ODRŽIVI MARKETING U FUNKCIJI ODRŽIVE URBANE MOBILNOSTI

Sonja Vujović¹, Tanja Vujović²,

doi: 10.5937/Oditor2103167V

Pregledni rad UDK: 502.131.1:656.1 658.8:502.1 502.04/.06:711.4

Rezime

Kako su opstanak i sudbina čovečanstva izvorno i neraskidivo uslovljeni stanjem prirodnog okruženja, vremenom je postalo jasno da odnos čoveka prema životnoj sredini i privredni rast i razvoj "po svaku cenu" više nisu ni mogući ni prihvatljivi i da je čovek, zapravo deo ekosistema iznad čijih zakonitosti neće moći zauvek da se uzdiže nekažnjeno. Suočena sa problemima koji, kao nusprodukti modernizacije već decenijama, devastiraju i narušavaju kvalitet života u urbanim sredinama ekološki osvešćena globalna zajednica insistira na kreiranju održivih gradova i "zelenije" urbane mobilnosti. Otuda namera autora da naglasi značaj prihvatanja koncepta održivog marketinga kako bi se podizanjem kolektivne svesti o važnosti tranzicije ka niskoemisionom društvu podstakla supstitucija navika i ponašanja u sferi urbane mobilnosti koje su u suprotnosti sa idejom održive urbane forme i vizijom "zelenog" grada. Istraživanje je bazirano na korišćenju sekundarnih podataka, analizi sadržaja dostupne stručne literature i relevantnih izveštaja Ujedinjenih nacija i nacionalnih institucija, kao i na primeni deskriptivne metode i metoda analize i sinteze. Članak se zaključuje nudeći okvir za primenu održivog marketinga i mere koje se mogu preduzeti u sferi kreiranja održive urbane mobilnosti.

Ključne reči: urbanizacija, urbana mobilnost, održivi razvoj, urbana naselja, održivi marketing.

JEL: M31, M37, Q56

Uvod

Savremeni svet, već uveliko suočen sa svešću da se Zemlja mora sačuvati kako za sadašnju, tako i za buduće generacije ljudi, održivi razvoj posmatra u skladu sa definicijom Svetske komisije za razvoj i zaštitu životne sredine kao "razvoj kojim

¹ Vanredni profesor, dr Sonja Vujović, Univerzitet u Prištini sa privremenim sedištem u Kosovskoj Mitrovici, Ekonomski fakultet, Kolašinska 156, Srbija, E-mail: sonja.vujovic@pr.ac.rs

² Redovni profesor, dr Tanja Vujović, Univerzitet u Prištini sa privremenim sedištem u Kosovskoj Mitrovici, Ekonomski fakultet, Kolašinska 156, Srbija, E-mail: tanja.vujovic@pr.ac.rs

se ide u susret potrebama sadašnjosti tako da se ne ugrožava mogućnost budućih generacija da zadovolje svoje sopstvene potrebe" i prihvata stav da je održivi razvoj "u suštini proces promena unutar koga su eksploatacija resursa, usmeravanje investicija, orijentacija tehnološkog razvoja i institucionalne promene u harmoniji i omogućavaju korišćenje sadašnjih i budućih potencijala kako bi se zadovoljile ljudske potrebe i aspiracije" (WCED, 1987). S tim u vezi, obaveza današnje generacije da ostavi potomstvu bar onoliko šansi za razvoj koliko ih ona ima, proistekla je iz fundamentalnih principa unutargeneracijske i međugeneracijske jednakosti, jer činjenica je da sadašnja generacija ima pravo na iskorišćavanje potencijala resursne baze i na zdravu životnu sredinu, ali isto tako i obavezu prema generacijama koje dolaze. Iz ove perspektive, održivi razvoj uslovljen potrebom da se uvažava kapacitet prirode kako bi se obezbedili resursi i usluge potrebne za život zapravo podrazumeva unapređenje kvaliteta ljudskog života u granicama kapaciteta podnošenja (*carrying capacity*) ekosistema koji ga podržavaju (IUCN, UNEP, WWF-I, 1991).

Antropocentričnim (homocentričnim) poimanjem odnosa čoveka i Prirode stvorena je predstava o dobroj i darežljivoj Prirodi koja kao neiscrpni resurs pokorno služi zadovoljavanju čovekovih nezasitih potreba. Sa blagodetima civilizacije koje su inicirane industrijalizacijom i neslućenim napretkom novih tehnologija rasli su i problemi ugrožavanja i očuvanja čovekove okoline. Brzi rast stanovništva na globalnom nivou, praćen intenzivnim tehničkim i tehnološkim procesima, rezultirao je rastućim potrebama za neobnovljivom energijom, sirovinama i drugim prirodnim resursima, posebno u zemljama sa najvećom stopom rasta stanovništva, odnosno u zemljama koje su se naglo i brzo razvijale (Munitlak-Ivanović, et al., 2017). "Ekonomski razvoj je tokom čitavog XX veka nagomilavao probleme u životnoj sredini koji nisu mimoišli ni gradove. Dinamika urbanog razvoja, nastanak velikih aglomeracija i opasnost od povišenog nivoa aerozagađenja u gradovima i njihovoj okolini determinisani su i apsolutnim porastom broja stanovnika na Planeti i povećanjem udela gradskog stanovništva. Kao živi organizmi gradovi su se, pod uticajem ponašanja i delovanja svih pojedinaca koji čine sastavni deo urbane zajednice razvijali, napredovali i prostorno i društveno-ekonomski transformisali." Urbani razvoj dešavao se paralelno sa "osvajanjem" plodnog poljoprivrednog zemljišta, modifikovanjem njegove primarne namene, uništavanjem prirodnog habitata i ugrožavanjem osetljivih ekosistema. "Sasvim je jasno da su čovek, njegove aktivnosti i navike koje su oblikovane blagodetima savremene civilizacije i modernizacijom svih aspekata svakodnevnog života zapravo glavni uzrok i neuralgična tačka ekološki sve više ugroženih gradova" (Vujović, Vujović, 2017).

