Product*
MC4BG:	*Med Coasts for Blue Growth*
MSP:	*Marine Spatial Planning*
NGO:	*Non-governmental organization*
NZEB:	*Net Zero Energy Building*
TCCA:	*Tourism Carrying Capacity Assessment*

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Background

CO-EVOLVE is an Interreg MED modular project co-financed by the European Regional Development Fund, which lasted from January 2017 to October 2019. It aimed at analyzing and promoting the co-evolution of human activities and natural systems in touristic coastal areas, allowing sustainable development of touristic activities based on the principles of Integrated Coastal Zone Management (ICZM) and Marine Spatial Planning (MSP).

As all Interreg MED modular projects, CO-EVOLVE was divided in three phases: the studying phase, the testing phase and the transferability phase. During the first phase of the project - the studying phase - an unprecedented analysis at MED scale of threats and enabling factors for sustainable tourism with local studies on representative pilot areas was performed in order to demonstrate, through pilot actions, the feasibility and effectiveness of an ICZM/MSP-based planning process. The coherent and cross-fertilized analysis performed constituted the basis of indications for the testing phase which translated those findings in practice in order to implement pilot actions (plans, concrete actions and measures) in selected coastal zones, creating conditions for sustainable tourism in coastal areas. Finally, the transferring phase, in the framework of which this document has been produced, targets two levels: the pilot/regional scale and the Mediterranean scale. At the local/regional level, the objective is to transfer the results of the analysis and demonstration actions beyond the immediate territorial and administrative limits of the pilot area. At the Mediterranean level, the objective is to transfer the CO-EVOLVE major findings, conclusions and outputs to relevant authorities of each Mediterranean country.

It should be noted that the purpose of this document is not to present in detail the results of CO-EVOLVE, be it research or pilot area experiments, but to give an overall overview of what has been achieved. The individual reports are available on the CO-EVOLVE website https://co-evolve.interreg-med.eu/ and the direct references of the reports mentioned in this document are listed in the bibliography.

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Chapter 1: Results from the studying phase

The coastal areas are very coveted spaces, which are also fragile and have limitations. The concentration and competition of human activities have led to degradation of coastal ecosystems. The challenge of sustainable development in these areas is to preserve outstanding natural spaces without hindering the development of human activities. Tourism is one of the major economic activities in the coastal zones of the Mediterranean region. In 2014, it accounted for 11.3 percent of Gross Domestic Product (GDP) and 11.5 percent of employment, with expected significant growth to 2025 including a 0.6 percent increase in total contribution to GDP[1]. As such, this activity has a crucial role to play in the development of the region. Though, the continuous growth of tourism in the Mediterranean coastal areas exerts pressures on environmental and cultural resources of the coastal zones, and affects negatively social and cultural patterns of tourist destinations.

The approach of Integrated Coastal Zone Management (ICZM) is perceived by the European Union (EU) and numerous international organizations as the most appropriate approach for the development and the management of coastal zones. ICZM is defined as “a dynamic process for the sustainable management and use of coastal zones, taking into account at the same time the fragility of coastal ecosystems and landscapes, the diversity of activities and uses, their interactions, the maritime orientation of certain activities and uses and their impact on both the marine and land parts”[2]. It is complemented on the sea side with MSP principles. MSP aims at “analyzing and allocating the spatial and temporal distribution of human activities in marine areas to achieve objectives usually specified through a political process”[3]. In order to better understand which are the threats that tourism poses to the coastal zones, but also which are the most relevant enabling factors for its sustainability, an analysis has been performed, and its results are summarized below.

[1] Plan Bleu, 2016. Tourism and Sustainability in the Mediterranean: Key Facts and Trends.
[2] UNEP/MAP/PAP/RAC, 2008, ICZM Protocol
[3] Ehler, C. and Douvere, F. 2009. Marine Spatial Planning: a step-by-step approach toward ecosystem-based management, Intergovernmental Oceanographic Commission and Man and the Biosphere Programme. IOC Manual and Guides no. 53, ICAM Dossier no. 6. Paris: UNESCO.

1.1. Threats and enabling factors for tourism sustainability

A complete and integrated analysis of the principal threats and enabling factors for a sustainable and ecosystem-based coastal tourism development, allowing a positive co-evolution of human activities and natural systems was performed. This analysis includes compiling and organizing information and data at the Mediterranean and pilot area scales. It represents the necessary knowledge base to address policies at the Mediterranean scale and to develop sound and sustainable action plans.

1.1.1. Tourist fluxes and carrying capacity[4]

Massive tourist fluxes can alter and compromise tourism destinations causing several potential direct and indirect impacts, strictly linked to the increasing need of local resources and space, and to the over-production of waste/pollution. Diversification of the tourist offer, de-seasonalization and distribution of the flows to wider areas are all key actions to reduce the pressure from tourist fluxes. As illustrated in figure 1, it appears that the Mediterranean coastline presents substantially differentiated numbers of average annual overnight stays, which justifies acts of different magnitude and scope.

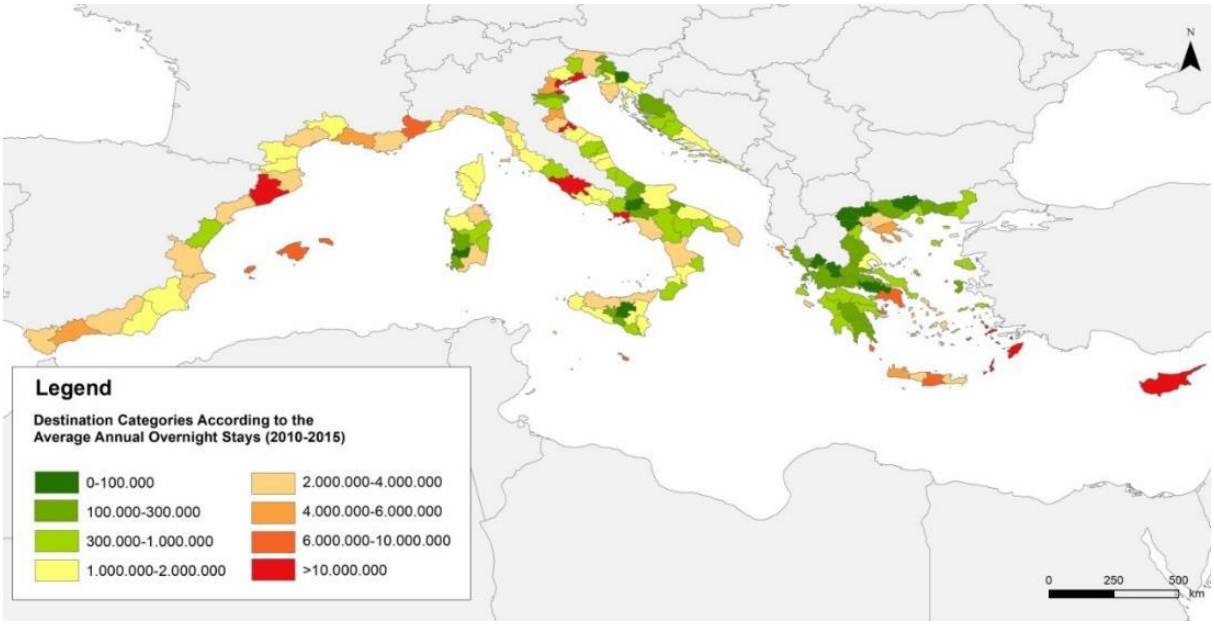


Figure 1: Destination categories according to the Average Annual Overnight Stays (2010-2015)
(from Coccossis, H. and Koutsopoulou, A., 2017(b))

[4] CO-EVOLVE project: Coccossis H. and Koutsopoulou A., 2017(a); Coccossis H. and Koutsopoulou A., 2017(b)

The Tourism Carrying Capacity Assessment (TCCA) is a valuable decision-making tool for maritime and coastal tourism destinations planning. A system of metrics for a logical assessment of TCCA for maritime and coastal tourism in the Mediterranean was developed in the frame of CO-EVOLVE.

1.1.2. Littoralization and urbanization[5]

Urbanization and especially coastal urbanization or littoralization, namely land occupation by urban land uses and related infrastructure in coastal areas, is a long-standing and intense phenomenon in the Mediterranean region.

Between 1950 and 2010, the Mediterranean urbanisation rate increased from 42.86% to 65.63%, while estimations show that, by 2050, 73.96% of the Mediterranean population will live in urban areas. The population residing in urban areas is shown in Figure 1.

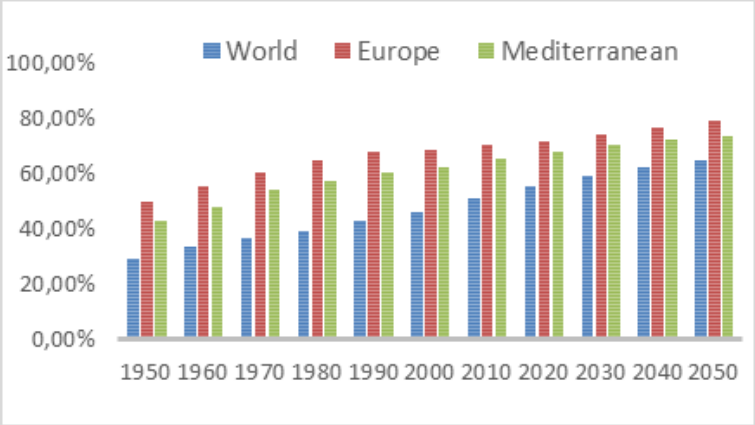


Figure 2: Increase of the population residing in urban areas (%)
(Coccossis H., Stavridou K. and Koutsopoulou A., 2017, based on United Nations Environmental Programme Data Set, 2015)

The population within 100 kilometres of the Mediterranean coast has increased almost 1.5 times in the period from 1975 to 2005 (figure 2). Likewise, the population density at the European coast of the Mediterranean, from 1950 to 2013, is continuously increasing but with a lower growth rate over the years.

