

Cultural and Historical Resources as a Factor for the Development of Sustainable Tourism: A Case Study of Lighthouses in the Northern Adriatic

Mirjana Kovačić

*University of Rijeka, Faculty of Maritime Studies,
mirjana051@gmail.com*

Miha Markelj

*University of Primorska, Ph.D. Student at Faculty of Tourism Studies – Turistica
markelj.m@gmail.com*

Alen Jugović

*University of Rijeka, Faculty of Maritime Studies
ajugovic@pfri.hr*

Lighthouses are distinct cultural landmarks and have a fundamental role in maritime safety, but it is rare to see them used as tourist attractions anywhere in the world.

Tourism on the Adriatic coast is predominantly based upon the concept of sun, sea and sand. In order to diversify the already existing products and attractions, selective forms of tourism have to be taken into consideration.

The purpose of this research is to present a new form of selective tourism that is based on the integration of lighthouses in the tourism sector. The paper will thus analyse lighthouses in Croatia that have been included in the »Stone Lights« project to determine whether their cultural and historical value has become devalued because of their integration into tourism services. Additionally, the research will examine the possibility of implementing the project with similar lighthouses in Slovenia and Italy.

Keywords: tourism, selective tourism forms, cultural and historical resources, lighthouses, Croatia, Italy and Slovenia

Introduction

In the late 1990s, the company Plovput Ltd. in Split launched a complex investment project called »Stone Lights« to ensure the continuity of human presence in the lighthouses. The Croatian Adriatic has over 5000 of years history written on its stone sea cliffs; the Austria-Hungary Empire built a number of lighthouses on them in the 19th century. Often located in poorly accessible, isolated locations, lighthouses offer a unique sense of true beauty. Built of white stone, with walls a metre or thicker, lighthouses are among

the most pleasant summer retreats on the Adriatic. Located in landscapes of particular beauty, nowadays they host tourists with adventurous spirits. Unlike the lighthouses in Croatia, lighthouses in Slovenia and northern Italy are not yet regarded as points of interest in the tourism sector even though they bear the same cultural and historical resemblance to those in Croatia.

Defining the Problem

Over the last two to three decades, global tourism trends have reflected a change in tourists' behaviour.

Nowadays, tourists' priority is to experience a destination, not merely to visit it. Since the mid-1980s, there has been a growing interest in forms of tourism that are closer to nature and offer individual experience (ecotourism) (Pančić Kombol, 2000). Because of the war in Yugoslavia, Croatian tourism was in decline, but since the mid-1990s tourism on the coast and islands has gradually begun to recover. Previously, the leading concept of tourism had been mass tourism development, focusing only on sun and sea tourism products and not on other natural and cultural attractions that the coastline could offer. This concept is slowly disappearing. However, there is a delay in the application of new ideas that are arising from the need to segment the tourism market. A re-definition of the old concept is needed, in which the application of selective tourist offers should be based on innovative tourist products that are able to satisfy increasingly demanding tourists (Jadrešić, 1991; Luković, 2008).

Accommodation capacities are being restored, and the Croatian coast and islands are slowly becoming recognizable as a tourist destination and are coming into line with new trends in an increasingly demanding market. When comparing the structure of foreign tourists in Croatia, a greater diversification of sending tourism markets can be observed from 1998 to 2013 (Croatian Bureau of Statistics, 2015).

Currently, new elements are becoming included in the creation of the new image of Croatia as a coastal and island tourist destination. In an attempt to enrich the coastal tourism services and facilities with competitive and innovative tourism products, the promotion of lighthouses as tourism facilities has already started.

Theoretical Background

Globalization has changed the meaning of travel over the past century. Increasingly, it is becoming based on detachment from everyday life (Pearce, 1994, Šergo & Tomčić, 1998). The bulk of tourism demand is physically concentrated in cities. There is a growing interest for destinations with a strongly visible sense of place, as a local response to the omnipresent global. In order to remain competitive in an increasingly demanding market, tourism products seek to emphasize local identity and, among other things, must integrate natural and cultural heritage.

Heritage sites also need to be preserved for future generations, because they represent one of the most important factors of local identity and are frequently one of the primary pillars of a recognizable tourism product.

Destinations that can offer psychophysical relaxation are becoming increasingly popular. "Seclusion" and "exclusivity" are terms that have been increasingly mentioned in the competitive tourist offers in most of the tourism strategies in the selected area of research.

