

NAUTICAL TOURISM IN FOSTERING THE SUSTAINABLE DEVELOPMENT: A CASE STUDY OF CROATIA'S COAST AND ISLAND

Mirjana Kovačić
University of Rijeka

Zvonko Gržetić
Hydrographic Institute of Croatia

Desimir Bosković
Institute of Agriculture and Tourism

This paper presents a systematic and comprehensive analysis of the economic, social and environmental aspects of developing nautical tourism. It examines the problems of sitting and selecting the location of a nautical port, and it identifies economic and political, and socio-cultural factors. The paper brings out the importance of balanced development of a port of nautical tourism as a primary determinant of the integrated management of the marine domain. Due to its manifold multiplier effects, nautical tourism is a major branch of tourism that has great potential for development in Croatia. The paper points out the importance of systematically valorising the potential of nautical tourism on the principles of sustainable development, while encouraging and raising the nautical-tourism offering to a higher level. It underlines the need to enlarge the capacities of nautical-tourism ports, especially on Croatia's islands, thus helping to increase the standard of living of coastal residents. In doing so, the development process must take into account the principles of spatial organisation and the needs of people living and working within the territory of a nautical-tourism destination.

Keywords: *balanced development, port of nautical tourism, nautical tourism, socio-cultural, economic and sustainable development*

JEL Classification: *L83, M1, O1*

INTRODUCTION

The purpose of the research is to define spatial capacities and limitations for the selection of a port of nautical tourism. In that context,



considering nautical tourism ports as a system will determine their role as a development factor of nautical tourism through which the ports, through their organisation and capacity affect the level of marine resources activation.

The purpose of the research presented in this paper has been to analyse the economic and socio-cultural valorisation of nautical tourism and nautical tourism ports aimed at increasing the standard of living of coastal residents simultaneously observing the spatial organisation principles and the needs of people who live and work in the area of nautical destination. The research started from a general hypothesis:

The integrated system of managing and planning the development of nautical tourism ports refers to managing the quality, environment, development and safety, and it has clear requirements in communication, responsibility and economy and is an integrated part of managing marine and coastal environment.

ECONOMIC ASPECT OF NAUTICAL TOURISM

A particular significance of nautical tourism in promoting nautical tourism and the complete national economy can be observed in numerous benefits. Nautical tourism has the highest and the most intense multiplicative effect that could, in a short time, make it the principal competitive Croatian product in the world. Nautical tourism is a kind of tourism that can ensure 180 – 210 operating days a year and the return of the invested capital in relation to hotel capacities is much faster. The investments in nautical tourism are lower than in hotel capacities for the corresponding number of accommodation units. The return of the invested capital is up to two times faster than in other branches of tourism, since it attracts a financially stronger guest which consequently improves the quality and image of the country. At the same time, comparative advantages are crucial for development in Croatia in relation to its direct competitors in the Mediterranean market.

Problem issues in developing nautical tourism

A large part of Croatia is situated in the Mediterranean, and trends in nautical tourism observed in more developed tourist countries in the Mediterranean may be expected or have already been present in Croatia. Due to a certain delay of nautical tourism development in Croatia in relation to, for instance, Italy, France and Spain, it is possible to notice positive and negative consequences that the development of nautical

tourism has had in those countries, primarily to their economy and the environment. Their experience will allow Croatia to consider its own development course.

Protection and increased quality of the existing natural, ecologic, cultural and historical, coastal and marine resources is the mission of all participants involved in the system of planning and managing such resources (Dodds & Butler, 2010). Local government has the role to accentuate the regional aspects of development and to coordinate various interests of numerous subjects and owners, especially in the environment protection, development of primary infrastructure and other facilities that contribute to increased quality of nautical offer.

Mediterranean countries are successful in developing nautical tourism, which also includes the orientation to socio-cultural aspect of development. Planning and designing the construction of nautical tourism ports and their organisation within institutional norms determining the rules and possibilities of long-term development have been particularly considered by the end of the 20th century. The best results were achieved in France and Spain, owing to their concession granting system and legal regulations which supported investments in nautical tourism ports (Luković, 2002).

Interrelation of balanced tertiary development and the selection of the location of nautical tourism ports

Distribution of nautical tourism ports is an important development element, and designing the development course is a part of development policy. In current conditions, the spatial distribution of new business activities is one of the main factors that affect the change in terms of spatial distribution of inhabitants and allow for economic effects. Simultaneously, the individual advantages of nautical port construction are reflected in the development of the immediate neighbouring area, which means that the owners' interests have to be coordinated with the issues of regional development.

