

## PROTECTION OF THE COASTAL LANDSCAPE FOR TOURISM SUSTAINABILITY

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### **Abstract:**

*In order to respond to the challenge of the sustainable development - that is the conciliation between landscape and environmental protection and socio-economic development – this paper intend to identify methods and scenarios able to promote the development using in balanced and durable way the several landscape and environmental resources.*

*This paper on the “Protection of the Coastal Landscape for Tourism Sustainability” analyses the phenomena manifested between landscape resource and tourist activities.*

*The paper proposes to analyse some tourist development models unable to provoke the degradation of natural ecosystems and the loss of local identities, but oriented to valorisation forms of the environmental, social and cultural characters of the sites.*

*Thus, the tourism, can favourite the economic and cultural development of a territory or, on the contrary, can determinate its irreversible degradation.*

**Keywords:** coastal landscapes; sustainable tourism; landscape quality.

**JEL Classification:** Q26, Q20, Q50, Q34, Q56, Q57, F60, F64, O13

### **1. Introduction**

The coastal regions of the European Union are under constant pressure: almost half of the population lives on less than 50 km away from the sea and its resources in coastal areas produce much of the economic wealth. Fishing, shipping and tourism have vital habitats along the 89000 km of the European coasts, the same coasts that are home to some of the most fragile and valuable habitats in Europe.

Because of this increasingly intense exploitation, coastal resources are degrading: ground water is lower and therefore invaded by the salt water, the erosion accelerates, pollution aggravates, the stock's decline (Musu, 2003).

This degradation inevitably determines social and economic negative consequences. Many of the problems of European coastal areas exceed national borders: if a petroleum tanker sinks in the English Channel, for example, the oil spot will almost certainly be extended on both British and French shores; similarly, if in the Austrian Danube end up agricultural or industrial polluters, these affect different countries before spilling into the Black Sea in Romania, thousands of miles away.

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The European coasts may also suffer the effects of the policies that at first sight seem not to have any relevance to these areas. The Common Agricultural Policy (CAP), for example, can affect the amount of manure from intensive farming of pigs and cattle that through the leaching of soil, are poured into rivers and watercourses. The nitrates contained by manure and chemical fertilizers promote the growth of blue algae, which, reproducing themselves at an impressive rate, stifle many other forms of life and once entering into the sea cause serious problems, especially on beaches from bathing localities. The problem of nitrate can hopefully be solved by effective evolution of the CAP.

The policies aimed to influence the viability of rural and mountain areas may have significant effect on coastal areas, affecting the migration to these areas. All these elements require special attention from European policy makers and indeed the European Union has introduced a coordinated policy for the European coastal regions. But the European Commission has taken not only measures to improve Community policies affecting coastal areas, but also urged Member States to implement national strategies for integrated coastal zone management (ICZM). Promoting the ICZM, the Commission pursues a specific purpose: to bring in a targeted strategy all local, regional, national and European policies that in one way or another affect the daily lives of European coastal regions.

The Integrated Coastal Zone Management (ICZM) aims to combine the various policies that have an influence on European coastal regions and is expressed through the planning and management of resources and coastal areas. It is not an isolated, but rather a dynamic process that will last and evolve over time. The ICZM has as fundamental objective the involvement of all local, regional, national and European political leaders, and more generally of all stakeholders, whose activities affect the coastal regions, not only state officials and national policy makers, but also, among others, the local populations, non-governmental organizations and businesses. The involvement of all stakeholders is a cornerstone of ICZM: in the absence of a global coordination, the efforts implemented to protect the coasts of Europe must have a limited success. The ICZM is not just an environmental policy. The protection of natural ecosystems is undoubtedly one of the main objectives of the strategy, but the ICZM also aims to promote the economic and social well-being of coastal areas and make them proper in order to accommodate modern and dynamic communities. In coastal areas, these environmental and socio-economic goals are intimately and inextricably linked (EU EC, eurostat, 2013).

## **2. The purpose of ICZM**

The coastal areas are also home to some of the most valuable habitats of the European Union; a recent study of the European Commission (An Assessment of

the Socio-Economic Costs and Benefits of Integrated Coastal Zone Management, Fim Crichton Roberts, November 2000) indicates that the total benefits generated by the ecosystems from coastal areas exceed, in economic terms, the GDP of a small country. In order to protect this economic resource, the European Commission considers essential the adoption of a more coordinated approach.

