

# STANJE I TENDENCIJE RAZVOJA TURISTIČKE PONUDE OPĆINE KUPRES (BiH)

## CONDITIONS AND DEVELOPMENT TENDENCIES OF TOURISTIC OFFER IN KUPRES MUNICIPALITY (BOSNIA AND HERZEGOVINA)

ANTE ŠILJEG, SILVIJA ŠILJEG, ŽELJKA ŠILJKOVIĆ

Odjel za geografiju, Sveučilište u Zadru / *Department of Geography, University of Zadar*

UDK 910.4:397.8:004.9(497.6 Kupres)

Primljeno / *Received*: 2010-07-07

Prethodno priopćenje  
*Preliminary communication*

Informacije o turizmu temeljni su pokazatelj stanja na turističkom tržištu. O njima ovisi u kojem će se smjeru razvijati određeno turističko odredište, kako će biti razmješteni turistički resursi te ima li mogućnosti uvođenja promjena u turističku ponudu. Jaka konkurencija i sve zahtjevniji posjetitelji tjeraju odgovorne subjekte na stalno planiranje i koordinaciju. Pod turističkim planiranjem misli se na integralno i strateško planiranje koje obuhvaća analizu odredišta, definiranje ciljeva, donošenje strategije i programa, planiranje namjene prostora, organizaciju tržišta, definiranje željenih gospodarskih učinaka turizma te suradnju svih nositelja turističke ponude. Uspješnost takvog planiranja očituje se turističkim indikatorima koji služe kao okvir za procjenu postojećeg stanja i formiranje upravljačkih smjernica. Jedan od najrelevantnijih pokazatelja stanja je mišljenje turista koji ocjenjuju prednosti i nedostatke turističke ponude kraja u koji dolaze te domicilnog stanovništva koje sudjeluje u stvaranju ponude.

Rezultati ovog rada temelje se na provedenoj anketi čiji su ispitanici bili posjetitelji športsko-rekreacijskih centara "Čajuša" i "Stožer" te stanovnici općine Kupres. Utvrđena su strukturalna obilježja ispitanika i vrijednosti aktualnih stavova o turističkoj ponudi. Uočene razlike u odgovorima hrvatskih i domaćih posjetitelja, upućuju na tradiciju posjećivanja sličnih europskih destinacija. Povećanje broja turista od 50% ostvareno je zadnjih godina zahvaljujući umjetnom zasnežavanju skijaških terena, ali i boljoj turističkoj ponudi (škole skijanja, ski-liftovi, ski-vrtić, tereni za sanjkanje, snowboardi, tradicionalna hrana itd.). Iako predratni kapaciteti još uvijek čekaju obnovu, inozemne investicije naglo restrukturiraju turističku ponudu te pozitivno utječu na gospodarstvo.

Primjena GIS tehnologije omogućila je jednostavnu analizu i pospremanje podataka na osnovi kojih je izrađen kartografski prikaz. Time je osigurana preciznost u predstavljanju podataka, a svakom privlačnom turističkom čimbeniku pridodani su atributni podatci u bazi podataka. Takvo planiranje jamči odgovornije i učinkovitije upravljanje resursima turističkog odredišta i ključno je za ukupan gospodarski razvoj kraja.

**Ključne riječi:** općina Kupres, turizam, indikatori stanja u turizmu, turistička ponuda i turistička potražnja, GIS

Data on tourism represent a basic indicator of the tourist market situation. The very course of the development of a tourist destination, the distribution of tourist resources, as well as the possibility of implementing changes in the tourist offer, all depend upon this data. Strong competition and the increasingly demanding visitors cause the responsible authorities to conduct constant planning and coordination. The term "tourist planning" implies an integral and strategic planning which includes: destination analysis, defining goals, adoption of strategies and programs, planning of land usage, organization of market, defining the desirable economic effect of tourism, and the cooperation of all subjects in the tourist offer. The efficacy of such planning reflects in the tourism indicators which serve as a framework for the assessment of an existing situation and the forming of management guidelines. One of the most relevant indicators of conditions is the opinion of tourists who rate the advantages and the shortcomings of tourist offer in the area which they visit, as well as the opinion of the indigenous population which participates in the creation of the tourist offer.

The results of this paper are based upon the conducted survey among the visitors of sport-recreational centres Čajuša and Stožer, and the indigenous population of Kupres municipality. The structural characteristics of the examinees and the values of the actual opinions on the tourist offer have been determined. The perceived discrepancies in the answers from Croatian and domestic visitors indicate a tradition of visiting similar European destinations. The increase in number of tourists by 50% has been achieved in the last several years, primarily thanks to the snowmaking on the ski slopes, but also due to an improved tourist offer (ski courses, ski-lifts,

ski kindergarten, snowboard slopes, traditional food, etc.). Although the pre-war tourist capacities still wait for a renewal, the foreign investments rapidly restructure the tourist offer and have a positive impact on the economy.

The use of GIS technology has allowed a simple analysis and data storage, making it possible to create a cartographic visualization. Thus, an accuracy in data presentation has been ensured, and each of the attractive factors in tourism has been associated with attribute data in the database. This type of planning guarantees a more responsible and efficient management of resources of a tourist destination and is crucial for the overall economic development of an area.

**Key words:** Kupres municipality, tourism, indicators of conditions in tourism, tourist offer, tourist demand, GIS

## Uvod

Mjerenja kvalitete turizma imaju dugogodišnju tradiciju u razvijenim zemljama svijeta (GAHIN, PATERSON, 2001., GHOSH I DR. 2006.). Odatle su se dalje širila i u druge zemlje. U početku ta su se mjerenja razvijala pod okriljem društvenih znanosti (SAWICKI, 2002.). Kasnije dolazi do diverzifikacije i povećanog zanimanja za istraživanja na temelju indikatora zbog njihove sve češće specijalističke primjene. Indikatori stanja u turizmu mogu utjecati na donošenje upravljačkih odluka i usmjeravanje turizma nekoga kraja u pozitivnom ili negativnom smjeru. Istodobno, oni pomažu odgovornima da sustavno vode računa i prate promjene u kvaliteti turizma. To se može provesti od razine apartmana, hotela i hotelskog naselja turističke destinacije do manjih i većih turističkih regija. Suvremeni sustav indikatora pomaže u davanju odgovora na niz važnih pitanja, primjerice: *Postaje li turistički kraj bolje ili lošije mjesto za odmor? Ispunjavaju li njegovi planovi i programi zahtjeve i potrebe turista? Pridonose li poboljšanju ukupne kvalitete turizma? Utječu li na pomake, kakve i za koliko?* (CAVRIĆ I DR., 2008.).

Naravno, svi ovi upiti zahtijevaju raspolaganje s vrlo specifičnom vrstom informacija, koja se ne može izvorno generirati iz standardnih statističkih izvora. Za tu svrhu potreban je poseban metodološki postupak koji pomaže pri sustavnoj izradi indikatora u sklopu informatičke piramide (primarni podatci → pokazatelji → indikatori → indeksi)<sup>1</sup> (WRI, 1995.), prikazane na slici 1.

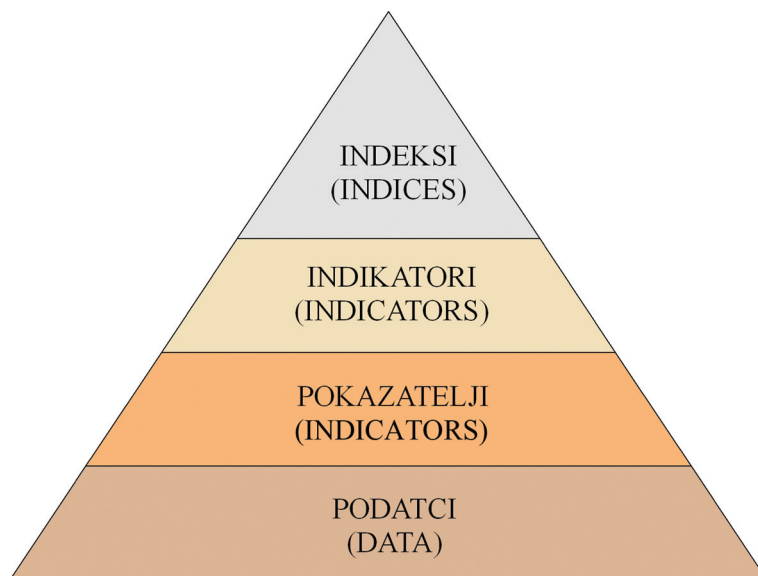
<sup>1</sup> Indikatori sadrže informaciju zasnovanu na primarnim podacima. Koriste se radi kvantificiranja informacija, isticanje njihova značenja, kao i za pojednostavnjivanje shvaćanja informacija o kompleksnim i složenim pojavama kao što je primjerice održivi razvoj (WRI, 1995.).

## Introduction

The measurements of tourism quality have had a long-time tradition in the developed countries of the world, from where their application has spread in other countries as well (GAHIN, PATERSON, 2001, GHOSH ET AL., 2006). In the beginning, these measurements were developed within social sciences. Later on, a diversification and an increased interest for researches based on indicators occurred due to their more and more common specialist use (SAWICKI, 2002). The indicators of conditions in tourism can influence the management decision-making and the steering of tourism of an area in positive or negative direction. At the same time, they appear helpful to authorities in systematic policing and monitoring of track changes in quality of tourism. It can be conducted from the level of apartments, hotels and hotel resorts of a single tourist destination up to smaller or larger tourist regions. The modern system of indicators is useful in providing answers to a series of important questions, such as: *Is a tourist area becoming a better or a worse place for vacation? Do plans and programs of an area meet the demands and needs of tourists? Do they contribute to the overall enhancement of tourism quality? Do they influence any trends (which trends and in what way)?* (CAVRIĆ ET AL., 2008).

Presumably, all these questions demand the availability of a very specific type of information which cannot be primarily generated from standard statistical sources. Instead, a special methodological process is required; the one which is helpful in a systematic creation of indicators within an information pyramid (primary data – ratios – indicators – indices)<sup>1</sup> (WRI, 1995) (Fig.1).

<sup>1</sup> Indicators contain the information founded on the primary data. They are used in quantification of information, emphasizing their importance, as well as the simplification of information comprehension when it comes to complex and elaborate phenomena such as sustainable development (WRI, 1995).



Slika 1. Informatička piramida (prema SPRENG, WILLS, 1996.)  
 Figure 1 Information pyramid (according to SPRENG, WILLS, 1996)

U organiziranim i uspostavljenim sustavima indikatori su najčešće ilustrirani kao dijagrami, karte, grafovi, sheme, tablice i slike na osnovi kojih je moguće sagledati trendove na najjednostavniji i najbrži mogući način.

Međutim, postoje i mnogi drugi oblici za pretvaranje informacija u sadržajne indikatore kao što su: audiovizualni mediji, grafički dizajn, umjetnička djela i slično. Laurini (2001.) je posebice naglasio važnost multimedijjskih i geografskih informacijskih sustava (GIS) koji utječu na izrazitu preciznost u procesuiranju, predstavljanju i upotrebi informacija o turističkim i drugim vrstama prostornih sustava. Primjena GIS-a u analizama turističkih područja, planiranju i marketingu u turizmu uobičajena je već nekoliko desetljeća. O važnosti GIS tehnologije u planiranju održivog turizma pišu Boers i Cottrell (2005.) te Culbertson i dr. (1994.) ističući potencijale GIS tehnologije u planiranju održivih oblika turističkih kretanja. Allen i dr. (1999.) naglašavaju važnost GIS-a u promjeni korištenja zemljišta u turističkim odredištima. Sličan rad o odabiru lokacija za razvoj turizma i planiranju turističkih područja pišu Bahaire i Elliott-White (1999.). Osim u planiranju turističkih odredišta i regija GIS tehnologija koristi se i u analizi demografskih pokazatelja turističkih kretanja, te u organizaciji i marketingu u turizmu (DONDO I DR., 2008., FAJUYIGBE I DR., 2007., BERTAZZON, CROUCH, 1997.). Malczewski (1999.) ističe važnost GIS tehnologije u opisivanju i

In organized and established systems, indicators are most usually illustrated as diagrams, maps, graphs, schematics, tables and images which can provide a basis for viewing the trends in the simplest and fastest possible way.

