NATURE PARK MEDVEDNICA

THE STRATEGY AND ACTION PLAN OF SUSTAINABLE TOURISM

2014-2018

Public Institution NP Medvednica



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THE STRATEGY OF SUSTAINABLE TOURISM

1. INTRODUCTION

Within the project "Dinaric Arc Parks" whose carrier is WWF Med-Pan and that is implemented in eight countries of the region, a big emphasis is put right to the development of sustainable tourism in national and nature parks. One of the project activities of "Dinaric Arc Parks" in the period of 2012 to 2014 is the nomination of ten parks in region for the certificate for sustainable tourism (European Charter for sustainable tourism, EUROPARC).

Four protected areas in Croatia are the nominees for European Charter for sustainable tourism – Kornati National Park, Lake Vrana Nature Park, Lonjsko polje Nature Park and Medvednica Nature Park. Some of the commitments taken with European Charter nomination are funding of the Stakeholders Forum of Medvednica Nature Park and mutual construction of this Strategy of sustainable tourism in Medvednica NP.

Public Institution Medvednica Nature Park perceives its special position in the entire nature protection sector from the very beginning according to the surrounding of the capital city (Zagreb), almost one quarter of Croatian population and the structure of its visitors that was studied twice — in communication and education of the visitors. The activities dealing with communication of messages from nature protection, i.e. education, interpretation and promotion of natural and cultural values of Medvednica have a significant and constantly growing influence on the work of the Institution and formulation of systematic documents.

EU Natura 2000 Integration Project - NIP is also underway and it is one of the effective measures for the development of tourist function of the protected areas in the Republic of Croatia. It is carried out on the entire Croatian territory and includes numerous activities that also regard visits to the protected areas and investments in the development of their tourist function: from investment in visitors' infrastructure and whole visiting system to standardization of signalization and interpretation in the protected areas and the development of visual identity of all 19 aeras, etc. In 2012 in Medvednica Nature Park within that multiannual project the construction of the Bliznec Informational Center with Natura 2000 educational labyrinth has been realized. Documentation for the project of conditioning of tourist function of the Veternica cave is also in process. It will be realized by the end of 2014.

The Institution is also in the phase of projecting its first Visitors Centre Medvedgrad which will be realized through non-refundable aids of the EU structural funds.

According to the UNWTO data, almost one billion of tourist visits were realized in 2011. On the other hand, local, national and global trends show the continuous trend of growth of visits in protected areas and its further growth is estimated. The similar situation is in the countries included in the project Dinaric Arc Parks. Most of those countries show better position in the travel and tourism competititveness index for 2011. Dinaric Arc Parks also represent additional possibility of using different international funds for projects and many other benefits.

The revision for Medvednica Nature Park management plan is scheduled in the end of 2014. The making of this Strategy will facilitate that process on a large scale because, except of considerate tourism developmet, it also contemplates monitoring, education and interpretation and intensive communication with stakeholders within and outside borders of the protected area and their involving in the management of the area.

Taking everything into consideration it is the right moment for the making of the first development strategy and founding of the Forum of all stakeholders of Medvednica Nature Park who took part in its making and other numerous activities we have taken in the process for Charter by now. The newly founded Forum of the stakeholders that notes members outside of the park area will certainly improve the tourist function of this Park, but also protection and preservation of natural and cultural resources that form the basis of its tourist activity.

Legislative frame of management of the protected area

For the first time Medvednica was protected in 1963 when eight special forest vegetation reserves were declared. Nature Park was declared in 1981 in the area of 22 826 ha. In February 2012, by the Law of Amendment of Declaration of Medvednica Nature Park, the borders of the Park have been changed and nowadays the area of the Park consists of 17 938 ha.

Table 1: Public data of Medvednica Nature Park declaration

Name of the protected area	Medvednica Nature Park
Date of declaration	May 29, 1981
Act of declaration	Act on proclaiming western part of Medvednica Nature Park (OG 24/81)
	Law on Amendments to the Law on proclaiming Medvednica Nature Park (OG 25/09)

Source: Management plan Nature Park Medvednica

Legal basis for the declaration and management of the protected area includes two laws: the Nature Protection Law (Official Gazette 70/05 and 139/08) and the Law of Public Institutions (Official Gazette 76/93, 22/97, 47/99 and 35/08). According to the Nature Protection Law, the Public Institution Medvednica Nature Park governs Medvednica NP and other protected areas on the territory of the Park, that have a border with them or that are situated directly by its border. This public institution was formed by the Regulation of the Government of the Republic of Croatia on September 3, 1998 (Official Gazette, 118/98). Surveillance, biodiversity protection and all the public functions of the Park need to be in accordance with the Book of Regulations on Internal Orders (Official Gazette 03/02) by which questions of protection, preservation, improvement and usage of the Park have been determined.

Table 2: Public data of the Institution that manages the protected area

Name	Public Institution "Medvednica Nature Park"
Date of foundation	September 3, 1998
Document of	Regulation of foundation of Public Institution "Medvednica Nature Park"
foundation	(Official Gazette 118/98)
Address	Bliznec bb, 10000 Zagreb, Croatia
Phone number	+ 385 1 4586 317
Fax	+ 385 1 4586 318
e-mail	park.prirode.medvednica@zg.t-com.hr
Web address	www.pp-medvednica.hr

Source: Management plan Nature Park Medvednica

Table 3: documents that are significant for the Public Institution and management of the protected area

The Statute of Public institution "Medvednica Nature Park", January 2008
The Book of Regulations on Internal Organization and Way of Work of Public Institution
"Medvednica Nature Park", June 2010
The Book of Regulations on Internal Orders in Medvednica Nature Park (Official Gazette 03/02) -
in the process of revision
Physical plan of the area of special characteristics of Medvednica Nature Park – in making

Source: Management plan Nature Park Medvednica

Public Institution "Medvednica Nature Park" has 16 employees in five Services and Director's office (15 upon government budget and one upon private income).

The Institution is the carrier of all the activities dealing with process of obtaining Charter for sustainable tourism. It implies organization and coordination of the work of the Stakeholders Forum of Medvednica Nature Park and making of the Strategy of sustainable tourism, but also other activities that come out of the Stakeholders Forum such as for example the making of the Protocol for Crisis Situations, the Stakeholders Forum of Medvednica Nature Park has been funded in June 2013 and

since then nine meetings were held (January 2014). The Institution based the work of the Forum on building trust by small steps, taking over management and responsibility for the elimination of smaller or bigger problems that the stakeholders had in their business. Smaller projects whose aims and expected results were useful for everyone were created mutually, including for the visitors of Medvednica Nature Park. The Stakeholders Forum actively participated in making of the proposal of the Strategy of sustainable tourism. All together 70 different institutions participated in Forum work with 109 of their participants. Cooperation agreements for Charter and Strategy implementation signed 22 institutions.

Upon the proposition of the Public Institute "Medvednica Nature Park" the Governing Council of the Stakeholders Forum has been founded in December 2013.

The management body is consisted of the President of the Forum and its four vice-presidents that rotate every year on the presidential position.

The Director of the Public Institution "Medvednica Nature Park" Snježana Malić Limari, MrSc, is also the president of the Governing council of Stakeholders Forum in its first year of duration. Mr Reno Fleiss, Ms Živana Rubak, Mr Miograd Vlačić and Mr Darko Slukan are vicepresidents of the Management Body.

Stakeholders Forum of MNP meets at least once a month and the methods of communication are meetings, workshops, e-mails and phone calls. In this phase of constitution of Forum's work it has not gone out to public. However, the communication strategy that is a component of the Strategy of sustainable tourism anticipates and stresses it out.

2. CURRENT SITUTATION

2.1. SOCIO-ECONOMIC OVERVIEW

Population and settlements

Human settlements on Medvednica existed in prehistoric period and the Middle Ages. The rural way of life and housing took place from 17th to 19th century. After the construction of railway in the second half of 19th century, Zagreb mostly expanded to the east and west and later on southern of the River Sava. It helped the directing of Zagreb towards preservation and protection of Medvednica, later including the whole area determined by the nature park (City bureau for physical planning Zagreb, 2008). By the change of the borders of the nature park in 2009, 33 614 inhabitants lived inside the borders of Medvednica Nature Park. Estimated annual rate of population growth took out 0.4-0.8%, depending on the area of the Park. After the reduction of borders the total area of the Nature Park consists of 28 settlements, i.e. parts of the settlements. According to the population census from 2001 there are 7 417 inhabitants on the area of recent borders of the Park (City bureau for physical planning Zagreb, 2008).

The major part of the Park area (total: 17 938 hA), 40.7% or 7 308 hA belongs to Zagreb area. The following ones are Zagorje (or also called Stubica) area – 5 941 hA or 30.6%, Bistra area with 4.303 ha or 22.5% and Sesvete area with 1109 hA or 6.2% of the Park area (City bureau for physical planning Zagreb, 2008).

- The Bistra area of the Park represents the ultimate west part of Medvednica stretching over Stubica Road, from Podsusedsko Dolje to Stubičke Toplice. The largest settlements of this area are Gornja Bistra and Jablanovac. It is an agrarian area with loads of ploughland and its population is increasingly inclined towards Zagreb.
- 2. **The Stubica area** within the Park territory has somewhat difficult conditions for settlement development except for the plains because it is the more arduous part of Medvednica. The population is concentrated in Donja Stubica and Stubičke Toplice. The places in the municipality of Gornja Stubica have kept its traditional and rural nature.
- 3. **The Zagreb area** of the Park is almost completely unsettled, except for 20 inhabitants in Gornia Dubrava district (Jakopovići).
- 4. **Sesvetsko prigorje** southeastern part of the Park comprises Planina Gornja and northern, unsettled parts of Kašina and Planina Donja. It is mostly rural and less urbanized area.

It is estimated that the number of inhabitants of the Bistra area still grows by the annual rate of 0.81%, followed by the Sesvete and Zagreb areas. The demographic growth rate is also expected for the Stubica area, especially in rural settlements.

Situation and landscape units

Medvednica is situated, as a separate mountain massif, immediately above Zagreb. It is an entity rising between the river valleys of Sava, Krapina and Lonja rivers. (picture 3)

There are two distinct landscape entities: the forest complex and the accessible area with settlements. Forest complex is mostly, continuous, with small sections of meadows. A large number of mountain streams in deeply cut valleys and the areas with karst contribute to diversity of landscape of the forest area. The access area has partly retained the character of foothill landscape in which urban, suburban and rural settlements intersperse with the surrounding agricultural areas and separate groves (DZZP, 2004). The western part of Medvednica was proclaimed nature park in 1981 (OG 24/81).



Picture 1. Situation of Nature Park Medvednica

The basic values of this space, which determine its use and management, primarily concern forests. Within the spacious forest complex (78% of the area of Nature Park) the most valuable sites are singled out as forest reserves (996,71 ha), while other parts of forest are assigned to recreational zone (Institute for Physical Planning and Zoning of the City of Zagreb, 2008). Medvednica has exceptional value for the city of Zagreb from the ecological (the protection of soil from erosion, preventing torrents, impact on climate, quality of air and water), aesthetic, recreational and touristic point of view (Institute for Physical Planning and Zoning of the City of Zagreb, 2008).

In 1981 the Parliament of the Republic of Croatia passed the Act on Proclaiming Nature Park Medvednica, and the Government of the Republic of Croatia instituted the Public Institution "Nature Park Medvednica", which started to operate in the proper sense in 2000.

Climate

In comparison to the surrounding flat country Medvednica is an "island", with more precipitation, lower temperatures, larger amount and duration of snow deposit. The area of Medvednica is in the temperature zone in which the air temperature descends for 0,5 °C per 100 m. (DZZP, 2004).

The average annual air temperature is 6,2 °C, while in Zagreb it is 11,4 °C. The coldest month is January with the average monthly air temperature of -3,1 °C. The warmest month is July, with average temperature of 15,2 °C (Institute for Physical Planning and Zoning of the City of Zagreb, 2008).

2.2. NATURE VALUES IN NATURE PARK MEDVEDNICA

The assessment of state of natural values in Medvednica Nature Park

Medvednica's biodiversity is one of its greatest characteristics. It is manifested through the diversity of habitats, species, landscapes and ecological systems. The Park is situated quite nearby the City of Zagreb and is exposed to numerous pressures and threats, however it represents a valuable area that needs to be protected not only for nature components preservance, but also because of many human interests.

There are 27 registered habitat types according to the National Habitat Classification in Medvednica Nature Park. Eight of them have been declared Natura 2000 Habitats. The number of plant species (1205 species) shows not only the good habitat preservance, but also the richness of flora. Forests and forest communities constitute a fundamental phenomenon of Medvednica Nature Park. There are eight special forest reserves in the Park that were declared localities of valuable forest communities in 1963. In them forest management wasn't maintained, so their revalorization needs to be conducted in the near future. According to the Ordinance on the proclamation of protected and strictly protected wild taxa (Official Gazette 99/09), 134 plant wild taxa that can be found on Medvednica are strictly protected and 235 are protected. There is a relatively large number of species named in the Red Book of Vascular Flora in Croatia that are also found on Medvednica. Four species are critically endangered (CR), ten species are endangered (ER), 26 species are sensitive (VU) and the status of 25 species is unknown due to the lack of data. According to the park area the number is relatively large and it can be credited to the prosperous status of the habitats.

State-owned forests of Medvednica are actively managed by Croatian Forests, while the private forests are managed by private foresters. Recently there is a larger number of private organizations and their members that mutually govern their forests. Private forests take part of 40% of the park area and their management is worse and improper. They show many problems that will be tried to be diminished throughout expanded communication with private foresters and improvemet of their knowledge of management in the next five years of the work of the Public Institution. In late 2013 a proposal for the IPA "Management in private forests" project has been approved to the Public Institution in Natura 2000 areas. It should start in 2015 as co-submitter of request to authorize funds. In spite of the large percentage of forest habitats, other types of habitats (meadows, grasslands, subsoil, orchards, vineyards and rural areas) should not be neglected. Numerous water habitats (80 creeks and 200 wellsprings) should especially be set out because they are endangered with human activities, above all with wastewater problem, channelization and retention construction. Numerous water organisms show the quality of water and they should definitely be included in further activities of a more detailed research of water system, their flora and fauna and regular water analysis so that the effective protection measurements could be conducted in the implementation of their management. Among other habitats, it is important to mention subsoil habitats that count around 60 speleological objects (caves) that are mostly closed for public, except for Veternica Cave that is in touristic function. Grassland habitats are mostly endangered by succession, but rare dry continental grasslands on forest edges are excerpted localities of high biodiversity. Grasslands of the eastern part of the Park on the wider Čučerje area (Vejalnica - Krč area) are on the list of Natura 2000 localities as a habitat of Natura 2000 specie Anemone sylvestris and some orchid species.

Diverse habitats on Medvednica (forests, bushes, meadows, deforestated areas, upland creeks and others) and altitude layering give home to different fauna. However, expansion of the Zagreb suburbia, urban centres and communication drastically changed those habitats, but numerous animal species (some of them are endangered or protected) still live there. Recent rich fauna is a fact that contributes that habitats of animal species are still of good quality with satisfying conditions.

