

Multidisciplinary
SCIENTIFIC JOURNAL OF
MARITIME RESEARCH



University of Rijeka
Faculty of Maritime
Studies Rijeka

Multidisciplinarni
znanstveni časopis
POMORSTVO

The scenario method of nautical tourism development – a case study of Croatia

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ABSTRACT

The human needs for travel and special-interest forms of tourism are playing an increasingly important role in tourist travels. Hence, the effect of tourism on space is becoming a vital issue and subject of interest for scientists and experts in a variety of areas. As a special-interest form of tourism, nautical tourism, together with its infrastructure and superstructure, exerts a powerful influence on the transformation of space, in an enabling as well as a constraining sense.

Based on their previous experience, the authors examine the spatial and environmental determinants of nautical tourism development in Croatia. In accordance with the problem presented, the purpose of this paper is to determine the existing condition of nautical tourism in Croatia. The paper aims to propose a development model that focuses on the environmental and economic acceptability of space for sitting nautical tourism ports. The special aim of this paper is to propose a model of the spatial development of nautical tourism which is based on a sustainable carrying-capacity development scenario.

The paper supports a systematic approach to planning, as well as the use of the scenario method in selecting a development model. The scenario method belongs to the order of prospective methods used in various research fields and in preparing strategic decisions. Applying the scenario method in this study allows the decision-maker to choose between several alternatives, or to choose between scenarios of intense and moderate versions of nautical tourism. The sustainable development scenario selected is based on a spatial and environmental approach to nautical tourism development in Croatia.

ARTICLE INFO

Review article
Received 25 October 2015
Accepted 15 November 2015

Key words:

Nautical tourism
Space
Development scenarios
Environmental sustainability
Economic effects

1 Introduction

As a result of the development and construction of accommodation facilities for vessels, the Croatian coast of the Adriatic has seen great advancement over the past fifteen years, and the market orientation towards nautical tourism has been proved justified. Ports of nautical tourism, together with the nautical tourism market, are developing throughout the Mediterranean, and are displaying an upward trend worldwide.

Ports of nautical tourism in Croatia, and its coastal counties, are unevenly distributed and are characterized by seasonality. The growing demand for sea berths, as well as for space for the land storage of vessels has been clearly identified by the Study on Nautical Tourism Development in Croatia (2006) and defined in the 2009-2019 Strategy of Nautical Tourism Development (2008).

Croatia's coastline accounts for almost one-quarter of the European coastline of the Mediterranean Sea. While it boasts the highest coefficient of coastline indented-

ness, the concentration of vessels along the Croatia's coast is on average eight to ten times less than that in other Mediterranean countries in Europe. This means that 75 per cent of the European Mediterranean coast accounts for 95 per cent of all vessels, whereas the 23.8 per cent that belongs to Croatia accounts for only three to four per cent of all vessels. When both domestic and foreign vessels in Croatia are taken into account, this number rises to about seven per cent.

Croatia continuously lacks of berths and facilities capable of receiving mega yachts. Analyses have shown that there is an upward trend in the demand for the organized accommodation of vessels, in particular, in summer months and increasingly in the off-season. The lack of vessel-receiving infrastructure in the vicinity of towns and on the islands has a substantial effect on revenue generated by nautical tourism. In addition to direct effects, there are also indirect benefits ranging from new jobs to numerous activities and services associated with nautical tourism.

Table 1 Capacity of Nautical Tourism Ports (2004-2012)

	2004	2005	2006	2007	2008	2009	2010	2011	2012
Number of nautical tourism ports...	83	84	95	94	97	98	98	98	98
...of which the number of marinas was	50	50	56	56	58	58	60	55	58
Marine area, m ²	3 673 004	3 901 705	4 241 550	3 309 958	3 387 879	3 293 558	3 313 110	3 293 891	3 266 746
Total number of berths	15 407	15 058	15 827	15 834	16 403	16 848	16 913	17 059	17 454
Number of berths by length of the vessel									
Up to 6 m	1 876	1 094	1 014	1 056	1 054	1 184	1 239	1 074	913
6 – 8 m	2 450	2 154	2 096	2 144	2 128	2 136	2 097	1 470	1 385
8 – 10 m	3 540	3 387	3 475	3 566	3 602	3 579	3 542	2 905	2 932
10 – 15 m	6 519	6 870	7 564	7 414	7 591	7 827	3 225	8 714	9 239
Longer than 15 m	1 022	1 553	1 678	1 654	2 028	2 122	1 577	2 896	2 985
Length of developed shore for mooring	113 302	121 172	116 455	117 127	66 038	63 824	64 715	64 345	58 634
Space for vessel accommodation	5 518	5 065	5 127	5 186	5 189	5 209	5 125	5 231	5 359
Total area of space on land, m ² ...	1 028 806	839 814	792 609	83 1372	760 469	753 369	756 538	772 338	783 168
...of which covered space amounted to	7 050	7 550	7 930	5 450	5 756	5 246	6 596	8 646	8 026