Analysis of the Stone Lights Project

Croatia is one of the few countries in the world to integrate lighthouses as accommodation facilities in its tourist services without failing to satisfy the two abovementioned elements of modern tourism demand: the search for local identity and the aspiration for peace and quiet in an ecologically clean, natural environment. In contrast to other countries that have also started to convert lighthouses into tourism facilities (e.g. Chile, Scandinavian countries and the United Kingdom), the advantage of the lighthouses in Croatia is their position in attractive secluded locations. Lighthouses on Croatian islands and at the coast can satisfy a variety of tourism activities.

Lighthouses on the Adriatic Coast have always attracted attention with their air of mystery, as well as the attractiveness of the isolated locations on the islands and the coast. In ancient times, before lighthouses appeared, there were primitive guidance systems for vessels involving the burning of a torch on the tower at the entrance to the port. Lighthouses in the modern sense of the word were built on the Adriatic since the beginning of the 19th century when the Austro-Hungarian Empire, wishing to develop a powerful navy, erected an initial network of lighthouses. Because of the need for navigation and orientation at sea, the Austro-Hungarian Empire built a total of 65 lighthouses, from the oldest one at Cape Savudrija in Istria dating back to the 1818, to the youngest at Rivanjske Sestrice on the small island of Rivanj near Zadar, which was built in 1899. During the Second World War, many lighthouses were damaged or destroyed, and many lighthouse keepers died or went missing. During the 19th and 20th centuries, generations of lighthouse families lived in the lighthouses and maintained them. Since that period, new

lighting systems and some upgrades of the facilities were made, but the cultural elements generally remained intact (Piplović, 2003).

Since the automation of the lighthouses during the 1990s, and the introduction of GPS satellite navigation systems as well as radar technology in maritime traffic, the need for people in lighthouses has been significantly reduced and so lighthouses are losing their former navigation and residential functions (Šerić, 2003 and 2004; Opačić, 2005).

About 15 years ago, an idea and vision for the management of lighthouses were formed with the aim of conserving and preserving them. The idea of lighthouses as tourist accommodation facilities opens the possibility of the financial self-preservation of cultural heritage monuments with their integration into tourist facilities and services. Furthermore, many European castles and palaces are involved in tourism not only as attractions but also as luxury accommodation facilities.

The conversion of a lighthouse rests largely on its protection; thus, examples of their connections within the tourism sector are rare (Opačić et al., 2010). In Chile, for example, the concept of organizing the physical surrounding of the lighthouses as a nature park was developed. Within the international movement for protecting lighthouses, Scandinavian countries attempted to develop alternative forms of income for the former lighthouse keepers and their families, while the lighthouses were restored as valuable cultural landmarks (Pearson, 1995). Unfortunately, today the majority of the lighthouses throughout the world, as well as in Croatia have no permanent inhabitants occupying their facilities.

In the late 1990s, the company Plovput Ltd. established the »Stone Lights« project, based on its positive experiences in the conservation of lighthouses by integrating history, ecology and tourism. The aim of the project was to preserve the cultural integrity of the lighthouses and to give them new meaning by remodelling their interiors into self-catering tourist apartments. In that way, financial means intended for the future renovation and preservation of lighthouses as cultural and historical monuments would be obtained (Plovput, 2011).

After having completed the analysis of the present situation and after the economic analysis of accommodation capacities in the process that occurred

from 2001 to 2009, 14 lighthouses (Savudrija, Rt Zub, St. John, Porer, Veli rat, Rivanjske sestrice, Prišnjak, St. Peter, Host, Plocica, Struga, Sušac, Palagruža and St. Andrija) were gradually included in the offer of tourism services. The intention is to remodel 28 more lighthouses into accommodation facilities. The overall area of all 48 lighthouses in Croatia is 10,398 square meters; 83% of which is living space and 17% are supporting facilities. The aforementioned information strongly indicates that lighthouses represent a significant tourism potential on the Croatian coast. Although the lighthouses offered to tourists differ in their attractiveness, size, number of apartments, vicinity of tourist destinations and traffic infrastructure, one of the most important preconditions for their successful implementation in tourism is location, according to which lighthouses are divided into three groups (Perišić, 2009):

- lighthouses on the open sea on uninhabited islands
- lighthouses situated on inhabited islands away from island villages
- lighthouses on the mainland close to urban villages.

Each group can offer different possibilities. While one group offers solitude on the island on the open sea, the other group offers the possibility of becoming familiar with the life of local people on bigger inhabited islands, and the third group of lighthouses, on the mainland, offers the possibility to learn about natural and cultural attractions in the immediate and distant areas.

