Analysis of Ecotourism Development Potential in Protected Areas in the Republic of Croatia and Recommendations

Sanja Tišma, Željko Kramarić, Kristina Ozimec, Damir Demonja*

Original paper UDC 338.48:502.131.1(497.5) Received in December 2006

Apart from the traditional summer–seasonal tourism offer at the Adriatic coast and islands, other forms of sustainable tourist activities in the continental part of Croatia are not developed enough. Although important, the capacities in protected natural areas, national parks and nature parks are not sufficiently used.

In this article, besides the theory of ecotourism, world experience and standards related to tourism development in protected natural areas, the results of the survey on visitors' perception of the tourist offer in North-Western part of the Republic of Croatia (mountainous part of Gorski Kotar and Lika, including the whole of Velebit and Velika Kapela) are presented. It covers four National Parks (Plitvice Lakes, Paklenica, Northern Velebit and Risnjak) and the Nature Park Velebit. It is a typical karst area with all its characteristics. The results of the survey conducted during the summer of 2004 present in detail the visitors' perception of the national parks and the nature park as well as their quality and availability of the tourist offer. The recommendation regarding ecotourism development in protected natural areas in Croatia refers to the preparation of overall marketing for all protected areas and joint promotion at Croatian and international market.

Key words: Ecotourism, Croatia

1. Introduction

For centuries and even today natural resources have been considered as invaluable and irreplaceable values to man. The protection of different animal types and their habitats is being achieved by the establishment of real protected areas (Spellberg 1992). The first example of separating certain territory from the overall use happened several centuries ago, by the establishment of Yellowstone, the first world National Park, in 1872. Today's reasons for

separating certain territory are not only its protection and conservation, but also its sustainable use. According to International Union for the Conservation of Nature – IUCN, protected natural areas are defined as «a territory to which legislative measures of limited use by people of flora and fauna are applied» (Lucas 1992). Having that in mind, ecotourism as the key activity of men in protected area is defined as «responsible journey to the area of natural beauty where environmental conservation and biodiversity is achieved to the well being of local inhabitants» (Epler Wood 1996). The relationship between protected areas and ecotourism is determined by seven basic common principles:

Sanja Tišma, Željko Kramarić, Kristina Ozimec, Damir Demonja, Institute for International Relations, Zagreb.

- Avoiding negative impact which might harm or destroy the integrity or the character of the visited natural or cultural environment,
- Education of visitors on the importance of protection and conservation of natural resources,
- Realisation of direct income for the nature protection and protected area management,
- Possible economic advantages to the local community, i.e. inhabitants living in protected areas,
- Planning of sustainable tourist flows and possible growth of tourist activities for the advantage of national economy,
- Increase of domestic income by using facilities and services owned by the local community, and
- Increased care of the environment, from infrastructure applicable to the environment, reduced use of fissile fuel, conservation of local flora and fauna.

Modern scientific and expert literature recognises several definitions of ecotourism of the similar or somewhat wider scope. For example, Boo (1992) describes ecotourism as «tourism directed to nature which at the same time promotes protection and sustainable development» thus representing the elements of proactive protection and economic growth of the area with tourist activities. Honey (1999) extends the definition of ecotourism so as to use expected benefits of protected natural areas and financial benefits of local community for future environmental protection, including human rights and democratic movements. In the context of environmental and nature protection, ecotourism is often mentioned as one of the methods of Communitybased natural resource management - CBNRM) (Kiss, 2004) and represents a popular choice of agreeable activities for the conservation of bio-diversity and economic growth and development. Finally, it can be concluded that ecotourism as an activity unites vision of environmental conservation/protection and conservation of bio-diversity simultaneously giving incentives to local rural development based on the principles of sustainability.

Ecotourism in protected areas is usually related (especially in Europe) to relatively smaller and often scarcely populated areas in the development of which only a few residents and employees of the parks are included. Due to that, the funds for project financing in the field of ecotourism are limited, the expected revenue smaller and the results are, as a rule, visible only in the long term. Also, the idea of preserving natural beauty and biodiversity while achieving financial success from an ecotourism project is often incomprehensible and unsupported by the carriers of local development. The level of ecotourism projects

is still low, while the way of thinking and everyday habits of the local centres in which they appear is concentrated to small changes. The changes in the way the local population views its natural resources are minimal and they mostly remain dependant for a long time on the measures placed upon them by development policies without understanding and accepting the concept of sustainable development on the level of local rural communities.

In Croatia, ecotourism is being developed into the most attractive form of tourist service, especially in continental parts, rural areas and in the vicinity of national and nature parks. The development of ecotourism in protected nature areas provides a possibility of enjoying beauty, fresh air, physical activity, education and of viewing the wildlife in a natural environment (Pravdić, 2003), while taking into account its possible downsides if it is not conceived and controlled step-by-step (controlling the growth of the number of visitors and infrastructural interventions in the surroundings). The development can, on the other hand, help the preservation of the ecosystem preventing further erosion and maintaining the biological integrity by actively promoting education on the preservation of nature and strengthening the bonds with the local community and visitors.

2. Basic Indicators of the Condition of Croatian Tourism

The geographical territory of the Republic of Croatia has always attracted numerous tourists, adventurers and travellers by its diversity and untouched natural beauty. The vast Panonian Plain, mountainous forest landscapes of Gorski Kotar and Lika rich with diverse and unique flora and fauna offer different possibilities for mountaineering and spending creative, active vacations and recreation in natural surroundings (Tišma, Pisarović, Farkaš, 2001).

