

# Integrated coastal zone management in Republic of Croatia with a reference to Marina Vrsar

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**Sardelin, Anton**

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**SVEUČILIŠTE U RIJECI  
POMORSKI FAKULTET U RIJECI**

**ANTON SARDELIN**

**INTEGRATED COASTAL ZONE MANAGEMENT IN  
REPUBLIC OF CROATIA WITH A REFERENCE TO MARINA  
VRSAR**

**DIPLOMSKI RAD**

Rijeka, 2020. godina

**SVEUČILIŠTE U RIJECI  
POMORSKI FAKULTET U RIJECI**

**INTEGRATED COASTAL ZONE MANAGEMENT IN  
REPUBLIC OF CROATIA WITH A REFERENCE TO MARINA  
VRSAR**

**INTEGRALNO UPRAVLJANJE OBALNIM PODRUČJEM U  
REPUBLICI HRVATSKOJ S OSVRTOM NA MARINU VRSAR  
DIPLOMSKI RAD**

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Mentor: Dr.sc. Borna Debelić

Student: Anton Sardelin

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Student/studentica: Anton Sardelin

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#### IZJAVA O SAMOSTALNOJ IZRADI DIPLOMSKOG RADA

Kojom izjavljujem da sam diplomski rad s naslovom INTEGRATED COASTAL ZONE MANAGEMENT IN REPUBLIC OF CROATIA WITH A REFFERANCE TO MARINA VRSAR izradio samostalno pod mentorstvom izv. prof. dr. sc. Borna Debelić

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## **SUMMARY**

The coastal area is a specific area that includes a part of the mainland and coastal waters and as such it is of great importance for the coastal state. This space allows access to the sea and it is potentially rich in natural resources. For this reason, this area has always attracted people. Due to the high concentration of people who live in these areas coastal areas could be environmentally polluted. The only way to preserve it is to introduce sustainable development in these areas through integrated management. This thesis will analyze the system of integrated coastal zone management in the Republic of Croatia with a reference to Marina Vrsar.

Keywords: coastal area, integrated coastal zone management, integrated coastal zone management in the Republic of Croatia, management, Marina Vrsar

## **SAŽETAK**

Obalno područje predstavlja specifičan prostor koji obuhvaća određeni dio kopna i obalne vode i kao takav je od velike važnosti za obalnu državu. Ovaj prostor omogućuje pristup moru i potencijalno je bogat prirodnim bogatstvima i resursima. Iz tog je razloga ovo područje oduvijek privlačilo ljude. Zbog velike koncentracije ljudi koji obitavaju na tim prostorima dolazi do uništavanja okoliša na obalnim područjima. Jedini način očuvanja je uvođenje održivog razvoja na tim područjima kroz integralno upravljanje. U ovom radu će se analizirati sustav integralnog upravljanja obalnim područjem u Republici Hrvatskoj s osvrtom na Marinu Vrsar.

Ključne riječi: integralno upravljanje obalnim područjem, integralno upravljanje obalnim područjem u Republici Hrvatskoj, Marina Vrsar, menadžment, obalno područje

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# **1. INTRODUCTION**

## **1.1. PROBLEM, SUBJECT AND OBJECT OF THE RESEARCH**

The coastal area is an area of land-sea interrelationship, and due to its many useful resources, compared to other parts of the country, it has always been attractive to people. Due to the high population and exploitation of resources, the natural resources located in these areas are endangered. In order to protect the coastal area from complete devastation, it needs to be managed integrally. Coastal states value their coastal area as their most valuable resource.

Based on these facts, the problem of this thesis will be defined, which is to define the coastal area and integrated coastal zone management in the Republic of Croatia. The subject of research in this thesis are the coastal counties of the Republic of Croatia, local governments, residents of coastal areas and Marina Vrsar as a legal entity on that area. The objects of this thesis are factors that affect the coastal area in a positive and negative sense.

## **1.2. HYPOTHESIS**

The hypothesis of this Master's thesis is to prove the need for an integrated management system in the coastal area in the Republic of Croatia and to determine its success and the quality of implementation of sustainable development and integrated management in the Republic of Croatia with a reference to Marina Vrsar.

## **1.3. PURPOSE AND GOALS OF THE RESEARCH**

The purpose of this Master's thesis is to define the coastal area and integrated coastal zone management and to point out the problems that are present in the coastal area and to prove the need for integrated coastal management in the Republic of Croatia. The aim of this thesis is to provide answers to the following questions:

- What is a coastal area and why is it easy to endanger it ecologically?
- What is integrated coastal zone management and why is it needed?
- Which parts of Croatia are considered a coastal area?
- How does the Republic of Croatia and Marina Vrsar manage this area?

## **1.4. SCIENTIFIC METHODS**

The process of writing this Master's thesis is based on a methodological approach. Scientific methods used for writing and formulating the results are: the method of analysis and synthesis, the method of induction and deduction, the graphic method, the statistical method and the method of description.

## **1.5. STRUCTURE OF THE THESIS**

Structure of the Master's thesis "INTEGRATED COASTAL ZONE MANAGEMENT IN REPUBLIC OF CROATIA WITH A REFERNCE TO MARINA VRSAR" is divided into 9 Chapters:

INTRODUCTION is the first Chapter in this thesis. This chapter explains problem, subject, object, hypothesis, purpose and goals of the thesis and scientific methods used in the thesis.

Second Chapter is named MANAGEMENT. In this chapter term management and management function will be defined to better understand thesis as a whole.

Third Chapter in this thesis is COASTAL ZONE. This chapter explains term coastal zone and its problematics in general.

INTEGRATED COASTAL ZONE MANAGENT is directly connected with previous chapter. In this chapter the term integrated coastal zone management will be defined and its importance for coastal countries and regions will be explained.

Fifth Chapter, INTEGRATED COASTAL ZONE IN REPUBLIC OF CROATIA describes organization of coastal zone in Republic of Croatia, the population on this area and legal Acts and regulations that correlate with coastal zone.

NAUTICAL TOURISM AND MARINAS is the name of the sixth Chapter. This chapter defines nautical tourism in general and marinas as the most complex and the most popular nautical port.

In the seventh Chapter the situation in nautical tourism in Republic of Croatia and nautical tourism in Istarska County will be explained.

Eight Chapter, MARINA VRSAR deals with the general information about marina, the analysis of nautical tourism and the implementation of integrated coastal zone management in the marina Vrsar.

The last or ninth Chapter CONCLUSION will give a short conclusion on overall thesis.

Literature used to write this thesis and tables, figures, schemes and charts used in this thesis will be listed on the last few pages.

## **2. MANAGEMENT**

Management is nowadays known as one of the most essential human activity. In the modern world it is very hard to achieve business goals without wide range of different activities done by one man or group of people so there must be an activity that connects all these activities into one process. Management secures efficient functioning of the group processes to complete selected goals.

### **2.1. DEFINITION AND CHARACTERISTICS**

Management is a very complex term and therefore it is very hard to define it by one definition. Management is often identified with terms like controlling, supervising, organizing, administration and leadership, but all these terms represent much narrower range of activities so it will be wrong to identify term of management with any of the listed terms.

Management is the process of designing and maintaining an environment in which individuals, working together in groups, effectively and efficiently, accomplish selected aims.<sup>1</sup>

This definition implies:

- As managers, people carry out the managerial functions of planning, organizing, staffing, leading, and controlling.
- Management applies to any kind of organization.
- It applies to managers at all organizational levels.
- The aim of all managers is the same: to create a surplus.
- Managing is concerned with productivity; this implies effectiveness and efficiency

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<sup>1</sup> Translated from: Weihrich, H., Koontz, H., Menedžment, deseto izdanje, MATE D.O.O., Zagreb, 1998. p. 4.

A manager is a person whose primary tasks arise from the management process - he plans and makes decisions, organizes work and business, hires and leads people and controls human, financial, physical and information resources.<sup>2</sup> To be a successful manager, person must acquire various technical, human and conceptual skills. A technical skill is possessing some formal or informal education, necessary expertise in the field of business and general and specific knowledge. Human skill is often treated as the most crucial factor in management process and it epitomize capability to organize and interact with human resources. Seeing a bigger picture and delivering new ideas is considered a conceptual skill. There are a series of expressions that substitute the term manager, but under them still involve managerial activities. Such are, for example, these terms: Supervisor, Leader, Executive. Organizer, Administrator, Director, Controller, Boss, Governor and similar.<sup>3</sup>

There are three types of managers regarding different hierarchical levels:<sup>4</sup>

1) Top management

Managers on top level are responsible for complete company. Terms used for this type of management are CEO, executive director, president etc. Top manager pays attention to company's future and wellbeing. Some of their most important activities are defining mission, vision and goals and engaging the knowledge, skills and abilities of each employee.

2) Middle management

Managers in the middle level are responsible for business units and main departments. Other term used for this level of management are head of development department, head of sales department, head of finance department etc. This type of management is orientated on closer future and implementation of strategies and policies defined by top management.

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<sup>2</sup> Translated from: Buble, M., Osnove menadžmenta, Sinergija, Zagreb, 2006., p.6.

<sup>3</sup> Translated from: Buble, M., Management, Ekonomski fakultet Split, Split, 2000., p. 7.-8. In book: Buble, M., Osnove menadžmenta, Sinergija, Zagreb, 2006., p.6.

<sup>4</sup> Translated from: Buble, M., Osnove menadžmenta, Sinergija, Zagreb, 2006., p.10.

### 3) Lower or First-line Management

Managers on lower level are focused on day-to-day activities. Chiefs and supervisors are the most common terms for this type of management. Their main goals are providing efficient and effective production and motivation of employees.

Table 1. under this paragraph shows different managers' roles divided by category and different activities associated with each role.

**Table 1. Management roles**

CATEGORY	ROLE	ACTIVITY
Informational	Monitor	Seek and receive information, scan periodicals and reports
	Disseminator	Forward information to other organization members; send memos and reports, make phone calls
	Spokesperson	Transmit information to outsiders through speeches
Interpersonal	Figurehead	Perform ceremonial and symbolic duties such as greeting
	Leader	Direct and motivate subordinates; train, counsel, and communicate with subordinates
	Liaison	Maintain information links both inside and outside
Decisional	Entrepreneur	Initiate improvement projects; identify new idea, delegate
	Disturbance handler	Take corrective action during dispute or crises; resolve conflicts among subordinates; adapt to
	Resource allocator	Decide who gets resources; schedule, budget, set
	Negotiator	Represent department during negotiation of union contracts, sales, purchases, budgets; represent departmental

Source: Prepared by student according to: [https://www.researchgate.net/figure/Three-types-of-line-managers-role\\_tbl1\\_273850327](https://www.researchgate.net/figure/Three-types-of-line-managers-role_tbl1_273850327) (18.06.2020.)

## 2.2. MANAGEMENT FUNCTIONS

Management is continuous and iterative process which is divided between five different, but connected functions. Several authors have different opinions and names for each of the function. In table 2. under this paragraph is showed the comparison between different authors.

**Table 2. Management functions by authors**

<b>Fayol, H.</b>	<b>Drucker, P.</b>	<b>Wehrich, H &amp; Koontz, H.</b>
1. Planning	1. Goal setting	1. Planning
2. Organizing	2. Organizing	2. Organizing
3. Commanding/Ordering	3. Motivating and communication	3. Staffing
4. Coordination	4. Measuring and evaluation of the achieved results	4. Leading
5. Controlling	5. Staff development	5. Controlling

Source: Prepared by student according to: Buble, M.: Osnove menadžmenta, Sinergija, Zagreb, 2006., p. 12.-13.

In this thesis classification defined by Wehrich, H. and Koontz, H. is going to be used. As already mentioned, management is an iterative process which starts with planning function and “ends” with controlling. Quotation marks above word “ends” represents continuous nature of a management process which means that after the last function (controlling) the process starts again right away with first function (planning).

### **2.2.1. Planning**

Planning is a function that initiates management process and it is considered as the most important function. The importance of planning can be emphasized by examining its four main aspects:<sup>5</sup>

- planning contribution to the goals and objectives
- primacy of planning among managerial tasks
- the ubiquity of planning
- efficiency of created plans

In planning process a manager decides goals that a company must realize and series of actions to achieve defined goal more efficient.

#### *2.2.1.1. Management planning levels*

There are three planning levels that corelate with the mentioned hierarchy management levels. First-line management or the lowest level of management regarding to hierarchy takes care of operational planning, middle management deals with tactical planning and top management defines mission, vision, goals and strategy for the whole company.

#### **STRATEGIC PLANNING LEVEL**

Strategic planning is a long-term planning which usually stretches 3 – 5 years ahead, although in some situations it can extend to 20 years in the future. As already mentioned, top management clarifies company's goals, mission, vision and strategies. In other word top management with strategic planning provides company and employees with start and end points.

#### **TACTICAL PLANNING LEVEL**

Tactical planning normally stretches 1 – 5 yeas in the future. Tactical planning level translates strategic goals into specific goals of individual organizational units.

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<sup>5</sup> Translated from: Weihrich, H., Koontz, H., op.cit., p. 118.

## OPERATIONAL PLANNING LEVEL

Operational level is in charge of specific procedures and processes, which are otherwise characteristic of the lowest level of management. It focuses on routine tasks such as production flows, delivery planning, determining human resource needs, etc.<sup>6</sup>

### *2.2.1.2. Types of planning*

There are different opinions about the existence of various types of planning. Some authors disagree whether there are more than one planning type, but taking into account that there is a great deal of different factors that positively and negatively affect company's activities and function, all the plans shouldn't be classified as only one type.

#### 1) MISSION

The mission identifies the basic function or task of the company, agency or any part them.<sup>7</sup> It defines company's true purpose and why company really exists.

#### 2) GOALS

Goal are final points according to actions and activities are directed.<sup>8</sup> Often in companies and organizations there are many different goals regarding size of the company and number of departments.

#### 3) STRATEGIES

The company's strategy forms a comprehensive master plan set so that it achieves its vision, mission and goals.<sup>9</sup>

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<sup>6</sup> Translated from: Buble, M., Osnove menadžmenta, Sinergija, Zagreb, 2006., p.89.

<sup>7</sup> Translated from: Ibidem, p.122.

<sup>8</sup> Translated from: Ibidem

<sup>9</sup> Translated from: Buble, M., et al., Strateški menadžment, Sinergija, Zagreb, 2005.,p.10.

4) POLICIES

The policy specifies the attitudes, principles and criteria by which decisions and actions in the company's business will be directed.<sup>10</sup> Company's business is defined by policy and there are relatively constant planning decisions that apply to all repeating situations.

5) PROCEDURES

Procedures determine chronological sequences of the implementation of the future action in detail.

6) RULES

Rules explicitly require specific actions or refrain from them and do not allow any freedom of decision.<sup>11</sup>

7) PROGRAMS

Programs refer to the implementation of major goals, and which may require several years to achieve. Program are usually a set of different planning types.

8) BUDGETS

Budgets provide organizations with information about expected results (incomes and expenses) in numbers.