If the urbanization rate of European countries is expected to increase by a moderate degree by 2050, the North African countries' rate will grow more rapidly.

Coastal urbanization/littoralization can be considered both as a threat to and a main component of the tourist destinations development. Mature tourist destinations with high tourism dynamism show the highest degree of coastal urbanization/littoralization, while regions characterized by low to medium touristic pressure are still predominantly rural.

[5] CO-EVOLVE project: Coccossis H., Stavridou K. and Koutsopoulou A., 2017.

The ICZM Protocol is the main instrument at the basin scale to address littoralization/urbanization. In its article 8, it requires the Contracting Parties to establish a setback zone where construction is not allowed in the first 100 meters from the shore. At the national level, all Mediterranean countries have developed strategies and plans to manage land use in their coastal areas.

1.1.3. Land-sea interactions [6]

The Mediterranean has long been the focal point of interactions between different coexisting and often conflicting socio-economic activities, such as fisheries and agriculture, energy extraction and exploration, and maritime transport. However, currently the maritime and coastal tourism is the largest sea-related economic activity in the Mediterranean region. Future scenarios indicate that in 2030 the Southern and Mediterranean Europe will receive 103 arrivals per 100 inhabitants. The forecast for energy extraction and exploration is for an increased exploitation of offshore oil and gas deposits, while for maritime transport a 4% annual growth rate in global trade over the next decade can be anticipated.

Similarly, fish aquaculture production in the Mediterranean countries of the EU is expected to increase by 112% between 2010 and 2030 (Piante & Ody, 2015[7]). Impacts from other activities on tourism include, for instance, negative interactions with marine aquaculture (conflicts over the use of space and local degradation of ecosystems), the density and negative influence of ports infrastructures, and negative interactions with off-shore oil and gas infrastructures.

1.1.4. Coastal erosion and protection measures [8]

Many important tourist destinations along the EU Mediterranean coast are exposed to erosion (figure 3).

If over the past decades the broad erosion along the Mediterranean coasts has been basically related to the anthropogenic development, which altered the overall sediment budget and the natural balance of littoral sand nourishment, the future erosion trends will additionally largely depend on the climate change effects (sea-level rise and extreme

[6] CO-EVOLVE project: Coccossis H. and Koutsopoulou A., 2017(d)

[7] CO-EVOLVE project: Piante C., Ody D., 2015. Blue Growth in the Mediterranean Sea: the Challenge of Good Environmental Status. MedTrends Project. WWF-France

[8] CO-EVOLVE project: Carniel S., Gaeta M.G. and Bonaldo D., 2017(a); Carniel S., Gaeta M.G. and Bonaldo D., 2017(b); Rizzetto F. and Vacca C., 2017(a).

events). Building coastal defence structures is a concrete way to prevent or reduce erosion at the local level. A significant presence of hard defence structures is observed in several Mediterranean areas characterized by sandy beaches and high urban development. Well-designed defence structures generally reduce the erosion rate of the protected beaches, and are often combined with sand supply, dredging and nourishment in the framework of the ICZM policy development. Although the technique of beach nourishment is nowadays becoming much more adopted in the Mediterranean region, it is often applied as a measure of a remedial rather than preventive strategy. Therefore, an overall long-term planning, coastal management, and regular monitoring of the coastline should be included in the planning of this type of measures as part of the ICZM policy. Figure 3 below, presents the coastal evolution trends and NUTS III overnight stays (average 2010-2015) in the Northern Mediterranean (Drius et al. 2018)

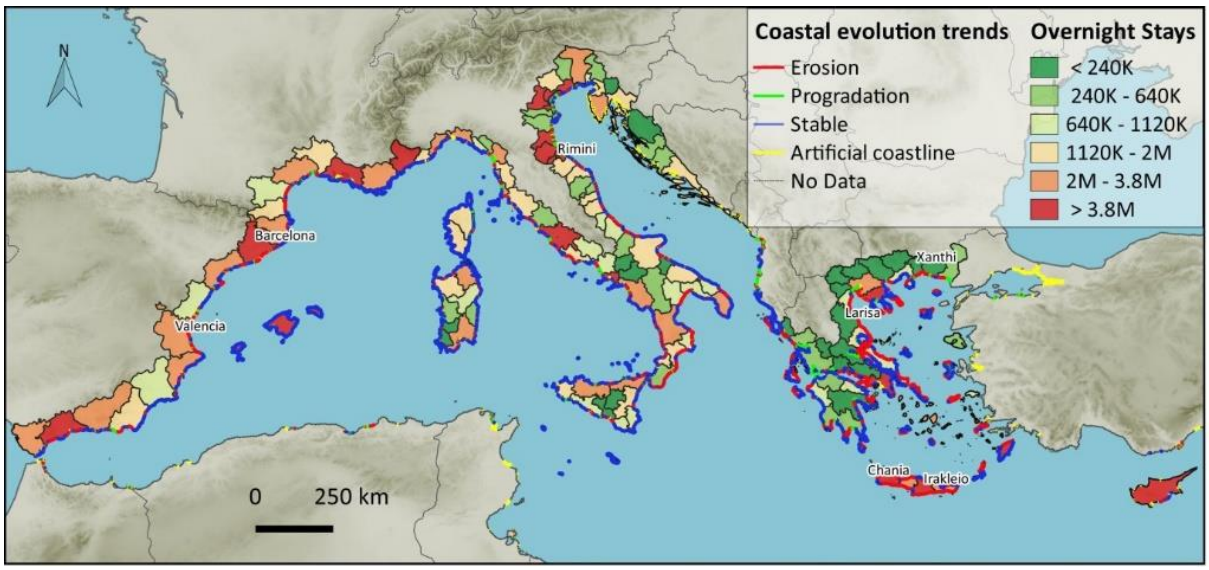


Figure 3: Coastal evolution trends and NUTS III overnight stays (average 2010-2015) in the Northern Mediterranean

(from Drius et al. 2018)

1.1.5. Ecosystem threats and protection [9]

The main threats tourism poses to ecosystems are ecosystem fragmentation and degradation, wildlife disturbance and exploitation, solid waste production, water pollution, air pollution, introduction of alien species, noise pollution and light pollution.

On the other hand, healthy coastal ecosystems provide multiple benefits for coastal tourism. They support recreation, wellbeing, aesthetic experience and intellectual stimulation. These so-called "cultural ecosystem services" rely on other services provided by coastal ecosystems crucial for tourism development such as, for instance, micro-climate regulation and protection against coastal erosion. Considering the importance of ecosystem services for coastal tourism, current regulations, such as the MSP Directive, need to be supported and guided by an ecosystem approach, which takes into adequate consideration also the role of ecosystem services.

Conservation measures are concentrated more in the EU Northern Basin (Corso Ligurian Basin) and in the Central Basin (between Tunisia and Sicily), than in the southern Mediterranean Basin. Figure 4 below presents the degree of urbanization and distribution of Natura 2000 sites in the Northern Mediterranean (Drius et al. 2018)

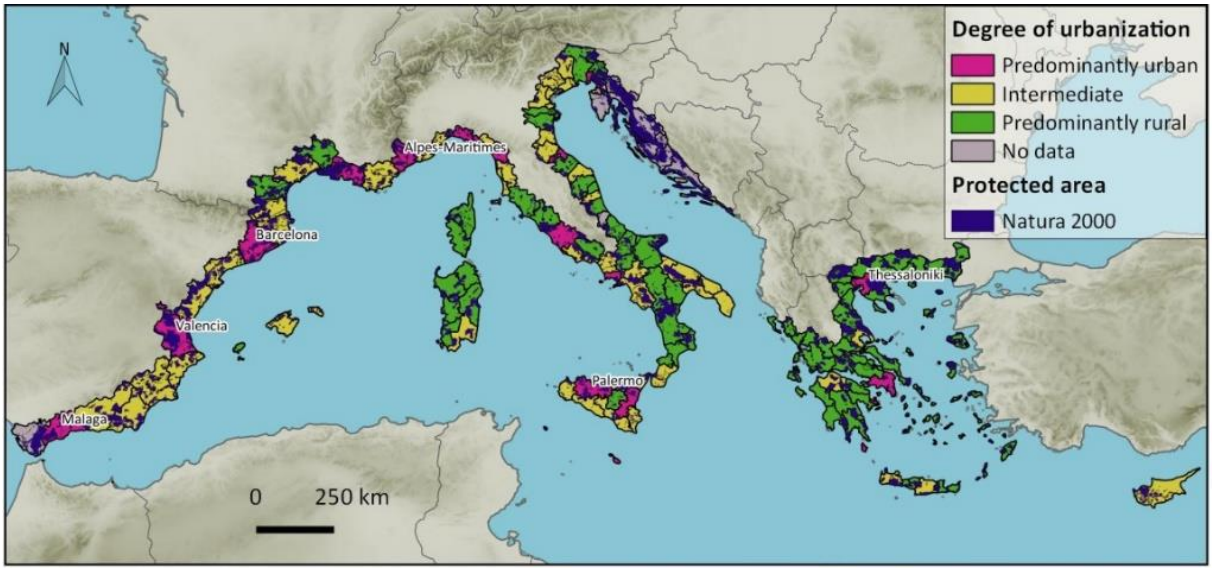


Figure 4: Degree of urbanization and distribution of Natura 2000 sites in the Northern Mediterranean
(from Drius et al. 2018)

[9] CO-EVOLVE project: Drius M., Bongiorni L. and Pugnetti A., 2017 (a); Drius M., Bongiorni L. and Pugnetti A., 2017(b); Drius M., Campanaro A., Bongiorni L. and Pugnetti A., 2017

1.1.6. Water management [10]

Most of the impacts of tourism on water resources are linked to seasonality, with peak demand coinciding with the dry season (summer). Spatial concentration along the coast, at locations with scarce local water resources (islands) and often in fragile natural environments, is particularly problematic (figure 5). There are numerous conflicts among uses (drinking water, agriculture, industry, ecosystems).