The Adriatic coast with numerous islands and rich historical and cultural heritage has been recognized globally and used as the unique destination in European and world tourist agencies (Tišma, 2005).

Beautiful and diverse nature of the Republic of Croatia and the traditional development of tourist activity across the Adriatic coast are a resource which should be carefully considered and provide the base for all future economic development. Economic and political conditions at the end of 1980s and the beginning of 1990s, especially with regard to the Homeland War, have had a great influence on the current condition of tourism as an economic field. The activities in tourism in the period from 1980 to 1990

are characterised by big tour-operators and low prices of tourist packages, i.e. mass tourism often with law quality of services, from accommodation to other parts of tourist offer. Moreover, the basic characteristics of tourist activities from that period are uncontrolled use of natural resources for the needs of tourism, often out of the limits of environmental carrying capacity at certain tourist destinations. The research from that period shows that the number of daily visitors of the Plitvice Lakes National Park was significantly higher than the carrying capacity, thus causing damage to natural environment.

According to careful consideration of the design of modern Croatian tourist offer today's activities are based on quality promotional activities, higher quality of service, accommodation and other tourist offer which must change the tendencies and consequences of mass tourism.

The fact is that the inherited mass tourism can hardly be fully avoided, but it is evident that people, potential customers and users of offered tourist services, use their spare time during vacations, weekends or holidays in a different manner. Today there is a new form of "educated tourists", therefore the notion of «mass tourism» is changed into something that might be called «quality mass tourism» (Pirjevec, 1998). All negative characteristics of mass tourism are still present, but have been mitigated by a better control of the use of natural resources and a better quality of offered services.

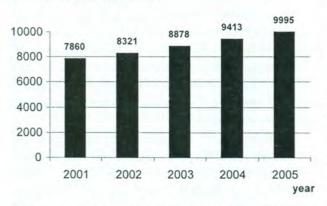


Figure 1: Tourists flow in the Republic of Croatia from 2001 to 2005

Some of the figures, apart from the above mentioned, are the base for strategic thinking on future development of Croatian tourist offer, i.e. almost 25% of basic capacities realise between 40% and 50% of all overnight stays in Croatia and the degree of average annual occupancy comes very close 40% (cca. 140 days annually). It must also be taken into consideration that tourism is an environmental pollution factor as well. Namely, independently of natural and antropogenous possibilities and quality of total and constructed resources which

might be made available for tourist exploitation, the total tourist growth in Croatia should, so to say "be kept under control", (Pirjevec, 1998) and divert the strategy and guidelines as much as possible from mass tourism and industry. Considering the role of tourism as an economic activity and its long-term development Croatia proves to be on the right path, especially with regard to the possibilities and growth of interest and demand in the field of ecotourism, particularly related to protected areas.

The analysis of available strategic documents, articles and public scientific and expert discussions show the following starting points to determine the vision and goals of future tourism development (Čižmar, 2000):

- Croatia has exceptional natural beauty and other tourism potentials of global value, but the existing tourist offer, due to inherited bad technological, managerial and marketing standards, should be thoroughly restructured and modernised;
- Shaping up of national tourist products must be done according to the concepts of sustainable development quality management;
- In order to increase general sectoral efficiency and especially commercial tourism, Croatia should create a space for real estate business (time share, sell and lease back, rent, etc.);
- Privatisation processes in Croatian tourism should end by taking over a dominant risk and responsibility for the property;
- Croatian independence presents the basis to create systematic conditions which will enable international competitiveness of Croatian tourism.

The vision for the development of Croatian tourism, also declared in the mentioned strategic documents, consists of the following issues:

- Sustainable tourist development,
- Croatia as highly valued tourist destination in Europe (between the 7th and the 10th position, according to the volume of physical transport and realised income).
- Systematic growth of Croatian tourist product and services quality.

Although there is a clear vision for the development of tourist sector, the manners for achieving the set future goals have not been agreed upon until today, due to different political, regional/local interests, depending on the micro or macro level of decision-makers (Tišma, 2005). Furthermore, the consensus regarding the implementation and operationalisation of strategic tourist goals has not been agreed upon, which should be the starting point for the future economic development of Croatia.

Institutionalisation at micro/regional level is one of the ways to eliminate the so far non-articulated conditions in the field of tourism activities often arising from the fact that the services offered in the Republic of Croatia are still in a transition process, i.e. that a consistent and efficient tourism policy in Croatia is still burdened with numerous limiting factors.

Tourism activity in Croatia should be redirected from tourist-catering monopole companies where the value was achieved by renting natural resources (Čižmar, 2000) to innovative, modern and globally acknowledged technologic—managerial solutions for the development of tourism at international market.

Much has been done lately through a number of legal documents and regulations trying to define the ways for the most efficient management and the best possible tourist offer of products and services. The obvious achievement and a step forward is the Strategic tourist marketing plan and Marketing plans for tourism development at county level. These plans help to enable the most efficient use of diverse natural resources and developmental potentials (economic and social) aiming at rising quality and increasing diversity of the tourist offer. Today, apart from the marketing activities, significant efforts are made to create different qualitative conditions enabling, among others, quick and comfortable arrival of tourists to their destinations, construction of different but quality carrying capacity, prolonged stay of tourists in a tourist destination and better offer which includes ecotourism in the continental part of Croatia, as differentiated from the summer tourism at the Adriatic coast and islands (Tišma, 2005). Thus, the organised ecotourism offer in protected areas gains its significance.

