MODEL OF SPATIAL EVALUATION FOR TOURISM ECO-RENT

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Abstract

Tourism is extremely interacted with the environment. Taking into account that tourism uses the space and related resources, it seems right to pay for the damages caused to the environment. This is the basis of the tourist spatial eco rent. The paper evaluates the space and resources used by tourism as the basis for the introduction of the tourism eco-rent in the area of Makarska Riviera, a traditional tourism destination. It is divided into three main spatial units: urban areas, bathing zone (beaches), Biokovo Park of Nature. According to natural and geographical reasoning, a number of zones with different spatial values within each spatial unit has been identified. Each unit, i.e. zone was evaluated according to various criteria relevant to the evaluation of space for tourism and tourism development purposes. Having ranked zones within each unit, using the multiriteria ranking method PROMETHEE II, comparative analysis of the obtained results was carried out as well.

Key words: *Tourism, Spatial evaluation, Eco-rent, Multicriteria analysis*

1. TOURISM, ENVIRONMENT AND SPATIAL ECO-RENT

1.1. Tourism and the environment

Tourism and the environment interact and depend each on another. In fact, the environment is one of the most important factors of attraction (being an integrative part of the tourism supply in a tourism destination). It offers to the tourism its environmental services (resources such as sea, land, leisure etc.) on one hand, but the tourism also uses the environment as the "disposal ground" for waste, waste waters etc., on the other hand. However, tourism has to preserve the environment it uses in order to maintain its attraction basis, vital for the tourism development in the first place.

Tourism and tourists, using the environment, produce various impacts and cause different damages on the environment in a tourist destination, such as additional burden on public utilities (waste, waste waters, communication networks, parking lots etc.), air and noise pollution, consummation of space by new constructions, devastation of architectural and historical heritage etc.

It can be argued that the tourism uses the space, and therefore the environment in a tourism destination. More precisely, the usage of the space by the tourism is not the same or with equal intensity throughout the destination. There are parts of the destination that are used only by tourism, or at least intensively by the tourism (such are spaces occupied by the tourist resorts, large accommodation facilities, sport and leisure areas dedicated to tourism etc.), and others that are used by a number of users and for a number of purposes, tourism and tourists being one of them (e.g. air, sea, natural parks, communication networks, public utilities, and also biodiversity, landscape, air, water resources, climate etc.). The former are crucial for the development of the tourism, yet its content and quality depend on the latter as well.

Thus, it seems reasonable to bring into the question the management of the space used by and for tourism, in order to enable the tourism development, but also the protection and improvement of the environment at the same time. This paper particularly deals with the problem of spatial management in tourism destination.

1.2. Tourism spatial eco-rent

Spatial management, as well as resource management in general, involves the notion of public good, and is therefore closely linked to the notion of the ownership over the resources. Due to the ownership status, the owner has to pay to the local community (authorities) certain charges related to the land use and provided infrastructural services. These charges are easily calculated and enforced in the areas used by tourism, intensively and/or exclusively (charges paid by the accommodation facilities, beach concessions etc.). However, the question remains about the rest of the space dedicated and/or used by tourism – who is to pay for the usage of tourism space, and to whom? This seems to be crucial problem related to the protection, conservation and improvement of the space and resources for the tourism development within a destination.

This contemplation leads to the notion of the rent. Rent in general, by definition, is the charge paid to the owner of the good, for usage of the same good. In this particular case, the rent should be paid because of the use of the natural and man-made environment in tourist destination. As Ricardo pointed out, in the cases where the certain good is in abound (the supply exceeds the demand for it), there is only absolute rent related to it. The existence of the specific rent (in this case tourism spatial eco-rent) is related to the shortage of the goods, when the exceeding demand raises the value or market price of the good. Another fundamental element of this specific rent is the fact that the usage of the natural goods results in their deterioration and pollution, so that certain measures of environmental protection and conservation are required (such as, for example, limited number of visitors).

The definition states that the rent is the charge paid to the owner of the good. The owner of the natural / public goods is the state (society). Usually, the state establishes special fund for environmental protection as the means for protection and improvement of the state of natural resources and environment. On the other hand, if the good is not owned by the state, but by an individual, the eco rent can still be collected because the state protects the particular good by the law, i.e. it defines the use of the whole space and protects it by the law. Thus, the ownership over the facilities / goods and the ownership over the use of good have to be distinguished. However, the assumption of the state as the owner to collect the rent remains open for a constant academic discussion (actually, in this case study, the next step would be to investigate and design the spatial tourism eco rent management at the destination level).