However, there are many other forms of turning information into content indicators, such as: audio-visual media, graphic design, art etc. Laurini (2001) has emphasized the importance of multimedia and geographic information systems (GIS) which provide a precision in processing, presenting and usage of information about touristic, as well as other spatial systems. The implementation of GIS in the analysis of tourist areas, tourism planning and tourism marketing has become common in the last several decades. Boers and Cottrell (2005), as well as Culbertson et al. (1994) write about the importance of GIS technology in sustainable tourism planning, with a special emphasis on potentials of GIS in land use changes in tourist destinations. There is a similar paper on choosing locations for tourism development and planning touristic areas by Bahaire and Elliot-White (1999). Besides planning the tourist destinations and regions, GIS technology is also used in the analysis of demographic indicators of tourist trends, as well as in tourism organization and marketing (DONDO ET AL., 2008, FAJUYIGBE ET AL., 2007, BERTAZZON, CROUCH, 1997). Malczewski (1999) notes the importance of GIS technology in describing and identifying touristic infrastructural elements

identifikaciji turističkih infrastrukturnih elemenata geometrijski, tematski i topografski. GIS se služi podacima o socioekonomskim, fizičkogeografskim pokazateljima i prikazuje ih u vektorskom ili rasterskom obliku.

### Istraživano područje

Općina Kupres smještena je u Hercegbosanskoj županiji u Bosni i Hercegovini (Sl. 2.). Ukupna površina općine iznosi 563 997 km<sup>2</sup>, a prema popisu stanovništva 1991. tu je živjelo 9618 stanovnika (STANOVNIŠTVO BOSNE I HERCEGOVINE, 1995.). Na prostoru općine prema današnjem upravno-teritorijalnom ustroju BiH nalazi se 36 naselja. Najveće i središnje naselje je Kupres po kojem je općina dobila ime. Unutar nje prema prostornom planu iz 2006. godine planirano je 11 športsko-rekreacijskih centara (9 za razvoj alpskog i 2 za razvoj nordijskog skijanja), od kojih su do danas samo dva valorizirana. Istraživanjem je obuhvaćen teritorij Stožera i Čajuše ukupne površine 16 597 km<sup>2</sup>,<sup>2</sup> koji se najvećim dijelom prostire na nadmorskoj visini većoj od 1500 metara. SRC "Stožer" se nalazi unutar 4 naselja: Goravci, Begovo Selo, Odžak i Kupres, dok se SRC "Čajuša" nalazi unutar 3 naselja: Gornji Malovan, Kupres i Zlosela.

Nakon ratnih zbivanja u Bosni i Hercegovini počeo je lagan, ali susljedan turistički razvoj općine Kupres, koji je potaknut izgradnjom skijališnih staza i turističkih objekata, a tijekom godina u turističku ponudu uvrštava se i prirodno i povijesno nasljeđe (JUKIĆ, 2009.). Dobra prometna povezanost s Republikom Hrvatskom privukla je i prve turiste koji su dolazili s područja Splita i njegova zaobalja, a iz godine u godinu očekuje se njihov sve veći broj. Raznoliko mala udaljenost i prihvatljive cijene glavni su razlog kupnje ili izgradnje planinskih kućica hrvatskih turista. Tako su u razdoblju od 10 godina nastala prava mala turistička planinska naselja.

Osnovni problem razvitka turizma u općini Kupres su razmjerno kratka sezona (najviše do tri mjeseca) te manjak turističkih sadržaja i servisa. Ratna zbivanja 1990-ih godina ostavila su traga na ekonomskom i gospodarskom planu. Područne ceste su u lošem stanju, osobito zimi kada su zbog neodržavanja teško prohodne. No, velike prostorne

<sup>2</sup> Površina SRC "Stožera" je 7185 km<sup>2</sup>, a SRC "Čajuše" 9412 km<sup>2</sup>.

geometrically, thematically and topographically. GIS uses the data on socioeconomic and physical-geographic indicators and presents them as vectors or networks.

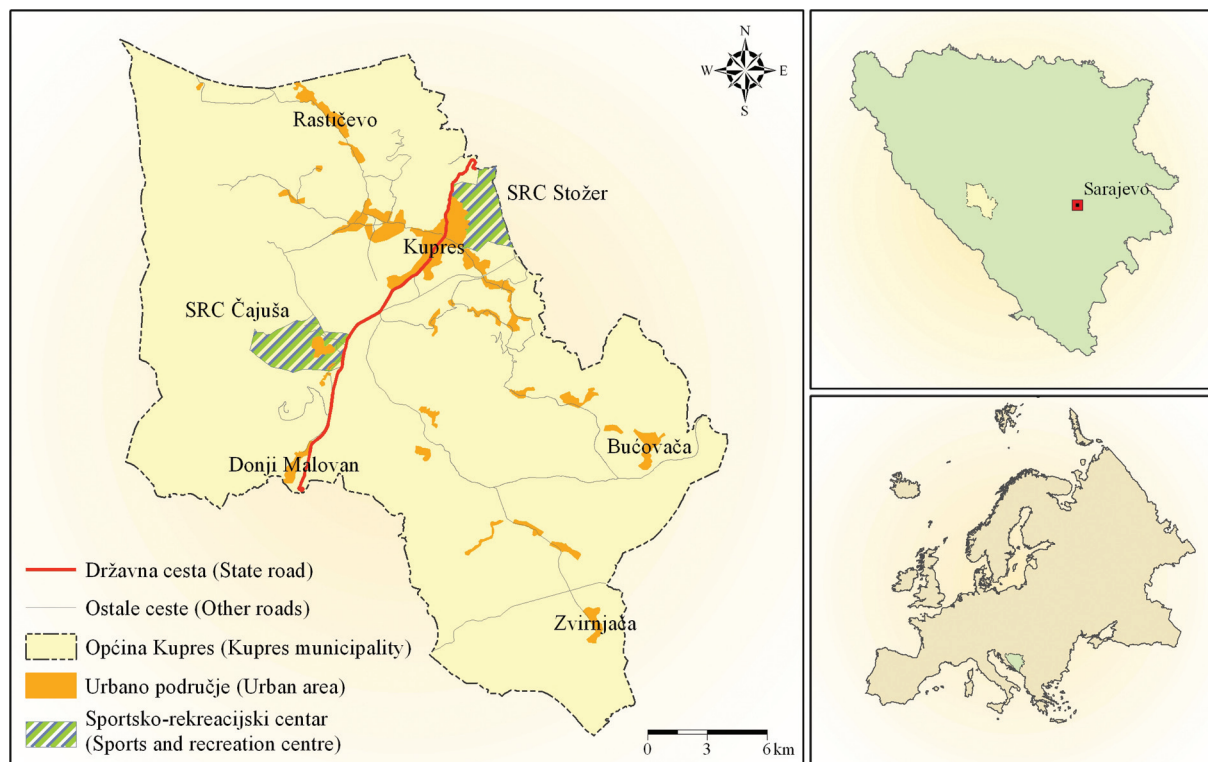
### Researched area

The municipality of Kupres is situated in Herzeg-Bosnia County in Bosnia and Herzegovina (Fig. 2). The total area of the municipality is 563.99 sq km, and according to the 1991 census, it had 9618 inhabitants (POPULATION CENSUS OF BOSNIA AND HERZEGOVINA, 1995). According to the present territorial organization of Bosnia and Herzegovina, there are 36 settlements in the area of the municipality. The largest and central settlement is Kupres, by which the municipality is named. In the regional plan from 2006, there were 11 sport-recreational centres (SRC) planned (9 for the development of alpine skiing and 2 for Nordic skiing), and the current situation shows that only 2 of them have been realized and valorized so far. The research includes the territory of Stožer and Čajuša with the overall area of 16.597 sq km<sup>2</sup>, mostly on altitudes over 1500 meters above the sea level. SRC Stožer lies within 4 settlements: Goravci, Begovo Selo, Odžak and Kupres, while SRC Čajuša encompasses Gornji Malovan, Kupres and Zlosela.

The analysis of the changes in Kupres municipality after the warfare in Bosnia and Herzegovina shows a slow but steady touristic development. It was stimulated by a construction of ski slopes and tourist facilities, and throughout the years, natural and historical heritage was included into the offer (JUKIĆ, 2009). Favourable connectivity with the Republic of Croatia has attracted the first tourists who arrived from the area of Split and its hinterland, and the increase of their numbers is expected in the following years. A relatively short distance and reasonable prices are the main reasons for buying or building mountain houses by the Croatian tourists. Thus, in the period of 10 years a number of small tourist mountain villages appeared in the area.

The basic problem of the tourism development in Kupres municipality is a relatively short season (3 months at most), as well as the deficiency of tourist services and events. The warfare in the 1990s has

<sup>2</sup> The area of SRC Stožer is 7.185 sq km and the area of SRC Čajuša is 9.412 sq km.



Slika 2. Geografski položaj općine Kupres  
Figure 2 Geographic position of Kupres municipality

površine unutar općine, omogućuju izgradnju mješovitih zona u budućnosti.

### Metode istraživanja

Osnovni izvor podataka i metodološka podloga bila je anketa domaćeg stanovništva i turista provedena na prostoru športsko-rekreacijskih centara "Čajuša" i "Stožer" te širem području naselja Kupres. Glavni razlog odabira ankete kao metode je nepostojanje sličnih studija i literature o turizmu općine Kupres. Ostali razlozi i glavni problemi u provođenju ovog istraživanja jesu: nepostojanje podataka o broju turista, čak i unutar turističkih tvrtki, neprovedeni popis stanovništva 2001. godine te negeoreferenciran Prostorni plan općine Kupres. Predmet istraživanja bio je prikupljanje činjenica i mišljenja o trenutnom stanju i mogućnostima turističkih odredišta općine Kupres, dok je istraživački cilj bio dobiti stvarnu sliku stupnja zadovoljstva turista i tamošnjeg stanovništva.

Istraživanje se provodilo tijekom turističke sezone, od 27. veljače 2009. do 2. ožujka 2009. godine na najfrekventnijim mjestima: u

left a trace on the local economy. Local roads are in bad condition, especially in winter when their passableness is reduced. However, large areas within the municipality provide a possibility of planning and building of mixed zones in the future.

### Research methods

The main source of the data and the methodological foundation was a survey among the domicile population and tourists, conducted in the area of sport-recreational centres of Čajuša and Stožer, and the wider area of Kupres. The main reason for using a survey as a method is non-existence of similar studies and literature on tourism of Kupres municipality. The other reasons and the main problems during the conducting of research were: non-availability of data on the number of tourists (not even in tourist agencies), non-availability of data for any year after 1991 (due to the fact that there was no census in 2001), and the fact that the regional plan of Kupres municipality was not georeferenced. The object of research was acquiring of facts and opinions on the current conditions and the possibilities of tourist

hotelima, na skijalištima, turističkim agencijama i u privatnom smještaju. Istraživački uzorak obuhvatio je 100 ispitanika, 1% domaćeg stanovništva općine Kupres (50 ispitanika)<sup>3</sup> i 1% turista (50 ispitanika)<sup>4</sup> u vrijeme turističke sezone, a prostorno je bio raspodjeljen na ukupno pet lokacija. Anketom su dobiveni sociodemografski podatci ispitanika (5 pitanja), a na temelju ostala 24 pitanja utvrđeni su pokazatelji na temelju kojih su oblikovani indikatori planiranja i upravljanja, prirodnog okoliša, sociokulturnog okoliša i ekonomski indikatori (prema NLP, 2008., BONACIN I DR., 2008.). Broj pokazatelja proporcionalno je povećavan prema važnosti indikatora za razvoj turizma u općini Kupres. Indikator prirodnog okoliša sačinjen je na temelju triju odabranih pokazatelja zbog pretpostavke da prirodni okoliš nije ugrožen u većoj mjeri. Indikator sociokulturnog okoliša također je sačinjen na temelju triju pokazatelja zbog pretpostavke da ne postoji kulturna ponuda grada i da je broj uključenoga domaćeg stanovništva u turizmu malen. Ostvarena ekonomska dobit od turizma temelj je za njegov daljnji razvoj, zbog čega je za ekonomski indikator odabrano šest pokazatelja. Zbog nedovoljne razvijenosti općine Kupres kao turističkog odredišta, najveći broj pokazatelja (12) odabran je za indikator planiranja i upravljanja. Da bi indikatori bili učinkoviti i uspješni, morali su se ispitati stalni i povremeni korisnici jer je prijeko potrebno:

- 1) ispitati turiste koji borave u turističkim centrima
- 2) ispitati stanovnike koji kreiraju turističku ponudu
- 3) utvrditi mjesne vizije i upravljačke smjernice
- 4) utvrditi mjesne potrebe, probleme i interes za budući turistički razvoj.