Zato ne čudi što se antropogeni faktor pri deskripciji čovekovog nemara prema životnoj sredini sve češće navodi kao generator dugoročnog dramatičnog

degradiranja i devastiranja Prirode i pustošenja raspoloživih resursa. S tim u vezi, razumevanje ključnih aktuelnih trendova urbanizacije, ali i onih koji će se verovatno odvijati tokom narednih godina presudno je za sprovođenje Agende 2030, s obzirom da su inkluzivni, bezbedni, prilagodljivi i održivi gradovi i naselja postali jedan od sedamnaest globalnih ciljeva održivog razvoja (Sustainable Development Goals) proizašlih iz osam Milenijumskih ciljeva razvoja za jedan Svet. Tim pre što se urbanizacija veoma često, pored veličine populacije i starosne strukture stanovništva navodi kao demografska varijabla koja se svrstava u značajne determinante emisije štetnih gasova (Petrović, et al., 2018). Upotreba motornih vozila je posebno intenzivna u urbanim zonama pa se pretpostavlja da se sa ubrzanjem procesa urbanizacije povećava emisija CO₂ i drugih štetnih gasova u gradskim sredinama. S obzirom da je pozitivan uticaj urbanizacije na emisiju gasova sa efektom staklene bašte potvrđen kao signifikantan u brojnim empirijskim studijama (Poumanyvong, Kaneko, 2010; York, 2007; Cole, Neumayer, 2004), ideja je da se prikazom prostornodemografskih promena u pravcu ubrzanog procesa urbanizacije i povećanja upotrebe motornih vozila ukaže na hitnost promene obrasca ponašanja i transformacije ustaljenjnih navika u pogledu urbane mobilnosti. S obzirom na visoke stope rasta urbanih naselja i rastući udeo gradskog u ukupnom stanovništvu sveta, ali i zbog činjenice da danas, gotovo polovina svetskog stanovništva živi u naseljima sa statusom grada pitanje održive urbane mobilnosti nameće se kao prioritetno.

Od marketing koncepta do koncepta održivog marketinga

Decenijama unazad marketing je bio izložen kritikama zbog (navodno) direktnog podsticanja prekomerne potrošnje i daljeg razvoja visoko konzumerističkog (neodrživog) društva. "Marketing se krivi za stvaranje lažnih potreba, podsticanje pohlepe i čak podsticanje zajednica na prekomernu potrošnju i materijalizam. Takođe, da teži da promoviše preveliki interes za posedovanjem - ljudi se procenjuju po onome što imaju, a ne po tome ko su" (Seretny, & Seretny, 2012).

Evoluirajući tokom vremena marketing je značajno uticao na ekološku osvešćenost na nacionalnom, regionalnom i planetarnom nivou. Danas "zelenija" budućnost kojoj se teži postaje sve izvesnija upravo zahvaljujući konceptu održivog marketinga. "Od početka dvadesetog veka i najintenzivnije tokom poslednjih šezdeset godina marketing se razvijao - od marketinga zasnovanog na proizvodima (1.0) do marketinga usredsređenog na kupca (2.0) do marketinga sa fokusom na čoveka (3.0)" (Kotler, Kartajaya, Setiawan, 2017). Danas smo svedoci nastanka nove ere, definisane kao Marketing 3.0, epoha, zasnovanoj na vrednosti, u kojoj se ljudi više ne percipiraju kao ciljno tržište potrošača bazirano na demografskom faktoru, već kao prilično promišljeni i inteligentni partneri sa

emocijama, osećanjima i specifičnim duhovnim vrednostima (Kotler, Kartajaya, & Setiawan, 2010).

Ekološki marketing koji je primarno bio usmeren na osporavanje proizvoda i tehnoloških procesa i postupaka koji imaju ili mogu imati negativan i štetan uticaj na okruženje evoluirao je u zeleni marketing koji se, u cilju omogućavanja uporedne egzistencije ekonomskog i prirodnog sistema na dugi rok inicijalno odnosio na popularizovanje "zelenih" proizvoda i podsticanje njihove kupovine. Međutim, zeleni marketing i dalje sledi ekonomsku paradigmu koja se fokusira na tradicionalni proces ekonomske razmene i profit kao krajnji cilj (Jamrozy, 2007). Štaviše, strategije zelenog marketinga fokusiraju se na zelene potrošače, koji rado plaćaju veće cene za ekološki prihvatljive proizvode.