There were attempts to solve the problems of underdeveloped areas by applying measures of political economy, but it meant the dictation in distributing business activities. Consequently, the criteria that will efficiently coordinate economic interests and interests of regional development were needed. In the case when the selection depends on maritime and other spatial conditions preference will be given to a developed area.

Underdeveloped areas, especially in Croatian islands are permanent factors that slow down the progress and the development of the community and the problem has to be solved by applying scientific bases. One of the micro effects of a place of nautical tourism ports is its influence to regional and urban planning of development. That contributes to the balance of regional development, attracts private capital, leads to the employment in islands and in other areas, stimulates the development of small entrepreneurs, allows for a more efficient exploitation of resources by developing tertiary and quarter activities.

Selecting the location of a nautical tourism port has a special significance because of the resources that are exploited and the profits it achieves (Kovačić. 2008). Therefore, it is important to determine the following:

- The ratio between the size of the region and the number of nautical ports,
- The relationship of regional centres to nautical ports,
- The needs in ranking various systems and nautical ports, and especially
- The depth of the sea, configuration of the coast and hydro meteorological conditions at the micro location.

FACTORS OF THE LOCATION OF A NAUTICAL PORT

It is not easy to determine which factor of the location of a nautical port is most important. Relative accuracy in determining the hierarchy of various factors could be achieved through several methods, and the data source could be survey questionnaires completed by decision-makers in nautical tourism ports, owners and investors, or by experts in particular fields (Richins & Scarinci, 2009). The hierarchy of factors may be determined also by observing the development of nautical tourism in a certain area, i.e. according to a determined interrelation between the development of nautical ports and the observed factors. The model of suitability of a nautical port location is based on the criteria arising from the factors of the location, which are evaluated according to their significance for the area.

Limitation factors of the location

Selection of a location requires the adjustment of the location, both to local zoning and to future development plans of the area. This refers especially to restrictions in construction of commercial objects in

protected parts of the littoral. Due to numerous marinas opened recently in Europe and the USA, local governments have become more cautious when issuing construction permits. Such opposition are related to frequent objections of local residents, like (Robinson, 2002):

- Threats to the existing views
- Threats to the pollution of the environment
- Residents will not be able to have cheap berthing for their vessels
- Tourist navigation is a hobby of wealthy people.

In order to ease such objections and obtain permits for construction of a nautical port it is necessary to present clearly to local authorities and residents the project and if necessary to adjust it to reasonable requirements. There the important role is at the investors' team of experts who will make a quality presentation of the advantages of a nautical port, especially of a marina and thus increase the interest of the residents and of local authorities, such as (Čičin-Šain, 2004):

- Employment possibilities
- Increased attractiveness of the locality
- The use of access roads
- Increased capacity of sewage and water supply network
- Market distribution of local products

Nautical tourism has to be developed within the framework of acceptable density and recognisable features of the area, taking maximum care of the preserved and attractive natural environment – the advantage of the Croatian landscape. The use of space should be based on integral management, and not only on protection (Favro, Saganić, 2006).

Nautical ports and their construction in natural parks (The Kornati islands, the Pakleni islands, etc.) are particularly unacceptable for the environment, since they could change the view and pollute the natural ambience. Because the supply points are remote and communal infrastructure is scarce there might be difficulties in supply and preservation of the natural environment. This is an reason why the employees in marinas and yachtsmen are constantly advised to coexistence between natural and human communities.

Economic and political factors

Selecting the location of a nautical tourism port includes the analysis of the market of a nautical port and of the development policy measures at the national and regional level. The market analysis is the most important

part of the investment study because without market recognition the basic objective of the investment – the increase of the capital cannot be realised. In order to achieve the aim it is necessary to increase the profit, and it could be achieved through successful business operations, which, basically, refers to selling of the output products/services and to buying input products/services.

Motivational elements and expectations that motivate boaters to visit a destination make part of a market analysis that should respond to the question what flow of boaters might be expected in a nautical port. The analysis of the offer and demand at the nautical market makes part of the market analysis that will determine the justification of the investment in the selected location of a nautical tourism port. It includes the estimation on operational flow in view of the trends at the nautical market of offer and demand and the estimation of the amount of turnover for a certain period of years.

Market analysis is a process of research in which the basic factors active in the market are analysed and main characteristics and changes in creating the demand and the offer in particular places and in particular time are observed. Market research has a particular importance for nautical tourism also because of the seasonal aspect of business operations of nautical tourism ports.