Source: By the authors according to CBS data (2004-2012)

The special aim of this article is to put forward a model of the spatial development of nautical tourism based on the scenario of the sustainable development of carrying capacity.

2 Problem definition

Nautical tourism is part of the development strategy of a given region (Gračan, 2006), the development strategy being a fundamental document of the long-term socio-economic development. Guidelines for the Elaboration of County Development Strategies in Croatia are set forth in the Regulation on Mandatory Content, Elaboration Methodology and Ex-ante Evaluation Procedure of County Development Strategies (Official Gazette 53-1304/2010). Development strategies are adopted in accordance with EU frameworks. County Development Strategies encompass the period up to the end of 2013, which will be followed by a seven-year adaptation programme cycle (2014-2020). Of essential importance to the development strategy is proper planning that takes into consideration all factors that impact on the development of a given area.

The development of nautical tourism is part of Croatia's development strategy. In addition to enabling effects, nautical tourism development can also have constraining effects (HHI, 2008). This means that when planning sites for the construction of nautical tourism ports it is necessary to establish the:

1. Natural and spatial features of each site:
 - its geographical position
 - its basic geological characteristics (vegetation, flora and fauna)
 - its climate features (winds, sea currents...)

2. Condition of traffic infrastructure, energy production infrastructure, and municipal infrastructure
3. Means and possibilities of disposing of waste generated in ports of nautical tourism.

3 Theoretical and space-related ecological determinants of nautical tourism in Croatia

Nautical tourism began to gain growing recognition in the twentieth century (Luck, 2007, Cooper, 2010). Research concerning nautical tourism in its various forms was conducted in the second half of that century. Countries with a long tradition in nautical tourism development possess comprehensive programmes that systematically monitor development through the controlled construction and management of nautical ports based on the principles of sustainable development. In some countries, there are specialized research institutes or departments engaged in monitoring the phenomenon of nautical tourism and studying the economics of nautical ports, and worldwide, there are specialized journals in this field. The Act on Tourism Activities in Croatia defines nautical tourism as the navigation and stay of tourists/boaters on board vessels and in ports of nautical tourism for the purpose of leisure and recreation. A significant part of overall tourism activities in Croatia, nautical tourism, is a dynamic form of the tourism offering, and its share in total tourism traffic is becoming more and more important.

3.1 Analysis of the state of nautical tourism in Croatia

Over the past 15 years, nautical tourism has recorded rapid development, both worldwide and in Croatia. The statistical data of the Croatian Bureau of Statistics con-

cerning the state of nautical tourism ports in 2012 (CBS, 2012) support this fact.

A study conducted in 2012, encompassed 98 ports of nautical tourism along Croatia's sea coast, of which 62 were marinas (11 of which were dry-storage marinas) and 36 were other types of nautical ports. These nautical tourism ports cover a marine area of 3,266,746 m², and have a total of 17,454 berths. Table 1 provides a comparative overview of the capacity of nautical tourism ports over a number of years.

On 31st December 2012, there were 14,396 vessels on permanent berths, signifying a 0.8% increase relative to 31st December 2011. Nautical tourism ports registered 181,628 transit vessels in 2012, a 3.6% drop relative to 2011. Of the transit vessels using sea berths, 33.6% were motor yachts; 63.4%, sailing yachts; and 3.0%, other types of vessels. In that period, Croatian vessels accounted for the greatest number of transit vessels (46.3%), followed by Italian (18.4%), German (11.5%), Austrian (7.6%) and Slovenian (3.8%) vessels, which together accounted for 87.6% of all transit vessels. The total revenue of nautical tourism ports in 2012 amounted to HRK 660.0m, of which HRK 487.8m was generated by renting berths, and accounted for 73.9% of total revenue. Relative to 2011, total revenue was 10.0% higher in 2012, while berth-rental generated income was higher by 11.0%.