With the implementation of national strategies for integrated management of coastal areas, the EU member states will improve the economic and environmental well-being of its coastal areas. According to the studies carried out on the potential socio-economic value of ICZM, the gross benefits of ICZM (habitat protection, local economy and tourism) could raise up to 4.2 billion Euros on an annual basis in the European Union. Beyond the net economic benefits, the ICZM offer qualitative benefits (which will vary depending on the specific initiatives that will be made) including, firstly, a greater cohesion of coastal communities. Thus, the implementation of national strategies for integrated coastal zone management will require relatively limited investments, but in return will provide significant economic benefits and extended over time.

### **3. The inefficiency of tourism development planning**

Managed in an appropriate manner, tourism can be important for the economic recovery of coastal areas. Unfortunately, in many sections of European coastal, tourism has developed in a chaotic way, causing serious environmental and social problems. The development of coastal tourism, for instance, can exert strong pressure on local resources of drinking water and cause serious difficulties, as is the case in some regions of southern Europe. In many parts of the Mediterranean, for example in the Greek islands, due to an over-exploitation of groundwater, water sea has ended up infiltrating into groundwater, making it unsuitable for drinking. Moreover, in many of these islands, there is a lack of adequate facilities for the disposal of solid waste and therefore illegal dumps are spreading (Fraguell y Sansbellò, 1998).

A less integrated management of tourist destinations can also cause serious pollution of air and sea. In tourist centers, air quality is often compromised by pollutants from fossil fuels, used not only in heating and cooking in hotels, bars and restaurants, but also by numerous motorcycles, cars and recreational craft that throng coastal tourist destinations. An inadequate planning of coastal tourism development can have a negative impact also on production and social environment of local communities (National Forum on the UN 2003). In the Cyclades islands of Greece, for example, apart from being in conflict with the mining industry, tourism has caused the decline of traditional methods of intensive cultivation determining many people to abandon the work in the fields and to seek employment in bars, cafes and nightclubs.

In France, however, in the Gironde estuary, paints used to treat the hull of recreational crafts have toxic action on local fish farms.

But experts insist that tourism can play a positive role in coastal regions, certainly if it is controlled. In Danish Storstrom County, for example, tourism supplement, especially in low season, the employment decline in fisheries, agriculture, shipping and heavy industry.

### **3.1. The decline of the fishing**

Fishing, which for centuries was the foundation of the local economy of many European coastal towns and villages, is now experiencing serious difficulties across the EU. In many areas, over-fishing has caused a drastic depletion of fish stocks and therefore the loss of jobs and general economic difficulties. In an effort to stop this phenomenon, the E.U. common fisheries policy has imposed restrictions on the fishing volume in the Community waters and has tried to reduce the number of vessels through multi-annual guidance programs for the fishing fleets. But, the scaling capacity of the fleet had as a direct result an increase of unemployment in many coastal areas. Many of the old fishing ports have ceased or reduced their activities and the population has shifted elsewhere, therefore the characteristic of these places have been lost and with it the tourist attraction. The fishing villages have seen the number of visitors dropping drastically when the sailors have finally hung networks to nail. Some areas have sought to give a new impulse to the local economy by creating alternatives to fishing, but this is a process anything but easy, in many regions the opportunity to find work in other sectors remaining rare. In regions which still plays an important role in the economy, the fishing must often contend with other sectors the space it needs, for example, the urbanization of the coastal strip, tourist marinas and moorings and pleasure boating can have a negative impact on coastal fishing and fishery resources.

The increasingly intense use of the shoreline may cause the disappearance of fishing sites and the loss of marine habitat (areas of nutrition, reproduction and growth of juvenile fish), and also worsening water quality and damaging coastal environment. Aquaculture, practiced mainly in the coastal waters and related to urbanization issues, tourism and agriculture, represent a typical example of how the ICZM can ensure mutual compatibility between the various coastal activities. Fish farming can have positive effects on the coastal areas because it can be practiced only where water quality is good and the environment clean; fish farming companies are also a tourist attraction and provide fresh fish to restaurants in the area. However, their presence can also have negative repercussions, as it provides other activities in keeping the little available space in water and on land and creates problems of pollution and waste disposal.