Buđenjem odgovornosti prema Planeti, ali i armiji lojalnih i potencijalnih potrošača dolazi do promena u pravcu podrške razvoja proizvoda koji su dizajnirani tako da minimiziraju negativne efekte na fizičko okruženje uz istovremeno poboljšanje i unapređenje postojećeg nivoa kvaliteta. Savremeni koncept održivog marketinga još intenzivnije doprinosi ekološkoj osvešćenosti insistiranjem na kreiranju, proizvodnji i isporuci održivih rešenja koja su u funkciji kontinualnog ostvarivanja ravnoteže između ciljeva društva (zaštita životne sredine), potrošača (zadovoljenje potreba) i preduzeća (profit) (Sudarević & Milovanov, 2015). Dakle, održivi marketing sugeriše neophodnost kreiranja održivih modela rasta i razvoja koji počivaju na ispunjavanju tri krucijalna kriterijuma: zadovoljavanje potreba potrošača i društva kao celine, ostvarivanje ciljeva organizacije, uz uvažavanje i naglašenu usklađenost sa potrebama ekosistema (Fuller, 1999).

Održivi marketing stoga treba posmatrati kao deo marketinga koji je prateći element održivog ekonomskog razvoja. S tim u vezi, u okviru održivog razvoja, marketing je prošao kroz tri faze. Prva faza: ekološki marketing usredsređen na ekološke probleme, poput zagađenja vazduha i vode, iscrpljivanja prirodnih resursa i uticaja đubriva i pesticida koji se koriste u poljoprivredi. Druga faza datira iz osamdesetih godina prošlog veka: marketing životne sredine, fokusiran na razvoju modernih, ekološki prihvatljivih, "čistih" tehnologija. U centru marketinških aktivnosti bio je "zeleni segment kupaca", jer je odgovorna akcija prepoznata kao konkurentska prednost. Treća faza je trenutna era održivog marketinga koja ima za cilj odgovoran ekonomski i socijalni razvoj (Hunt, 2011).

Iz tog razloga konceptu održivog marketinga pripada važna uloga na putu postizanja globalno dogovorenih ciljeva održivog razvoja primarno orijentisanih ka ostvarivanju ekonomskog prosperiteta i društvenog blagostanja uz zaštitu životne sredine, kao i realizaciji ideje o održivoj "zelenijoj" mobilnosti u

gradovima. Cilj istraživanja usmeren je ka isticanju uloge koju koncept održivog marketinga može imati u procesu kreiranja održive urbane mobilnosti.

Prostorno-demografske promene i proces ubrzane urbanizacije na globalnom i nacionalnom nivou

Sve do kasnog osamnaestog veka urbanizacija nije predstavljala značajnu pojavu za svet (Milutinović, 2004). Početkom XIX veka samo 3% svetskog stanovništva živelo je u gradskim naseljima. Tokom veka taj broj se gotovo upetostručio, tako da je početkom XX veka 14% stanovništva Planete živelo u naseljima koja su imala status grada (Miličić, 2004). Svetska populacija kroz proces ubrzane urbanizacije prolazi naročito od 1950. kada je od ukupno 2.516,5 miliona stanovnika sveta u gradovima živelo 733,7 miliona stanovnika, odnosno više od dve trećine (70%) svetske populacije naseljavalo je seoska naselja. Na početku novog milenijuma svet se suočio sa neočekivanim urbanim porastom, a rezultat toga je da gotovo polovina svetskog stanovništva živi u naseljima sa statusom grada. Prema podacima Ujedinjenih nacija 2000. godine broj gradske populacije dostigao je 3.197,6 miliona, što je gotovo za 700 miliona više nego što je 1950. godine bilo stanovnika na planeti (United Nations, 2003). 2007. godine prvi put u istoriji svetska urbana populacija premašila je broj globalno ruralnog stanovništva, i od tada se broj stanovnika gradova i dalje povećava brže od broja stanovnika u ruralnim sredinama. Tokom druge decenije novog milenijuma planetarni trend povećanja urbane populacije kreirao je novu realnost savremenog sveta: u sadašnjem trenutku u gradovima živi više od polovine Planete. Naime, od ukupnog broja svetske populacije, danas čak više od 55% ljudi (4,2 milijarde) živi u urbanim područjima, sa tendencijom rasta u narednih trideset godina. Po prvi put u istoriji razvoja čovečanstva u 2018. godini broj stanovnika u ruralnim naseljima pao je na nivo manji od 50% u odnosu na stanovništvo urbanih naselja (3,4 milijarde). Na osnovu raspoloživih podataka evidentno je da je za 70 godina, gradska populacija sveta porasla više nego četiri puta, sa približno 0,8 milijardi 1950. godine na 4,2 milijarde 2018. Eksplozivan rast urbane svetske populacije ilustruju podaci iz Tabele 1.

Tabela 1. Ukupno, urbano i ruralno stanovništvo po razvojnim grupama i odabranim godinama u periodu od 1950.-2050. godine

	Stanovništvo (u milijardama)						
Razvojne grupe	1950.	1970.	1990.	2018.	2030.	2050.	
Ukupan broj stanovnika							
Svet	2,54	3,70	5,33	7,63	8,55	9,77	
Razvijeniji regioni	0,81	1,01	1,15	1,26	1,29	1,30	
Manje razvijeni regioni	1,72	2,69	4,18	6,37	7,26	8,47	
Gradsko stanovništvo							
Svet	0,75	1,35	2,29	4,22	5,17	6,68	
Razvijeniji regioni	0,45	0,67	0,83	0,99	1,05	1,12	
Manje razvijeni regioni	0,30	0,68	1,46	3,23	4,12	5,56	
Ruralno stanovništvo							
Svet	1,79	2,35	3,04	3,41	3,38	3,09	
Razvijeniji regioni	0,37	0,33	0,32	0,27	0,24	0,17	
Manje razvijeni regioni	1,42	2,01	2,72	3,14	3,14	2,92	

Izvor: United Nations, Department of Economic and Social Affairs/Population Division, World Urbanization Prospects: The 2018 Revision, New York, 2019.