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<sup>10</sup> Translated from: Ibidem, p.11.

<sup>11</sup> Translated from: Wehrich, H., Koontz, H., op.cit., p. 126.

### 2.2.2. Organizing

Definition of organizing is to do or arrange things, plans, ideas, etc., according to a particular system so that they can be used or understood easily.<sup>12</sup> This is the second function in the management process. True purpose of organizing the organizational structure is to achieve optimal organizational structure (working environment). Key tasks in organization designing are:<sup>13</sup>

- 1) Divide the overall company's task
- 2) Forming jobs and workspaces
- 3) Forming organizational units
- 4) Arrange relationships between organizational units
- 5) Design a management system
- 6) Design working collectives
- 7) Design organizational flows
- 8) Design a spatial organization
- 9) Design organizational resources

The organizational structure refers to the departments between which the division of labor has been carried out, the functions and tasks of departments and the relations that are established between them.

---

<sup>12</sup> Cambridge dictionary, online: <https://dictionary.cambridge.org/dictionary/english/organize> (25.06.2020)

<sup>13</sup> Translated form: Buble, M., Osnove menadžmenta, Sinergija, Zagreb, 2006., p.175.

### **2.2.3. Staffing or human resource management**

Human resource management (also known as HRM or staffing) is connected with different collection of activities regarding employees and workplaces connected with each department of the organizational structure. Convenient, compatible and capable personnel lead to more efficient execution of each presented task and accomplishment of company's goals.

Main human resource management activities are:<sup>14</sup>

1. Attracting an effective workforce to the organization
2. Developing the workforce according to its potential
3. Long-term maintenance of the workforce

To secure desirable realization of this function, top management hires experts in this field of knowledge. Human resource managers are responsible for analyzing different jobs in the company in all departments, determining current and future needs for human resources, forming strategy for staffing, selecting and hiring new personnel and other activities in correlation with workforce. Before hiring, every candidate must be analyzed through various tests, interviews and other intellectual and psychophysical tests where he/she shows their abilities and competences. Selected candidates, after hiring, go through specific training for each job position.

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<sup>14</sup>Translated from: Daft, L. R.: Management, Fourth edition, New York, 1997., p.414. In book: Buble, M., Osnove menadžmenta, Sinergija, Zagreb, 2006., p.253.

#### 2.2.4. Leading

Leading is influencing people so that they will contribute to organizational and group goals.<sup>15</sup> The most important terms in this management functions are leader and motivation. Being a good leader means understanding what motivates his/her employees.

##### LEADER

The person who influences other members of the group, i.e. the person who initiates in social situations, plans and organizes the action and in doing so causes the cooperation of others.<sup>16</sup> Leader is always future-oriented and it is expected from leader to direct their vision to personnel by inspiring and helping them to achieve personal goals.

##### MOTIVATION

Motivation is a general term that refers to a whole set of urges, demands, needs, desires, and similar elements.<sup>17</sup> The problem with motivation occurs because everybody has different urges, demands, needs and desires which means that every person is motivated with different set of accomplishments and rewards. There are a lot of different theories that try to explain human needs and motivation. Some of these theories are:<sup>18</sup>

- 1) Maslow's Hierarchy of Needs
- 2) Herzberg's Two Factor Theory
- 3) McClelland's Three Needs Theory
- 4) McGregor's Theory X and Theory Y
- 5) Alderfer's ERG Theory
- 6) Mayo's Motivation Theory

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<sup>15</sup> Translated from: Weihrich, H., Koontz, H., op.cit., p. 21.

<sup>16</sup> Translated from: Zvonarević, M., Socijalna psihologija, Školska knjiga, Zagreb, 1981., p. 459.-460. In book: Buble, M., Osnove menadžmenta, Sinergija, Zagreb, 2006., p.310.

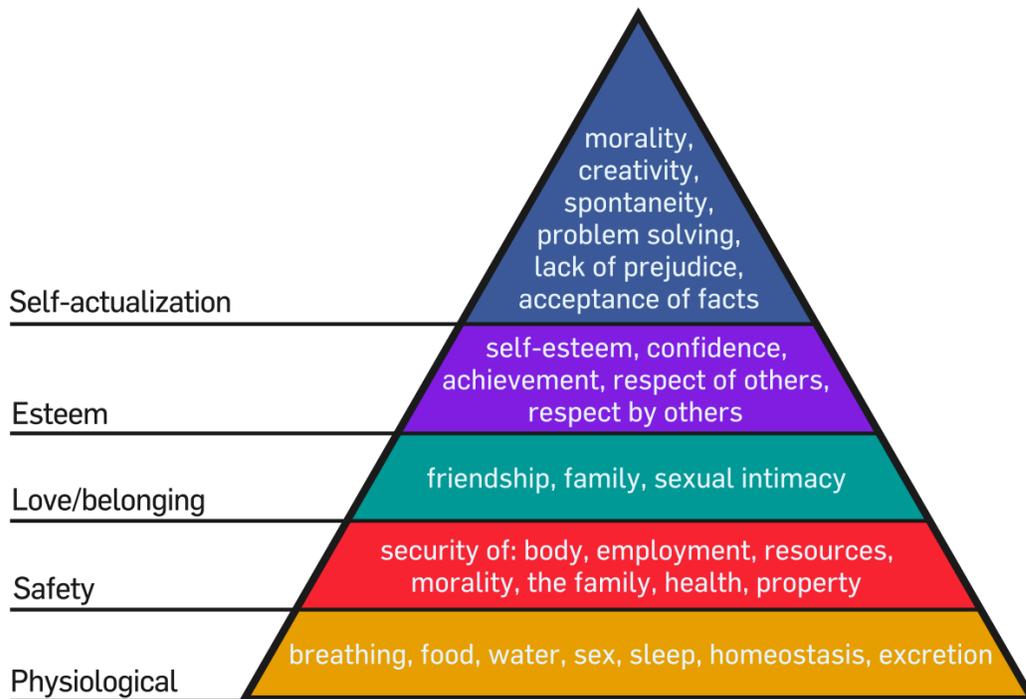
<sup>17</sup> Translated from: Weihrich, H., Koontz, H., op.cit., p. 336.

<sup>18</sup> Pinterest, Theories of Motivation, online:

[https://ar.pinterest.com/pin/794181715521526516/?amp\\_client\\_id=CLIENT\\_ID\( \)&mweb\\_unauth\\_id={{default.session}}&simplified=true](https://ar.pinterest.com/pin/794181715521526516/?amp_client_id=CLIENT_ID( )&mweb_unauth_id={{default.session}}&simplified=true) (25.06.2020)

## MASLOW'S HIERARCHY OF NEEDS

Maslow's Hierarchy of Needs is the most popular motivational theory. Figure 1. under the paragraph describes mentioned theory.



**Figure 1. Maslow's Hierarchy of Needs**

Source: Maslow's hierarchy of needs, online:

[https://en.wikiversity.org/wiki/Motivation\\_and\\_emotion/Book/2011/Maslow%27s\\_hierarchy\\_of\\_needs](https://en.wikiversity.org/wiki/Motivation_and_emotion/Book/2011/Maslow%27s_hierarchy_of_needs)

In Maslow's Hierarchy of Needs theory is proved that human needs form hierarchy. The most crucial needs are in the bottom of the pyramid (physiological needs) which include eating, drinking, sleeping, breathing and other (needs that sustain life). Maslow explained that human needs are satisfied in progressive order for the bottom to the top of the pyramid.

### 2.2.5. Controlling

Controlling is the last management function. Controlling is a process of correcting and observing activities to determine which of organizational and individual activities in the company follow (or do not follow) designed plan. Completed goals are measured in terms of quality and quantity. Even though, controlling is known as the last function in management process, it is wrong to assume that management process ends with this function because, as already mention, management is an on-going or iterative process which means that after the finishing function ends (in this case controlling) the process instantaneously starts again with the first function (planning).

#### THREE STEPS OF BASIC CONTROL SYSTEM:<sup>19</sup>

1. Setting indicators - Indicators represent criteria for measurement. Points highlighted throughout the planning process where performance measurement is implemented.
2. Performance measurement – Measurement of current and future performances according to the indicators from previous step.
3. Deviation removal procedure – Some methods are goals and plans modification, redistribution of tasks, hiring and/or firing of employees and other.

Figure 2. od the next page shows all management functions in correlation to one another.

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<sup>19</sup> Translated from: Wehrich, H., Koontz, H., op.cit., p. 578.



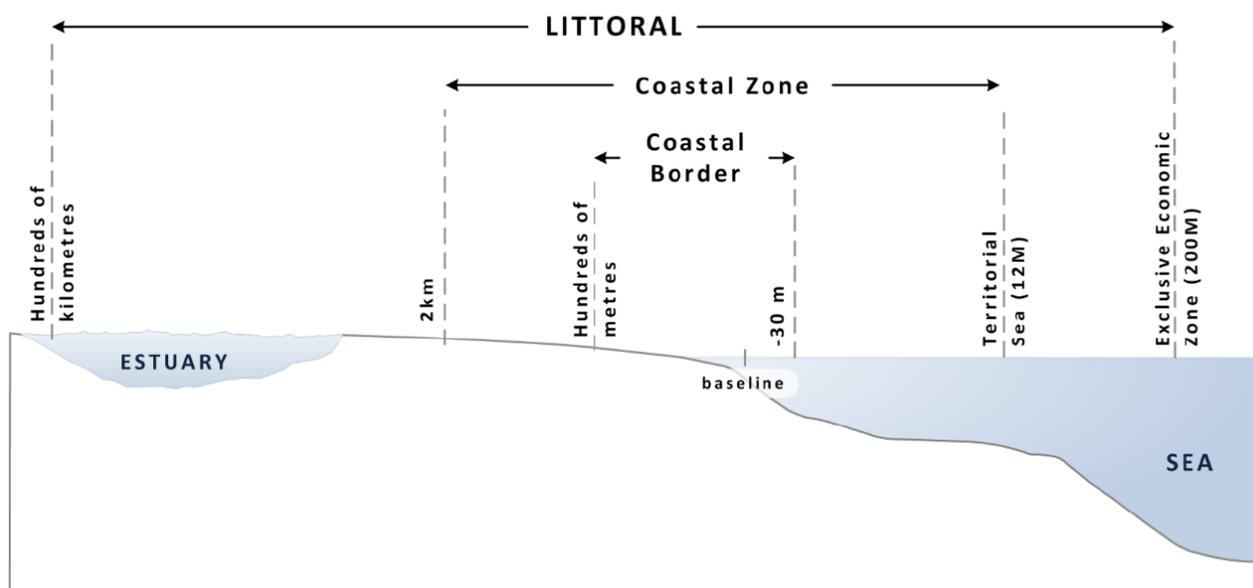
**Figure 2. Management functions**

Source: Five Functions of Management, online: <https://www.managementstudyhq.com/functions-of-management.html> (26.06.2020)

### 3. COASTAL ZONE

The coastal zone is a complex area where animals and plants live, but also legal entities such as organizations, companies and laws. It is a system with multiple resources. Coastal zone provides mankind, animals and plants with space, living and non-living resources, and determines the environment. It is defined as the relationship between land and sea. The boundary of the coastal area at sea can be up to 200 m, and this depends on the approach of coastal area management, i.e. on the political, environmental, legal, functional or administrative criteria of a particular country.<sup>20</sup>

Today, the coastal zones are among the most densely populated areas, and over time, the area has undergone gradual degradation, the development of housing and other activities. Some of various activities permitted on coastal zones are fishing, aquaculture, industries, agriculture, tourism, sport and recreational activities, power plants and transportation. Considering the number of natural resources, coastal sustainability must be a priority interest of all states.



**Figure 3. Coastal zone**

Source: Land-sea interactions and relationships with integrated coastal zone management, online: [https://www.google.com/url?sa=i&url=https%3A%2F%2Fzenodo.org%2Frecord%2F2594720%2Ffiles%2FSIMNORAT\\_D6\\_LSI\\_and\\_ICZM.pdf%3Fdownload%3D1&psig=AOvVaw2oFgoBGbs\\_Yd5cocBRMxk9&ust=1593338828647000&source=images&cd=vfe&ved=0CA0QjhxqFwoTCNCrs-7foeCFQAAAAAdAAAAABAD](https://www.google.com/url?sa=i&url=https%3A%2F%2Fzenodo.org%2Frecord%2F2594720%2Ffiles%2FSIMNORAT_D6_LSI_and_ICZM.pdf%3Fdownload%3D1&psig=AOvVaw2oFgoBGbs_Yd5cocBRMxk9&ust=1593338828647000&source=images&cd=vfe&ved=0CA0QjhxqFwoTCNCrs-7foeCFQAAAAAdAAAAABAD) (27.06.2020.)

<sup>20</sup> Hess, M., Upravljanje obalnim područjem, Sveučilište u Rijeci, Pomorski fakultet u Rijeci, Rijeka, 2019., p.10.

The economics of coastal areas examines the organization of space in the function of overall development. Its development is viewed as a complex system in which all elements stand in a cause-and-effect relationship with each other.<sup>21</sup> Coastal area planning is an integral planning which especially plans the organization of space in the function of the development of the economy and society in a certain coastal area.<sup>22</sup>

The coastal zones are valuable for vast variety of possible ways of usage, and for different groups of individuals.<sup>23</sup> These common maritime assets can be categorized into living (animal and botanical) and inanimate (spatial and cultural, service and social value) groups. At the same time, they are scarce and their exploitation demand must be met as optimal as possible. Coastal areas are of great importance to residents living in nearby areas whose jobs and lives depend on them. Nowadays, there are strong links between the life and work of the population with coastal areas. In recent decades a strong growth in transport, tourism, fishing, industry and plenty of other sea- economic activities connected with the sea have been marked by increasingly strong pressure on coastal areas. As such, they require special attention in order to preserve their integral functionality.<sup>24</sup>

Defining the concept of coastal economy from a spatial point of view arises from the success and cost-effectiveness of development that depends on the significance factor of a particular area. On the other hand, looking at the economy of coastal areas from a planning point of view, space is a factor of development and a subject of planning. A special feature of coastal zone is that this area is located on the coast and is affected by special geographical conditions that indicate its function and structure. It connects land and sea into one life structure.

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<sup>21</sup> Translated from: Filipić, P., Šimunović, I.: O ekonomiji obalnih područja, Sveučilište u Splitu, Ekonomski fakultet u Splitu, Split, 1993., p. 13.

<sup>22</sup> Ibidem

<sup>23</sup> Debelić, B.: Maritime Common Good and Coastal Zone Management, Pomorstvo, Sveučilište u Rijeci, Pomorski fakultet u Rijeci, Vol. 32., 2018., p. 152-161, p. 153., online: <https://hrcak.srce.hr/file/296887> (27.06.2020.)