Within this framework, the tourism spatial eco rent is the charge paid by the user (tourist) of certain environmental resources and values (coast, beaches, sea, landscape, natural monuments, biodiversity etc.) due to the damages and pollution produced by the tourists during their staying in the destination.

As stated before, the destination encompasses spaces used exclusively by tourism, and spaces used by tourism and other activities. The main tourism pressure today is in the former spaces (and therefore main pollution burden), but the future of tourism heavily depends on the latter ones. So, both categories of space within a destination have particular value for tourism and tourism development. The very basic idea of this research thus was to design an instrument (spatial tourism eco rent) that would refer to the entire tourism destination. The rent would differ across the various areas within the destination, in accordance to the value of space for tourism and tourism development: higher estimated value of space would imply higher basis of spatial eco rent. At the end of the day, one can get an impression of the value of the space (with and because of the existing resources in that space) throughout the destination for the tourism.

The revenues collected should be used to improve the environment and its services throughout the destination. The amounts invested in certain areas do not have to be match the amounts collected from the spatial tourism eco rent in these areas; this would contribute to the balanced spatial development of the destination in terms of the environment and its services in general.

Finally, it should be emphasized that spatial tourism eco-rent in urban areas is not equal or could be substituted by the urban rent. Actually, the spatial tourism eco-rent does not represent a charge for, e.g. usage of the communal infrastructure, or other urban facilities; it is based on the evaluation of their value for the tourism in the certain urban zone. The same reasoning can be applied as to differentiate spatial tourism eco-rent and the other environmental fees and charges in the destination.

2. RESEARCH AREA AND SPATIAL EVALUATION

2.1. Methodology

The aim of the research was to define homogenous zones within the research area. These zones are characterized by the same or similar rank describing the value of space for the tourism and tourism development (which will serve as the basis for the determination of the amount of the spatial tourism eco rent in each unit/zone).

The methodology used consists of several phases. In the first phase, the entire area under study, Makarska Riviera, is divided into three zones: urban zone, beaches (including pristine beaches as well as urban/hotel beaches that are actually excluded from the urban zone) and Nature Park Biokovo. The reason behind the division into the three zones is rather simple: majority of tourism activities and consequent pressures are concentrated in the urban zone (settlements along the coast) and the belonging beaches. Beaches outside the settlements as well as the surrounding areas (mainly occupied by the Park of Nature Biokovo), still preserved, have recently been attracting more and more tourists.

Each zone was further divided into a number of spatial units. The authors were lacking cadastre records, so the division into smaller spatial units was done as follows: in urban zone, according to the administrative borders of the settlements (and municipalities); beaches were identified and divided respecting the physical determinants; units in the Nature Park Biokovo respect the natural determinants of the space.

In the second phase, the criteria for spatial evaluation (i.e. estimation of the value of space for tourism and tourism development) for each zone were identified. Actually, the criteria can be divided into two sets: the first refers to the general criteria, and the second to the criteria specific for each zone under study. General criteria were identified having in mind the history of the Riviera as mass tourism bathing area; thus, these criteria describe the requirements that such areas should meet (such as ambient values, road accessibility, parking, water supply, waste management, public toilets, basic sport and entertainment facilities). There are also other general criteria that were not taken into the account because all the spatial units would have the same value according to the specific criterion (e.g. accessibility of telecommunication networks). Specific zone criteria aim to evaluate the specific features of the zone crucial for the tourism and its development in the entire destination. Taking into the account the morphology of the area under study, it seems reasonable that some of the specific criteria are applied in two zones (e.g. noise pollution is investigated in the urban zones and beaches).

In the third phase, each spatial unit was evaluated according to each criterion. This was done through the opinion poll carried out in the field, among the different users of the space.

In the fourth phase, the criteria were evaluated (criterion weight identified) by a number of experts. This was done in two basic steps. In the first step, each criterion was given its weight, under the condition that the total

weights equal 100. In the second step, the criteria were grouped in three sets: environmental, infrastructure, tourism facilities; each set containing both general and specific criteria. In addition, the criteria sets were given different sums of weights, and the experts were asked to distribute the weight load among the criteria within each group (criteria weights scenarios). The reasoning behind this exercise was twofold: first, sensitivity analysis of resulting ranking; second, different weights of the criteria groups could represent different approaches to the destination development strategy, so it was interesting to see whether the value of the specific zones and spatial units would consequently change and if so, how significant the change would be. The ranking of each spatial unit within the zones was carried out using PROMETHEE II method[1].