Socio-demographic and cultural factors

Nautical tourism as a selective type of tourism includes also users of nautical services, who come from higher social strata. They are promoters of the changes both in the places they sojourn (nautical tourism ports) and in relation to residents, bringing in their culture and expectations in terms of standard of living, quality of the offer, foreign languages and other.

Social and cultural living conditions of the surroundings

Social and cultural conditions of the area are starting points of the concept aimed at satisfying nautical needs. They comprise attitudes, desires, expectations, level of intelligence and education, beliefs and customs of a particular society. An element of socio-cultural environment is ethical environment that includes a set of generally accepted and implemented standards of personal conduct (Wehrich, & Koontz, 1994). Interaction of these elements requires a constant monitoring and examining of their relations in order to implement them in the system of successful business operations of the nautical port. At that point the

national culture is an important factor of the outer surroundings and it affects the design of the company's structure (Robbins, 1990).

Boaters are visitors arriving from developed countries, used to a higher standard of living, with higher education and hence more demanding. They value a number of elements aimed at their pleasure. Nautical ports in smaller locations depend on local influence and atmosphere. Certain cases indicate that the accelerated development, the construction of nautical ports, especially marinas, has changed the structure and the living style in such localities (Marina Frapa, Rogoznica). In that process, there are two-way relations between domicile residents and nautical tourism ports. Such relations may be positive, especially during the adaptation, tourist evolution and construction, which will further positively reflect to boaters who will consider them as a part of nautical offer.

Interrelation and potentially negative socio-cultural relations have rarely been studied separately, and the relation of nautical tourism and socio-cultural environment is still inadequately researched. Simultaneously, during its transformation process from quantity into quality, nautical tourism as a complex social phenomenon has become the issue of increased social interest.

Socio-demographic consequences of the development of nautical tourism ports

Socio-demographic consequences of the construction and development of nautical tourism ports are mostly positive and may be summarised as follows:

- a technological and technical system of services similar to those in more developed countries will be implemented
- they supplement the existing infrastructure and add a new quality in terms of urban planning and environment
- have positive effects to the level of employment in the area
- new possibilities for indirect additional benefits are opened, the increase of the standard of living and communal infrastructure improvement
- influence the general transformation of the locality by increasing the offer
- contributes to the entire quality of living of domicile residents.

Development of nautical tourism ports will result in *numerous benefits*, such as:

- *direct benefits* – finances gathered from taxes, admissions to national and natural parks, concession fees
- *indirect benefits* – new catering objects due to the increased demand of boaters, increase quality of services in places where the boaters sojourn.

Due to their isolated geographic position, the islands are frequently socially isolated and treated as isolated communities, while the development of nautical ports will have a positive result to the life of the residents. Boaters will also contribute to such changes in the following sense:

- local inhabitants will have opportunities to realise additional income (selling of fish, catering, other tourist services)
- local ports and bays will collect finances from berthing fees in ports and anchorages
- emigration process of local inhabitants will fall, since the employment opportunities have increased.

Nautical tourism will indirectly affect the increase of accommodation capacities in the coast and islands. Although it has been observed that boaters in Croatia mostly stay overnight in their yachts, there is a clear trend of increased overnights in the coast. Nautical tourism affects and promotes the development of *numerous service business activities* that are directly or indirectly related to boaters' needs for occasional various services.

By analyzing the development of nautical tourism ports and area of their location it is easy to obtain a very strong positive correlation and impact to environment. The development has had a rapid dynamics as the population number in 4-6 years increased by 3-5 times, and the indicators of standard are higher than a national standard. The manifestation of the development of small business is best seen in the following table (table 1). As an example, the results of research give a complete picture of development indicators of a small place Rogoznica (Croatia), situated in the middle of the Croatian side of the Adriatic coast. In this area is also situated Marina Frapa, which was proclaimed as the best marina in the World in February 2007. This great reward was given on the prestigious World tourist competition in Madrid, in the category of the World best nominated marinas. The journey from the vision to the best marina in the World was successfully achieved by its owner and manager in more than 10 years. **Marina Frapa** is situated on north – west side, fully protected by wind, in cove Soline (picture 1). The island on which is marina situated give to nautical tourists special pleasure and enjoy, because of its beauty, clean environment and its offer.

Picture 1 Marina Frapa, Cartographic presentation of the micro location



Source: Hydrographic Institute of Croatia, 2007

It is obvious that the marina Frapa, in only ten years of its business operations has initiated a very dynamic development in this locality. Such example is also noticed in the localities of nautical ports in the Croatian Adriatic, but also in the Mediterranean. This example is not an exception, it is rather a rule. It is quite obvious that a leader has emerged in the Mediterranean, which is an initiator of a local and economic regional development, especially in the domain of small business. The new leader is economically stable and strong enough to be able to completely overtake the role of a development leader.