Usual forest species of mammals are widespread on Medvednica: doe, wild boar, fox, badger, weasel, European pine marten, beech marten, skunk, wild cat, hare, grey dormouse, hazel dormouse, a variety of other "small mammals" (rodents and insectivorae) and bats. There are 23 species of bats on Medvednica and all of them are strongly protected. Some of them live in caves (Veternica cave is the most examined of them), while other relate to the forest and their survival depends on the forest conditions. The Medvednica area is included into Natura 2000 Network proposal due to eight bat species. There are also 96 bird species of forest habitats assessed by a recent research in the Park. The bird fauna comprises a large number of song-birds, Piciformes, hazel grouse, a couple of vulture species, owls and other species. All the species of amphibians and reptiles are protected by law, but only yellow-bellied toad (*Bombina variegata*) is a Nature 2000 specie that will need to be followed within a framework of national monitoring. Among the fish species caught in all of the 13 creeks on the

territory of the Park, there are eight autochtonous and three alochtonous species (rainbow trout, Prussian carp and silver carp) that have presumably escaped the nearby fishponds. According to the Ordinance on the proclamation of protected and strictly protected wild taxa (Official Gazette 99/09), a target specie of the Natura 2000 network Danube barbel (*Barbus balcanicus*) has the status of strictly protected wild taxa, while schneider (*Alburnuides bipunctatus*), bullhead (*Cottus gobio*), Danube gudgeon (*Gobio obtusirostris*) and brown trout (*Salmo trutta*) have the status of protected wild taxa. The invertebrates that need to be mentioned are butterflies with Natura 2000 species *Lyacaena dispar Phengaris arion*. Furbydryas aurinia and Lentidea morsei. Richness of heatle species

dispar, Phengaris arion, Euphydryas aurinia and Leptidea morsei. Richness of beetle species (Coleoptera) mirrors preservation, quality and diversity of a habitat and is widely used as an indicator of state of an ecosystem. 43 species of ground beetles (Carabidae) have been registered through several forest habitat researches, along with 13 species of other beetles among which stag beetle (Lucanus cervus), the Rosalia longicorn (Rosalia alpina), the hermit beetle (Osmoderma eremita) and the longhorn beetle (Morimus funereus) belong to the Natura 2000 species. Species that indicate prosperous state of the environment are outspread in the macroozebenthos of Medvednica creeks. Researches of the creek fauna showed that exponents of Ephemeroptera, Crustacea, Oligochaeta, Trichoptera and Plecoptera orders live in Medvednica. There are also some endemic arthropod species in creeks. The stone crayfish (Austropotamobius torrentium) is enlisted in Annex II of the Habitats Directive. Not only arthropods live in creeks, but also endemic snail species. The analysis of the material collected during speleological researches in Veternica Cave has assessed 56 taxa of snails with certainty by now.

By the last list of recommendations of pSCI areas according to the Habitats Directive, State Institute for Nature Protection has proposed Medvednica Nature Park as Natura 2000 area with particular Natura 2000 potential species and habitats with 20 animal species, 23 plant species and 8 types of habitats. By Natura 2000's Ordinance on Ecological Network in September 2013, Medvednica Nature Park has become a member of that network and in the following years researches and monitoring will be centered to the target species and habitats. Undoubtedly, other species relevant for specific areas should not be neglected and other priority / endangered / rare / endemic species of high importance for Medvednica should be determined. Additional researches on them should be conducted on the basis of Red Lists, Red Books, by the IUCN categorization and signed international conventions. It is also very important to note that Medvednica has not become a SPA area by the Birds Directive, but it does not diminish the richness of its ornithofauna. In the future researches and monitoring of the state of both protected and rare and common bird species will be planned.

The problem of the distribution and spreding of the areals of invasive and alochtonous species is recognized as a big threat within the Park. Those alochtonous species endanger autochtonous flora and fauna and cause violation of the original ecosystem. Some of them also represent a great threat to human health (e.g. *Ambrosia artemisiifolia*). According to the large number of visitors and in the aim of their health preservance, the Public Institution will identify the distribution of alien and invasive species in the Park.

2.3. CULTURAL AND HISTORICAL SIGNIFICANCE OF MEDVEDNICA NATURE PARK

The assessment of state of cultural and historical values in Medvednica Nature Park

Natural and cultural-historical significance of Medvednica are mutually caused and interlaced.

The numerosity of archeological sites and localities is a witness of long-term human presence on the Medvednica mountain. There are more than 20 archeologic sites that have been recorded on the territory of the Park by now. The remains of material heritage from prehistory to late medieval age have been found on them. Abundance of material cultural heritage has resulted in over 60 registered cultural goods on the Park area. The Study on protection of cultural goods (City Institute for the Conservation of Cultural and Natural Heritage, 2003), a basis developed for the needs of the Physical plan for areas with special characteristics of Medvednica Nature Park, has noted the elements of cultural and historical identity of places that are worth of preservation although they do not have characteristics of a cultural good, so those values are enlisted on the list in appendix.

The oldest proof of human presence on the Medvednica mountain was found in Veternica Cave – numerous stone artefacts that were built during Paleolithic (around 43 000 BC) and were made and used by Neanderthal hunters of the Mousterian culture. The arms and tools from the Late Stone Age were found in other parts of Medvednica: in Vidovec, Kraljev vrh, Stubica and beside Marija Bistrica.

The waves of new culture change stone with metal and form the basis of the Bronze Age and the following Iron Age. In that era human beings started to use copper and bronze for arms and tools manufacture. The most famous finding of that age is an axe made of copper (so-called *kelt*) found on Medvedgrad and dating from the 12th or 11th century BC.

From the 1st to the 5th century AD the territory of Medvednica, such as entire Middle Croatia, were the part of the Roman Empire. After large battles in the last decades of the BC era, the 1st century AD peace finally dominated. A legal state functioned, settled border (*limes*) was strong and it was possible to live outside of the fortified settlements. The Romans chose rich lowlands and established their settlements like Šćitarjevo and Stenjevec. Graveyards have been found in other parts of the sole of Medvednica and they indicate the existence of plentitude of small settlements. Romans took rock that was used for the construction of settlements on Medvednica. At least four Roman quarries have been recorded: Bizek, Vrapče, Črna voda near Markuševec and Čučerje. Numerous altars dedicated to important Roman gods Jupiter, Silvanus and Hercules have been found in all of those quarries.

During that period excellent Roman road constructors built the entire road network on the Zagreb area. Two most important roads passed the Medvednica mountain from the east and west and connected the middle (Dalmatian) and Panonian part of the Empire.

In the 3rd century AD attacks of the Barbarian tribes became more often. In the 3rd and 4th century Romans started to retreat to inapproachable places from which it was much easier to defend from attacks of the enemies. The most well-known settlements of that type on the Medvednica slopes were Kuzelin near Donja Glavnica and Cikov Gradiček near Markuševečka Trnava. It is presumed that the settlement on Tepčina špica also derives from that period of time. Along with Kuzelin it served for surveillance and protection of probably the most important Roman road that connected Panonian and Dalmatian part of the Empire (the road Kašina – Marija Bistrica that passes over the Laz notch).

Romans also used natural shelters on Medvednica. Apart from applied Roman objects, the coins of Roman emperors Valentianus the Second, Gratianus and Theodosius the First from the 4th century AD were found in Veternica Cave.

There is few evidence of human presence on Medvednica in the Early Middle Ages. The oldest medieval finding is a warrior sword found in a grave in Podsused. It dates from the beginning of the 9th century.

The name "Medvednica" was mentioned in historical resources for the first time in 1145 in the Golden Bull of Bela the Third in which the king donated his property on the mountain to Gradec. Bela the Fourth donated his forest holdings to the citizens of Gradec and the king Lewis allowed salt digging in Slani potok in 1345.

The 13th century was marked out as the time of outrageous attacks of equestrian hordes from the East. Pedestrian feudal army could not resist those attacks and the inhabitants again searched protection in arduous parts of the mountain. During that period three fortifications were built on Medvednica: Medvedgrad in the middle part, Susedgrad in the western part and Zelingrad in the finite west part of the mountain. That fortification system stopped the breach of the Ottomans to the west.

In the Middle Ages life was concentrated in feudal towns-fortifications such as centers of Medvedgrad (in the 13th century) and Susedgrad-Stubica feudal possessions (in the 14th century) and in the settlements in their subterrains. It was the time of the first mentions of villages that nowadays exist on the slopes of Medvednica (mostly related to churches and parishe): Čučerje, Donja Stubica, Mikulići, Marija Bistrica, Bistra, Vrapče, Podsused, Markuševec, Vidovec and Brdovec. Their residents had to cultivate fields and vineyards, exploit forests and work in mine fields and quarries in order to pay to the noblemen and aristocrats to whose military care they belonged to.

The lifestyle of this area completely changed after the danger of the Ottoman attacks ceased. Numerous noblemen left military service and started to live on their family assets. They built manors, castles and villas with beautiful parks such as the Kulmer castle in Šestine, the Pongratz villa in Mikulići, the Junković manor in Gornji Stenjevec, the Oršić castle in Gornja Bistra, the Golubovec castle, the Thauszy villa and the Ružić villa in Vugrovec and others. In the beginning the life in those castles and villas had been quite modest, but with time they became more dazzling and luxurious. Soon they became centers of economic, social and cultural power.

In the mid-19th century Medvednica received its recognizable recreational-tourist function for the first time. The first wooden pyramid was built on the highest peak of the mountain in 1870 and it represented the first climbings' object in the history of Croatian mountaineering. Numerous trails and climbers' lodgings were founded and in the late 19th century the Sljeme road was built.

Between the two World Wars tourist-recreational function of the area intensively developed. Climbers' lodgings Runolist, Željezničar, Red Cross home, Union home Glavica and Scouts' home (nowadays Apartment house "Snow Queen").

The first ski jumping hill was constructed in 1934. In 1935, after the first climbers' lodging was completely destroyed in fire, "Tomislavov dom" was built on today's location. The majority of climbers' lodgings were built after the Second World War – Puntijarka, Grafičar, Risnjak, Lipa and others and the first ski slopes were fixed (Crveni spust or the Red slope in 1946). Ski chairlift was constructed in Panjevina and a big cable car from the Tunnel was built in 1963. In that way sports and recreation have become one of the significant characteristics of the Medvednica area.

3. TRENDS

3.1. IN TOURIST MARKET

The Strategy of Tourism Development in Croatia by 2020 has listed a couple of **global** qualitative megatrends i.e. movement in tourist market that determine the competitiveness of tourist destinations in a large scale.

- **Political surrounding** in the sense of safety of the tourists is still the most important advantage, whereas Croatia is considered a safe country
- **Economic surrounding** in the sense of standard increase in so-called BRIC and MIST countries that brings the inclination towards tourist travels
- **Social surrounding** in the sense that by development of the country, standard and education tourist travel becomes an emotional need more often
- Legal surrounding that brings the regulation of this branch, for example the implementation
 of standards and certificates whose aims are the protection of the resources, the protection of
 consumers etc.
- environment and nature are of enormous value for tourism because they are fundamental resources and tourist branc will incline towards green concepts – from the level of services to destination level
- **technology** in the sense of continued process of rapid development of information and communication technologies and further strenghtening of the Internet as the distributing channel

The Strategy of Tourism Development in Croatia by 2020 is focused upon the optimization of tourism development close to the nature in protected areas, as the increase of the quality, extent and type of tourist products and services. It also aims towards expansion of the physical distribution of new products from the overloaded coastal area to the inland of Croatia which is insufficiently developed in tourist way.

3.2. Zagreb as a tourist market in the proximity of the Park

Medvednica Nature Park is situated in the mere surrounding of the capital city of Croatia, Zagreb. The survey of visitors taken in two occasions shows that 99% of the visitors come to the Park from the proximity, especially from the City of Zagreb. The natural sequence is to analyze the trends on the Zagreb tourist market. Although Medvednica is mostly visited by domestic visitors whose main motives are relaxation and recreation, trends that are actual in the world as in Medvednica Nature Park are the increase of health and benefit care which corresponds to active stays in nature. Nowadays tourists are more demanding and ask for more in the aspect of services and products offered to them. The occasion to increase the satisfaction of domestic and foreign visitors (except by preservance of natural and cultural value) is the interpretation in its entire plentitude of resources and methods that are available. Apart from that aim, it is possible to accomplish the increase of awareness of necessary protection and fundamental values of the Park, support of the Institution and work by volunteering, financial resources and political support of the sector by well-planned interpretation.

Zagreb TOMAS is included in the the Strategy of sustainable tourism and because of that fact by former research of visitor structure it records a relatively small number of foreign visitors. On the other hand, the City of Zagreb records large and continuous increase of foreign visitors. By creating different facilities, better and mutual promotion and marketing of the Park as one of the possible destinations, it is possible to attract visitors to the Park and prolong their visit in Zagreb by use of additional attractions in close vicinity of the city. Veternica cave, Zrinski mine and Medvedgrad are tourist

attractions that still record smaller number of visitors anually than needed for their optimal sustainable use.

The survey "TOMAS Zagreb" (Attitude and spending of tourists and visitors in Zagreb) is centered to characteristics of Zagreb's tourist demand. It was conducted in 1998, 2003, 2005, 2006, 2008 and 2012 in collaboration with the Tourism Association of the City of Zagreb.

The survey "TOMAS Zagreb" (Attitude and spending of tourists and visitors in Zagreb) follows central characteristics of the city's visitors (of those with overnight stay in commercial accomodation, but also of those in one-day visit), their attitudes towards numerous elements of Zagreb's tourist offer and expenses that were realized in Zagreb.

Continuous TOMAS surveys in Zagreb show changes and follow trends of tourist offer in Zagreb. The most expressed trend is the one that speaks in favor of positioning Zagreb as a destination for short city vacation.

"TOMAS Zagreb" says that Zagreb needs to provide an unforgettable experience, surpass the expectances and give the feeling of the adequate "value for money" in order to strenghten its position in a very competitive market of city tourism and to attract new visitors. The aim is possible to accomplish when all the carriers of tourist offer collaborate and connect public and private sector. The document also specifies that it is necessary to follow / evaluate tourist activities all the time, especially and according to economic results.

Main results of the tourist research in Zagreb:

Sociodemographic profile of tourists

The most important market: domestic (19%), Germany (6%), the United States (6%), Italy (5%) Average age – 42 years, 58% of the guests – between the age of 26 and 45

Almost two third of the visitors have university degree.

More than two thirds of the visitors (69%) have monthly receiving costs in excess of 2000 euros.

Motivation for arrival

Primary motivation for the visit: business obligations (42%), new experiences (26%), short vacation in the city (24%), fun (18%), getting to know the cultural sights of Zagreb (18%)-

60% of the foreign visitors are in Zagreb for the first time and 49% for the first time in Croatia.

Information sources

64% of the visitors collect information on the Internet, 22% via printed tourist guides, 16% via booklets, advertisments and billboards, 14% via previous visit, 11% via recommendation of family and friends.

