

Carrying Capacity Assessment - An Essential Tool for Sustainable Tourism Development in Coastal Areas of Albania

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Abstract

Like in many Mediterranean countries, the coastal areas in Albania are recognised among the country's great assets both from the development and environmental point of view. Their scenic beauty, favourable climate, diversity of ecosystems, rich cultural and historical heritage make them excellent resources for the development of tourism, which is recognised as one of most important sector contributing to country's national long-term growth. During the last twenty years, the coastal areas in Albania have attracted the major part of tourism investments, which due to the lack of legislation, urban planning and institutional capacity for sustainable development, have been spontaneous and have negatively affected the sustainable use of natural resources. Thus, the proper planning and implementation of sustainable tourism development model together with the assessment of tourism carrying capacity, take a paramount importance for sustainable development of the coastal resources. Yet such assessment in Albania is not considered part of integrated planning and management of the coastal areas, therefore the carrying capacity assessment (CCA) should be considered an extremely important tool that should be used during the course of drafting policies and development plans for coastal areas. The CCA should not only be considered as a concept, or scientific calculation that shows the precise number of tourists for a particular area. Instead, it should be used as a flexible management tool for sustainable development of tourism allowing for optimum level of capacity in a certain area. Carrying capacities should also be considered an integral part of defining development scenarios for a given area in order to ensure a harmonised and sustainable development for the future. This process should be more effective if it develops in sympathy with the nature and character of coastal environment, tourist needs and local population's expectation for tourism development. This article presents the necessity of assessing and applying the CCA concept during the course of developing various tourism development models of coastal areas, with a strong focus at application of sustainable tourism development scenario.

Keywords: Coastal areas, carrying capacity, sustainable tourism, tourism development scenarios.

1. INTRODUCTION

Tourism in Albania is recognised as an important economic sector that contributes to employment generation, foreign currency earning, and long term development of the national economy. Taking into considerations the potentials for tourism and the continuous interests showed from foreign and domestic capital over the last 20 years tourism developments have been focused mainly along the coastal areas. Albania's coast is one of the country's most valuable assets both from the development and environmental point of view as well as the opportunities it offers for socio-economic development. Its geographic position, rich ecosystems favourable climate, great scenic beauty, rich historical and cultural heritage, makes it both an attractive area and an important resource for the development of economic sectors such as tourism. Being aware of potentials for tourism developments and the need for sustainable development, during the last twenty years, the Government of Albania has invested during considerable efforts in setting up the legal and institutional framework for regulating sustainable development in the coastal areas at both national and local levels. The most relevant achievements include the gradually developing legislation on priority areas for tourism development, the national legislation on urban and physical planning, national legislation for nature and environment protection, the development of National Biodiversity

Strategy and Action Plan, the implementation of various technical assistance and investment programs supported by international donors, etc. However, the present on-the-ground reality shows that the above mentioned efforts have not been sufficient to ensure a balanced, long-term sustainable development of the coastal areas. Like in other European and Mediterranean countries, over the past years tourism investments along the Albanian coast have caused serious environment and scenic degradation, urban sanitation and congestion issues, Due to ad-hoc types of development, environmental limits coastal of ecosystems not only are not taken into account, but in most of the cases, have been overexploited, thus creating constant and hazard conflict with coastal resources.

Nowadays, there is a clear evidence of negative impact, some time irreversible, brought about from uncontrolled sprawling development along the coastal zones of Durrës, Golem, Sarandë, and to a lesser extent, in Velipojë and in Vlorë. These developments are associated with reduction and pollution of coastal resources, loss of the terrain from untreated sediments of waste and rubbishes, pollution of the sea from direct sewage discharge, lost of scenic landscapes and seascapes, lost of free spaces in exchange of residential buildings, erosion of coastal areas due to unsuitable constructions, reduction of biodiversity and natural habitat, etc. Such developments have also exerted negative social impact by fading out the local traditions, and converting the local economy into the monoculture type of development, etc. Last, but not least, conflict over resources ownership has become part of the everyday Albanian discourse.