2.2. Research area

The research was carried out in the Makarska Riviera, a traditional tourism destination in mid Dalmatia, Croatia.

Figure 1:   Research area – Makarska Riviera, Croatia

Source: http://www.apartments-split.net/images/croatiamap.jpg;
         http://www.davorkrtalic.com/Turizam/Makarska/makarska_rivijera_mapa.jpg

Riviera embraces ca 53 km long coastal strip between the towns of Brela and Gradac. The entire strip is approximately 3 km wide, from the sea line to the mountain of Biokovo. Basic feature of the area are beautiful pebble beaches. Taking into the account the history of tourism in the destination, it could be stated that it has reached the mature phase of the destination life-cycle. This destination is based on beach tourism. Recently, some new, "soft" forms of tourism have been developing, such as sport tourism, health tourism, adventure tourism etc., benefiting from the Biokovo mountain and Nature park in the close vicinity. Tourism has always been basic, almost exclusive economic activity in the area. It suffers extreme seasonality, as well as relatively short period of tourist staying in the area (six days in average).

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[1] Due to limited extend of the paper, the PROMETHEE II method is not explained. However, all necessary information about this method, and consequently the explanation of parameters and other issues regarding the criteria types, can be found in: Behzadian M., Kazemazadeh R. B., Albadavi A., (2010).

2.3. Urban zone

Table 1: Criteria for spatial evaluation of urban zone

Criterion	Type	Min/Max	Parameter(s)	
1. Ambient values	III	max	P = 2.5	
2. Environmental conditions	VI	max	S=1	
3. Road accessibility	V	max	Q=0.5	P=1.5
4. Parking	V	max	Q=0.5	P=2.5
5. Water supply	III	max	P = 1.5	
6. Electrical power supply	III	max	P = 1.5	
7. Waste pollution	VI	max	S = 1	
8. Exposure to noise	III	max	P = 3	
9. Availability of health care	III	max	P = 2	
10. Availability of post and bank services	VI	max	S = 2	
11. Availability of public toilets	III	max	P = 2	
12.Availability of sport and entertainment	VI	max	P = 2	
13. Cycling and walking paths	VI	max	S = 3	

Table 2. Evaluation matrix of the urban zone

Criterion / Settlement	Ambient value	Environm	Road acces	Parking	Water supply	Electrical power	Waste pollution	Noise exposure	Health services	Post and bank services	Public toilets	Sport & entertain.	Cycling & walking
Makarska	4.5	1	3	2	3	3	1.5	1	3	4	0.5	4	4.5
Baška Voda	4	2.5	3	3	3	2.5	2.5	1.5	2	3.5	0	3.5	5.5
Krvavica	2	1.5	1.5	2	3	3	3	3	1.5	0.5	0	1.5	2.5
Promajna	1	2	3	3.5	3	3	2.5	2	1.5	1	0	2.5	3
Brela	5	3	2.5	2.5	3	3	3.5	3	1.5	2	0.5	3	5
Brist	1	2	1	2	3	3	2	2	1.5	0.5	0	0	0.5
Drvenik	3.5	1.5	3	4	3	3	3	2	0	1.5	0	2	3.5
Gradac	3.5	2	3	2.5	2.5	1.5	2.5	2.5	2	2.5	0.5	2	4
Podaca	2.5	2	1	1	3	3	2.5	3.5	0.5	0	0.5	1.5	3.5
Zaostrog	4	3	3	4	3	3	2	4	0.5	0	0	2	5
Drašnice	3	1	3	1.5	3	3	2.5	3.5	1.5	1	0.5	2	2.5
Igrane	3	2	2	2	3	3	2.5	3.5	1	1	0	2	3
Podgora	4.5	2.5	3	3.5	2.5	2	2	1.5	2	2.5	0.5	1.5	4.5
Živogošće	3.5	2	2	2	3	3	2.5	3	0	1.5	0.5	2	3
Tučepi	5	2.5	3	2.5	1.5	2	2.5	2.5	2	3	3	3	4

Urban zone includes the municipalities of Brela, Baška Voda, Makarska, Tučepi, Podgora, Gradac with the constituent settlements of Krvavica and Promajna, Igrane, Drašnice and Živogošće, Brist, Drvenik, Podaca and Zaostrog. Urban zone is mainly constructed, with limited free space, especially in the municipalities in the western part (from Brela to Podgora). The rest of the zone is more preserved in terms of space, but on the other hand, less equipped in terms of infrastructural and tourism related facilities[2]. The following are the evaluation criteria for urban zone (along with criteria specifications as requested by the PROMETHEE II method), evaluation matrix, as well as the presentation of the criteria weight scenarios.