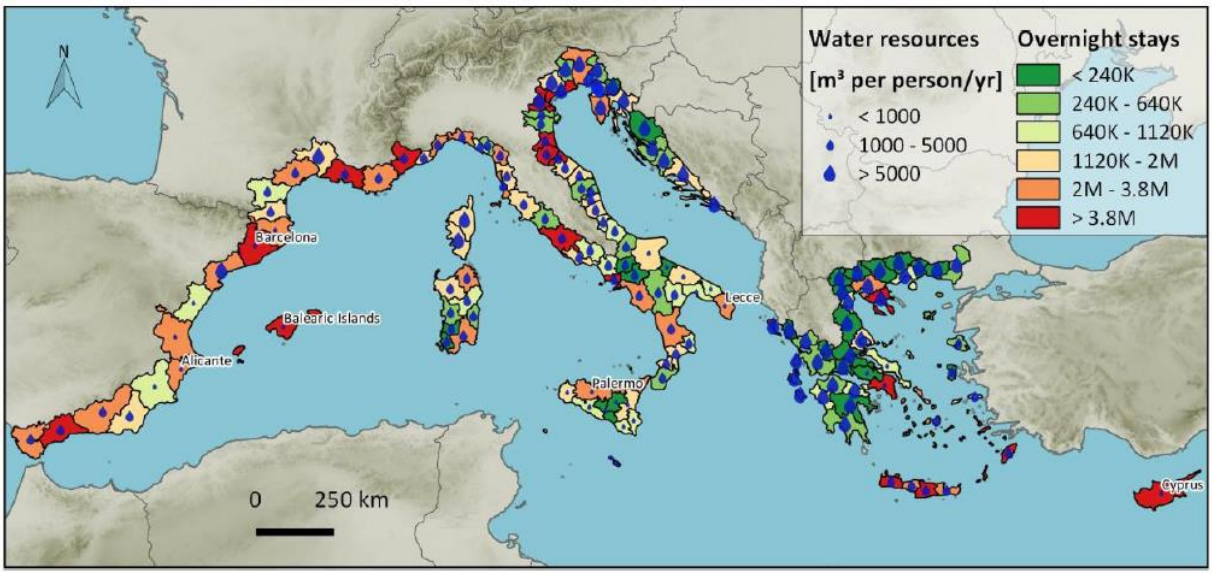


Figure 5 : Availability of water resources and high tourist pressure (from Drius et al. 2018)

In the southern countries, as well as in Turkey, where water demand is still increasing and the resources are most threatened by climate change, the supply-side policy, mainly for development purposes, is still predominant. Overexploitation of groundwater is still unequally mastered. One of the main objectives of water policies is to prevent the consequences of drought and the risk of water shortage, as well as the current and future "water crises" caused by climate change.

[10] CO-EVOLVE project: Kennou H., Miquel S., Burak S., Margat J., and Dubreuil C., 2017

1.1.7. Transport and accessibility [11]

Transport can be considered as a key factor in the success of sustainable tourism development. Accessibility of a tourist destination in order to attract tourists largely depends on the availability and efficiency of transport needed to travel to that destination (figure 6). On the other hand, poor accessibility to destinations can discourage visitors from attempting to reach these places altogether.

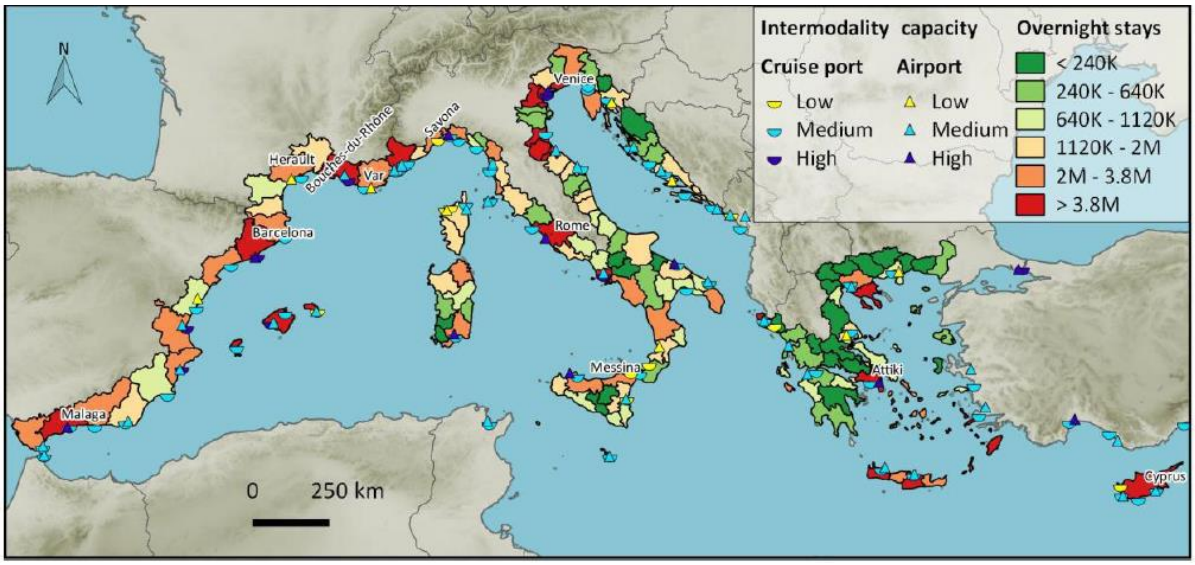


Figure 6 : Intermodality capacity for cruise ports and airports is higher in Western Mediterranean than in Eastern Mediterranean, consistently with tourism fluxes (from Drius et al. 2018).

1.1.8. Interaction among threats and enabling factors [12]

All threats and enabling factors are expected to increase in the near future, although at different speed and intensity, with the exception of "pollution and other anthropogenic pressures affecting ecosystems" which should stay constant, owing to the good environmental policies and practices. In general, the intensity of the interactions between threats and enabling factors is increasing, with the three main drivers being: i) the morphological instability of coastal areas, also due to climate change; ii) the increase of tourist fluxes; iii) the protection measures to put in place on the coasts and ecosystems in order to respond to threats and allow for sustainable tourism development. The expected increase of other uses of the coast and the sea within a general expansion of sea economy and their coexistence with tourism will be another major issue.

[11] CO-EVOLVE project: Sakib N., Musco F., and Gissi E., 2017. State of the art and future development of Transport and Accessibility at Mediterranean Scale.

[12] CO-EVOLVE project: Drius M., V. Evers, S. Bellacicco, L. Petrić, M. Prem, A. Barbanti, 2018.

This analysis, although simplified, clearly shows the importance of a multidisciplinary, integrated and long-term view and effort on policy and governance.

1.1.9. Governance for a better sustainability of tourism[13]

Even though they cannot be considered as "silver bullets", the ICZM Protocol and MSP principles can be considered as major tools for the improvement of sustainability of tourism since they address all the crucial issues the Mediterranean basin is facing. Considering tourism through their prism can also help adopt a holistic approach which is essential in order to balance the uses of the coastal zone, as well as to reduce the conflicts among them. Five main cross-cutting obstacles to sustainable tourism can be identified when adopting this holistic perspective.

- Obstacle 1: Countries' excessive orientation to and over-dependence on tourism as an economic activity;
- Obstacle 2: Misbalance between destinations' carrying capacities and demand volume;
- Obstacle 3: Seasonal concentration of demand;
- Obstacle 4: Over-use and pollution of (natural and cultural) resources by tourism industry;
- Obstacle 5: Illegal activities by tourism industry.

The ICZM Protocol, as a legally binding instrument, complemented by the MSP principles on the marine part of the coastal zone, provides a legal basis for getting over these obstacles, and may act as a key enabling factor for co-evolution of the tourist areas of the Mediterranean region. Its implementation through the national laws, as well as through local practices, should enable the coastal destinations to keep or turn their coastal zones into healthy, attractive, economically balanced and diverse ones, which is the basis for developing sustainable tourism. Besides, it enables dealing with the emerging coastal environmental challenges, such as the climate change.

[13] CO-EVOLVE project: Evers V., Petric L. and Prem M., 2017.

1.2. CO-EVOLVE's planning methodology[14]

The guidelines produced in the framework of the project offer a step-by-step methodology to construct a tourism-driven strategic plan for sustainable development of coastal areas. They integrate the main principles and goals of ICZM and of sustainable tourism. The proposed planning methodology is organized in different consequential steps that constitute an adaptive and cyclical process. It consists of 6 major phases (figure 7), each of which includes key tasks and steps. The iterative process of tourism-driven strategic planning in coastal areas is reported in the figure bellow.

Figure 7: Conceptual framework of the methodology to the tourism-driven strategic plans construction (from Magni et al, 2017)

A short summary of each phase of the process is presented below.

[14] CO-EVOLVE project: Filippo Magni, Federica Appiotti, Denis Maragno, Alberto Innocenti, Vittore Negretto, Francesco Musco, 2017.

STEP 0 - PLANNING SET-UP: The main aim of this step, that can be considered the most important pre-planning phase, is to create the needed basis for the subsequent implementation of the whole planning process. In this phase, one will answer to the **questions** why (why do we need this strategy), who (identification of the stakeholders and of the team which will develop the plan), when (timing definition, identification of the milestones), where (territorial boundaries)**,** and how (which are going to be the costs).

STEP 1 - BUILDING KNOWLEDGE FRAMEWORK: The overall aim is to analyze the area, in a coherent and integrated way, in order to build up the knowledge to support the decision-making process provided in steps 2 and 3, in which the vision and objectives are defined and the strategy is constructed. This step is organized in 3 main tasks. The first task aims to collect information about the existing area status in relation to sustainable tourism development. The information that should be collected and subsequently analyzed includes: (i) threats and enabling factors that affect the co-evolution of the area's tourism development, (ii) area's sustainability status; (iii) existing policies and plans. The second task aims at analyzing data collected in order to obtain a knowledge framework useful to define planning priorities and subsequent goals and objectives. The analysis must be strongly focused on the main planning goal. Finally, the third task's purpose is to organize the results obtained from the previous phases to facilitate the subsequent steps execution. At the end of this phase, a final summary of the existing conditions of the area should be produced focusing on the agreed points.

