## Mili Razović / Renata Tomljenović

# Development model of tourism on Croatian open-sea islands

#### **Abstract**

Islands, as a separate land entity surrounded by the sea, from the very beginning of tourism, have become a unique and attractive tourism destination where tourism development faces different challenged than on the mainland. This is especially the case of the open-sea islands. The aim of this paper was to identify tourism development model suitable for the Mediterranean open-sea islands in terms of social, economic and environmental sustainability. The model was based on the assessment of tourism capacity, tourist traffic, attraction base and consultation with the two main stakeholder groups - residents and tourists. The primary research was conducted on the four open-sea islands of Croatian Adriatic - Dugi otok, Vis, Lastovo and Mljet, via tourist and resident survey. In total, 190 residents and 184 tourists participated in the research. The visitor survey was conducted in order to capture attitudes and opinions of tourists on those islands regarding different types of tourism products and tourism development options considered appropriate for the four islands. The resident survey was conducted in order to canvas their views on the preferred types of tourism development, tourism development scenarios and types of tourism products they wished to be offered. The results clearly point out that the optimal tourism development is the one that respect the island's development and tourism advantages based on unique natural and cultural heritage and way of life of the local population. The model of tourism development on these particular islands offers true value that attracts visitors and encourages further growth of tourist traffic. This tourism development is based on ecology, sustainable development, and family atmosphere.

Key words: tourism development; tourism offer; tourism on the islands; Croatia

## Introduction

With the development of tourism, the islands are becoming increasingly attractive. Many islands have become recognized as popular tourist destination globally. Besides the specific natural characteristics, each island has preserved its socio-economic uniqueness, which was created by long-term adjustment of the close-knit community to specific, often harsh, natural environment. In the whole area of the Croatian Adriatic, during the sixth, seventh and eighth decade of the twentieth century, the total capacity of tourist accommodation was increased almost one and a half times, with the same rate of growth in, both, mainland and those island destinations that are closer to mainland with regular traffic connections. Despite an extremely valuable tourism attraction base, the four islands of study - Dugi otok, Vis, Lastovo and Mljet - could not follow new trends in tourism demand and has lagged behind in tourism development. Consequently, they are officially classified as underdeveloped and their

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socio-economic decline is further accelerated by the emigration of young people. Thus, the future of island communities has become highly uncertain.

Therefore, in spite of its high level of tourism attractiveness, the four islands can still be considered at the initial phase of tourism development, due to the poor investment in basic infrastructure and tourism facilities. In this context, which is similar to many smaller and remote islands of the Mediterranean, the aim of this paper is to propose an optimal tourism development model for the four open-sea islands based on participatory planning approach. It starts from the premise that the unique islands' features enables the creation of special and unique tourism products that would improve their tourism performance while, at the same time, ensure that the islands' natural and social environment is sustained. In line with the aims of the study, the article begins with broader tourism concepts relevant to the islands tourism development followed by specific challenges faced by tourism developments on islands. To put the subsequent research in context, a brief outline of the Croatian archipelago is provided. Then the methodology is given, which features more detailed contextual information of the four islands under study, followed by research results and conclusions.

# Theory of tourism development and the islands

From the very beginning tourism theorists have claimed that tourism provides an opportunity to value available natural resources such as clean air and sea, the beauty of the landscape and vast open space. Thus, natural resources in its original form get an economic value (expressed in the cost of individual services). The theory of tourism development has sought to explain how, for example, such natural resources as well as other tourism attractions are transformed into goods, which are economically valorised and reflected in the price. Classical tourism theories, besides the clear focus on consumption and its significance for the tourism industry, emphasize the role of the state in economic development and, thus, tourism. Representatives of the classical theory of tourism have a clear view that there is no tourism development without continued investment in tourism products and capacities (Vukonić & Keča, 2001).

Later on, the focus of theorists was the global impact of tourism on the national economy. At the same time, theorists point out that, in tourism, it is possible to achieve a higher price for the same quality of service in more attractive tourism destinations. Accordingly, in tourism destination the same goods and services can achieve higher prices than in the non-tourist areas (Antunac, 1985). By the middle of last century tourism theorists have become aware that tourism development does not take place in an 'empty space' or, in other words, that tourism development decisions should be made by taking into account all other development options available in a given area. At about the same time, the idea of tourism multipliers was introduced by Clement (Antunac, 1985). There were many critics of Clement's approach claiming that he did not completely understand Kahn-Keynesian multiplier model of income but, instead, relied on the Keynesian multiplier of investment and employment. Nevertheless, on the example of small island countries of the Pacific, Clement found that the tourism multiplier was \$ 3.27 which, in other words, means that a dollar spent in tourism produces economic activity equal to \$ 3.27 during per annum (Antunac, 1985).

Then, in late 1970s, when it was realised that, apart from the economic impact, tourism also has an effect on community social fabric and environment, a notion of carrying capacity was introduced

with the idea that there is a limit to tourist numbers that a destination can support. During the nineties, in the theory of tourism development a new direction had developed, the so-called sector of formal-informal dichotomy (Vukonić & Keča, 2011, p. 74). In developing countries, the formal circle is characterized by tourism products (mostly accommodation) of international standards, while in the informal circle there are products of a lower standard usually called "domestic" or "local." The informal sector is identified with the so-called "open spatial structures" and formal sector symbolizes tourist "enclaves", small self-contained areas where all necessary services are provided exclusively to those staying in these areas (Vukonić & Keča, 2001).