Pitanja su bila zatvorenog tipa s ponuđenim odgovorima Likertove skale s pet stupnjeva slaganja, odnosno neslaganja (1 – ne slažem se uopće, 2 – ne slažem se, 3 – djelomično se slažem, 4 – slažem se, 5 – u potpunosti se slažem). U slučaju ispitivanja stavova glede suvenira općine Kupres pitanje je bilo otvorenog tipa, gdje su ispitanici mogli iznijeti svoje prijedloge.

<sup>3</sup> Prema procjeni Katastarskog ureda općine Kupres broj stanovnika 2008. godine bio je oko 5000.

<sup>4</sup> Prema procjeni Turističkog ureda općine Kupres broj turista u sezoni 2008./2009. bio je oko 5000.

destination Kupres municipality, while the goal was to generate a real view of the degree of contentment of tourists and domicile population.

The research was conducted during a tourist season, from February 27<sup>th</sup> 2009 until March 3<sup>rd</sup> 2009, on the most frequent locations; hotels, ski resorts, tourist agencies and private accommodations. The sample included 100 examinees, of which 1% of domicile population (50 examinees)<sup>3</sup> and 1% of tourists (50 examinees)<sup>4</sup> during the tourist season, and was taken on 5 locations. The survey was set to provide sociodemographic data on the examinees (5 questions), and the remaining 24 questions were set to provide and form indicators of planning and management, natural environment, socio-cultural environment and the economy (according to: NLP, 2008, BONACIN ET AL., 2008). The number of indicators was increased in proportion to the importance and relation of indicators to the development of tourism in Kupres municipality. The indicator of natural environment was formed through 3 selected indications based on the assumption that the natural environment was mostly not endangered. The indicator of socio-cultural environment was equally formed based on 3 selected indications founded on the assumption that the town's cultural offer did not exist and that the number of domicile inhabitants involved in tourism was low. The economic profit from tourism is the basis for its further development, which is why a total of 6 indications were picked for the economic indicator. Due to an inadequate level of tourism development of Kupres municipality, most of the indications (12) have been involved with forming of the indicators related to planning and management. In order for indicators to be effective, both permanent and periodical users had to be queried. In other words, it was necessary to:

- 1) query the tourists in tourist centres,
- 2) query the residents who create the tourist offer,
- 3) determine the local visions and management guidelines
- 4) determine the local needs and issues, as well as interests for the future tourism development.

The questions used belonged to a type of closed questions with a Likert scale of five levels of agreeing or disagreeing (1 – I completely disagree, 2 – I disagree, 3 – I somewhat agree, 4 – I agree, 5 – I

<sup>3</sup> According to the estimate of the Kupres municipality's Land Register, the population of Kupres was around 5,000 in 2008

<sup>4</sup> Kupres municipality's Tourist Office estimated that the number of tourists in 2008 was around 5,000

Prema vrsti uzorak je koncipiran kao uslojeni, a prema odabiru slučajni, jer je bio uvjetovan javnomnijenjskim obilježjem. U istraživanju je korišten pristup odozdo prema gore, što znači da se težilo utvrđivanju pouzdane i objektivne javne percepcije turističke kvalitete. U svim svjetskim turističkim studijama najbolji rezultati u sferama mjerenja turističke ponude i potražnje postignuti su upravo takvim stavovima javnosti. Podatci prikupljeni na terenu kasnije su upotpunjeni podacima iz drugih izvora.

Metode primijenjene u znanstvenoj analizi rada bile su: prikupljanje primarnih i sekundarnih podataka, obrada podataka, analiza, primjena GIS alata *ArcInfo*, izrada karata, usporedba i sinteza. Prvi korak bio je kreiranje baze podataka (*geodatabase*) sa setovima podataka (*data set*) u *ArcCatalogu* (aplikacija *ArcInfo*), a zatim izrada slojeva (*feature class*) u *ArcInfo*, pri čemu je kao podloga korišten Prostorni plan općine Kupres iz 2006. godine, dobiven od Katastarskog ureda Kupres, koji je izradio Urbanistički zavod BiH Sarajevo. Da bi se prostorni plan mogao koristiti za analizu, bilo ga je potrebno uz pomoć softvera *AutoCAD* i njegovih aplikacija smjestiti u prostor<sup>5</sup>. S *Google Eartha* (elipsoid WGS84, UTM projekcija) preuzeto je pet referentnih točaka, koje su uz pomoć softvera *Kartomatika* prebačene u Basselov elipsoid i Gauss-Krügerovu projekciju. Georeferencirani prostorni plan dodan je u *ArcCatalog*, te preko aplikacije *ArcToolbox*, tj. ekstenzije *To Geodatabase* svi su .dwg slojevi iz *AutoCada* prebačeni u .gdb (*geodatabase*) slojeve *ArcInfo*. Svi novonastali .gdb slojevi su preko izbornika *Topology* (ekstenzija *ArcToolboxa*) ispravljeni, zbog brojnih pogrešaka koje su nastale tijekom izrade Prostornog plana općine Kupres. Poslije terenskog istraživanja obrađivali su se (unijeti u *Excel* tablice) podatci, odnosno odgovori građana na postavljena pitanja iz ankete. Svaki odgovor podijeljen je s brojem ispitanika da bi se dobile postotne vrijednosti. Rezultati statističke obrade uneseni su uz pomoć GIS alata *ArcInfo* u zajedničku GIS bazu podataka.

<sup>5</sup> Prostorni plan napravljen u *AutoCAD*-u na topografskoj karti 1 : 25000 (Gauss-Krügerova projekcija) nije bio georeferenciran.

completely agree). Regarding the issue of choosing the souvenir of Kupres municipality, the question was of open type, with the examinees having a possibility to state their own suggestions.

According to type, the sample was conceptualized as layered and according to the selection it was random, since it was conditioned by a public opinion. An upward approach was used in the research, which means that the aim was to determine a reliable and objective public perception of tourist quality. Among the available tourism studies in the world, the best results in the context of measuring tourist offer and demand were gained with those including public opinions. The data collected on the terrain was later on completed with the data from other sources.

The methods applied in the scientific analysis include: collecting primary and secondary data, processing of data, analysis, the application of GIS tool *ArcInfo*, mapmaking, comparison and synthesis. The first step was to create a database (*geodatabase*) with datasets in *ArcCatalog* (*ArcInfo* application). The next one was to create layers (*feature class*) in *ArcInfo* with using regional plan of Kupres municipality from 2006 (attained from the Land register office in Kupres and made by Urbanistic institute of Bosnia and Herzegovina, Sarajevo) as background. In order to use the regional plan for analysis, it was necessary to give it spatial reference<sup>5</sup> by using *AutoCad* and its applications. Five referent points were taken from *Google Earth* (ellipsoid WGS84, UTM projection), which have been transformed into Bassel's ellipsoid and Gauss-Krüger projection by using a software *Kartomatika*. The georeferenced regional plan was then added to *ArcCatalog*, with all the .dwg extension files from *AutoCad* transformed into *ArcInfo*'s .gdb (*geodatabase*) files by using *ArcToolbox* (the extension *To Geodatabase*). All the newly-formed .gdb files were corrected through the menu *Topology* (*ArcToolbox*'s extension), because of the many errors which were previously made during the creation of the original Regional plan of Kupres municipality. After the terrain research, the acquired data with the answers of the examinees was inserted into the *MS Excel* tables. Each answer was divided with the number of examinees in order to get the percentage values (shares). The results of the statistical processing were then inserted into a collective GIS database by using *ArcInfo*.

<sup>5</sup> Regional plan created with *AutoCad* on a topographic map 1 : 25,000 (the Gauss-Krüger projection) is not georeferenced

Primjena GIS-a omogućila je automatsko preklapanje (*overlay*) i izvlačenje (*extract*) slojeva u svrhu vizualizacije, klasificiranje i uređivanje podataka po skupinama, njihovu brzu pretragu i kvalitetan kartografski prikaz. Korišten je Duekerov *feature model* iz 1979. godine, odnosno geometrijski prikaz geografskih elemenata da bi se pojednostavnio prikaz prostora. Ovaj model svodi kartirane geografske sastavnice na točke, crte i poligone. Dakle, športsko-rekreacijski centri prikazani su kao poligoni. Sljedeći korak bio je unijeti postotne vrijednosti u atributnu tablicu sloja iz koje su, preko različitih opcija koje nudi alat, dobiveni kartografski prikazi. Nakon spomenutoga koncepta rada pristupilo se analizi i sintezi.

### Rezultati ankete turista

Pri provođenju ankete turista ukupno je ispitano 54% muškaraca i 46% žena. Zadovoljstvo posjetitelja ponudom, kao temeljna varijabla, mjereno je na osnovi 12 pokazatelja iz kojih su sačinjena četiri indikatora stanja turizma (Tab. 1.). Za svaki pokazatelj izračunata je aritmetička sredina na temelju koje je utvrđeno ukupno zadovoljstvo posjetitelja turističkom ponudom.

Turisti su anketirani u športsko-rekreacijskim centrima "Stožer" i "Čajuša" između kojih je uočen nerazmjer u broju posjetitelja. Centar "Stožer" ima znatno manji broj posjetitelja, a glavni je razlog njegovo nedavno otvaranje. "Stožer" je otvoren u prosincu 2008. godine pa većina posjetitelja nije obavještena o njegovu otvaranju. U športsko-rekreacijskom centru postoje novi smještajni kapaciteti s restoranom i brojnim parkirnim mjestima, no glavni je nedostatak činjenica da nema topove za zasnježavanje, što stvara problem kad nema snijega.

Dobna struktura podijeljena je u četiri skupine: manje od 21 godine imalo je 8% ispitanika, 21-44 godine imalo je 66%, 45-60 godina 24% i više od 60 godina 2% ispitanika. Pokazatelje indikatora sociokulturnog okoliša ispitanici svih dobnih skupina različito su vrednovali. Mlađa populacija (do 21 godine) nije zainteresirana za kulturnu i povijesnu ponudu grada. Također, ova dobnja skupina ističe potrebu za većim brojem zabavnih sadržaja na skijalištima, ali i u samom gradu. Kod ispitanika dobne skupine od 21 do 44 godine utvrđena su kritička razmišljanja o aktualnom stanju turističke ponude, a ispitanici su

The application of GIS has provided the automatized overlapping (*overlay*) and extracting (*extract*) of layers in order to conduct visualization, classification and data editing by groups, their quick searching and a quality cartographic representation. Dueker's feature model from 1979, i.e. geometrical representation of geographic elements was used in order to simplify the depiction of the area. This model reduces the mapped geographic elements onto points, lines and polygons. Thus, sport-recreational centres were visualized as polygons. The next step was to insert the percentage values into the attribute table of the layer from where maps were produced by using various options. After the described concept of work, the next steps were analysis and synthesis.