Main travel characteristics

58% of the visitors have 2 to 3 overnight stays, 23% just one overnight stay, the rest more than 4 overnight stays. Average: 2.7 overnight stays.

Tourists mostly visit inner center of the city (Ban Jelačić Square, the Upper Town and Lowe Town, the Catherdral and Dolac market).

8% of the tourists visit some of the museums.

The majority of tourists visit bars (79%), restaurants (74% - fast food restaurants are not included), each third tourist visits malls.

Each fifth visitor collects information in Tourist Information Center, around 5% of the tourists use the service of organized city tours, 1 to 2% take the tourist bus and use 'Zagreb CARD'.

Satisfaction with offer in Zagreb

Visitors of hotels in Zagreb are mostly satisfied with all the accomodation elements. Kindness of hotel staff and quality of the services received the highest grades.

Zagreb is perceived as destination that is ideal for short vacation. It is picturesque and has a good offer of cultural sights and gastronomy. Souvenir offer, entertainment and offer of the street events received the lowest grades.

Personal security and the kindness of locals, publice service staff and tourist information centers received high grades.

Elements of the city infrastructure are the lowest graded set of the elements of tourist offer in Zagreb, especially the arrangement and clearness of signposts and parking infrastructure.

Consumption of tourists in Zagreb

Average daily costs: 123 euros – 62% or 72 euros: accomodation, 17% or 21 euro: food and drinks in bars and restaurants, 11% or 14 euros: shopping.

3.3. TRENDS OF DEVELOPMENT OF TOURIST OFFER IN THE REPUBLIC OF CROATIA

The Strategy of Tourism Development in Croatia by 2020 indicates perspectives that point that the entire number of tourist products (along with "sea and sun" as the product that is globally dominant) will develop quickly: the whole array of product from the domain of nautical, health, cycling, adventure, sport, cultural and business tourism.

Expected movements in the development of crucial production groups for Croatia:

Sun and sea

Although it is sensitive to economic circumstances and is a subject of cyclic movements, the "sea and sun" vacation will increase further. The significant segmentation of the market, "new" values and the growing "sophistication" of the buyers will make a need for more variety of contents, activities and services in the destination, the expansion of accomodation types and the growth of the "sun and sea" vacation combined with other tourist products.

Health tourism

The available data shows that the products of health tourism increase 15 to 20% per year on a global level. According to the trend of population ageing and the growing orientation towards the "healthy life" and health prevention, it is expected that health tourism will be one of the main traveling motives in the future. The key concepts that are expected to be of greater importance in customization of the offer of health tourism include "innovative", "authentic", "green" and "holistic". In that sense, specific factors of the success of health tourism concern the quality of specialized health institutions / centers and the following tourist offer and compatible development of the destination.

Cultural tourism

Further increase of cultural tourism is predicted and the big importance of this product for further growth of the entire tourism sector is accentuated. The trend of further offer diversification and the growth of niche products will support the growth of smaller, specialized offer providers. The increase of "creative tourism" that includes active comprehension of the local culture to visitors is especially predicted.

Business tourism

Predictions show the recovery of business tourism after recent economic crisis. The increase of consumption and business events can be expected. At the same time industrial observers show that the market of business meetings, conferences and events enters the new era of the "culture of savings" and that closer destinations will be chosen. The trend of smaller number of participants and shorter events will also continue. The technology of live video transmission and the use of social networks will develop further. Environmental responsibility of destinations and service providers will positively affect the decision of selection.

Cycling tourism, adventure and sport tourism

The continuation of rapid growth of cycling, adventure and sport tourism is expected in the future. That trend is supported by more expressed needs of the consumers for active and healthy vacation that is also responsible towards environment. According to interests and values of 'new' tourists, further diversification of products is expected. 'Combined' products that connect adventure and sports tourism with gastronomy, culture or some other socially useful activity will develop within the context of 'traveling with meaning'. Remarkable growth is expected in the domain of adrenaline sports and in non-tourist destinations.

According to the World and Tourism Travel Council's predictions, Croatia is on the fifth place on the list of the ten countries with the largest demand in the period from 2006 to 2015.

4. TOURISM IN NATURE PARK MEDVEDNICA

4.1. VISITING SYSTEM – SERVICES AND FACILITIES IN MEDVEDNICA NATURE PARK

4.1.1. Visitors in Medvednica Nature Park

Tourism in Medvednica Nature Park started to develop in the second half of the 19th century with the change of lifestyle (the expansion of Zagreb, industrialization). The visitor infrastructure started to develop, such as mountaneering trails, climbers' lodges, shelters, roads. Different societies were founded. Almost 150 years later that infrastructure has an additional value – a value of cultural, material and intangible heritage. Today Medvednica Nature Park is encountered in surrounding of more than one million of inhabitants – it is near Zagreb, Zagreb County and Krapina-Zagorje County that represent one quarter of total population of the Republic of Croatia.

The assessment of annual visitors' number of Medvednica Nature Park is estimated to 1 000 050 and is taken from the study "Structure and attitudes of visitors of Medvednica Nature Park" (2009). It is impossible to set out an accurate number of visitors because there are around 90 entries in the Park. However, visits of different programs are counted, just as numbers of tickets sold for some of Medvednica's tourist attractions, data got by traffic counting mechanisms (of both road and pedestrian traffic) and data received by the estimations of number of visitors in various events in the Park.

In the future within the framework of the Stakeholders' Forum of Medvednica Nature Park it is necessary to collect additional data: the number and structure of overnight visitors in accomodation with stay capacities, the number of visitors of the events organized by other stakeholders with special stress on the northern side of Medvednica that records larger lack of data.

By 2009 only visits that were recorded were the ones in programs conducted by the Public institution "Medvednica Nature Park" such as Veternica cave, Zrinski mine, education programs, "Medieval Days on Medvednica", "European Bat Night" and others.

Table 4: Number of users of some of the programs of direct education conducted by the Public Institution "Medvednica Nature Park" from 2006 to 2012

Visitors of NPM	2006	2007	2008	2009	2010	2011	2012	2013
Number of visitors -	4551	5045	7128	6918	5 667	5 546	4 463	4719
Zrinski mine								
Number of visitors -	3489	4882	4223	2912	3 247	3 085	3 967	4001
Veternica cave								
Number of visitors -	-	-	-	-	5 954	11	12	10246
Medvedgrad						632	065	
Number of children in	2300	1700	1548	427	619	291	235	502
educational programme								
Number of visitors -	382	500	153	151	237	302	180	108
guided tours								
Number of visitors (free of	200	800	1200	900	600	420	410	984
charge in all programmes)*								
Corporate volunteers	-	-	-	-	800	530	300	-
Total	10922	12927	14252	11308	17124	21806	21620	20560

^{*}It should be noted that the Institution does not charge its services to disabled people, children of lower social status and regular field education of different faculties of the University and the Associate-degree College of Zagreb

In November 2008 pedestrian and road traffic counter mechanisms were set up. They have completed the data about number and circulation of visitors.

Table 5: Results of traffic counters in the period from 2009 to 2012

Ecocounter	2009.	2010.	2011.	2012.
Road ecocounter – Forestry Bliznec	50.000	53.309	64.750	66.823
Pedestrian ecocounter – Bikčević's trail during 2010 and 2011 and educational path Miroslavec during 2012*	80.000	106.415	101.514	103.662
Total	130.000	159.724	166.264	170.485

^{*}In December 2012 the pedestrian ecocounter was out of the function for one month

Traffic counters were put and counted traffic from the end of 2008 to the end of 2012. The road traffic counter counts the number of vehicles next to the Forestry Bliznec, the Headquarters of the Public Institution. The pedestrian traffic counter was put on the entry of the Bikčić's trail, one of the most visited mountaneering trails. In the middle of January 2012 it has been transferred to educational trail Miroslavec, one of the three most visited trails in the Park. Since December 2012 and weather damage it has been out of function.

Through the period in which road traffic has been counted the growth trend of the vehicles has been recorded. One of the main and significant reasons is the closure of the ZET cable car. Some of other possible reasons of increasing number of road traffic could be the continuous enrichment of tourist offer of the Park by the Public Institution and other stakeholders. The growing trend in number of vehicles and pedestrians continued in 2012. However, the pedestrian ecocounter was out of function in December 2012 due to thunderstorm damage.

4.1.2. PINPM income for period 2008-2013

Table 6: PINPM income for period 2008-2013

INCOME	2008.	2009.	2010.	2011.	2012.	2013.
State budget income for financining (material costs)	2.035.492	1.977.863	1.874.511	1.958.943	1.920.698	1.807.086
State budget income for financining capital prorgrammes	770.000	541.000	596.390	483.000	210.700	320.000
Own income	804.321	685.115	795.519	792.659	654.522	639.717
Donations sponsorships etc.	476.032	321.089	256.437	326.489	151.500	121.011
other	59.482	12.263	3.947	50.211	483.550	101.229
Total income:	4.145.328	3.537.331	3.526.806	3.611.303	3.420.97	2.988.540

Table 7: Income from basic activities (PINPM generated income)

INCOME	2008.	2009.	2010.	2011.	2012.	2013.
Income according to the pricelist activities in NPM	55.037,71	74.504,07	112.809,75	103.000,00	57.258,21	24.880,00
Entry tickets – Zrinski mine	101.381,07	103.468,12	75.378,16	76.056,84	53.593,91	58.008,04
Entry tickets – Veternica cave	66.963,04	55.571,64	47.146,35	54.203,28	54.792,00	54.760,00
Entry tickets – Medvedgrad	-	-	52.382,09	147.113,78	146.592,00	127.136,00
Educational programmes implementation	38.344,27	14.535,89	13.902,43	14.451,19	4.003,00	10.192,00
Souvenirers selling Medvedgrad	-	-	-	-	-	20.103,20
Souvenirers selling - Lugarnica	72.663,39	76.611,76	102.024,33	87.949,38	84.748,58	55.955,20
Souvenirers selling - Infocentre Bliznec	-	-	-	-	-	4.056,00
Income from concesion approvals	469.931,90	358.862,67	314.919,72	279.908,36	252.088,88	283.717,17
Income from panoramic telescope	-	1.560,98	7.721,57	-	326,40	164,80
Income of renting Medvedgrad	-	-	69.234,65	29.976,43	1.120,00	240,00
Total of own income:	804.321,38	685.115,13	795.519,05	792.659,26	654.522,98	639.212,41

4.2. DEVELOPMENT OF VISITORS' INFRASTRUCTURE

Since the very beginning the Public Institution perceives the stressed function of the Medvednica Nature Park in Croatian system of protected areas – the communication with general public. By development of the entire range of infrastructure for the visitors and diverse interpretative program, the communication with visitors and general public is carried out both directly and indirectly.

The Institution has rearranged seven educational trails in the last couple of years. Forest trail Bliznec has been adapted for persons with special needs. Informational centers on main entrances have been arranged. Bliznec information center has been in function since October 2012 with regular night shifts during weekend. Veternica cave, Zrinski mine and Medvedgrad are three main tourist attractions of the Park. Medvedgrad has become the most visited locality on Medvednica (according to the number of the sold tickets in Table 3). It is estimated that Medvedgrad will become a modern center for the visitors of Medvednica Nature Park in the future. Numerous other localities with natural and cultural value have been set, interpreted, signalized and put in the tourist offer of the Park (Table 4). Marian Pilgrim path is one of the new trails in the trail network. Also, in 2013 nine new cycling trails of total length of 150 kilometers have been opened – eight circular and one transversal.

Table 8: visiting structure - Public Institution "Medvednica Nature Park"

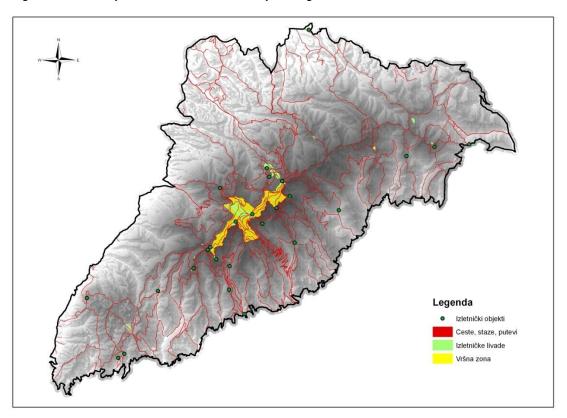
Name	Area	Purpose
Medvedgrad – visitors center	1435,25 m²	Visits, education
Zrinski mine	1,2 ha	Visits, education
Veternica cave	Length: 7,100 m, tourist part: 380 m	Visits, education
Information center Bliznec	12 m ²	Visits, education
Surveillance stations	12 m ²	District office
Miroslavec educational trail	Length of the trail: 2,7 km	Recreation, education
Bliznec forest trail	Length of the trail: 800 m	Education
Bistra educational trail	Length of the trail: 12,5 km	Hiking, education
Slani potok educational trail	Length of the trail: 4,4 km	Recreation, education
Sopot Waterfall educational trail	Length of the trail: 3,7 km	Recreation, education
Kameni svati educational trail	Length of the trail: 2,8 km	Hiking, education
Mountain Mirror educational trail	Length of the trail: 900 m	Recreation, education
Horvat's Stairs educational path	1,2 ha	Visiting, education
9 cycling trails	150 km	Recreation
Marian Pilgrim path	Length of the trail: 50 km	Pilgrimage, hiking, recreation
Geological column – 2 pieces (Bliznec and Bistra)	1x3 m	Education

PINPM dispose with number of visitors information only for three tourist attractions (cave Veternica, Zrinski mine and medevial city Medvedgrad). For all the other visitor infrastructure number of visitors is not available.

Medvedgrad

In June 2010 the Public Institution took over the management of the fortified medieval feudal town Medvedgrad and it has been placed in the visiting system of the Park. Night shifts were organized, tickets for the adults are charged. Pupils of the lower grades of primary school, defenders of Croatia from the Homeland War, persons with special needs have a free entrance. An exhibition has been set in the Big Palace and the accompanying tourist product has been realized. In 2012 Medvedgrad was visited by more than 12 065 people, but that is the number of the recorded entrance tickets. A plan is to open the new Visitors Center in Medvedgrad because it is considered a spectacular and unique attraction that can engross visitors outside of the peak zone. That is one of the plans of the Public Institution "Medvednica Nature Park" and the Physical plan of the Park. Medvedgrad has already recorded a completely different structure of the visitors than the rest of the Park. There is a larger part

of foreign visitors. That should be researched and eventually confirm the presumptions that Medvedgrad is visited by tourists who visit the City of Zagreb.



Picture 2: Visitors infrastructure in Medvednica Nature Park

Green dots: Tourist objectsRed lines: roads, paths and trailsLight green areas: Tourist meadows

Yellow area: peak zone

Physical data from the GIS database of the Park has been used for the needs of the analysis of physical map of visitors infrastructure of the Park. Visitors infrastructure occupies around 180 hA of the Park area, but it is not distributed evenly. The areas of the large load in the peak zone of the middle part and close to the Sljeme road are set out.