STEP 2 - DEFINING GOALS, VISION AND OBJECTIVES: The starting point to create an effective strategy for sustainable tourism development in coastal areas is to set the main direction to which we want to move: the vision and its related objectives. The vision for the area and the identification of strategic specific objectives must be defined, on one hand addressing the strategic issues that emerged from the analytical phase, and, on the other hand ensuring the coherence and compliance with ICZM and sustainable tourism principles and main goals. Therefore, the step should be subdivided in 3 main tasks: the first one will consist in designing a common and integrated vision for the area; the second one will be to identify the main planning goals and objectives; and the last will be to link objectives with ICZM and sustainable tourism goals.

STEP 3 - TOURISM-DRIVEN STRATEGIC PLANNING CONSTRUCTION: The aim of this step is to develop longer-term elements for a sustainable tourism-driven development of the area starting from the vision and objectives identified. The tourism-driven strategy identifies a

feasible “trajectory” of change based on the approved objectives and consisting of concrete actions reported in a comprehensive action plan for its implementation. Therefore, the tourism-driven strategic plan is an integrated set of desired and integrated outcomes in which the actions for their realization are explained through an action plan. The action plan will consist of a series of management actions aimed at achieving one or more identified objectives.

STEP 4 - IMPLEMENTING THE PLAN: The purpose of this phase is to apply the strategic approach to priority issues, i.e. on a smaller, more practical scale. Design and implementation of strategic action plans depends on the strategic priorities identified within the second step. As it identifies the key undertakings in consultation with stakeholders while focusing on resources and partnerships, the implementation of strategic actions plans remains fully congruent with the CO-EVOLVE project approach.

STEP 5 - REVIEWING THE PLAN: The revision step is one of the most critical planning steps, and is an activity designed to provide constant feedbacks on the progress of the planning process and on the status and efficiency of its implementation. The revision step includes a phase of monitoring and a phase of evaluation. The aspect of tourism sustainability can be monitored using the “Sustainability toolkit” presented bellow, and the indicators selected for the specific area in the building framework step (step1). The use of indicators will show the trends of change after the actions’ implementation.

The importance of stakeholder involvement

It is important to stress that the development of the plan should be done in a participatory way. The participatory process shall start from the very beginning of the process (STEP 0), starting from concept development through implementation to monitoring and evaluation of results. Early stakeholder engagement in decision-making has been frequently cited as essential if participatory processes are to lead to high-quality and long-lasting decisions.

In order to be efficient, the stakeholders involved should include not only the actors likely to have an impact on the project, but also the people who will be affected by the project. Categories of stakeholders usually considered as relevant in tourism context include government, residents, local business, visitors, tourism employees, academics, and civil society. The participatory process is complex and can be problematic, as there has to be collaboration among stakeholders holding different opinions on the same subject. For example, investors and hotel managers rarely share the point of view of NGOs.

1.3. CO-EVOLVE's tourism typology and indicators[15]

Tourism typology

The use of a common typology in tourism development substantially contributes to the identification of goals and objectives, the highlighting of trends, problems, conflicts and opportunities for development, the improvement of the decision-making process and the production of alternative scenarios for each type of destination. In CO-EVOLVE, the typology developed is based on two variables that form the basis for the classification. One refers to the average share of overnight stays at each destination against the total overnight stays in the Mediterranean destinations, and the other refers to the average annual growth of overnight stays at each destination.

The use of the two variables led to 6 main destination types that provide useful insights about the state and potential of the tourism sector in the Mediterranean regions (figures 8 and 9).

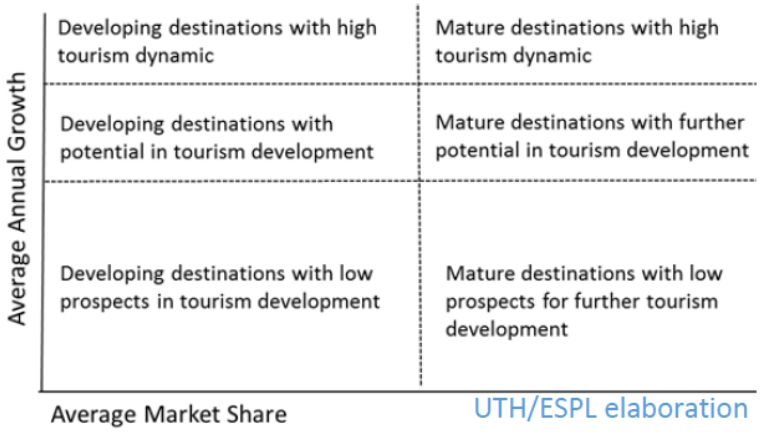


Figure 8: State and potential of the tourism sector in the Mediterranean regions (1) (Coccossis H. and Koutsopoulou A., 2017(e))

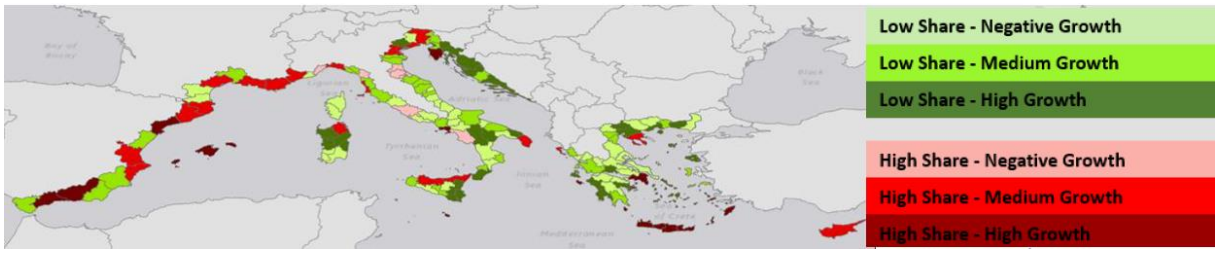


Figure 9: State and potential of the tourism sector in the Mediterranean regions (2) (Coccossis H. and Koutsopoulou A., 2017(e))

[15] CO-EVOLVE project: Coccossis H. and Koutsopoulou A., 2017(e); Coccossis H. and Koutsopoulou A., 2017(f).

Building upon the typology, the conceptual model of indicators developed in CO-EVOLVE represents an extended and flexible tourism sustainability toolkit that can be customized according to the specific needs and characteristics of the highly diversified Mediterranean coastal destinations.

The toolkit (figure 10) constitutes a three-tier system composed by the following sets of indicators:

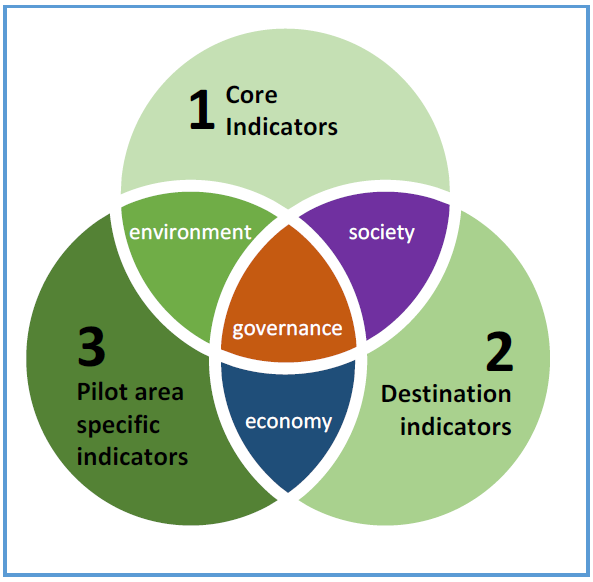


Figure 10: CO-EVOLVE toolkit (Coccossis H. and Koutsopoulou A., 2017(e))

Core indicators: 40 indicators have been selected from the European Tourism Indicator System (ETIS) to serve as the basis for comparison of the level and trends of sustainable development for all types of destinations .

Destination indicators: An extensive set of indicators developed to address the specific issues of coastal areas according to the characteristics and particularities of the predominant type of tourism activity in each type of destination (beach/maritime tourism, urban/cultural tourism, cruising, recreational boating, nature/ecotourism).

Pilot area-specific indicators: A set of indicators developed on the basis of area-specific critical issues with linkages to the main threats, enabling factors and governance issues identified in the Mediterranean coastal areas.

The starting point for adapting the Toolkit to each destination is a list of priority indicators selected from the Toolkit which regard to the most common critical issues and specificities encountered in the Mediterranean coastal tourism destinations. The list is meant to act as a baseline for comparisons among coastal tourism destinations in the Mediterranean.

The use of the Toolkit provides hints for improving the existing - or shifting towards alterative - tourism models, it highlights existing data gaps and provides guidelines towards relative measurements. It can also be used as a starting basis to measure and quantify stakeholders' perceptions, define thresholds through public consultation processes, develop probability

scenarios to adjust future planning actions and policies, and to monitor changes in sustainability in the future.

Chapter 2 – Results of pilot experiences

The CO-EVOLVE project has 7 pilot areas spread across 5 countries of the North Mediterranean Basin (figure 11). In some cases, pilot areas are made of two sub-areas.