3. Nature Protection in the Republic of Croatia

The system of nature protection in the Republic of Croatia is defined by Nature Protection Act, adopted by the Croatian Parliament on May 20, 2005, which determines the system of nature protection and conservation of its values representing biological and landscape diversity. Article 2 defines nature as the basic value and one of the most important resources of the Republic of Croatia which is protected in accordance with this Act.

Nature protection is implemented through the conservation of biological and landscape diversity, protection of natural values of declared protected areas by bodies determined by the Act and recorded in the Register of Protected Natural Values, which apply to conservation categories (strict reserves, national parks, special reserves, nature parks, regional

parks, nature monuments, important landscapes, park-forests and monuments of park architecture), protected flora and fauna, including dead samples of protected species according to this Act and international contracts, their parts and derivates, as well as protected minerals and fossils.

The Act defines the national park as a vast, mainly unmodified area of mainland and/or sea of exceptional and numerous natural values with one or more conserved or slightly modified ecosystems primarily intended for the conservation of natural values. National park has a scientific, cultural, educational and recreational purpose. In a national park only activities which do not endanger nature are allowed, while economic use of natural resources is prohibited. According to this Act catering, tourist and recreational activities for the purpose of visiting and touring, as well as agriculture, fishing and traditional crafts are permitted in the national park.

Furthermore, the Act defines the nature park as a vast natural or partly cultivated area of mainland and/or sea with ecological features of international and national importance, with marked landscape, educational, cultural, historical, tourist and recreational values. Economic and other activities which do not endanger its features and its role are permitted in a nature park. The manner of performing economic activities and the use of natural resources in nature park are determined by nature protection conditions.

National parks and nature parks are designated by the Croatian Parliament based on the expert assessment of the State Institute for Nature Protection, which determines the values and management methods of the area proposed for protection. The Act also includes the confirmation of the authority in charge that the funds for the management of the protected area have been secured.

The public is informed about the proposal for the designation of the protected area while the proposed act and the expert assessment together with cartographic documentation undergo public hearing. The designated protected areas are recorded in the Ministry of Culture's Register of Protected Natural Values.

The measures and actions of environmental and nature protection inside protected areas are consistent parts of the following documents: physical plans, management plans and other regulations based on this Act, which determine the issues of environmental protection, conservation, improvement and the use of national parks, nature parks and other protected areas.

Protected areas are managed by public institutions. Public institutions managing national parks and nature parks are established by the Government of the Republic of Croatia. The means for the operation of a public institution come mainly from the government budget, county budget, the City of Zagreb, the town or the municipality; the income from the use of protected nature values; the income from reimbursements; other funds determined by the Act and special regulations.

3.1. The Development of Ecotourism in Croatian Protected areas

Although most visitors come to Croatia because of the Adriatic Sea, a significant increase in the number of tourists who visit the continental parts has also been noticed. Through that, the development of ecotourism has been recognised by the creators and bearers of Croatian development policy as a significant element in environmental and cultural education, especially significant for the protection of protected natural areas. This attitude is incorporated in Croatian Tourism Development Strategy for the period 2003-2010, where one of the strategic goals is permanent protection, implementation and respect of the high ecological standards, as well as a long-term and sustainable valorisation of tourist potentials. Sustainable usage, protection and development of natural resources are a conditio sine qua non of the long-term development of tourism in Croatia.

Since the concept of ecotourism is relatively new for the Croatian tourism sector, only in the recent years certain activities that can be considered as a part of ecotourism are being developed and promoted within the areas of national and nature parks.

One of the first researches of the tourism offer and the level of devastation of protected natural areas in Croatia was conducted in 1997. The research mainly included natural parks and included the number and type of visitors. The recorded number of tourists was about 651,000 in 1997, 80% of which were international visitors and the numbers varied distinctly from park to park depending on the infrastructural connections, the marketing representation of the park on national and international level and the appropriate services, such as hotels, cultural content, the catering offer, etc. The obstacles to an intensive development of ecotourism that were identified during the 1997 research are still, in a somewhat weakened form, present today. The most common problems are the following:

- Inappropriate protection of nature and control of the visitors within the park,
 - Insufficiently developed infrastructure,
- The lack of a systematically created tourist offer in the protected areas and the lack of cooperation with local and county officials,
- Problems with ownership laws and the privatization process,

- A flawed zoning concept,
- Urbanization and illegal construction within the parks,
 - The lack of human resources.
 - The lack of financial resources.

These problems are present in all national parks in Croatia. Recently, the development of management plans for the parks has been set in motion, with all components reviewed on a strategic level (Tišma, 2001). The basic problem during work is the lack of educated and capable management personnel who, along with the knowledge of biodiversity, also have management skills.

4. Case Study

Case study: ANALYSIS OF POTENTIALS FOR THE DEVELOPMENT OF ECOTOURISM IN THE NATIONAL PARKS: PLITVICE LAKES, PAKLENICA, NORTHERN VELEBIT AND RISNJAK, AND NATURE PARK VELEBIT

4.1. Reasons for Research and the Scope of Analysis

The tourism in the monitored karst area can be broadly divided in two main sectors: on the one hand, mass tourism is concentrated on the Adriatic Coast in the summer season, and, on the other, the ecotourism, where the main attractions are obviously the Plitvice Lakes National Park, with hundreds of thousands of tourists from all over the world. Lately there is also a significant niche of sport-related tourism in the area of National Park Paklenica, one of the most favourite destinations for the European free-climbers.