At about the same time the spatial organization of tourism destinations and areas has also attracted the attention of tourism theorists. In 1979, on the example of Bali, Dress introduced the theoretical concepts of tourism spheres of influence and spheres without tourist influence that can be equally applied to the spatial concept of island tourism development (Vukonić & Keča, 2001). In the following decade there were many theorists who have defended their theoretical stance by research conducted in island environments (Pearce, 1982). They have analysed the dispersion of tourists in archipelagos, from the main island where the airport is located to other islands. Based on this, a model of regional tourist distribution was developed and applied to mainland countries, from the capital city or coastal resort to rural or inland areas.

By the end of the twentieth century there was a plethora of studies mainly focused on deepening of the existing knowledge and understanding of tourism and its development. The same was the case with the studies into socio-cultural impacts of tourism, in particular host-guest interactions (Pearce, 1982). Sociologists and anthropologists documented heavily the social, cultural and economic disruption of the locals' way of life caused by the arrival of mostly affluent tourists from developed countries (Vukonić & Keča, 2001). It can be said that tourism development is a continuous process of formulating and achieving goals, where these goals are usually subordinated to, in most cases, the general national development goals.

While island tourism development shares the same characteristics as tourism development overall, it also has certain particularities. First of all, due to its geography, island tourism development is often influenced by global tour operators, air carriers and hoteliers. In many cases, the island's economy depends heavily on its tourism sector. An analysis of 25 island states, according to the significance of tourism in islands GDP, shows that some rely almost exclusively on tourism (i.e. 95% is the tourism contribution to the GDP of British Virgin Islands, 74% to Maldives's GDP and 52% to Barbados), while more than a quarter of national GDP of Mauritius (31%), Malta (28%) or Cyprus (28%) depends on tourism (Sharply, 2007). Thus for many island states the economic performance of tourism sector has a significant effect on their overall economic and social conditions (Marin, 2000; Bramwel, 2004).

Sharpley (2007) has conceptualised island tourism development as dependent on three mutually related factors: spatial planning and management, tourism product development and marketing. More recently, the policy of island tourism development, in particular, takes into account the dynamics of the development of new facilities, the sustainable development of tourism and encourages development of new products such as cultural tourism and agro tourism. In marketing, attempts are made to decrease dependence on "sun and sea" tourism product by introducing a wider range of products attractive to tourists with higher purchasing power and outside the main summer season (Sharpley, 2004).

Tourism, throughout its history of over 150 years, has become an indispensable feature of the socio-economic development of islands. In its development it has taken many forms, two main approaches to development can be discerned. Firstly, the colonial form in which development in a receptive tourist area is based solely on capital that comes from developed region and countries. The second approach is indigenous, where tourism development is spurred by local initiatives and capital, and based solely on the natural and social attractiveness of an area (Sharpley, 2007).

It is claimed that the indigenous approach to development is sustainable as it is in line with sustainability principles. This, in particular, entails that the local population continuously benefits from tourism development economically and socially, while the natural environment is preserved, and adverse social, economic or environmental impacts minimised.

## Islands and tourism

In defining the island, few factors such as the territory, distance from the mainland and population density are combined. The simplest definition of the island is that of land surrounded by sea, which is not a continent (Grace & Dodds, 2010, p. 33). Rubić considers an island as land surrounded by sea with the coastline of at least 10 km (Faričić, Graovac & Čuka, 2010). The key features of the island are their small spatial coverage, insulation and underdeveloped economy (Marshall, 1991). Island communities have different languages, history, social relations, forms of governance and sources of existence (Baldacchino, 2007; Kelman, 2009). Thousands of years of life of islanders in isolation provide experience and flexibility in solving their social and ecological problems. These things help them adapt to contemporary changes such as climate change, communication technology or a faster mode of transport (Kelman, 2009)

Islands are especially valuable tourism resources (King, 1993). To start with, the notion of an "island" creates an image of fantasy and escape from routine and stress; paradise with exotic life (Bauman, 1997) a space of mystique and adventure (King, 1993) or a different kind of "shelter" (Hadley, 2001). The island's aspect is also characterized by the sense of distance, exclusion, separation, isolation, but also opportunities for tourists to learn about island traditions (Gottlieb, 1982; Let, 1983). The feeling that one is separated from the mainland is one of the important physical and psychological attributes of a successful holiday (Butler, 1993). Tourist attractions of islands are diverse. These attractions are perceived through untouched beaches, clear sea, a favourable climate and the obvious relationship between the land and sea that surround the island. (Sharpley, 2004). Many features of island contribute to its attractiveness, although Baum (1997) considers that the most important are: a) distance; b) difference, but similarity; c) across the sea, but not too far; d) peaceful life, something "stopped in the past"; e) a unique language and culture; f) social life oriented towards the sea; g) common heritage; h) distinct specific attractions; i) untouched nature; j) a small area.

The contemporary trends in tourism demand offer many opportunities for island tourism development. Firstly, there is a growing trend of nature-based holidays which often involves traveling to relatively remote and unspoiled places, making islands extremely desirable destinations. Secondly, the proportion of tourists wishing meaningful and insightful contact with local population is growing steadily. For them, islands offer opportunities to visit communities that are isolated but have rich and diverse cultures, unique ecological features and exotic species (Douglas, 2006; Lim & Cooper, 2009; Lopez

& Bauman, 2004). The growing importance of eco-tourism also favours island tourism development. As islands have, due to their isolation, avoided industrial development, they are oasis of pristine environments in an increasingly degraded biosphere. For this reason the concept of tourism development of the island based on ecology and sustainable development is particularly discussed (Weaver, 1998; Buhalis, 1999; Cooper, 2000). Finally, the proportion of heritage tourists is also growing steadily and islands, with their unique culture and history, are ideally positioned to capture that market segment.