Figure 11 : CO-EVOLVE pilot areas (RER power point presentation)

Pilot area coordinators are presented below (table 1) together with their corresponding output (according to the application form):

Pilot area coordinator	Output as presented in the application form
1 – Region of East Macedonia and Thrace (REMTH) – Greece	1.a and 1.b: realization of two MSP-ICZM action plans focused on achieving sustainable tourism based on the preparation of financing scheme for selected actions according to the existing planning instruments
2 - Emilia Romagna Region (Regione di Emilia Romagna - RER) – Italy	2. a: realization of an action plan for the re-launching of the port area based on improvement of navigation safety, sustainability and waste management. Installation of a jet-suction ejector system for the sea bed sustainable maintenance; 2. b - restoration of the beach-dune system and catwalk installation.
3 - Po Delta Park Veneto Region Authority (Veneto) – Italy	3. a: formulation of guidelines for the sustainable accommodations in natural areas camping villages with the realization of a NZEB (Net Zero Energy Building) prototype bungalow as demonstrator. 3.b: creation of an Environmental Observatory and a planning centre for sustainable tourism in the natural area, conservation and protection of the environment.
Fundacion Instituto Portuario de Estudios y Cooperacion de la Comunidad Valencia (Valencia) - Spain	4. model to measure economic impact of cruise tourism in local destinations ECO-cruise port/city tool/analysis to reduce environmental impacts from vessel arrivals.
Department of Herault (Herault) – France	5.a: adaptation plan of touristic fluxes in coastal areas subject to climate change effects and 5.b: design of a common integrated vision along with ICZM principles and sustainable tourism goals with a realization of a sediment management plan and a tourists fluxes study.
Public Institution for Coordination and Development of the Split-Dalmatia County (RERA) – Croatia	6. formulation of a local ICZM-MSP plan to promote a sustainable form of tourism-driven development
Dubrovnik-Neretva Regional Development Agency (DUNEA) - Croatia	7. elaboration of the methodology for integral protection of rural landscapes and sustainable development of tourism of the Neretva river delta.

Figure 12 : Pilot area coordinators and corresponding outputs

As already mentioned in the chapter 1.3 (figures 8 and 9), the destinations have been classified based on their average market share and on their average annual growth. Destinations with a low market share are Alexandroupoli/Makri & Thassos/Keramoti, Comacchio, Kaštela Bay and Neretva Delta. Nevertheless, their trends in tourism development are very different. In particular, as depicted in the said classification

Alexandroupoli/ Makri & Thassos/ Keramoti have a negative trend (although the latest figures present a medium positive and high positive trend respectively), Comacchio has a medium positive trend while Kaštela Bay and Neretva Delta have a high positive trend. Destinations with a high market share are Cattolica port and coastal area, Frontignan/Maguelone Lido & Delta Orb river and Valencia. Cattolica has a negative trend, while the other destinations have a medium positive trend.

2.1. Presentation of the baseline situations at pilot sites

Apart from factors like the current tourism capacity and the recent touristic growth, the pilot areas differ in many other aspects, such as physical characteristics, geographic scale, objectives, and involved stakeholders. While **Cattolica**, **Alexandroupoli** and **Valencia** are mainly urban pilot areas, which have to deal more with typical urbanization-related pressures such as littoralization, coastal erosion and land use conflicts, other pilot areas comprise mainly natural habitats such as delta systems (**Neretva**, **Orb, Keramoti** and **Comacchio**) or beaches (**Keramoti** and **Rosolina Mare**) for which a trade-off between environmental protection and touristic development is of outmost importance.

The physical, socio-economic and cultural characteristics of the pilot areas determine their objectives and visions of sustainable coastal tourism development. In **Kaštela Bay**, for instance, the very narrow coastal zone is not conveniently organized to face the sea-level rise and wave strikes, putting at risk its highly valuable cultural heritage. For this reason, great efforts shall be made to adopt adequate coastal protection measures. Pilot areas **Rosolina Mare** and **Polesine Camerini** (picture 1), as most of the north Adriatic Italian littorals, are experiencing high human pressures, mainly due to urbanization, tourism, and industry. Consequently, the natural dynamics of the coastal zones have been seriously modified by the increasing development of urban settlements, infrastructures, and economic activities. These areas are mainly characterized by low sandy beaches commonly affected by significant erosion processes. Urbanization, construction of roads and railways, the building of extensive defence structures, and extraction of sediments from the riverbeds are just some of the most important causes that have resulted in drastic modifications of the littorals, either irreversible or rather difficult to correct.

Picture 1: Existing industrial structure in Polesine - Camerini- Porto Tolle Municipality, a natura 2000 site, which could be turned into an environmental observatory (Po-Delta region presentation at CO-EVOLVE kick-off meeting)

The pilot area comprising the **Orb river delta** is an already established touristic resort, for which a crucial factor to tackle is drought. When the tourism peak coincides with a drought period, natural resources experience great pressure, with consequent problems of salinization of the ground water table and decreasing bathing water quality. **Valencia** faces particular problems linked with cruise tourism, as the cruise traffic has grown by 125% in the number of passengers over the past 10 years. The local population largely criticizes this industry as they estimate the majority of associated revenues are kept within the cruise shipping line and are not beneficiating local communities. Cruisers also have an impact on the environment by polluting the air, producing waste and waste water, but this impact is not measured adequately at the time being. **Alexandroupolis** also faces issues related to tourism, as the town is usually only considered as a transit place and fails to retain tourists for leisure. The municipality wishes to improve the touristic offer by rehabilitating the urban coastal area, expanding the port in order to attract cruise tourism and invest in tourism infrastructure. **Neretva delta** also wishes to attract more tourists, by developing alternative tourist offer which would respect the fragile nature of their coastal zone.

2.2. Analysis of threats and enabling factors at the pilot area level

During this step, the pilot areas performed an in-depth analysis of the existing documents in order to identify the main threats they faced and the enabling factors they could benefit from in order to improve their sustainability.

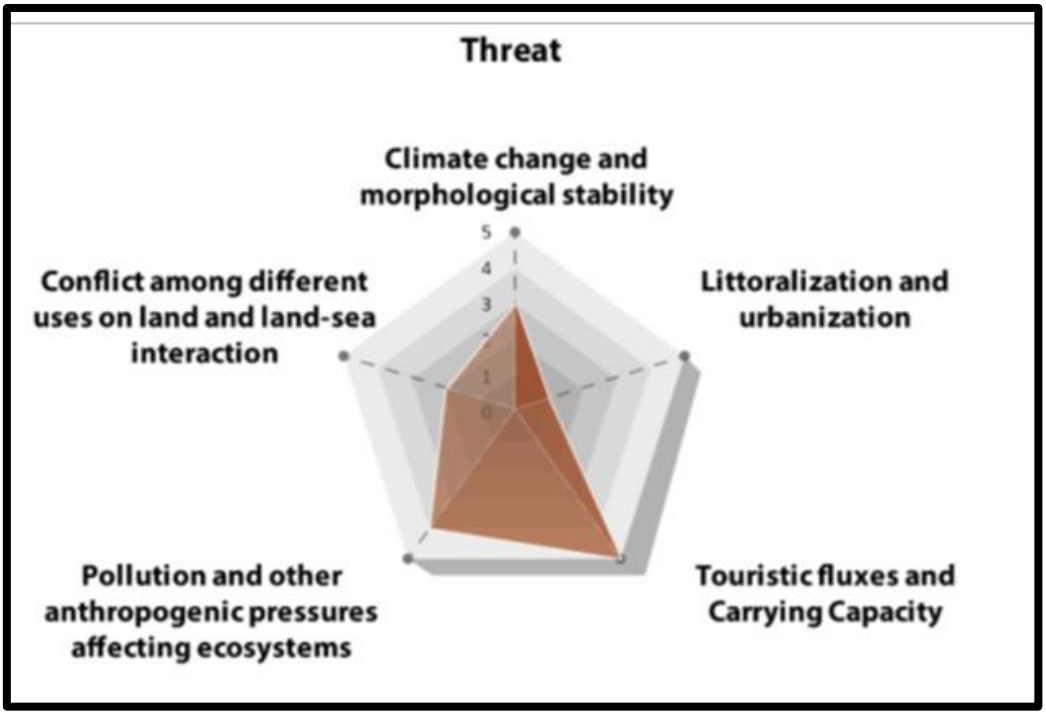


Figure 13: Example of graphical elaboration of pilot area's priorities that emerged from the analysis of threats by Valencia[16]

The threat from **climate change and morphological stability** was acknowledged as the most relevant by the pilot area coordinators, even though much work has been done on local level to establish and improve coastal protection works and strategies. **Governance** received the second highest score, despite being a very difficult issue to quantify. Generally, it was acknowledged that local management plans exist, but most of the times they do not include all aspects of sustainable tourism. Fragmented jurisdictions and lack of common visions are other important issues. The management of the coastal zone is spread over many different entities at local and regional levels.

[16] CO-EVOLVE project: Valencia Port Autority: Transferability plan at the pilot area and regional scale, 2019

Littoralization and urbanization were ranked third. These issues are considered particularly pressing in most of the pilot areas except for Valencia and Keramoti. In fact, most of the pilot areas lack adequate spatial planning, and consequently have or are still suffering from a disorganized coastal urban sprawl and artificialization of the coastal strip. **Biodiversity preservation** is considered as an important issue that has been set as prerequisite for the sustainable development of all activities. Pertinent EU Directives have set the general objectives and the "minima" every country has to achieve in order not to jeopardize sustainable development. Local and regional "management plans" for the effective management of Natura 2000 sites and other protected areas are also required.

Conflicts among different uses and **transport and accessibility** deserved similar attention according to the pilot area coordinators. The conflicts over the use of limited space and/or of the same resources are pressing only for Kaštela Bay, Keramoti and Neretva river delta, three sites whose naturalness level is still high. Their interest in protecting their natural capital might explain their particular concern for competing uses. The enabling factor transport and accessibility was ranked of high relevance by the pilot area coordinators of Valencia and Keramoti. In other pilot areas, the main issue is to attract higher quality tourism, as there are no problems of accessibility. **Respecting carrying capacities** of a destination is generally a crucial issue for the sustainability of Mediterranean coastal tourism. However, only Valencia considered it a priority aspect to address, because this pilot area has to tackle persisting strong seasonality of high touristic fluxes, which make up the 13% of the regional GDP. **Water supply and depuration** were considered the least important issues, except for Orb river delta. This perception might reflect a general lack of awareness with regard to water scarcity (and related water quality) in the Mediterranean Basin. It is important, though, to recall that all the Pilot Areas are located in the Northern Mediterranean countries. It is likely that the prioritization of Threats and Enabling Factors would have been different if countries from the Southern Mediterranean had been part of the assessment.