Lighthouses on the open sea are situated mainly on uninhabited islands and offer solitude to the fullest extent (Robinson tourism). On such islands, the dream of having your own island is realized. Tourists can enjoy different natural and cultural attractions while exploring the surroundings. Lighthouses are usually rented by guests who are aware of the charms of the wilderness. Plovput has restored ten such lighthouses: St. John, Porer, Rivanjske sestrice, Prišnjak, Host, Plocica, Struga, Sušac, Palagruža and St. Andrija.

Lighthouses situated away from villages on islands are favourable to those tourists who wish to have solitude, peace, time for bathing, fishing and

diving, but also a possibility to go to the village for essential needs. Tourist can go shopping, and they have the possibility of becoming familiar with the life and customs of local people. Such lighthouses are favourable for the development of nautical tourism, and they are becoming desirable destinations for numerous amateur sailors. There are two such lighthouses: Veli rat on the Island of Dugi otok and Struga on the Island of Lastovo.

Lighthouses on the mainland and close to urban centres are old attractive buildings providing accommodation in the lighthouse in an excluded location, beautiful beaches, but also all the conveniences of a tourist site in an urban place on the coast (Perišić, 2009; Kovačić et al., 2011). As they are located on the mainland, tourists can use their own cars for their arrival, sightseeing and for becoming familiar with the natural and cultural attractions in the immediate and distant areas. Such lighthouses situated near coastal urban places are: Savudrija on the cape of the same name on the western coast of Istria, Rt Zub between Novigrad and Poreč on the western Istrian coast and St. Peter's lighthouse located on the cape of the same name in Makarska.

Results

An analysis of tourist traffic to the lighthouses shows that the proximity and accessibility of the coast remains one of the most important factors of their tourist utilization (Plovput, 2014). It has been determined that the desirability of the lighthouse decreases proportionally with the distance from the mainland or from major populated islands. With closer and more accessible lighthouses, the tourist season lasts longer, and they attract tourists during the off-season more than the lighthouses on small, uninhabited islands in the solitude offshore. Differences in occupancy with respect to the categorization of apartments on the lighthouses have not been observed, which confirms the hypothesis that the most important feature is location and not apartment category for tourist traffic to the lighthouses (Opačić et al., 2010; Kovačić et al., 2011). Although the profitability of the project is relatively small and the period of cost recovery long, it has already been proven that tourism has enabled the preservation of Croatian lighthouses as a form of cultural heritage. In the long run, this is, along with the maintenance of lighthouses that supports the safety

of navigation, the most important result of the project.

Future tourism development for Croatian lighthouses must be based on the following preconditions (Kovačić et al., 2011):

- rational use of the existing resource base,
- promotion of environmental safety measures and infrastructural advancement preservation of cultural characteristics,
- raising the quality of the experience of tourists and the quality of life of residents.

The Croatian islands and coastline also have not implemented all the possibilities that selective tourism offers, although the Adriatic coast in Croatia is, due to its geographical diversity, a perfect place for the development of many forms of selective tourism, including nautical, cultural and ecological tourism (Ćorluka, Matošević, & Geič, 2013).

Nevertheless, the new type of tourism in lighthouses is slowly developing. It is marked by the proximity of the emissive market with a unique coastline and highly favourable climatic and hydrographical as well as navigational conditions. Alongside these favourable factors, it has to be mentioned that Croatia is one of the most visited tourist countries in the world. The natural characteristics of the Croatian coast, which are favourable for the development of all forms of maritime tourism, have encouraged other tourists, such as boaters, divers, Robinson tourists and others to visit this area, and thus the development of selective forms of tourism has been encouraged.

Regarding tourism in lighthouses, different factors that can increase the competitiveness of this form of tourism can also be identified, which can be categorized into more general ones and specific ones:

- general factors include the climate, beauty and cleanliness of the sea, beautiful landscape that includes the diversity of the coast and islands as well as the settlements;
- specific factors include airport accessibility in relation to major markets, personal safety and security of navigation, the number, arrangement and equipment of the lighthouses, the friendliness and education of the staff, other services, the attractiveness of services on mainland, and the prices of services.

If the above-stated factors are assessed properly, an increase of tourism demand in lighthouses can be expected in the future.