### **3.2. Lack of transport networks**

Transports are the root of the particularly complex problems in E.U. coastal regions. The lack of proper networks stunts the development of the local economy and prevents coastal regions to exploit the economic benefits that could result from a thriving tourism. Inadequate transport networks or designed only on the basis of tourist flows can also cause mobility problems for the population that lives all year in these regions. Conversely, too many communication lines or poorly designed may cause pollution, overcrowding as also and destruction of natural habitats. For European leaders planning the transport problem is to finding a satisfactory meeting point between the accessibility of coastal areas and the protection of local environment. Unfortunately, in the past this happened very often and not always the specific needs of coastal areas were taken into consideration. In recent decades the problem of communication networks has forced many people to abandon some of the more isolated coastal regions of the European Union. The depopulation has reached particularly relevant proportions in some Greek islands and other parts of the Mediterranean. Opposite to this is the situation in the Bay of Naples; there transport routes are numerous, but poorly coordinated, which helps aggravating the traffic congestion (caused also by mass tourism), pollution and mismanagement of natural and cultural heritage.

The achievement of what experts call sustainable accessibility, namely the construction of efficient transport systems in the local environment, is an essential step towards the improvement of coastal zones. In order to reach this result, the various national organizations responsible for the construction of transport infrastructure should work in close collaboration with all local stakeholders involved.

### **3.3. Urban areas**

In recent decades urbanization has affected an ever larger part of coastal communities. If planned with foresight and respectful for the environment, property development can help saving the coastal regions from economic decline; too often, however, the European coast was attacked by the concrete fury.

One of the reasons for wild construction has been the huge increase of second homes along the European coast. Many of these homes are used only on weekends or during holidays and remain uninhabited for most of the year, but in many cases destroy fragile natural habitats and prevent the general public access to beaches. Moreover, the carrying resulting from the waste disposal of and biological waste from the septic tanks of these homes is often higher than the absorption capacity of the environment. The problem of coastal urbanization is particularly severe in

southern Europe, where many second homes are abusive or semi-abusive and not constructed adequate to local regulator plans.

### **3.4. Coastal Erosion**

In many coastal areas of the European Union, erosion caused by the sea is a natural process that has existed for millions of years. The phenomenon itself is little concerning for the environment, but becomes a problem in areas where threatens coastal towns and cities (CE – COM, 2001).

Trying to prevent erosion is a complex process and it is not always easy to calculate what will be the long-term effects of human intervention. The “heavy” traditional engineering works as the breakwaters involve high maintenance costs and does not always succeed in preventing the erosion of coastlines, and in some cases they even accelerate it. The construction of large works of any type in areas that are subject to erosion can aggravate the problem.

In many parts of European Union, national and regional authorities are beginning to realize that it is perfectly useless to build artificial barriers to halt the natural erosion. In some locations it is preferred to choose a policy known as “controlled withdrawal, which is to gradually reduce the presence of human activities in coastal areas that one day will be invaded by the sea.

In regions where the controlled withdrawal is not a viable (e.g. in the areas of high economic or historical value), the authorities have often opted for easy coastal protection instead of traditional breakwaters.

In areas not excessively urbanized, for example, the reintroduction of psammophilous plants and other native plant species can significantly slow down the process of erosion. The great challenge of the next years for policymakers will be to develop solutions that are long-term effective and that lead to the lowest possible number of unforeseen consequences.

### **3.5. Pollution**

Coastal areas are exposed to a dual threat: first they are periodically affected by maritime disasters of vast proportions such as oil or chemicals spills; second they are affected by the waste produced by the mainland, which is poured into the sea via rivers and watercourses.

Pollution caused by maritime accidents is a problem that affects particularly the coastal areas located close to major international shipping routes. Generally, maritime transport is considered relatively environmentally friendly; but when an accident occurs, the consequences are often disastrous. To aggravate the problem is the fact that the responsibility of maritime accidents is often difficult