As a response to such situation, the integrated management of coastal areas and the calculation of maximal number of tourists they can withstand without causing environmental damages, or Tourism Carrying Capacity Assessment (TCCA), has become an important discipline for sustainable tourism development. Although, such calculation is not considered yet a useful analytical tool, the concept of carrying capacity, must take a primary importance during the course of drafting the policies and development plans for the coastal areas and local investments for land-use planning and regulation. Taking into account the continuous growing pressure from developers and investors it is of a paramount importance that in the coming years, a harmonized balance between economic, social and environmental resources be ensured. The incorporation of TCCA during the course of planning and management of tourism development projects should be considered as an important instrument which guides the development process through the participation of all the actors involved, like decision making authorities at the central and local levels, developers and investors, civil society and local communities in particular.

2. THE EVOLUTION OF TOURISM CARRYING CAPACITY CONCEPT

The concept of tourism carrying capacity (TCC) has been under considerations for at least as long as there has been increasing concerns about the impact of tourism. It stems from a perception that tourism can not grow forever in a place without causing irreversible damage to the local system.¹

During the last 20-30 years there have been many attempts to define carrying capacity. At a theoretical level, carrying capacity has been defined by specialized researchers “. . . as the number of user unit use periods that a recreation/tourist area can provide each year without permanent natural/physical deterioration of the area's ability to support recreation and without appreciable impairment of the visitors' recreational experience², or as a “. . . measure of the tolerance a site or building are open to tourist activity and the limit beyond which an area may suffer from the adverse impacts of tourism.”³ Other definition describes carrying capacity as a “. . . certain threshold level of tourism activity beyond which there will occur damage to the environment, including natural habitats.”⁴

The early concept of carrying capacity was initially introduced in biological science to indicate the limit, or the level a species population size attains given the environmental resistance indigenous to its location⁵. Although the first analysis of the

¹ Coccossis H. (2004) Sustainable Tourism and Carrying Capacity

² Coccossis H.N., Parpairis A. (1992), “*Tourism and the Environment: Some Observation on the Concept of Carrying Capacity*”.

³ Middleton V.C., Hawkins R., 1998: *Sustainable Tourism: A Marketing Perspective*. Oxford: Butterworth-Heinemann.

⁴ Clark J., 1997: *Coastal Zone Management Handbook*. Boca Raton: Lewis Publishers

⁵ Lein J. K. (1993), *Applying Expert Systems Technology to Carrying Capacity Assessment: A Demonstration Prototype*. Journal of Environmental Management 37, 63-84.

ability of parks and protected areas to absorb tourist and to study their impact was made in USA at the beginning of 1930s¹, the TCC concept emerged as an important discipline during '70s and '80s. Since that time, many international organizations dealing with tourism development, have elaborated their own definitions of TCC. Thus, the WTO has proposed the definition of TCC as "the maximum number of people that may visit a tourist destination at the same time, without causing destruction of the physical, economic and socio-cultural environment and an unacceptable decrease in the quality of visitors 'satisfaction".²

Many researchers agree that during the course of carrying out TCC, multidisciplinary elements should be considered including environmental assets, cultural heritage, residents' aspirations and the quality of visitor's experience. Following these considerations, the carrying capacity concept has four major facets: physical, social, economic and psychological carrying capacity. Initially, TCC was concerned with environmental considerations, but later on with evolution of theory and practices on sustainable tourism and with the need for a multidimensional approach combining simultaneously social, economic and environmental dimensions was taken much emphasis. Consequently, the existence of three different types of carrying capacity was developed by Pearce³ as following:

physical carrying capacity: "the maximum number of people who can use a site without an unacceptable alteration in the physical environment and without an unacceptable decline in the quality of experience gained by visitors"⁴;

social carrying capacity: the level of tolerance of the host population for the presence and behavior of tourists in the destination area;

economic carrying capacity: the ability to absorb tourist functions without squeezing out desirable local activities and avoiding the decline of the tourist destination caused by the disruption of the local attractions;

On the basis of the main dimensions of the development, the impacts of tourism in a given area can be analysed in terms of three major axes: physical environment (natural and man-made including infrastructure), social (population and social structure and dynamics) and economic (including institutional and organisational). These three basic axes compose

physical-ecological, socio-demographic and political-economic dimensions of TCC⁵.

The physical-ecological dimension refers to all fixed and flexible components of the natural environment, as well as infrastructural systems.