Table 3. Criteria weights scenarios

Criterion / Criteria weights scenarios	1	2	3	4
ENVIRONMENTAL		∑40	∑40	∑30
Ambient value	15	12	12	10
Waste pollution	5	8	8	5
Exposure to noise	4	10	10	7
Environmental conditions	8	10	10	8
INFRASTRUCTURE		∑30	∑20	∑20
Road accessability	8	9	5	4
Parking	4	3	2	2
Water supply	10	7	5	5
Electrical power supply	10	7	5	5
Availability of health care	6	4	3	4
FACILITIES		∑30	∑40	∑50
Post and bank services	5	6	11	14
Sport & entertainment	13	12	15	17
Public toilets	5	3	2	4
Cycling & walking paths	7	9	12	15
Total criteria weight	100	100	100	100

2.4. Beaches (bathing area)

Bathing area was of a special interest for this research, because of the domination of beach tourism in the area.

Total of 43 beaches was identified within the area under study. They vary from pristine, natural pebble beaches, local beaches and hotel/resort beaches[3].

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[2] Detailed information about the urban zone and ranking can be found in: Kurbaša, K. (2010).
[3] Detailed information about the bathing zone and ranking can be found in: Radoš, A. (2010).

Table 4: Criteria for spatial evaluation of beaches

Criterion	Type	Min/Max	Parameter(s)	
1. Type of beach	III	max	P = 3	
2. Ambient values	III	max	P = 3	
3. Beach accessibility	IV	max	Q=0.5	P=1.5
4. Parking	V	max	Q=0.5	P=2.5
5. Waste pollution	VI	max	S = 2	
6. Exposure to noise	III	max	P = 3	
7 Availability of public toilets	VI	max	S = 1.5	
8. Showers and cabins	V	max	Q = 0.5	P = 3.5
9. Availability of sport and entertainment facilities	VI	max	s = 2	
10. Cycling and walking paths along the beach	III	max	P = 5	
11. Sea quality	I	min	-	

Table 5. Criteria weights scenarios

Criterion /Criteria Weights Scenarios	1	2	3	4
ENVIRONMENTAL		∑40	∑30	∑30
Type of beach	10	10	6	6
Ambient value	20	16	14	14
Waste pollution	7	6	4	4
Noise exposure	4	6	4	4
Sea quality	6	2	2	2
INFRASTRUCTURE		∑20	∑30	∑20
Beach availability	15	9	13	9
Parking	9	7	11	7
Public toilets	8	4	6	4
FACILITIES		∑40	∑40	∑50
Showers and cabins	5	15	15	15
Sport & entertainment facilities	13	20	20	25
Cycling & walking paths	3	5	5	10
Total criteria weight	100	100	100	100