3.2 Spatial determinants of nautical tourism

With all its distinctive natural features, space is concurrently one of the most enabling as well as constraining factors of tourism development. In general, tourism development is based on the quality of space and its natural resources. The concept of space in tourism includes everything belonging to that space, regardless of its origin, that is, regardless of whether the given conditions of space were created by nature or by humankind.

The development of nautical tourism has always been linked to the construction of new nautical ports and the reorganization or reconstruction of the existing ones. Studies dealing with the needs of and potential for the continued construction of nautical tourism ports along the Croatian coast and on islands have indicated an increased demand for berths or, in other words, a lack of berths. The damage caused by vessels that cannot dock in nautical ports due to this lack of berths is considerable both in terms of revenue and the environment. In comparison with certain Mediterranean countries, the capacity of Croatia's marine area is capable of absorbing an increase in the number of vessels, which at the same time affects the saturation (carrying capacity) of marine and coastal space.

A spatial plan is the fundamental document used to determine the site for constructing a port of nautical tourism (Favro and Kovačić, 2006). Croatia possesses primary attraction elements that favour the further development of nautical tourism: it has an appealing coastal area, a

well-indented coastline, national parks and forest parks, a pleasant climate, biodiversity, a clean sea and preserved seafloor, aesthetic assets, landscapes, cultural and historical assets, etc. (Cukrov and Kwokal, 2009). However, to ensure the conservation of these assets it is necessary to plan for development in the long run, taking into account all enabling factors as well as potential constraining factors.

When building ports of nautical tourism in particular and other types of ports in general, a part of the coastal area is used for the purpose of enabling access for vehicles, and for building berths and supporting infrastructure. Hence, the first essential step is spatial planning, and the usage of space is determined by the Spatial Planning Strategy. An Environmental Impact Study is also mandatory because the protection of the coastal zone and maritime domain is an issue inherent to spatial planning.

An Environmental Impact Study assesses the environmental and economic potential and feasibility of a project involving the construction of a nautical tourism port in a specific area (Natchez, 2005). Too much commercialization can cause the coast to lose its beauty and appeal, which in turn causes tourists to lose interest in that area and to travel to other, more attractive and better preserved areas.

Seeking to rationalize the use of coasts in its Member Countries, the European Union has prescribed the conservation of scenic spots and the protection of vulnerable nature areas through a series of Directives. Croatia has brought its legislation (Environmental Protection Act, Nature Protection Act, Physical Planning and Construction Act, National Environmental Protection Strategy) in line with EU legislation, particularly in the field of the protection of the sea and the marine environment (Marine Strategy).

A new dimension of nautical reality present in developed European countries is reflected in the level of development on the whole, as well as in the continuous process of ensuring flexibility and adjustments to change in the environment (Jugović et al., 2011).

3.3 Ecologically protected areas and the adverse impact of nautical tourism ports

Pursuant to the Nature Protection Act (Official Gazette 70/05), Croatia has nine categories of spatial protection. These are strict reserves, national parks, special reserves, nature parks, regional parks, natural monuments, important landscapes, forest parks and monuments of park architecture (Official Gazette 70/05, Art. 8).

Nature parks and national parks account for about 90% of the total area of protected areas in Croatia. Because of the steady and huge economic interest in these areas, there is a continuous threat from excessive saturation in terms of tourism and recreation.

Efforts are being made to provide protection to national parks and nature parks. However, different visions of how to manage and protect these areas have emerged

as a result of the lack of spatial plans for protected areas, the lack of management plans, and the low level of environmental awareness of the representatives of local self-government. This has caused conflicts with residents over changes in spatial management, led to pollution hazards, and brought about certain problems that are characteristic of specific national parks or nature parks (Vuk Tvrtko Opačić, 2004).

It is the opinion of many authors (Orams, 1999; Johnson, 2005; Luck 2005; Robinson, 2009; Kovačić, 2012) that the adverse effects of nautical tourism ports on marine flora and fauna are the result of inadequate mooring, the discharge of wastewater and solid waste from vessels and, more often than not, the spilling of petrol, oil and other chemical materials.

Pursuant to the Maritime Domain and Seaports Act, it is prohibited to anchor boats, yachts and other vessels in areas that have been specially designated as such on sea maps and other publications of the Croatian Hydrographic Institute, particularly in environmentally protected areas. Proper anchoring is vital to the safety of all stakeholders in a port (anchorage place) as well as to the safety of the seafloor. When an anchor scrapes the seabed, it can lead to the destruction of natural species (flora and fauna) in that area.