Implementation of the Project in Slovenia and Italy
Plovput's Stone Lights project could also represent a positive example of preserving the old Austro-Hungarian lighthouses in Slovenia and Italy. In order to extend the successful project to Slovenia and in the Italian region of Friuli Venezia Giulia, the research has identified 15 lighthouses (eight¹ in Italy and seven² in Slovenia) from which three lighthouses could adopt the Plovput Stone Lights project model.

The relatively small Slovenian coastline harbours a neocortical lighthouse that was built in the 19th century on the tip of the peninsula in the medieval town of Piran. Before the lighthouse, the church of St. Mary stood there. The church was modified into a lighthouse between 1871 and 1872 (Darovec et al., 2007). Attached to the lighthouse, there is also an area for the lighthouse family, similar to those of the lighthouses along the Croatian coast. Although the local community has begun attempts to restore the lighthouse tower, the Plovput model of converting the lighthouse into tourism accommodations facilities while preserving the cultural monument could be applied, and positive results could be expected.

Apart from the lighthouse in Piran, other lighthouses on the Slovenian coast are smaller in size and thus do not have the possibility of accommodating people.

On the Italian coastline in the region of Friuli Venezia Giulia, eight different lighthouses can be identified. Historically, a part of the Italian coastline was also under the Austro-Hungarian Empire and thus the same type of lighthouses as in Croatia and Slovenia can also be found in Italy. The two most appropriate sights to adopt Plovput's model are the lighthouse in Trieste Molo Santa Teresa and the lighthouse in Bibione near the Tagliamento river es-

tuary. Both of them reflect the Austrian architectural style and have a place where the lighthouse family used to live.

The lighthouse in Bibione was built in 1913 and later rebuilt after being bombed in 1917. Today, the building is in the hands of a local custodian and does not have a proper management plan (Lighthouses of Northern Italy, 2014). Plovput's model could thus also be implemented here. The lighthouse in Trieste Molo Santa Teresa is home to the Trieste section of the Italian Naval League and thus cannot be used in future tourism development because it already has an established management plan (Auriemma & Karinja, 2008).

Apart from the abovementioned lighthouses, the Italian coastline consists of several smaller ones that do not have the possibility of accommodating people and a bigger one called the Faro della Vittoria in Trieste. This lighthouse is 70 meters high and was constructed from white marble stone from Vrsar in Istria but does not bear an architectural resemblance to the ones built in the time of the Austro-Hungarian Empire. The lighthouse was constructed in 1927 and dedicated to the Italian victory in the First World War (Vittoria lighthouse, 2014). Clearly, Plovput's model is also not applicable here because the tourism offer of the lighthouse is limited only to towers with a viewpoint.

Conclusion

In an attempt to enrich the tourist offer in the Croatian coastal area with competitive and (in a global framework) innovative tourism product, in 2001 the company Plovput Ltd. (Split, Croatia) started to convert lighthouses on the Croatian islands and along the coast into tourist accommodation facilities.

With the implementation of the Stone Lights project, lighthouses are gradually being included in the offer of tourism facilities and services in Croatia while preserving traditional cultural elements of the lighthouses as well as their natural surroundings. The positive effects of the project can be seen when funds are generated for the conservation maintenance and revitalization of the lighthouses, which are important as cultural heritage monuments.

According to data about tourist traffic on the lighthouses in Croatia, it is clear that the proximity and accessibility of the coast remains one of the most

1 The lighthouses in Italy are: Tagliamento (Bibione), Punta Sottile, Vittoria, Trieste Molo Foraneo, Lanterna di Trieste, Molo Santa Teresa, Porto Franco Vecchio south Head, Porto Franco Vecchio north Head.

2 The lighthouses in Slovenia are: lighthouse at Rt Debeli rtič, west (breakwater) mole at Port of Koper, east (breakwater) mole at Port of Koper, lighthouse in Izola, lighthouse at Piran peninsula, Piran harbor lighthouse (west) and Piran harbor lighthouse (east).

important factors of their tourist utilization. With closer and more accessible lighthouses, the tourist season lasts longer, and they attract tourists during the off-season more often than the lighthouses on smaller uninhabited islands do.

Although the profitability is relatively small and the period of cost recovery long, it has been proven that the income of tourism has been used in the conservation of the lighthouses. This is the most important result of this project. Tourism on Croatian lighthouses supports the principles of sustainable development and has a wider social importance. The research results presented in this paper show that the selective types of tourism encourage sustainable tourism development in all its aspects and are compatible with regional development concepts. Tourism in lighthouses in the Northern Adriatic has a future because it represents an innovative tourism product and because it restores cultural heritage monuments and gives them new meaning.

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