<sup>24</sup> Ibidem

## 4. INTEGRATED COASTAL ZONE MANAGEMENT

In developed and developing countries, coastal areas are centers of population and economic activity. Although they make up less than 10% of the total inhabited territory of the Earth, about 60% of the total population is concentrated in these areas, and the same percentage of the coastal population is inhabited in cities.<sup>25</sup> The main goal of coastal zone management is to harmonize the economic profit of the coastal area with sustainable development so as not to destroy the natural resources and quality of life in the coastal area.

### 4.1. COASTAL ZONE MANAGEMENT PRINCIPLES

The United Nations Conference on Environment and Development (UNCED) in Rio de Janeiro in 1992 reaffirmed the Charter of the United Nations Conference on the Environment, adopted in Stockholm on 16 June 1972, which established the basic principles of coastal zone management. The basic principles of coastal zone management stem from the will to establish cooperation between states and important sections of society and the population at new levels, therefore creating a new and just partnership around the world, from strengthening efforts to achieve international agreements that respect the interests of all and protect the integrity of the global system of development and the human environment and from the recognition of the indivisibility of the Earth, our home and the interrelationships that exist on it.<sup>26</sup> A total of 27 principles have been identified, of which the first seven will be listed here:<sup>27</sup>

Principle 1. - Human beings are at the centre of concerns for sustainable development. They are entitled to a healthy and productive life in harmony with nature.

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<sup>25</sup> Translated from: Šverko Grdić, Z.: Održivi razvoj obalnog područja, Prvih 30 godina Zavoda za prostorno uređenje Primorsko - goranske županije, Sveučilište u Rijeci, Fakultet za menadžment u turizmu i ugostiteljstvu Opatija, Vol. 1, No. 1., 2015., p.199-206, p. 199, online: [https://zavod.pgz.hr/pdf/11\\_doc.dr.sc.Zvonimira\\_SVERKO\\_GRDIC.pdf](https://zavod.pgz.hr/pdf/11_doc.dr.sc.Zvonimira_SVERKO_GRDIC.pdf) (01.07.2020.)

<sup>26</sup> Kovačić, M., Komadina, P.: Upravljanje obalnim područjem i održivi razvoj, Pomorski fakultet u Rijeci; Rijeka, 2011., p. 9

<sup>27</sup> REPORT OF THE UNITED NATIONS CONFERENCE ON ENVIRONMENT AND DEVELOPMENT, online: [https://www.un.org/en/development/desa/population/migration/generalassembly/docs/globalcompact/A\\_CONF.151\\_26\\_Vol.I\\_Declaration.pdf](https://www.un.org/en/development/desa/population/migration/generalassembly/docs/globalcompact/A_CONF.151_26_Vol.I_Declaration.pdf) (01.07.2020.)

Principle 2. - States have, in accordance with the Charter of the United Nations and the principles of international law, the sovereign right to exploit their own resources pursuant to their own environmental and developmental policies, and the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction.

Principle 3. - The right to development must be fulfilled so as to equitably meet developmental and environmental needs of present and future generations.

Principle 4. - In order to achieve sustainable development, environmental protection shall constitute an integral part of the development process and cannot be considered in isolation from it.

Principle 5. - All States and all people shall cooperate in the essential task of eradicating poverty as an indispensable requirement for sustainable development, in order to decrease the disparities in standards of living and better meet the needs of the majority of the people of the world.

Principle 6. - The special situation and needs of developing countries, particularly the least developed and those most environmentally vulnerable, shall be given special priority. International actions in the field of environment and development should also address the interests and needs of all countries.

Principle 7. - States shall cooperate in a spirit of global partnership to conserve, protect and restore the health and integrity of the Earth's ecosystem. In view of the different contributions to global environmental degradation, States have common but differentiated responsibilities. The developed countries acknowledge the responsibility that they bear in the international pursuit of sustainable development in view of the pressures their societies place on the global environment and of the technologies and financial resources they command.

On February 12th, 1978 The Convention for the Protection of the Mediterranean Sea Against Pollution (also known as the Barcelona Convention) held in Barcelona entered into force. The original version of the Barcelona Convention was primarily aimed at protecting the sea from pollution, and through many years of developing the idea of protecting the marine environment and raising awareness of how unique the marine environment is, the convention's focus has extended to coastal zones in seventh protocol. The Barcelona Convention has given rise to seven Protocols addressing specific aspects of Mediterranean environmental conservation:<sup>28</sup>

1. Dumping Protocol (from ships and aircraft)
2. Prevention and Emergency Protocol (pollution from ships and emergency situations)
3. Land-based Sources and Activities Protocol
4. Specially Protected Areas and Biological Diversity Protocol
5. Offshore Protocol (pollution from exploration and exploitation)
6. Hazardous Wastes Protocol
7. Protocol on Integrated Coastal Zone Management (ICZM)

The Convention established the action plan (The Mediterranean Action Plan – MAP). The Mediterranean Action Plan (MAP) is a platform for regional cooperation in protecting and enhancing the marine and coastal environment while promoting sustainable development in the Mediterranean region.<sup>29</sup>

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<sup>28</sup> European Commission, [https://ec.europa.eu/environment/marine/international-cooperation/regional-sea-conventions/barcelona-convention/index\\_en.htm](https://ec.europa.eu/environment/marine/international-cooperation/regional-sea-conventions/barcelona-convention/index_en.htm) (01.07.2020.)

<sup>29</sup> UN Environment programme, Mediterranean Action Plan, <https://www.unenvironment.org/unepmap/who-we-are> (01.07.2020.)

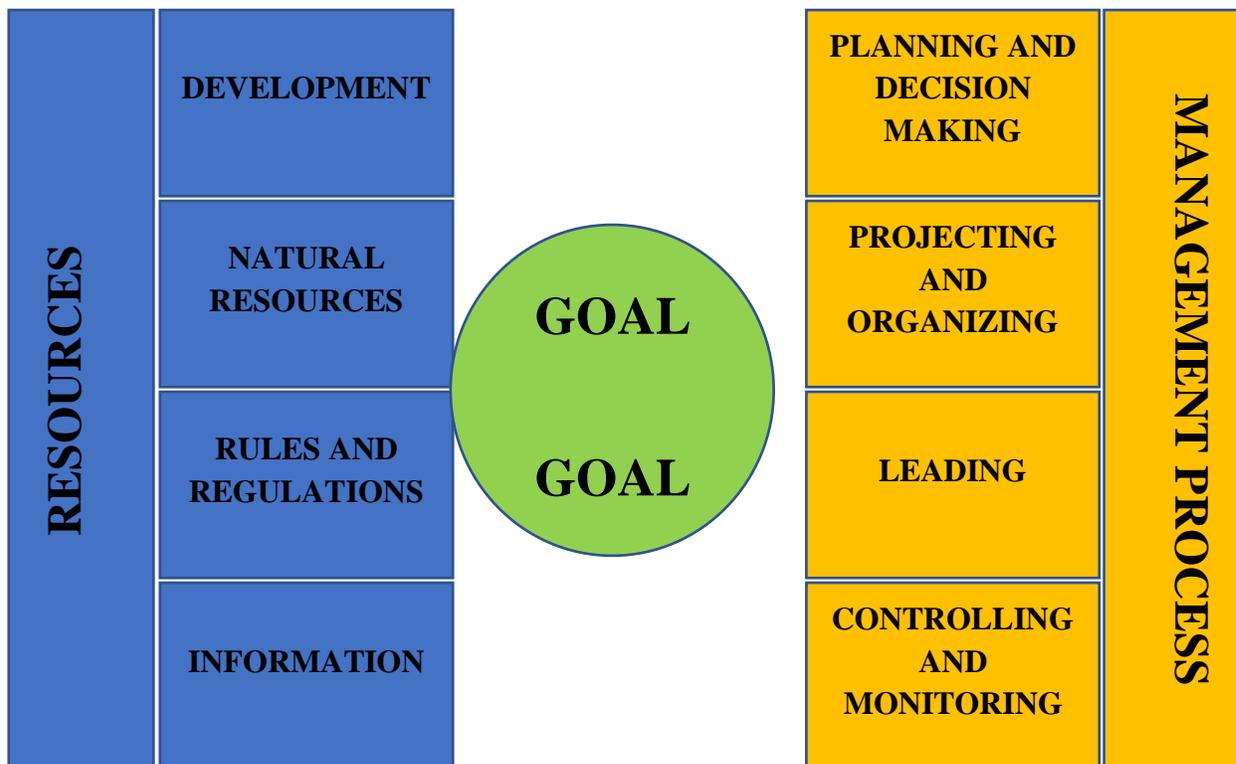
## **4.2. DEVELOPMENT AND RESOURCE MANAGEMENT**

The term development marks a progress or a new state to which one strives, while a similar term growth is defined as a quantitative change that is most often manifested in the growth of production, increase in available production capacity and other component when it comes to economic growth. Although growth and development are two different concepts, they take place simultaneously, that is, development is a process that results in change, and growth is its initiator.

Sustainable development is a process based on the concept of development and which supports positive change in the market, but while maintaining the quality and quantity of natural resources. Coastal resource management and development today uses a systematic approach that allows for the harmonization of different objectives and structures. The position of natural resources is most often neglected for the reason that they are considered a common good. Constant overexploitation of coastal resources and resources can lead to their non-renewability.

Management of natural resources and development in the coastal area is a very complex process, not only because of the amount of resources located in these places but also because of the possibility of conflicts of interest between coastal zone users. For example, construction of an LNG terminal on Krk, where the local population does not agree with the construction due to the impact of the terminal on the environment, quality of life and tourism. The impacts of coastal zone management affect both the local level and the country as a whole and its international connections.

Scheme 1. on the next page shows correlation between external resources and management process.



**Scheme 1. Correlation between resources and management process**

Source: Prepared by student according to: Filipić, P., Šimunović, I.: O ekonomiji obalnih područja, Sveučilište u Splitu, Ekonomski fakultet u Splitu, Split, 1993., p. 99.

## **5. INTEGRATED COASTAL ZONE MANAGEMENT IN THE REPUBLIC OF CROATIA**

The coastal edge of the coast of Croatia and the Adriatic Sea coastal area are very significant for their natural resources. Some of these riches are the purity and transparency of the sea, the beauty of the landscape and the biological diversity of flora and fauna. The coastal area of the Adriatic Sea is a place of processes that depend on the interaction of land and sea, and the negative impacts of development and other processes are more pronounced on the coast than in the interior. For this reason, the Adriatic Sea, coast and islands are said to be home to the most sensitive and valuable natural systems in the Republic of Croatia. One of the ways to reduce the negative processes in the coastal area is the introduction of integrated management.

### **5.1. SPATIAL COVERAGE OF THE COASTAL AREA IN THE REPUBLIC OF CROATIA**

The term "coast" is in most cases defined as "the contact area of sea and land" or as "the place where land, water and air meet". Consequently, "coastal area" is most commonly defined as "land affected by proximity to the sea and the part of the sea affected by proximity to land", or in other words, the area where processes that depend on sea-land interaction are most pronounced.<sup>30</sup> The coastal area in the Republic of Croatia is defined by the Maritime Good and Seaports Act (translated from Croatian original name *Zakon o pomorskom dobru i morskim lukama*). Maritime good is a general good of interest to the Republic of Croatia, has its special protection, and it is used under the conditions and in the manner prescribed by this Act. Maritime good consists of internal sea waters and territorial sea, sea floor and underground level, and the part of the land that is intended for general use or declared as such, as well as everything that is permanently connected to that part of the land on or below the surface. By the paragraph 3 of this Article, the following shall be considered as part of the land: sea coast, ports, embankments,

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<sup>30</sup> Translated from: URBOS D.O.O.: Integralno upravljanje obalnim područjem, Hrvatski zavod za prostorni razvoj, Split, 2014., p. 4.

reefs, cliffs, reefs, beaches, estuaries flowing into the sea, canals connected to the sea, and alive and inanimate natural resources in the sea and underground level.<sup>31</sup>

According to Article 4 of the same Act, the sea coast is a part of the land territory that extends from the line of medium higher high sea waters and includes the land belt bounded by the line reached by the largest waves during storms and part of the land which serves to the use of the sea for maritime traffic and sea fishing, and for other purposes related to the use of the sea, which is at least six meters wide from a line that is horizontally distant from the line of medium high waters.<sup>32</sup>

According to the mentioned laws, it is defined that the area of the land part of the coverage of the coastal area of the Republic of Croatia in the narrower sense is 7,776 km<sup>2</sup>. The surface of the coastal area is 31,067 km<sup>2</sup>, and the total area of the islands of the Adriatic Sea is 3,259.57 km<sup>2</sup>.<sup>33</sup>

**Table 3. Number, coastline length and areas of islands, islets and rocks in the Croatian part of the Adriatic Sea**

	Number	Area (m <sup>2</sup> )	Coastline length (m)
<b>Islands</b>	79	3.195.715.335	3.573.816
<b>Islets</b>	525	62.413.694	717.801
<b>Rocks</b>	642	1.441.694	106.822
<b>Total</b>	1246	3.259.570.887	4.398.440

Source: Prepared by student according to: Duplančić Leder, T., Ujević, T., Čala M.: Coastline lengths and areas of islands in the Croatian part of the adriatic sea determined from the topographic maps at the scale of 1 : 25 000, Geoadria, Hrvatski hidrografski institut, Vol.9, No.1, 2004. p. 5.-32., p. 11.

<sup>31</sup> Translated from: Zakon o pomorskom dobru i morskim lukama, Narodne Novine Republike Hrvatske 158/2003, online: [https://narodne-novine.nn.hr/clanci/sluzbeni/2003\\_10\\_158\\_2257.html](https://narodne-novine.nn.hr/clanci/sluzbeni/2003_10_158_2257.html) (01.07.2020.)

<sup>32</sup> Ibidem

<sup>33</sup> Duplančić Leder, T., Ujević, T., Čala M.: Coastline lengths and areas of islands in the Croatian part of the adriatic sea determined from the topographic maps at the scale of 1 : 25 000, Geoadria, Hrvatski hidrografski institut, Vol.9, No.1, 2004. p. 5.-32., p. 11.