Various types of organisms that can be transferred from one marine area to another by means of a vessel's anchor, anchor chain or its hull are a special hazard to the marine environment. Such organisms can cause severe consequences, and the demise/destruction of marine communities that are vital links in the food chain (Johnson, 2005). It is known that this is the way a species of seaweed, an alga of the genus *Caulerpa*, was introduced into the Adriatic Sea from the Indian Ocean and the Red Sea.

Caulerpa is spread by anchors, anchor chains and fishing nets, it is necessary to prevent fishing and anchoring in places in which this seaweed is widespread (Orešić, 2004).

The disposal of solid waste in ports of nautical tourism is a vital factor that needs to be taken into consideration when building nautical tourism ports, especially given the large number of people staying in such ports (and generating large quantities of various types of waste), particularly in the summer period when high temperatures enable the development of a variety of bacteria and harmful microorganisms (causing unpleasant sights and foul odours).

Contamination of the marine environment in ports of nautical tourism is also caused by the accidental or deliberate spilling of petrol, oil, paint and solvents into the marine environment. Considering that a variety of repair and maintenance services are provided in nautical ports, it is of the most importance to properly dispose of any chemicals being used.

To prevent pollution, parameters have been established in Croatia to monitor sea quality. These parameters are vital indicators of the current state of the sea. A comprehensive picture of the marine environment is obtained

by monitoring these parameters over a longer period of time. Oceanographic parameters are the most commonly monitored parameters of sea quality and include:

- Physical parameters – temperature, salinity and density of the sea, sea currents, the colour and transparency of the sea
- Chemical parameters – dissolved oxygen, pH, nutritive salts (nitrites, nitrates, phosphates...)
- Biological parameters – chlorophyllic biomass and the composition of phytoplankton, the number of bacterial cells (direct number), the composition of microzooplankton and mesozooplankton, sanitary indicators
- Meteorological parameters.

Out of the large number of parameters for monitoring sea quality, certain parameters are monitored / used for specific purposes.

4 Methods and materials

This chapter explains the systematic approach to planning and the scenario method for selecting a development model. The selected sustainable-development scenario is based on a spatial and ecological approach to nautical tourism development in Croatia.

Spatial planning and development is a prerequisite to achieving a better distribution of economic activities in space, to ensuring the protection and improvement of natural as well as built assets, and to enabling the best distribution of facilities used in various activities, including nautical tourism activities. A scientific approach to spatial planning in nautical tourism is necessary because nautical tourism is an economic activity that requires coastal and marine space as a crucial precondition to business and development (Kovačić and Luković, 2007). Of all types of nautical tourism ports, marinas require much coastal space of the best quality, so planning the location of marinas in space is especially important. As landscapes and historical urban centres hold the greatest attraction for boaters, the greatest trend is building marinas in such areas. There is a continuous risk that marina construction will either degrade or even completely devastate such areas. Experts in various fields have become involved in addressing this issue. Available natural resources are analytically studied in terms of quality; the cost-efficiency of investments is analysed, as well as specific traits of resources. In its general design, the scenario method belongs to the order of prospective methods used in various research fields and in preparing strategic decisions. In its essence, this method is a way of defining the future through temporal demarcation by demonstrating the development of occurrences in temporal and successive parts, while taking into account action and reaction to one or more actions coming from the environment and setting up counteraction aimed at achieving the best possible results in fulfilling the primary objective (Šimunović, 2005, 65). "Prospectivity" is the main attribute of the scenario method. Its second at-

tribute is reflected in the fact that its methodical concept can be realised in different ways providing the basic scenario principles and structures are adhered to.

Two scenarios exist in viewing the course of development an occurrence may take:

- *the situation scenario* – describes how an occurrence will look after a certain period, but does not describe the manner and conditions in which the situation will come about
- *the process scenario* – in seeking a more appropriate scenario for development and natural resource management, focus should be placed on those attributes of a scenario method that allow for a multitude of alternatives in its construction and that do not preclude a specific systems configuration.

In identifying scenarios of the future, it is necessary to continuously valorise and evaluate the socio-economic development. This requires looking into the capacity of the eco-system as a whole, as well as into each of its factors individually (air, spring water, the sea, rock, the earth, flora, and fauna). A good knowledge of local-level issues is needed, as are efforts in seeking and finding support for their resolution (Bizzari and La Foresta, 2011). The structure elements are scrutinised, together with their environmental impact as a whole and as individual factors, and placed within the context of a multi-level scenario. Adapting this form of procedure serves to guarantee that overall development will be based on knowledge and consideration of the environment, that environmental protection will be viewed as an integral part of activities across all dimensions and in every segment.