### The results of the tourist survey

During the survey of tourists, a sample of examinees consisting of 54% of men and 46% of women was examined. The visitors' contentment with the offer, as the basic variable, was measured based on 12 indications from which 4 indicators of conditions in tourism were derived (Tab. 1). For each indication an arithmetic mean was calculated, from which the overall contentment with the tourism offer was defined.

The tourists were surveyed in the sport-recreational centres Stožer and Čajuša, with a disproportion in the number of visitors perceived among them. Stožer centre had significantly less visitors, and the main reason for that was its recent opening. Stožer was opened for visitors in December 2008, and most visitors were not informed about it. There are new accommodation capacities in the sport-recreational centre, with a restaurant and many parking spaces, but the main shortcoming is that it has no snowing cannons, which is a problem when there is no snow.

The age structure has been divided into four groups: 8% of examinees were under 21, 66% was between 21 and 44, 24% was between 45-60, while 2% of examinees was over 60 years old. The indications of socio-cultural environment indicator were differently valorized by the examinees of all age groups. Younger population (under 21) showed no interest for the town's cultural and historical offer. Furthermore, this age group emphasized a need for more entertainment facilities in ski resorts, as well as in the town itself. The opinions of the examinees belonging to the age group 21-44 were critically constructed when it came to



Tablica 1. Indikatori stanja turizma u općini Kupres  
Table 1 Indicators of conditions in tourism in Kupres municipality

INDIKATOR PRIRODNOG OKOLIŠA / NATURAL ENVIRONMENT INDICATOR

Pokazatelji / Indications		1	2	3	4	5	AS/M
Ugroženost bukom / Noise pollution	PAG/ICS	12	48	26	8	6	2,48
Zagađenost okoliša / Pollution of environment	PAG/ICS	24	26	34	12	4	2,46
Degradacija zelenih i slobodnih površina / Degradation of green and public surfaces	PAG/ICS	8	30	20	28	14	3,10

INDIKATOR SOCIO-KULTURNOG OKOLIŠA / INDICATOR OF SOCIO-CULTURAL ENIRONMENT

Pokazatelji / Indications		1	2	3	4	5	AS/M
Interes za kulturu i tradiciju / Interest for culture and tradition	PAG/ICS	4	12	24	40	20	3,60
Ljubaznost stanovnika / Kindness of residents	PAT/ITS	0	0	8	28	64	4,56
Urednost i čistoća naselja / Cleanness and tidiness of settlement	PAT/ITS	0	2	18	48	32	4,1

EKONOMSKI INDIKATOR / ECONOMIC INDICATOR

Pokazatelji / Indications		1	2	3	4	5	AS/M
Poslijeratni gospodarski razvoj / Post-war economic development	PAG/ICS	8	26	46	18	2	2,80
Poboljšanje životnog standarda / Improvement of living standard	PAG/ICS	6	18	38	30	8	3,16
Promocija lokalnih proizvoda / Local products' marketing	PAG/ICS	8	18	24	40	10	3,26
Kakvoća usluga / Quality of services	PAT/ITS	0	0	12	50	38	4,26
Cijene usluga u restoranima/hotelima / Prices of services in restaurants/hotels	PAT/ITS	2	10	22	36	30	3,82
Ponuda u trgovinama / Offer in stores	PAT/ITS	2	4	28	42	24	3,82

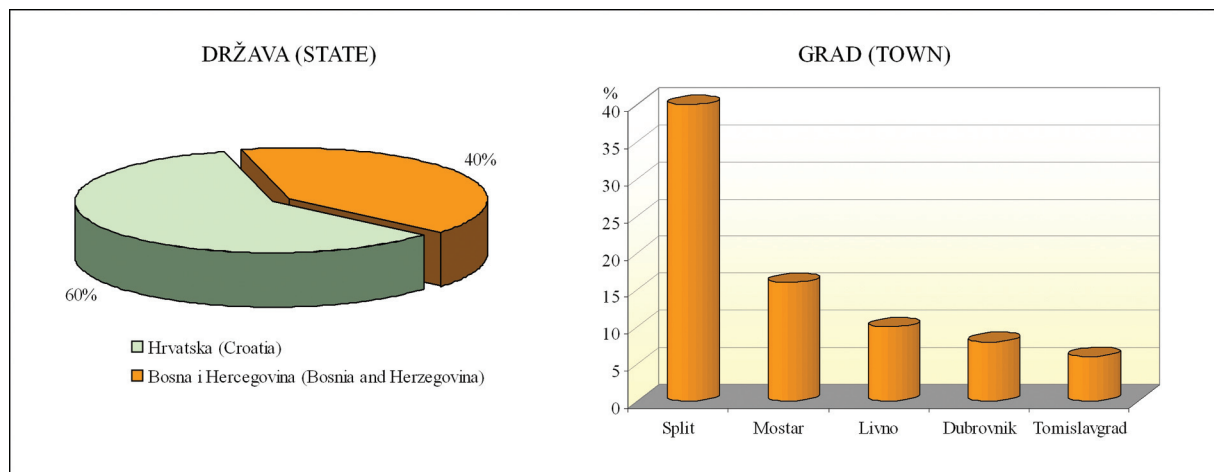
INDIKATOR PLANIRANJA I UPRAVLJANJA / INDICATOR OF PLANNING AND MANAGEMENT

Pokazatelji / Indications		1	2	3	4	5	AS/M
Doći ću ponovno / I will come back	PAT/ITS	0	0	0	6	94	4,94
Dostupnost informacija o destinaciji / Destination info availability	PAT/ITS	0	8	16	40	36	4,04
Dostupnost restorana / Availability of restaurants	PAT/ITS	0	4	10	44	42	4,24
Dostupnost skijališta / Availability of ski slopes	PAT/ITS	0	0	2	20	78	4,76
Kakvoća prometnica / Quality of roads	PAT/ITS	2	6	42	20	30	3,7
Kakvoća skijališta / Quality of ski slopes	PAT/ITS	0	0	20	36	44	4,24
Kapaciteti za prihvata turistima / Tourist reception capacity	PAG/ICS	2	16	30	30	22	3,54
Mogućnost parkiranja / Parking options	PAT/ITS	0	6	12	28	54	4,3
Ponuda jednodnevnih izleta / One-day trip offers	PAG/ICS	0	2	8	38	52	4,40
Potreba za produljenjem sezone / Need for season prolongation	PAG/ICS	0	0	6	34	60	4,54
Razvoj ruralnog turizma / Development of rural tourism	PAG/ICS	0	4	8	44	44	4,28
Ulaganja u obnovu naselja / Investments in settlements' restoration	PAG/ICS	12	8	44	26	10	3,14

PAG/ICS– pokazatelj ankete građana/indication from citizens survey, PAT/ITS – pokazatelj ankete turista/indication from tourists survey, AS – aritmetička sredina/arithmetic mean

Izvor: Anкета turista i građana u općini Kupres, 27. veljače – 02. ožujka 2009.

Source: Tourists and citizens surveys in Kupres municipality, February 27<sup>th</sup> – March 2<sup>nd</sup>, 2009



Slika 3. Emitivna područja anketiranih turista u športsko-rekreacijskim centrima "Čajuša" i "Stožer" (Izvor: Anketa turista u općini Kupres, 27. veljače – 02. ožujka 2009.)

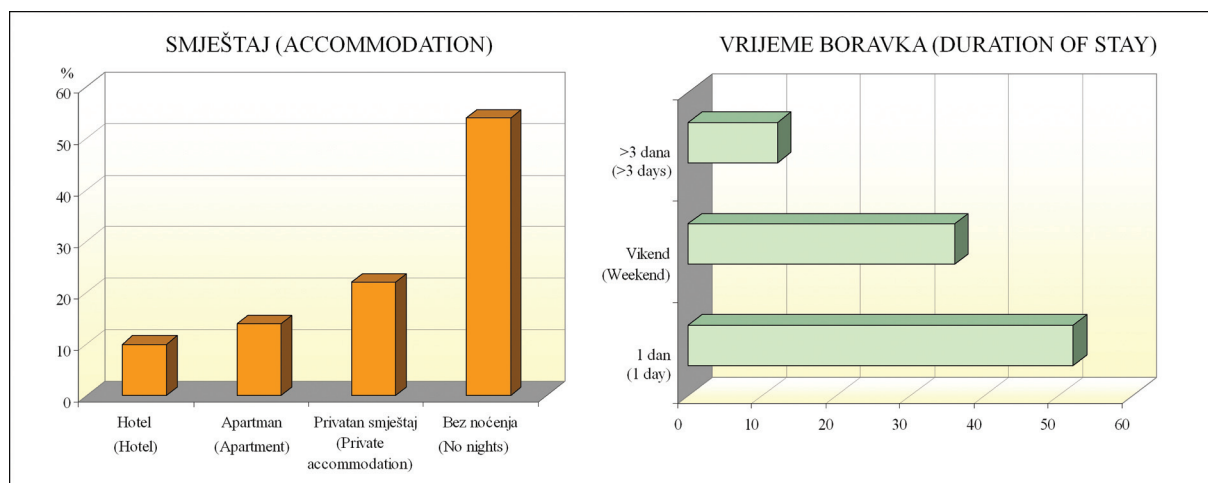
Figure 3 The emissive areas of the tourists surveyed in the sport-recreational centres Čajuša and Stožer (Source: Tourist survey in Kupres municipality, February 27<sup>th</sup> – March 2<sup>nd</sup>, 2009)

ponudili konkretna rješenja. Neki su od prijedloga bili izgradnja većega trgovačkog centra koji bi konkurirao ponudom proizvoda i cijenama, stvaranje prepoznatljivog suvenira kraja, noćne zimske igre i slično. Kod dobrih skupina 45-60 i više od 60 godina postoje drugačije potrebe i zahtjevi. Ovi posjetitelji isključivo su usmjereni na skijanje kao rekreaciju, i to uglavnom u prijedpnevnom satima, a posebno ih zanima i povijesno nasljeđe ovog kraja. Stoga predlažu izgradnju muzeja ili drugih kulturno-povijesnih objekata gdje bi posjetitelji starije životne dobi mogli provoditi svoje slobodno vrijeme.

Iz Splita je bilo 40% posjetitelja, dok su na drugom mjestu bili posjetitelji iz Mostara 16%, a na trećem iz Livna 10% (Sl. 3.). Od ukupno 50 ispitanika, njih 54% nije noćilo na prostoru općine, tj. vraćali su se u mjesto prebivališta. U hotelima je bilo smješteno 28%, u apartmanima 32%, a u privatnim domaćinstvima 40% anketiranih. Dio ispitanika (24%) u privatnom smještaju vlasnici su vikendica koji posjećuju Kupres u vrijeme zimskog odmora. Turisti koji su boravili u hotelima, do skijališta su dolazili pješice, za razliku od onih u privatnom smještaju koji su se morali koristiti osobnim vozilima. Problem dolaska osobnim vozilima događa se u vrijeme snježnih mećava, kada se ne čiste područne ceste pa je posjetiteljima otežan pristup skijalištu. Prema duljini boravka najviše turista došlo je na jedan dan, 52%, dok je 36% bilo onih koji su došli na vikend, a samo 12% posjetitelja je došlo na duže od tri dana (Sl. 4.).

the actual conditions of the tourist offer, and the examinees themselves provided some concrete suggestions for solutions. Some of the suggestions were: constructing a larger mall which would add to the competition in products and prices, creating a genuine local souvenir, organizing night winter games, etc. The age groups of 45-60 and over 60 showed different needs and demands. These visitors were focused on skiing in terms of recreation, and mostly in the mornings, and have shown to have a special interest for the historical heritage of the area. Thus, they suggest a building of a museum or other similar cultural-historical landmarks where older visitors could spend their free time.