**Table 4. Coastline lengths and areas of 10 largest islands in Croatian part of the Adriatic Sea**

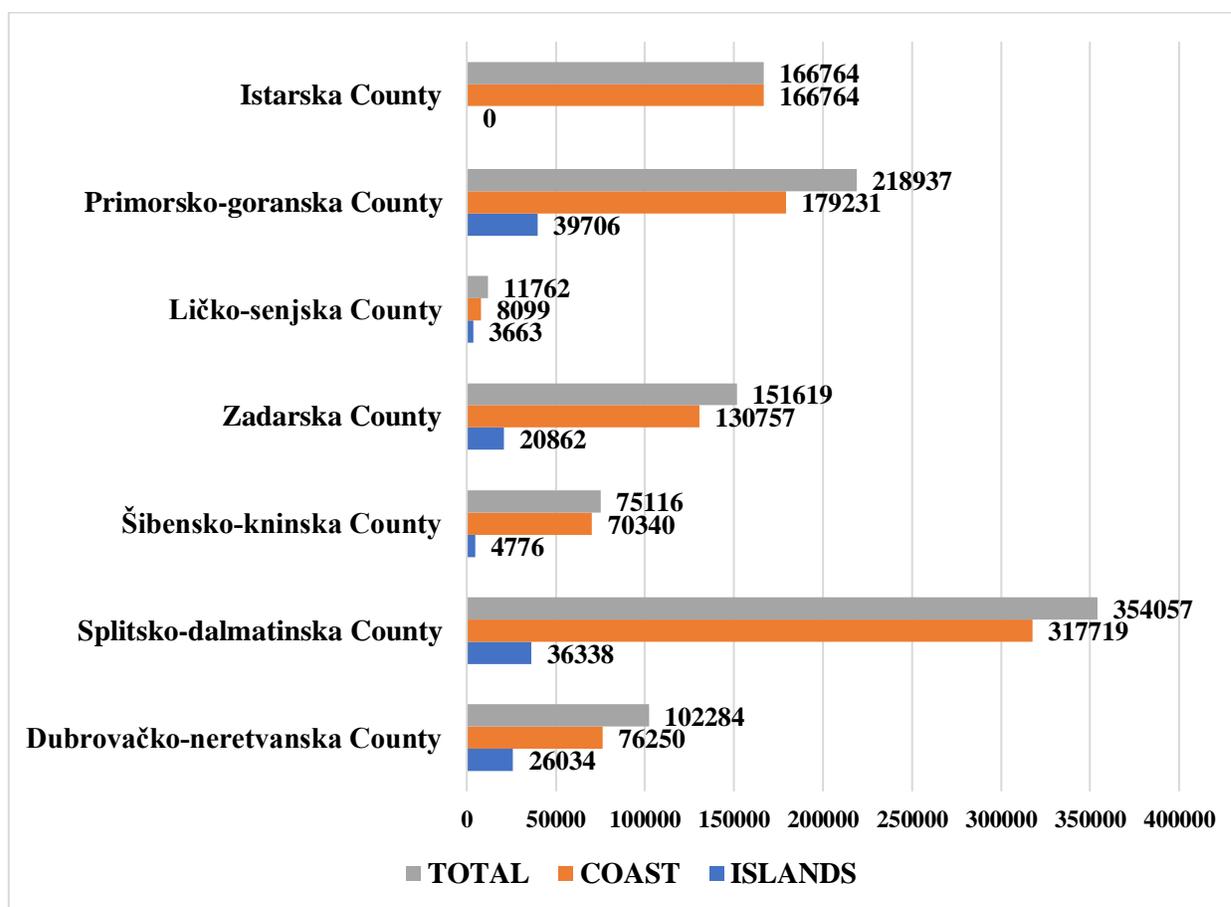
<b>Island</b>	<b>Area (m<sup>2</sup>)</b>	<b>Coastline length (m)</b>
Cres	405.705.293	268.205
Krk	405.218.994	219.120
Brač	395.438.030	180.613
Hvar	297.376.802	270.001
Pag	284.181.553	302.474
Korčula	271.466.109	190.735
Dugi Otok	113.305.339	182.109
Mljet	98.015.857	135.185
Vis	89.721.921	84.907
Rab	86.115.120	121.003

Source: Prepared by student according to: Duplančić Leder, T., Ujević, T., Čala M.: Coastline lengths and areas of islands in the Croatian part of the adriatic sea determined from the topographic maps at the scale of 1 : 25 000, Geoadria, Hrvatski hidrografski institut, Vol.9, No.1, 2004. p. 5.-32., p. 11.-12.

## 5.2. COASTAL POPULATION IN THE REPUBLIC OF CROATIA

Population as a set of people living and working in an area is the most important factor in the development of a particular area. The entire economy of the country depends on the number, distribution, age coefficient and population movements of the coastal area.

According to the last census from 2011, 25.2% of the population of Croatia lives in the coastal area, or 1,080,539 inhabitants. The population of the coastal area lives on 47 inhabited islands and island groups and the Pelješac peninsula.<sup>34</sup>



**Chart 1. Distribution of coastal population by counties**

Source: Prepared by student according to: Popis stanovništva Republike Hrvatske iz 2011. godine; online: <https://www.dzs.hr/> (02.07.2020.)

<sup>34</sup> Translated from: Zakon o otocima, Narodne Novine Republike Hrvatske, Zagreb, 116/2018, [https://narodne-novine.nn.hr/clanci/sluzbeni/2018\\_12\\_116\\_2287.html](https://narodne-novine.nn.hr/clanci/sluzbeni/2018_12_116_2287.html) (02.07.2020.)

Chart 1. shows the distribution of the coastal population by counties and the number of people living on the coast and the number of people living on the islands. From the available information it can be seen that the Splitsko-dalmatinska County has the most populated coastal area in the Republic of Croatia of 354,057 people, most of whom, or 317,719 live on the coast, and only 36,338 on the islands. Furthermore, the 2011 census found that the county with the most islanders is Primorsko-goranska County (39,706), most of whom live on the island of Krk. The total population of the islands and the Pelješac peninsula is 131,379 according to the latest census.

### **5.3. SPATIAL ORGANIZATION OF THE COASTAL ZONE**

The management of complex systems such as the Adriatic coastal area requires an integrated approach that allows harmonization of multiple, interdependent and overlapping interests within the coastal area in a coordinated and reasonable manner and conserves coastal resources by ensuring maximum social and economic benefits for present and future generations without destroying the natural resources.<sup>35</sup> No interest group of people has the exclusive right to use coastal resources.

Because the necessity for good coastal zone management, the activities and actions of the private, public and civil sectors are aimed at achieving collective goals, better coordination and coherence in the functioning of various management and policy branches. A large number of participants are involved in the management process, so the harmonization of interests and coordination of all participants is the most important segment of successful management. In order for coastal areas, which include a large amount of different interests and activities, to focus on sustainable development, all development plans that affect the coastal area (spatial, economic, social and environmental planning) must be coordinated with the appropriate implementation of plans.

It is realistic, for Croatia, to assume that the development of ICZM will be based on the spatial planning system as the main determinant of the future integrated management system.<sup>36</sup>

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<sup>35</sup> Translated from: URBOS D.O.O., op.cit., p. 62.

<sup>36</sup> Translated from: Koboević, Ž., Milošević-Pujo, B., Kurtela, Ž.: Održivi razvoj i integrirano upravljanje obalnim područjem – procesi uspješne zaštite obalnog mora, Naše more, Sveučilište u Dubrovniku, Dubrovnik, Vol. 59., No. 3.-4., 2012., p. 176.-188., p. 181.,online: <https://hrcak.srce.hr/89782>, (02.07.2020.)

Spatial planning creates the conditions for the management, use and protection of the coastal area of the Republic of Croatia and thus ensures the preconditions for social and economic development, environmental protection, quality of construction and rational use of natural resources.

### **5.3.1. Legal framework**

The Republic of Croatia has no legal regulations related to coastal zone management as a whole. Of particular importance for ICZM is a set of laws and Acts relating to the regulation of certain parts of the coastal area, the division of competencies and the performance of activities that affect the coastal area. Some of these laws and Acts are:

- Environmental Protection Act (original Croatian full name: Zakon o zaštiti okoliša (Narodne Novine Republike Hrvatske 80/13 i 153/2013))
- Nature Protection Act (original Croatian full name: Zakon o zaštiti prirode (Narodne Novine Republike Hrvatske 80/13))
- Law on Sustainable Waste Management (original Croatian full name: Zakon o održivom gospodarenju otpadom (Narodne Novine Republike Hrvatske 94/13))
- Maritime Good and Seaports Act (original Croatian full name: Zakon o pomorskom dobru i morskim lukama (Narodne Novine Republike Hrvatske 158/03, 141/06, 38/09 i 123/11))
- Maritime Code (original Croatian full name: Pomorski zakonik (Narodne Novine Republike Hrvatske 181/04, 76/07, 146/08, 61/11 i 56/13))
- Water Act (original Croatian full name: Zakon o vodama (Narodne Novine Republike Hrvatske 153/09, 63/11, 130/11, 56/13, 14/14 - na snazi od 06.02.2013.))
- Marine Fisheries Act (original Croatian full name: Zakon o morskom ribarstvu (Narodne Novine Republike Hrvatske 81/13))
- Islands Act (original Croatian full name: Zakon o otocima (Narodne Novine Republike Hrvatske 34/99, 32/02, 33/06))
- Spatial Planning Law (original Croatian full name: Zakon o prostornom uređenju (Narodne Novine Republike Hrvatske 153/13))

### 5.3.2. Administrative and territorial coastal zone organization

The coastal area in the Republic of Croatia is divided into 131 units of local self-government (original Croatian name: lokalne samouprave) (cities and municipalities) and as such constitute the level at which the main objectives are achieved and with which a certain coastal area is managed. These 131 local self-government units are located and are part of the coastal counties. Table 5. shows the division of local self-governments according to the counties in which they are located.

**Table 5. Division of local self-governments according to the counties**

<b>Counties</b>	<b>Cities</b>	<b>Municipalities</b>	<b>Total</b>
<b>Istarska</b>	<b>8</b>	<b>14</b>	<b>22</b>
<b>Primorsko-goranska</b>	<b>10</b>	<b>10</b>	<b>20</b>
<b>Ličko-senjska</b>	<b>2</b>	<b>1</b>	<b>3</b>
<b>Zadarska</b>	<b>5</b>	<b>22</b>	<b>27</b>
<b>Šibensko-kninska</b>	<b>3</b>	<b>6</b>	<b>9</b>
<b>Splitsko-dalmatinska</b>	<b>11</b>	<b>21</b>	<b>32</b>
<b>Dubrovačko-neretvanska</b>	<b>4</b>	<b>14</b>	<b>18</b>
<b>Total on coastal area</b>	<b>43</b>	<b>88</b>	<b>131</b>

Source: Prepared by student according to: Koprić, I.: Stanje lokalne samouprave u Hrvatskoj, Hrvatska i komparativna javna uprava: časopis za teoriju i praksu javne uprave, Institut za javnu upravu, Zagreb, Vol. 10. No. 3., 2010., p. 655.-680., online: <https://hrcak.srce.hr/ccpa>, (02.07.2020.)

From Table 5. it can be seen that most local self-governments are part of the Splitsko-dalmatinska County. Zadarska County has the most municipalities in the coastal area, and the county with the most cities in the coastal area is Splitsko-dalmatinska. There is a total of 43 cities and 88 municipalities in the coastal area, which makes a total of 131 local self-governments.

## 5.4. CONCESSION

Concessions are rights given by the government to physical or legal entity to use part of the land. Concession in Republic of Croatia is defined by Concessions Act or Law of Concessions (Original Croatian name: Zakon o koncesijama NN 69/2017). An agreement of concession for the economic use of a common or other good is an administrative contract, in writing, the subject of which is the economic use of a common or other good for which the law stipulates that the good is of interest to the Republic of Croatia.<sup>37</sup> There are three types of concessions. Concession for the economic use of a common or other good, concessions for work and service concessions. Concessionaire pays agreed sum of money to concession provider to use wanted land in personal usage.

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<sup>37</sup> Translated from: Zakon o koncesijama, Narodne Novine Republike Hrvatske 69/2017, online: [https://narodne-novine.nn.hr/clanci/sluzbeni/2017\\_07\\_69\\_1603.html](https://narodne-novine.nn.hr/clanci/sluzbeni/2017_07_69_1603.html) (09.07.2020)

## 6. NAUTICAL TOURISM AND MARINAS

To understand ports used in nautical tourism and marinas, firstly nautical tourism and ports in general must be defined. Both of these terms have different definitions from different authors. Nautical tourism attracts growing attention all over the world and thus in Croatia, because of economic importance in the whole economy.<sup>38</sup> In Republic of Croatia nautical tourism is one of the most important types of tourism.

### 6.1. NAUTICAL TOURISM

Tourism is a set of different elements arise from travel and stay outside the place of permanent residence, exclusively for non-business reasons. Nautical tourism appears as a sub-branch of the tourist offer. Nautical tourism includes sailing and stay of tourists on vessels (yacht, motor boats, sailing boats), as well as stay in nautical tourism ports for rest and recreation.<sup>39</sup> Nautical tourism interferes with various economic branches and activities (maritime, boat accommodation, boat chartering, shipyards, etc.), and is closely related to the basic nautical infrastructure - nautical tourism ports.

#### 6.1.1. Definition and characteristics

Nautical tourism can be observed from various points of view (economical, recreational, accommodational etc.) that corelates with a large number of different definitions from different authors. In this thesis, nautical tourism will be defined as the totality of multifunctional activities and relationships caused by the stay of tourists-sailors in nautical tourism ports or outside them and the use of vessels as well as other facilities related to nautical tourism for recreation, sports, leisure and other needs.<sup>40</sup>

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<sup>38</sup> Kovačić, M., Luković, T.: Prostorne karakteristike planiranja i izgradnje luka nautičkog turizma „Spatial characteristics of planning and construction of nautical tourism ports“, Geoadria, Sveučilište u Dubrovniku, Dubrovnik, Vol. 12 No. 2, p.131.-147.,2007., p. 131.-132.

<sup>39</sup> Jugović, A., Kovačić, M.: Nautički turizam u Republici Hrvatskoj u funkciji razvoja destinacije, Pomorski zbornik, Rijeka, Vol. 47.-48., No. 1., p. 61.-72., 2013., p. 61.

<sup>40</sup> Luković, T.: Nautički turizam, definiranje i razvrstavanje, Ekonomski pregled, Vol. 58., No.11., p. 689.-708., 2007. p. 695.

To fully understand the term of nautical tourism, some of its components and elements should also be specified. The most important components are:<sup>41</sup>

- Nautical tourist “product”, which is a complex set of different services and products that can meet the needs of sailors, or in other words nautical tourist demands. It is hardly necessary to point out that a nautical “product” can appear in countless combinations, because the needs and demands can vary.
- Nautical tourist offers, understood as the ability of economic entities to offer a particular service. The offer can be viewed through the direct (such as nautical tourism ports) and indirect or logistical (public services, numerous services and natural conditions) point of view.
- Consumer who can differ from one another.

### **6.1.2. Types of nautical tourism**

Types of nautical tourism can be classified through different points of view. It can be classified based on services provided by this sector of tourism and consumers of these services.

Some of classifications are:<sup>42</sup>

- From the size and type of vessel the point of view:
  - Shipping or “large scale” (ferries, passenger ships...)
  - Yachting tourism (yachts of different sizes and types)
  - Moto-nautical tourism (speedboats, motor boats and boats without motor, sports and recreational vessels...)

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<sup>41</sup>Translated from: Dulčić, A.: Nautički turizam i upravljanje lukom nautičkog turizma, EKOKON d.o.o., Sveučilište u Splitu, Split, 2002., p. 7.