The present survey is focused on the development of the karst area tourism of the inner land of the Republic of Croatia, based on the natural and cultural heritage of the area. This typology of tourism is concerned by several definitions (rural tourism, "alternative" tourism, etc.), but since there are five protected areas - parks in the karst area that are mainly "responsible" for the tourist offer, the ecotourism was the key subject of the undertaken research.

The goals of assessing the current situation and proposing actions for ecotourism development are based on the following assumptions:

- Generally speaking, analysed karst area parks do not have (with the exception of Plitvice Lakes National Park) particular tourist attractions recognised in the past. In this sense the main strong element of this area is the valorisation of the natural phenomenon of karst, which gives a unique value to this area. - Ecotourism in the karst area must address the target groups that look at holidays as a journey aiming to experience specific landscape and real situations of life different from the "day-to-day" situations.

 Ecotourism in these areas is a part of local development process and the decision making process must involve the local community.

The resources on which the tourist offer is based cannot be only the traditional ones (a nice landscape and a good restaurant) but must provide added value to the tourist attractions through education on natural and cultural heritage, as well as its protection and sustainability.

Some of the key additional factors of ecotourism offer are originality and uniqueness of tourist attractions, especially those related to the local cultural heritage, richness and diversity of the offer as well as the development of environmental conservation awareness, appreciation of the local culture, benefits to local community deriving from ecotourism.

Apart from the positive developmental impacts, ecotourism activities in protected karst areas have some negative consequences on natural resources, which might be reduced and mitigated by active management of the parks in cooperation with the local community.

Based on the method of sustainable natural resources management related to ecotourism development in protected areas are the management of tourist flow, i.e. development of the system for the assessment of tourist carrying capacity and related monitoring system, support of the Park in the interpretation of natural resources to visitors and active participation of local community in planning and realisation of integral use of available resources.

4.2. The Methods Used

In the scope of the project "Karst eco-system conservation" during the summer season (June-September) 2004 a survey of the visitors of National Parks Plitvice Lakes, Paklenica, Northern Velebit and Risnjak and Nature Park Velebit was undertaken in order to obtain their impressions on the level of the tourist offer and the recognised organised ecotourism offer. The two questionnaires were prepared in cooperation with the Parks' staff and distributed to visitors in order to obtain a clear picture on tourists visiting the area and assess the target group frequenting the area. At the same time, the questionnaires served as the basis for the assessment of interesting tourist attractions, quality of offered services, impact of promotional activities and, in general, of the possibilities of the development of ecotourism in the karst area.

Questionnaire A had only few questions and was supposed to be filled in directly by the tourists without assistance. The basic goal of this questionnaire was to collect a high number of answers on some basic elements (identification of the target group, motivations for holidays, promotion efficiency and services used) in order to have a quantitative basis on which some general considerations on tourism flow could be set up.

Questionnaire B was much longer, and needed the support of the park staff to be filled-in. This questionnaire was more targeted on a qualitative analysis with the scope to estimate the customer satisfaction with the tourist offer in the Parks. The data collected provided the basis for a sample analysis of the different target groups, and for the assessment of the corresponding perception of the protected area offer with suggestions for improvement. Also, it was conceived as a tool to collect inputs on the perception of the destination before the arrival, the satisfaction with promotional material, information and services in the Parks.

Five key international tour-operators significant for Croatia were assessed by the method of interviews regarding their attitude towards ecotourism offer and information on the karst protected areas in Croatia.

4.3. Current Condition of Tourism Based on Natural Resources

It is a fact that ecotourism in a clean and preserved environment is becoming more popular, especially regarding the intensive urban development and the need of an urban person for a place of calm and relaxation. That is the basis of future development of Croatian tourism. The protected areas and ecotourism add a significant contribution to the development of society and help strengthen the permanent balance of natural and cultural heritage (Vidaković, 2003). The bearers of development and political decisions-makers on national, county and local levels are joined in their attempt to make possible the development of karst areas through joint activities, but they also agree that still there are certain inconsistencies in the predicted models. For example, although there is a general consensus to prioritize sustainable tourism and ecotourism, at the same time there are certain parties who have strong interests in the development of hunting tourism, hotel management and large scale tourist visits. However, the large scale visiting is not followed by the knowledge of the necessity that each visitor must protect and nurture the nature to the extent of his capability, especially in karst areas where the preservation of nature is their primary function.

There are two ground regulators which determine the boundaries of using a protected area for the

¹ Karst ecosystem conservation project - KEC financed by WB/ GEF (World bank/Global environmental Fond) and the Government of the Republic of Croatia.

activities which are not related only to their preservation and protection. The first determines the range and the allowed number of visitors and the second the special capabilities and evaluation of ecological capacities and the capacity of the zone of the basic phenomenon (Vidaković, 2003).