Table 6. Evaluation matrix of the beaches

Beach[4]/Criterion	1	2	3	4	5	6	7	8	9	10	11
P1 - Gradac	3	3	3	1,5	2	2	0,5	2,5	1,5	3,5	1
P2 - Gradac	3	3,5	2	1,5	2,5	2	0,5	3,5	2,5	3,5	1
P3 - Brist	3	1,5	2	0,5	3	4	0	0,5	0	0,5	2
P4 - Brist	1	3,5	2	0,5	3,5	4	0	0	0	0	2
P5 - Podaca	3	4,5	2	1	3,5	4	0,5	2,5	0,5	4	1
P6 - Podaca	2	4.5	2	1	3,5	4	0	0	0	0	1
P7 - Podaca	3	3	2	0,5	1,5	2	0,5	2	0	2,5	1
P8 - Zaostrog	3	4,5	3	3,5	3	2,5	0,5	3,5	2,5	4,5	2
P9 - Zaostrog	3	3	3	3	3	3	0,5	0	0	0,5	2
P10 - Drvenik	3	4	2	3	3	2	1	2,5	1,5	1,5	2
P11 - Drvenik	3	3	3	1,5	3	1	0,5	2,5	0,5	1,5	2
P12	2	5	1	0	3,5	4	0	0	0	0	1
P13	2	5	1	0	3,5	4	0	0	0	0	1
P14 - Živogošće	4	2,5	3	3	2,5	1,5	1	2	0	1,5	2
P15 - Igrane	3	2,5	3	1,5	1,5	2	0,5	3	2,5	1,5	1
P16	2	4,5	1	0	3,5	4	0	0	0	0	1
P17 - Drašnice	3	2,5	3	3	2,5	3	0,5	1,5	1,5	1	1
P18	2	4	2	0	3	1,5	0	0	0	0	1
P19 - Podgora	3	3,5	3	3	1,5	1,5	0,5	5,5	4	4,5	4
P20 - Podgora	3	4	3	0,5	2,5	2,5	0	1,5	0	0,5	1
P21	2	4	2	0	3,5	4	0	0	0	0	1
P22 - Tučepi	3	4	2	2	2,5	2,5	5	4,5	3,5	4	1
P23 - Tučepi	3	4,5	2	2	2,5	2,5	3,5	4,5	3	4	1
P24	2	4,5	1	0	3,5	4	0	0	0	0	1
P25 - Makarska	3	3	2	1,5	3,5	2	3,5	1,5	4	5,5	2
P26 - Makarska	1	5	2	0	3,5	3	0	0	0	2,5	1
P27 - Makarska	3	4	2	2,5	3	3,5	3,5	4	3	4,5	1
P28 - Makarska	4	3	2	2	3,5	1,5	3,5	4	3,5	4,5	2
P29 - Krvavica	3	3,5	2	2	3,5	4	0,5	2	0	5	1
P30 - Bratuš	3	2,5	3	0,5	3	4	0	2	0	0	2
P31 - Promajna	3	4	3	3	2,5	2,5	1,5	5	2,5	2	1
P32	2	4	2	0	3	4	0	0	0	5	1
P33 - Baško polje	4	3	2	2,5	2	3,5	0,5	2	0,5	5,5	1
P34 - Baška voda	2	4	2	0,5	3	4	0	0	0	5,5	1
P35 - Baška voda	3	3,5	3	3	3	2	3,5	5,5	4	3,5	1
P36 - Baška voda	3	3,5	3	3,5	3	2	3	4,5	4	3,5	2
P37 - Baška voda	3	4	2	3	3,5	2,5	0	4,5	1	2	1
P38 - Brela	4	4	2	3,5	3	2	3	5	4	5,5	1
P39 - Brela	4	4	2	3,5	3	2	3	5	4	5,5	1
P40 - Brela	3	3	2	3,5	4	3	0	0	0	5,5	1
P41 - Brela	3	3,5	2	3,5	3,5	3,5	1	4,5	1,5	5,5	1
P42 - Brela	3	4,5	2	3,5	3,5	3,5	1	5	2,5	5,5	1
P43 - Brela	3	4,5	2	3,5	3,5	3,5	3,5	5	1,5	5,5	1

2.5. Biokovo Park of Nature

The mountain of Biokovo is very special due to its rare and various geomorphologic phenomena, as well as a number of rare, threatened and protected species. Natural Park stretches over the north-west part of the

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[4] Beaches marked only with number are pristine and natural beaches, outside of the urban areas.

mountain. It is divided, according to the natural and geological features, into three spatial units: coastal, top and continental[5]. The entire zone is rarely populated. However, the pressure of tourism is more intensive in the coastal part of the Park, which is at the same time easier accessible and more equipped for tourism facilities. The continental part is hard to access, but abundant in natural and historical sites.

Table 7: Criteria for the spatial evaluation of the Biokovo Nature Park

Criterion	Type	Min/Max	Parameter(s)	
1. Ambient values	III	max	P = 1.5	
2. Road accessibility	IV	max	Q=0.5	P=1.5
3. Waste pollution	IV	max	Q = 0.4	P = 0.9
4. Parking	III	max	P = 2	
5. Water supply	III	max	P = 2	
6. Availability of public toilets	V	max	Q = 0.4	P = 2.5
7. Biodiversity	III	max	P = 1.5	
8. Geomorphologic phenomena	I	max	-	
9. Historical / Architecture heritage	III	max	P = 2	
10. Trekking paths	III	max	P = 2	
11. Cabins and view points	III	max	P = 1.5	
12. Catering facilities	I	max	-	
13. Availability of sport and leisure facilities	II	max	Q = 1	

Table 8. Evaluation matrix of the Park units

	Criterion												
Unit	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**
Coastal part	3	2,5	3	3	2,5	3	3	2,5	2	1,5	2	2,5	3
Top	2	1,5	1,5	1,5	3	2	1	1,5	1,5	0	0,5	0,5	0,5
Continental part	1,5	0,5	0,5	0,5	2	1,5	2,5	2	0,5	0	0,5	0	0

Table 9. Criteria weights scenarios

Criterion/ Criteria weights scenarios	1	2	3	4
ENVIRONMENTAL		∑40	∑40	∑30
Ambient value	15	15	15	12
Waste pollution	4	13	13	11

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[5] Detailed information about the Nature Park Biokovo and ranking can be found in: Gunjača, I. (2010).

