

Sustainable Tourism in Coastal Zones – A Case Study

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Abstract

Since earlier times, coastal zones have been considered as preferred areas for tourist activities.

Meanwhile, this sector has increased environmental problems in coastal zones because of the excessive use of sun and sea as tourist products. However, modern tourists don't look just for these touristic products but they are also interested in looking for other quality criteria, both environmental and cultural criteria.

The confirmation of the conflicts between the tourism sector and coastal zones was the subject of research into Sustainable Tourism/Sustainability of Tourism in coastal zones, especially in areas that require a touristic and environmental "re-creation". The case study analysed was the municipality of Mira coastal zone in Central Portugal.

This paper intends to present the programme of sustainable tourism proposed to apply the sustainable criteria to the tourism of this area, which needs to be renewed or "re-created". In that programme the diverse potentialities of this area to make the tourism sector more sustainable were pointed out, along with the diversification of tourist products, offering new and renewed conditions to the tourists, and conserving and improving the natural and cultural resources of the area. The proposal development process was carried out with a close connection with local authorities. Following steps are already being taken in order to implement this programme and make it the kind of programme that will bring new opportunities and benefits to the population of Mira's municipality.

1. INTRODUCTION

Coastal zones have always been considered as preferential areas for touristic activities. Normally, coastal zones show up a diversified function and these areas are considered as preferential for employment, economic growth and improvement of life quality of population.

Beyond the referred potentialities, coastal zones have innumerable potentialities in order of natural resources and also excellent conditions for the practice of recreation and leisure activities. These potentialities generate strong dynamics in tourist activities. Meanwhile, these dynamics have revealed a strong seasonality, a strong environmental pressure on the ecosystems, with the associated environmental degradation, which are responsible for the successive losses in the capacity to attract people. This phenomenon became evident in the lost of attractiveness and interest about the sun and sea product.

This scenario pointed out the need of application of sustainable tourism strategies for coastal zones. This paper intends to give a small contribution to this reflection.

The analysis and application of Sustainable Development and Sustainable Tourism criteria to renew coastal zones have been the starting points to the case study analysis - Mira municipality beaches - with the purpose to identify strategies and applicable measures of Sustainable Tourism

in this area and to define a Sustainable Tourism programme.

2. DEFINING SUSTAINABLE TOURISM

From the definition of Sustainable Development, WTO prepared a Sustainable Tourism definition as the one that "envisaged as leading to management of all resources in such a way that economic, social and aesthetic needs can be fulfilled while maintaining cultural integrity, essential ecological processes, biological diversity and life support systems" (WTO, 1993).

This definition, based on the principles of the sustainability, implies the necessary link between the social, economic and environmental dimensions of the development.

As principal objectives to prosecute to Sustainable Tourism, we mention the following ones: the protection of the natural resources and cultural while tourist resources, the promotion of social, economical and environmental improvements, the contribution for the sustainable development of the communities and receiving countries of tourism, the safeguard of the cultural inheritance of the communities and the natural environment in tourist destinations, the support to the areas where the risk of deterioration from the excessive of tourist activity exists, having always in account the load capacity of the tourist places.

Sustainable Tourism is seen as an opportunity. However, in coastal zones Sustainable Tourism is seen as a necessity, in special when situations of risk of environment degradation are verified, caused by excessive tourist pressure. In this context, associated with the decline of the tourist product, it's possible to speak of traditional coastal destinations renewing, improving the environment quality, offering new products and tourist attractions and promoting the sustainable development of these zones.

It appears then opportune to develop Local Agendas 21 as a chance to reach the accomplishment of the following objectives: to improve the planning and environmental management of tourist places, to promote a more sustainable use of transports, to conserve and to promote the natural and cultural resources of regions, to help tourism companies in the function of a more sustainable behaviour, to promote the use of local products, to create benefits and chances to all the population and to promote a healthful relation between local population and tourists.

2.1 The European Context

The concept of sustainable tourism will be applied at the European level with the Agenda 21 for European Tourism Sector. This Agenda presents as main concerns the application of measures to encourage good environment practices in tourist destinations as well as the promotion of tourism in natural and cultural areas and, in this way, sensitising the public opinion. For the scope of coastal zones, there is the need to combine this instrument with the Integrated Management of Coastal Zones in such a way that will be possible to reach: the protection and development of the coastal zones, the environmental evaluation and monitoring, the environmental education of the population to the sustainability, the balance of the activities of the coastal areas, such as agriculture, fishery and industry, the tourist development that assures the environment quality, and finally, the sustainable development of the tourism, in order to assure that the tourist industry is based on the coastal natural resources, imposing limits to a compatible level with the ecological and social capacities of the places. It is evident and necessary the articulation between these instruments, which is already evident by the principles that Agenda 21 for the European Tourism Sector is based.