2.3. Application of CO-EVOLVE sustainability toolkit[17]

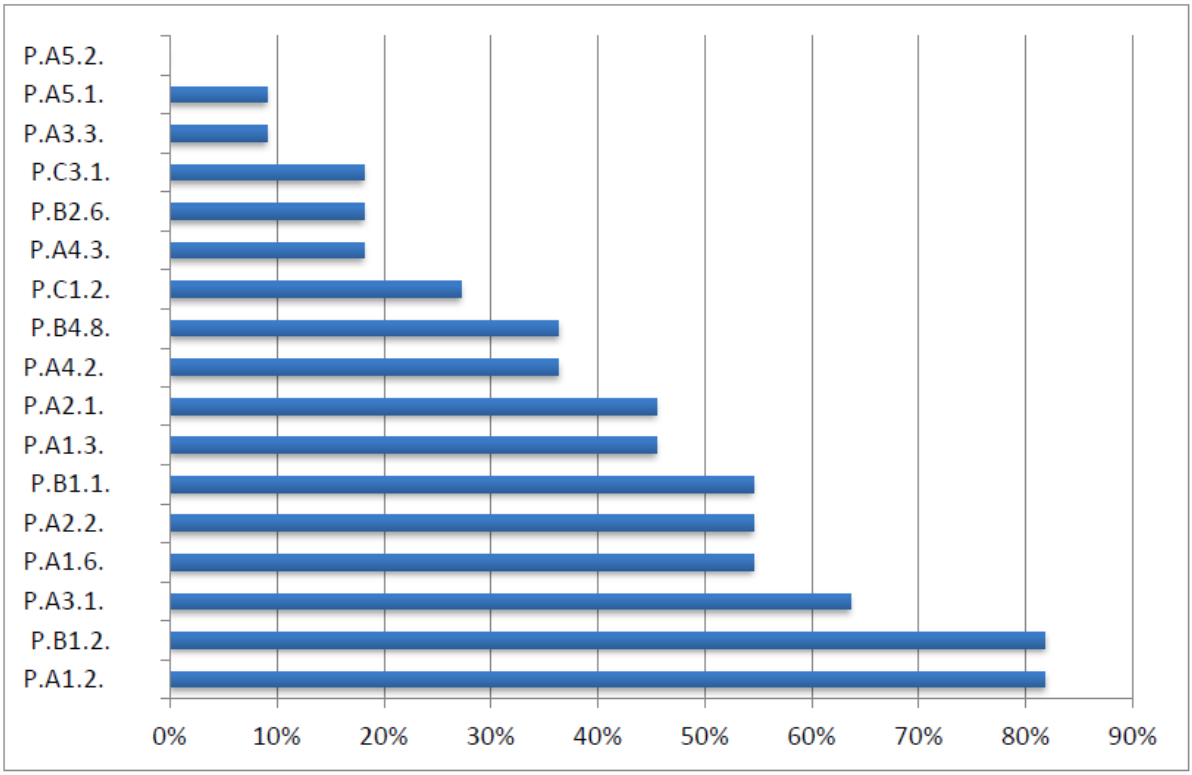
As already described in chapter 1.3, CO-EVOLVE developed a three-tier sustainability toolkit with 3 levels of indicators: core indicators, destination indicators, and pilot-area-specific indicators (see figure 10). Having this 3-level list of sustainability indicators allows comparisons among coastal destinations and is still flexible enough to highlight the different needs and priorities of each coastal area.

At the first level, the pilot area selected core indicators in a list which was common for all the destinations. Core Indicators depicting tourism flows, the contribution to the local economy and spatial concentration are most frequently (above the average) identified to be highly relevant and important to the pilot areas. Environmental issues related to water and especially energy are considered less relevant at the selected destinations.

At the second level, pilot areas defined destination indicators. The first step pilot areas had to achieve in order to do so was to define the nature of tourism in their destination according to the following categories: beach/maritime tourism, urban/cultural tourism, cruising, recreational boating, nature/ecotourism. Those categories could correspond to the current development patterns developed in each pilot area or could also be a projection of the pattern the destination was about to follow. Beach and maritime tourism is the dominant type of tourism developed among the pilot areas, especially in terms of the current development patterns. Ecotourism, followed by cultural tourism, is also among the most commonly selected sets of indicators that are considered of high priority, and in most cases represent the future policy goals in tourism development. Recreational tourism seems mostly a supplementary activity in most pilot areas, whereas cruising is developed only in Valencia.

Finally, partners had to identify pilot-area-specific indicators. Those indicators related to the environmental problems, use, protection and management of the coastal zone are most frequently identified as key indicators for the sustainability of the pilot areas. As shown in Figure 13, several indicators seem to be of key significance for the majority of the pilot areas and are more frequently selected and identified as being of high priority.

[17] CO-EVOLVE project: Coccossis H. and Koutsopoulou A., 2017g



P.A5.2	Energy use by tourism industry as % of total
P.A5.1	Total use of water by tourism sector (tourism as a % of all users)
P.A3.3	Water use (total volume in litters or m^3 consumed and litters per tourist per day)
P.C3.1	Level of tourism sector involvement in public policy (advisory bodies, review panels, etc.)
P.B2.6	Implementation of Natura 2000 management plans
P.A4.3	Percentage of bathing sites with excellent water quality
P.C1.2	% environmental, social, cultural actions recommended in plan which have been implemented
P.B4.8	Volume (m^3) of sediments dredged per year
P.A4.2	Rate of loss of protected areas
P.A2.1	Land occupied by artificial surfaces within the first 500m of coast (in%)
P.A1.3	Coastal area in degraded condition (low/medium/high)
P.B1.1	Existence of a coastal planning management system
P.A2.2	% of area designated for tourism purposes
P.A1.6	Coastal flooding events per year (number)
P.A3.1	Total tourist numbers (mean, monthly, peak) (categorized by their type of activity)
P.B1.2	Length of protected and defended coastline (km)
P.A1.2	% shoreline subjected to erosion

Figure 14 : Highly prioritized pilot area specific indicators (UTH, 2017(g))

Common needs, obstacles and goals among the pilot areas emerge during the prioritization process.

2.4. Stakeholder involvement

Stakeholder involvement helps identify the legitimacy, interest and role of each stakeholder in the strategic planning and management process. It helps ensure the participation and recognize the needs of groups that are most vulnerable. It also provides an insight into the capacity of each stakeholder to engage in the tourism-driven planning process. Determining the significance and legitimate interest of the stakeholders has a great importance for enabling all stakeholders to participate in development decision-making, and for empowering stakeholders to perform their roles and undertake responsibilities for real implementation of the strategic actions

Stakeholder identification

When identifying relevant stakeholders, the pilot area coordinators included people who:
(a) are directly affected by one or more issues;
(b) have an interest in one or more issues;
(c) can influence strategic development (positively or negatively);
(d) have access to, or control of, resources (financial, technical, intellectual) that may be needed to support tourism-driven strategic development.

In the context of CO-EVOLVE project, the stakeholder groups typically included:
- Representatives of regional and local authorities. The presence of the local level is particularly important in the coastal zones, as communities usually have their own needs and identities. Neglecting them has proved to be inappropriate. Recently, a particular attention has been paid to destination-level governance and management which is highly relevant in the coastal context.
- Representatives of the private sector. In the framework of CO-EVOLVE, this category included mainly tourism boards and service providers, but in some cases like in Valencia it also included a number of companies involved in the value chain of the cruise activity.

- Fishermen, who are among the most impacted actors when major changes occur in the coastal zone.

Also relevant where:

- Port authorities: in **Valencia,** where the boundaries of the pilot area corresponds to the port zone, but also in major towns such as **Alexandropoulis** which have a substantial port activity.
- Management bodies of the protected areas: in **Alexandropoulis** (Evros Delta Protected Area), **Keramoti** (Nestos Delta Protected Area), **Neretva Delta** (RAMSAR site) and **Po-Delta** (Natura 2000 site).

Organization of the participatory process

CO-EVOLVE put a special emphasis on the need to involve stakeholders from the very beginning of the process and to make it last up to its completion. Different strategies were used for mobilizing different groups of stakeholders depending on the characteristics of the group, their special interest or stake, and their capacity, as well as on the respective project phase. Strategies for mobilizing and involving stakeholders took the form of:

• Small meetings to share information, identify problems and propose solutions. Those meetings, which were mainly organized during the early phases of the project, were often bilateral, held between pilot area coordinators and relevant institutions. They allowed having a better understanding of the sectoral vision of each of the stakeholders, as well as of their personal expectations from the project;

• Multi-stakeholder meetings which allowed stakeholders to better understand the views of the other sectors and to take their needs and expectations into account;

• Workshops which gave stakeholders and the local population an opportunity to meet the members of the project team and work together on strategic plans. Such workshops were organized by REMTH;

• In three pilot areas (**Herault**, **Cattolica** and **Valencia**) steering committees were set up with the participation of relevant stakeholders. These committees are composed of representatives of the core political stakeholders, of the national government and of higher-level competent local administrations. They are responsible for monitoring, supervising, controlling and reorienting the process. **Valencia** insisted on the major importance the group had when presenting and discussing the views of the institutional representatives on the

objectives, the strategy followed and the results obtained. The steering committees regularly met in order to follow the process step by step.