Protected area	2002	2003	2004
NP Risnjak	11,265	12,702	12,945
NP Plitvice Lakes	665,108	721,265	49,209
NP Paklenica	105,017	102,183	108,414
NP Northern Velebit	5,430	6,293	6,356
PP Velebit	493	14,884	12,497
Total	787,313	857,327	889,421

Table 1: Number of Parks visitors in the period 2002-2004 (sold entrance tickets)

National parks

are the most organized part of the protected environment, which enables a large number of visitors, respecting the principles of preservation, to get to know the nature and its laws, thus acquiring an understanding of the need for protection while resting and enjoying their unparalleled beauty. That way, the protected areas achieve their other primary function, which is education. National parks and nature parks own the most valuable and most attractive natural features, and tourism in such areas has a growing significance to a growing number of countries (Vidaković, 2003).

Although the national and nature parks in the karst regions were formed in the 1950s, tourist activity in the areas now encompassing the parks was well developed in the mid 19th century. But, since then, their development was slowed down by wars waged in these areas, the effects of which are felt to this day and will be present for some time in the future.

So far only the area around the Plitvice Lakes National Park has been intensively used in terms of tourism. The tourist valorisation begins at the end of the 19th century. Since the seventies of the last century, the main road connecting Zagreb (and Western Europe) with the tourist locations on the Dalmatian coast, led directly through the core of the National Park in direct vicinity of the lakes, thus becoming an easy accessible tourist attraction. With the construction of the new highway Zagreb-Split, the main traffic is now diverted out of the Park area, but it still goes through the central part of the karst area, which provides the park with new opportunities to reconsider the existing concept of mass-tourism and try to implement a more integrated, nature based and sustainable tourism in the area.

National Park Paklenica has a very interesting and important group of visitors, free climbers, which use the rocks in the Velika Paklenica canyon for climbing and usually stay in the area for about one week. This group forms a significant part of the visitors to the Park. A smaller group of visitors come to the Park to

watch protected bird species or just enjoy the scenery.

As it is visible from Table 1 the number of visitors of National Parks in the recent years is slightly growing. This follows the general trend of the increase of tourist flows in Croatia and to some extent the interest for ecotourism in protected areas. Large differences between the various parks are visible in the national structure of visitors. While the Plitvice Lakes National Park is visited mainly by foreign visitors (about 90%), parks like Northern Velebit are visited mainly by Croatian visitors (about 75%). The figures are very difficult to compare as every park uses its own methodology for recording the number of visitors.

This approach will soon be surpassed by the introduction of a unified system for protected areas management.

4.4. Results of the Survey

The survey of tourist perception of the karst area and data gathering have been carried out during the 2004 summer season in four National Parks and one Nature Park. The total number of 790 questionnaires of A and B groups were gathered during July, August and September (the overall number of collected questionnaires is 816; the mismatch is due to invalid replies in the questionnaire).

In general, most of the filled in questionnaires were of group A, which was much shorter. Only in the Plitvice Lakes National Park the number of B questionnaires B was much higher than A. This is mainly due to the work overload of staff and overcrowded offices at the entrance points during high season. This was compensated by a large number of B questionnaires collected by park rangers in the area. The frequency of filled in questionnaires responds very well to the actual seasonal movement of visitors in the parks.

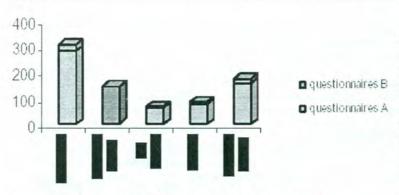


Figure 2. The number of filled in questionnaires per Park

The structure of park visitors reached by the questionnaires shows that, in general, a higher number of visitors come from abroad than from Croatia. This especially applies to National Parks Plitvice Lakes and Paklenica, where the number of foreign visitors is much higher than in other parks (i.e. National Parks Plitvice Lakes, 90% of foreign visitors).

The gender and age distribution shows a balanced level, although the sample size does not allow a more detailed interpretation.

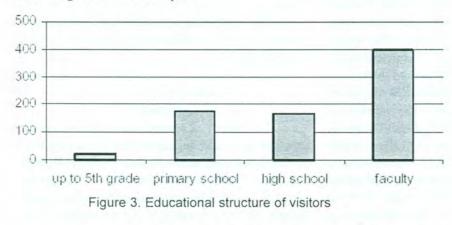
The educational structure of visitors shows a relatively high level of education among the park visitors. This can be seen as an indicator that the parks have a specific type of visitors with high level of knowledge, but also with specific expectations concerning the offer of the park.

Almost three quarters of visitors visited the respective protected area for the first time. 26% of visitors had already been in the park, some of them very often. This especially applies to National Parks Risnjak and Northern Velebit, due to Croatian mountaineers which come to these areas for frequent one day mountain hiking trips.

The visitors were also asked if the protected area was the main goal of their travel or if they included the park in a round trip or similar. The results show very even distribution of visits to the Park being the visitors' main goal and those being a part of the round trip.



Figure 5. Visit to the protected area as the first or second goal



These data have also to be seen under the aspect of a small sample. If the sample of the questionnaires in the Plitvice Lakes National Park had been bigger, the results would for sure show a picture more in favour to visitors that included Plitvice as a stop in a wider trip.

The park visitors were also asked if this visit was the first one to the area.

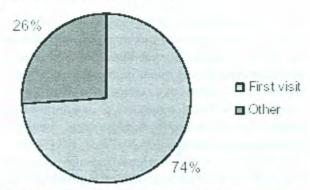


Figure 4. First versus repeated visits to the area

Very indicative results have been received from the visitors when asked about the motivation for their visit to the protected areas. According to the data in Figure 6, there are three main motivations for visiting one of the protected areas: contact with nature, walking and seeing cultural heritage, whilst gastronomy or adventure come very low on the motivation scale.