The concepts and models of island tourism development has captured the attention of many tourism researchers (see Lockhard & Drakakis-Smith, 1997). Lockhart (1997) has, recognising the economic contribution of tourism, argued that tourism can be potentially a major economic alternative to traditional activities such as fishing and agriculture (Lockhart, 1997). In Croatia, the history of island tourism development was documented and compared to global developments bay Alfier (1995). He noted that many Croatian islands, such as Lošinj, Brijuni and Hvar, have started tourism development, primarily as winter health resorts at the end of 19<sup>th</sup> century, at about the same time when similar developments occurred at Atlantic islands of Madeira and Bermuda or Tyrrhenian island of Capri. It was only after WWII when 3S tourism grew in popularity, that summer demand expanded. Many middle-size and small islands and island groups in the Ionian, Aegean, Tyrrhenian and Adriatic Sea started to develop tourism and with development of air transport, the islands of the Caribbean, Pacific and Indian Ocean have become involved in tourism.

Douglas (2006), based on the complexity of island destinations, brings into question the management of numerous tourism resources (Douglas, 2006). Economists warn that tourism creates particularly sensitive insular economies because in large part they depend on tourism (Briguglio, 1995; McElroy & Albuquerque, 1992). Some detect over-dependency on foreign tour operators and its disproportionate influence on islands' tourism products, especially in Mediterranean (Buhalis 2000; Aguilo, Alegre, & Riera, 2001). Ioannides and Halcocom (2001) warn of a pitfall of tourism policy based on high-quality tourism resorts that many islands have opted for in order to maintain or improve competitiveness. Such a policy has also led to a high level of constructions, higher consumption of water and energy and foreign management.

There are those arguing that, due to islands' size and isolation, it is possible to create and offer a tourism product that is extremely attractive and that stimulates tourism demand on a global scale (Butler, 1993; Sheller, 2003). Instead of being a disadvantage, the isolation of the island turns the island into an attractive and exotic destination, especially when it comes to small islands (Scheyvens & Momsen, 2008). However, it seems that island tourism development can be successful only if it does not disrupt the island's uniqueness as the main tourism asset and if it shows high respect to natural and cultural heritage and social fibre of local communities.

## Croatian islands and tourism

Croatia's highly indented coastline is characterised by more than 1200 island, islets, reefs and cliffs covering 31.067 km² of territorial waters and internal sea waters (Duplančić *et. al.* in Faričić, Graovac & Čuka, 2010). Islands occupy 69 percent of the Croatian coastline and five percent of the land of the overall Croatian territory. The Croatian archipelago is the second largest in the Mediterranean. Croatian islands represent exceptional natural, cultural, historical, social, economic and ecological

systems where different natural-geographic and socio-economic factors intertwine. The most important factors are sea, rocky ground, Mediterranean climate, diverse island wildlife and coastline. The value of natural heritage is testified and preserved by three national parks established on the islands - Brijuni, Mljet and Kornati, the nature park Telaščica, seven forest parks, a number of protected landscapes, geological and morphological natural monuments, monuments of park architecture and rare trees.

Before tourism, islands were not particularly developed with the population involved mostly in subsistence agriculture (vineyards, sheep and goats), fishing, shipbuilding and shipping. The start of tourism development on the islands dates back to the first half of the 19th century, when the Austrian Lloyd steamship line Trieste - Kotor was established, in 1837. Apart from the larger coastal ports this line sailed into the island villages of Mali Lošinj, Krk, Rab, Hvar and Korčula, which were also one of the first in the Adriatic that began with the organised reception of visitors. By the 1850s, many towns have set up tourism associations in charge of improving the visual appeal of the urban cores and tourism promotion. The first of such associations was established on Krk island in 1866. ("Society for Village Improvement"), Hvar 1868 ("Hygienic Society Hvar"), and in Mali Lošinj in 1885 ("Travel Club", as a section of the Austrian Tourist Club). At about the same time, the first tourist guides promoting sea baths and beaches were published and the statistics on tourist arrivals and overnights has started to be collected (Mikačić, 1994). By the late 1940s tourist traffic was statistically recorded in thirty towns and villages on thirteen islands. (Vlahović, 2003). Tourism started to flourish in 1960s, when fiscal policy measures stimulated significant investments in tourism facilities and transport infrastructure, while the increase of living standard of the local population and border crossing liberalization enabled an increase in traffic of domestic and foreign tourists.

At that early stage, tourism development affected the Croatian coastal area more than the islands. Croatian islands became more attractive in the last decades of the twentieth century due to the establishment of a large number of ferry lines and road construction on the islands. With the improvement of basic municipal infrastructure (primarily roads and water supply), the islands became increasingly attractive tourism resources. This has stimulated investment in tourism facilities. Currently, there are almost 220 thousand beds available on Croatian islands or 26% of total national capacity. They have realised 18% of total Croatian tourist arrivals and 22% of total overnights (Table 1). Given that the share of bed capacity on islands is larger than the share of arrivals and overnights and considering the islands' overall tourism attractiveness, it is evident that there are still opportunities to improve islands' tourism performance.