40% of visitors arrived from Split, followed up by those from Mostar making 16% of the overall visitors, and the third most common tourists were those from Livno (10%) (Fig. 3). 54% of 50 examinees did not use accommodation to spend the night, i.e. they returned to their place of residence. 28% of surveyed visitors stayed at hotels, 32% in apartments and 40% of them in private households. A part of the visitors in private accommodation (24%) are the owners of cottages who visit Kupres during their winter vacations. The tourists staying in hotels could walk to the ski-slopes, while those in private accommodations had to arrive with cars. The problem of arriving with cars occurs during snow storms, when the local roads are not ploughed, and the access to the ski-slopes is difficult. According to the lasting of stay, 52% of the tourists arrived to stay for a day, 36% of them to stay for a weekend and only 12% to stay for over three days (Fig. 4).



Slika 4. Smještaj i vrijeme boravka ispitanika u općini Kupres (Izvor: Anketa turista u općini Kupres, 27. veljače – 02. ožujka 2009.)

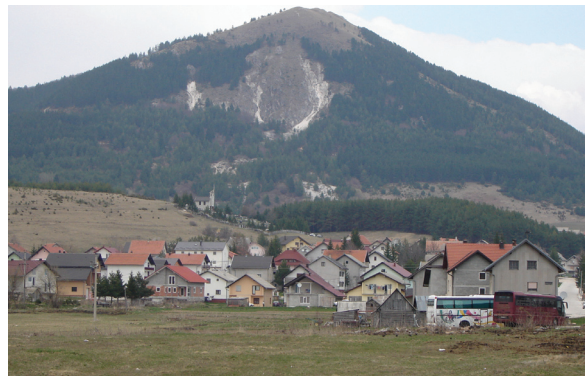
Figure 4 Type of accommodation and lasting of stay of the examinees in Kupres municipality (Source: Tourist survey in Kupres municipality, February 27<sup>th</sup> – March 2<sup>nd</sup>, 2009)

Pri ocjenjivanju zadovoljstva ponudom turisti su najzadovoljniji dostupnošću skijališta i ljubaznošću stanovnika, dok su najmanje zadovoljni stanjem prometnica. Čak 94% ispitanika odgovorilo je da će ponovno doći, što je iznimno visok postotni udio za jedno razmjerno malo i nerazvijeno skijalište. Kvalitetom usluge u potpunosti je zadovoljno 38% ispitanika, a uglavnom je zadovoljno 50% posjetitelja. Dio ispitanika (12%) tvrdi da bi cijene skijaških karata trebale biti niže, što bi bilo u skladu s ponudom. Dostupnošću restorana u potpunosti je zadovoljno 42% posjetitelja, koji ipak sugeriraju da bi broj restorana trebao i mogao biti veći. Dostupnošću skijališta u potpunosti je zadovoljno 78% posjetitelja, dok nezadovoljni nisu zabilježeni. Turisti posebno ističu i zadovoljstvo s radom žičare i topova za stvaranje umjetnog snijega, što je presudno u danima kada ima manje snijega ili ga uopće nema. Mogućnošću parkiranja zadovoljno je 54% posjetitelja. Posebno su zadovoljni redovitim čišćenjem parkirnih mjesta i položajem parkirališta uz samo skijalište pa se potrebna oprema može lako prenijeti do skijališne staze. Zadovoljstvo informacijama o odmoru podijelilo je mišljenja ispitanika. Njih 8% pokazatelju zadovoljstva informacijama o turističkom odredištu pridodalo je vrijednost 2 (dovoljan), 16% vrijednost 3 (dobar), 40% 4 (vrlo dobar) i 36% 5 (izvrstan). Posjetitelji tvrde da izostaje turistička promidžba mjesta te apeliraju da turistička zajednica osmisli kampanju za promociju destinacije. Najveći dio turista (72%) obavijesti prikuplja putem interneta na službenim stranicama općine i grada

The rating of contentment with offer has shown that the tourists are the most satisfied with the availability of ski slopes and the kindness of the residents, while they are the least content with the quality of roads. 94% of examinees have responded that they will return, which is a substantially high share for a relatively small and underdeveloped ski destination. A total of 38% of examinees is completely satisfied with the quality of service, and 50% of them are somewhat satisfied. A part of the examinees (12%) claims that the prices of ski tickets should be lower, which would be proportional to the offer. 42% of the visitors are completely satisfied with the availability of restaurants, although they suggest that the number of restaurants could and should be larger. 78% of the examinees are completely satisfied with the availability of the ski slopes, and the survey showed that there is no dissatisfied visitors. The tourists particularly emphasize the contentment with the cable car and the snow cannons, the latter being of key importance during periods without snow. 54% of examinees is content with parking options. They are particularly content with regular cleaning of parking spaces and the location of the parking lot in the vicinity of the ski slope, which facilitates the carrying of the ski equipment to the ski run. The contentment with the information about the vacation has divided the opinions of the examinees. In the context of the indication of contentment with tourist destination info, 8% of them rated it with a 2 ("sufficient"), 16% gave it a 3 ("good"), 40% rated it with a 4 ("very good") and



Slika 5. Planinsko selo – novija gradnja  
Figure 5 Mountain village – newer construction



Slika 6. Planinsko selo – starija gradnja  
Figure 6 Mountain village – older construction

Kupresa. Manji broj posjetitelja (17%) informirali su o športsko-rekreacijskom centru prijatelji ili poznanici. Urednošću i čistoćom naselja u potpunosti je zadovoljno 32% posjetitelja, iako i sami tvrde da velikim dijelom upravo turisti onečišćuju i nemarno se odnose prema okolišu. Također 66% ispitanih tvrdi da bi grad, općina i mještani trebali izraditi prepoznatljiv suvenir kraja i bolje predstaviti autohtona jela. Predlažu izgradnju tematskih restorana, izgrađenih od domaćih materijala u kojima bi se mogla ponuditi, osim domaćih tradicionalnih gastronomskih jelovnika, i specifična domaća glazba nastupima kulturnih društava obučenim u narodne nošnje, a bile bi poželjne i suvenirnice.

Ukupno zadovoljstvo turističke ponude športsko-rekreacijskih centara "Stožer" i "Čajuša" ocijenjeno je zbirnom ocjenom 4,231 i pokazuje da je kvaliteta ponude vrlo dobra. Ipak stavovi iskusnijih turista, koji su posjetili veći broj različitih odredišta, u nekim se segmentima razlikuju od stavova posjetitelja koji zimuju jedino u općini Kupres. Dio posjetitelja iz Hrvatske (11%) navodi da se ova ponuda i opće stanje centara ne mogu mjeriti s poznatim europskim skijalištima, ali s obzirom na promidžbu i financijska sredstva kojima raspolaže mjesna zajednica, ova se skijališta iznimno dobro održavaju, a ponuda se stalno nadopunjuje. Domaći posjetitelji, koji uglavnom nikada nisu posjetili strana skijališta, iznimno su zadovoljni i ponudom i kakvoćom smještajnih kapaciteta (Sl. 5. i 6.), prometnica, staze, cijenom i svim drugim elementima, pa ne ističu nikakve probleme niti navode bilo kakve prijedloge. Ispitanici su najzadovoljniji dostupnošću skijališta i ljubaznošću stanovnika, a najnezadovoljniji kakvoćom prometnica i ponudom u trgovinama.

36% of them gave it a 5 ("excellent"). The visitors think that the touristic advertising of the location is lacking, and suggest that the tourism community should plan a campaign for the promotion of the destination. Most of the tourists (72%) gather information through the internet, over the official web pages of the municipality and the town of Kupres. Smaller share of the visitors (17%) have been informed about the sport-recreational centre by friends or acquaintances. 32% of the visitors are completely content with the tidiness and cleanness of the settlement, although they suggest themselves that the tourists are the ones who act careless and litter the environment. Furthermore, 66% of the examined claim that the town, the municipality and the inhabitants should create an original souvenir of the area and do more effort in affirming and promoting indigenous cuisine. They suggest the building of thematic restaurants made of local materials, where the offer would include (besides the traditional gastronomic menus) a specific indigenous music and performances of groups such as cultural societies with folk costumes, and the souvenir shops are also recommendable.

The overall contentment with the touristic offer of the sport-recreational centres Stožer and Čajuša has been averagely rated 4.231, which indicates that the quality of offer is very good. However, the opinions of the more experienced tourists who visited more various destinations somewhat differ from those of visitors who spend their winter vacation exclusively in Kupres municipality. A part of visitors from Croatia (11%) claim that this offer and the overall conditions in the centres cannot compare with popular European ski resorts, but in the context of marketing and the available finances of the local community, these ski centers are maintained relatively well and the

## Rezultati ankete građana

U sociodemografskom kontekstu anketom građana ispitano je 50 ispitanika, od čega 26 muškaraca (52%) i 24 žene (48%). Na temelju pokazatelja o razvoju turizma, smještajnim kapacitetima, duljini turističke sezone, te ponudi i potražnji na prostoru općine Kupres nastojalo se doznati kako domaće stanovništvo percipira preobrazbu svojeg mjesta u turističko odredište, te utvrditi moguće pozitivne i negativne učinke. Istraživanjem je utvrđeno postojanje različitih stajališta autohtonog stanovništva o stanju turizma općine Kupres. Najviše ispitanika pripada dobnoj skupini 21-44 godine starosti (66%), dok je nešto manje ispitanika iz dobne skupine 45-60 godina (22%). Podjednaki je broj ispitanika iz dobne skupine do 21 i više od 60 godina (6%). Većina (88%) ispitanika su radno aktivne osobe pa je i empirijska dobna raspodjela iznimno povoljna.

Ispitivanjem građana o stavovima gospodarskog razvoja u poslijeratnom razdoblju utvrđeno je da njih 46% smatra kako je razvoj dobar, a 26% da je dovoljan. Takve rezultate građani objašnjavaju lošim radom Turističke zajednice koja nije, čak ni nakon 10 godina, napravila plan razvoja turizma Kupresa kao budućeg turističkog odredišta. Drugi činitelj su veća očekivanja građana glede turističke ponude, koja bi izravno ili neizravno utjecala i na gospodarski razvoj kraja. Ispitanici (njih 46%) smatraju da turizam ima gotovo najvažniju ulogu u gospodarskim prinosima, pa i u samom razvoju Kupresa. Ipak, 10% njih odgovorilo je da se u potpunosti slaže kako su izdvajanja u obnovu naselja veća nego prije rata, 26% se slaže, a 44% se djelomično slaže. Većina ispitanika (38%) tvrdi da je turizam utjecao na poboljšanje životnog standarda građana Kupresa, odnosno 6% tvrdi da se životni standard zbog turističkog razvoja nije poboljšao.