Ukoliko se najnovije dugoročne projekcije Ujedinjenih nacija pokažu istinitim, može se očekivati da će u narednom periodu zapravo celokupan rast svetske populacije biti determinisan porastom broja stanovnika u urbanim sredinama. To jest, u periodu između 2018.-2050. godine očekuje se porast gradskog stanovništva za 2,5 milijardi osoba, sa 4,2 milijarde na 6,7 milijardi, dok se predviđa da će se svetska populacija u narednih 30 godina povećati nešto manje, za 2,1 milijardu, sa 7,6 milijardi u 2018. godini na 9,8 milijardi u 2050. Znatan rast gradskog stanovništva, kao i u prethodnim godinama biće podstaknut dejstvom nekoliko faktora, od kojih su presudni: prirodni priraštaj, ruralno-urbana migracija i geografska ekspanzija urbanih naselja kroz aneksiju i transformaciju ruralnih lokaliteta u gradska naselja (United Nations, 2019).

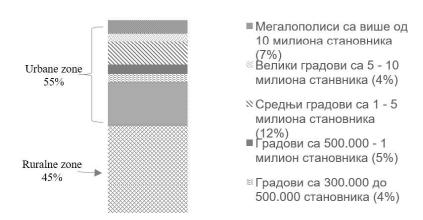
Na globalnom nivou vidljive su upečatljive razlike u obrascima urbanizacije između razvijenijih i manje razvijenih regiona. Dok trenutno nešto manje od polovine stanovništva manje razvijenih regiona živi u ruralnim područjima, velika većina u razvijenim delovima sveta živi u urbanim naseljima. Međutim, urbano stanovništvo manje razvijenih regiona raste znatno brže nego što je slučaj u razvijenim regionima, i kao rezultat savremenih trendova, njen udeo u gradskom stanovništvu sveta je u porastu. 1950. godine gradsko stanovništvo razvijenijih regija bilo je znatno brojnije od stanovništva manje razvijenih regiona (446 miliona nasuprot 305 miliona), tako da su razvijeniji regioni sa 59% učestvovali u svetskoj gradskoj populaciji. Već od pedesetih godina prošlog veka obrasci rasta gradskog stanovništva razvijenih i manje razvijenih regija pokazivali su znake divergencije, pri čemu je uočena tendencija usporavanja rasta urbane populacije razvijenijeg dela sveta. Kao posledica toga, do 1970. godine gradsko stanovništvo

manje razvijenih regiona je po broju nadmašilo gradsko stanovništvo razvijenijih regiona (680 miliona prema 674 miliona), a razlika se, tokom decenija koje su usledile naglo povećala. Prema izveštaju Ujedinjenih nacija u 2018. godini tri puta više stanovnika živelo je u gradovima manje razvijenih regiona (3,2 milijardi nasuprot 1,0 milijarde stanovnika urbanih naselja razvijenih zemalja), tako da su gradovi manje razvijenih regiona činili 76% svetske gradske populacije i 84% ukupne populacija sveta (United Nations, 2019).

Brzi urbani rast koji karakteriše gotovo sve geografske regione sveta doveo je do velikog porasta u broju gradskih stanovnika. Urbano stanovništvo Afrike povećalo se u periodu između 1950. i 2018. godine za šesnaest puta, povećavajući se sa 33 na 548 miliona. Urbano stanovništvo Azije povećalo se za devet puta, sa 246 miliona na približno 2,3 milijarde, dok je broj stanovnika Latinske Amerike i Kariba porastao sedam puta, sa 70 miliona na 526 miliona. Broj stanovnika gradova u Severnoj Americi se više nego udvostručio (sa 110 miliona na 299 miliona), dok je u Okeaniji utrostručen (sa 8 na 28 miliona). Čak i gradsko stanovništvo Evrope, čije su stope rasta relativno niske, skoro se udvostručilo tokom istog period, sa 284 na 553 miliona (United Nations, 2019). Uprkos relativno niskom stepenu urbanizacije (oko 50%), Azija, kao najmnogoljudniji kontinent ima najveći broj stanovnika koji žive u urbanim sredinama (2,3 milijarde u 2018. godini), sledi Evropa, sa populacijom od 553 miliona u urbanim sredinama, zatim Afrika sa 548 miliona (kao uglavnom ruralna, sa 43% stanovništva u gradskim oblastima) i Latinska Amerika i Karibi sa 526 miliona stanovnika koji žive u urbanim područjima.

Imajući u vidu da je tranzicija iz ruralnih u urbana područja aktuelna od vremena Prve industrijske revolucije, grupa velikih gradskih aglomeracija populaciono je rasla, sve brže šireći mrežu metropola širom sveta. Naime, tokom poslednja dva veka, desila se još jedna velika promena u distribuciji svetske populacije: sve veća i da sada neprevaziđena koncentracija ljudi u visoko urbanizovanim oblastima, poznatim kao urbane aglomeracije. Najveće od ovih aglomeracija na vrhu urbane hijerarhije su one sa 10 ili više miliona stanovnika, takozvani, megalopolisi. Trideset tri megalopolisa u Africi, Aziji, Evropi, Latinskoj i Severnoj Americi čine 7% ukupne svetske populacije u 2018 (Grafikon 1). Sledeća grupa sastoji se od velikih gradova sa 5 do 10 miliona stanovnika, što koncentriše još 4% svetske populacije. Ostale kategorije urbane hijerarhije definisane su kao srednji gradovi sa 1 do 5 miliona, gradovi sa 500.000 do milion, gradovi sa 300.000 do 500.000 i gradska naselja sa manje od 300.000 stanovnika, koja su u 2018. godini u ukupnom svetskom stanovništvu učestvovala sa 12, 5, 4, odnosno 23% (United Nations, 2019).