<sup>42</sup> Translated from: Luković, T., Gržetić, Z.: Nautičko turističko tržište u teoriji i praksi Hrvatske i europskog dijela Mediterana, Hrvatski Hidrografski Institut, Split, 2017., p. 118.-119.

- From navigational organization point of view:
  - Individual
  - Group
  - Nautical tourism in convoys
  
- Classification according to itineraries (plans of navigation):
  - In closed seas, rivers and lakes
  - Overseas and ocean
  - National
  - International
  
- Types according to purpose of navigation:
  - Excursion
  - Cruising, sailing
  - Sport and leisure navigation
  - Underwater navigation
  - Combine and fast tourist transport
  
- Classification by sectors:
  - Coastal
  - Swimming
  - Nautical camping
  - Residential in ports
  - Nautical tourism on open seas and oceans

These 5 classifications are based on consumers of service (tourists in nautical tourism). This approach is known as the humanistic school of nautical tourism (Croatian original name: humanistička škola nautičkog turizma) developed in the 1970s in Zadar.

Practical division of nautical tourism is based on several sources, legislative, statistical which is added by National classification activity. In that way the basic classification of nautical tourism has been imposed:<sup>43</sup>

- Nautical tourism ports
- Charter
- Cruising

Nautical tourism port is a group of activities related to the accommodation of vessels and sailors and other necessary services to vessels and sailors (restaurants, gas stations, shops...). Marina is the most developed, the most complex and the most common form of business in this group. That is the reason why in most cases general term port of nautical tourism is identified as marina. Ports and marinas will be explained in the next part of this Chapter.

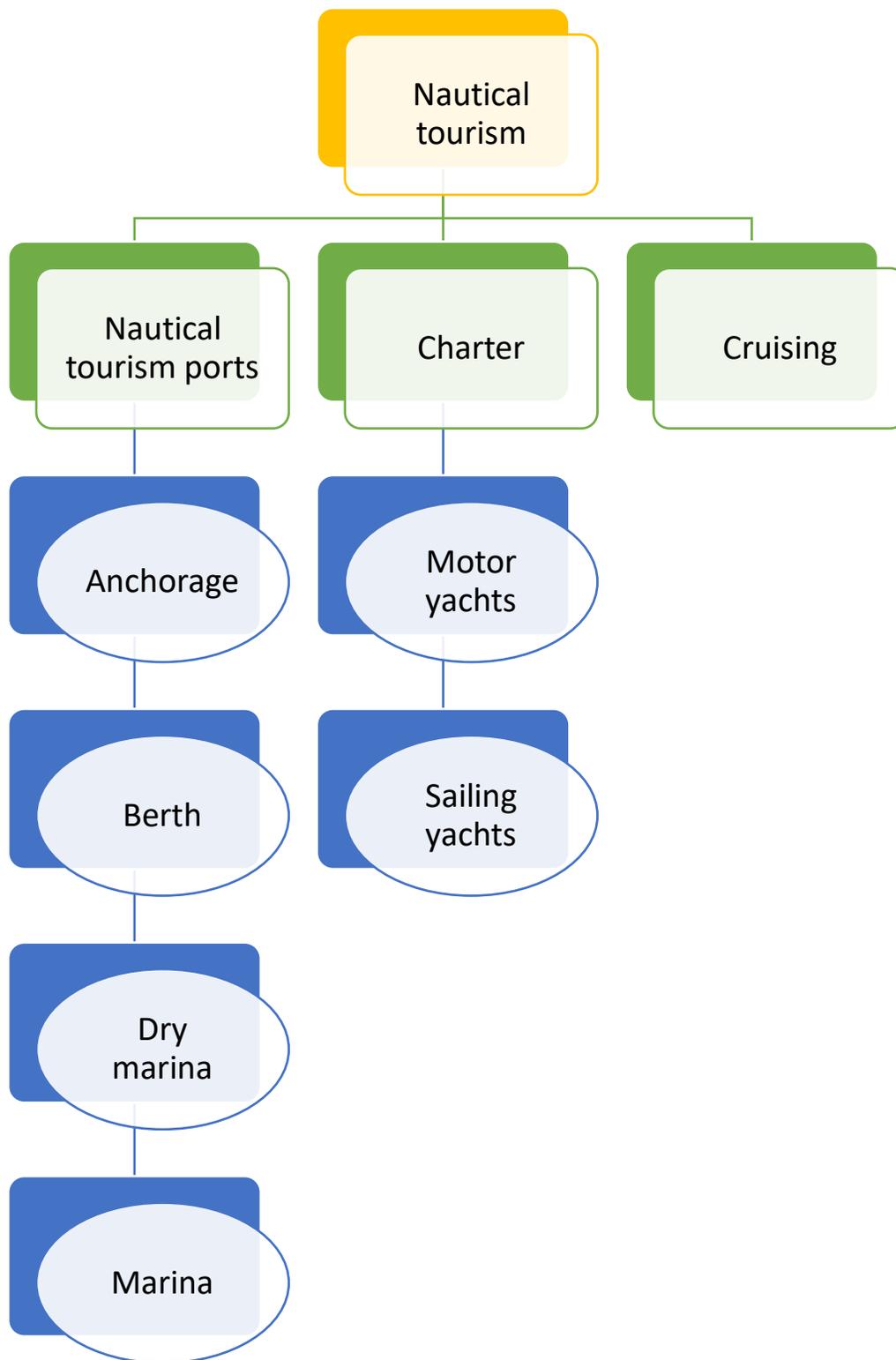
Charter or chartering is the form of business where charter company rents their boats to tourist for agreed period (normally daily or weekly). The most common types of boat chartering are renting smaller boats (<7 meters) – the usual rent lasts one day or several hours and sailing boat charter – the usual rent is one week. There are also other less common types of charters like jet ski rents, catamaran rents, luxury and expensive boats rents and many other.

Cruising means round trip on a cruise ship. Cruising tourism is of great importance in the development of the national economy, primarily due to the direct positive economic effects, which are: additional income for the local population, greater employment opportunities, general increase in standards, reduction of emigration, revitalization of various activities specific to a particular area, etc.<sup>44</sup> Cruising tourism is classified according to type of ship used in particular trip. Some forms of cruising tourism are luxury cruises, thematic cruises, cruising on mega cruisers and many more.

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<sup>43</sup> Luković, T.: Nautički turizam – definicije i dileme, NAŠE MORE: znanstveni časopis za more i pomorstvo, Sveučilište u Dubrovniku, Dubrovnik, Vol. 54., No. 1-2, 2007., p.22.-37., p.22.

<sup>44</sup>Translated from: Šantić, L., Vilke, S., Grubišić, N.: Čimbenici štetnog djelovanja crusing-turizma na brodski okoliš, NAŠE MORE: znanstveni časopis za more i pomorstvo, Sveučilište u Dubrovniku, Dubrovnik, Vol. 58, No. 5-6, 2011., p. 229.-243., p. 230. online: <https://hrcak.srce.hr/75540> (20.07.2020.)



**Scheme 2. Nautical tourism classification**

Prepared by student according to: Luković, T., Gržetić, Z.: Nautičko turističko tržište u teoriji i praksi Hrvatske i europskog dijela Mediterana, Hrvatski Hidrografski Institut, Split, 2017., p.123.

## 6.2. PORTS AND MARINAS

Transport and tourism are one of the most important economic activities in today's economic and social development of the world. Ports and marinas are great indicators for local and national development.

### 6.2.1. Ports

Ports are defined in the broadest sense as a naturally or artificially protected sea, river or lake pool, where ships find shelter from waves, currents, tides and ice; protection from enemy attacks; where they can load fuel, water and food; make repairs to the ship's hull, machinery and equipment or clean all parts of ship; where they can safely and quickly unload, load and reload cargo and passengers and where crew can rest.<sup>45</sup>

In Republic of Croatia ports are defined by Maritime Good and Seaports Act (Croatian original name Zakon o pomorskom dobru i morskim lukama). Port means a seaport, i.e. sea area and area of land directly connected with sea with built and unbuilt shores, breakwaters, devices, facilities and other facilities intended for mooring, anchoring and protection of ships, yachts and boats, loading and unloading of passengers and goods, storage and other manipulation of goods, production, processing and finishing of goods and other economic activities that are in economic, traffic or technological connection with these activities.<sup>46</sup>

The most important types of ports by the purpose they serve are passenger ports, cargo ports, fishing ports, commercial ports, industrial ports and mixed ports.<sup>47</sup> Passenger ports are type of ports equipped with specific terminals for loading and unloading passengers, vehicles and luggage. Cargo ports and cargo terminals are places on the coast where machinery used for cargo handling is located. There are different types of cargo terminals like container terminal, dry bulk cargo terminal, LNG terminal, LPG terminal etc. Fishing ports are designed for fisheries, fishing boats and other facilities and activities used in fishing business. The most

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<sup>45</sup> Translated from: Pomorska enciklopedija 4, Zagreb, 1978., p. 367. In book: Dulčić, A.: Nautički turizam i upravljanje lukom nautičkog turizma, EKOKON d.o.o., Sveučilište u Splitu, Split, 2002., p.169.

<sup>46</sup> Translated from: Zakon o pomorskom dobru i morskim lukama, Narodne Novine Republike Hrvatske 158/2003, online: [https://narodne-novine.nn.hr/clanci/sluzbeni/2003\\_10\\_158\\_2257.html](https://narodne-novine.nn.hr/clanci/sluzbeni/2003_10_158_2257.html) (20.07.2020.)

<sup>47</sup> Kesić, B., Jugović, A.: Menadžment pomorskoputničkih luka, Pomorski fakultet u Rijeci, Rijeka, 2006., p. 7.

important function of commercial ports is trading. And mixed ports are ports that serve different functions like passenger-cargo port.

Other classifications according to Croatian Law are:<sup>48</sup>

1. Types of ports by their application:
  - Ports open for public
  - Special purpose ports
  
2. According to the importance and size for the Republic of Croatia ports open for public are:
  - Ports of international economic importance
  - Ports of county significance
  - Ports of local importance
  
3. According to the activities performed in ports for special purposes are:
  - Military ports
  - Internal affairs ports
  - Nautical tourism ports
  - Industrial ports
  - Sport ports
  - Fishing ports
  - Etc.
  
4. According to the importance for the Republic of Croatia ports for special purposes are:
  - Ports important for Republic of Croatia
  - Ports of local importance

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<sup>48</sup> Kesić, B.: Ekonomika luka, Pomorski fakultet Sveučilišta u Rijeci, Rijeka, 2003., p. 27.-28.

### **6.2.2. Nautical tourism ports**

Nautical tourism port is a form of business in which a legal or physical entity operates and provides tourist services in nautical tourism and other services in the function of tourist consumption.

Nautical tourism ports in Republic of Croatia are categorised in 4 categories:<sup>49</sup>

1. Anchorage
2. Berth
3. Dry marina
4. Marina

Anchorage is a part of sea area reserved for anchoring of the ships. These areas must provide ships with mooring buoys for safe anchoring. Berth is a part of coast and sea area which provides boats with safe docking. Berths must be provided with electricity and clean water for ship and crew and shop and toilette close to the docking place. Dry marina is usually part of the coast or other land area equipped for boat safekeeping outside of the sea. Services like boat transport in and out of the sea are normally provided in dry marinas.

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<sup>49</sup> Translated from: Pravilnik o razvrstavanju i kategorizaciji luka nautičkog turizma, Ministarstvo turizma, Narodne novine Republike Hrvatske 72/2008, [https://narodne-novine.nn.hr/clanci/sluzbeni/2008\\_06\\_72\\_2402.html](https://narodne-novine.nn.hr/clanci/sluzbeni/2008_06_72_2402.html) (22.07.2020)



**Figure 4. Anchorage**

Source: <https://www.visitlosinj.hr/hr/maracol.aspx> (22.07.2020)



**Figure 5. Berths**

Source: <https://malin-krk.com/ponude/priveziste-za-brodice/> (22.07.2020.)



**Figure 6. Dry marina**

Source: <https://www.nautical-center.com/suha-marina/> (22.07.2020)



**Figure 7. Marina**

Source: <https://croatia.hr/hr-HR/dozivljaji/nautika/aci-marina-rovinj> (22.07.2020)

### 6.2.3. Marinas

Marina is an area of the coast and the sea specially designed for providing services, firstly services for boats (for example safe docking, electricity, water etc.) and services for tourists on boats (for example accommodation, food, etc.). The marina is the dominant type of tourist port in the world, the "ultimate range" of nautical-tourist offer, because it has several differently connected attractive and lucrative service elements for participants in fun navigation.<sup>50</sup>

Marinas have a lot of different classifications according to different variable. According to degree of equipment there are standard (with basic equipment), deluxe or luxury (with a high level of comfort) and recreational (used in recreational activities) marinas. According to the type of construction there are the American, Atlantic and Mediterranean type of marinas. The American type of marina is characterized by simple (and standard), quality and relatively cheap construction, functional layout, good equipment and efficient business organization. The Atlantic type of marina, like all European marinas, does not have a unique type of construction in terms of architecture, it is equipped poorer and on average has a smaller capacity than the American type. Construction styles depend on the areas and can be pyramidal, stepped, ambient and high. The Mediterranean type of marina is characterized by relatively smaller land areas with solid construction of infrastructure facilities. These types are related to the tourist resort or are part of it. They have a limited number of berths and are intended mainly for guests in the summer season who stay shorter period of time in the port.<sup>51</sup>

There are four types of marinas given to the position of water:

- Completely tucked marinas
- Tucked marinas
- Partially tucked marinas
- Open marinas

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<sup>50</sup> Luković, T., Bilić, M.: LUKE NAUTIČKOG TURIZMA U HRVATSKOJ I STRATEGIJA LOKALNOGA RAZVOJA, NAŠE MORE: znanstveni časopis za more i pomorstvo, Sveučilište u Dubrovniku, Dubrovnik, Vol. 54 No. 3-4, 2007., p. 114.-122., p. 116.

<sup>51</sup> Ibidem, p. 116.-117.



**Figure 8. Completely tucked marina – Marina Kremik**

Source: <https://sibenskiportal.rtl.hr/aktualno/vlasniku-primostenskih-hotela-zbog-milijunskog-duga-propala-charter-tvrtka/> (24.07.2020)



**Figure 9. Tucked marina – Marina Novigrad**

Source: [https://marinas.com/view/marina/x1cllj4\\_Novigrad\\_Harbour\\_Novigrad\\_Croatia](https://marinas.com/view/marina/x1cllj4_Novigrad_Harbour_Novigrad_Croatia) (24.07.2020)



**Figure 10. Partially tucked marina – Marina Vrsar**

Source: <https://croatia.hr/hr-HR/dozivljaji/nautika/marina-vrsar> (24.07.2020)



**Figure 11. Open marina – Marina Punat**

Source: <https://garant-charter.hr/informacije/marina-punat-parkiranje> (24.07.2020)

The category of marina is determined depending on the fulfilment of the conditions for each category: quality of equipment and facilities, standard of services, variety of complementary services provided to tourists in the marina, as well as other services and facilities available to tourists near the marina and quality of maintenance. There are 4 categories of marinas in Republic of Croatia:<sup>52</sup>

1. Two anchors (translated from Croatian: dva sidra)
2. Three anchors (translated from Croatian: tri sidra)
3. Four anchors (translated from Croatian: četiri sidra)
4. Five anchors (translated from Croatian: pet sidara)

Fixed assets of which consist marina are land (place where marina is located), buildings (reception, toilettes etc.), breakwater(s) (protects marina from waves and storms), fixed and floating piers (serve for mooring equipped with electricity and water for boats), cranes (for transporting boats in and out of water) and utility infrastructure (sewerage, drinking water, electricity, pipeline, etc.).