The socio-demographic dimension, is associated to all the elements which concern social communities, as well as the problems of interrelation between local resident population and tourists;

The last dimension (political-economic dimension) primarily refer to the anticipated

investments and economic measures for tourism development.⁶

The interaction between the above dimensions varies in accordance to the characteristics of a tourist destination including local resources, the sensitivity of natural ecosystems, size and compositions the population, economic structure, local cultural heritage, types of tourist visiting the area and the model of tourism development. Therefore TCCA should be applied

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² UNWTO (1981), *Saturation of Tourist Destinations*, Report of the Secretary General, Madrid.

³ Pearce D.C., 1989: *Tourist Development*. Essex: Longman Scientific and Technical Publishers.

⁴ Mathieson A. and Wall G. (1982), *Tourism. Economic, Physical and Social Impacts*, Longman.

⁵ UNEP/MAP/PAP (1997), *Guidelines for Carrying Capacity Assessment for Tourism in Mediterranean Coastal Areas*, Priority Action Programme, Regional Activity Centre, Split.

⁶ UNEP/MAP/PAP (1997), *Guidelines for Carrying Capacity Assessment for Tourism in Mediterranean Coastal Areas*, Priority Action Programme, Regional Activity Centre, Split.

individually for each specific tourist destination by using an individual approach that takes into consideration the specific features of the destination"¹.

In addition, during the past decades, the concept of carrying capacity has re-emerged by facing a new direction according to which the focus has shifted from determining the maximum numbers of users towards the achievement of desirable conditions, identification of limits of acceptable changes. The prevailing concern for a scientific approach to tourism carrying has been gradually broaden towards a management approach. This implies moving from explicit and numerical values to toward more indicative systems, which should involve not only the key stakeholders, but also the tourist themselves. ²

3. APPLICATION OF TOURISM DEVELOPMENT OPTIONS IN ALBANIA AS A

PREREQUISITE FOR APPLICATION OF CCA IN COASTAL AREAS

There are not so many practical approaches aimed as assessing the tourism carrying capacity in the coastal areas. In 1997 the Priority Action Programme (PAP) created the Guidelines for Carrying Capacity Assessment for Tourism in Mediterranean Coastal areas with specific focus on coastal areas. The guidelines were applied in a number of demonstrations sites in the Mediterranean Basin (Vis, Rhodes, Brijuni, Fuka-Matrouch, Malta and Rimini)³.

Recognising that TCC in general and the carrying capacity of the coastal areas is not a fixed category, PAP Guidelines suggest the preparation of tourism development option for a given area first and than after the assessment of its carrying capacity. These options should be elaborated as separate scenarios of tourism development, which in turn should be examined in order to identify the most suitable one. PAP Guidelines recommend that in principle, the basic development scenarios should be the same for all areas (whether in or outside of the Mediterranean Basin), and may be subdivided into 4 basic types:

Free development without any restrictions

Intensive tourism development, with some elements of control;

More limited development, of alternative tourism or "eco-tourism"; and

Balanced, sustainable tourism development.

3. 1. Free development without any restrictions.

This development option implies going over the top limit of carrying capacity in all domains, therefore, it is generally considered unacceptable. This is really about giving over an area to competing entrepreneurs' capital on the open market, interesting only to those entrepreneurs who are after maximum short-term profit, and who don't really care what the long-term consequences may be for the environment. ⁴

This development scenario was applied on ad-hoc bases in some coastal areas of Albania, initially in Golem, Velipojë and Sarandë. After losing the state control from political turmoil during the year 1997, the urbanisation process was totally chaotic, without environmental consideration and with heavy concentration of residential dwelling which were not accompanied by the public infrastructure (waste water draining to the sea, solid waste scattered everywhere, energy

¹ UNEP/MAP/PAP (1997), *Guidelines for Carrying Capacity Assessment for Tourism in Mediterranean Coastal Areas*, Priority Action Programme, Regional Activity Centre, Split.

² Cocossis H. (2004) *Sustainable Tourism and Carrying Capacity*

³ Trumbic I, (2005) *Proceedings of the 14th Biennial Coastal Zone Conference*, New Orleans, Louisiana

⁴ UNEP/MAP/PAP (1997), *Guidelines for Carrying Capacity Assessment for Tourism in Mediterranean Coastal Areas*, Priority Action Programme, Regional Activity Centre

shortages, etc). The majority of these constructions were initially built without building permits. Although there were few cases of demolition, the majority of the development has been legalized, through a *posteri* enlargements of the zones allowed for construction by local public institutions. A direct consequence of such situation is the decrease of consumer satisfaction from the tourists which has resulted in lowering of the number of guests experiencing these zones and reduction of economic benefits for local population and economy. Also, from the marketing point of view, these areas have lost their comparative advantage since they offer a tourist product that is difficult to be marketed at regional and European tourist markets.