Table 1
Accommodation facilities, number of visits and overnight tourists on Croatian islands in 2012

Island	Accommodation (beds)*	Tourists (in 000)	Overnights (in 000)
Krk	46,664	613	3,516
Pag	32,021	275	1,864
Lošinj	27,316	249	1,774
Rab	25,851	232	1,679
Brač	14,563	162	1,212
Hvar	19,697	187	1,094
Cres	9,106	105	731



Table 1 Continued

Island	Accommodation (beds)*	Tourists (in 000)	Overnights (in 000)
Murter	11,919	90	684
Korčula	15,354	95	560
Vis	5,560	33	204
Pašman	3,128	20	173
Dugi otok	2,292	18	136
Ugljan	3,087	25	119
Šolta	2,107	10	93
Mljet	1,418	15	73
Lastovo	772	5	34
Islands total	220,855	2,134	13,946
Croatia total	853,407	11,835	62,743

Source: Ministry of Tourism (2013); Croatian Bureau of Statistics (2011)

## Methodology

In line with the main aims of the paper to propose a tourism development model for the Croatian open-sea islands based on community planning principles, this section brings first a short description of the four islands in terms of their location, the most important tourism attractions and basic tourism performance statistics primarily in order to provide a context for the subsequent interpretation of survey results. Applying the community planning approach, community consultation was undertook through surveys of two main stakeholders – local population and visitors.

## Study sites

This section deals with the four open-sea islands in the focus of this paper – Dugi otok, Vis, Lastovo and Mljet (Picture 1). These islands have been continuously inhabited from the very early times. There are remains from Illyrian, Greek and Roman periods, from the Middle Age and the more recent times. Their location, natural heritage and specific ways of life make them spatially so different to justify a specific tourism planning approach.

The northernmost of the four islands is Dugi otok (114 km²), meaning the Long Island as it is 44.5 km in length and only 4.5 km wide. It belongs to the Zadar archipelago and, with its prominent elongation, represents a significant natural protection for the entire Northern Dalmatian Archipelago. Due to its unique natural heritage, a large section of the islands is under protection. There are 70 km² protected as a nature park, of which almost 26 km² is land and rest its surrounding marine area. There are about 240 ha of olive groves protected as botanical reserve. Part of its cliff-lined coastline is protected as a geomorphological reserve, few bays and beaches as significant landscapes, while about 30 ha of pine forest is declared as forest park. There is only 1,655 permanent residents living in 12 villages of the island. The first tourists arrived on the islands in the 1900s to visit the cave that was open for visitors due to the efforts of Zadar's Tourist and Mountaineering Club (Bulić, 2011.). Currently, there are about 600 beds in hotels and 1,592 in private accommodation. In 2012, the island was visited by 18,000 tourists who stayed for 136,000 nights (Ministry of Tourism, 2012).

<sup>\*2011</sup> information

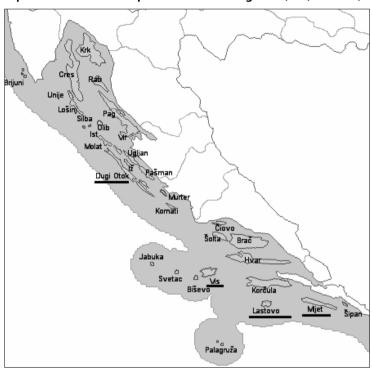


Figure 1

A position of the four open-sea islands Dugi otok, Vis, Lastovo, Mljet

Source: Anthropological Research of the Eastern Adriatic http://www.anthroinsula.org/research-projects.php

The island of Vis, with a surface area of only 90.3 km<sup>2</sup>, is the farthest inhabited Croatian island located in the central Dalmatian archipelago, about 50 km away from the mainland and 18 km from the closest island of Hvar. There are two main villages on the island – Vis, a larger port established by the Greeks and Romans when it was known as Issa in the north-eastern part of the island and Komiža, on the western side of the islands, with a long tradition of fishing. It is surrounded by a group of small islands that increase diversity and beauty of its coastline. The most popular is the islet of Biševo, famous for its Blue Cave, a protected natural monument owning to its carst morphology and aesthetic values. Then, there are three islets - the only volcanic island in Croatian archipelago, protected for their geological, zoological and botanical value. The first tourists arrived on the island in 1920s, when the so-called "Czech villa" was open as a Czech children's nursing and art colony. The more recent history of the island is rather unique. From the end of WWII to 1960s it was a strictly controlled military zone and foreign tourists were not allowed to visit the island. After the 1960s the visiting regime for foreigners was liberated a little, but it was only in the late 1990s that the ban was lifted. There are about 3.5 thousand permanent residents. They welcome about 33 thousand tourists who realise about 204 thousand overnights in 5,560 commercial beds, of which the majority is in private accommodation (Ministry of Tourism, 2012).

After Vis, the island of Lastovo with a surface area of 50 km<sup>2</sup>, is the farthest inhabited island, 25km from the mainland and 13 km from its nearest island of Korčula. There are only 790 permanent residents. Similar to Vis, it is surrounded with a large number of islets on its western and northern sides.