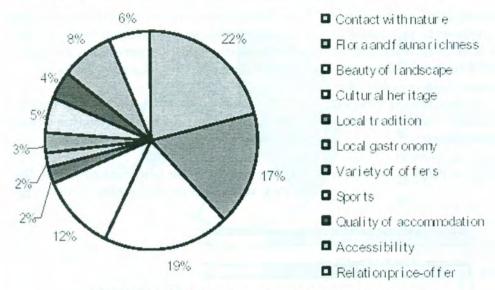


Figure 6. Motivation for the visit to the protected area

When asked how (by which means of information or advertisement) they heard of the Park, almost one half of the visitors declared that they were informed about the area by friends or relatives that visited the park before. This fact demonstrates the high importance of the oral promotion, which directly depends on the actual satisfaction of the visit. Very significant is the low number of visitors that heard about the Park from a Tour Operator (only 7%).

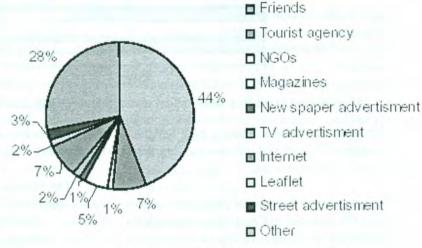


Figure 7. Sources of information on the Park

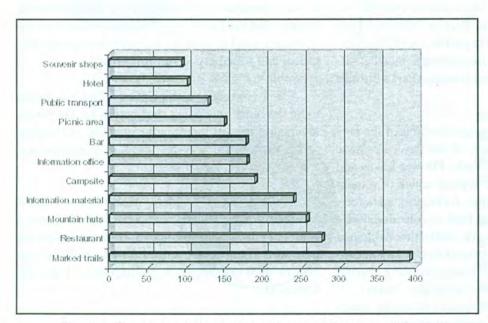


Figure 8. Services mainly used in and around the protected area

Visitors use a wide variety of services in and around the protected areas, such as marked trails, accommodation (camp, apartment, and private rooms), restaurants or markets and information points of the Park. Much less used services are guided walks, educational activities, agro-tourism, cultural heritage - museums, as well as internet points, which is mainly due to the lack of such type of offer in and around the protected areas, but also the lack of interest of the local community and economy.

One of the key functions of the questionnaires was to receive information about the satisfaction of visitors with ecotourism offer of the Park and the recognition of other Park's functions. They were asked if they had learned more, little or nothing during their visit and the results show that the Park personnel is still not systematically engaged in information and interpretation in general.

The results according to Parks are shown in Figure 9.

The overall results are very clear and provide an outline of the common elements that make the karst area a unique tourist destination, and at the same time highlight the differences among the Parks.

For example, the Paklenica National Park is, first of all, recognised as a beautiful landscape close to the Adriatic Coast.

The same element is recognised for the Nature Park Velebit, but the accessibility is worse; the

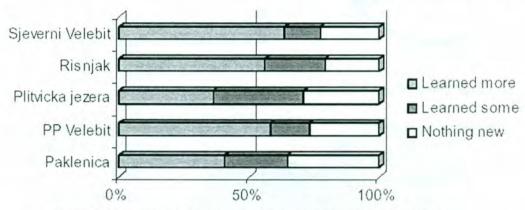


Figure 9. Visitors' satisfaction with the level of acquired information

The results in general show a high satisfaction of visitors with acquired information, but there is still room for improvement.

With regard to international experience in protected areas, the activities in Croatian karst areas such as establishment or modernisation of information points have intensified.

The relatively low numbers for National Parks Paklenica and Plitvice Lakes are very indicative, showing that most probably mass tourism reduces visitor satisfaction. Parks like National Park Northern Velebit, Velebit Nature Park or National Park Risnjak seem to match the expectations of their visitors better, since the motif for visiting somewhat differs from the one for visiting National Parks Plitvice Lakes and Paklenica.

Asked about the average duration of the stay in the Parks, the highest rate of one day visits have been recorded in National Parks Plitvice Lakes and Paklenica. This shows the typical image of a mass tourism excursion destination. As mentioned before, the Plitvice Lakes National Park is considered as a "must go" site (destination), while the Paklenica National Park with its vicinity to large tourism centres on the Croatian seaside is an interesting alternative for a one day excursion for holiday makers.

The perception of the quality of tourist attractions is estimated as high, medium or low.

need of other elements (like gastronomy and variety of activities) seems to be tackled by the Park.

The Plitvice Lakes National Park is also primarily appreciated for its landscape and biodiversity, and due to the fact that it is protected area. Other services, although more developed than in other areas, (ecotourism, gastronomy and accommodation) so not seem to be strong points of the offer.

The Risnjak National Park is well known for its main attractions (mountaineering site and natural beauty), but the low score of cultural values demonstrates the need to improve the promotion of the historical and social aspects of this area.

The Northern Velebit National Park has shown to be the most interesting destination for the nature lovers, but it must increase the quantity and quality of the ecotourism services, especially gastronomy and accommodation offer.

The common problem, except in the Plitvice Lakes National Park and somewhat in the Paklenica National Park, is the absence of the means of public transport. There is also a need for alternative possibilities of transport, such as the use of bicycles, horses, etc.