Grafikon 1. Stanovništvo sveta, prema zonama naseljenosti i prema veličini urbanih naselja, 2018. godine



Izvor: United Nations, Department of Economic and Social Affairs/Population Division, World Urbanization Prospects: The 2018 Revision, New York, 2019

O ubrzanom rastu urbanih aglomeracija govore i sledeći podaci. 1990. godine bilo je 10 gradova sa više od 10 miliona stanovnika u kojima je živelo 153 miliona ljudi, što je predstavljalo manje od 7% ukupne gradske populacije. 2018. godine na prostoru 20 država smestilo se 33 takozvanih megalopolisa, odnosno urbanih aglomeracija sa 10 ili više miliona stanovnika. Posmatrani zajedno megalopolisi predstavljaju dom za 529 miliona ljudi, što je otprilike osmina svetskog urbanog stanovništva. Pritom, Tokio je najveći grad na svetu sa aglomeracijom od nešto više od 37 miliona stanovnika, a slede Delhi sa 29 miliona, Šangaj sa približno 26, Sao Paulo (Brazil) i Meksiko Siti sa blizu 22 i Kairo sa 20 miliona stanovnika. Među preostalih top 10 mega-gradova nalaze se Bombaj, Peking, Daka (Bangladeš) i Osaka sa nešto više od 19 i New York sa gotovo 19 miliona stanovnika, što svedoči da je 6 od 10 najvećih metropola sveta locirano na prostoru azijskog kontinenta (United Nations, 2019).

S obzirom na visoke stope rasta urbanih naselja i rastući udeo gradskog u ukupnom stanovništvu sveta, potrebno je ukazati na važne činjenice. Naime, prema izveštaju Ujedinjenih nacija svetski gradovi zauzimaju samo 3% Zemljine površine, ali urbane aktivnosti sa 60-80% učestvuju u potrošnji energije i generišu 75% celokupne emisije ugljen-dioksida kao i značajne količine drugih štetnih gasova i zagađujućih materija. Od 2016. godine, 90% stanovnika gradova stalno je izloženo štetnom dejstvu suspendovanih čestica iz vazduha, što je za posledicu imalo 4,2 miliona smrti usled povećanih koncentracija zagađenja vazduha (www.un.org/sustainabledevelopment/cities). Više od polovine svetskog gradskog

stanovništva bilo je izloženo nivoima zagađenja vazduha najmanje 2,5 puta višim od standarda sigurnosti (www.un.org/sustainabledevelopment/cities).

Slično kao i kod većine država Jugoistočne Evrope, proces intenzivne urbanizacije u Republici Srbiji započet je tek u drugoj polovini XX veka. Sve do šezdesetih godina prošlog veka Srbija je u pogledu privredne strukture imala isključivo poljoprivredni karakter, dok je po strukturi naseljenosti bila ruralna sredina. U godinama nakon Drugog svetskog rata uočavaju se značajne prostornodemografske promene, inicirane snažnim procesom primarne urbanizacije i deagrarizacije stanovništva, zapravo, intenzivnim migracionim tokovima na relaciji selo-grad. Do 1953. godine urbano stanovništvo činilo je nešto više od jedne petine ukupnog stanovništva (22,5%), dok je istovremeno oko dve trećine aktivnog stanovništva bilo zaposleno u poljoprivredi (67%). Za gotovo pola veka (2011. godine), u gradskim naseljima Srbije živelo je 59,44% (4.271.872) od ukupnog stanovništva, a zaposlenih u primarnom sektoru delatnosti bilo je 11,8% (Ministarstvo građevinarstva, saobraćaja i infrastrukture Republike Srbije, p. 4). Sasvim razumljivo, usporavanje procesa ubrzane urbanizacije na našim "pražnjenjem" tradicionalnih prostorima započinje tek demografskih "rezervoara", prvenstveno naglašeno ruralnih sredina.

Proces "odlivanja" stanovištva u pravcu ekonomski razvijenih sredina imao je za posledicu stvaranje zona demografske ekspanzije i visoke koncentracije stanovništva i zona konstantne depopulacije, odnosno sve izraženiju prostornodemografsku polarizaciju. Komparativnom analizom uočava se da ove dve zone imaju dijametralno suprotne osnovne prostorno-demografske karakteristike. "Zone demografske ekspanzije uglavnom determiniše relativno mali prostorni obuhvat, visok stepen aglomeriranja stanovništva i aktivnosti, visok nivo opšte naseljenosti i relativno povoljne relevantne demografske strukture, a po pravilu predstavljaju imigraciono atraktivna visoko urbanizovana područja. Za razliku od njih, zone depopulacije predstavljaju demografski egzodusne, teritorijalno velike i relativno slabo naseljene prostore, dominantno ruralnog karaktera, sa konstantno opadajućom populacijom, kod koje su praktično svi negativni efekti (proces starenja stanovništva, konstantan pad stopa nataliteta i rast stopa opšteg mortaliteta) demografske tranzicije najizraženiji" (Stojanović, Vojković, 2005). Tako su formirani periurbani prstenovi – gravitaciona područja koja gravitiraju oko jačih funkcionalnih centara među kojima se izdvajaju periurbani prsten metropolitenskog beogradskog područja, novosadska funkcionalno-urbana aglomeracija, kao i periurbana područja oko Niša i Kragujevca (Ministarstvo građevinarstva, saobraćaja i infrastrukture Republike Srbije).