It is logical to conclude that the development of nautical tourism ports is a process of social changes and changes of living conditions in nautical destinations, and a process that can affect the change of social and economic structure and activities in the islands and the coast.

Table 1 The development results in the area of Rogoznica, Croatia

Development indicators	Before the marina Frapa (year 1995)	Marina Frapa in business (year 2006)
No. of population	350	over 1500
Average age of the population	over 70	about 40
No. of employed	30	500
No. of small and medium- sized companies	10	100
Price of land	10 – 20 eura	100 – 300 eura
No. of restaurants	1	8
No. of cafes	2	15
No. of shops	2	9
No. of exchange offices	0	2
Primary schools	0	2
Natural resource preservation (ecology)	preserved	preserved

Source: Luković, Šamanović, 2007

CONCLUSION

Nautical tourism may substantially contribute to overall economic development, to the increase of the standard of living and to the quality of life of domicile inhabitants, under the condition that it is established on scientifically based development factors, proved in practice in developed countries.

Nautical ports are open, dynamic and complex systems in steady growth in Croatia and in less developed countries like Greece, Turkey etc., due to which the development of such system is to be continually monitored and researched. Accordingly, it is necessary to determine the objectives at the level of the system (country) and at the level of each element (region), in order to define the main criteria and sub-criteria, which will be the basis for long-term planning of development and for optimisation of selecting the location and facilities of nautical tourism ports.

The quantity of investment and the term of return of the investment have an increased importance, especially in new market conditions of operations of nautical ports. Such criterion could therefore be vital in future, especially in less developed countries with scarce nautical infrastructure. The solution could be found in positive and stimulating government policy that will stimulate new investments, simultaneously determining the development guidelines and define the regional objectives and priorities (macro locations).

Such organisational model of development of nautical tourism ports influences the development of the surrounding area in such manner that the area influences to the demand in nautical ports.

REFERENCES

- Čičin-Šain, D. (2004). Planiranje i izgradnja marina s menadžerskog aspekta. Visoka škola za turistički menadžment. Elektronički zbornik radova. *Šibenik*, Vol. 1, No.4, pp.1-17.
- Dodds, R. & Butler, R. (2010). Barriers to implementing sustainable tourism policy in mass tourism destinations. *Tourismos*, Vol. 5, No.1, pp.35-54.
- Favro, S. & Sagančić I. (2006). *Sustainable Development of Nautical Tourism in Croatia*. New Perspectives and Values in World Tourism & Tourism Management in the Future. Turk-Kazakh International Tourism Conference. Alanya, Turkey. Book 1, pp.602-620.
- Kovačić, M. (2008). Optimisation of Selection of the Location and Facilities of a Nautical Tourism Port. Doctoral thesis. Faculty of Maritime Studies of the University of Rijeka, Croatia
- Luković, T. (2002). *Yachting on the European part of the Mediterranean*. Croatian Paneuropean Union. Split, Redak d.o.o.
- Luković, T. and Šamanović, J. (2007). *Management and economy of nautical tourism*. Hydrographic Institute of Croatia, Split.
- Richins, H. & Scarinci, J. (2009). Climate change and sustainable practices: A case study of the resort industry in Florida, *Tourismos*, Vol. 4, No.2, pp. 107-128.
- Robbins, S. (1990). *Organization Theory – Structure, Design and Applications*. (2nd ed.). New Jersey, Prentice Hall Englewood Cliffs.
- Robinson, P.J (2002). *Marinas and Social Demands*. <http://www.icomia.com/library/introduction.asp>. Accessed the 5th of September 2008, at 18:00.
- Weirich, H. & Koontz, H. (1994). *Menadžment*. Zagreb, Mate.

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Mirjana Kovačić (mirjana.kovacic@pgz.hr) is a Research Assistant at the University of Rijeka, Department of Maritime Affairs, Transportation and Communication, Primorsko-goranska County, Rijeka, 5100 Adamićeva 10.

Zvonko Gržetić (zvonko.grzetic@hhi.hr) is a Director of Croatian Hydrographic Institute, Split, 2100, Zrinsko-Frankopanska 161.

Desimir Bosković (Desimir.Boskovic@iptpo.hr) is a Professor at the Croatian Institute of Agriculture and Tourism, Institute of Agriculture and Tourism, Poreč 5244, C.Hugues 8.