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<sup>52</sup> Translated from: Pravilnik o razvrstavanju i kategorizaciji luka nautičkog turizma, op.cit.

## **7. NAUTICAL TOURISM IN REPUBLIC OF CROATIA**

In Croatia, nautical tourism is determined by the Act on the Provision of Services in Tourism (Original Croatian name: Zakon o pružanju usluga u turizmu). According to the Law, nautical tourism is the sailing and stay of tourists (sailors or passengers) on vessels (yacht, sailing boat or motor boat) for personal needs or economic activity, as well as staying in nautical tourism ports and nautical part of the port open to public traffic, for vacation, recreation and cruises. The law also defines tourist services in nautical tourism:

- services for the use of berths, reception and accommodation of vessel and tourists
- charter services
- organizing trips or excursions on nautical tourism vessels
- acceptance, storage and maintenance of vessels at berth in the sea and on land
- cleaning and preparation of vessels
- other services for the needs of tourists

The development of nautical tourism is closely linked to space. Croatia, as a Mediterranean country with 6,278 kilometres of coastline, indented coast (1,246 islands, islets and rocks) and natural beauty, favourable geo-traffic position and climate, has comparative advantages for the development of nautical tourism. According to the indentation of the coast, Croatia is the coast with a coefficient of 11.10 in second place in the Mediterranean, just behind Greece. Thanks to the given natural resources and more intensive investments, the demand for nautical tourism in Croatia has been continuously growing in the last ten years. In response to growing demand, the supply of nautical tourism is improving through increasing the capacity of nautical ports and increasing the level of quality and diversity of supply. In Croatia, nautical tourism represents a significant part of the total tourist offer and through its multiplicative effects contributes to economic development, employment and raising the quality of life of the local population.

## 7.1. ANALYSIS OF NAUTICAL TOURISM IN CROATIA

The beginning of the development of nautical tourism in Croatia is considered to be the period before the Second World War. At that time, sailing was individual and rare, and only a few sailors used the services of ports. Accordingly, there was no need to design a systematic offer of nautical tourism. The first five specialized nautical ports built in Croatia during 60s and 70s of 20<sup>th</sup> century are marinas: Puntar, Mali Lošinj, Zadar, Split and Dubrovnik.

There are 167 nautical tourism ports in Croatia today, of which 78 are marinas (17 dry marinas). The total area of nautical tourism ports is 4,349,270 square meters, while the total capacity of Croatian marinas is 18,179 berths. Table 6. shows the capacity of nautical tourism ports in Croatia in 2019, according to the length of the vessel. Table 7. shows the total number of nautical tourism ports and marina in Republic of Croatia by Counties.

**Table 6. Capacity of nautical tourism ports in Croatia in 2019. according to the length of the vessel**

<b>LENGTH OF THE VESSEL</b>	<b>CAPACITY (NUMBER OF BERTHS)</b>
<b>&lt; 6 m</b>	<b>674</b>
<b>6 m – 8 m</b>	<b>1246</b>
<b>8 m – 10 m</b>	<b>2840</b>
<b>10 m – 12 m</b>	<b>4511</b>
<b>12 m – 15 m</b>	<b>5116</b>
<b>15 m – 20 m</b>	<b>2984</b>
<b>&gt; 20 m</b>	<b>808</b>
<b>TOTAL</b>	<b>18179</b>

Source: Prepared by student according to Državni zavod za statistiku (Bureau of Statistics of Croatia), online: <https://www.dzs.hr/> (04.08.2020)

**Table 7. Total number of nautical tourism ports and marina in Republic of Croatia by counties**

<b>COUNTY</b>	<b>NAUTICAL TOURISM PORTS</b>	<b>MARINAS</b>
<b>Istarska</b>	<b>13</b>	<b>12</b>
<b>Primorsko-goranska</b>	<b>33</b>	<b>11</b>
<b>Zadarska</b>	<b>47</b>	<b>8</b>
<b>Šibensko-kninska</b>	<b>30</b>	<b>14</b>
<b>Splitsko-dalmatinska</b>	<b>31</b>	<b>11</b>
<b>Dubrovačko-neretvanska</b>	<b>13</b>	<b>5</b>
<b>Total in Croatia</b>	<b>167</b>	<b>61</b>

Source: Prepared by student according to Državni zavod za statistiku (Bureau of Statistics of Croatia), online: <https://www.dzs.hr/> (04.08.2020)

As at 31.12.2019, there were 14,249 vessels in nautical tourism ports in Croatia (4,6% more than on the same day of the previous year). Of these, 84.9% of vessels used mooring at sea, while 15.1% of vessels were on land. According to the type of vessels on a permanent berth, most were sailing yachts (49%), followed by motor yachts (46,4%) and other vessels (4,6%). According to the length of the vessel, the most common vessels for which a berth was used are vessels up to 12 meters long (32%), followed by vessels 10 to 12 meters long (29,1%). Table 8. shows the number of vessels at permanent berth in nautical tourism ports in Croatia as at 31.12.2019, by type and length of vessel.

**Table 8. Number of vessels at permanent berth in nautical tourism ports in Croatia as at 31.12.2019, by type and length of vessel**

<b>LENGTH OF THE VESSEL</b>	<b>TOTAL</b>	<b>MOTOR YACHTS</b>	<b>SAILING YACHTS</b>	<b>OTHER</b>
<b>&lt; 6 m</b>	<b>278</b>	<b>249</b>	<b>10</b>	<b>19</b>
<b>6 m – 8 m</b>	<b>816</b>	<b>666</b>	<b>103</b>	<b>47</b>
<b>8 m – 10 m</b>	<b>1703</b>	<b>959</b>	<b>713</b>	<b>31</b>
<b>10 m – 12 m</b>	<b>3521</b>	<b>1286</b>	<b>2046</b>	<b>189</b>
<b>12 m – 15 m</b>	<b>3876</b>	<b>1186</b>	<b>2488</b>	<b>202</b>
<b>15 m – 20 m</b>	<b>1461</b>	<b>876</b>	<b>563</b>	<b>46</b>
<b>&gt; 20 m</b>	<b>445</b>	<b>388</b>	<b>39</b>	<b>18</b>
<b>TOTAL</b>	<b>12100</b>	<b>5610</b>	<b>5962</b>	<b>552</b>

Source: Prepared by student according to Državni zavod za statistiku (Bureau of Statistics of Croatia), online: <https://www.dzs.hr/> (04.08.2020)

Most vessels on a permanent berth were under the Croatian flag (44,1%), followed by vessels under the flag of Austria (15,6%), Germany (15,5%), Slovenia (5,0%) and Italy (3,8%).

In 2019, there were 204,858 vessels in transit in nautical tourism ports in Croatia, which represents an increase in the number of vessels in transit by 5,5% compared to the previous year. According to the type of vessels in transit for which a berth at sea was used, most were sailing yachts (64.9%), followed by motor yachts (29.1%), while other vessels accounted for 6.0% of the total number of vessels in transit. During 2019, most vessels in transit were under the flag of Croatia (47.8%), followed by vessels under the flag of Italy (14.1%), Germany (12.2%), Austria (7.0%) and Slovenia (4.1%). Vessels under the Croatian flag and the flag of close European emitting tourist markets make up a total of 85,2% of the total number of vessels in transit in Croatia in 2019.

In 2019, nautical tourism ports in Croatia generated 918 million HRK in revenue. Of that, HRK 652 million (71.0%) of revenues were generated from renting berths. Compared to 2018, the total revenue of Croatian marinas increased by 7.2%, while the revenue from renting berths increased by 5.4%. This shows that Croatia is still an attractive tourist destination for boaters, but also that nautical tourism is an important part of the overall development of Croatian tourism.

## TRENDS

Trends in nautical tourism can be monitored and analysed thanks to research by TOMAS Nautika, conducted by the Institute of Tourism in Zagreb. The last such research was conducted in 2017, and the results of the research were published in 2018. The aim of the research is to determine the characteristics of nautical demand and to follow the trends on the world and Croatian nautical tourism market.<sup>53</sup>

### 1. Sociodemographic profile:

- 43 years is the average age of tourists
- 55% of tourists are between 30 and 49 years old
- 51% have a university degree
- 56% come from a household with a monthly income of more than 3,500 €

### 2. Means of arrival and departure

- 58% of tourists come by their own car
- 24% of tourists come by plane
- 13% of tourists come by the boat on which they are staying

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<sup>53</sup> Translated from: Tomas Nautika 2017., Institut za turizam, Zagreb, 2018., online: <http://www.iztg.hr/UserFiles/file/novosti/2018/Tomas-Nautika-Jahting-2017-29-06-2018-prezentacija.pdf> (04.08.2020)

### 3. Characteristics of travel / navigation

- 34% of tourists use skipper rental services
- 5 people are on board, on average
- 37% of tourists sail with family members, 35% only with a partner
- 10 nights on average on a trip: 6 in marinas, 2 in local ports, 2 on a buoy or anchor
- 96% go to restaurants, 84% to shopping, 53% to pastry shops and cafes
- 48% are engaged in diving
- 40% go for walks / hiking
- 34% go fishing
- 33% visit national parks or other protected natural areas
- 32% go sightseeing
- 31% are engaged in sports and recreational activities at sea
- 30% attend local fests/parties

### 4. Satisfaction with the offer:

- tourists express a high or very high level of satisfaction for nautical offer in Republic of Croatia
- the beauty of nature and landscape, personal safety, ecological preservation and a number of elements related to the offer of marinas and charters were best rated
- they are the least satisfied with the possibilities for shopping in marinas and the offer of entertainment and sports facilities
- 7% to 13% of tourists expressed dissatisfaction with the irresponsible behaviour of other tourists at sea, inappropriate waste disposal, too many vessels at sea, inability to find a free transit berth in the marina / port / anchor, crowds on land or noise

### 5. Expenditures of tourists:

- Tourists on average spent 1,486 € per person (62% for a boat, 11% transport from the place of residence to the port of departure in Croatia and back, 27% other)
- 126 € per day are the average cost of boaters (excluding transport costs)

## **7.2. NAUTICAL TOURISM ON THE TERRITORY OF ISTARSKA COUNTY**

The Istarska County covers the largest part of Istria and makes up to 5% of the total area of Croatia. Istria is the largest Adriatic peninsula, located in the north-eastern part of the Adriatic Sea. Istria has a favourable geographical position, as it connects Central Europe with the Mediterranean. It is surrounded by the sea on three sides, in the north it borders with Slovenia and shares the sea border with Italy. Istria and Kvarner together cover an area of 612,374 m<sup>2</sup>, deeply indented into the European mainland, which contributes to better transport connections with European emitting tourist markets.

The length of the Istrian coast (with islands, islets and rocks) is 539 kilometres, of which 327 kilometres is the coast in the western part of the peninsula. The waters of Istria cover 3,781.93 square kilometres. The western part of Istria has a very indented coast, with a large number of bays, coves and islets, which makes this part of the peninsula very attractive to visitors. In this part of Istria there is a large number of nautical tourism ports and accompanying facilities intended for nautical consumption. The development of nautical tourism in Istria has been contributed by the Mediterranean climate, which is characterized by mild and humid winters and warm and dry summers. Throughout the year, 260 days Istria has an average temperature above 10°C, and only about 20 hot days with temperatures above 30°C.

Favourable natural preconditions have created the foundations for the development of nautical tourism in Istria, and due to the long tradition of seafaring and good transport connections, the Istarska County is one of the most maritime developed Croatian counties. The main advantages of Istria's nautical tourist offer are the purity of the sea, the beauty of the landscape and the preservation of the coast. The disadvantage of the nautical tourist offer is the insufficient equipment of nautical tourism ports and the lack and variety of content for visitors and tourists.

According to the Bureau of Statistics of Croatia, nautical tourism ports in Istria are:

- ACI Marina Umag
- Marina Nautica Novigrad
- Marina Červar Porat
- Marina Poreč
- Marina Parentium
- Marina Funtana
- Marina Vrsar
- Marina Valalta
- ACI marina Rovinj
- ACI marina Pula
- Marina Veruda
- ACI Marina Pomer.

Nautical tourism is one of the main tourist products of Istria, which significantly contributes to the development of the region. The development of nautical tourism benefits primarily from nautical tourism ports, but also from all other activities, which are developed in parallel with the development of nautical tourism and for the purpose of enriching the nautical tourist offer. Also, nautical tourism contributes to the extension of the tourist season, reduces the seasonality of tourist demand for the destination. The local population also benefits in the long run from the development of nautical tourism, which is reflected in greater employment opportunities and an increase in social standards. With the development of nautical tourism, Istria as a region is gaining in attractiveness and becoming more competitive in the tourist market. In order for the development of nautical tourism in Istria to be sustainable in the long run and to generate benefits for all stakeholders through its multiplier effects, it is necessary to plan it in accordance with the current situation and opportunities arising from the available resource base. In doing so, Istria must valorise its resources in order to become more attractive to tourists and more competitive in the market, developing nautical tourism according to trends in tourist demand and the principles of sustainable development.

## **8. MARINA VRSAR**

In the past, Vrsar was a small town, which inhabitants were mainly engaged in fishing and agriculture. Thanks to the natural beauty of the place and the richness of history and cultural heritage, the first tourists began to arrive in Vrsar in the middle of the 20th century. At that time, the development of tourism in this area was spontaneous, without plans, and guests stayed mostly in camps. By researching the possibilities of tourism development in the place, the development of tourism began to be planned and the construction of the first accommodation facilities, hotels and camps began. With the mass arrival of tourists in Vrsar, the tourist infrastructure and objects are being built, complementary activities are being developed and the development of the place is beginning to be based on tourism. Vrsar has always had an old fishing port, which over the years began to arrive an increasing number of vessels for entertainment and recreation and grew interest in mooring vessels in the port throughout the year, mainly due to pleasant climate, natural beauty, conservation of natural resources, indented coastline and the proximity of emitting tourist markets.

The construction of the marina Vrsar began in the year 2000, and was based primarily on the adaptation of the existing natural port, which was firstly used to accommodate vessels.

### **8.1. MUNICIPALITY OF VRSAR**

Vrsar is an established tourist destination on the west coast of Istria, located between the river Mirna in the north and the Lim Bay in the south. Vrsar is a traditional fishing and tourist place (population of about 2,000). The municipality of Vrsar includes a total of nine settlements: Begi, Bralići, Delići, Gradina, Kloštar, Kontešići, Flengi, Marasi and Vrsar. Nautical tourism has developed in Vrsar thanks to favourable natural resources and climatic conditions, but also the built infrastructure and other created elements of the tourist offer.



