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LitusGo Manual
Module 11
**Landscape and marine-scape
management**



Editor: Isotech Ltd, Environmental Research and Consultancy
www.isotech.com.cy

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Preface to the LitusGo Education Manual

The LitusGo Manual is part of the LitusGo educational package which is included in the LitusGo portal: www.litusgo.eu. LitusGo aims at the training and capacity building of Local Authorities and local stakeholders in Integrated Coastal Zone Management issues and the reaction to the impacts of climate change.

This Manual consists of 20 autonomous, self-contained and inter-related modules. The modules are available in four languages, Greek, English, Maltese and Turkish and in three different forms: the dedicated wiki application in the LitusGo portal, the dvd and the hard copy version. This hard copy version of the LitusGo Manual consists of 20 self-contained booklets, one for each module, kept in a hard collective case.

List of modules of the LitusGo Educational Manual

- Module 1: European legal framework
- Module 2: Stakeholder involvement/Public participation
- Module 3: Sustainable tourism-carrying capacity
- Module 4: Water resources management
- Module 5: Fisheries/fish farming
- Module 6: Coastal water quality
- Module 7: Ecosystems management (land and coastal ecosystems)
- Module 8: Waste management/recycling/compost
- Module 9: Air pollution
- Module 10: Land uses/urban planning/coastal over-development
- Module 11: Landscape and marine-scape management
- Module 12: Coastal erosion control
- Module 13: Community annoyance issues 1: noise pollution
- Module 14: Community annoyance issues 2: light and thermal pollution, odours
- Module 15: Archeological areas/historic sites/cultural heritage
- Module 16: Extreme conditions management: flood risks, coastal flooding and storm surge
- Module 17: Droughts
- Module 18: Desertification
- Module 19: Energy use, consumption and management
- Module 20: Green buildings

Credits

The LitusGo Education Manual has been developed by the LitusGo Educational Manual Working group:

Modules 1, 2, 6, 7, 8, 9, 12, 13, 14, 16, 17, 18, 19 have been prepared by the scientific team of the beneficiary/coordinators ISOTECH Ltd. Major authors: Michael I. Loizides, Chemical/Environmental Engineer and Xenia I. Loizidou, Civil/Coastal Engineer. Constantinos Georgiades (MSc in ICZM) is responsible for the overall editing. The hard copy of the educational Manual is designed by Anastasia Georgiou.

Modules 3, 4, 5, 10, 11, 15, 20 have been prepared by the scientific team of the Sustainable Aegean Programme of ELLINIKI ETAIRIA - Society for the Environment and Cultural Heritage. Major authors: Georgia Kikou, Geographer, MSc Environment (Manager of the Sustainable Aegean Programme), Alexandros Moutaftsis, Economist, MSc Environment, Leonidas Economakis, Political Sciences, MA International Development.

Dr Alan Pickaver on behalf of partner The Coastal & Marine Union (EUCC) was responsible for the quality control of the educational material.

LitusGo partnership:

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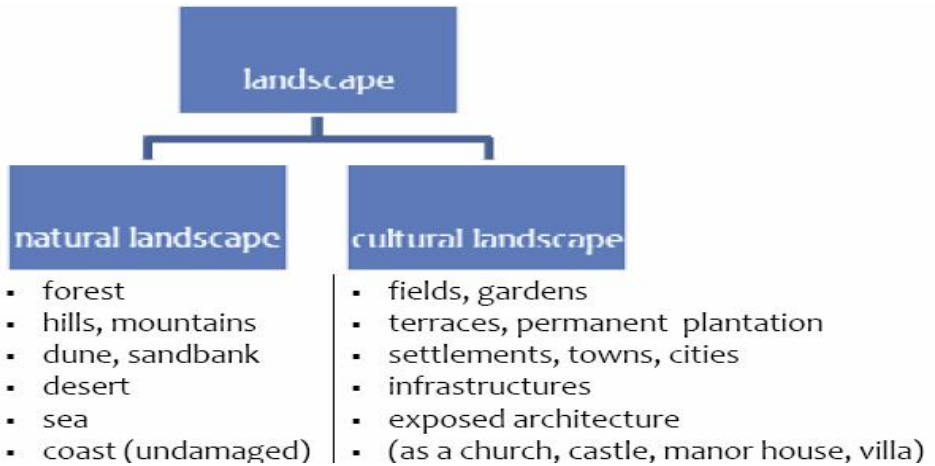
Landscape and marine-scape management

1| Theoretical background

The process of overseeing the design, the creation, and the maintenance of a landscaping project is called landscape management. According to the European Landscape Convention (Council of Europe, 2000), Article 1:

"Landscape means an area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors...Landscape management means action, from a perspective of sustainable development, to ensure the regular upkeep of a landscape, so as to guide and harmonize changes which are brought about by social, economic and environmental processes"

Natural landscapes, are the landscapes that have been developed according to natural laws, while cultural landscapes have been developed through human activities and influences on the natural landscape (traditional agricultural methods for instance).



Picture 1. “Outstanding Landscapes in the Mediterranean” (PAP/RAC 2010).

Landscape management is based on managing the land, but coastal (including marine) landscape management refers to the management of both coastal and marine areas. The term “marine-scapes” has been introduced by the LitusGo project in an effort to be more accurate when talking about coastal and marine landscapes.

Unfortunately, despite the uniqueness and recognisability of the Mediterranean landscapes, their management is still far from effective, with mass tourism having already led to their deterioration and in several cases, to their complete destruction.



Photo 1. A famous marine-scape: the Rock of Afrodite in Pafos - Cyprus.