Karakteristična za prostor Srbije je i pojava prinudnih migracija, koje su, u značajnoj meri uticale na trendove urbanizacije. Kako se može zaključiti, u

strukturi demografskog rasta gradova Srbije već decenijama dominantnu ulogu ima mehanička komponenta (unutrašnje migracije), dok je uticaj biološke komponente u formi prirodnog priraštaja (zbog usporavanja biološkog obnavljanja) osetno manji. Upravo iz tog razloga nimalo nije pogrešno reći da migracije stanovništva predstavljaju najvažniju determinantu promena prostornog razmeštaja stanovništva Republike Srbije. Da su globalne tendencije populacionog buma u gradskim sredinama prisutne i na prostoru naše zemlje potvrđuju podaci poslednjeg popisa stanovništva na osnovu kojih, u gradskim naseljima, koja čine 3,6% od ukupnog broja naselja u Srbiji (bez KiM), živi gotovo 60% ukupnog stanovništva Republike (Republički zavod za statistiku, 2014). Naličje i produkti depopulacije i demografskog pražnjenja sela ogledaju se u kreiranju zagušenih, bučnih i prenaseljenih gradova koji su, veoma često kao tipično veštačke sredine suprotstavljeni Prirodi i otuđeni od nje.

Motorna vozila na putevima sveta, Evrope i Republike Srbije

Negativni efekat motora sa unutrašnjim sagorevanjem na životnu sredinu, a time i automobila koji se pokreću korišćenjem tradicionalnih goriva, pored nekontrolisanog iscrpljivanja prirodnih resursa planete Zemlje, koji nisu obnovljivi, ogleda se u aerozgađenju. Uticaj izduvnih gasova na zagađenje vazduha u gradovima i njihovoj okolini je značajan, a s obzirom da ukupan broj motornih vozila na globalnom nivou rapidno raste "ozelenjavanje" gradova se, na putu održivog razvoja nameće kao jedan od prioriteta trećeg milenijuma.

Automobil je danas jedno od najrasprostranjenijih sredstava za prevazilaženje fizičkih distanci. Broj automobila, autobusa i kamiona svakodnevno se povećava. Već sredinom 2010. godine, po prvi put je bilo registrovano više od milijardu automobila širom sveta. Početkom 2019. bilo ih je oko četvrt milijarde više. Sa nadolazećim i brzo rastućim ekonomijama, poput Kine ili Indije i rezultirajućim poboljšanjem nivoa životnog standarda lokalnog stanovništva, sve veći broj ljudi će biti u prilici da sebi priušti "ljubimca" na četiri točka. A zbog činjenice da je reč o zemljama ogromne populacije verovatno će se rast broja automobila na globalnom nivou nastaviti i još više povećavati. Sa 3,1 automobila, koliko se proizvede tokom jedne sekunde, u svetu se na godišnjem nivou proizvodi oko 100 miliona novih automobila, a taj broj će se, svakako usled očekivanog eksplozivnog populacionog buma i razvoja tehnoloških dostignuća značajno povećavati tokom sledećih decenija. Proračuni govore da će do 2035. godine preko 1,8 milijardi automobila biti u upotrebi širom sveta (www.live-counter.com/number-of-cars).

Iako je globalna prodaja automobila i lakih komercijalnih vozila u 2018. godini smanjena za 0,5%, na 54 najvećih svetskih tržišta prodato je oko 86 miliona

vozila. Prodaja električnih automobila dostigla je rekordni nivo, s obzirom da je tokom godine prodato 1,26 miliona putničkih električnih automobila, što je porast za ogromnih 74%. Bilo je to jedno od najvećih porasta među svim kategorijama automobila na globalnom tržištu, što se može objasniti uticajem nekoliko faktora. Prvo, kineska potražnja za električnim vozilima porasla je tokom godine, jer je ovaj tip automobila dobio veću vidljivost među potrošačima, delom i zahvaljujući činjenici da su lokalne vlasti promovisale njihov uticaj na životnu sredinu. Drugo, Tesla Model 3 postao je najprodavaniji električni auto-brend na svetu, jer je podstaknut prodajom u Severnoj Americi, gde je prvi put postao dostupan. Konačno, dizel-kriza u Evropi doprinela je, takođe podizanju svesti potrošača o prednostima vožnje električnim aitomobilima (www.best-sellingcars.com/global).

Vozni park putničkih automobila Evropske unije porastao je tokom poslednjih pet godina za 5,7%, tako da je broj vozila na putevima evropskog kontinenta povećan sa 243 na 257 miliona. Uprkos porastu broja registracija putničkih automobila sa alternativnim pogonom poslednjih godina, automobili koji ne koriste tradicionalna pogonska goriva čine samo 3,4% ukupnog voznog parka EU. Automobili na prostoru Evropske unije u proseku su stari 10,5 godina. Prosečna starost automobila drastično varira od zemlje do zemlje zavisno od toga da li pripadaju bogatom zapadu ili siromašnijem istoku. Litvanija i Rumunija, tako imaju najstarije flote, sa vozilima starijim od 16 godina, dok se "najmlađi" automobili voze drumovima Luksemburga (prosečna starost 6,3 godine) i Ujedinjenog Kraljevstva (7,8 godina). Zanimljivo je da, u Mađarskoj skoro polovina svih domaćinstava (48,3%) nema automobil, a u Danskoj skoro 40%. Suprotno tome, više od 30% francuskih porodica poseduje dva automobila (www.acea.be/statistics/article).