**Figure 12. Vrsar**

Source: <https://villsy.com/croatia/istria/porec/vrsar/> (06.08.2020)

The indented coastline and archipelago of islands in the area of Vrsar and its surroundings is actually the best foundation for the development of nautical tourism. The Vrsar coast is, after the Brijuni Islands, the most indented part of the Istrian coast. The Vrsar archipelago has 18 islands and islets, and there are also numerous bays and the Lim Bay in the south of the municipality. The most important islands of Vrsar are: Figarolica, Salamon, Galiner, Sveti Juraj, Koversada, Longa and Orlandin.



**Figure 13. Vrsar islands**

Source: <https://www.zupavrsar.com/vrsarske-znamenitosti/vrsarski-arhipelag> (06.08.2020)

## 8.2. GENERAL INFORMATION ABOUT MARINA VR SAR

Marina Vrsar is in a category of 3 anchors marinas. Marina Vrsar is located on the west coast of Istria and today is a famous tourist place with a developed tourist offer. In front of Vrsar lies one of the most beautiful archipelagos with eighteen uninhabited islands.<sup>54</sup>

The construction of the marina began in 2000., and was based primarily on the adaptation of the existing natural harbour, creating the capacity to accommodate vessels without major disturbance of the natural harmony of the place. The marina is naturally protected from winds by the island of Sveti Juraj. The marina started operating in 2001 and has been operating very successfully since then, thanks to continuous investments in raising the level of quality of nautical services and meeting the needs of tourists with the needs of the local community.

Marina Vrsar is open all year round and has 220 berths in the sea and 40 berths on land. The depth of the waterway and berths is from 7 to 14 meters, so it is possible to accept yachts up to 50 meters long. All berths are supplied with water and electricity, and visitors can use the Wi-Fi network. For the safety of tourists and their vessels, each part of the marina is equipped with surveillance cameras. Visitors have all the necessary facilities: reception, maritime service (0-24), air-conditioned toilets with the possibility of using a washing machine and dryer, restaurant, coffee bar, service for boats with a crane up to 30 tons, specialized nautical equipment store, sport and rent centres, diver services, charter company, clothing and footwear store, ATM etc. There is also a gas station in the marina with the sea depth of 4 meters. Due to the proximity of the town centre and larger cities, guests have at their disposal other tourist facilities.

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<sup>54</sup> Translated from: Montraker web site, Marina Vrsar, online: <http://www.montraker.hr/index.php/hr/marina-vrsar-2> (07.08.2020)



**Figure 14. Marina Vrsar - today**

Source: <http://total-croatia-sailing.com/marinas/marina-vrsar/> (07.08.2020)

### 8.3. STATE ANALYSIS

Marina Vrsar has been managed from the very beginning by the company Montraker D.O.O., which is 100% owned by the municipality of Vrsar. Montraker D.O.O. has a concession over marina till 15.01.2023. Marina Vrsar employs 13 workers for an indefinite period of time. Due to the increased volume of business during the tourist season (especially July and August), Marina Vrsar additionally employs temporary workers and students.

Marina Vrsar generates most of its income from renting permanent berths. In Marina Vrsar on 31.12.2019. were 240 vessels on a permanent berth, of which 130 were motor yachts and 110 sailing yachts. Table 9. shows number of vessels on permanent berth in Marina Vrsar from 2010. to 2019. according to the vessel type.

**Table 9. Number of vessels on permanent berth in Marina Vrsar from 2010. to 2019. according to the vessel type**

<b>Year</b>	<b>Motor yachts</b>	<b>Sailing yachts</b>	<b>Other</b>	<b>Total</b>
<b>2010.</b>	<b>122</b>	<b>110</b>	<b>4</b>	<b>236</b>
<b>2011.</b>	<b>128</b>	<b>108</b>	<b>2</b>	<b>238</b>
<b>2012.</b>	<b>129</b>	<b>108</b>	<b>0</b>	<b>237</b>
<b>2013.</b>	<b>125</b>	<b>106</b>	<b>0</b>	<b>231</b>
<b>2014.</b>	<b>120</b>	<b>109</b>	<b>1</b>	<b>230</b>
<b>2015.</b>	<b>120</b>	<b>110</b>	<b>2</b>	<b>232</b>
<b>2016.</b>	<b>129</b>	<b>110</b>	<b>1</b>	<b>240</b>
<b>2017.</b>	<b>131</b>	<b>114</b>	<b>0</b>	<b>245</b>
<b>2018.</b>	<b>134</b>	<b>113</b>	<b>1</b>	<b>248</b>
<b>2019.</b>	<b>130</b>	<b>110</b>	<b>0</b>	<b>240</b>

Source: Prepared by student according to: Montraker D.O.O., Marina Vrsar, internal reports

Most vessels at the permanent berth in Marina Vrsar navigate under European flags, from which it can be concluded that the largest number of guests are from close emitting markets of Western Europe, primarily from Germany, Austria, Italy and Slovenia. Vessels under the Croatian flag refer mainly to the charter fleet. A great advantage of Marina Vrsar for costumers from Western European countries is the proximity of the destination, which stimulates the demand for permanent berths in Marina Vrsar for many years. The number of vessels on permanent berth in Marina Vrsar in 2019. according to the vessels flag is represented in table 10.

**Table 10. Number of vessels on permanent berth in Marina Vrsar in 2019. according to the vessels flag**

<b>Vessels flag</b>	<b>Number</b>
<b>Germany</b>	<b>75</b>
<b>Austria</b>	<b>63</b>
<b>Italy</b>	<b>34</b>
<b>Croatia</b>	<b>32</b>
<b>Slovenia</b>	<b>16</b>
<b>Great Britain</b>	<b>9</b>
<b>Nederland</b>	<b>4</b>
<b>France</b>	<b>2</b>
<b>Malta</b>	<b>2</b>
<b>Belgium</b>	<b>1</b>
<b>Czech Republic</b>	<b>1</b>
<b>Hungry</b>	<b>1</b>
<b>Total</b>	<b>240</b>

Source: Prepared by student according to: Montraker D.O.O., Marina Vrsar, internal reports

In addition to revenues from permanent berths, a significant part of Marina Vrsar's income comes from monthly and daily berths. Marina Vrsar does not have berths reserved only for vessels in transit, but rents permanent berths for vessels in transit, when there are no vessels with an annual berth contract. All boat owners who have a vessel on an annual berth, in accordance with the concluded contract, are obliged to report the departure and the day of the planned arrival when leaving the marina, so that their berth is available to other sailors. The dynamics of the movement of vessels in transit for the period from 2010 to 2019, according to the flag of the vessel, is shown in Table 11.

**Table 11. Vessels in transit in a period from 2010. to 2019.**

Flag	2010.	2011.	2012.	2013.	2014.	2015.	2016.	2017.	2018.	2019.
Germany	632	580	559	529	583	563	541	689	537	523
Austria	357	327	359	319	333	347	370	387	355	355
Italy	1803	1786	1605	1331	1186	1166	1218	1172	1113	1042
Croatia	212	153	210	268	229	230	245	302	278	280
Slovenia	248	178	199	180	206	173	186	198	191	166
Great Britain	37	34	46	51	45	38	34	49	28	35
Nederland	28	28	32	22	21	33	34	56	54	40
France	54	46	44	31	24	37	24	28	20	17
Malta	4	2	10	9	8	14	5	9	11	3
Belgium	10	14	13	10	15	23	28	39	44	63
Czech Rep.	2	2	2	3	3	3	4	7	1	3
Hungry	7	4	3	2	0	0	0	4	4	4
USA	27	23	14	14	10	6	5	19	5	5
Switzerland	27	35	39	44	47	31	27	28	26	24
Other	30	35	24	36	51	36	28	39	30	15
<b>Total</b>	<b>3478</b>	<b>3247</b>	<b>3159</b>	<b>2849</b>	<b>2761</b>	<b>2700</b>	<b>2749</b>	<b>3026</b>	<b>2697</b>	<b>2575</b>

Source: Prepared by student according to: Montraker D.O.O., Marina Vrsar, internal reports

According to the flag of the vessel, the transit is also dominated by vessels from Western European countries, but the vessels under the Italian flag stand out, which number is significantly higher in all years compared to other flags. They are followed by Germany and Austria, than vessels under the Croatian (which are mostly owned by charter companies), Slovenian, British, Dutch and French flags.

In 2019, the Vrsar marina had a total of 2,575 of vessels in transit. 1,530 arrivals were made by sailing yachts, motor yachts made 998 arrivals in transit, and other types of vessels 47 arrivals.

The movement of the number of transits in Marina Vrsar in the observed period of time has a negative trend. In 2010, the largest number of arrivals of vessels in transit was achieved (3,478 vessels) and then the number of vessels in transit decreased until 2015. Re-growth was recorded in 2016 and 2017, when 2,749 and 3,026 arrivals of vessels in transit were recorded, respectively. In 2018, the number of transits decreased again, and in 2019, Marina Vrsar realized 2,575 arrivals of vessels in transit, which is 122 transit arrivals less than in 2018. The reason for this trend in the number of vessels in transit in Marina Vrsar is not only the decline in demand for Vrsar as a nautical destination. In Marina Vrsar, over the years, a certain number of berths were adjusted for the possibility of accepting larger yachts, so it was possible to accommodate a smaller number of vessels on the same pier. Also, the number of vessels in transit depends on the available free berths in the marina, which depend on the dynamics of departure of vessels at the permanent (annual) berth.

A relevant indicator for the analysis of the demand for berths and planning for the future development of Marina Vrsar is the number of vessels on a permanent berth and the number of vessels in transit according to the length of the vessel. Table 12. shows the number of vessels for which a permanent berth was used in Marina Vrsar according to the length of the vessel in 2019.

**Table 12. Number of vessels on permanent berth in Marina Vrsar according to the length of the vessel in 2019**

<b>Length (m)</b>	<b>Motor yachts</b>	<b>Sailing yachts</b>	<b>Total</b>
< 6	2	0	2
6 – 7	8	0	8
7 – 8	4	0	4
8 – 9	11	2	13
9 – 10	20	14	34
10 – 11	18	18	36
11 – 12	15	28	43
12 – 13	13	19	32
13 – 14	5	7	12
14 – 15	9	14	23
15 – 16	5	3	8
16 – 17	5	2	7
17 – 18	0	0	0
18 – 19	4	1	5
19 – 20	0	1	1
20 – 21	1	0	1
21 – 22	1	1	2
22 – 23	1	0	1
23 – 24	5	0	5
24 – 25	1	0	1
25 – 26	1	0	1
26 – 27	0	0	0
32 – 33	1	0	1
<b>Total</b>	<b>130</b>	<b>110</b>	<b>240</b>

Source: Prepared by student according to: Montraker D.O.O., Marina Vrsar, internal reports

The structure of vessels on a permanent berth according to the length of the vessel is dominated by vessels of the category 11 - 12 meters, of which there were 43 at the annual berth in Marina Vrsar. Next are vessels of category 10 - 11 meters, of which there were 36, then vessels of category 9 - 10 meters (34), category 12 - 13 meters (32), category 14 - 15 meters (23), category 8 - 9 meters (13) and vessels of the category 13 - 14 meters (12).

The largest number of motor yachts is category 9 - 10 meters (20), followed by category 10 - 11 meters (18), category 11 - 12 meters (15), category 12 - 13 meters (13) and category 14 - 15 meters (9). There are only 11 motor yachts over 20 meters long, and among them the most common length is 23 - 24 meters (5), while one yacht in category 32 - 33 meters is on an annual berth.

Among sailing yachts, 11 - 12 meters long yachts dominate, of which there were 28 on the last day of 2019. Other common categories are: 12 - 13 meters (19), 10 - 11 meters (18), 9 - 10 meters (14) and 14 - 15 meters (14). Only one sailboat is 21 - 22 meters long.

Table 13. on the next two pages shows the number of transit vessels in Marina Vrsar according to the length of the vessel in 2019.

**Table 13. Number of transit vessels in Marina Vrsar according to the length of the vessel in 2019.**

<b>Length (m)</b>	<b>Motor yachts</b>	<b>Sailing yachts</b>	<b>Other</b>	<b>Total</b>
< 6	30	3	5	38
6 – 7	54	27	7	88
7 – 8	101	42	1	144
8 – 9	91	57	3	151
9 – 10	114	253	6	373
10 – 11	103	247	2	352
11 – 12	105	315	13	433
12 – 13	83	211	4	298
13 – 14	68	254	5	327
14 – 15	69	78	1	148
15 – 16	47	21	0	68
16 – 17	30	14	0	44
17 – 18	34	1	0	35
18 – 19	8	1	0	9
19 – 20	9	2	0	11
20 – 21	7	3	0	10
21 – 22	8	1	0	9
22 – 23	3	0	0	3

23 – 24	23	0	0	23
24 – 25	2	0	0	2
25 – 26	2	0	0	2
26 – 27	5	0	0	5
32 – 33	0	0	0	0
44 – 45	2	0	0	2
<b>Total</b>	<b>998</b>	<b>1530</b>	<b>47</b>	<b>2575</b>

Source: Prepared by student according to: Montraker D.O.O., Marina Vrsar, internal reports

The structure of the vessel for which the transit berth was used is dominated by sailing yachts. The largest number of sailing yachts for which the transit berth was used in the marina Vrsar in 2019 was 11 - 12 meters long (315). Followed by category 10 - 11 meters (247), category 12 - 13 meters (211), category 14 - 15 meters 78 and category 8 - 9 meters (57). In 2019, in the Marina Vrsar, a transit berth was used for only four yachts on sails over 20 meters long.

In the case of motor yachts for which a transit berth was used, motor yachts of the category 9-10 meters prevailed, of which there were 114, followed by the category 11-12 meters (105) and 10-11 meters (103). There was a total of 214 motor yachts in the category from 14 meters to 20 meters, while there was a total of 50 yachts above 20 meters in 2019. The arrival of two mega-yachts in the category of 44-45 meters was recorded in Marina Vrsar.

#### **8.4. COMPETITION ANALYSIS**

The competition of Marina Vrsar consists of all other marinas in the Istarska County, of which there are a total of 12.

ACI Marina Umag has a capacity of 475 berths in the sea with water and electricity connections and the possibility of accepting yachts up to 40 meters long. In addition, there are 40 places to accommodate vessels on land. The marina is equipped with many facilities and has charging stations for electric cars. ACI Marina Umag was named the best marina in the Croatian part of the Adriatic in 2007. and 2008. In terms of connectivity, Umag is well connected by road with the whole of Europe, and within 150 kilometres are located three international airports Pula (80 km), Trieste (70 km) and Ljubljana (134 km).