4.3. Manifestations

The Public Institution also establishes cultural-tourist manifestations in the purpose of the promotion of the main tourist attractions that are autonomous tourist products at the same time. For example, "Medieval Days on Medvednica" is one of those events. It is one of the ways in which the Public Institution contributes the efforts in quality increase and improvement of tourist chain of value in the domain in which it is competent – in the first place the attractions that it manages by itself and interpretation, education and signalization of the area in general.

Medvedgrad leads as a tourist attraction especially in that area whereas demands and institution come from the outside and events are organized in partnership with high percentage from the side of the partners both financially and with human resources. One of the benefits is the fact that those new manifestations on Medvedgrad attract people who visit Medvednica for the first time.

Important dates in nature protection are celebrated, such as "European Bat Night" and "Earth Day" is accompanied by large nature cleaning action. "Summer Fairy Tales" on Medvednica is one of the new cultural and touristic events and it takes place on Medvedgrad and in Zrinski mine. "Adopt a Bat" is one of the promotive activities that have been initiated and it resulted with a number of 800 adopters in the end of 2012. In collaboration with August Cesarec Cultural and Movie Center a music event "Medvedgrad Music Nights" was organized for the first time. That event is growing every year with increasing number of nights and performers.

New contents are planned for 2014 – the organization of Zagreb Fantasy Film Festival. Final evening of the festival will take part on Medvedgrad.

The Public Institution "Medvednica Nature Park" organizes the event "Clear up in Bistra" in collaboration with the Municipality of Bistra. International Year of the Forests, International Bat Year and 30th anniversary of the foundation of Medvednica Nature Park were celebrated in 2011.

The growing trend of corporative volunteering of the big companies in the surrounding of Medvednica Nature Park is recorded. Out of many demands, employees of the companies Holcim Croatia, Atlantic Group Stock Company, VIP have realized their volunteer work in the Park. Local stakeholders (The Association of Sljeme's Caterers, Croatian Forests, Zagreb Forestry) and local hunters also collaborate with the Park on different activities.

Table 9: estimation of visitors number on different manifestations in NPM

Events/manifestations	Visitor number
FIS Snow queen skii races (2 day event), Croatian	15 000
Ski Association	13 000
Medieval days on Medvednica (2 day event), PINPM	6 000
Event Gljivarenje v Stubakima (Stubičke Toplice County)	2500
Bajkovito ljeto na Medvednici (Rudnik, Medvedgrad) PINPM	1500
Medvedgradske glazbene večeri (2 day event), PINPM	1000
Rally Stubičke toplice (Stubičke Toplice County)	1 000
Seljačka buna (2 weekend), Donja Stubica	6000
Križni put (Bliznec forest trail)	1 500
Parish fair of St. Jakob (S of Medvednica)	2 000
Parish fair - Kapelica Majke Božje Sljemenske	2 000
Parish fair of St. Jakob (N of Medvednica)	1000
International Bat Night (Veternica), PINPM	1500
Celebrating Earth Day - cleaning actions, PINPM	500
Green devil, duation race	600
Traditional event "Kestenijada" (Hunjka)	500
Traditional event "Gupčeva Kestenijada", Gornja Stubica	500
Traditional Mountain hiking, organized by different Mountaineering societies (4)	2000
Trekking (2)	1000
Competitions (local, national, international): skiing,	
cross country skiing, skating, mountain car race and	5000
others). Different organizers (about 20)	
Bicycle tours, north side (2)	1000
Other events (maratons, Rudijevi susreti, Dan sv.	
Mihovila, Dani Perunike, a series of smaller events	15 000
such as culinary workshops, Dani štrukli e.t.c.)	
Total:	67.100

Organiser of those evets mostly don't generate income through implementation of manifestation. All manifestations have one common goal and that is promotion of different facilities or values. Production costs are covered by donations and sonsorships, and in small percentage throug own income.

4.4. Structure and attitude of visitors of Medvednica Nature Park

The structure and attitudes of visitors to Nature Park Medvednica, and readiness to pay for its preservation

The primary aim of every protected area is the protection and preservation of all natural and cultural values because of which the area is declared protected. At the same time there is a trend to introduce economic activities (recreation, ecologic tourism) with the aim to ensure economic sustainability of the protected areas. These two aims contradict each other and have to be reconciled in the long-term planning of the management of the protected area.

IUCN categories of protected areas are classified by the level of the introduction of economic exploitation. Nature Park Medvednica, pursuant to Croatian legislature and IUCN definition of V. category, is a protected area of so called soft protection, that is, economic activities, such as tourism, i. e. ecologic tourism are allowed within sustainable frame. The development of ecologic tourism or tourism in general in protected areas is subject to several limitations: ecologic limitation, infrastructure limitation, the level of tolerance of local residents to the development of tourism and the level of tolerance of visitors to the diminished quality of experience due to the potential environment degradation. (Tišma and Maleković, 2009).

To know and comprehend how to manage visiting, that is, tourism, in a protected area - first and foremost the impacts of visiting and development of infrastructure - is essential for the managing of the entire protected area. It requires detailed knowledge of habitats, ecologic systems, biological, cultural and landscape diversity of the area, and finally the bearing capacity of the areas with potential tourist value.

Thus it is necessary to include the social component, that is, get to know the visitors of particular protected area, region, country, etc. Therefore the first survey of the structure and attitudes of the visitors of Nature Park Medvednica, as well as their readiness to pay for the protection of the Park was carried out.

By socio-demographic characteristics the visitors to Nature Park Medvednica are mostly younger than 35 (almost 60%), which may be the result of the distinct recreational and educational function of the Park which attracts younger population. It is interesting to note that TOMAS survey shows that the visitors of national parks and nature parks in Croatia are mostly middle-aged (36-45 years). Visitors to Medvednica are relatively highly educated, even 80% claiming high or higher education. Similar level of education has been noted also in other protected areas. Also, Eagle and others, 2002, quote that the ecologic tourists in the protected areas are more highly educated than average tourists, as is also the case with cultural tourists. (Tomljenović, 2008).

One of the results of the survey shows that almost 92% of visitors come from the immediate environs of the Park (City of Zagreb and County of Zagreb), while the next largest group (6,4%) comes from northwestern Croatia. Only 0,47% come from abroad, which opens the space for targeted management in order to disseminate information about the Park to that target group. In order to generate useful data for the promotion of the Park the next survey will ask for the country of origin. In comparison with the results of TOMAS surveys in protected areas in 2006, where foreign tourists prevail (82%), the difference between the surveyed areas is evident, because Nature Park Medvednica has been almost exclusively visited by local visitors (99%).

This information shows the unique position and role of Nature Park Medvednica in the system of protected areas in Croatia, which has to be carefully considered in decision making, such as, for example, the introduction of admittance fee, as the local visitors contribute to the protection through taxes.

While most of the visitors of the other Croatian parks visit in the company of their partners/spouses (42%), most of the visitors of Nature Park Medvednica visit in the company of friends (50%) or family (34%).

Most of the visitors (37,4%) visit the Park several times a year, a somewhat smaller number (25,2%) visits on weekends, while only 5,3% visited the Park for the first time. Frequent visits by visitors from the environs of Medvednica show its status as a traditional excursion site of the residents of Zagreb. This conclusion is also supported by the fact that very few visit in organized groups.

Similarly to other areas, most visitors (72,4%) spend half a day in the Park. This result shows that they are prevailingly excursion-makers. By definition a tourist is any person, regardless of age or sex, staying outside the place of permanent residence for at least one night (Tišma and Funduk, 2009). Thus the visitors to the Park could not be regarded as classical tourists. Although there are several objects in Nature Park Medvednica offering high quality accommodation, such as the hotels

"Tomislavov dom" and "Snježna kraljica" in the most attractive peak zone, considerable efforts should be made to create various and attractive programs and contents, as well as the reconstruction of old dilapidated objects (hiking huts, sanatorium Brestovac, Dom Željezničara and Vila Rebar), and the development of infrastructure (primarily drainage of waste water), and marketing, if the aim of management is to attract tourists to stay in the Park for longer periods, that is, develop ecologic tourism with caution.

In the contrast with TOMAS survey, where most of the visitors have visited the park the survey was made in for the first time, only 5,5% visitors of Nature Park Medvednica claimed it was their first visit, while most of the visitors (39,5%) claimed they visited several times a year. Frequent visits, low percentage of first-time visitors and high percentage of visitors from immediate environs once again show the high social significance of Mount Medvednica for local population.

The next very important set of data obtained in the survey shows the level of visitors' knowledge about Medvednica prior to their coming to the Park. Since Medvednica dominates the surrounding landscape and is visible from every city street, it is indeed an integral part of the identity of the city and its environs and has been the excursion and recreation site for more than a century and 90% of surveyed visitors reside in its immediate environs, it is not surprising that 42% of them obtained information about it in informal ways, that is, by word of mouth, and 29,2% of them visits regularly. The survey provided useful data for the Park's marketing activities and showed that the following distributive channels have to be considered: Internet (12,4%), newspaper articles (10,5%) and TV features (2,7%). It is interesting to note that only 1,6% of surveyed visitors obtained information from various printed promo material, which may indicate the rise in the use of Internet as the channel for distribution of information, but also the insufficient use of printed promo material and its great unused potential for promotion. Indeed in June 2008 Internet was used by 44,4 of Croatian population, while in November 2007 it was used by only 35.1%, which shows the rapid increase of users of Internet, that is, of new technology in Croatia (Jelinčić, 2009). In the future the promotive managerial activities have to be directed towards the development of the content of contemporary technologies and the use of digital distributive channels such as web pages, mass mailing lists, etc.

The next survey of the structure of visitors should analyze also the availability and use of information during the visit to the Park, such as educational panels, educational trails, or the immediate information from the employees of the Park at the sites such as Veternica Cave, Zrinski Mine, educative programs, etc. Surveys of the habits of visitors of the parks in Croatia show that the Internet and printed material are most efficient official means of promotion for the parks.

Weekly dynamics of visiting shows the peak on weekends. Even 80,5% of visitors visit the Park on weekends, that is, on Saturdays 35,4% and on Sundays 45,1%. Pronounced seasonality has been noticed also in other parts of Croatia and even identified as a hindrance in the development of tourism, that is, a weak spot which should be remedied by the development of continental tourism, with its segments such as ecologic tourism in the protected areas, cultural tourism, historic, etc. (Tišma and Maleković, 2009). Even 74% of visitors stay in the park for half a day, 25% for a whole day, and only 27 visitors stayed in the park for two or three days. The visitors who stayed in the Park for several days chose overnight accommodation in the peak zone: Pansion Medvednica, Hotel Tomislavov dom and other objects in the peak zone, such as "Snježna kraljica" Appartments, "Grafičar" and "Puntijarka". In future surveys such answers should be avoided by offering precise answers, because they are only indicative and can only confirm the use of the peak zone. Most of the visitors preferred hotel accommodation (72%), and only 28% chose accommodation in hiking huts. It has to be noted that the sample of visitors staying overnight in the Park is very small indeed (only 27).

Even 43% of visitors came to the Park by private car, and 31% of them came on foot, which corresponds to TOMAS survey (Marušić and Tomljenović, 2006). There is a big difference in the participation of organized groups, which account for 25% of visitors in other protected areas, while on Medvednica only for 3,9%. The data given verbally by Kavčić at the beginning of October 2009 indicate that 50.000 vehicles entered the Park at Bliznec in a year, which illustrates the negative impact of visiting. Deterioration of air, soil and water, noise, increased number of animals run over by vehicles, diminished quality of experience are only some of the negative consequences of visiting, and such way of visiting should be discouraged, perhaps by introducing entrance fee for vehicles.

The cable car line which provided transport to the peak zone ceased operation in June 2008, to be followed by the introduction of a bus line. The bus line was used by 8% of visitors. The Park has 15 cycle tracks in total length of 112 km, and it is interesting to note that 3% of visitors came to the Park by bicycle. Most of the visitors coming to the Park by car leave their vehicles in the peak zone. But a high 30% of them park their vehicles outside designated parking lots, in the peak zone as well as at the foot of the mountain. It is not surprising because there are only 135 designated parking places in the peak zone. The construction of new cable car line with the terminal outside the Park (on

Gračanska cesta) with garage capacity of 800 parking places, as well as appropriate capacity and time table may contribute to the decrease in the number of vehicles at the peak zone and parking outside designated parking lots.

Visitors were asked to grade the quality of chosen contents. The Public Institution is responsible for some of them, such as the maintenance of educative trails, cycle tracks, main entry points into the Park and info points, as well as for the two main tourist attractions in the Park: Veternica Cave and Zrinski Mine. The maintenance of hiking trails is the responsibility of various hiking associations, while the maintenance of county and local roads is the responsibility of relevant public services. Therefore the future surveys have to focus only on the services and contents in the area of responsibility of the Park, as well as include the grading of the direct, immediate interpretation and education, that is, the entire program carried out by the Institution. The satisfaction with the rest of the visitors' infrastructure, from roads, over restaurants and hotels, to garbage disposal, etc., can still be surveyed, but the information relevant to the short-, mid- and long term improvements in the managing of the Park should hold priority. In the interpretation of results it is necessary to take into consideration the size of the particular sample that is, that all visitors do not grade all elements of the service. The satisfaction of visitors with the services organized and offered by the Public Institution Nature Park Medvednica was particularly analyzed. The results show high level of satisfaction with educative trails and with the objects managed by the Park, while the level of satisfaction was low in some segments, that is, Infocenter, Info-mat and cultural tourism events. It is important to note that Info-center and Info-mat were not in function for the most part of the period of the survey, which may have somewhat influenced the result. However, the low level of visitors' satisfaction indicates that these services have to be reconsidered, and adapted to the requirements.

Feeling safe in the Park is a very important segment of visitors' satisfaction. The complete signalization within and outside the borders of the Park, on sites of natural and cultural value, restaurants and the like is an important element of providing easy access to various sites in the Park, and subject to the level of visitors satisfaction. The results of the survey show that most visitors are satisfied with general signalization, and the percentage of dissatisfied visitors was very low - only 3%. Visitors to the Park seek the experience of nature in a wide range of activities. The survey showed the following activities as primary: enjoying nature (90%), enjoying the company of family and friends and rest (70%), recreation (27%), visit to restaurants (24%), learning something about natural and cultural values of the Medvednica Park (22%). The category of recreation included recreational sport activities: jogging, cycling, skiing, hiking, walking, paint-ball, paragliding and hang-gliding. The category of participating in sport activities included the following: car racing, skiing, orienteering, cycling and running. It is interesting to note that even 90% of visitors identified enjoying nature as the main motive of visiting Nature Park Medvednica.

In the next visitor survey it is necessary to make a clear distinction between the motive of visiting and the activities visitors exercise during their visit. This would provide more precise information on the activities during visit, and further analysis would point to the concrete measures for reducing negative impact on natural and cultural values of the Park, such as influencing visitors to change their behavior. Also in the next survey the visitors motivated by learning should be asked what they learned about, and thus generate information useful for the short- and long-term programs of interpretation.

