



CO-EVOLVE

Promoting the co-evolution of human activities and natural systems for the development of sustainable coastal and maritime tourism

Sustainability Toolkit

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I. Concept and Objectives

The economic and social performance of tourism activities need to be correlated and co-evaluated with the environmental performance and impacts on tourism destinations in a long term perspective ensuring the conditions of sustainable development for future generations.

conceptual *model* for assessing the level of sustainable development of tourism in *Mediterranean coastal destinations*

assess sustainability at destination level

identify data needs and gaps

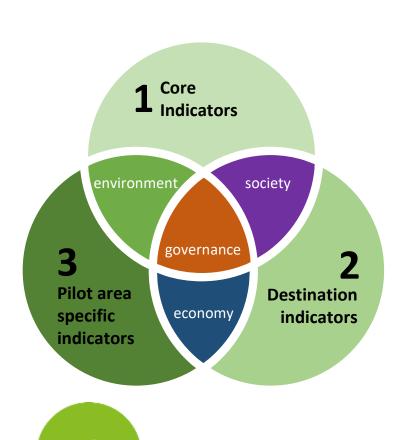


Co-Evolve approach





II. Conceptual Framework: CO-EVOLVE's Approach



1 Core Indicators

40 indicators from ETIS to serve as the basis for comparison of the level and trends of sustainable development

2 Destination Indicators

2nd set 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

3 Pilot Area Specific

3rd set to address area-specific critical issues with specific linkages to the main threats, enabling factors and governance issues





II. Measuring sustainability: The use of indicators at European and



World Tourism Organization

Acknowledging the need for more specialized measurements according to the destination's type

co-evolve's pool of Indicators

Creating a limited set of indicators to evaluate and measure tourism competitiveness over time and to guide policy choices

European Tourism Indicators System (ETIS)

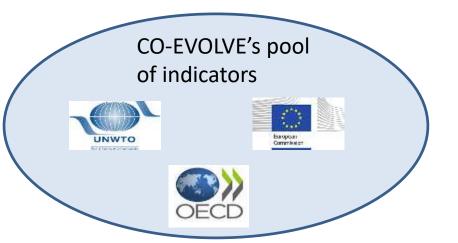
43 core indicators addressing the key issues for sustainability: economy, society and environment > capture the baseline information to understand, monitor and manage the impact of tourism activities on a destination







III. Sustainability Indicators



Indic. Ref.	Core indicators
C.A1.1.	% of tourism enterprises/establishments in the destination using a voluntary certification/labeling for environmental /quality/sustainability and/or Corporate Social Responsibility
C.B1.1.	Number of tourist nights per month
C.B2.1.	Average length of stay of tourists (nights)
C.B3.1.	Direct tourism employment as % of total employment in the destination
C.C1.1.	Number of tourists/visitors per 100 residents
C.D1.4.	Average carbon footprint of tourists and same-day visitors travelling from home to the destination \ensuremath{I}
C.D3.1.	Waste production per tourist night compared to general population waste production per person (kg)
C.D5.1.	Water consumption per tourist night compared to general population water consumption per resident night
C.D5.2.	% of tourism enterprises taking actions to reduce water consumption
C.D6.2.	% of tourism enterprises that take actions to reduce energy consumption
C.D6.3.	% of annual amount of energy consumed from renewable sources (Mwh) compared to overall energy consumption at destination level per year
C.D7.1.	% of local enterprises in the tourism sector actively supporting protection, conservation and management of local biodiversity and landscapes