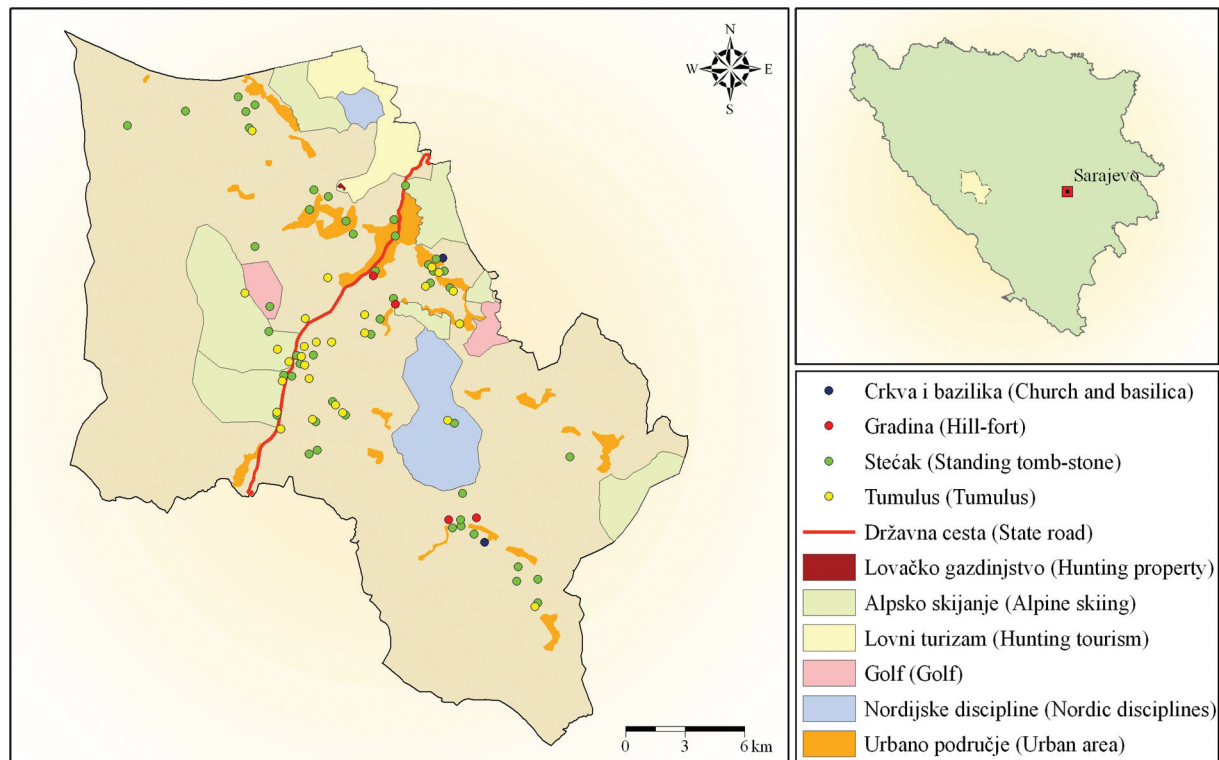
Razvojem turizma povećana je promocija i prodaja mjesnih proizvoda. Prehrambeni proizvodi, poput raznih vrsta sireva, kajmaka, vrhnja i namaza pretežno se prodaju na privatnim domaćinstvima uz cestu, dok je njihova implementacija u gastronomsku ponudu grada tek započela. Tako se 10% ispitanika u potpunosti slaže da je turizam omogućio promociju lokalnih proizvoda, 40% se slaže, a 24% se djelomično slaže. Osnovni problem građani vide u slabijim financijskim mogućnostima i nezainteresiranosti gradske

offer is constantly upgraded. Domicile visitors who have generally never visited any of the foreign ski resorts seem to be extremely content with offer and quality of accommodation (Figs. 5 and 6), roads, ski slopes, prices and all other elements, so they do not point out any problems, nor do they have any suggestions. The examinees are the most content with the availability of ski slopes and the kindness of the inhabitants, and the least content with the quality of roads and the offer in shops.

## Results of the citizen survey

In socio-demographic terms, the survey included 50 examinees, of which 26 men (52%) and 24 women (48%). Based on the indications on the development of tourism, accommodation, lasting of the season, as well as demand and offer in the area of Kupres municipality, an effort was made to find out how the domicile population sees the transformation of their town into a tourist destination, as well as to determine the possible positive and negative effects. The research has confirmed the existence of various opinions of the indigenous population on the conditions of tourism in Kupres municipality. Most of the examinees belong to the age group of 21-44 (66% of them), while the number of those belonging to the age group of 45-60 is somewhat smaller (22%). The number of examinees in age groups under 21 and over 60 is similar (6%). The majority (88%) of examinees belong to the working population, thus, the empirical distribution of age is very favourable.

The survey of citizens on the conditions of the economic development in the post-war period has shown that 46% of them consider the development to have been good, and 26% of them think it has been sufficient. The citizens explain that such results are due to poor efforts of the Tourist Community which has failed to create a plan of tourism development of Kupres as a tourist destination in the last 10 years. The second factor is the increased expectations of citizens regarding the touristic offer, which would presumably have a positive direct or indirect effect on the economic development of the area. The examinees (46% of them) believe that tourism practically has the most important role in economic profits, as well as the overall development of Kupres. However, 10% of the examinees have answered that they completely agree on the funds for the renewal of the town being larger than before the war; 26% agree and 44% partially agree. Most of the examinees (38%) claim that tourism has



Slika 7. Turistički potencijali općine Kupres

(Izvor: Prema Prostornom planu uređenja općine Kupres – izmjene i dopune, 2006.)

Figure 7 Tourism perspectives of Kupres municipality

(Source: According to the Regional plan of Kupres municipality – changes and appendices, 2006)

uprave s jedne, ali i građana s druge strane. S pozitivne pak strane sve je veća potražnja turista za domaćom hranom i autohtonim pletenim proizvodima ručne izrade. Posljednjih godina sve je veći interes i za bolje upoznavanje kulture i tradicije kupreškoga kraja. Tako se čak 60% ispitanih izjasnilo da je zanimanje turista za kulturnu baštinu veliko ili iznimno veliko. Najveće zanimanje turisti pokazuju za kuprešku crkvu, koja je postala iznimno posjećena.

Kulturno-povijesni spomenici, prema mišljenju građana, mogu biti osnova za razvoj kulturnog turizma. Kulturno-povijesna baština na prostoru kupreškog kraja nije valorizirana i ne postoje točni podatci o broju objekata. Godine 1953. Đuro Basler evidentirao je 40 zemljanih tumula, 1954. Šefik Bešlić 1055 stećaka, a Alojz Benc 1986. godine pisao je o tumulima navodeći da ih je 51. Današnje stanje znatno je izmijenjeno, pa je u Prostornom planu ucrtano samo 49 grupa stećaka, 1 crkvena, 1 bazilika, 4 gradine i 27 tumulusa (Sl. 7.). Glavni su problem u razvoju kulturnog turizma pristupni putovi koji ne postoje ili su u jako lošem stanju, pa turisti ne znaju da ti objekti postoje.

influenced the increase in standard of living of Kupres population. In contrast, 6% claim that it has not influenced the standard of living.

With the development of tourism came an increase in promotion and sale of local products. The foodstuffs such as various cheeses and creams (such as "kajmak") are mostly being sold in private households, next to the road, while their implementation in the gastronomic offer of the town has only begun. Thus, 10% of the examinees completely agree that tourism has enabled promotion of local products, 40% agree, while 24% partially agree. In citizens' opinion the basic problems are the low financial possibilities and the lack of interest from the local authorities on one side and from citizens on the other. The positive sides are the increasing tourists' demand for local food and the indigenous handmade knitted products. In the last several years there has also been an increased interest for learning about the culture and tradition of Kupres area. Thus, 60% of the examinees have stated that the tourists' interest for cultural heritage is large or exceptionally large. The tourists show most interest for the church in Kupres, which has become frequently visited.



Slika 8. Hotel Kupres  
Figure 8 Hotel Kupres

Jednostavnom GIS analizom utvrđeno je da prosječna udaljenost kulturno-povijesnih spomenika od glavnih cesta iznosi samo 458 metara ili oko 10 minuta hoda. Analizom standardne udaljenosti utvrđeno je da se čak 59 kulturno-povijesnih spomenika (od 82) nalazi u tampon zoni od 15 kilometara. Položaj te zone je između športsko-rekreacijskih centara "Stožer" i "Čajuša" uz glavnu državnu prometnicu.

U ocjenjivanju kapaciteta za prihvata turista stavovi građana su različiti. Neki smatraju da bi se broj kapaciteta morao povećati pa bi tada i broj turista bio veći, dok drugi tvrde da kapaciteti zadovoljavaju s obzirom na potražnju (Sl. 8.). Tako je veličinu kapaciteta 22% ispitanika ocijenilo odličnim, 30% vrlo dobrim, 30% dobrim, 16% dovoljnim i 2% nedovoljnim. Većina ispitanika smještajne kapacitete povezuje i s duljinom turističke sezone. Naime, građani tvrde da većinu godine smještajni kapaciteti stoje prazni i da se njihovo povećanje financijski ne isplati zbog potrebe održavanja prostora.

No čak se 94% složilo ili u potpunosti složilo da bi turistička sezona trebala trajati duže, odnosno da bi osim zimskog turizma trebalo razviti i ljetni koji bi nudio drukčije vrste odmora, rekreacije i zabave. Brojni izvori, potoci, te dva glavna vodotoka u polju Mrtvica i Milač, kao i jezera Turjača, Kukavičko i Uzur mogli bi se uvrstiti u ponudu za razvoj ljetnog turizma. U sklopu ljetnog, mogao bi se razviti i lovni turizam za koji je u Prostornom planu predviđena površina od 15,144 km<sup>2</sup>, te je utvrđena površina lovačkog gospodarstva s lovačkom kućicom od 64 767 m<sup>2</sup>.

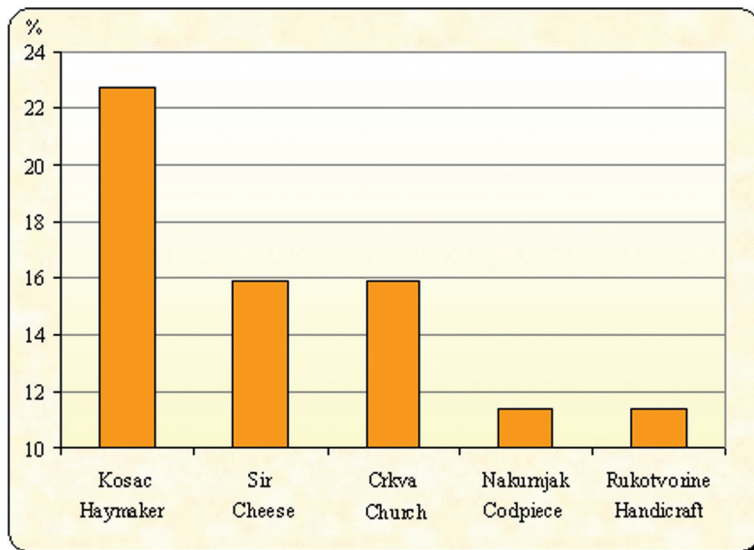
No bez obzira na godišnje doba i sezonu, građani smatraju potrebnim opriličavanje jednodnevnih izleta. U sklopu tih izleta obilazile bi

According to the citizens' opinion, the cultural-historical monuments and landmarks can provide a basis for the development of cultural tourism. Cultural-historical heritage in the area of Kupres has not been valorized and there are no exact data on their number. In 1953 Đuro Basler recorded 40 earth tumuli, in 1954 Šefik Bešliagić recorded 1055 standing tomb-stones and in 1986 Alojz Benc wrote about the 51 known tumuli. Today's conditions are significantly changed; namely, the regional plan notes only 49 groups of standing tomb-stones, 1 church ruin, 1 basilica, 4 hill-forts and 27 tumuli. The main problem in the development of cultural tourism are the access roads which are in poor condition or do not exist, which is why the tourists are not aware of the existence of landmarks.

Using a simple GIS analysis it was determined that an average distance of the cultural-historical landmarks from the main roads is only 458 meters, or about 10 minutes of walking. The standard distance analysis has shown that 59 cultural-historical landmarks (out of 82) are located within a 15-kilometers buffer zone. The position of that zone is between the sport-recreational centres Stožer and Čajuša, by the main state road.

The rating of accommodations has shown various opinions of citizens. Some believe that the number of accommodations should increase in order for the number of tourists to rise, while others claim that it is adequate for the existing demand (Fig. 8). Thus, 22% of examinees has rated the number of accommodations with a grade "excellent", 30% "very good", 16% "sufficient" and 2% "insufficient". Most of the examinees relate the accommodations with the lasting of the tourist season. Namely, the citizens claim that during most of the year the accommodations are empty and that consequently their increase would not be financially effective because of the requirements for maintenance.