Lastovo's diverse coastline of the main island and nearby islets creates a playful labyrinth of narrow passages and channels. In contrast to Dugi otok and Vis, Lastovo has received its first visitors in 1960s, when individually organised groups in search for fishing arrived, staying in private accommodation or camping. Currently, it has 225 beds in hotels, 30 places on the camps and 537 beds in family houses. In 2012, Lastovo was visited by 5,000 tourists who registered 34 thousand overnight stays (Ministry of Tourism, 2012)

Finally, the island Mljet, with a surface area of 100.4 km², is the most southerly and easterly of the larger Adriatic islands of the Dalmatian region of Croatia. There are about 1.1 thousand permanent residents in 13 villages. Similar to Dugi otok, it is an elongated island – 37 km long and only 2.5 to 3 km wide. It lies south of the Pelješac peninsula, from which it is divided by the Mljet Channel. The main feature of the island are two deep bays created as a karst depression which, due to their extremely narrow links with the sea, are regarded as and indeed named lakes: the Great Lake and the Small Lake. Due to the phenomenon of lakes, unique centuries-old pine and pine forests, historical monuments and other rarities, the north-western part of the island 1960 was proclaimed as a National Park. The first visitors arrived on the island between the two world wars, when there were two restaurants and 17 rooms (Franić, 1969). Larger tourism development on the island began in 1962, when hotel "Melita" with 63 beds was opened in the converted Benedictine monastery on the little island of the Great Lake. The second hotel that has become the main accommodation is hotel "Odisej", built in the 1970s. Today, there are 310 beds in the two hotels, 230 camping sites and 778 beds in private accommodation. In 2012, the island was visited by 15,000 tourists who realised 73,000 nights (Ministry of Tourism, 2012).

## Visitor survey

A visitor survey was conducted in order to capture attitudes and opinions of tourists on those islands by regarding different types of tourism products and tourism development options considered appropriate for the four islands. The main data collection instrument was a questionnaire divided in ten sections—basic socio-economic data such as age, education and country of origin, a battery of motivational statements, activities participating in during the stay, level of satisfaction with products and services, products and services to be offered in the future and preferred tourism development scenario. It was available in English, German, Italian, Czech and Polish languages, reflecting the national structure of the tourists on those four islands.

The population for this survey was defined as foreign tourists older than 20 years of age visiting the four islands from beginning of June to the end of September 2012. A decision to restrict population to foreign visitors was made because foreign tourists have international travel experience enabling them to be more objective in assessing tourism development and its future than it would be the case with domestic tourists. The random sample method stratified by nationality was used. Stratification was made based on the nationality structure of visitors during the previous year. The survey was conducted from June to September 2012, during the high and shoulder summer seasons, on islands of Dugi otok, Vis, Lastovo and Mljet. Data was collected combining personal interview and self-completion. Interviewers approached respondents to inform them about survey and, upon getting their consent, handed the questionnaire in the selected language. Upon completion, respondents have placed the questionnaire in a self-sealed envelope to preserve anonymity and confidentiality and handed it back to interviewers. In total, there were 184 distributed questionnaires, resulting in a 91% response rate.

The socio-economic structure of respondents to visitor survey is presented in Table 2.

Table 2
Socio-economic structure of visitor survey respondents (%)

Sample characteristic	Dugi otok (n = 53)	Vis (n = 32)	Lastovo (n = 40)	Mljet (n = 44)
Origin of visitors				
<ul> <li>Germany</li> </ul>	18.0	21.0	23.0	23.0
<ul> <li>Slovenia</li> </ul>	17.0	27.0	29.0	19.0
<ul> <li>Slovakia</li> </ul>	15.0	5.0	4.0	9.0
• Italy	14.0	25.0	26.0	16.0
• Czechs R.	11.0	4.0	5.0	9.0
<ul> <li>Poland</li> </ul>	13.0	3.0	3.0	7.0
<ul> <li>Austria</li> </ul>	12.0	15.0	12.0	17.0
Age				
• 20 - 29	12.0	15.0	16.0	14.0
• 30 - 39	17.0	22.0	22.0	21.0
• 40 - 49	24.0	28.0	29.0	27.0
• 50 - 59	37.0	31.0	27.0	29.0
• 60 +	10.0	4.0	6.0	9.0
Education				
<ul> <li>Primary school</li> </ul>	27.0	24.0	21.0	19.0
<ul> <li>High school</li> </ul>	44.0	42.0	42.0	41.0
<ul> <li>College and higher</li> </ul>	29.0	34.0	37.0	40.0
Number of visits to the island				
<ul> <li>First time</li> </ul>	26.0	16.0	31.0	36.0
<ul> <li>Second time</li> </ul>	35.0	43.0	37.0	39.0
<ul> <li>Three times or more</li> </ul>	45.0	51.0	32.0	25.0

## Resident survey

The resident survey was conducted in order to canvas their views on the preferred types of tourism development, tourism development scenarios and types of tourism products they wished to be offered. The main data collection instrument was a questionnaire divided into six sections. Besides the basic socio-economic data such as age, education and country of origin, it featured a section dealing with the resident involvement in the tourism decision-making process and a set of socio-economic and environmental impact statements. There was also a section on development preferences (types of products, types of development, scenarios) that was the same as in the visitor survey. It was designed for personal interview and available in the Croatian language.

Population for this survey was defined as all residents leaving permanently (12 months per year) on the islands who are 20 years of age or older. The age limit of 20 was imposed because those older than 20 and living permanently on these islands have, more likely, made a more permanent decision to stay there in contrast to those that are younger. Also, those older than 20 already have some work experience, most likely in tourism and, together with some life experience, is more likely to form certain attitudes toward life and tourism on the island than their younger counterparts. To sample residents, the random method was used. The survey was conducted from June to September 2012, during the

high and shoulder summer season, on islands of Dugi otok, Vis, Lastovo and Mljet. In total, there were 190 distributed questionnaires, resulting in 89% response rate. The socio-economic structure of respondents to visitor survey is presented in Table 3.