to determine. The company owning the tanker may have headquarter outside the E.U. jurisdiction and making them responsible is a long and complex. However, the Commission has recently made a series of proposals to introduce preventive measures in this field. Also, the pollution from land-based sources, primarily factories and farms, is a serious problem for coastal areas. Fortunately environmental disasters are quite rare, as the incident that in 2000 has caused in Romania a serious spillage of cyanide and the pollution of a large part of the Danube and the Black Sea coast, but the fact remains that every day important quantities of pollutants are poured on the beaches. One of the main concerning reasons is the pollution caused by nitrates from agricultural fertilizers and manure. Nitrates are an essential component of all fertilizers and if they are properly used, they don't pose particular problems for the environment. However, when, due to the washing away of soil, they are poured in high concentrations in the rivers and waterways, they provide nourishment to algae, which reproducing themselves very fast stifle other forms of aquatic life. The problem also affects the sea, where the proliferation of mucilage makes bathing unpleasant. To avoid these "green tide", we need greater coordination between the stakeholders and the coastal authorities of industry, agriculture and other sources of pollution. The new EU directive on the quality of water known as the Water Framework Directive is dealing with the problems of coastal sense but also with innovative ideas, basing the protection of waters on the management of individual watersheds. The river basin management is accomplished through the coordination of all those national, regional and local exercising an influence on water resources in their path from the source to mountain rivers, lakes and finally to the sea. The Water Framework Directive aims to urge EU governments to make coordinated efforts for water management and to reduce pollution, rather than applying fragmentary policies, in many cases dictated by the needs of a stopgap emergency situations quotas. A great importance is also given to the harmonization of the collection and presentation of data through the use of geographical information systems. Regarding the coastal areas, the directive requires Member States to implement measures to cope with the consistent pollution produced by both terrestrial and marine sources and gives governments 15 years to ensure a good quality of coastal waters through coherent policies based on river basin management.

### **3.6. Habitat Destruction**

Some of the richest and most fragile natural habitats of the European Union are located in coastal areas, in many cases within areas of special ecological interest, as brackish marshes, sand dunes and cliffs, where live many rare species of birds. But in many E.U. Regions the coastal habitats are in serious danger.

Population growth and changing economic activities alter the characteristics of the seabed and coastal beaches. Major coastal habitats, especially in wetlands can be destroyed by the urban expansion. Urbanization has brought to total extinction some of the animal species in various coastal regions: a permanent loss that translates as erosion of what experts call biodiversity. It is impossible to rebuild a coastal habitat once it's been destroyed, and even when the restoration is feasible, the interventions needed are extremely complex and expensive. Moreover, the loss of habitat can also have adverse effects on the availability of water resources and coastal erosion. Requests for protection of natural habitats of coastal regions are sometimes ignored by regional governments who see in the construction of houses, roads and tourist, commercial or industrial settlements an opportunity to give an impulse to the local economy. In reality, however, the loss of habitat has often heavy consequences on the economy of coastal areas: in the areas where the fishing industry is flourishing, for example, destruction of habitats can cause the reduction of stocks and also the loss of areas of natural beauty prevents coastal regions to develop areas such as ecotourism and outdoor recreation.

Community's coastal regions are exposed to many and often contradictory pressures; that is why the Commission considers that for the European Union is necessary a coordinated policy regarding coastal areas.

In 2000, the Commission presented a detailed programs relating to the adoption of a strategy for integrated coastal zone management (ICZM) for the European Union. The report says that the European coastal areas could benefit from a series of measures at Community level, but that it must exist in each Member State a national strategy for the integrated management of coastal areas. Through the various national strategies, the policymakers, to which the management of coastal regions depends, may provide a much more effective coordination of their efforts. The national strategies can also harmonize the various laws and national sectoral policies that affect coastal areas, and to facilitate the operations of local and regional authorities.

In coastal European regions the stakeholders are the local administrations: only they, together with other stakeholders anchored to the area as businesses, residents and non-governmental organizations, really know the real problems of their areas of competence. The regional organizations are expected to provide guidance and coordination of local initiatives arising from the base, while policies and national programs responsible for providing the framework are expected to facilitate legal and action at regional and local levels.



The ICZM shows that decisions affecting coastal regions are taken at the most appropriate level, but highlights the need to harmonize the activities of the different levels of government. In many cases it is also necessary a cooperation between countries: for example, it would be appropriate for those countries bordering the same sea trying to coordinate their actions, rather than adopting different or even contradictory national policies.

#### **4. EU policy on Coastal Management**

The strategy for E.U. integrated coastal zone management encourages this kind of transnational policies of the coastal countries bordering on “regional seas” like the Mediterranean or the Baltic. The ICZM strategy also aims to prevent policies that apparently have no connection with the coastal regions to damage the coast (CE – COM, 5/6 February 2012). In the case of agriculture pollution, the ICZM enable the responsible organizations for the CAP to take greater account of the impact of fertilizers on coastal waters. One of the cornerstones on which is based the effectiveness of a policy of ICZM consists on examining the problems of coastal areas in a wider context as possible. In the past, many attempts to improve the status of coastal regions of the European Union have failed, despite the good intentions, because we are dedicated to certain isolated aspects. For example, the issue of tourism in coastal areas cannot be managed effectively if not taking into account a variety of stakeholders, such as water supply, land, employment and the impact of tourism on the existing natural habitats. To make it even more complicated, the situation contributes to the fact that in many parts of E.U. the coastal areas are crossed by several administrative boundaries. As a result, policies aimed to improve the situation of the coast are often extremely contradictory and the various districts implement different measures with no coordination. If the coastal area is divided by a national border, the problem is aggravated. Despite this, many of the problems that afflict coastal areas originate hundreds of miles away from the sea.