Marina Nautica is a marina with 365 berths in the sea and 50 places on land. It is located on the northwest coast of Istria in Novigrad. Within the marina there is a hotel Nautica with many facilities for tourists.

Marina Červar Porat is located in the tourist resort Červar - Porat, 6 kilometres north of the city of Poreč. The marina has 259 berths for vessels from 3 to 25 meters (maximum draft up to 5 m). All berths have the possibility of using electricity and water on the piers. The marina has its own technical service with the services of mechanics, electronics, electricians, carpenters and others, as well as a 15-ton crane.

Marina Poreč is located in the city port of Poreč. It has 129 berths in the sea and technical and sanitary infrastructure. The depth of the Marina waters ranges from 1 meter to 3.5 meters. The entrance to the Marina is 150 meters wide, and the depth of the entrance is 3.5 meters. There is also a petrol station for boats in the Marina area, and a 5-ton crane on the other side.

Marina Parentium is located in the tourist resort Zelena Laguna, 6 kilometres south of the city of Poreč. The marina has 184 berths for vessels from 3 to 20 m (maximum draft up to 5 meters). All berths have the possibility of using electricity and water on the pontoon. This marina has its own services with the services and a 10-ton crane.

Marina Funtana was built in 2003 and has 180 berths in the sea and 40 places on land. All berths have water and electricity connection. Depth at berths is from 2.5 meters to 4.3 meters.

The marina has numerous facilities, but no gas station so tourists must use the gas station in the neighbouring Marina Vrsar or Marina Poreč, 1.5 nautical miles to the south. Marina Funtana is owned by the same company as Marina Vrsar (Montraker D.O.O.)

Marina Valalta is the first and only naturist port on the Adriatic. It is located near the city of Rovinj. It has 180 sea and 60 places on land, it is designed mostly for smaller boats. The water depth in the marina allows a draft of 1.5 to 6 meters. The marina offers its guests accommodation of boats, water and electricity connection on piers, servicing and crane for boats and sanitary area with hot and cold water.

ACI marina Rovinj was modernized in 2019 and now has a total of 196 berths for vessels with an average length of 17 meters and the largest possible draft of 14 meters. This marina combines all services and is the most modern nautical destination in Croatia.

ACI Marina Pula has a capacity of 192 berths in the sea and has the ability to accept mega yachts up to 40 m in length. Within the marina there is a restaurant and additional facilities. The marina is located in the city centre and is about 5 kilometres away from Pula airport.

Marina Veruda, located south of the city of Pula, has 630 berths for boats up to 40 meters and the largest possible draft up to 4 meters. It stretches for 1500 meters in length and its position provides safe shelter from all winds. The series of 19 piers is equipped with connections for electricity (220 and 380 V) and water. It is possible to accommodate 250 vessels on land and an additional 50 vessels on the new dry dock. Marina Veruda has its own service for maintenance and repair of boats. The marina has two cranes of 10 and 30 tons.

ACI Marina Pomer was renovated in 2016. It has a capacity of 294 berths in the sea and 30 places on land. The marina is equipped with numerous facilities. In addition, the marina also has a fenced children's playground. In summer, the ACI marina Pomer is a starting point or intermediate station for cruising the Adriatic. The marina is very well connected by roads with the main highways, and it is only 10 kilometres away from Pula Airport.

Table 14. on next page analyses the prices in some of named marinas regarding to vessels length

**Table 14. Comparison of prices of Marina Vrsar with the prices of competitors**

Kategorija	Marina Vrsar	ACI Umag	Marina Parentium	Marina Poreč	Marina Veruda	Marina Novigrad	ACI Rovinj	ACI Pula
do 6	16,000.00	9,971.00			21,652.00			19,387.00
6 - 7	18,500.00	13,561.00			22,644.00			19,387.00
7 - 8	24,000.00	15,724.00	24,555.00		23,628.00			19,387.00
8 - 9	27,000.00	24,414.00	26,487.00	25,125.00	24,605.00		55,075.00	20,785.00
9 - 10	30,000.00	27,175.00	30,091.00	28,187.50	28,978.00	36,500.00	55,075.00	22,926.00
10 - 11	33,500.00	30,688.00	31,243.00	30,250.00	33,795.00	39,450.00	55,075.00	26,307.00
11 - 12	38,000.00	34,538.00	34,587.00	33,625.00	36,778.00	43,800.00	55,075.00	29,609.00
12 - 13	40,500.00	38,534.00	38,487.00	37,437.50	40,559.00	48,300.00	62,585.00	33,323.00
13 - 14	45,000.00	42,377.00	42,239.00	41,062.50	44,836.00	52,700.00	67,590.00	36,711.00
14 - 15	50,000.00	46,143.00	46,252.00	45,687.50	48,914.00	56,050.00	75,100.00	40,180.00
15 - 16	53,000.00	54,434.00	48,592.00	48,687.50	55,070.00	59,700.00	85,115.00	45,141.00
16 - 17	60,000.00	58,844.00	50,450.00	53,187.50	60,273.00	64,500.00	95,130.00	48,870.00
17 - 18	64,000.00	66,859.00	54,796.00		65,460.00	69,700.00	102,535.00	53,641.00
18 - 19	70,000.00	72,083.00	59,143.00		70,300.00	75,600.00	107,545.00	57,180.00
19 - 20	74,000.00	77,306.00	62,820.00		72,756.00	82,230.00	115,150.00	61,376.00
20 - 21	78,500.00	82,522.00	66,796.00		76,642.00	88,850.00	122,560.00	65,586.00
21 - 22	85,000.00	87,745.00	70,734.00		91,390.00	95,500.00	130,175.00	69,884.00
22 - 23	89,000.00	92,968.00	na upit		95,726.00	102,150.00	137,585.00	74,174.00
23 - 24	94,000.00	98,191.00	na upit		101,187.00	108,780.00	145,190.00	78,472.00
24 - 25	99,000.00	103,415.00	na upit		106,352.00	115,400.00	152,505.00	83,251.00

*\*prices in HRK, kategorija – category in meters; od – from; na upit – price on request*

Source: Montraker D.O.O., Marina Vrsar, internal reports

In Marina Vrsar, the prices are formed in accordance with the goals to be achieved by the pricing policy and the prices of competitors. Marina Vrsar stands out from the competition thanks to the natural features of the landscape, but also the level of quality of service provided to tourists. Marina Vrsar is a multi-award-winning marina in the category of small marinas in Croatia, according to which the marina Vrsar has repeatedly been a leader in the categories of cleanliness, ambience, staff courtesy and value for money.

## 8.5. SWOT ANALYSIS

SWOT analysis is one of the simplest and the most widely used way to extract positive components and factors from negative ones according to internal environment (strengths and weaknesses) and external environment (opportunities and threats).

**Table 15. SWOT analysis – Marina Vrsar**

<p><b>STRENGTHS</b></p> <ul style="list-style-type: none"> <li>-natural beauty and purity of the sea</li> <li>-indented coast and many islands</li> <li>-favorable climate</li> <li>-natural attractions and biodiversity</li> <li>-ecological preservation of the sea and landscape</li> <li>-untouched coast</li> <li>-personal safety and safety of navigation</li> <li>-traffic connectivity</li> <li>-tourist infrastructure</li> <li>-tourism and maritime tradition</li> <li>-hospitality</li> <li>-nautical infrastructure</li> <li>-human resources and experience</li> <li>-customer relations</li> <li>-application of standard quality system</li> <li>-flexibility in designing services according to the needs and suggestions of users</li> <li>-environmental awareness</li> </ul>	<p><b>WEAKNESSES</b></p> <ul style="list-style-type: none"> <li>- lack of number of berths, especially for mega-yachts</li> <li>-seasonality</li> <li>-lack of major investments in nautical infrastructure</li> <li>-content of the destination offer and quality of services</li> <li>-incompatibility of laws and regulations at the national level</li> <li>-complicated categorization of marinas at the national level</li> <li>-insufficient investment in marketing</li> <li>-owner – local self-government</li> </ul>
<p><b>OPPORTUNITIES</b></p> <ul style="list-style-type: none"> <li>-continuous growth of demand for nautical tourism</li> <li>-great interest for an annual berth (waiting list)</li> <li>-increase in demand for ecologically preserved destinations</li> <li>-sustainable development and socially responsible business</li> <li>-increase in the quality</li> <li>-expansion and modernization of existing capacities</li> <li>-investment in the improvement of tourist facilities and tourist offer at the local level</li> <li>-cooperation with the local community</li> <li>-introduction of new services for boatowners with modern technology</li> </ul>	<p><b>THREATS</b></p> <ul style="list-style-type: none"> <li>-decrease in demand for nautical tourism due to negative global trends (economic crisis, pandemic – COVID 19)</li> <li>-appearance of new investors and privatization of the marina</li> <li>-stronger competitors</li> <li>-environmental pollution</li> <li>-loss of biodiversity</li> <li>-over-construction of the coast</li> <li>-legal laws and regulations</li> <li>-disorders in other connected markets</li> <li>-bad weather</li> </ul>

Source: Prepared by student according to: Montraker D.O.O., Marina Vrsar, internal reports

## **8.6. ANALYSIS OF THE EFFECTS OF MARINA VRSAR 'S BUSINESS ON LOCAL AND REGIONAL ECONOMY**

Nautical tourism as a complex socio - economic phenomenon with its multiplicative effects brings great benefits to the destination in which it develops. Precisely because of its complexity, nautical tourism is often called the nautical industry, which actually refers to nautical tourism and a whole set of complementary activities that are developed for the purpose of nautical consumption with the aim of meeting the needs of customers.

Marina Vrsar continuously generates income from renting berths and other services, and its business also contributes to the employment of the local population, not only directly in the marina, but in all work units of Montraker D.O.O. which manages the marina. The effects of Marina Vrsar's business on the economy are reflected in the multiplier effect, due to the connection with many industries (services, mechanics, various shops, restaurants etc.). Thanks to the development of nautical tourism in Vrsar and the business of Marina Vrsar, significant revenues are generated, much of which is directly spent and invested in the construction and maintenance of the Municipality of Vrsar, which directly and indirectly contributes to raising the quality of life of local population.

## **8.7. INTEGRATED COASTAL ZONE MANAGEMENT IN MARINA VR SAR**

Natural resources are the basis for the development of nautical tourism in a particular area. The natural basis and the degree of attractiveness of the area are the main factors of tourist demand for Vrsar as a nautical destination. Under the influence of tourism development, natural resources are partially consumed, which may cause the destination to lose its attractiveness or disappear completely, which would, among other things, result in a reduction of tourist activity in the Vrsar area. The use of a certain space for tourism development is a direct contact and the impact of tourism and tourists on changes in the environment. In addition to the direct impact, there is also an indirect impact of tourism on the pollution of area.

The development of nautical tourism is directly dependent on the state of the environment and tourist resources. Preserved natural resources, cleanliness of the sea and marine environment are the basics for its development. Therefore, when planning and using the capacity in Marina Vrsar, it is necessary to implement numerous environmental protection measures, with the aim of preserving it and achieving long-term benefits from the development of nautical tourism. In order for space management to be efficient and the construction and adjustment of capacities for the needs of nautical tourism to be sustainable, it is necessary to plan the space and monitor the manner of its use. Decisions and actions in the field of spatial planning in the reconstruction of existing and possible construction of new capacities, both in the water area and in the land area, must be based on an integrated approach. Nautical tourism as a complex economic phenomenon needs to be developed within the limits of acceptable load and recognizable characteristics of the space, with the aim of preserving the attractiveness of natural resources as a fundamental comparative advantage.

Integral planning of nautical port development is based on a systematic approach that combines economic, social, spatial, environmental and infrastructural aspects. It must not replace individual partial plans, but at a certain level must create a synthesis of partial approaches with regard to content, space and time. An integrated approach to the development of Marina Vrsar implies full integration of changes into the existing environment and

implementation of changes in capacities with the maximum level of environmental protection and respect for the set limits of growth and development.<sup>55</sup>

Marina Vrsar represents environmental protection, energy efficiency, sustainable and integrated development as a starting point in its business and future development. This could be verified through looking into marina's mission and vision statements and values:<sup>56</sup>

Mission:

“Contribute and create innovative solutions to exceed the expectations of our visitors in marinas as well as contribute to the residents of the Municipality of Vrsar a better way of life with a sense of satisfaction and importance by creating new value for the business and social community.”

Vision:

“We want to become a regional leader in nautical tourism and the first choice for visitors to marinas in Istria and continuously provide high quality maintenance services to residents of the Municipality of Vrsar, all based on the principles of ecology, energy efficiency and sustainable business.”

Values:

“In order to realize the vision and mission, it is necessary to subordinate our behaviour to the expectations and goals of all stakeholders, the most important of which are owners, customers, employees, partners and the community in which we operate, and to take care of the environment and energy management.”

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<sup>55</sup> Translated from: Montraker D.O.O., Marina Vrsar, internal reports

<sup>56</sup> Ibidem

## 9. CONCLUSION

Sustainable development is a way of harmonizing the relationship between the economy, human activities and preserving the environment in order to preserve natural resources for future generations. The introduction of sustainable development requires changes in various sectors of governance such as the economy, politics, ecology, society and others. The coastal area is a very specific geographical area where the sea and the land meet. This area is potentially rich with various natural resources and riches making it very attractive for settlement. Coastal areas are centres of population and economic activity in many countries. Due to improper management and excessive concentration of the population, the natural values of coastal areas can be permanently lost. One way to preserve coastal areas for future generations is to introduce integrated management over that area. Integral coastal zone management results from sustainable development, environmental protection and harmonization of human activities and the economy in the coastal zone.

The Republic of Croatia is a coastal country where the coastal area creates a large number of different activities and greatly affects the growth or decline of total GDP depending on positive or negative changes. According to the data from the last census in 2011, it was determined that a total of 1,080,539 people live in the coastal area of the Republic of Croatia, which is 25.2% of the total population of which 131,379 live on the islands and on the Pelješac peninsula. Legal regulations on coastal zone management in the Republic of Croatia are not in one whole, but are determined by sets of laws relating to the regulation of individual parts of the coastal area, the division of competencies and the performance of activities that affect the coastal area. Such a way of prescribing further complicates the integrated management of the coastal area. Coastal zone management in the Republic of Croatia takes place through local governments (cities and municipalities). The number of cities on the coast of Croatia is 43, and the number of municipalities is 88, which makes a total of 131 local governments. Greater centralization of the area is needed for more efficient management, which would mean a reduction in the number of local governments.

Marina Vrsar is a legal entity providing its services on coastal zone. From its beginning Marina Vrsar has a positive results thanks to attractive coast and natural beauties. Problem with country's regulation with integrated coastal zone management (not being in one whole)

translates to legal entities on that area like Marina Vrsar. Even though the regulation is not perfectly prescribed, Marina Vrsar is trying its best to achieve goals thought integral and sustainable development.

It is of crucial importance, for coastal zone, to regulate this zone by laws and Acts into one whole. Positive effects of doing so are better understanding of regulation and protection of this area for future generation.

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