Picture 2: CO-EVOLVE Steering Committee meeting in Herault (Herault, 2019)

2.5. Proposals of solutions with a replication potential

The solutions proposed by the pilot area coordinators to solve their problems depend largely on the diagnosis which was done at the beginning of the project. By applying the CO-EVOLVE guidelines, the coordinators had the opportunity to carry out a comprehensive evaluation of the state of their coastline in both physical and strategic terms. This helped highlight the individual needs of the pilot areas and prioritize them. In some cases, such as Kaštela Bay or Alexandropoulis/Keramoti, it resulted that there was a need to develop an Integrated Coastal Management Plan. All efforts have therefore converged to participate in producing a guidance document that would contain a vision, as well as general objectives related to which sectors could be strongly considered when developing the said plans.

An example of vision is provided by the pilot area of **Kaštela**: "*The development of the Coastal Plan aims to promote sustainable forms of tourism-driven development with focus on coastal protection measures as a key factor for preserving coastal zone, especially castles, since they are increasingly endangered due to the effects of climate change, particularly rising sea levels and floods"*.

The **Kaštela** Coastal Plan enabled the following:

- Definition of a management mechanism for coastal zones that can ensure the strengthening of coastal resilience to the impacts of climate variability and change and steer development towards sustainability;
- Identification of the most vulnerable areas, taking particularly into account the impacts of climate variability and change;
- Proposal of measures for the adaptation of the coastal zone to the consequences of the climate change; and
- Elaboration of a framework for the development of sectoral policies in harmony with the sustainable development of the coastal area.

In the case of **Alexandropoulis/Keramoti**, the situation was different because there was a lack of data available, and stakeholders were not formally involved in previous activities on the thematic of sustainable management of the climate change impacts in the coastal regions. Therefore, a broader strategic approach was followed, channelling their resources to raising awareness on the need to adopt an integrated approach (i.e. organization of 2 public consultations). Based on the results of the said consultations two action plans with specific technical detailed activities, bankable measures and selected funding schemes were elaborated for both pilot areas.

In other pilot areas, however, it was felt that there were enough strategic documents already adopted, and that it was necessary to focus on more concrete actions. In the cases of **Herault** or **Po delta**, the demand came directly from the stakeholders, who insisted that the actions carried out be palpable and fit into the existing strategic framework of their regions. In the case of **Herault**, it was decided, with the support of the CO-EVOLVE leader, to focus on 3 individual themes of the project and to achieve very concrete activities: erosion management (development of a transferable methodology for calculation of the loss of the coastline), the calculation of the carrying capacity (a study on the use of the Vargas beach), and sustainable mobility (definition of cycling routes). In the **Po delta region**, the decision was taken to establish a planning centre with the purpose to give indications on environmental and tourism themes, as well as on sustainability measures. A part of the CO-EVOLVE budget was dedicated to purchasing

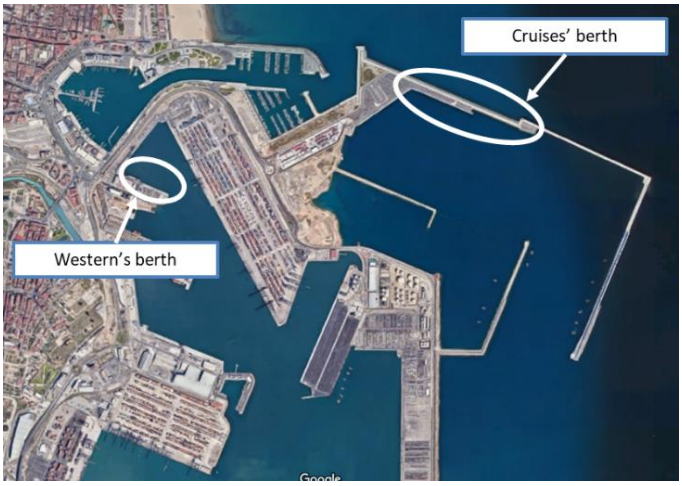
scientific equipment for data collection. Today, this centre enables both to collect data in relation to coastal sustainability and to share them via the Catalogue Portal (http://deltadata.parcodeltapo.org/coevolve/) every citizen has access to. Also, a prototype of ecological movable lodging has been made in the tourism village located in **Rosolina Mare**. By hearing about the construction of this lodging with material respectful of the environment and the ecological functioning of the building, visitors have an opportunity to better understand the challenges the coastal zone is facing, as well as the way to develop it in a sustainable way.

In the pilot area of **Dubrovnik-Neretva**, tourism has not yet developed in accordance with the potential of the area. Nevertheless, the County does not want the activity to develop exclusively on the coastal area which is particularly sensitive, hosting a RAMSAR protected area. This issue was identified with the stakeholders as the priority threat to deal with. Therefore, the County decided to focus on developing tourism inland in rural areas, which will enable the reconstruction of abandoned settlements and the revaluation of the valuable cultural heritage of rural areas. Therefore, they elaborated Guidelines for integral protection of rural landscapes and sustainable tourism development of the Neretva river valley that would include planning and architectural guidelines for construction in traditional rural settlements.

Picture 3: Presentation of DUNEA's CO-EVOLVE results in Kastela (DUNEA, 2019)

Finally, in the case of **Valencia** the diagnostic analysis put in evidence that the main threats were related to cruise tourism (excessive number of tourists in a short period, air

and water pollution, waste, etc.). Therefore, the solution proposed consisted in elaborating an Eco-cruise tool in order to evaluate the socio-economic and environmental impacts of cruise activities within ports and city areas. The tool proposes a three-step approach: 1- Definition of the parameters to measure and how to measure them; 2- Measurement and analysis in order to evaluate the starting point, and 3- Establishment of an action plan including recommendations to minimize its negative impacts. The tool focuses on five aspects related to environmental impact: air emissions, noise, waste, mobility and resource consumption.



Picture 4 : Noise measurement points at Valenciaport Source (Valenciaport Foundation)

Regarding the economic impact, an accounting tool is used which makes it possible to quantify the number of jobs, wage income, surplus and tax burdens generated, the gross value added, as well as the aggregated and disaggregated information on production corresponding to the management of cruise ship activity itself.

2.6. Difficulties encountered

Although the CO-EVOLVE project has brought many benefits to the pilot areas that have implemented it, it is important to mention that some major difficulties were encountered.

Data availability and indicator selection[18]

As shown in Chart 1, only 36% of the required data is available at destination level at present, whereas 35% is not available at all. Moreover, there are major inconsistencies in spatial resolution since 18% of the data is available at different spatial scales (municipality or even NUTS3 unit), of which 7% is built on estimations from proxy or qualitative data. This type of data requires special attention since they may lead to misleading results at destination level. Temporal inconsistencies also pose important barriers in cross-cutting analyses among the pilot areas, since most of the pilot areas refer to different time periods.

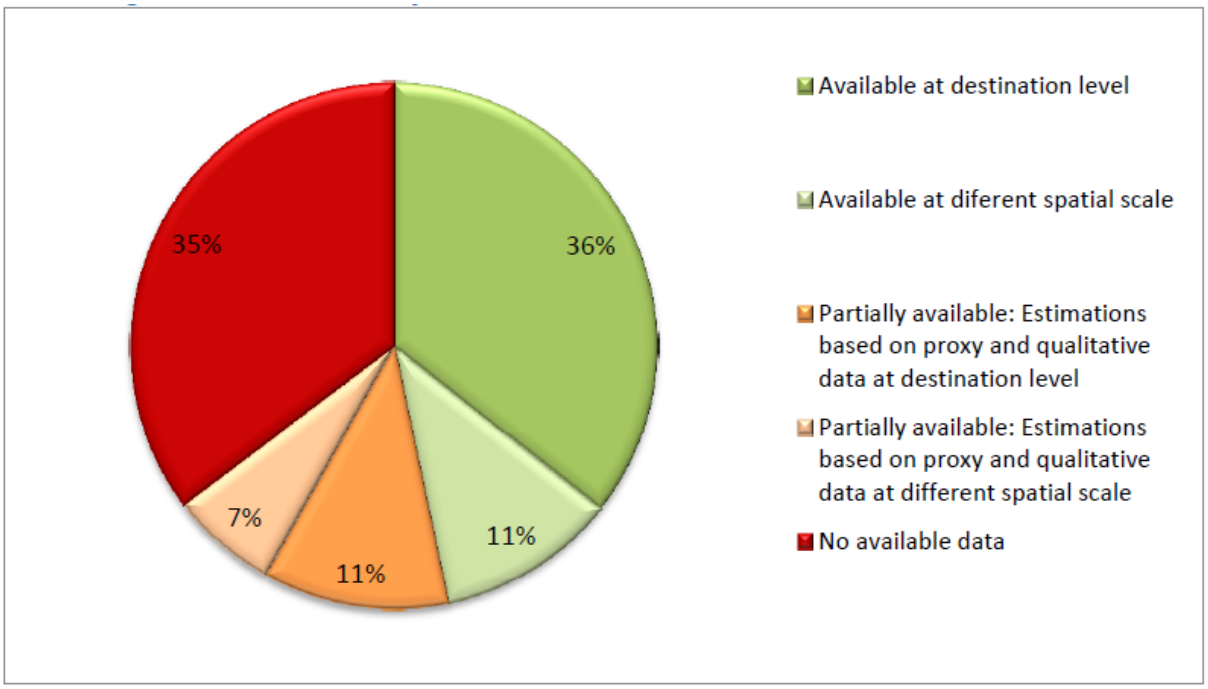


Figure 15: Data Availability overview

The most extensive data gaps are recorded in Neretva river delta where more than 70% of the data is not available (or at least not accessible), followed by Orb delta (43%), Valencia (40%) and the rest of the pilot areas which range between 20% and 30%. The only exception is Kaštela bay where only 6% of the data is currently unavailable. Serious gaps are recorded in Alexandroupoli/Makri and Thassos/Keramoti where most of the data (60% and 43% respectively) are estimations based on proxy or qualitative data with most of it available at different spatial scales. Few of the pilot areas slightly exceed 50% availability at destination

[18] CO-EVOLVE project: Coccossis H. and Koutsopoulou A., 2017g

level with the exception of Kaštela bay where more than 90% of the data is available at destination level. An attempt to outline the thresholds for the sustainability indicators was made through a set of queries including satisfaction levels (in relation to the current value/state for each indicator) and trends evaluation. However, less than 10% of the respective queries were eventually completed due to lack of data and essential information.