Given the multitude of involved factors, the effectiveness of ICZM strategy depends on the ability to coordinate all these organization that exercise an influence on coastal regions and the ability to confront in a proper way the many different, but interconnected problems staffing these regions. The coastline of the European Union has an extremely varied morphology: hence, a strategy for ICZM that can be defined as effective must be based on local solutions designed to fit the local conditions. Therefore, the European strategy for the integrated management of coastal zones is based on the principle of subsidiarity, according to which important political decisions should always be taken at a level as close as possible to its citizens. This means that local stakeholders interested in E.U. coastal regions must be in the center of ICZM, since none better than those who live and work in coastal areas

knows the real problems and difficulties of these areas. It would not be logical or fair if national governments or the European institutions try to impose solutions uniform to these regions.

The role of national and community administrations is to provide assistance and guidance to local initiatives, while ensuring that the numerous national and European policies affecting the coastal zone are not in contradiction with each other. National and community administrations must also act to ensure that sectorial policies take into account the specificity of the coastal zones (CNEL 2005). The coordination between national and Community policies concerning issues such as water quality, protection of habitat, transport, fisheries and tourism can contribute to a better future for the coastal zone of the European Union, but only if the various policies will be implemented in a consistent manner at local level. To ensure that problems are dealt with taking into account local needs, it is necessary for the planning and the management of coastal areas to be conducted on the basis of precise and sufficiently detailed information, collected by the Member States.

Often it is extremely difficult to predict exactly what problems will face in the future a particular coastal region. Precisely for this reason, the ICZM born as a constantly evolving process, which addresses not only to the present problems, but thanks to its flexibility, is able to adapt to unforeseen events that may occur in the future. This type of approach is very important because if, for example, once it has built a new marina, we can see that is causing serious damage to the environment, and it is difficult to dismantling and restoring the conditions of departure.

A good management of coastal areas should recognize explicitly that there is no certainty about future conditions and thus flexible and adaptable policies must be promoted. The planning and management of coastal areas must necessarily be based on the so-called “precautionary principle” policy makers must try to predict in advance the potential damage to coastal areas and then identify the most appropriate solutions before problems occur. Also, for the “precautionary principle”, if they are not entirely sure that a particular intervention is devoid of negative effects for a coastal zone, they must inspire their work to the utmost caution. This way of approaching the planning process is particularly important in areas that could suffer negative consequences as a result of the urbanization or development of tourism. Once worsening the risk of climate change, coastal areas will likely be forced to deal with new problems and difficulties in the coming decades. We must ensure that our planning and management systems are sufficiently flexible to enable us to confront new problems as they arise.

The ICZM is intended to foster contacts between the local, regional and national management of the sectors of which we are a part, in order to enable policymakers to get a clear picture of the real needs of European coastal areas. But to give the

desired results, in the planning and the management of coastal areas should also be involved non-governmental organizations and interested local stakeholders: without a regular input from the businesses, NGOs and citizens who live and work in coastal European areas, ICZM cannot work.

Without the full participation of local stakeholders, the coastal management strategies will never succeed. If people do not feel involved in decisions that affect their region, it is not rare that they suffer when confronting political leaders and reject plans for the improvement of coastal areas. In 1993, for example, in the United Kingdom, a plan set Exe estuary prepared by a consulting company was rejected by the local community, who complained that it was not consulted on certain issues, primarily the implementation of rights on port services charged to estuary users. The experience prompted policy makers to rethink the whole strategy for the estuary and led to the creation of a series of study groups composed of residents of the area. Following a broad consultation process turned into several meetings at the local level, they developed a new strategy that had the support of all. Even today, residents meet regularly to discuss local problems and have formed a forum for coordination of the initiatives aimed to improve life in their region.

Similar experiences across the European Union show that it is crucial to involve, right from the beginning, in the discussions on the policy for coastal areas local stakeholders, which must always be in the center of ICZM strategies; equally important is involving in the activities aimed to improve coastal areas all those who exercise an influence on those areas.

Often this requires a more general coordination between local and national policies, in order to avoid conflicts that arise between the various levels of government. It is useless, for example, a local initiative to reduce the pollution of a river without the direct involvement of the authorities responsible for agricultural and industrial policy at national level.