However, 94% agreed or completely agreed that the tourist season should last longer, i.e. that besides winter tourism, alternative should be sought in summer tourism with different types of vacations, recreations and entertainment. Many springs, creeks and two main flows in the field (Mrtvica and Milač), as well as the lakes Turjača, Kukavičko and Uzur-jezero could be included into offer for the purpose of developing summer tourism. Within summer tourism, hunting tourism could also develop on 15.144 sq km hunting ground reserved for it on the determined hunting farm with a hunting cottage of 64,767 sq m.



Slika 9. Prijedlozi građana za prepoznatljivi suvenir općine Kupres (Izvor: Anketa građana u općini Kupres, 27. veljače – 2. ožujka 2009.)

Figure 9 Citizens' suggestions for a genuine souvenir of Kupres municipality (source: Citizens survey in Kupres municipality, February 27<sup>th</sup> – March 2<sup>nd</sup>, 2009)

se zavičajne znamenitosti, posjećivali mali obrti za kućne radinosti, izvorišta pitke vode i sl. Čak 52% anketiranih u potpunosti se slaže s uvođenjem jednodnevnih izleta, 38% se slaže, a 8% se djelomično slaže. Građani spominju i potrebu stvaranja prepoznatljivog suvenira kraja. Ovisno o dobnoj strukturi prijedlozi za suvenire potpuno su različiti. Pet najčešćih prijedloga bilo je: kosac, sir, crkva, nakurnjak i rukotvorine (Sl. 9.).

S obzirom na stupanj turističkog razvoja, broj vozila i jačinu buke u vrijeme sezone građani Kupresa ne smatraju problemom. Tvrde da broj vozila nije enormno povećan i da ima dovoljno parkirnih mjesta po cijelom gradu i ispred svih skijališta. Također tvrde da turisti ne stvaraju buku jer se glavninu dana nalaze na samim skijalištima, a da središte grada rijetko posjećuju. Najčešće u grad dolaze na jutarnju kavu ili u večernju šetnju, ali se vremenski ne zadržavaju dugo. Samo 14% ispitanika smatra da je grad opterećen vozilima u vrijeme sezone, odnosno samo 6% da je tada veća buka. Slabiju posjećenost gradu građani pripisuju slaboj turističkoj ponudi. Smatraju da osim crkve i parka turisti u središtu nemaju nikakvu turističku ponudu ili poticaj. Ispitanici su upozorili i na jedan dodatni problem u vrijeme sezone, a to je nebriga za okoliš. Čak 50% ispitanih misli da se turisti uopće ne brinu ili se slabo brinu za očuvanje okoliša. No, s obzirom na ne tako velik broj posjetitelja, na prostoru općine još uvijek ne postoje kritične točke koje bi trebalo sanirati

But regardless of the season, the citizens believe that the organization of one-day field trips is necessary. Such field trips would include touring the area's famous places, visiting small home businesses and sources of fresh water, etc. 52% of the examinees completely agree that one-day field trips should be organized, 38% of them agree and 8% partially agree. The citizens also mention a need to create a genuine souvenir of the area. Depending on the age structure, the suggestions for souvenirs are completely different. Five most common suggestions were: haymaker, cheese, church, codpiece and folk handicrafts (Fig. 9).

Considering the level of tourism development, the citizens do not have a problem with the number of cars and the noise. They say that the number of automobiles has not increased enormously and that the number of parking spaces in town and in ski-resorts is sufficient. They also say that tourists do not create noise pollution because they are on the ski-slopes most of the day and they rarely visit the centre of the town. Most commonly, they come to town in the mornings to have coffee or in the evenings for a walk, but they do not stay for long. Only 14% of the examinees think that the town is strained with vehicles during the season and only 6% claim that the noise is then louder. The citizens also think that the town is seldom visited due to a poor touristic offer. They believe that besides the church and the park there is no offer or attraction for tourists in town's centre. The examinees have



ili zaštititi od buke, onečišćenja zraka, vode i drugih vrsta degradacije. Najniže vrijednosti kod pokazatelja ankete građana utvrđene su za prirodni okoliš, stoga bi indikator prirodnog okoliša trebao biti smjernica da se zaštite dijelovi prostora kojima prijete degradacija i ugroženost radi stvaranja ambijentalnih pretpostavki za razvoj turizma.

Poseban prijedlog stanovnika je da se osim zimskog usporedno razvija i ruralni turizam s ciljem stvaranja tržišno-ekološke ravnoteže. Čak je 44% ispitanika ocijenilo potrebu razvoja seoskog turizma ocjenom 5, a 44% ocjenom 4.

### Smjernice za daljnji razvoj

Analiza stanja na temelju ankete upućuje da općina Kupres ima dobre preduvjete za razvoj različitih oblika turizma koji nisu dovoljno korišteni ni promovirani na tržištu. S obzirom na osjetljivost ekosustava prostora istraživanja (prirodni krajobraz, planinska jezera, zaštićene biljne vrste na prirodnim pašnjacima, značajna šumska područja) te na povijesno, religijsko i kulturno nasljeđe, osim zimskog turizma treba poticati i održivi turistički razvoj usmjeren na seoski, eko i avanturistički turizam koji su temelj za dodatni izvor prihoda i zapošljavanje mjesnog stanovništva.

Posebnu pogodnost za takav razvoj građani vide u čistoj, gotovo netaknutoj prirodi, ekološki prihvatljivoj proizvodnji autohtonih proizvoda i poljoprivrednim površinama koje su gotovo nekorištene. Takva vrsta turizma osigurala bi profiliranje domaćeg stanovništva i njihovih proizvoda u turističku ponudu općine. Time bi se povećao i broj radnika u turizmu i ugostiteljstvu što bi se izravno odrazilo na povećanje gospodarske koristi, odnosno povećanje blagostanja tamošnjeg stanovništva i očuvanje kulturno-povijesne baštine i prirodnih potencijala. Međutim, za to je potrebno i dodatno obrazovanje stanovništva koja se može ostvariti u već postojećim srednjoškolskim ustanovama. Te bi aktivnosti poglavito trebale biti usmjerene na osposobljavanje vodiča za manje skupine ekološki i avanturistički opredijeljenih turista (planinarske staze, šumske staze, boravak na otvorenom u kampovima na stočarskim stanovima, u planini, sudjelovanje na pošumljavanju planinskih područja). Posebna pozornost trebala bi se usmjeriti na učenje stranih jezika, rad na računalu, marketingu regije na širem emitivnom području, ali i na definiranje turističkih proizvoda po kojima bi općina bila

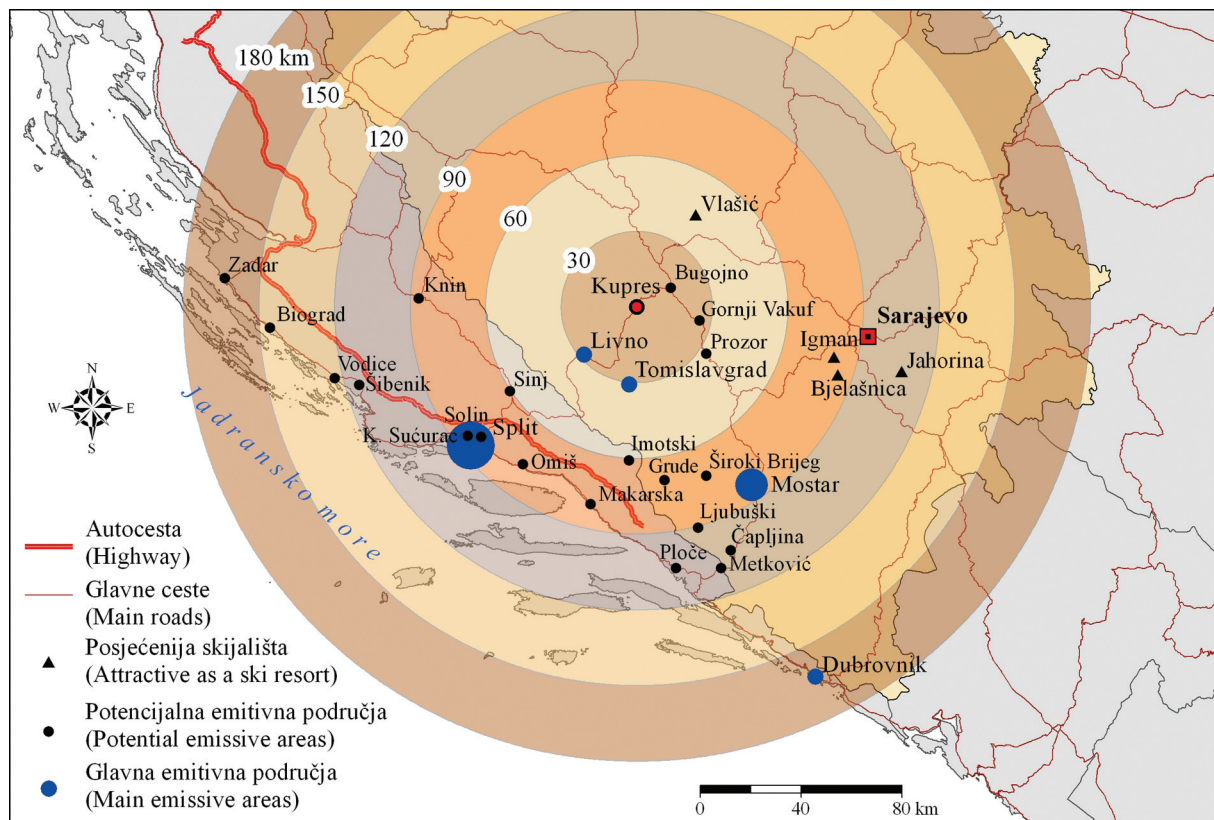
also mentioned another problem which occurs during the season – poor environmental care. 50% of the examinees believe that tourists have no regard for the environment or that their care for the environment is poor. Yet, considering the number of visitors which is not very high in the area of the municipality, there are still no critical locations which need recovery or protection from noise, air pollution, water pollution and other types of environmental dangers. The lowest values in survey indications were defined in the context of environment, which suggests that the environmental indicator should probably become a guideline for protecting certain parts of the area which are threatened by degradation or the endangerment by creating landscape requirements for the development of tourism.

A particular suggestion of the population is to develop rural tourism parallel to winter tourism, with a goal to create a balance between market and ecology. 44% of the examinees rated the need for rural tourism development with a grade 5, and another 44% of them with a 4.

### Guidelines for further development

The analysis of conditions based on the survey suggests that Kupres municipality has good prerequisites for the development of various forms of tourism which have not been used or advertised enough on the market. Considering the fragileness of the ecosystems in the researched area (natural landscapes, mountain lakes, protected plant species on natural pasture grounds, significant forest areas), as well as the historical, religious and cultural heritage, a sustainable tourism development oriented towards rural, organic and adventure tourism should be encouraged in order to attain the foundations for additional financial income and new jobs.

The citizens see a special privilege for such a development in clean, almost virgin untouched nature, ecologically acceptable production of indigenous products and the agricultural surfaces which are almost unused. Such form of tourism would provide specialization of the local population and their products for the needs of municipality's touristic offer. Thus, the number of employed in tourism and catering industry would increase, which would have a direct impact on the economical benefits and the increase in the prosperity of the population, as well as on the preservation of cultural and historical



Slika 10. Blizina emitivnih područja skijalištima općine Kupres

Figure 10 The vicinity of the areas emissive to the ski resorts of Kupres municipality

prepoznatljiva, sudjelovanje u turističkim projektima, stalno uređenje i unapređenje postojeće infrastrukture, smještajnih kapaciteta itd. Mogućnost otvaranja stočnih farmi na seoskim gospodarstvima privukla bi posjetitelje i izvan Kupresa, pa bi turizam mogao postati jedan od osnovnih pokretača razvoja i u područjima u kojima je do sada bio marginaliziran. Obnova napuštenih seoskih područja ovisi i o zanimanju lokalne zajednice da tradicionalnim djelatnostima potakne razvoj malih seoskih domaćinstava. Dodatni je argument činjenica da je područje Kupresa ranije bilo značajno područje uzgoja ovaca i proizvodnje sira. Na taj bi se način povezali raznoliki elementi, oblikovala bi se turistička ponuda odredišta te bi se stvorila nova turistička regija.