Table 3
Socio-economic structure of resident survey respondents (%)

			•	
Sample characteristic	Dugi otok (n = 41)	Vis (n = 32)	Lastovo (n = 40)	Mljet (n = 56)
Age				
• 20 - 29	8.0	11.0	16.0	17.0
• 30 - 39	22.0	23.0	21.0	19.0
• 40 - 49	37.0	38.0	41.0	43.0
• 50 - 59	18.0	12.0	14.0	11.0
• 60 +	15.0	6.0	8.0	8.0
Education				
<ul> <li>Primary school</li> </ul>	48.0	34.0	43.0	45.0
<ul> <li>High school</li> </ul>	39.0	49.0	49.0	42.0
<ul> <li>College and higher</li> </ul>	13.0	17.0	9.0	13.0

## Results and discussion

## Visitor survey

Natural beauties were the first and strongest motive for the arrival of foreign tourists to Dugi otok, Vis, Lastovo and Mljet (Table 3). Another motive was rest and relaxation. This means that foreign tourists come to these islands primarily to rest and relax in the natural beauty and the unique island environment. Friends and relatives, certainly, experienced unforgettable moments and vacation on these islands because they were the main source of information for tourists (over 25%).

Table 4
Motives of foreign tourists for visiting Dugi otok, Vis, Lastovo and Mljet (%)

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Motives*	Dugi otok (n = 53)	Vis (n = 32)	Lastovo (n = 40)	Mljet (n = 44)
Rest and relaxation	56.0	50.0	70.0	50.0
Natural beauty	69.6	50.0	80.0	64.2
Beaches	44.5	50.0	20.0	7.1
Unique island environment	20.9	12.5	50.0	21.3
Recommendation	10.3	50.0	10.0	14.2
New experiences and adventures	16.4	12.5	30.0	21.3
National park/ Nature park visit	21.7	25.0	35.0	57.1

<sup>\*</sup>Multiple answers

The most important activities of foreign tourists during their stay on the four islands was swimming, walking and visiting restaurants (Table 5). However, the pattern of activities varied somewhat from island to island, reflecting each island's peculiarity. With a well-developed network of cycling routes, cycling was an activity that 87% of Vis' respondents participated in, while almost three quarters of Mljet's respondents reported visiting the natural park, reflecting the high popularity of the park among visitors in general.



Table 5
Activities of foreign tourists during their stay on Dugi otok, Vis, Lastovo and Mljet (%)

Activities*	Dugi otok (n = 53)	Vis (n = 32)	Lastovo (n = 40)	Mljet (n = 44)
Swimming	95.3	87.5	90.0	92.9
Walking	94.4	50.0	90.0	71.4
Visiting restaurants	86.0	37.5	60.0	50.0
Visiting natural park / Nature park	59.8	37.5	40.0	71.4
Visiting cultural monuments	44.9	25.0	40.0	21.3
Souvenir shopping	23.4	12.5	20.0	7.1
Cycling	17.8	87.5	0.0	35.7

<sup>\*</sup>Multiple answers

In general, respondents to the visitor survey were satisfied with the tourism products and services available on those four islands (Table 6). In particularly, silence and peace were at first place, followed by the friendliness of staff in the accommodation facilities and hospitality of the population in general. Visitors also highly evaluated the quality of accommodation and feeling of personal safety. The well-preserved nature of the islands was also a source of satisfaction for most visitors. These are the major prerequisites for peaceful and comfortable stay of tourists on these islands. While visitors were generally satisfied with the authentic feel of villages, they expressed comparably somewhat lower level of satisfaction with the visual appeal of the villages, owning most likely to decaying and often abandoned houses. In line with this, the satisfaction with the state of cultural heritage preservation was also marginally lower. Visitors were least satisfied with the gastronomy and availability of local produces and products. The pattern of response indicate that tourism development on those four islands have to be based on the traditional hospitality of the local population and special family atmosphere offered by private accommodation providers. This, coupled with the traditional farming, fishing and other local products, could be incorporated into the overall tourism products of these islands.

Table 6
Foreign tourist satisfaction with island's tourism products, services and atmosphere (%)

Elements	Dugi otok (n = 53)	Vis (n = 32)	Lastovo (n = 40)	Mljet (n = 44)
Friendliness of staff in the accommodation facility	4.74	4.25	4.20	4.14
Silence and peace	4.72	4.38	4.20	4.50
Hospitality of the local population	4.51	4.00	4.00	4.21
Quality of accommodation	4.49	4.13	3.80	4.28
Personal safety	4.43	4.50	4.10	4.57
Preservation of the nature	3.94	4.50	4.10	4.21
Beauty of the town/village	3.91	4.75	3.90	3.78
Preservation of village authenticity	3.81	4.38	4.00	4.07
Preservation of cultural sites	3.78	4.00	3.50	3.64
Gastronomy	3.63	4.38	3.70	3.50
The richness of domestic product offer	3.18	3.75	2.80	3.21

<sup>\*</sup>Response: very dissatisfied (1), dissatisfied (2), satisfied (3) very satisfied (4) extremely satisfied (5)



In terms of preferred types of tourism development (Table 7), visitors have, in general, supported the introduction of more agro tourism farms and improving the infrastructure, such as promenades, that would allow greater access to and enjoyment of the sea and cycling routes that would facilitate active holidays and better access to nature. Given that one of the most important reasons to visit those islands was rest and relaxation, while peace and silence the greatest source of satisfaction, it is not surprising that visitors have not supported propositions to build luxury hotels, resorts or to introduce typical resort entertainment, such as casinos or night clubs. There were also differences between islands, with visitors of Dugi otok expressing strongly their opinions, while on the other hand; those on Mljet did not take a strong stance on most of the possible development options. Such pattern of responses might be reflecting the structure of the sample, with Dugi otok reporting the largest proportion of loyal visitors, familiar with the islands and possibly emotionally attached to it, while Mljet had the largest proportion of respondents visiting the island for the first time.