For some situations, the coordination should also extend to European policies; it is the case, for example, of coastal areas that are part of regions declared protected under European standards on the protection of habitats.

The integration between European and ICZM strategies at local level is appropriate for aspects such as agriculture, water quality and transport.

The local stakeholders alone cannot solve the problems of coastal areas. The difficulties that the coastal areas face are many and, in the absence of cooperation between all management levels, the ICZM is inevitably doomed to failure. To avoid that the problems that afflict the coastal regions worsen in the further, a coastal policy is need, coordinated by the Community; generally it is expected that the use of these areas will continue to grow in the near future.

If we do not intervene to manage the increasing pressures to which the coastal regions are subdued, the loss of habitat, pollution and erosion will eventually destroy

some of the most beautiful, fragile and biologically rich area of the European Union, increasing the unemployment and the social disintegration of local communities and causing a drastic depletion of the value of coastal areas and the destruction of valuable resources for the economy.

Only by promoting the introduction of ICZM strategies coordinated at EU and national level, the EU will enhance coastal regions, making them able to develop a modern and vital and at the same time to safeguard their extraordinary natural beauty. To function properly, the integrated management of coastal zones must be based on the principle that local problems should be solved at local level. The local stakeholders will always be the cornerstone of initiatives aimed for the protection and enhancement of coastal regions, but to ensure the most possible effective and correct management it will require coordination between the programs and measures of these areas and the policies adopted at regional, national and European level.

### **5. Current stage of global tourism industry**

The World Tourism Organization (WTO) estimates that since 1950, the number of international tourist arrivals has increased at least 28 times, reaching in 2000 698 million. The forecasts, made before the facts of September 11, assumed that these figures will double till 2020, reaching 1.6 billion arrivals. These figures do not include domestic tourists, tourists who move within their own country, which can be estimated to grow between 4 and 10 times more depending on location. With these predictions, tourism will become the first industry in the twenty-first century and will be one of the top three industries of the global economy. The Mediterranean countries, in particular, increase by 2.8%, with minimum increments for South and the West Europeans. Italy will follow this trend (+2.2%), falling to sixth place in the ranking of the main destinations (currently fourth), after China, USA, France, Spain and Hong Kong. It is clear, then, that even after the events of 11 September, tourism had a very strong global growth and expansion.

With these available data it is clear that the risk is now connected to the tourism industry: conviction capacity that is not common to any other economic sector. However, following the gradual growth of the tourist industry, the international community has gained the understanding that we must curb the negative effects that this growth can have on the environment while maintaining the potential of the sector in terms of new jobs and opportunities to stimulate new investment.

Following this logic, in the last decade, discussions have begun on how to balance the needs of the tourist industry and sustainable development. On an international scale, for the first time, the concept of sustainable tourism has been

focused in the World Conference which took place on the island of Lanzarote (Canary Islands) in 1995, which agreed with the Charter that highlights the term. In the first paragraph the Charter for Sustainable Tourism says that the development of growth must be based on criteria of sustainability, long-term respect for the environment, be economically viable and socially and ethically fair for local communities. The document highlights how the nature of sustainable tourism requires the integration of present natural, cultural and human aspects; must be respected the fragile balance that characterizes many tourist destinations, particularly in environmentally sensitive areas such as coastal zones.

Later than, at the International Conference on Sustainable Tourism held in Rimini (2001), was drafted another Charter which deals in particular with mass tourism destinations, that is considered as “a priority for the political agenda of all involved parties and that this priority should be to direct and encourage further efforts and commitments in the coming years. It has been demonstrated that the increasing tourism demand and offer represents a phenomenon that has already produced relevant social and environmental effects in the present, threatening to undermine the quality and vitality of tourist”.

The question, regards now the areas with a “mature tourism” for which we must assume the responsibility to rethink models and strategies of territorial tourism development and the tourist product innovation, affirming their identity and cultural diversity and valuing products, human resources and local economies, in the clear direction of social, economic and environmental sustainability and environmental regeneration of a land capable of considering the global dimension of the problems (Lanza, 2006).