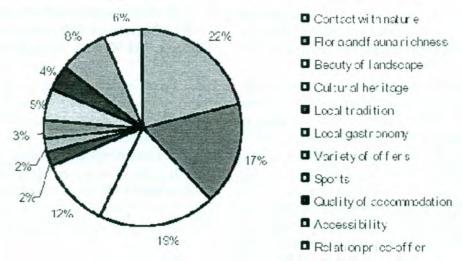


Figure 10. Best factors of tourist offer

The overall results of the key aspects of the tourist offer of all five karst area parks show a high appreciation of the visitors for the natural assets of the area, but a considerably lower appreciation for accommodation, gastronomy or diversity of offers.

In order to cross check this information, visitors were asked about the weakest points of the tourist offer of the parks. The results show mainly problems related to traffic, but also weak information provision and low level of other offers were considered to be very important.

The questionnaire also asked for suggestions about what the Protected Area Authority could do in order to improve the quality of services. Besides other suggestions, the need for access of disabled people was considered as one of the key management issues for the park authority, as well as the improvement of the facilities for children and the reduction

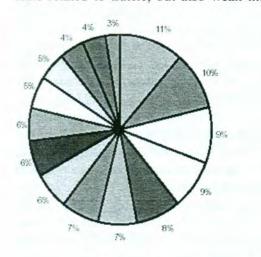




Figure 11. Weakest factors of the tourist offer

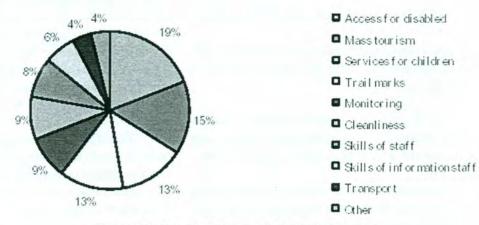


Figure 12. Proposals for possible improvements

of mass tourism. The improvement of staff skills and information was also considered as an important factor for quality services in karst protected areas.

Based on the key aspects of ecotourism development in karst protected areas and international experience, the estimation of international markets having a significant share in the Croatian tourism sector but lack information on ecotourism offer in karst areas has been made.

The analysis of eight countries was made, out of which The Netherlands and Germany were considered due to their respective well known interest towards ecotourism, as well as Austria, Italy, Czech Republic, Poland, Hungary and Slovakia due to their increasing presence at the Croatian market.

Slovenia was not considered in this analysis because there are many daily visitors with specific reasons for their visit and the main not being ecotourism in protected karst eco-systems.

Five key Tour Operators were identified as the prominent actors in the definition of the "image" of the karst area at the tourism market, i.e. which in their catalogues have some products related to the local offer.

The main findings of these interviews can be summarized as follows:

- None of the tour operators is specialized in ecotourism in Croatia; the seaside is the main destination.
- The target groups are various, but generally speaking the young people and the families are the main ones.
- None of the interviewed tour operators has a specific catalogue on nature-related products for Croatia.
- Croatia has a general positive "green-blue" image.
- Parks and protected areas are considered only as added value to the offer, not as the main travel motivation.
- The Plitvice Lakes National Park is considered as a "must go" tourist destination, but in no way as the protected area of high environmental value.
- The possibility to develop a partnership with local organizations that are setting up ecotourism products of high quality is appreciated.

5. Recommendations for Ecotourism Development in Protected Karst Areas in Croatia

Nature-related tourism is mainly based on natural values. At the same time these biological values, like biodiversity, rare and endangered plant and animal species, unspoiled habitats and natural landscapes tend to suffer from high tourism exploitation. It is therefore extremely important to make sure that areas under high tourist pressure are continuously monitored to ensure that natural and cultural values which make these areas attractive are not spoiled.

The existing tourist offer in protected karst areas shows several types of tourist products: coastal, sport, hunting tourism and hiking, along with, in recent years, visits to intact and preserved natural areas with the goal of viewing, admiring and enjoying the landscape, the wildlife and the existing events of cultural heritage.

Based on the analysis results, the karst areas evidently have significant potential for the development of ecotourism in protected natural areas, especially because of the diversity of natural and cultural heritage inside the parks. Certain preconditions for further development have already been established, but there are still serious obstacles for its development according to globally recognised guidelines for tourism development in protected areas. Primarily, there is a lack of appropriate general promotion of natural beauty and ecotourism services in those areas (not only in karst areas), which should be actively solved at local, county and national levels in order to make ecotourism prosperous in the interest of the entire state. Therefore, since the main resource representing the area/territory from natural and cultural aspects and high quality standards of ecotourism services add value and enable competitiveness growth, what is missing is a systematic promotion, but also active public participation, primarily of local residents, in the management of their development based on natural beauty for achieving higher standards and quality of living, with simultaneous prevention of negative impacts of tourist activities on the environment.

Therefore, the recommendation is to use natural beauty and rich cultural heritage of karst areas as inexhaustible development resources if it is managed in a sustainable manner. Additional promotion of ecotourism in those areas at national and international market is an obligation of decision-makers at

national, county and local levels. The development of the overall marketing concept for the development of ecotourism in all protected areas in the Republic of Croatia would be a significant step forward towards preservation of natural resources, application of high quality services and recognition of this type of tourist product at national and international market.

BIBLIOGRAPHY

Bralić. I. (2000). Turizam i nacionalni parkovi u Hrvatskoj. Turizam, 48(4):373-378.