2| Objective

*"Acknowledging that the landscape is an important part of the quality of life for people everywhere: in urban areas and in the countryside, in degraded areas as well as in areas of high quality, in areas recognized as being of **outstanding beauty** as well as **everyday areas**" (ibid)*

The LitusGo project is making an effort to fill this information and training gap about landscape and marine-scape management, and provide local decision makers and local stakeholders with practical and implementable suggestions and solutions, so as to be able to take action and decisions that promote land and marine-scape management.

3| Problem

According to the European Landscape Convention (Florence, 20.X.2000- so far signed by 39 countries and already ratified by 33, status as of 9/05/2011)

"...developments in agriculture, forestry, industrial and mineral production techniques and in regional planning, town planning, transport, infrastructure, tourism and recreation and, at more general level, changes in the world economy are in many cases accelerating the transformation of landscapes."

The damage done is so severe that the landscape character is changing completely.

In landscape planning, vulnerability refers to the *"potential negative impact of planned activities on natural and manmade environmental values."* (Steiniz, 1967 as cited in Golobic and Beskvar Zaucer, 2010).

Certainly some landscapes are more sensitive than others and although it is difficult to distinguish why a number of variables impact on the various sites, it is possible to identify two main sources (causes) of visual vulnerability on landscapes:

1. Human interventions, and
2. Environmental causes: Both external (light, weather, time of year) and inner landscape (slope, soil, vegetation) (Χατζηστάθη & Ισπικούδη, 1995).

Coastal/Marine-scape management:

The Mediterranean coastline is approximately 46,000 km long, with nearly 19,000 km of island coastline (SOED, 2009). Unfortunately, due to the linear nature of coastal urbanization taking place (mostly unregulated), almost 40% of the coastal area's total length is already occupied (PAP/RAC, 2010:6). Some of the main factors behind the degradation of the Mediterranean coastal landscapes – caused mainly by human activities – are:

a) The uncontrolled urbanization of coastal zones, b) the increasing development of settlements (usually in sharp contrast with the traditional architecture) and mass tourism in the narrowest coastal zones, c) the unregulated construction of family houses in the coastal zones, d) the growth of intensive industry and maritime transport (including the construction of ports and marinas for boating), e) the deterioration of agricultural areas, due to the abandonment of traditional cultivation techniques, f) soil erosion and desertification effects and g) the ever more frequent forest fires and pollution. It is also astonishing that municipal sewage contributes to 80% of all pollution of the Mediterranean Sea! (PAP/RAC, 2010:13).

The effects are equally serious and include:

a) The reduction and degradation of natural habitats or culturally important areas, b) limited access to the coasts, c) permanent reshaping of the coasts, d) reduction of land fertility and sea-wealth, e) increased pollution and impoverishment of the sea, f) excessive consumption of freshwater in areas with already scarce water

resources. In general we are experiencing a massive identity change of the Mediterranean land/marine-scapes.



Photo 2. Folegandros Island, (photo: Ilias Nokas)

4| How to deal with the problem

The measures that are given below are according to articles 5 and 6 of CoE Landscape Convention, regarding how to deal with land/marine- scape problems:

Article 5 – General measures

Each Party undertakes:

- a) *"to recognize landscapes in law as an essential component of people's surroundings, an expression of the diversity of their shared cultural and natural heritage, and a foundation of their identity"*
- b) *"to establish and implement landscape policies aimed at landscape protection, management and planning through the adoption of the specific measures set out in Article 6"*
- c) *"to establish procedures for the participation of the general*

public, local and regional authorities, and other parties with an interest in the definition and implementation of the landscape policies mentioned in paragraph b above"

d) "to integrate landscape into its regional and town planning policies and in its cultural, environmental, agricultural, social and economic policies, as well as in any other policies with possible direct or indirect impact on landscape".

Article 6 – Specific measures

- A) Awareness – raising*
- B) Training and education*
- C) Identification and assessment*
- D) Landscape quality objectives*
- E) Implementation*

"To put landscape policies into effect, each Party undertakes to introduce instruments aimed at protecting, managing and/or planning the landscape".

Part of the identification and assessment of landscape vulnerability are several procedures that have been incorporated in contemporary landscape planning, such as: a) sustainability assessments, b) environmental impact assessments, and c) comparative evaluations of alternative options. The idea is to evaluate the degree to which a system is likely to experience harm due to some threat and to provide reliable expert information for policy and decision making (Golobic and Beskvar Zaucer, 2010: 17)

[The Local Authorities, in addition to all the above actions, should proceed immediately in:](#)

- Defining the important land and marine-scapes in their areas
- defining the land and marine-scapes that are in danger
- trying to identify important land and marine-scapes that have been lost/destroyed due to human activities
- finalising this list and drafting immediate ways to protect them, light them, keep them clean, prohibit any construction on them etc.
- promoting stakeholder involvement, through targeted trainings (as per the Landscape Convention suggestions) and through specific awareness raising participatory events, such as organising a photographic competition asking locals to participate and photograph the land and marine-scapes they consider important. This activity will provide important information and will encourage stakeholder participation.



Photo 3. Typical Mediterranean stone retaining wall in Malta. (A protected landscape characteristic).

Another more direct way to deal with the problem is to be more environmentally friendly through "green landscaping" or "green-scaping" which refers to eco-friendly, sustainable landscape design.

For example, gardeners can implement “green-scaping” in the gardens by following simple, yet very important steps, such as those advised by the EPA (European Environment Agency) in a recent related leaflet (2006):

- Building and maintaining a healthy soil (smart use of compost, see “waste management” module of LitusGo).
- Making planting a “site-specific” process.
- Practicing smart watering.
- Adopting a holistic approach to pest management.
- Practicing natural lawn care.

References/useful information:

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