This approach suffered an important sanction few months later, during the “Communication from the Commission to the Council, the European Parliament the Economic and Social Committee and the Committee of Regions”, entitled “Working together for the future of European tourism”, dated November 13, 2001 (CE-COM, 13.11.2001). This significant document, made official just two days after the disaster of the two towers in New York, makes a general overview of the European tourism and lays down the guidelines for professionals and researchers. It is a new and precise definition that is the synthesis of the concepts of sustainability and tourism development: “sustainable tourism development meets the needs of present tourists and host regions, while protecting and improving prospects for the future. It must integrate the management of all the resources so that the economic, social and aesthetic exigencies can be met, while maintaining at the same time the cultural integrity, essential ecological processes, biological diversity and the living systems. “This definition reminds that of sustainable development contained in the Declaration of the United Nations Conference on Environment and Development held in 1992 in Rio de Janeiro, where were

delineated the lines of the development for a comprehensive policy based on a high level of cooperation linked to sustainable development. In Agenda 21 and particularly in the second section devoted to “Conservation and management of resources”, there can be found the action guidelines for sustainable development in coastal areas. The fifteen years after Rio have not gone in vain: from the strict scientific environment - thanks mainly to environmental organizations - that concept has begun to pervade policies, decisions, choices and entered the common lexicon up to the point of jeopardizing its own meaning. Today it is clear that there is a growing global demand to identify the strategic guidelines and measures needed to reach sustainable patterns for tourism development. And it is equally obvious that the implementation of the sustainable development principles in the various sub-sectors of tourism is increasingly perceived as a value added to the image of destinations.

The planning of a sustainable tourism development is closely related to the place where and which is designed, because it is intended to identify and design a development model must be adapted to the specific coastal area and must work as the system itself and as part of a larger and complex systems (Luciani, Andriola, 1999). Sustainable tourism is obviously something different from the Ecotourism; only because the United Nations has declared 2002 the World Year of Ecotourism and which have defined the basis for developing ecotourism. The International Ecotourism Society defines, in fact, ecotourism as “responsible travel in natural areas that conserves the environment and ensures prosperity to the local population.” The ecological tourism is, therefore, one of the fastest growing segments of the tourism industry, which, in all its segments, from cultural tourism for the elderly tourism, from social tourism to bathing should guarantee sustainability criteria. The European Commission (CE-COM, 19.10.2007) approved “The agenda for sustainable and competitive European tourism”, which represents a further contribution to the Lisbon strategy in which are set objectives to achieve a balance between the welfare of tourists, the necessity of natural and cultural environment, the development and the competitiveness of destinations and businesses located in a holistic and integrated policy, in which all parties share the same goals. These objectives must include conservation and sustainable management of natural and cultural resources; minimum use of resources and minimum impact of the pollution of tourist destinations; waste production, changing management for the welfare of the community; reducing the seasonal effect of the demand, the environmental impact of transports related to tourism; ensuring the security for tourists and for local communities (Querini, 2000).

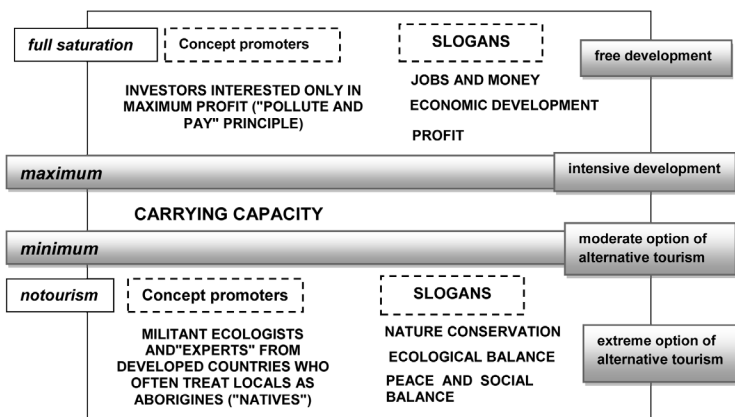
## **6. The Challenge of Tourism Carrying Capacity Assessment**

The methodology of Carrying Capacity Assessment (CCA) has been formulated by the United Nations Environment Program (UNEP) and it is proposed as an analysis technique in a series of UNEP Guidelines adopted in 1997. The UNEP Guidelines indicate how the CCA should become an integrated part of the tourism planning and management process in tourist areas and the analysis methodology takes in consideration all components of the local tourist development:

- the environmental and urban characteristics of the concerned areas,
- the type and scale of tourist attractions,
- the relations between tourism micro and macro policies, the preferences of local people, tourists and traders.