Destination Indicators: Di.Beach/Maritime tourism		
Di.A4.	Number of second homes per 100 homes in coastal zones*	
Di.B1.	% of tourist infrastructure (hotels, other) located in coastal zones*	
Di.C2.	% of beaches awarded the Blue Flag	
Di.C3.	Costs of erosion-protection measures (e.g. sea walls.)	
Di.C4.	Beach nourishment: sand volume and extension of the restored beach (m3 and m2)	
Di.D1.	Existence of up to date tourism plans and policies (YES/NO)	
Di.D2.	Existence of a land use or development plan (YES/NO)	
Di.D8.	Existence of performance indicators designated for evaluating the plan developed and used(YES/NO)	
Di.D11.	Existence and functioning of a representative coordinating mechanism for MSP/ICZM (YES/NO)	
Destination	Indicators: Dii.Urban/Cultural tourism	
Dii.A3.	% of total tourists visiting in peak month and average for the year	
Dii.B1.	Total number of tourists per square Km in key sites (crowding/spatial distribution)	
Dii.C4.	% of sites under a management and monitoring system for protection of cultural sites	
Dii.D1.	Existence of up to date tourism plans and policies (YES/NO)	
Dii.D2.	Existence of a land use or development plan(YES/NO)	
Dii.D8.	Existence of performance indicators designated for evaluating the plan developed and used(YES/NO)	
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Destination	Indicators: Diii.Cruising
Diii.A4.	Number of ship visits per year (by month)
Diii.A6.	Average duration of stay in port (in days)
Diii.A8.	Average spending per cruise ship visitor (€)
Diii.B1.	Volume of fresh water on-loaded at port (m ³)
Diii.B2.	Volume of waste accepted for disposal (solid, liquid) at port (m ³)
Diii.C1.	Maximum capacity of docking facilities (number)
Diii.D1.	Existence of up to date tourism plans and policies(YES/NO)
Diii.D2.	Existence of Master Plan(YES/NO)
Diii.D8.	Existence of performance indicators designated for evaluating the plan developed and used(YES/NO)
Diii.D11.	Existence and functioning of a representative coordinating mechanism for MSP/ICZM (YES/NO)
Destination	Indicators: Div.Recreational boating (Yachting/Marinas)
Div.A2.	Number of yachts per year (by month)
Div.A4.	Average duration of stay in port (in days)
Div.B1.	Volume of fresh water on-loaded at port(m³)
Div.B2.	Volume of waste accepted for disposal (solid, liquid) at port(m ³)
Div.C1.	Number of berths and moorings for recreational boating
Div.D1.	Existence of up to date tourism plans and policies(YES/NO)
Div.D2.	Existence of a land use or development plan(YES/NO)
Div.D8.	Existence of performance indicators designated for evaluating the plan developed and used(YES/NO)
Div.D11.	Existence and functioning of a representative coordinating mechanism for MSP/ICZM (YES/NO)



Destination to discharge De Material Production		
Destination Indicators: Dv.Nature/Ecotourism		
Dv.A3.	Total number of visitors to parks and to key sites	
Dv.B1.	Number of sites/ecosystems/assets considered to be damaged or threatened (% of all defined	
	systems/assets in protected area)	
Dv.B5.	N° of visitors acceptable, according to the capacity of the equipment and facilities of the site	
	(depends on capacity studies establishing limits)	
Dv.C1.	% of site area occupied by rare or unique species	
Dv.C2.	% of endemic species at the site	
Dv.D1.	Existence of up to date tourism plans and policies(YES/NO)	
Dv.D2.	Existence of environmental plan and management(YES/NO)	
Dv.D10.	Existence of performance indicators designated for evaluating the plan developed and used(YES/NO) \rightarrow P.I.	
Dv.D13.	Existence and functioning of a representative coordinating mechanism for MSP/ICZM (YES/NO)	





IV. From the general framework to Sustainability Analysis at the local scale

Priority Indicators List



Consultation with local stakeholders

Identification of areaspecific challenges and particularities

Customization of the indicators & Sustainability analysis at the local scale



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





V. Use of sustainability indicators in planning



Provide hints for improving existing or shift towards alterative tourism models



Highlight existing data gaps & provides guidelines towards relative measurements



Measure and quantify stakeholders' perceptions



Define thresholds through public consultation processes



Develop probability scenarios to adjust future planning actions and policies



Monitor changes in sustainability in the future









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