Stakeholder's lack of willingness to participate in the project

While most of the coordinators of the pilot areas indicate that stakeholder participation has been very satisfactory, a resistance has been encountered in some cases, which has made their task considerably more difficult.

The pilot areas that have encountered the difficulties are those of Comacchio and Maguelone/Frontignan. In the case of Comacchio, the lack of trust of the local population in political life and the lack of willingness to communicate was such that the coordinator was forced to reallocate the budget to other activities in the area of Cattolica.

Herault mentioned difficulties to establish a new dynamic in a sector for which many actions have been carried out, are planned or already committed. Also, the partner underlined that the local actors in Maguelone/Frontignan had questioned at some point the legitimacy of them directly dealing with spatial planning, as they considered it was the prerogative of the agglomerations and communities of municipalities. This led Herault to restrict its ambitions, as the department is planning to develop a strategy for its coastal zone in a near future, which will mobilize teams well beyond the duration of CO-EVOLVE, with more substantial means - several million €. Also, it was decided not to impose a planning study that might have appeared to be imposed on other public actors, due to lack of consensus and enthusiasm on their part at least.

In both cases, it is important to underline that both pilot area coordinators showed a great flexibility and got the support of the project coordinators. This flexibility allowed them to answer to the real needs of the local actors, instead of forcing the production of a document that would probably never be implemented as it would not have the necessary local support to do so.

The above-mentioned difficulties are presented here as it often reflects the situation in the panorama of OECD members, where stakeholders are often reluctant to undertake a process such as strategic planning and even more to assume the consequences in the phase of implementation.

Chapter 3– Actual replication/transfer at the Mediterranean scale

Transferability at the Mediterranean scale is a crucial component of CO-EVOLVE. Therefore, great effort will be invested in order to carry out this last work package of the project.

3.1. Transfer through meetings

In the countries, partners will arrange further meetings with national or local authorities and other stakeholders from areas facing similar problems in order to enhance the potential of transferring knowledge and experience earned. The objective is to transfer the results of the analyses and actions beyond the immediate territorial and administrative limits of the pilot areas.

At the Mediterranean scale, dissemination of the results has been and will be ensured through several meetings. One of them was PAP/RAC Focal Points meeting which was organized on the 8th and 9th of May 2019 in Split, Croatia. This event was attended by representatives of ministries of 17 Mediterranean countries. During this meeting, PAP/RAC presented the activities it carried out over the past two years, and mentioned some of most important CO-EVOLVE results at that stage of the project. As the transferability plan at the Mediterranean scale had not yet been drafted at that time, according to CO-EVOLVE planning, it could not be distributed. CO-EVOLVE leaflet was put at the disposal of the participants.

Another meeting during which CO-EVOLVE results are going to be disseminated is the UNEP/MAP COP meeting which will be held in Naples, Italy, in December 2019. At this occasion, the transferability plan at the Mediterranean scale will be distributed to the participants. Representatives of ministries of the 21 Mediterranean countries, as well as from the European Union will be invited to this meeting.

3.2. Transfer through MedOpen online course

PAP/RAC is going to disseminate the CO-EVOLVE results via MedOpen, its online training course which aims at assisting Mediterranean countries in building capacities for coastal management. The MedOpen training is targeting decision-makers (at the local, national, regional, and international levels), policy advisors, project managers, staff and experts of international organizations and institutions, academic researchers, students, and all others interested in ICZM issues. It includes two training courses: the basic and the advanced ones.

Picture 5 : MedOpen homepage

The basic course, which is completely free of charge, can be attended at any time and by anyone having an interest in ICZM by simply registering on the MedOpen website. The advanced course, on the other hand, is more demanding and requires an official inscription, as the number of candidates is limited. The advanced students benefit from supervision by several professors, and their work during the training is subject to an evaluation allowing them to obtain a MedOpen advanced certificate. Since 2017, the MedOpen course has been included as an integral part of the university curriculum at 3 universities of the following Mediterranean countries: Algeria (2017), Tunisia and Morocco (both 2019) for which a joint advanced training course has been organized. A number of 25 to 30 Master's students from each university had the opportunity to attend the MedOpen advanced sessions.

CO-EVOLVE results are going to be integrated directly in the training course contents by updating the existing lectures, while a bibliography with some of the CO-EVOLVE most

important publications will be proposed to the students as the additional literature. The updated MedOpen training courses will be available to students from 2020 onwards.

3.3. Transfer through horizontal Interreg and other relevant projects

A lot of importance has been given to the follow-up of and involvement in the activities of the Interreg MED community on Sustainable Tourism (BleuTourMed) ever since the project was launched in November 2016.

BleuTourMed is a community which consists of around 200 partners, representing different types of bodies i.e. public authorities, universities, research centres, sectoral agencies, associations, NGOs, etc. It brings together projects working on different aspects related to sustainable tourism, including planning (ICZM and MSP) for some of them. It was therefore the best place to initiate the transfer of CO-EVOLVE's results.

Over the first two years of the project, CO-EVOLVE partners identified other projects of interest within the community and started collaborating with several of them. A specific collaboration was set up with MITOMED+ in particular, and a Memorandum of Understanding between the two projects was signed in October 2018. MITOMED+'s pilot destinations committed themselves to replicate CO-EVOLVE's methodology to the best extent possible and the projects to exchange key information on their works and deliverables.

In this perspective, specific tools and methodologies were shared with the community on specific occasions, such as the meetings organised by BleuTourMed, in particular CO-EVOLVE's Sustainability toolkit and Strategic planning.

Beyond this, CO-EVOLVE partners strongly supported the community with the elaboration of its Policy Factsheets. All factsheets include the description of at least one tool developed by CO-EVOLVE.

In parallel to this, in 2017 CO-EVOLVE partners have initiated a process to extend the methodology of the project to other territories, in particular in the Southern and Eastern Mediterranean. An umbrella project - MedCoast4BG (Med Coasts for Blue Growth) – retaking CO-EVOLVE's methodology and tools, was hence labelled by the Union for the Mediterranean in December 2017.

Thanks to MedCoast4BG, CO-EVOLVE opened up to new partners and observers i.e. Italy (Lazio Region, Puglia's Regional Agency for Ecosustainable Development-ASSET,

Department of Earth and Geo-environmental Sciences of the University of Bari, EURelations EEIG – Molise); Spain (University and Region of Murcia); including some from Southern and Eastern Mediterranean countries: Tunisia (National Institute of Marine Sciences and Technologies, Governorates of Sousse and Monastir, among many other Tunisian entities responsible for coastal protection and sustainable tourism); Morocco (Ministry for Agriculture, Fisheries, Rural Development, Waters and Forests; as well as the L'Oriental and Tanger Regions, among others); Lebanon (Ministry of Works and Public Transport and Ministry of Environment, NGOs like AMWAJ and ALMIDAN); and Montenegro (Ministry of Sustainable Development and Tourism, Municipality of Herceg Novi), Albania (Audela NGO).

All this (as a part of MC4BG) gave birth to different initiatives aiming to transfer the project's methodology. For instance, a project proposal (CO-EVOLVE4BG) that had been submitted under the ENI CBC MED first call for standard projects has recently been selected for funding. This project consists in extending the CO-EVOLVE's methodology in new pilot areas, including Tunisian and Lebanese ones. Another proposal was submitted under the Interreg IPA CBC Italy-Albania-Montenegro Programme to cover the Southern Adriatic-Ionian area. A couple of TAIEX projects are also being submitted in the same framework to support Moroccan entities in their efforts towards the capitalization of CO-EVOLVE's results.

CO-EVOLVE and the new projects and initiatives will keep supporting and following-up the work of the Interreg MED community on Sustainable Tourism, in particular the spin-off of the BleuTourMed project, and will keep promoting CO-EVOLVE's tools and methods.

The ongoing CO-EVOLVE4BG project also has a transference component which will ensure the durability of CO-EVOLVE's transferring activities throughout the Mediterranean basin.

Conclusion

CO-EVOLVE was a large-scale project which gathered a wide variety of pilot areas, and whose implementation was particularly complex. The findings, presented in this report, are commensurate with the efforts of both institutional partners and the pilot areas. The analysis of threats and contributing factors made it possible to take stock of the existing knowledge in the themes tackled at the Mediterranean level. In addition, the pilot areas, by providing information as part of this analysis, have enabled the collection of a database that has been widely used in the project, particularly in the selection of indicators for the toolbox developed within the project. The development of sustainable tourism guidelines, which have been fully tested in the pilot areas, has made a significant methodological advance in this field. They have been flexibly adapted, each of the pilot areas having its particular characteristics and the stakeholders involved having different requirements. This flexibility is probably one of the key ingredients for success of the project, as it enabled great results in each of the pilot areas to get the most useful outputs for managing their territory, improving that way the sustainability of their coastal zone in order to improve the sustainability of the tourist activity. This could not have been achieved if the pilot area coordinators had just strictly followed their administrative commitments without taking properly into account the local circumstances. One should indeed always remember that the ultimate goal of the Interreg projects is not to produce a document, but to achieve a tangible change in the places where it is implemented. Pilot area coordinators also insisted on that despite the fact that some initiatives seemed to have a rather narrow focus compared to the wide scope of the project. Following the CO-EVOLVE step-by-step methodology prompted them to have a holistic approach of their coastal zone, and to consider the issues as part of an integrated process. It also had a big impact on the local stakeholders as they had an opportunity to learn more about ICZM and MSP and to take their principles into account in their planning process. It will allow them in the future to integrate them more naturally in their work.

All of this offers a wide range of experiences that allow many parts of the Mediterranean to find those that are most relevant to their situation, and to replicate them.

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