Consulting Services for Biodiversity Studies, Development of Tourism Initiatives in Protected Areas, Report from the Second Round of Workshops: 21st February 2006 NP Risnjak, 14th March 2006 NP Plitvice Lakes, 15th March 2006 Nature Park Velebit, Ministry of Culture Republic of Croatia, Agriconsulting S.p.A., April 2006

Đikić, D. i sur. (2001). Ekološki leksikon. Zagreb: Barbat.

Economic Values of Protected Areas - Guidelines for Protected Area Managers, Task Force on Economic Benefits of Protected Areas of the World Commission on Protected Areas (WCPA) of IUCN in collaboration with the Economics Service Unit of IUCN, Adrian Phillips (Series Editor), Best Practice Protected Area Guidelines Series No. 2, IUCN – The World Conservation Union, 1998

Environment DG – European Commission, Sustainable tourism and Natura 2000 - Guidelines, initiatives and good practices in Europe, Final Publication, Vol. I, based on the Lisbon seminar, December 1999, 28 October 2000, SECA Société d'Eco-Aménagement

Enserink, B., & Monnikhof, R.A.H. (2003). Information Management for Public Participation in Co-design Processes: Evaluation of a Dutch Example. Journal of Environmental Planning and Management, 46(3):315-344.

Glavač, V. (2001). Uvod u globalnu ekologiju. Zagreb: Hrvatska sveučilišna naklada, Ministarstvo zaštite okoliša i prostornog uređenja, Pučko otvoreno učilište – Zagreb.

Interim Report of the Working Group: Guidelines for Sustainable Activities in Cultural Landscapes, Peter Ogden (chair), EUROPARC Expertise Exchange, Technical Support for Central and Eastern European Protected Areas, EUROPARC Federation, 1999

Kiss, A. (2004). Is community-based ecotourism a good use of biodiversity conservation funds? Trends in Ecology and Evolution, 19(5):232-237.

Lash, Gail. What is community-based eco-tourism? Available at: http://www.recoftc.org/site/fileadmin/docs/publications/Seminar_Proceeding/Lash.rtf

National Park Management Plans Guidance, Countryside Commission 1997

People for Mountains – Mountains for People: The Velebit Green Belt, WWF Mediterranean Programme Office, October 2002

Porteous, A. (1996). Dictionary of environmental science and technology. Chichester: John Wiley & Sons.

Pravdić, V. (2003). Sustainable development: its meaning, perception and implementation. Društvena istraživanja, Zagreb, 12(3-4):285-309.

Proceedings of the Training Seminar on Visitor Management in Protected Areas, Partnership & Exchange Programme, 30 No-

vember - 8 December 1996, Crossmead Conference Centre, Exeter & in Dartmoor & Exmoor National Park, England

Priručnik Zelenog plana u Hrvatskoj – Teorija i praksa, ZOE-Centar za održivi razvoj ruralnih krajeva, lipanj 2005.

Proceedings on the Workshop on Direct Marketing of Local Products, Rudolf Specht & Josef Maitz (editors), EUROPARC Expertise Exchange, Technical Support for Central and Eastern European Protected Areas, Vysoke Tatry National Park, Slovakia, 1-5 July 1998

Sustav posjećivanja i interpretacija okoliša s posebnim osvrtom na prihvatni kapacitet, Projekt Turistička revitalizacija NP «Plitvice Lakes», Povjerenstvo Vlade RH za vođenje investicija NP «Plitvice Lakes», Institut za turizam Zagreb, studeni 1997.

Tišma, Sanja. Co-operation and the mobilisation of financial resources for sustainable development in the Mediterranean, National Study – Croatia, UNEP/MAP/BLUE PLAN: Financing and Cooperation for Sustainable Development in The Mediterranean. 2. 2005. pp 1-42.

Tišma, Sanja; Pisarović, Anamarija; Farkaš, Anamarija. Ekološko I ekonomsko vrednovanje šuma u Republici Hrvatskoj: Metoda cost-benefit analize; Socijalna ekologija . 10 (2001) 1-2; pp. 115-133.

Tišma, Sanja; Pisarović, Anamarija; Farkaš Anamarija. Metodološka primjenjenost cost-benefit analize u ekonomskom vrednovanju prirodnih resursa, Prirodni zeolitni tuf iz Hrvatske u zaštiti okoliša, Tišma, Sanja; filipan, Tugomir; Farkaš, Anamarija (ur.). Zagreb, 2007.

Tourism Development Assessment for the KEC Area, Ministry of Culture Republic of Croatia, Agriconsulting S.p.A., April 2005 Travis, A. S. (2000). Ekoturizam ili održivi ruralni turizam: prednost imaju ruralna rješenja. Turizam, 48(4):365-372.

Vidaković, P. (2003). National parks and protected areas in Croatia. Zagreb: Environmental Protection and Tourism Scholarship Fund.

Vidaković, P. (1995). Prírodno-turističke odlike Like s posebnim osvrtom na općinu Lovinac. Turizam, znanstveno-stručni časopis, godina 43(1-2).

Zupan, S. (2000). Ecotourism in Croatian National Parks and Their PAN Parks Potentials. A thesis submitted to the Department of Environmental Sciences and Policy of Central European University in part fulfilment of the Degree of Master of Science. Budapest. Available at: http://www.panparks.org/index.nphases.

[http://www.geografija.hr]

[http://www.nn.hr]

[http://www.setimes.hr]