Table 7
Foreign tourist development preference (%)

Development options	Dugi otok (n = 53)	Vis (n = 32)	Lastovo (n = 40)	Mljet (n = 44)
Open agro tourism with domestic offer	2.85	3.00	2.6	2.28
Build more promenades (along the coast)	2.85	2.37	2.8	2.00
Build cycle routes	2.61	2.62	2.7	1.85
Build small & family run hotels	2.13	2.25	2.4	2.35
Build horse/donkey riding trails	1.79	2.37	2.4	2.07
Build big luxury hotels	1.54	1.75	1.5	1.14
Build apartment villages	1.41	1.87	2.1	1.28
Open casino. night club	1.25	2.00	1.8	1.14

<sup>\*</sup>Response: disagree (1), cannot evaluate (2), agree (3)

Visitors were quite decisive when it came to tourism development scenarios for the four islands (Table 8). Foreign tourists clearly expressed (over 62%) that tourism on these islands should be developing towards growing the number of tourists to a certain level, and towards the development of a tourism in harmony with nature, landscape and village or town identity. This form of tourism can only be developed in the island's ambience of the local architecture along with the hospitality and affirmation of local gastronomy.

Table 8

Prefer tourism development scenarios by foreign tourists (%)

Proffered scenario	Dugi otok (n = 53)	Vis (n = 32)	Lastovo (n = 40)	Mljet (n = 44)
Larger numbers of tourists, a large number of hotels and apartments, a lot of new tourism attractions	0.0	0.0	0.0	0.0
Growth in the number of tourists to a certain level, tourism development in harmony with nature, non-infringement landscape and village/town identity	65.4	62.5	90.0	72.8
Tourism without movement in any direction, it is good as is	33.6	37.5	10.0	27.2

## Resident survey

In developing a model for the four open-sea islands tourism development, residents were important stakeholders and the focus of the resident survey was to ascertain a degree to which they perceive to be currently involved in the decision-making process, the extent of tourism impacting their lives, and preferred tourism development options. As illustrated in Table 8, more than two-thirds of the respondents to the resident survey felt that they were not informed about the processes and models of tourism development taking place on their islands. Regardless of the lack of formal tourism development plans or strategies on these islands, the results suggests that the existing initiatives of tourism development on these islands do not derive from the initiatives of the local population and local communities. The tourist development of these islands occurs spontaneously and under the influence of certain "out of island" initiative. Likewise, results indicate that the majority of respondents were not involved in decision-making pertaining to tourism development.

Table 9
Informing of the local population of Dugi otok Vis, Lastovo and Mljet about decisions on tourism development (%)

	Dugi otok (n = 41)	Vis (n = 32)	Lastovo (n = 40)	Mljet (n = 56)
Informed about tourism development				
• Yes	6.2	0.0	20.0	9.1
• No	72.1	75.0	60.0	72.7
• I do not know	21.7	25.0	20.0	18.2
Involved in decision-making				
• Yes	9.9	0.0	10.0	0.0
• No	70.8	87.5	60.0	100.0
• I do not know	19.2	12.5	30.0	0.0

In terms of the perceived impacts of tourism, respondents perceived tourism to bring economic benefits in all four islands (Table 10). There was a tendency of respondents to attribute improved appearance of their villages to tourism, although to a lesser degree on the two southern islands of Lastovo and Mljet. Respondents were not certain on the effect of tourism on the natural environment, with the exception of Mljet where respondents perceived that tourism has a negative environmental impact. This might be due to the fact that a large part of Mljet is a national park and residents have been made more aware of the exceptional island's natural heritage that on other three islands. Although recognising positive economic impacts of tourism, respondents perceived tourism to have a mostly negative impact on their traditional lifestyle, while there were certain ambivalence or polarisation in terms of its impact on the quality of life. The reasons should be sought in the isolation of open-sea island groups and specific life-style that has developed under such circumstances.

Table 10
Perceptions of socio-economic and environmental impacts of tourism (%)

Impacts	Dugi otok (n = 41)	Vis (n = 32)	Lastovo (n = 40)	Mljet (n = 56)
On the natural environment				
<ul> <li>positive</li> </ul>	25.5	17.5	20.0	27.3
<ul> <li>neither positive nor negative</li> </ul>	48.4	62.5	40.0	27.3
negative	26.1	20.0	40.0	45.4



Table 10 Continued

Impacts	Dugi otok (n = 41)	Vis (n = 32)	Lastovo (n = 40)	Mljet (n = 56)
On the physical appearance of the village				
<ul> <li>positive</li> </ul>	44.1	50.0	30.0	27.3
<ul> <li>neither positive nor negative</li> </ul>	44.1	37.5	50.0	47.3
negative	11.8	12.5	20.0	25.4
On the usual way of life				
<ul> <li>positive</li> </ul>	17.8	10.0	20.7	18.2
<ul> <li>neither positive nor negative</li> </ul>	45.3	50.0	36.1	38.2
<ul> <li>negative</li> </ul>	36.9	40.0	43.2	43.6
On living quality				
<ul> <li>positive</li> </ul>	34.6	42.5	40.0	40.0
<ul> <li>neither positive nor negative</li> </ul>	22.3	25.0	20.0	19.1
<ul> <li>negative</li> </ul>	43.1	32.5	40.0	40.9
On the economic development of your place				
<ul> <li>positive</li> </ul>	59.6	62.5	60.0	68.2
<ul> <li>neither positive nor negative</li> </ul>	11.7	12.5	10.0	9.1
• negative	28.7	25.0	30.0	22.7

In terms of the preferred scenario for tourism development, responses of residents were very similar to those of visitors in giving preference to the scenario involving a controlled growth of tourist numbers with appropriate preservation of natural resources and respect for the islands social fabric (Table 11).