The “value” in terms of carrying capacity that emerges from this analysis is finally assessed in the light of different possible scenarios for the development of tourism and the comparison with the political, economic and social will present in the area. The methodology has been applied, under the supervision of UNEP, in areas characterized by an intense tourism development actual or proposed According to the definition of the World Tourism Organization (WTO), “the carrying capacity of a tourist resort is represented by the maximum number of people visiting, in the same period, a particular location without compromising its environmental, physical, economic and socio-cultural characteristics and without reducing the satisfaction of tourists”. It is a concept that can change significantly depending on the specific context, because the relationship between the intensity of use and user’s satisfaction varies considerably depending on the type of “tourist product” taken in consideration. Every tourist area is characterized therefore by their own specification for “carrying capacity”, defined first of all by the environmental provider, but also with strong references to socio-economic aspects (expectations, vocations, etc.). As illustrated in Figure 1, the carrying capacity can imagine a range within which occurs the process of sustainable development of tourism.

Figure 1 – The Carrying Capacity



The upper limit of this range is the intensive development of tourist resource; in practice from this point onwards development is no longer sustainable from the point of view of the environmental and cultural resources of the territory.

This is the classic case of economic development led by outside investors, with the objective of maximizing profits (an excellent example is that of the Balearic Islands and the Costa Brava). The lower limit is set on alternative tourism development based on soft forms of tourism (radical ecotourism). Basically, it regards the hyper-conservative approach of the territory where tourism is seen solely as a threat to the environment and not a resource.

The study of carrying capacity has the objective of defining the tourist “sustainability” of a location, understood as the ability to support in a given time influx of tourists and the consequent use of available local resources. The carrying capacity is therefore represented by the number of tourists that can be compatible with the maintenance of environmental standards and quality of service, taking into account the “objective” environmental limits, the direction the existing legislation and planning, the willingness of the local community. A condition that cannot and should not be forgotten regarding the planning of tourist resource is that tourism must lead to economic development and that it must be programmed to represent a long-term resource.

New strategies for sustainable development and integrated management of coastal areas, if adopted by the local community, will have a scientific basis to define even more cautious standards, possibly fixing them below the upper limit of the carrying capacity. Studies regarding the carrying capacity (Bossel, 1999) are directed primarily to:

- local authorities and public decision makers (governments, tourism planners offices)
- stakeholders in the tourism sector (hotels, travel agents, tourist associations, consumer associations, tourists, etc.).

The CCA is an open model that aims to guide tourism development in a concerted way through the active participation of the institutions of the economic and social world related to tourism (EU EC-environment, 2009). The participation of all social partners is a fundamental part of the CCA process and the local community should have an active role in the preparation of the CCA for local development.

The methodology proposed by UNEP provides the following steps:

- Analysis of the data and cartographic production
- Definition of sustainability indicators for the tourism area
- Creation of the forum for participation
- Analysis of the current tourism scenario
- Definition of the scenarios for tourism development
- Definition of calculation model for Carrying Capacity



The Assessment of Tourist Carrying Capacity has become one of the most applied techniques for tourism and recreation activities planning and management. The objective of the CCA is to determine the limits of sustainable development, that is the best use of tourism resources and it must be integrated into the process of planning and management of tourism resources.

The CCA, as a result of the first experiences in the Mediterranean, has proved itself as an effective planning tool applicable in more developed areas and to mass tourism, as well in destinations that are not yet developed regarding tourism, as a most appropriate tool for tourism development programming.

## **Conclusions**

During the last century, according with the changing of lifestyle was reevaluated the beaches role: from an inhospitable place they have become the driving force of the economic welfare.

Moreover, the demographic pressure, the urbanization, the overuse of the territory and the other related factors on one hand those of the hinterland (dams in the rivers, farming and tourism) and on another the proper beach (sewage discharge, dry goods extraction and crops) have caused a general decrease of natural sediments supply to the beaches.

However, there is not a unique solution to solve all these problems but with some measures, the situation could improve.

By implementing an Integrated Coastal Zone Management of the beaches that is reorganization of the whole territory and even of its periphery so the natural areas can benefit from that process and provide a concentration of tourism in a specific area. Also to achieve a sustainable development is absolutely necessary to internalize externalities from services and damages (and their repairs) into the prices of the goods, services or activities which cause them (according to the Polluter Pays Principle). Beaches have an economic and an environmental value and for these reason is imperative to protect the coast against coastal erosion, so investing more. In another train of thoughts, a better dissemination of the existing information associated to a better coordination of the stakeholders that deal with coastal management is necessary.

At last but not the least, an improvement of the environmental education is essential for a sustainable development of the coast.

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