The data on the structure of visitors and on the character of visiting parks show the specificity of Medvednica in comparison to other parks included in TOMAS survey. Most frequent visitors of other parks are foreign tourists on their first visit to the park. Also, their visit to the park is mostly made on the way to or from their destination or from their final destination, which suggests that the visit to the park is only a part of their tourist itinerary. On the contrary, most of the visitors to Medvednica are the residents of its environs, who visit the Park several times a year, mostly on weekends, in the company of friends and family. This suggests that Medvednica fulfills an important social function in the local area as a place of socializing and rest in natural environment.

Here are the main conclusions of the 2009 'Structure and Attitude of Visitors of Medvednica Nature Park' research:

- Medvednica Nature Park is mostly visited by the domestic visitors 99,53%
- Inhabitants of the direct surroundings of the Park (the City of Zagreb and Zagreb county) are the largest source of demands for Medvednica Nature Park 91,72%
- The majority of the visitors of the Park are of younger and middle age middle-aged (42,9%), have higher education degree (40,52%) and are employed (67%)
- The majority of the visitors come to the Park during weekends (80,5%), a couple of times per year (37,4%). Only 5,3% of the visitors claimed it was their first visit to the Park.
- The majority of the visitors come to the Park with friends (50%) and family (34%).

- 42% of the visitors received the information about the Park by informal sources (oral recommendation of friends and relatives) and official sources the Internet (12,4%), articles in journals and in newspapers (10,5%) and radio and TV (2,7%)
- 74% of the visitors stay in the Park for the half of the day and almost one quarter of the visitors spends the entire day in the Park.
- Puntijarka, the gazebo on the TV tower and Grafičar are the three most visited localities in the Park.
- 43% of the visitors come to the Park with their personal vehicles.
- The majority of the visitors were satisfied with the offer in the Park. The satisfaction level with the offer under response of the Public Institution is slightly higher, except in the case of Information Spot and Infomat.
- 57% of the visitors are satisfied with the general signalization in the Park.
- The following motives are primary among the visitors of the Park: being in nature, the company of family and friends, leisure and recreation.
- The total number of estimated visitors of the Medvednica Nature Park in one year: 1 005 000
- Average daily consumption per examinee: 48,76 kn
- Total consumption for the estimated number of visitors: 49 003 800 kn
- 34% of the examinees are ready to pay the hypothetical ticket of the calculated middle value of 11.86 kunas
- Total monetary value of the touristic and recreational function of the park: 53 148 140,00 kn (in case A); 60 923 900,00 kn (in case B)

5. AVAILABILITY AND TRANSPORT

Traffic

Medvednica Nature Park is connected with its surroundings in a great way. County road Ž 1049 passes through the Park. It is a one-way road until the peak zone and from the peak zone on the return to Zagreb. The road is two-way towards Zagorje and in the peak zone. There are also numerous macadam roads and 67 hiking trails.

The function of the ZET cable car by which the majority of the visitors were transported was stopped in 2007 and the growth of road traffic is the consequence. It has been proved by the traffic counter put near the Headquarters of the Public Institution.

Table 10.: number of vechicles (main entrance Bliznec)

Ecocounter	2009	2010	2011	2012
Road ecocounter – Forestry Bliznec	50.000	53.309	64.750	66.823

Table 11.: number of vechicles per month in the period of 2009 to 2011

Month	2009	2010	2011
January	5145	4088	5286
February	3992	4418	4352
•			
March	4147	5709	6302
April	4296	4296	4775
May	4258	4121	5082
June	3220	5323	6600
July	3915	3330	3396
August	3838	5011	5301
September	3969	4703	6803
October	3566	3546	4723
November	2927	3812	4626
December	3315	4952	7504
TOTAL	46 588	53 309	64 750

A bus line from Mihaljevac to the hotel "Tomislavov dom" in the peak zone has been established as a replacement for the cable car. However, the frequency of the bus rides is not sufficient for the needs of the area and the number of visitors.

Public transport in the Park cannot be measured with the freedom and flexibility that offered by a car. The trend of vehicle arrivals to the park is in growth. One of the possible solutions is to put a cable car back in the function in order to unburden the peak zone and to diminish the level of gaseous emission, to fix the access to the ski logdes and to ensure the acces to persons with special needs. The survey taken on the visitors of the Park shows a need of additional bus stops on the way from the bottom of the mountain to the top and the improvement of the public transport. The inhabitants of Zagorje (local population of the north side of Medvednica) who work in Zagreb also use the county road, not only the visitors of the Park.

According to the fact that the Sljeme road is categorized as a county road, the Public Institution cannot regulate or limit the traffic through the Park.

The lack of parking spaces is also among the biggest problem. It is in particular seen during weekends and during ski season when the peak zone is additionally burdened with vehicles of personal use. Problems arise due to inadequately parked vehicles that block the access to the public transport.

Zagreb Holding Ltd., Zagreb Electric Tram (ZET) branch plans the reconstruction of the cable car and the process of projecting has started intensively. The intention is to use non-refundable funds of the European Union. At the moment the project is in the phase of choosing the route and the entire project is planned to be finished in 2016/2017.

The construction of modern cable car that will entirely cover the route of the old cable car and continue to Gračani (the last tram stop of tram no. 15) should help to solve the majority of traffic problems and

should become the cleaner and more ecologic mean of transport. The extension of the lower station of the cable car to the area of Gračani and Dolje route is predicted. The new cable car will solve the problem with parking spaces. The construction of underground car park with 320 parking spaces near the lower station is planned.

The cable car has been shown as the crucial problem during the SOWT analysis and as a solution of numerous questions and problems. There is also a problem with the extension of the cable car route on the top because the competent Ministry gave a negative opinion about that question. By moving the upper station of the cable car closer to the peak the acces to persons with special needs will be possible. Now it is impossible due to the elevation and the type of background. It is of crucial importance that the entire project will not become too excessive, but that the necessary capacities should be assessed in a realistic way. It will automatically condition the size of the cabins of the cable car and of the accompanying objects. The construction of middle station in Brestovac is also planned. Medvedgrad is accessible by traffic on all the routes that connect three counties - the City of Zagreb, Zagreb county and Krapina-Zagorje county. It can be accessed from the city by the local road from the Lukšići (Šestine) direction or via county road at the Bliznec entrance (Ž 1049). From Krapina-Zagorje county it can be accessed via county road at the Pile entrance (Ž 2219). Although it is well connected, the traffic access to Medvedgrad as future Visitors Centre is inadequate due to the roadway width. Due to thunderstorm Teodor that affected the Park in the beginning of November 2013 the part of road is submissive to erosion and dangerous for traffic. Parts of the road should be widened and parking spaces should be made so that buses can make an U-turn in the way that the conjunction with the main road will also be widened. At the moment there is no organized public transport to the fortified feudal town. Negotiations with the ZET Branch related to the introduction of seasonal bus lines from Kaptol (in the center of the city) to Medvedgrad are in progress until the validation for which we have received the support of the Tourist Association of the City of Zagreb.

Veternica cave is one of the three most visited localities in the Park and also has an inadequate approach. Part of the trail is paved, but the major part is macadam that passes through forests in private property. In the last two years it has visibly perished due to heavy rainfalls and winters with long periods of snow cover.

The research of attitudes and satisfaction of the visitors of Medvednica Nature Park (according to the TOMAS methodology) showed the way in which they got in the Park:

- 43% of the examinees used the vehicle of personal use
- 31% of the examinees came by foot
- 3% of the examinees used a bicycle

Visitors of Medvednica Nature Park have a couple of ways of moving around:

- 1. Marked hiking and mountaineering trails.
- 2. Public transport (bus)
- 3. Vehicles of personal use
- 4. Bicycles

It is necessary to show the visitors the use of public transport and hiking by which the parking problem in the peak zone and climbers' lodgings area can be reduced.

In 2013 eight new cycling trails have officially been opened – eight circular and one transversal. The cycling map is available on the website of the Park and via QR codes in the terrain. Except for hiking trails, visitors can also use seven educational trails that offer beautiful nature, but also have an educational character. There is also a pilgrim trail.

Persons with special needs can use Bliznec forest trail near the main entrance to the Park. The trail follows Bliznec creek and is 800 meters long. It offers contents for blind and partially sighted people. It is necessary to open a lot more available contents of the Park that exist nowadays to people with different types of special needs.

During winter season both county roads (Ž 1049 and Ž 2219) are sprinkled with salt to avoid ice on the road. By now none research has been conducted on the influence on soil and flora and it should be monitored.

Pollution in the Park, decreased air quality and satisfaction of the visitors are the consequences of the larger number of vehicles eachyear (especially during weekends and during ski season).

6. COLLABORATION WITH STAKEHOLDERS OF THE PARK AND BUSINESS SECTOR

Nature Park Medvednica stakeholder's forum

Partnership is one of the principles of development, even in tourism according to the fact that touristic product is an agregate category and it implies both horizontal and vertical collaboration, but also the collaboration of the carrier of public governance with private and civilian sector and others such as nature, ecology, culture, traffic, health, security etc. All the aspects of tourism management as an activity are recognized from the Public Institution and representatives of interior and exterior stakeholders. At the moment thirty institutions are members of the Forum, but it is expected that the number will grow because the entire process is still in its initial phase.

Before the Stakeholders Forum was established, the collaboration with the stakeholders had existed but it had been limited to their smaller number and dealing with current business and situations in the Park. During the making of the Management plan none significant consultations of the stakeholders were not carried out, respectively bottom up approach was notused. Mutual activities for the Plan implementation were not roughcast.

According to the relation with private sector, collaboration with business sector was conducted in two ways. The first way was corporative volunteering and the other one donation biddings and sponsorships of different companies that have diminished in the last couple of years. The Institution did not have possibilities for major manouvres to provide win-win situation towards the business sector to those simple efforts in promotion per its distributive channels (websites and Facebook page).

The fact is that Medvednica Nature Park is surrounded by around million inhabitants and that numerous and various activities occur in the Park itself and its surrounding. This management aspect (the collaboration with stakeholders and business sector) is very important and demands larger emphasis in planning documents, moreover in the making of the Strategy of Sustainable Tourism. The Institution has realized the value of Charter and its principles.

Except of recognized preservance of natural and cultural values, the Institution is expected to arrange and coordinate all the stakeholders in the field of tourism development, renovation and development of the entire visitor infrastructure, promotion and management of the field. A couple of expectances have been put to the Public Institution: the expansion of the ski area capacity, road asphalting, the construction of ZET cable car, solving of legal property problems in the Park. The last one is not the responsibility of the Institution, but is in the domain of Stakeholders Forum of the Park or in the domain of discussing this strategic document.

The proposition of the Strategy of sustainable tourism has been done with Stakeholders Forum and consultations with experts of certain action planning. Four workshops with around hundred participants took place. Various institutions for nature protection and cultural heritage, tourist sector (tourist boards and the Ministry of Tourism of the Republic of Croatia), firefighters, police, catering and hotel trade sector and local communities were among the participants of those workshops. Detailed list of participants can be seen in the Attachment below.

7. SWOT ANALYSIS

STRENGTHS

- Attractive and preserved natural and cultural heritage
- Charter for sustainable tourism and Stakeholders Forum of Medvednica Nature Park that has been founded
- ♦ Status of the protected area positive perception of possible visitors
- Proximity of the capital city
- ♦ National and global trend of the increase of visitors in protected areas
- Pleasant climate for visits (fresh during summer, snow in winter, colorful during spring and autumn)
- Availability of multiple information about the Park, numerous high-quality researches and surveys
- Good walking and hiking infrastructure kiking, mountaineering and educational trails
- ♣ The existence of contents for active vacation in the nature ski slopes, cycling trails, spa northern of the Park
- ♦ The existence of three tourist attractions Veternica cave, Zrinski mine and Medvedgrad
- Promotive and educational materials of high quality (leaflets, printed tourist guide, maps)
- The existence of overnight stay and catering facilities (climbers' lodgings, restaurants and bars, hotels)
- ♦ Loyal visitors many climbers from Zagreb visit Medvednica on regular basis
- ♦ Increase of tourists in Zagreb and visits of foreign visitors in the Park
- ◆ Good partnerships WWF, Europarc, ski partnership with Pohorje, Dinaric Arc Parks
- Large motivation of all the stakeholders and the Public Institution to initiate the development of Medvednica

WEAKNESSES

- Absence of the Physical plan for areas with special characteristics of Medvednica Nature Park
- Complete offer of Medvednica Nature Park without integration and mutual approach towards tourist market
- ◆ Many stakeholders who manage infrastructure for visitors (services and facilities)
- ♦ Inadequate traffic infrastructure (ZET cable car, public transport to Medvedgrad)
- ♣ Insufficient and unprofessional promotion of the area
- Plentitude of similar offer in the country and in the region
- **♦** Lack of private investments into additional contents
- Expressed seasonality of visits to the Park
- Long-term recession, objects in bad condition, low consumption of the visitors
- ♣ Relatively low human capacities in the Institution according to the large area of the Park it manages
- ♦ Insufficient financial resources for maintenance of the existing visitors infrastructure and construction of new / additional facilities
- Traffic too many vehicles on weekends and during ski season, the lack of parking spaces, traffic jams, pollution, noise that endanger security of the visitors
- Unclear and inadequate signalization in the peak zone and access areas of the Park
- Concentration of the majority of the facilities and visitors in the peak zone
- Lack of real visitor center
- Insufficient and inadequate promotion, marketing and comercialization of the destination (Medvednica Nature Park)
- Low selling of products and services
- The brand "Medvednica Nature Park" does not exist in the real significance of the word
- ◆ Large and administratively complex area the Park is divided between three counties
- ◆ Lack of local offer in the Park local products and family farming
- Restricted working hours of the objects, especially of Medvedgrad
- Negative perception of forest management on Medvednica

- Squalor of the objects (catering profession and the deteriorated objects the Rebar villa, Brestovac hospital and climbers' lodging Želježničar)
- ♣ Insufficient signal coverage for mobile phones the lack of use of the new technologies on the entire Park area (QR codes, Medvedgrad)

OPPORTUNITIES (external)

- ♦ Increase of new trends in tourism visiting protected areas (so-called "green tourism"), health, cultural, adventure and active tourism
- Religious tourism (Stepinac trail, Pilgrim trail of St Mary, the vicinity of Marija Bistrica Marian shrine)
- A lot of area (and plans) for the increase of accomodation capacities (e.g. camping place on the northern slope)
- Stakeholders Forum an occasion to grow into the strong body that can solve the active problems in a proactive way traffic signalization, parking lots, traffic connections
- ♦ Plans for cable car construction the possibility of solving many traffic problems
- Availability of different funds for development projects (including the EU funds)
- ♦ NIP project GIF project, DAP project
- Positive trends related to economic subjects towards "green" initiatives and investments into protected areas
- → The Strategy of Tourism Development in Croatia by 2020 advantage of the development of continental tourism, especially of the areas that "due to characteristics of resource-attractive base and/or tradition of tourist income have the greatest chance for success"
- Preparation of contents for summer and the ones related to Advent (connecting with event organizers in the city)
- Connecting with tourist agencies and tourist guides preparation of tours/programs that could be offered to visitors
- Unification of events, contents and sights in one website in two languages
- ◆ The use of "the force of brand" of Ivica and Janica Kostelić and other significant people from the past
- Putting the existing out-of-date objects into function the Rebar villa, Brestovac hospital, climbers' lodging Želježničar, Medvedgrad (establishment of visitor center), closed quarries many obstacles, but also many opportunities
- ◆ People and knowledge

THREATS (external)

- Prolonged economic and financial crisis in the society
- ♦ The non-existence of physical plan insecurity and vagueness of the things that are allowed and that are not allowed
- Dependence on financing from the government budget and other resources that is too strong
- ♣ Increased pressure of the visitors in the peak zone and the decrease of quality of visits as its consequence
- ♣ Inappropriate activities in the Park area that can disturb its natural balance and attractiveness (e.g. quarries, timber takeoff, cutting fir tree branches, offroad ride on hiking trails – quads, motorcycles, bicycles)
- ♣ Illegal waste disposal in the Park area (in quarries)
- **♦** Vandalism
- → Too many actors that do not collaborate sufficiently, two levels of the institutional framework (city and state level) – overlap and vagueness of the authority
- ♦ Habits of tourist agencies and touroperators they do not include Medvednica Nature Park
- Legislative pressure
- ➡ Belongings and legal obstacles there are many private areas on the Park territory and it reduces and complicates some of the infrastructure interventions (construction of the necessary trails)
- **♦** Tradition loss

RESUME OF THE CRUCIAL POINTS

A couple of crucial points can be extracted from the SWOT analysis related to tourism in Medvednica Nature Park.