A number of different elements need to be analysed when designing development policies in nautical tourism that emphasize sustainable development (Kovačić et al., 2005). One of the crucial elements is determining the carrying capacity at the destination level. The methodology of establishing the carrying capacity (Klarić, 1994) makes it possible to analyse changes in the natural and social environment caused by the use of a given area in nautical purposes.

The element that determines the lowest value of the carrying capacity is the element that defines the total carrying capacity of a destination (PPA/CRA, 1996). Providing such an element (for example, the openness of residents to the arrival of boaters) experiences change over a prolonged period, the threshold of the carrying capacity may be raised. However, should this be an element such as the existing spatial constraints that provide no possibility of expanding a nautical port's marine area and its ability to absorb more vessels (Koelbel, 1999), then it becomes a factor that determines the lowest value of the carrying capacity.

By identifying the carrying capacity of a given area based on pre-set parameters and corresponding standards tied to individual parameters, a basis is created for constructing scenarios of possible development:

- completely free development with no constraints
- intensive nautical development but with some elements of control
- the development of alternative tourism or nautical tourism
- sustainable development of a nautical port

The most suitable development scenario is then selected.

5 Research and results

This chapter presents the possible scenarios of nautical tourism development, and puts forward recommendations for the selection of a scenario of nautical tourism development that is based on research conducted in the Croatian part of the Adriatic Sea.

5.1 No-constraints scenario of nautical port development

The scenario of free development with no constraints is considered acceptable, although, in practice, it means exceeding the limits of the carrying capacity in all its aspects (Orams 1999). This type of scenario may yield short-term but high profits for a nautical port at a specific location, but it will have disastrous consequences for the environment. Development of this kind is a blind force, due to the absence of any planning in building a nautical port. Typically, residents tend to offer resistance to this development scenario, and often, even the State may find it unacceptable, except in situations where there is only one goal – economic gain. Such a scenario needs to be analysed in the case of endeavours to implement it in:

- an area of developed nautical tourism
- an underdeveloped area
- areas in which it has previously been applied, that is, in the remediation of built locations.

5.2 Intensive-development scenario

Intensive development implies large interventions in space undertaken to gain high profits. The state plays a central role in this kind of development and imposes various control mechanisms. This scenario takes carrying capacity partially into consideration, but it tends to portray carrying capacity values as being higher than they actually are. While on the one hand taking account of economic and political aspects, on the other hand it minimises the importance of socio-cultural carrying capacity, which in some cases may have values that are lower than the capacity of the marine and coastal environment. The opinion of residents is marginalised. Calling for a middle-ground approach to relationships between boaters and residents, this scenario is offered as an alternative in all plans, except when dealing with highly vulnerable and valuable areas where it is not acceptable under any con-

ditions. Examples of this development scenario include the region of Languedoc – Roussillon in France, Poreč in Croatia, etc.

5.3 Development scenario of special-interest tourism forms – nautical tourism

The development scenario of special-interest tourism forms and, in particular, nautical tourism has evolved as a response to the concept of mass tourism. In its extremes, this concept began to develop as the opposite of anthropological and ecological criticisms directed at tourism as such, causing the regions for which it was originally intended to discard it. Typically, the concept attempted to assert itself in moderately and less developed countries, imposing limitations and neglecting the economic growth needed. In implementing the concept of special-interest tourism, nautical tourism is very important. The lowest possible carrying capacity values are presented, and while socio-cultural and environmental aspects are overstated, the economic and political aspect is understated. This type of scenario is taken into consideration in the case of highly vulnerable areas, areas rich in cultural and historical heritage, and areas in which the local population has a specific identity.

5.4 Sustainable development of nautical tourism and nautical tourism ports

The sustainable development scenario is positioned between the maximum and minimum carrying capacity, that is, between scenarios of intensive and moderate nautical tourism development. In terms of planned values and types of nautical capacities and in terms of nautical traffic, quantifying a sustainable nautical tourism scenario depends directly upon the conditions at a given site. The values of the relatively fixed components of the carrying capacity (physical capacity, environmental capacity, resource capacity, demographic capacity) are established, as well as the range of values for the more elastic components (infrastructure, a local community's socio-cultural capacity). Economic and political factors, that is, the willingness of the state to encourage or discourage a project through legal regulations or direct investments, are vital in selecting and implementing a development option. This scenario offers several alternative carrying capacity values and development concepts. The carrying capacity threshold at which a model of sustainable nautical tourism development will be set depends upon the specifics of a given area, and the demands and considerations of decision-makers at a local and national level. For example, limitations imposed on boater arrivals to prevent the intended carrying capacity from being exceeded will depend upon the nautical port's capacity, which determines the maximum number of vessels and boaters.