Obnova tradicijskih obrta, posebno onih vezanih za stočarsku djelatnost, te stvaranje mogućih "staza ovaca i sira" potencijalno su značajan izvor prihoda. Primjer uspješnog projekta je *La Strada Formaggi delle Dolomiti* u regiji Beluno (Italija) (REOLON, PELLEGRINI, 2006.).

heritage and the natural potentials. However, this scenario would require an adequate education of the residents, which is attainable in the existing high-school institutions. Such activities would primarily have to be concentrated on training of guides of smaller groups of tourists interested in environment and adventures (mountain pathways, forest paths, outdoor camping in cattle facilities, in the mountains, participating in afforestation of the mountain areas). Special attention should be given to learning foreign languages, work on computers, region marketing in the wide emissive area, and defining the tourist products which would represent a brand of the municipality, participating in touristic projects, constant maintaining and upgrading of the existing infrastructure and accommodations, etc. The possibility of opening the cattle farms in local village estates would also attract visitors from outside of Kupres, and thus, tourism could become one of the basic initiators of development in the areas where it has been mostly marginalized so far. The renewal of the abandoned rural areas also depends on the interest of the local community to

Projektom su obuhvaćene vertikalne strukture, od planinskih pašnjaka i ispaša stoke do proizvođača na seoskim imanjima (minimljekare i sirane) do tržišta, poput restorana i objekata seoskog turizma (ŠILJKOVIĆ, 2009.). Također, ključan je preduvjet za budući razvoj turizma blizina područja odakle dolazi najveći broj turista, te blizina potencijalnih emitivnih područja (Sl. 10.).

Kupres ima niz pogodnosti kojima se njegov prostor može razviti u turistički visoko vrijedno odredište, ne samo masovnog zimskog turizma već i turizma usmjerenog na održivi razvoj cijele zajednice.

### Zaključak

Anketom turista i građana u općini Kupres utvrđen je stupanj zadovoljstva ili nezadovoljstva pojedinim turističkim elementima, ali i odnos ponude i potražnje. Zadovoljstvo turista ocijenjeno je ocjenom 4,2, a građana ocjenom 3,3. Broj turista u športsko-rekreacijskim centrima općine Kupres povećava se iz godine u godinu, jednako kao što se i dopunjava turistička ponuda. Od malih gradskih skijališta centri "Čajuša" i "Stožer" postupno se razvijaju u regionalna skijališta sa smještajnim kapacitetima, opremljenim stazama, žičarom, topovima, skijaškim školama za djecu i odrasle, snowboardingom itd.

Osnovni je problem intenzivnijeg i kvalitetnijeg turističkog razvoja nedovoljno razvijena prometna infrastruktura, pa je jedan od prioriteta za budući razvoj turizma, razvoj prometne infrastrukture i njezino usklađivanje s postojećim Prostornim planom općine Kupres. To bi osiguralo veći broj izletnika i turista kao potencijalnih potrošača usluga i sadržaja, te punjenje kapaciteta u predsezoni i posezoni. Drugi je razlog sporijega turističkog razvoja opća nezainteresiranost javnih vlasti za stvaranjem Kupresa kao prepoznatljivog turističkog odredišta te nedovoljna angažiranost lokalne turističke zajednice. S druge strane potrebno je i promicanje svijesti i kulture građana o sveopćem značenju turizma. Stoga bi se za uspješan razvoj općine Kupres trebali udružiti svi javni, poslovni i privatni subjekti, uz posebnu podršku javnih vlasti i intenzivnu angažiranost lokalnih turističkih agencija.

Posebne pogodnosti za turistički razvoj su blizina emitivnog područja (do 90 km), mogućnosti bogate i raznovrsne ponude (od

encourage the development of small village farms with traditional activities. An additional argument is the fact that the area of Kupres used to be famous for sheep breeding and cheese production. In this way various elements would be connected, forming a touristic offer of the destination and creating a new tourist region.

The revival of traditional crafts and trades, especially those related to cattle-raising activities, and creating "sheep and cheese roads" represents a potentially significant source of income. The example of such successful project is *La Strada Formaggi delle Dolomiti* in the region of Beluno (Italy) (REOLON, PELLEGRINI, 2006). This project encompasses the vertical structures, from mountain pastures and cattle and the manufacturers on village estates (small milk and cheese dairy plants) to the market subjects, such as restaurants and rural tourism units (ŠILJKOVIĆ, 2009). Also, a key prerequisite for the future development of tourism is the vicinity of the area where most of the tourists come from, as well as the relative vicinity of the potential emission areas (Fig. 10).

Kupres has many favourable features for developing into a highly valuable tourist destination, not only in terms of massive winter tourism, but also a tourism focused on the sustainable development of the whole community.

### Conclusion

Surveying of tourists and citizens of Kupres municipality has determined their degree of contentment or discontentment with touristic elements, as well as the relation between demand and offer. The contentment of tourists was rated with an average grade 4.2, and of citizens with 3.3. The number of tourists in sport-recreational centres of Kupres municipality has been increasing each year and the touristic offer has been upgrading. Čajuša and Stožer are gradually evolving from small town ski centres into regional ski resorts with accommodations, well-equipped ski slopes, cable cars, snow cannons, skiing schools for children and adults, snowboarding, etc.

The main obstacle in front of the more intense and quality development of tourism is the underdeveloped transport infrastructure, which implies that one of the priorities of the future tourism development is the development of transport infrastructure and its synchronization with the existing regional plan. This would provide higher numbers of tourists and hikers

kulturnih, prirodnih, ruralnih, rekreativnih i drugih potencijala), razmjerno niske cijene, mogućnosti selektivnog turizma (seoski, lovni, izletnički) i novi smještajni kapaciteti. Na osnovi svih privlačnih čimbenika i pogodnosti, općina Kupres trebala bi razvijati turizam kao strateški pokretač općeg razvoja regije. Takvim djelovanjem moguće je u budućnosti osigurati rast bruto domaćeg proizvoda i privući domaći i strani kapital te kreirati strategiju regionalnog turističkog razvoja.

as the potential consumers of services and contents, as well as filling of accommodations in pre-season and after the season. The second reason for a slower tourism development is the general lack of interest of public authorities for making Kupres a recognizable tourist destination, as well as the insufficient involvement of the local tourist community. On the other hand, it is necessary to promote consciousness and culture of citizens regarding the general significance of tourism. Thus, all public, business and private subjects, with the support of public authorities and the intensive involvement of the local tourist agencies, should join forces in order to ensure a successful development of Kupres municipality.

Special conveniences for the touristic development are the vicinity of the emissive area (up to 90 km), possibilities of rich and versatile offer (cultural, natural, rural, recreational and other potentials), relatively low prices, possibilities of selective tourism (village, hunting, trips) and the new accommodations. Based on all of the attraction factors and conveniences, Kupres municipality should develop tourism as a strategic factor of the overall region development. Such an activity could ensure the future rise of GDP (gross domestic product), attract inland and foreign investments, and create a strategy of regional touristic development.

## IZVORI / SOURCES

*Digitalni atlas svijeta*, ESRI Data and Maps, New York, 2006.

*Nacionalna lista pokazatelja za turizam*, Agencija za zaštitu okoliša, veljača 2008., Zagreb.

*Stanovništvo Bosne i Hercegovine, Narodnosni sastav po naseljima*, Državni zavod za statistiku, Republika Hrvatska, Zagreb, travanj 1995.

*Prostorni plan uređenja općine Kupres – izmjene i dopune*, Urbanistički zavod BiH, Sarajevo, 2006.

## LITERATURA / LITERATURE

ALLEN, J. S., SHOU LU, K., POTTS, T. D. (1999): *A GIS Based Analysis and Prediction of parcel land – use change in a coastal tourism destination area*, World Congress on Coastal and Marine Tourism, Vancouver, B. C. Canada, 287-297.

BAHAIRE T., ELLIOTT-WHITE M. (1999): *The Application of Geographical Information Systems (GIS) in Sustainable Tourism Planning: A Review*, Journal of Sustainable Tourism, 7, 2, 159-174 .

BENAC, A. (1986): *Praistorijski tumuli na Kupreškom polju*, Akademija nauka i umjetnosti Bosne i Hercegovine, Sarajevo.

BERTAZZON, S., CROUCH, G., DRAPER, D., QWATERS, N. (1997): *GIS Applications in Tourism Marketing: Current Uses, an Experimental Application and Future Prospects*, Journal of Travel & Tourism Marketing, 6, 3-4, 35-59.

BEŠLAGIĆ, Š. (1954): *Kupres, Srednjovjekovni nadgrobnici*, Sarajevo.

- BOERS, B., COTTRELL, S. (2005): *Sustainable Tourism Infrastructure Planning: A GIS Based Approach*, Proceedings of the 2005 Northeastern Recreative Research Symposium, Bolton Landing, New York, 151-160.
- BONACIN, D., BILIĆ, Ž. (2008): *Kanoničke relacije indikatora rekreacijskog turizma i indikatora lokacija turističke ponude*, Univerzitetska Hronika, 1, 1: 39-42.
- CAVRIĆ, B., TOPLEK, S., ŠILJEG, A. (2008): *Participatory Measurements of Sustainable Urban Development and Quality of life in a post-socialist Zadar, Croatia*, Spatium, 17/18, 45-53.
- CULBERTSON, K., HERSHBERGER, B., JACKSON, S., MULLEN, S., OLSON, H. (1994): *GIS as the tool for regional planning in mountain regions : Case studies from Canada, Brazil, Japan and the USA*, Mountain Environments and GIS, London, 99-118.
- DONDO, CH., BHUNU, S. T., RIVETT, U. (2002): *GIS in Tourism – A Zimbabwean perspective*, The International Archives of the Photogrammetry, Remote Sensing and Spatial Information Science, 34, 6 /W6, 197-200.
- FAJUYIGBE, O., BALUGUN, V. F., OMEMBE, O. M. (2007): *Web – Based Geographical Information System (GIS) for Tourism in Oyo State, Nigeria*, Information Technology Journal, 6, 5, 613-622.
- GAHIN, R., PATERSON, C. (2001): *Community Indicators: Past, Present and Future*, National Civic Review 90, 4, 347-361.
- GHOSH, S., VALE, R., VALE, B. (2006): *Indications from Sustainability Indicators*, Journal of Urban Design, 11, 2, 263-275.
- JUKIĆ, S. (2009): *Hercegbosanska Županija je Bosna i Hercegovina u malom*, Turizam BIH, 1, 128-141.
- MALCZEWSKI, J. (1999): *GIS and Multicriteria Decision Analysis*, Wiley, New York.
- REOLON, S., PELLEGRINI I. (2006): *La Strada dei Formaggi delle Dolomiti Bellunesi*, 5<sup>th</sup> European Mountain Convention Cohesion for Growth, 14.-15. 9. 2006., Chaves, Portugal.
- SAWICKI, D. (2002): *Improving Community Indicator Systems: Injecting More Socila Science into the Folk Movement*, Planning Theory and Practice, 3, 1, 13-32.
- SPRENG, D., WILLS, A. (1996): *Indicators of Sustainability: Indicators in Various Scientific Disciplines*, Paper Written in Support of the Multidimensional Approaches to Sustainability: The Framing Project Proposed to the Alliance of Global Sustainability.
- ŠILJKOVIĆ, Ž. (2009): *Imaju li planinska ruralna naselja budućnost?*, First International Geographical Scientific Symposium: Transforming of Rural Areas in the Conditions of Transition and Integration into European Union, Kupres.
- WORLD RESOURCES INSTITUTE (1995): *Environmental Indicators – A Systematic Approach to Measuring and Reporting on Environmental Policy Performance in the Context of Sustainable Development*, Washington, DC.