2.2 The Portuguese Context

At the national level, Portugal is seen as having a great capacity for the tourist activity due to the natural and climatic potentialities, having as principal destinations the coastal zones (local of concentration of resources and potentialities). Associated to this great dynamic of the Tourism sector in coastal zones it is frequent to verify a picture marked for the strong seasonality and pressure, a mono-thematic and massive tourism, a degrada-

tion of habitats and ecosystems, especially coastal ecosystems, which leads to a social, economical and environmental unsustainability.

However this sector is revealed as one development key sector of the national or local level economy. This is due to its high development potential that is superior to the rate of growth of global economy, to its high dynamic effect at the local, regional and national level, and also due to its high multiply effect.

Even yet without a national tourism program that will give way orientations defined by RCM 97/2003, August 1st, the instruments like National Sustainable Development Strategy (ENDS), National Natural Conservation and Biodiversity Strategy (ENCNB), Environmental Operational Program (POA), Coastal Management Plan (POOC) and *Finisterra* Program, are responsible to articulate the national importance of tourism sector with the necessity of invert the negative scenario that was referred. It is imperative to start thinking in strategies that make possible the diversification of tourism, the valorisation of resources, the offer of original products, the application of sustainable tourism strategies and the renewal of coastal destinations.

3. CASE STUDY – MIRA MUNICIPALITY

This coastal sketch was chose because it is an area that needs to be environmentally touristically renewed.

Mira municipality is located in an area between Vouga and Mondego basins, designated by "Gândara". It is also part of "Ria de Aveiro" territorial area. It is a municipality that presents great tourist potentialities that are motivated by the excellent set of natural and cultural resources. These resources are the beaches and coastal lagoons, the forest, local typical houses (casas gandaresas and palheiros), water mills and forest houses.

3.1 Biophysics and Socioeconomic Characterisation

This area is characterised by a plain relief that varies between zero and sixty one meters, where prevail eolic dunes. The hydrographic system is part of Vouga Basin. There are two principal lagoons: Lagoa de Mira and Barrinha de Mira.

Ecosystems like dunes and coastal lagoons are enhanced, with the presence of flora and fauna with sea and continental influence. As an example of these species that live in primary sand dunes we refer *Otanthus maritimus*, *Ammophila arenaria* and *Elymus farctus*. In the dip area after primary sand dunes we can find *Pinus pinaster*, *Corema album* and *Ulex europaeus*.

The climate is characterized by its amenity having presented smooth summers and winters, with weak annual thermal amplitude (14,1°C) and maximum precipitations in December and minims in July and August (120mm/m³ and 8,4 mm/m³).

The population of this municipality was 12872 inhabitants in 2001. It has been registered loss of population since 1981.

Regarding activity sectors, the tertiary sector represents 53% of active population, while second sector has 34% and first sector only 13%. It is evident the decrease of population in the first sector of activity.

In the tourism sector, in accordance with the data of Statistic National Institute, it is important to refer that occurred a significant break in the entrances of foreign tourists and a stagnation in the entrances of national tourists in 2000 and 2001. Moreover, a strong seasonality of tourist activity is verified, with strong incidence in summer. However, tourist affluence is verified also during all the year, perhaps, motivated by the natural potentialities of the region.

This fact, associated with natural and socio-cultural features, discloses the necessity to apply strategies of sustainable tourism, taking advantage of the natural resources and the existing areas of ecological interest. In this way, we think that is possible and opportune to define a program of sustainable tourism in Mira sighting its implementation.

3.2 Program Definition

The definition of this program is in accordance with the ENCNB, ENDS and Local Agenda 21 principles. The program seats in 3 basic arguments:

- Valorisation of local natural and cultural inheritance with strong incidence in the preservation and protection of natural systems;
- Development and attraction with strong economic incidence;
- Sensibly and inform people educating them environmentally.

It has as main objectives to conserve and to promote cultural and natural resources; to promote the use of local products; to take advantage of the existent human resources; to educate and to sensibly local population and tourists, having attention to the capacity of the ecosystems.

The definition of the program has 6 key areas:

- Cyclic and pedonal track;
- Thematic routes;
- Circuits;
- Nature sports;
- Equipments;
- Environmental education sessions.

The main idea is the network concept, which means that should exist a physical element that link the diverse areas, in a way that it is possible to the tourist to explore the natural singularities of the territory.



Figure 1: Traditional Coast Fishery



Figure 2: Mira Beach

The physical structural element of the program is the cyclic and pedonal track, that exists already.

This track allows going through almost all the municipality, always in contact with its principal natural elements: the forest and hydric system.

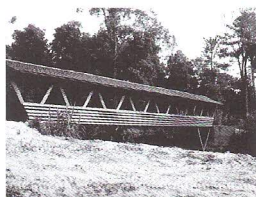


Figure 3: Cyclic and pedonal section track

It allows also the access to the diverse thematic routes, circuits and equipments among which it is possible to highlight the Eco Museum (project step), Ethnographic Museum, handicraft house, Scout Camp School, Garden Dunes, and Botanical Park (definition step) and also the municipal camping park that is being targeted in a requalification project. Meanwhile, the generality of track sections implies a go/back circuit, which can be a factor of less of attraction.