- Sustainable tourism is an economic branch that can contribute nature protection, biodiversity and landscaping diversity and it can fuction as a cohesion force that can unite the entire Medvednica area in the unique unit.
- Medvednica Nature Park has a strong resource base for both nature protection and sustainable tourism that (by joining forces) can contribute each other and the Park as a whole
- Medvednica Nature Park offers tourist products and services of high quality, but there is a large area for their conditioning, development of new products and attracting new target markets and the collaboration with tourist sector in the vicinity of the Park
- There is a lack of modern visitor center in which numerous natural, landscaping and cultural values of the Park would be presented together with products and services that Medvednica offers to its visitors.
- Creation of the recognizable Medvednica brand as a unique destination is necessary along with everything it represents and offers.
- There is a need for additional development of specific information channels related to Medvednica Nature Park that are focused on visitors through different formats and media
- Increased pressure of vehicles and lack of adequate public transport are the crucial questions that need to be solved – high hopes of the problem solution are centered towards cable car construction
- Most of the visitor contents and facilities are centered in the peak zone and it is necessary to disburden that part of the mountain through development and conditioning of contents and facilities in other parts of Medvednica and diverting visitor interest towards those areas.
- There is a need for better and stronger collaboration between private and public sector and the stakeholders on the entire area of Medvednica in order to secure more efficient use of the resources and to strenghten the destination brand – that process gained in quality by funding the Stakeholders Forum
- o There is a lack of offer of local products (family farms, old crafts, original souvenirs etc.)
- The lack of destination promotion from the side of tourist sector (tourism associations and tourist agencies) of the Park surrounding is also quite felt.
- The establishment of whole year sustainable tourism is necessary for the economic stability of the Park's stakeholders. It is also necessary for the attractions managed by the Institution by the principle of sustainability.

8. STRATEGY

This chapter considers the general context for tourism in Medvednica Nature Park and the demands of Charter. In those frameworks a strategical context for the sustainable tourism in Medvednica Nature Park is brought by considering the results of the analysis from previous chapters. Aspiration, visions and aims that serve as a basis for the action plan in the next five years are defined by the Strategy.

8.1. CURRENT SITUATION

Protected areas have a significant role for Croatian tourism. In the majority of well visited protected areas in Croatia there is a domination of foreign visitors, but domestic half-day and daily visitors from the three counties that surround the Park consist 99% of the visitor structure of Medvednica Nature Park. The Park is administratively set on the area of those three counties.

Visitor infrastructure and its dominant tourist-recreational function have been developed in the last 150 years. Nowadays it gravitates towards more than one million of inhabitants of the surrounding area and the increasing number of tourists who visit Zagreb. Medvednica has been protected by the Nature Protection Law as a nature park since 1981. The Public Institution that manages the Park was founded 14 years ago.

Contents and services for the visitors are numerous and distinct – climbers' lodgings, ski slopes, gazebo and ZET cable car that is an important object in visiting system, medieval feudal towns, Veternica cave, Zrinski mine and many other cultural and natural sights that are included in the visiting system.

Medvednica Nature Park holds a good position for the increase of the number of the visitors and their consumption. There is a whole series of developed experiences of good quality and the infrastructure already exists – it only needs to be modernized and enhanced. The Park is situated near the capital city. Its surrounding is estimated to more than one million of inhabitants that gravitate to the Park as their place for leisure and recreation through the entire year. It is also eligible as educational training ground for associate-degree colleges, universities, high schools and primary schools. The City of Zagreb has a continuous increase of number of visitors. By careful planning and creation of different contents foreign tourists can be attracted to visit the Park. Medvedgrad (in which the first visitor center on Medvednica is planned to be open), Veternica cave and the inner area of the peak zone (TV tower and gazebo) excel among all the contents of the Park. It is easier to keep the traditional, loyal visitors of the Park and not a lot of facilities are need to attract them. The majority of the visitors of protected areas in Croatia stay in the park for half of the day or the entire day, but without overnight stay. The prolongation of tourist stay in the Park or in Zagreb and visit to the Park is a good measurement for the achievment of sustainability of the shareholders, including the Public Institution that manages three capital attractions.

Medvednica is especially attractive during winter because it is a ski center for citizens of Zagreb. Partnership with Pohorje ski center in Slovenia has been signed and by all means it opens possibilities for further development. Conditioning of ski slopes precedes each further development of winter tourism on Medvednica and it ensures additional winter facilities, for example trails for ski running.

There is a large number of different stakeholders that manage the entire visitor infratstructure. However, many objects are in the middle of legal property dispute and it results with their bad condition. It implies in particular to the Rebar villa, Brestovac, Prekratić's house, Željezničar climbers' lodging, but also to the condition of other climbers' lodgings, ski slopes, traffic and other infrastructure that also do not have quantitative standard necessary for the improvement of tourist function of the Park. None actual and recent economic situation does not help in the solving of problems of Medvednica. That is one of the reasons why there is a period of stagnation of tourism development in Medvednica Nature Park. During restoration or complete reconstruction it is necessary to insist upon the projects of high energetic efficiency.

It is possible to improve current situation with funding of the Stakeholders Forum, their connection, continuous collaboration and near availability of the EU funds. At the moment of creation of this Strategy it is already known that the Gondola project has been signed on for the EU funds together with Medvedgrad Visitor Center. Those are two huge infrastructure projects. If they are going to be realized in the following three to four years, they will represent the investments that have not been recorded in the Park for a long period of time. Medvednica Nature Park needs a professional improvement of its tourist offer – integrated and through mutual promotion and marketing. Efficient

promotion and marketing need to be established through mutual brand of Medvednica as one destination. One should be aware that the strength of a brand lies in the quality of services and contents, including human beings.

Visitor management represents an important role in maintaining ecological sustainability of the Park as a whole or one habit in the Park (e.g. Veternica cave). In any case it is inevitable in all the models of cautious tourism development that have an accent on studying and understanding of the field and on monitoring of the influences that different tourist activities have upon nature. Visitor management techniques are versatile: zoning, entrance and ticket billing, limiting of visits and development of particular area, planning, time and physical dispersion of the visitors and strict bans. This Strategy accentuates the important management component – monitoring of the influences of tourist activities upon nature. Continuous research of visitor structure and attitudes is recognized as important, just as potential market surveys outside of the borders of the Park. One of the important unanswered questions that should be made before any serious "touristification" is the bearing capacity of the peak zone. Having in mind the current weight of the peak zone with contents, it is necessary to develop new and spectacular attractions outside of the peak zone and to redirect visitors to other parts of the Park. The necessity of connection between the southern and the northern side of the Park is of special significance.

Dinaric Arc Parks project is a project of regional character that has a strong accent upon cautious tourism development in protected areas. Medvednica Nature Park has a leading role in this project along with ten other protected areas due to nomination for European Charter for sustainable tourism (Europarc). The continuation of the project in the period from 2015 to 2017 will also continue the development of specific tourist products of great quality that connect the Dinaric Arc region – eight countries of the Arc by improvement of promotion and commercialization. It will help the achievment of this Strategy's aims and activities. The Ministry of the Environmental and Nature Protection is conducting two projects that improve tourist functions of protected areas at the moment. Information center Bliznec project has already been realized. Negotiations for financing of the action plan of Veternica cave by this Strategion are underway.

As previously analized, the Strategy of Tourism Development in Croatia by 2020 assumes large increase of potential for the niches from the domains of nautic, health, cycling, adventure, sports, cultural and business tourism. The majority is concerning to the possibility of development inside the borders of Medvednica Nature Park. Global and domestic trend of visiting protected areas, good tourist results in the City of Zagreb and forecasts that show revival of business tourism after recession are the factors of expected increase of consumption and the number of business events. At the same time, meeting, conferences and events market enters the new era of "culture of savings" and that is the reason why closer destinations will be chosen. The trend of smaller number of participants and shorter events will also continue. The technology of live video transmission and the use of social networks will develop further. Environmental responsibility of destinations and service providers will positively affect the decision of selection. It is a big opportunity for Medvednica Nature Park. Zagreb and Stubičke Toplice have made three projects related to health tourism: the restoration of ruins of the former tuberculosis hospital Brestovac, the construction of camping area for vehicles in Stubičke Toplice and putting the Stubica spa back in function.

Adventure and cycling tourism on Medvednica already exist as a tourist niche. Last year nine new cycling trails of total length of 150 kilometers have been put in function. They were constructed in collaboration with cyclists. There is still a space for their promotion, networking and connection on local, regional and international level.

The Ministry of Tourism and its system of tourism associations annually issue financial support for different programs. The Institution and other stakeholders can apply for the projects that should be coordinated in the Forum.

All the stakeholders in the Forum agree that Medvednica and its peak Sljeme represent a crucial tourist attractor and that plentitude of contents and services for tourism. It represents big tourist and recreational potential of Zagreb and its surrounding. The strong educational function of the Park for associate-degree colleges, universities, high schools and primary schools and informal ways of education during the implementation of assessment of 79 protected areas in 8 countries of the Dinaric Arc Parks project by PA BAT methodology has been recognized.

Stakeholders of the Forum also agree unanimously that Medvednica Nature Park has much larger potential in providing different and attractive contents and activities during whole year, but all of us together need to make an effort and approach the tourist market in the surrounding and wider as a unique and single tourist destination.

It is also recognized that in the last few years in Zagreb and its surroundings, as well as in Nature Park Medvednica itself, a whole range of various tourist offer has been developed, which puts our protected

area in a competing position. Tourism is one of the most competitive and fastest growing industries on global and local levels, because all countries have a goal in increasing national and international visits. Nature Park Medvednica as a tourist destination will have to work hard to increase its attractiveness for visitors and its share in the tourist market. This refers to all members of the Forum, because tourism as an industry requires a well coordinated and integrative approach, as well as communication among all: public institutions, civil society and private sector. One of the first steps that the Forum should take, is to identify national and foreign agencies which would help better commercialization of the tourist offer in Medvednica.

8.2. EUROPEAN CHARTER REQUIREMENTS

The European Charter defines Sustainable tourism as "any form of tourism development, management or activity which ensures the long-term protection and preservation of natural, cultural and social resources and contributes in a positive and equitable manner to the economic development and well-being of individuals living, working, or staying in protected areas". To put this form of tourism into practice, the European Charter explicitly refers to a balance between the needs of the environment, local businesses, visitors and the host community. It is crucial to conserve, bring out and promote the special qualities of each protected area as a basis of its tourism offer. All sustainable tourism strategies should address four key aims for sustainable tourism in protected areas:

- To conserve, enhance and gain values from the environment and heritage
- To increase economic and social benefits from tourism
- To protect and improve the quality of life of local people
- To engage in effective visitor management and enhance the quality of tourism offer.

The official Charter text points out two underlying aims of the European Charter for Sustainable Tourism in Protected Areas:

- To increase awareness of, and support for, Europe's protected areas as a fundamental part of our heritage that should be preserved for, and enjoyed by, current and future generations.
- To improve the sustainable development and management of tourism in protected areas, which takes into account the needs of the environment, local residents, local businesses and visitors.

The Charter elaborates these two aims in a set of ten principles, which point the way to the kinds of structures and actions required. These are:

- 1. To involve all those implicated by tourism in and around the protected area in its development and management;
- 2. To prepare and implement a sustainable tourism strategy and action plan for the protected area;
- 3. To protect and enhance the area's natural and cultural heritage, for and through tourism, and to protect it from excessive tourism development;
- 4. To provide all visitors with a high quality experience in all aspects of their visit;
- 5. To communicate effectively to visitors about the special qualities of the area;
- 6. To encourage specific tourism products which enable discovery and understanding of the area;
- 7. To increase knowledge of the protected area and sustainability issues amongst all those involved in tourism;
- 8. To ensure that tourism supports and does not reduce the quality of life of local residents;
- 9. To increase benefits from tourism to the local economy:
- 10. To monitor and influence visitor flows to reduce negative impacts.

Particular requirements of the Charter include:

• Establishment of a permanent structure for working together, which will insure mutual management of sustainable tourism in the protected area. Specifically, the Charter expects that: A permanent Forum, or equivalent arrangement should be established

- between the protected area authority, local municipalities, conservation and community organizations and representatives of the tourism industry.
- A strategy for sustainable tourism in the protected area, which is based on local
 consultation and an assessment of the area's needs and opportunities. The aims of the
 strategy should be in line with the four key aims set out above.
- An action plan for five years, which should identify the responsibilities of the different players and ensure the implementation of the 10 principles of the Charter in the protected area.

9. STRATEGIC AIMS AND VISION

STRATEGIC AIMS

- 1. To conserve environmental integrity, landscape and particular components of natural and cultural heritage, especially the Natura 2000 species and habitats, as well as monitoring of their condition.
- 2. To improve basic ecological, recreational and educational function of the NP Medvednica.
- 3. To increase the quality of services and facilities for visitors.
- 4. To increase and broaden collaboration with the stakeholders of the Park, local people and private sector.

VISION FOR SUSTAINABLE TOURISM IN NATURE PARK MEDVEDNICA

By 2018 Nature Park Medvednica will be nationally and internationally recognized as a sustainable tourist destination, which through the implementation of quality and enriching programs for visitors, makes possible the preservation of natural and cultural heritage, prosperous business of local businesses and better quality of life of local residents.

THE ROLE OF PUBLIC INSTITUTION NPM

The activities of PI NPM encompass the whole area of Nature Park Medvednica. Our Institution has to hold a clear role in the support and development of sustainable tourism in its area, first and foremost through networking and coordinating all subjects active in the Park, and the encouragement of their mutual communication and partnerships.