Broj drumskih motornih vozila registrovanih tokom 2018. godine u Republici Srbiji u blagom je porastu u odnosu na broj registrovanih vozila u prethodnoj godini. Kada je reč o našoj zemlji broj ukupno registrovanih drumskih motornih i priključnih vozila 2018. bio je na nivou od gotovo 2, 472,748 miliona, od čega je 1.999.771 putničkih automobila, a samo na području grada Beograda registrovano je 568.308 što je više od broja u celom regionu Šumadije i Zapadne Srbije (527.623) (Republički zavod za statistiku, 2019). Kada su u pitanju vozila koja ne koriste konvencionalna pogonska goriva, broj registrovanih automobila je i dalje na veoma niskom nivou. Na putevima naše zemlje prisutno je skromnih 173 vozila na električni pogon, kao i 255 hibridnih vozila, a prosečna starost automobila koji se voze u Srbiji procenjuje se na 17 godina. S obzirom na važeću regulativu, koja još uvek omogućava uvoz "punoletnih" vozila, nimalo nije čudno što na našim putevima preovladavaju vozila iz prošle decenije i što je broj vozila iz prošlog veka daleko iznad onih sa motorima poslednje dve uvedene emisione

klase (Euro 5 i Euro 6 standard). Činjenica da sa povećanjem broja vozila, naročito onih koja zemlje razvijene Evrope zakonima "proteruju" sa svojih drumova raste i zagađenje, a da "zagađivači" na četiri točka u velikoj meri devastiraju kvalitet vazduha u gradskim sredinama ukazuje na hitnost preduzimanja zaštitnih mera, kako bi se predupredila ekološka šteta koja je u najavi i pronašli načini supstitucije ustaljenih navika i ponašanja u urbanim zonama. Tim pre što merenje koncentracije zagađujućih materija, posmatrano po urbanim naseljima, pokazuje da tek trećina stanovništva ima vazduh dobrog kvaliteta, dok dve trećine ima vazduh čiji je kvalitet potrebno poboljšati (Strategija održivog urbanog razvoja Republike Srbije do 2030. godine).

"Kako je broj vozila sa niskom emisijom ugljenika (g/km) na putevima Srbije zanemarljiv, promociji "zelene" urbane mobilnosti i kreiranju održivih gradova koji nude željeni kvalitet životnog i radnog ambijenta kako u sadašnjem trenutku, tako i u budućnosti potrebno je posvetiti posebnu pažnju. S tim u vezi, od višestruke važnosti je spoznaja što većeg procenta urbane populacije da lokalno aerozagađenje uglavnom ima regionalne i globalne implikacije" (Vujović, Vujović, 2017).

Zaključne napomene: kako do održive urbane mobilnosti

Kroz strategije razvoja kompaktnih gradova, koji postaju ideal održive urbane forme, evropske zemlje promovišu plansko ograničavanje prostorne ekspanzije gradova, ali i veću energetsku efikasnost i manji uticaj na zagađenje, pre svega zbog mešovite namene prostora i veće gustine naseljenosti, što zahteva kraća putovanja od mesta stanovanja do mesta rada i drugih aktivnosti i korišćenje održivih vidova saobraćaja. Pritom, prihvatanje koncepta održivog marketinga i primene, njemu raspoloživih tehnika u funkciji su kreiranja "zelenije" urbane mobilnosti i pronalaženja načina supstitucije ustaljenih navika i ponašanja stanovnika u urbanim zonama. U procesu pripreme, usvajanja i primene planova održive urbane mobilnosti (POUM) koje predviđa Strategija održivog urbanog razvoja Republike Srbije do 2030. godine, promocija prelaska na održivije vidove transporta i podrška ekološke mobilnosti u urbanim sredinama moguća je kroz sledeće korake:

• Razvoj visokokvalitetne, odgovarajuće i "udobne" infrastrukture za bicikliste, vozače električnih trotineta i pešake (biciklističke staze, pešačke zone i šetališta) radi kreiranja prijatnog, sigurnog i ekološki bezbednog ambijenta, bez aerozagađenja i buke i s tim u vezi promovisanje aktivne mobilnosti i zdravog načina života, sa fokusom na fizičku aktivnost (šetnje i biciklizam u cilju sprečavanja i prevencije bolesti i gojaznosti). Biciklistički saobraćaj i sistem organizovanog iznajmljivanja bicikala (*bike sharing*) tipični su, pre svega, za

Vojvodinu dok se biciklističke staze sporadično grade i u ostalim delovima zemlje, ali se biciklizam više promoviše kao vid rekreacije u prirodi, zbog čega nema značajnog udela u mobilnosti u gradovima (Ministarstvo građevinarstva, saobraćaja i infrastrukture). U cilju oslobađanja centralnih urbanih zona od motornog saobraćaja i integracije saobraćajnih površina treba slediti primer pozitivne prakse modernih gradova Evrope, poput Londona i Milana koji su uvođenjem "urbane zamke" i naplaćivanjem ulaska automobilom u centar grada (kamere kontrolišu poštovanje propisane mere) uspele da značajno smanje saobraćajnu gužvu i broj automobila na ulicama tokom dana.