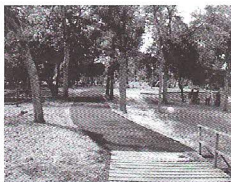


Figure 4: Cyclic and pedonal section track in the forest



Figure 5: Ethnographic Museum

To function as a net, this should allow a diversified sightseeing and absence of monotony.

The thematic routes proposed allow the sightseeing and observation of natural, cultural and built inheritance. However, it is essential the delimitation of these routes to guide tourists and to avoid the degradation of surrounding areas. We suggest three kinds of routes:

- Pinewood route that allows the observation of wetlands biodiversity;



Figure 6: Wetland Biodiversity



Figure 7: Pinewood route

- Dunes pathway that allows the observation of sand dunes characteristic flora;

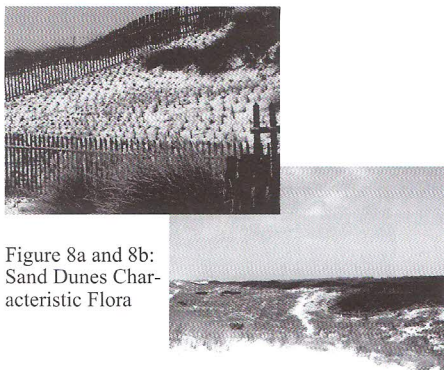


Figure 8a and 8b:
Sand Dunes Characteristic Flora

- Water mills pathway to be done on the existing water trench, where we can find a set of water mills that should be rehabilitated, turning some of them in museums.

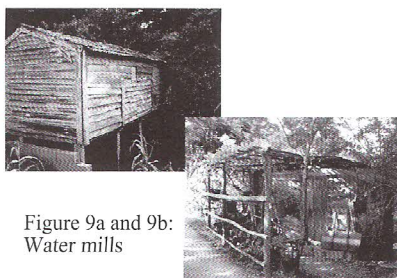


Figure 9a and 9b:
Water mills

The circuits selected for this program are associated to the cyclic and pedonal track and to the natural Ria de Aveiro. These circuits should be guided with massive information that gives the opportunity to the visitor to have a global knowledge about the natural potentialities of the region. As an example of a circuit we suggest the trail between the coastal lagoons and the Ria de Aveiro ecosystem. One of the most attractive natural factor of this area is precisely the three coastal lagoons: Barrinha, Lagoa and Lago do mar.



Figure 10: Barrinha de Mira

This circuit should allow the realization of nautical sports through the system of water trench. Moreover, the connexion to the Ria de Aveiro ecosystem should allow the valorization of this natural resource and the promotion of its conservation.

3.3 Program Implementation

The program implementation needs an operational structure. We defined five basic components on that operational structure.

First place it is necessary to have an operational program manager. In a first stage that manager could be the city hall playing that role in association with other entities. However, the final purpose is the definition of a sustainable tourism agency that should be composed by: city hall, local cultural and natural associations, regional institutions and private entities.

Second place it's necessary to find financial resources for the implementation. That should come from municipal resources, national and regional funds like POA, or private financial resources, promoting the alliance of business view with sustainability principles.

It is also essential the involvement of local population. For that reason, it should be realized some divulgation sessions about the program to explain the main purpose and the opportunities of this kind of program. It is also essential the promotion of conditions to alter the actual socioeconomic situation, giving trainee in the tourism area, to try to reduce the unemployment rate. It is essential the involvement of local associations, entities and private supporters that already do some acts to promote sustainable development in Mira.

Finally, to affirm this program as attractive, it should be imperative to define marketing and divulgation strategies that catch visitors and potential investors, having always in attention the environmental sustainability. The marketing strategy should affirm the new tourism offer in a market that is only with a vocation for sun and sea products. The divulgation strategy should offer to the visitor one more educational value and knowledge about local environmental realities.

Until now, the program is still at a design phase, so this is just a description of implementation stages that should be followed to affirm its functionality.

4. FINAL COMMENTS

Tourism in coastal zones is considered as one of the most important activities. However, this activity is markedly seasonal and massif, that originate negative effects in the environment. We think that there is the necessity to manage the tourism in agreement and with respect for load capacity of the territory and still a necessity of change of attitudes and behaviors of the population.

We consider also that the decline of tourism importance in coastal zones is due to the progressive degradation of natural environment, which takes to the necessity of a process of renew in terms of tourist products. This renew must be carried through in a perspective of environment sustainability of the tourist activity as a form to keep coastal destinations attractive.

The elaboration of a program of this kind should let be possible to provide the natural, cultural and human resources profit of this region. It should also invert the seasonality tendency of tourism through efforts in activities along all year. This coastal area needs an environmental and tourist renew, which would be possible with the implementation of the measures proposed here. With that environmental renew, there could be a better environmental and tourist quality and also better conditions to local populations. Finally this program can also contribute to the launching of a Local Agenda 21.

However, to be a reality, it is essential that there is an assumed politic desire to implement this program and a participative involvement of the local population.

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