3. 2. Intensive tourism development, with some elements of control.

In substance, the intensive tourism development scenario is quite similar to the free development scenario. This scenario takes into account the carrying capacity of the environment as well as of the economic and political systems, but somehow it tends to disregard the socio-cultural carrying capacity by ignoring to a certain degree the public opinion and local community interests.¹

This type of scenario has occurred starting from the year of 2000 in the tourist development zones of Vlore, Orikum and in particular in Golem, Saranda, and Ksamil. These years were characterised by the rapid mass urbanisation process and hazard unregulated development. As a result of a "pro-development" vision, new urban area plans that were developed without passing environmental impact assessment procedures enabled the construction of thousands buildings (3000 in Saranda only) with over 10 storeys scattered in large spaces and without any sense of logical organized growth. The case of Golemi Bay, together with aforementioned cases of Vlora-Orikum and Saranda-Ksamil ribbon development is probably the most significant negative in the urban/rural interface along the coastal areas of Albania.

3. 3. The alternative development of tourism.

The alternative tourism development or the so-called "eco-tourism" is the scenario which has become quite popular in the last couple of years. It came into existence as a critical response to the concept of mass or "industrial" tourism some Mediterranean countries developed during the '60s. Characteristic of this scenario is the fact that it offers a one-way communication between residents and visitors (scientists, adventurers, "alternativism" supporters, etc.), instead of an interaction between them, and that it ignores likely net economic benefits from tourism.²

This model was proposed to be developed once Albania was open to foreign investors after the first democratic government took place in 1992 and the newly Ministry of Tourism was set up. The Albanian Tourism Development Guidelines, commissioned by EBRD in November 1992, suggested that "Albania has a unique opportunity to become Europe's leading eco-tourism destination, with an image of a safe environment unpolluted by tourists. . . The unspoilt coasts, in particular, must be preserved not only for Albanian heritage but also for competitive advantage in tourism markets".³ These guidelines recommended a range of tourism products and activities which were designed to capitalize on the strengths of Albanian natural resources, heritage, culture and people, while recognising that considerable constraints of infrastructure. The Guidelines identified as the main target markets for Albanian tourism to focus on:

people seeking quality, value for money holidays in a clean and safe environment where development should be rigorously controlled;

Individuals and small groups with special interests in culture, sports, exploring outdoor pursuits;

¹ UNEP/MAP/PAP (1997), *Guidelines for Carrying Capacity Assessment for Tourism in Mediterranean Coastal Areas*, Priority Action Programme, Regional Activity Centre

² UNEP/MAP/PAP (1997), *Guidelines for Carrying Capacity Assessment for Tourism in Mediterranean Coastal Areas*, Priority Action Programme, Regional Activity Centre

³ Touche Ross, EuroPrincipals Limited (November 1992) *Albania Tourism Guidelines*

The key visitors originating countries defined were Austria, France, Germany, Great Britain, Greece, Italy, Spain and Sweden. ¹ Although the concept of CCA was rather unknown to the Albanian reality at that time, the study had proposed the first physical considerations of territorial planning by recommending the maximum building density for hotels and apartments (including ancillary facilities, car parking, landscaping) of 100 tourist beds for hectare of land, together with a maximum height for buildings depending on topography. From calculations of appropriate building densities and physical constraints it was recommended that the Adriatic coastal area could support a total of around 9000 tourist beds, whereas for the Ionian part around 7500.

Unfortunately, coastal developments of the years '95-'96, and in particular, those that happened after turmoil of 1997, definitely destroyed the opportunity to develop such scenario. The period 1996-2000 was characterised by a rather anarchy over the control on territory, maltreatment of public property for tourism investment, severe damages of the environment, especially of the coastal areas, serious deterioration of the fragile tourist image that was cultivated till that time, thus demonstrating the lack of awareness and preparation by local and business community, and government institutions responsible for tourism development. Today, statistics from the Ministry of Tourism and Urban Planning report an approximate number of 10, 197 tourist beds spread over to Velipojë, Lezhë, Durrës and Kavajë districts and 8, 838 in Vlorë and Sarandë. Should the informal tourist and residential dwellings be taken into account the above number would be 2-3 times higher, thus leaving far behind the projections of eco-tourism development scenario, proposed by Tourism Development Guidelines.