Biodiversity	10	5	5	3
Historical and architectual heritage	1	2	2	1
Geomorphologic phenomena	7	5	5	3
INFRASTRUCTURE		∑30	∑20	∑20
Road accessibility	14	15	10	10
Parking	13	10	7	7
Water supply	2	5	3	3
SERVICES & FACILITIES		∑30	∑40	∑50
Trekking paths	11	10	12	14
Cabins and view points	3	2	4	6
Catering	5	4	6	8
Sport & leisure	6	6	8	10
Public toilets	9	8	10	12
Total criteria weight	100	100	100	100

3. RANKING RESULTS

As far as the urban zone is concerned, the following can be considered as final ranking of settlements (i.e. the most stable ranks according to all criteria weights scenarios):

Zone 1: Brela

Zone 2: Baška voda and Makarska

Zone 3: Tučepi, Zaostrog, Podgora and Promajna

Zone 4: Gradac, Drvenik, Živogošće, Igrane and Drašnice

Zone 5: Podaca and Krvavica

Zone 6: Brist

The most sensitive to the change of weights are the settlements of Tučepi and Zaostrog. In fact, the former is more developed and equipped with infrastructure and tourism facilities, while the latter is still more natural. Thus, their rank varies depending on the distribution of the weights between criteria groups – if the environmental criteria dominate, Zaostrog gains higher rank; otherwise, in the case of the domination of infrastructural and tourism oriented facilities, Tučepi progresses.

As far as the beaches are concerned, the final ranking is the following:

Zone 1: Brela 1, Brela 2, Baška Voda 2, Baška Voda 3, Podgora 1, Zaostrog 1

Zone 2: Brela 6, Promajna 1, Makarska 3, Tučepi 2, Makarska 4, Brela 5, Tučepi 1

Zone 3: Makarska 1, Brela 4, Makarska 4

Zone 4: Baška Voda 4, Gradac 2, Drvenik1

Zone 5: Podaca 1, Drašnice 1, Gradac 1, Baško Polje 1, Igrane 1

Zone 6: Krvavica 1, Živogošće 1

Zone 7: Zaostrog 2, Podgora 2, Brela 3, Drvenik 2, Bratuš 1

Zone 8: Baška Voda 1, Podaca 2, Makarska 2, Podaca 3, P32

Zone 9: P24, P12, P13, P21, Brist 2

Zone 10: Brist 1, P18, P16

The sensitivity analysis is similar to the urban zone. In fact, the beaches in the middle of the ranking list (e.g. Makarska 1, Podgora 2, Bratuš 1, Drvenik 2, Živogošće1) change the ranking zone depending on the distribution of the criteria weights; those in small settlements progress with the importance of environmental criteria, while the local and resort beaches gain in rank with the increase of the weights of infrastructure and tourism facilities criteria.

In the case of the Biokovo Nature Park, the structure is rather firm and stable: the most valuable space for tourism is coastal part, top part follows, while the continental takes the end of the list.

Comparative analysis shows that the most valuable spaces (urban, bathing and adjacent protected area) for tourism and tourism development are located in the north-west part of the Riviera. Further to south, the space seems less occupied with tourism and urbanisation, is more pristine and preserved, providing therefore a basis for tourism development and diversification in offer in the future.

4. CONCLUDING REMARKS

Tourist spatial eco rent is an economic instrument that could be enable more sustainable spatial and also tourism management. The rent reflects the value of the space (and related resources) for the tourism and its development throughout the destination. This could be especially interesting in the traditional and mature tourist destinations such as Makarska Riviera. Indeed, the spatial units with highest ranks are the most valuable for tourism today. So, it seems fair to impose a rent to tourists there. It should be higher than the rent in the spatial units (urban areas, beaches and continental part of Nature Park) with lowest rankings. Naturally, values of particular spatial units would change in time, respecting the effects of the invested rent revenues, changes in tourism demand etc. Back to the theoretical debate on the ownership, spatial tourist rent would be an ideal instrument for destination management – the revenues could be invested in preservation of the unpolluted spatial units, as well as in improvement of the environment and its services in the developed parts of the destination. The ultimate goal should be balanced (spatial) development of the entire destination, with preserved nature and highly diversified and sustainable tourism offer.

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