The primary role of PI NPM is preservation of natural and cultural heritage of the Park and its biological and landscape diversity, as well as systematic research and interpretation of the information on the Park, emphasizing its exceptional features and educating contemporary and future generations. The Institution also has to turn to the development of sustainable tourism in the Park, supporting tourist projects and initiatives through active cooperation with tourist sector (tourist boards and agencies) and marketing and promotion of joint programs. Such cooperation would not allow for the overlapping of the areas of activities of tourist sector and the Institution, but would enable them to complement and develop sustainable tourist offer in the Park. Such cooperation would be useful both for the tourist sector and the Park, that is, the managing Institution.

In order to make such strategy viable, the cooperation and support of tourist institutions is crucial, specially the support of tourist boards, because they carry out a great part of the effective marketing of destinations, as well as manage tourism in their area of competence, including research, the development of products, information services and education of tourist workers. They also have regular direct communication with many tourist agencies throughout Croatia and abroad. Therefore it is very important to establish and retain good cooperation between the Park and tourist associations, and act in partnership in the implementation of the Strategy and Action Plan. Although good cooperation with some local tourist associations has already been established, there still remains a lot to do in the direction of the improvement of the present practice, to the benefit of visitors, local businesses, the Institution and the Park as a whole.

KEY OBJECTIVES

1. To define and strenghten the identity of Nature Park Medvednica as a sustainable destination, promote its natural and cultural values, as well as its offer to visitors, encouraging longer stay and exploration.

(correspondent to principles 5, 6, 7, 8, 9)

Indicators:

- a) increased number of enquiries on the values of NPM
- b) improved program of the promotion of natural and cultural values

established

- c) improved offer to visitors
- d) increased number of visitors (home and international)
- e) increased overnight stays
- 2. To improve the system of management of visits to NPM, as well as of visitor flows.

(correspondence to principles 3, 8, 9, 10)

Indicators:

- a) increased number of guides/educators
- b) increased number and improved quality of contents for visiting, recreation and education
- c) improved cooperation with tourist associations and agencies d) increased number of visitors and higher level of satisfaction
- 3. To develop and improve a variety of contents and activities to enhance the satisfaction of visitors with their visit, based on recreation and education about natural and cultural values of the Park.

(correspondence to principles 4, 5, 6)

Indicators:

- a) increased number of educative, interpretative and recreational contents in the Park
- b) improved offer and promotion of natural and cultural values
- c) increased number of visitors
- d) higher level of visitors satisfaction
- 4. To connect, coordinate and cooperate with all internal and external stakeholders of the Park on integrated and sustainable development of tourism in NPM, as well as on its efficient promotion.

(correspondence to principles 1, 3, 4, 5, 6, 7, 10)

Indicators:

- a) number of stakeholders in the Forum of Nature Park Medvednica
- b) number of meetings and minutes of the NPM Forum
- c) improved cooperation and information between the stakeholders (number of joint projects)
- d) number of educations organized for the members of the Forum
- e) recognized value and benefit of the implementation of sustainable tourism

among stakeholders as well as visitors

5. To increase the awareness and understanding of the function of tourism in the Park, including its impact on the environment and residents of the Park, as well as its economic contribution.

(correspondence to principles 3, 4, 7, 8, 9, 10)

Indicators:

- a) increased awareness of local residents and stakeholders of the importance
- of sustainable tourism
- b) the results of the research on economic contribution promoted to the Forum and the public

- c) increased control of implementation of tourist contents and activities d) number of educations for the members of the Forum

10. ACTION PLAN

Table 12: Action plan 2014 - 2018

Key objective	Activities	Indicators	2014	2015	2016	2017	2018	Source	Cost/ Euro
1	Develop midterm Interpretative Plan	Interpretive Plan completed		Х				Own income/ PINPM/ Forum NPM	2000,00
1	Create new souvenir offer related to defined interpretative themes	interpretation themes defined; number of new souvenirs	х	Х	х	х	Х	Own income/ PINPM/ Forum NPM	10000,00
1	Publish second Edition of the guide Decode Medvednica! and translate and publish it in English	second edition published; Second edition translated and published in English			X			Own income/ PINPM/ Donation of tourist boards	20000,00
1	Natura 2000 Croatia and NPM - traveling exhibition in the Park	Exhibition Natura 2000 shown in the park for four months Number of exhibition venues Number of visitors	x					Own income/ PINPM	200,00
1	Regularly create and publish flyers, posters and other promotional and educational material, multilingual	Number of published posters and flyers; number of other printed promotional materials in several languages	х	х	х	х	х	Own income/ PINPM/ state budget/ Donation of tourist boards	10000,00
1	Educate about and interpret natural and cultural values of the Park	Number of users of education; number and types of of different interpretative methods	х	Х	Х	Х	Х	Own income/ PINPM/ state budget	5000,00
1	Promote aesthetic, health, spiritual values of NPM for human well-being	Number of promotional articles, posting on the web, facebook, events, etc.	x	х	х	х	x	PI NPM/ Forum NPM	1000,00
1	Encourage participation of the media in education and informing on the protection of natural and cultural heritage in Nature Park Medvednica, and establish a lasting	Media included in education and information; signed partnership agreements; number of contacts for the media; number of organized study	х	х	х	x	х	PI NPM	6000,00

	partnership	tours for media representatives							
1	A complete redesign of the website Nature Park Medvednica (interactive, visitor-oriented)	Redesigned and interactive site; satisfaction poll of site visitors completed	х					PI NPM/ Tourist board city of Zagreb	5000,00
1	Define the brand for Nature Park Medvednica as a unique tourist destination	Brand relevant to the entire park defined and used in promotion; number of publications	х	х				PI NPM/ Forum NPM	10000,00
1	Define brand for the Visitors Center Medvedgrad	Medvedgrad brand developed and recognizable	X					PI NPM	3500,00
1	Continuously present the offer of the Park at tourism fairs and other events, in tourism sector (travel agencies and tourist associations) and to the media.	Number of fairs in which the park participated; number of meetings with agencies and associations; number of features, articles in the media; number of visitors to tourist attractions	X	X	X	х	x	PI NPM/ Forum NPM	12500,00
2	Reconstruction of ZET gondola (cable car) 2014- 2016	Gondola reconstructed and operating	X	x	x	х	х	City of Zagreb (posibility for EU structural funds)	20000000,00
2	Strive to ensure access to facilities and services for all	Number of adjusted infrastructure; Number of programs developed for persons with disabilities; Level of user satisfaction	х	х	х	х	х	All Forum stakeholders/ PI NPM	50000,00
2	Explore the possibility of recategorization of the road after the opening of the gondola line	Number of meetings with the relevant authorities; verification of legal framework					х	PI NPM/ Forum NPM	0
2	The project of new signalization in NPM	New signalization posted in the Park; Number of signposts; Number of	х	х				PI NPM through donation from tourism sector	30000,00

	1	i	1		1				
		information panels; visitors							
2	Improving traffic signalization outside the park	satisfaction Number of new signposts outside the park	х					PI NPM through donation from tourism sector	5000,00
2	Investigate the load capacity of peak area	Study on the capacity of peak area completed			Х			PI NPM	5000,00
3	Develop new and continue to implement existing educative programs and continually improve them (synchronize them with educational curriculum)	Number of existing, new and executed programs; Number of users; Certificate of the Education Agency	x	x	x	x	x	PI NPM	3000,00
3	Implement the project: belvedere at Fakultetsko dobro	Belvedere project realized at Fakultetsko dobro		х	х			PI NPM/ County Stubičke toplice	7000,00
3	Landscaping of the site Kraljičin zdenac: 2015- 2018	Number of documents in project documentation; Evidence of agreements, etc.		х	х	х	х	City of Zagreb/ EU Fonds	20000000,00
3	Reinterpretation and redesign of the site Horvatove stube	Number of new posted interpretative panels	х					PI NPM/ Stubičke toplice	2000,00
3	Landscaping and interpretation of Tigrovo oko and Šumarev grob sites	Number of new posted of interpretative panesl; number of benches	х					PI NPM/ Branch horticulture/ Forestry office Zagreb	1000,00
3	Implementation of action plan Medvedgrad Visitors Centre (in Annex) -2014- 2018	Action plan for Medvedgrad implemented (indicators in AP1)	х	х	х	х		PI NPM/ EU structural funds	2500000,00
3	Implementation of action plan Veternica Cave (attached)	Action plan Veternica Cave implemented (indicators in AP2)	х	х				PI NPM through NIP project	65000,00
3	Complete reconstruction of Forest trail Bliznec	Forest trail Bliznec completely reconstructed	х	х				PI NPM City of Zagreb/ Forestry office Zagreb/ Branch Horticulture	200000,00
3	Regular maintenance of infrastructure for visitors in NPM and adjusting it to	Number of annual reports on maintenance	х	Х	х	х	х	PI NPM/ Forum NPM	25000,00

	new requirements								
3	Regular celebration of important dates in nature protection	The number of celebrations of important dates / reports; Number of TV and newspaper features; number of visitors	х	х	x	x	x	PI NPM/ Forum NPM	12500,00
3	Carry on traditional cultural tourism events with gradual introduction of new ones	number of events, number of visitors; Number of TV and newspaper features	X	X	x	X	X	PI NPM/ Forum NPM	10000,00
3	Gradually replace interpretative panels on all educational trails and other in the park in accordance with the national standard	Number of replaced boards annually	х	х	x	x	x	PI NPM through donations	30000,00
3	Create itineraries in NPM and networked national and regional trails (e.g. Neanderthal trails, Gubecs rebels (puntari), milkmans trail, "spa trail", miners trail, millers trail, pilgrims trail)	Number of created itineraries, number of users; number of partners	X	X	X	x	x	All Forum stakeholders/ PI NPM	5000,00
3	Design "Medvednica Passport " - a booklet for collecting seals from various locations	The booklet with seals designed; number of users who collect seals	х	X	X	х	х	PI NPM through donations	3000,00
3	Explore the possibility of establishing a bike park in NPM (pre-feasibility study)	Study completed		x				PI NPM	5000,00
3	Design little brochures with Parks offer	Number of brochures	Х	х	x	х	Х	PI NPM	2000,00
4	Prioritize large investment projects and detect partners	Number of prioritized projects; number of partners involved	х	Х	х	x	х	PI NPM/ City of Zagreb/ Forum NPM	3000,00
4	Explore justification for the establishing a camp with low impact on nature	Drafted elaborate				X		PI NPM	3000,00
4	Building autocamp	Camp in operation;	х	Х	Х	Х		County Stubičke	5000000,00

	Stubičke toplice	Stubičke toplice						toplice/ EU	
	and	spa						funds	
	reconstruction of spa Stubičke	reconstructed							
	toplice							51.1.51.4/	
4	Compile and regularly update	Compiled calendar	Х	Х	Х	Х	Х	PI NPM/ Forum NPM	3000,00
	Calendar of	updated at least						· Ordini i vi	
	Events of all	once a year; number of							
	stakeholders of the Forum, for	publications							
	NPM and								
4	environs Develop and	Number of		X				PI NPM	1000,00
	countinously	developed		^				1 1 1 1 1 1 1 1 1	1000,00
	implement	programs;							
	programs for volunteers	number of implemented							
		programs							
4	Explore the effectiveness of	Exploration of efficiency		Х				PI NPM	500,00
	establishing a	completed							
	Web portal for								
	promotion of complete tourist								
	offer in the Park								
	by all Forum stakeholders								
4	Establish	Collaboration	Х					PI NPM	2000,00
	cooperation with	with the							
	the Museum of Prigorje on the	Museum of Prigorje on the							
	project	project Kuzelin							
	Archaeological Park Kuzelin	established							
4	Identify relevant	Number of	Х					PI NPM	2500,00
	tourist and travel	meetings; facilities and							
	agencies and establish	services used							
	cooperation in the								
	sale of content and services								
4	Support	Number of	Х	Х	Х	Х	Х	PI NPM/	2500,00
	development of	objecs with						Forum NPM	
	high quality local gastronomic offer	local authentic cuisine;							
	in the Park and	number of eco-							
4	environs Support members	producers Number of	x	х	X	х	х	PI NPM/	0
	of the Forum and	realized	^	<u> </u>			^	Forum NPM	v
	others in the development of	projects and cooperations							
	contents for	cooperations							
	visitors which								
	preserve and contribute to the								
	values of the Park								
4	Support the projects of energy	Number of supported,	х	х	х	х	х	PI NPM/ City of	1500000,00
	efficiency and	number of						Zagreb/	
	eco-certification of	completed						Forum NPM	
	catering and accommodation	projects; number of eco-							
	objects in the	certificates							
4	Park Strongly support	Number of	x	х	X	Х	х	PI NPM/	2500,00
'	regional and	participations in		^	^	^	^	City of	2000,00

	international cooperation in the	regional and international						Zagreb/ Forum NPM	
	creation and promotion of	events; number of						1 Oldin I II.	
	tourist products	promotions; number of products							
4	Develop a protocol for crisis management	Protocol completed; protocol followed in state of emergency	х					PI NPM/ Forum NPM	1000,00
5	Continue monitoring of Zrinski mine	Reports on monitoring the situation of the Mine	х	х	х	х	Х	PI NPM	15000,00
5	Continue monitoring of Veternica Cave	Monitoring reports of underground fauna and bats of the cave	х	Х	Х	х	х	PI NPM	10000,00
5	Continue monitoring of ski- tracks	Annual report on the monitoring of ski tracks	Х	х	x	х	x	PI NPM	5000,00
5	Develop new integrated protocol for monitoring ski tracks	New protocol completed; protocol is followed; Number of reports			х	x	х	PI NPM	2000,00
5	Research on the structure and attitudes of visitors of NPM (3.)	Number of polls; completed basis for data analysis; study completed			x			PI NPM	2000,00
5	Research on the perceptions of NPM of non-visitors in cooperation with county tourist boards	Research conducted in collaboration with the County Tourist Boards			X			PI NPM/ County tourist boards	2000,00
5	Educate human resources - stakeholders of Forum on sustainable tourism and other relevant topics	Number of education on the topic of sustainable tourism, etc.; number of educated stakeholders	х	x	X	х	X	PI NPM/ Forum NPM	5000,00
5	Educate stakeholders of the Forum on major natural and cultural values of the park	Number of educations on the values of the park; number of educated stakeholders	x	x	x	х	x	PI NPM	3000,00
5	Research on the economic value of tourism functions in NPM	Research on economic value of tourism in the Park completed				х		PI NPM/ donation from tourism sector	15000,00
	11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	i an completed	1	_1	ТОТ	TAL:			31.625.700,00

11. COMMUNICATION STRATEGY OF NP MEDVEDNICA

11.1. Introduction

At the beginning of September 2013, Public Institution Nature Park Medvednica was nominated for the Charter for sustainable tourism (Europarc) within the WWF MedPo project the Dinaric Arc Parks, alongside the three Croatian protected areas - National Park Kornati, Nature Park Vransko jezero and Nature Park Lonjsko polje. The obligations accepted with the nomination are the development of the Strategy of Sustainable Tourism and Communication Strategy.