3. 4. Sustainable tourism scenario.

The essence of sustainable tourism is harmonization of the overall local situation with the regional and national interests, by achieving a harmonious management of the resources attractive to tourism, and by planning of tourism activities with regard to environmental, socio-cultural, economic and political aspects. ²

The scenario for sustainable development can offer several optional values of the carrying capacity, or concepts of tourism development or it can decide on one option. This option will be closer to the scenario of intensive development or to the moderate scenario of alternative tourism depending primarily on the situation at the given area. The carrying capacities applicable for this type of development are calculated as intermediate levels of the capacities of intensive development (maximum values) and those applicable to alternative type of development (minimum values). Whether a model for sustainable tourism will be closer to the upper or to the lower limits of the theoretical carrying capacity depends upon the specific features of a given site, i. e. on the requirements expressed at the local, regional and country levels. If among the deciding factors, the influence of investors and developers is the stronger force, and they do not really care about the environment or local community, so it can be expected that they "push" the carrying capacity towards its upper limits, and even beyond them. On the other hand, if greater influence is in the hands of ecologists and conservationists, who are not interested in economic benefits, they tend to "push" carrying capacity towards its lower limits or beyond.

In Albania, although the strategies for tourism development adopted by Albanian Governments during the last 20 years, have focused on the option of sustainable tourism, the coastal municipalities and other local government units have been unprepared to control the strong development pressures by providing regulatory plans and serviced buildable land. These has resulted on illegal and inappropriate sprawl development, threaten of the integrity of coastal ecosystems, loose of aesthetic values of due to poor construction quality and complete neglecting of traditional architectural style. The latest National Tourism Strategy 2002-2020, approved by the Albanian Government in 2003, provides general directions for the development of sun and beach tourism, but it does not contain the special dimension. While it sets out some norms for tourism development (e. g provides a good stating point 100 beds for hotel on the Adriatic Coast and 200 beds per hotel in on the Ionian Coast), it does not go too far by stimulating clear limits for the use of land and coastal resources needed for tourism development.

¹ Touche Ross, EuroPrincipals Limited (November 1992) *Albania Tourism Guidelines*

² UNEP/IMAP/PAP (1997), *Guidelines for Carrying Capacity Assessment for Tourism in Mediterranean Coastal Areas*, Priority Action Programme, Regional Activity Centre, Split.

4. CONCLUSIONS AND RECCOMENDATIONS

Tourist investments in some coastal areas of Albania, especially in northern and central part, have surpassed their carrying capacity level, mainly because they developed without a clear development framework imposing too high price on the nature and coastal resources. As pressures for development are expected to grow leading to the saturation of the remaining rather intact areas, appropriate policies and carrying capacity assessment need to be develop and introduced.

Cooperation among different sectors, sustainable development and urban/environmental planning that seriously consider TCCA, are important tools that lead to integrated coastal area management. Within this frame, tourism could be considered a common ground for a new approach of sustainable tourism in Albania which should be developed in sympathy with the nature and character of costal environment in which is to cited, tourist needs and local population's expectation.

The calculation of TCC should be done once the development model of a tourist destination is defined. In Albania, where the level of tourism is less developed in comparison to other Mediterranean destinations, the incorporation of demographic and socio-cultural components of carrying capacity, vis-à-vis to the physical and ecological ones take a greater importance. Therefore, it is required a more specific approach adapted to the principal characteristics of the environment and types of tourism that could develop successfully. The main reasons for such specific approach are the characteristics sensitive coastal ecosystems, specific environmental climate, great wealth of cultural heritage, specific tradition and behaviour of the local population, etc.

As public participation and transparency in decision making are important to sustainability of issues, the implementation of CCA is going to be more efficient if it will be supported by public participation and public involvement in planning and implementation phases of coastal tourism projects.

Since many of the above considerations were insufficiently taken into consideration in the past, CCA approach in Albania should immediately be applied into the planning phase of development projects, as the concepts introduced in this article, make it imperative and rather easily adaptable in the future.

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