Table 11

Preferred tourism development scenarios by residents (%)

Possibilities	Dugi otok (n = 41)	Vis (n = 32)	Lastovo (n = 40)	Mljet (n = 56)
Larger numbers of tourists, a large number of hotels and apartments. a lot of new tourist attractions	11.8	0.0	10.0	9.1
Growth of the number of tourists to a certain level, tourism development in harmony with nature. non-infringement landscape and place identity	81.4	87.5	90.0	90.9
Tourism without movement in any direction. This is a good	6.8	12.5	0.0	0.0

In terms of the preferred types of tourism development, responses to the resident survey were also similar to those of the visitor survey (Table 12). All types of tourism products involving local initiatives (i.e. agro-tourism farms, sale of local products) and making natural areas more accessible (i.e. promenades, cycling trails) were supported by respondents, with very little variations from island to island. In terms of accommodation, there was a clear preference for small, family run-hotels and, likewise, rejection of propositions to build resorts, luxury hotels, casinos or night-clubs. The high degree of congruence in attitudes of foreign tourists and local population provides basic guidelines for the tourism development on these islands. This preferred type of tourism development on islands' villages and bays involves products and services that rely heavily on pristine nature and unique ambience in villages. This atmosphere is created through a combination of stone architecture and urban design with gastronomy based on local produces as well as intensive contact with locals.

Table 12
Residents' development preference (%)

Development options	Dugi otok (n = 41)	Vis (n = 32)	Lastovo (n = 40)	Mljet (n = 56)
Open agro tourism with domestic offer	2.90	2.75	3.00	3.00
Build more promenades (along the coast)	2.87	3.00	2.00	3.00
Open shop for the sale of local products	2.84	2.05	3.04	2.81
Build bicycle routes	2.79	3.00	3.00	3.00
Build small & family hotels	2.56	2.50	2.95	2.90
Build apartment villages	1.71	1.12	1.14	1.55
Open casino. night club	1.61	2.50	1.52	1.73
Build big luxury hotels	1.35	1.13	1.52	1.90

<sup>\*</sup>Response: disagree (1), cannot evaluate (2), agree (3)

## Conclusions: Towards the model of tourism development

Tourism development on the islands of Dugi otok Vis, Lastovo and Mljet should be approached carefully within the physical, human and receptive capabilities of each island. The future concept of tourism development of Dugi otok, Vis, Lastovo and Mljet should be designed by considering the benefit to the islands' resident population, secondarily towards the interest of tourists, and finally the interests of other parties involved in tourism business and in the development of tourist facilities.

When it comes to the development of certain forms of tourist offer on the Croatian open sea islands there is high congruence in perceptions and attitudes of island population and foreign tourists. Both, local residents and foreign tourists, agree that agro-tourism farms are one of the priority sectors of the development of accommodation facilities and tourist products on the four open-sea islands under question. The fact that a high proportion of respondents to the resident survey have opted for agro-tourism farms and family-run hotels indicate that local residents are aware of the motives and needs of tourists interested in visiting such places. Such developments offer the experience of staying in a family atmosphere and enjoying authentic cuisine. At the same time, it ensures that tourism products reflect the simple and slow-paced way of life on the open-sea islands that is beneficial to residents as they preserve the lifestyle that they love and treasure while, at the same time, offer recuperation and learning possibilities for tourists through direct contact with locals and enjoyment in peacefulness of the island.

Along with accommodation facilities, the proposed family-run tourism enterprises are ideally suited to expand their business to agriculture and fishing, and aim towards creating unique cultural environment, experience and special gastronomical attractions. Local production based on ecological principles, indigenous agricultural products (vegetables, fruit, wine, olive oil, milk, meat, fish) creates a cultural atmosphere and special gastronomic offer. In addition, agricultural production on family farms provides tourists with a possibility to get actively involved in seasonal work on farms as well as in fruit picking. Thus, this model of tourism development provides a new form of the active holiday as guests assist hosts on family farms and relax at the same time.

Considering the type of accommodation, organization of business and the overall ambiance of the hotel family, the proposed model of tourism development on Croatian open-sea islands unites the unique relationship of the host and his guest. The proposed model especially takes into account tourist

capacities of the local population and their culture. This model allows certain selective policy towards "external players" whose contribution to the development of tourism on open-sea islands is based on long-term thinking and building of family accommodation that is in harmony with the natural environment and local culture. Through this model it is possible to establish a harmonious and humane relationship between the population of these islands, tourists and those who come as participants in the development of tourism.

The proposed basic elements of the model of open-sea island tourism development were based on a research into the main features of the island and opinions of two major groups of stakeholders – residents and visitors. The research on which it was built, however, is not without certain limitations, of which the most notable is the relatively small sample size. Likewise, variations in responses between the four islands call for in-depth interviews to be conducted with visitors and, in particular, local residents in order to get deeper insights into their specific reasoning related to tourism impacts and preferred tourism development.

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Submitted: 16/04/2014 Accepted: 04/03/2015