So far Nature Park Medvednica has not considered the activities for the planning of communication processes, and consequently does not have such systematic document. Obviously the introduction of this aspect of operations needs not be elaborated upon - it is simply an integral part of daily routine or of annual cycle of the operations of the Park which has not yet been systematically and proactively considered. Communication has been practiced more as a reaction to public views, or as a part of activities related to promotion and education, which also includes tourism through developing and offering various services and contents for visitors, such as cultural tourism events, ecological campaigns, etc.

Motivated by the Charter, the Park now stands before the challenge of the process of developing a strategic or planned communication, always keeping in focus the need to cultivate relationships and dialogue with all stakeholders (internal as well as external), and their participation in the development and implementation of the Strategy of Sustainable Tourism of NP Medvednica.

The participation of the general public and communication strategy have been designed so as to involve all target groups, including the local community, in the creation of the common vision of the development of sustainable tourism in the protected area.

The communication strategy is going to create the awareness of various target groups of the values of biological diversity of NPM, about ecological networks, sustainable development of tourism and of the Charter as the as the frame to build within, and show that joint efforts of all involved, and the employment of professional and legal frame, can reconcile the exploitation of nature and its protection, and consequently interconnect the targeted groups, primarily the ones within the borders of NPM.

11.2. Communication Aims

The main goal of this communication strategy is to inform relevant bodies at the local, national and regional level, local community, stakeholders and general public, as well as the business sector, of the importance of the protection of biological diversity and ecological networks, the development of sustainable tourism in NPM, the Charter for Sustainable Tourism, and of the necessity and potentials of cooperation in the activities of the Strategy for Development of Sustainable Tourism and the Management Plan of NPM.

The Strategy establishes the following communication aims (general and specific) of the NPIP project:

General

- to provide information on the activities, aims and results of the Strategy of Sustainable Tourism in NPM and on the Charter at the local, national and regional level
- to promote the appreciation of the importance of the protection of biological diversity in NPM and its sustainable exploitation in NPM
- to achieve better institutional positioning
- to establish cooperation and dialogue between target groups and Public Institution NPM
- to involve as many as possible stakeholders in the realization of the Strategy and the Charter, sustainable exploitation and protection of NPM
- to promote the participation of general public, volunteers as well as the involvement of business sector

Specific communication aims:

• to increase awareness of defined target groups and general public of the aims of the Charter

- and Strategy has been increased
- to establish cooperation of all target groups in the realization of the Charter through the Forum, with everyone understanding their roles and responsibilities
- to include local community in the development of sustainable tourism and land management in the protected areas
- to support the role of volunteers as the assistance in the activities in the protection of nature
- to increase the understanding of benefits biological diversity offers to
- to promote the examples of good practice and innovative solutions in the protection of biological diversity as well as of the development of sustainable tourism
- to reduce conflicts and the necessity to react to public views
- to increase fundraising possibilities

11.3. Target groups

The stakeholders have been classified into 6 target groups, and a detailed list is available in the Attachment. Better communication and connection between the defined target groups is going to provide the base for a long-term cooperation also in the realization of development aims on the national scale, outside the bounds of the NPIP project. The methods of incorporating separate target groups into the realization of project activities are going to vary from project component to project component, as well as from target group to target group.

- State administration, public institutions, agencies and institutes at local and national levels
- Park visitors
- Forum of stakeholders of NPM members
- scientific or high education institutions, primary and secondary education system
- related sectors 11 (agriculture, water management, forestry, tourism, traffic, physical and regional planning, fishery, hunting, culture, regional development, environment protection)
- non-governmental organizations
- media

11.3.1. State / public administration, public institutions, agencies and institutes at national and regional levels

The description of target group: decision makers, potential assistance in mobilization and coordination of other target groups, may facilitate financial support.

- Ministry of Culture, Directorate for the Protection of Cultural Heritage
- Ministry of Tourism
- State Institute for Nature Protection (DZZP)
- Environmental Protection and Energy Efficiency Fund
- Public Institutions for Management of Protected Areas
- National Protection and Rescue Directorate
- Croatian Chamber of Commerce Tourism Department
- Croatian National Tourist Board
- City of Zagreb
- Municipalities: Bistra, Stubičke toplice, Gornja Stubica, Donja Stubica, Jakovlje, Ivanec

Means of communication:

- newsletter 1x annually; web, reports, working groups, meetings, workshops.

11.3.2. Local bodies, local community

The description of target group: potential conflicts in multiple exploitation of natural resources, insufficient communication and coordination between the national, regional and local administrations, often on the periphery of development, interested in local development, land protection, emotionally bound to the area, relatively insufficiently informed about NPIP project themes, insufficiently organized. Local community is the primary target group which takes care of its natural resources and

its inclusion in the realization of the NPIP project is essential for their protection.

- Local community, local authorities
- The City of Zagreb and its districts
- Municipality of Bistra
- Municipality of Stubičke Toplice
- Municipality of Donja stubica
- Municipality of Gornja Stubica
- Museums of Hrvatsko Zagorje
- Jablanovec, Ivanec, Zaprešić
- Local toruist boards

Means of communication:

- newsletter, web, workshops, ad hoc work groups

11.3.3. Scientific or higher education institutions, primary and secondary educational system

The description of target group: very high level of knowledge about ecological networks and biological diversity, poor interpretation of information to general public, ecosystems regarded as having no interaction with humans

- Croatian Academy of Sciences and Arts Ornithology Department
- University of Zagreb Faculties of: Science, Veterinary Medicine, Agronomy, Architecture, Forestry, Pharmacy, Mining, Geology and Petroleum Engineering and Bio-technology
- Polytechnic in Karlovac
- Croatian Museum of Natural History, Zagreb
- Institute "Ruđer Bošković" Zagreb
- Forestry Institute Jastrebarsko
- Education Department of the Republic of Croatia

Means of communication:

- meetings (work groups), conference, flyers, newsletter, web

11.3.4. Related sectors

Interlinking of all identified sectors involved in planning, exploitation of natural and cultural resources, regulation, management and monitoring of ecosystems, as well as the reinforcement of their capacities, are important for the protection of biological diversity and for the realization of the Strategy of Sustainable Tourism, the Charter and the Management plan of NPM.

Identified sectors are: agriculture, water management, forestry, tourism, traffic, physical planning, fishery, hunting, culture, environment protection, regional development (11). Tourism:

- NPM and Natura 2000 have been protecting exactly the areas most attractive to tourists. Means of communication:
- meetings (work group), reports, conference, workshops

11.3.5. Non-governmental organizations

Non-governmental organizations are a significant factor because they are able to influence general public and local community much faster than the state and public administration.

Although the organizations involved in nature and environment protection are relatively few, they present exceptional potential which has to be employed. There are also other organizations engaged in education, local development, participation of the public, cultural heritage and other subjects related to the particular activities of the Strategy to be enveloped, for several reasons: the immediate involvement of community in the activities of NPM, better communication with local community, and the reinforcement of capacities in knowledge, experience and innovation.

Means of communication:

- web, meetings (work groups), newsletter, workshops, conference

11.3.6. Media

The media of public communication are among the most powerful multipliers and transmitters of information, and consequently among the main influencers of public opinion. In this Strategy the media are a target group, that is, the active partner in the realization of the Strategy, and as a means or tools of transmitting information and messages.

Cooperation with the media is going to result in better public appreciation of the aims of the Park, the Strategy of Sustainable Tourism and the Charter, as well as in obtaining the support and inclusion of business sector, and potential sponsors and donors. Therefore the interactive communication with the media has to be established at the very beginning of the implementation of the Strategy, they should be included as active stakeholders in the Forum, and not limited to one-way communication merely providing information on activities in the Park.

The Strategy should provide for the assembling of a base of journalists regularly reporting on the activities of the Forum, Charter and PI NPM, as well as organizing a basic press kit on the Charter, Forum and Strategy, in order to transmit information quickly, accurately and efficiently.

Means of communication: press releases, web, meetings (work groups), workshops, study visits to NPM.

11.4. Chosen means of communication and the inclusion of target groups

The starting point is the informing, that is, increasing the awareness of the public of the main components of the NPIP project, as well as the informing of all target groups about the purpose of the project. The process has already started in the phase of the preparation of the NPIP project. In order to inform and increase the awareness of target groups a mix of communication means was chosen, as well as the methods of incorporating target groups in the realization of the aims and results of the project. The techniques of facilitation and moderation vary according to the nature and requirements of various groups, as well as of the project components of NPIP, and are going to be chosen in the course of the realization of the project.

As the means of support to the activities of the Strategy for Sustainable Development of Tourism the following means of communication were chosen:

- web page
- · periodical press releases
- electronic newsletter
- TV interviews
- meetings of the Forum and work-groups
- manual for volunteers in the system of nature protection (NIP project link)
- organization of conference
- organization of workshops (according to the planned activities of the Strategy and the Charter)
- organization of two study visits to NPM for the media and stakeholders
- organization of special events promoting the Charter and sustainable tourism

11.4.1. Web page

Internet is a very powerful means of transmitting information to target groups. Web page can be a central place for dissemination of information, and in the past one of the major mistakes of the Forum was a failure to compile and publish annual calendar of the events organized by various stakeholders in the Park. Mutual promotions can also reinforce the promotion of the Charter activities.

The Park is going to create a special segment in its web page pertaining to the activities of the Forum and the implementation of the Strategy, with the view of connecting it to the web pages of the stakeholders (DZZP, PI and others).

The web page is going to be updated according to the requirements of the project, at least once a month.

The page has to carry as much as possible electronic materials such as photographs, presentations, short promotive films, etc.

11.4.2. Press releases

Press releases are going to be employed frequently in the period of the beginning of the realization of the Strategy of Sustainable Tourism and of awarding of the Charter, and later where appropriate. In order to inform the media of the project activities the annual press conference has been planned. In the cooperation with specialized magazines and journals (GEO, Meridijani, Croatian issue of National Geographic, etc) it has been planned to publish articles on the subject and provide more information to the smaller, specialized public.

11.4.3. Electronic newsletter

Newsletter is a convenient means of retaining the interest of target groups in the period of the duration of the Strategy. Newsletter regularly offers information on the implemented project activities and experiences in an informal way. The Strategy provides for the mailing of the newsletter to all detected target groups and their contacts, as well as to all members of protected area sector mailing list. It is also going to be posted on the web page. The program and content of the newsletter has to be established by the people who lead the Charter and implement the Strategy.

11.4.4. Television broadcasts

The media of public communication are one of the most powerful multipliers and transmitters of information, as well as one of the main influencers of the public opinion. Broadcasted features and interviews are the tools to be employed more frequently in the phase of the announcement or at the start of the project, and later when necessary, according to the developments in the project and circumstances. A short promotive video (3-5 minutes) should be created and distributed to the media for broadcasting. Specialists, project leaders and others will also be available for interviews. Some of the television and wireless broadcasts of interest are:

"Eko Zona"

"Znanstvena petica"

"Slušaj kako zemlja diše"

"Z kao Zemlja"

"Dobro jutro, Hrvatska"

"Boje turizma"

"Hrvatska uživo"

and others.

11.4.5. Poster

Poster is one of the tools of communication we propose to use intensively, in particular for the celebrations of important dates in the field of nature protection, such as Nature Protection Day and the International Day of Biological Diversity. The Strategy provides for the promotion of the main objectives of the Charter on the Nature Protection Day.

The theme and content of the poster, as well as the time of the realization of this activity will be established during the first year of the project.

11.4.6. Meetings of Forum and specialized work-groups

The Forum is proposed to meet at least four times a year, and also when necessary. Specialized work-groups of qualified and informed specialists in various fields will, on the basis of their knowledge and experience, decide upon the implementation of the activities of the Strategy, coordinate them, and recommend further developments and platforms.

11.4.7. The organization of conference

A conference is planned to be organized in the middle of the period of the duration of the Strategy. On the one hand it will be employed as a means of communication for the Charter and the Strategy, and on the other it will provide a potential basis for devising future programs, projects and general developments.

11.4.8. The organization of workshops

The activities of the Strategy provide for workshops (for example, in the implementation of action plans Veternica Cave and Visitors Center Medvedgrad), not to be only a means of communication, but also a vehicle for the involvement of interest groups in the achievement of the results of action plans, as well as reinforcement of knowledge and skills in the management of natural resources and sustainable development. Work-groups and project leaders have to define in advance the aims and subjects of workshops in order to solve problems and find innovative solutions for the achievement of the expected results of all components of the project.

The informal exchange of knowledge and experience by the members of target groups, alongside team work and intensification of cooperation including participants from various levels, from Ministries, over public institutions, local and regional bodies down to NGOs.

11.4.9. The organization of study visits in NPM for the media and Forum stakeholders

The informal exchange of knowledge and experience, team work and intensification of cooperation. With the aim to exchange experience the organization of 1-2 study visits in the Park with presentation of the projects of the stakeholders in the Forum, as well as the application of good practices:

a) in NPM, and

b) to other Charter protected areas in Croatia and in the region for the representatives of the Forum and the media.

11.4.10. Presentations at symposia, seminars and conferences

Presentations of the Charter and Strategy, or some specific discoveries, the results of research, etc, at symposia, seminars and conferences at home and at international level.

11.4.11. Nature Protection Day in Croatia

Nature Protection Day will be celebrated by the organization of various events related to the Charter.

11. 5. COST ESTIMATE

Table 14: Overview of costs of the activities of the Communication strategy

	Activities	Costs (EUR)	Year
1.	Redesign of Website (development and maintenance /	6700,00	2014
	content management through 5 years)		
	PRODUCTION OF CALENDAR OF EVENTS BY ALL	2700,00	2014-2018
	STAKEHOLDERS		
2.	Press Releases all five years		
	Press Conference - Organization		
	Shooting of RTV Broadcasts		
	Publishing articles in specialized journals, preparing		
	materials	400.00	0044 0040
_	Study visits for the media in NPM	400,00 1000,00	2014-2018
3.	Creating a press kit and database of journalists contacts (regularly updated)	1000,00	2014-2018
4.	Electronic newsletter-once a year, all five years	700,00	2014-2018
5.	NPM presentations at symposia, meetings,		
	conferences, seminars and other	3400,00	2014-2018
6.	Poster	700,00	2015/16
7.	Branding of Visitors Center Medvedgrad (mostly pro		
	bono Leo Burnett)	3500,00	2014
8.	Branding NPM as one destination	10000,00	2014/15
9.	Forum meetings (at least 4 times a year)	3400,00	2014-2018
10.	Organization of the Conference	4000,00	2015/16
11.	Organization of workshops and meetings of working		
	groups – as needed	2000,00	2014-2018
12.	Organization of study visits for representatives of the		
	media (2 times in 5 years)	2700,00	2014-2018
13.	Participation in professional meetings, seminars,		0044 0045
	conferences and other	2000,00	2014-2018
14.	Nature Protection Day in Croatia	6700,00	2014-2018
15.	Printing of manuals for volunteers - NIP project	0	2014-2018
16.	Translation into English	2700,00	2014-2018
17.	Research of visitors to Medvedgrad - Visitor Centre	400,00	2014
18.	Evaluation and revision of communication strategy	1000,00	2014-2018
тот	AL:	51900,00	

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