County spatial plans represent a legal platform for planning and building ports of nautical tourism. They

determine the location and maximum capacity of individual nautical tourism ports. According to data based on county spatial plans, 16,030 sea berths were recorded in nautical tourism ports in the Croatian part of the Adriatic in July of 2006. A total of 25,750 new sea berths and 7,900 dry berths were foreseen in county spatial plans for the period up to 2015. However, when having to choose between the option of maintaining the existing capacities or fostering the rapid development of nautical tourism ports (supported by county spatial plans), it is reasonable to choose the sustainable development of nautical capacities. By focusing on quality and on improving the services provided in the existing nautical tourism ports, the planned capacities can be reduced to an acceptable number. Hence, the construction of new capacities for 15,000 vessels is assessed as being a reasonable possibility. The proposed scenario of sustainable development is seen as a model that will evenly distribute these new capacities throughout the counties by building 5,000 berths in new ports of nautical tourism, 5,000 berths in the existing nautical tourism ports and 5,000 dry berths on land. It is reasonable that nautical tourism ports of a maximum capacity should be built near major Croatian towns, while in all other locations they should be of a minimum capacity and offer a minimum level of services.

5.5 Systems approach

The carrying capacity methodology was initially developed for the management of natural attractions. In this case, the boundaries of a given area can be set, allowing managers to control its use and take corrective actions if required. In practice, however, different stakeholders will have different opinions regarding the acceptable level of use of a site in nautical purposes. Also, limitations exist to the size of a nautical port, and in particular, a marina; these limitations are dictated by the size and design of vessels (Koelbel, 1999). Notably, environmental damage to natural resources may occur even at a low level of use. Based on the above, the basic criteria for determining the carrying capacity of a nautical port can be defined as follows:

1. The carrying capacity of a site or area must be defined in accordance with the management objectives.
2. The area of an aquatorium and its characteristics should be established prior to determining its carrying capacity.
3. Various frameworks for planning the carrying capacity should be used, taking into account minimum and other standards and monitoring the conditions within the location selected.
4. The opinions and preferences of users (as well as non-users) should be collected to help in formulating objectives and suggesting possible changes to the existing development policies.

5. A wide variety of environmentally-friendly supporting facilities and services should be made available to boaters.
6. The techniques used by nautical port managers need to be selected in accordance with a port carrying capacity, its development objectives and the importance of the area.
7. Upon analysis, the management should decide upon the optimum level of use in nautical purposes of a given area.

Although difficulties exist in determining the carrying capacity, they do not diminish the importance of this concept in planning the future development of a nautical destination. These difficulties involve:

- difficulties in identifying critical limiting resources as a basis for assessing the carrying capacity of nautical tourism,
- the number of vessels a given area can absorb, depending upon the type of vessel and technological factors

6 Conclusion

Croatia has one of the loveliest and most indented coasts in the world. The Adriatic Sea, its coastline and islands, which have gained worldwide recognition, are a vital basis of economic development in Croatia. However, the economic value of this major natural resource has not been sufficiently or appropriately exploited, and its development up to now has failed to focus adequately on environmental protection. Because tourism has spoiled a part of the coast, it is necessary to protect the remaining pristine and non-industrialized parts of the Croatian coast, and development needs to be planned within the boundaries of sustainable growth. To secure the ecological and natural balance of these areas and prevent the uncontrolled construction of receiving facilities for vessels and boaters, it is essential to continuously conduct an interdisciplinary research. This will ensure that nautical tourism develops according to the established scenario of sustainable development.

In general, nautical tourism should be developed within the limits of an area's carrying capacity and according to its distinctive features; maximum efforts should be made to preserve each area's appealing, natural environment, which is an advantage of special importance to Croatia. The multiple effects of development (economic, social and ecological) should be taken into consideration, together with those effects that will help to stimulate other elements of life. This is particularly important for areas of strategic significance, such as, the islands.

The scenario of the sustainable development of nautical tourism incorporates balanced and equal development that generates benefits for all stakeholders and, most importantly, it helps to preserve the attraction basis and natural features of the Croatian part of the Adriatic.

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