- Promocija upotrebe gradskog prevoza³ sa tendencijom ka uvođenju autobusa na alternativni pogon u gradski saobraćaj. Javni prevoz je često brže i jeftinije rešenje od korišćenja automobila, naročito u sredinama u kojima je parking prostor ograničen. Veća upotreba javnog prevoza ima prednosti za životnu sredinu i zajednicu, čime se smanjuju zagađenje, prometna zagušenja, saobraćajni metež i buka. Naravno, neophodno je poboljšati percepciju gradskog prevoza u javnosti i promeniti stereotip po kome je javni prevoz jedina alternativa za prevoz ljudi koji ne mogu sebi da priušte svakodnevno korišćenje putničkih vozila.
- Imajući u vidu da savremeni sistemski pristup razvoja sistema javnog gradskog prevoza pretpostavlja transformaciju koncepta od "sistema za sebe" "podsistemu sistema grada", kao neophodnost se nameće promena dugogodišnje poslovne filozofije JGP i preorijentacija podsistema sa koncepta "kvantiteta usluge", ka konceptu "kvalitetnog zadovoljavanja najvećeg broja identifikovanih potreba korisnika sistema" (Tica, 2018, p. 18). U tom smislu podsistem javnog gradskog prevoza putnika, prihvatanjem koncepta holističkog marketinga mora da uskladi svoje ciljeve sa ciljevima grada kao hijerarhijski višeg sistema i ispuni neke od krucijalnih zahteva u smislu da: bude komforan i cenovno pristupačan u prostoru i vremenu; da bude dostupan za korišćenje svim građanima, po jednakim i unapred poznatim uslovima; da obezbedi objekte (uređena stajališta) i usluge koji su efikasno ugrađeni u humano orijentisanu urbanu sredinu; da stimuliše željeni urbani razvoj i formu grada; da ima male negativne ekološke propratne efekte i nusprodukte na životni ambijent i nanosi minimalnu ili nultu štetu ekosistemu; da bude adaptivan u smislu stalnog prilagođavanja zahtevima i ciljevima viših sistema i zainteresovanih učesnika u sistemu, radi efikasne

³ Udeo gradske populacije koja ima pogodan pristup javnom prevozu (definisano da živi na 500 metara hoda od autobuske i na 1.000 metara od železničke i/ili trajektne stanice) i dalje je nizak, posebno u zemljama u razvoju. Na osnovu podataka iz 227 gradova iz 78 zemalja u 2018. godini, u proseku je 53% urbanih stanovnika svih regiona sveta imalo pogodan pristup javnom prevozu, od niskih 18% u subsaharskoj Africi do visokih 75% u Australiji i Novom Zelandu (www.un.org/sustainabledevelopment/cities, Sustainable Development Goal 11).

adaptacije i transformacije po principima održive urbane forme i koncepta "zelenog" grada.

- Promocija upotrebe električnih vozila može se posmatrati kao važan aspekt rešavanja pitanja zagađenja i zagušenja gradskih sredina saobraćajem. Po ugledu na ekološki osvešćeni deo sveta državna vlast, ali i lokalne samouprave treba da se angažuju u sferi kreiranja politike razvoja, dodatne odgovarajuće infrastrukture, širenja mreže punjača, subvencionisanja i podsticaja (što nije slučaj), koji će biti u funkciji povećanja upotrebe i ubrzanog širenja korišćenja vozila i autobusa na električni pogon u gradovima širom Srbije. Pritom, ne sme se gubiti iz vida da upotreba električnih automobila ne znači automatsko eliminisanje korišćenja fosilnih goriva s obzirom na činjenicu da će zapravo elektrane na ugalj "nastaviti" da zagađuju vazduh dok proizvode struju za "čista" električna vozila.
- Promocija upotrebe automobila sa manjom potrošnjom goriva (1/100km) i vozila sa niskom emisijom ugljenika (g/km), takozvanih, energetski efikasnih vozila po *carpool/carshare* konceptu, čime bi se direktno smanjio nivo zagađenja u gradu i poboljšao lokalni kvalitet vazduha. Isto tako, povećano korišćenje energetski efikasnih vozila (hibridi, električna vozila i vozila na alternativna goriva: biodizel, etanol, vodonik) donelo bi značajne finansijske benefite za građane i lokalnu ekonomiju, s obzirom da upotreba ovih vozila znači trošenje manje energije, a time i uštedu devastiranih resursa. U mnogim gradovima evropskog kontinenta lokalne samouprave podsticajnim merama podržavaju "zelenija" vozila nudeći korisnicima energetski efikasnih automobila brojne pogodnosti: ukidanje poreza pri kupovini, besplatan parking i putne takse, besplatno punjenje električnih baterija na javnim prostorima i slično.. "Deljenje prevoza" takođe postaje ekološki prihvatljiviji i održiviji način putovanja s obzirom da smanjuje zagađenje vazduha, emisiju ugljenika, zagušenje u saobraćaju i potrebu za parking mestima.
- Stimulisati kupovinu novih putničkih automobila sa posebnim osvrtom na kupovinu automobila koji emituju manju količinu CO₂.
- Obezbediti kontrolisan uvoz polovnih automobila koji bi morao da uključi i strogu kontrolu nivoa tehničke ispravnosti uvezenih vozila koja, u sadašnjim uslovima, bez obzira na spoljašnju očuvanost, najvećim delom predstavljaju automobilski otpad, prvenstveno Evrope. Po ugledu na zemlje regiona, promotivnim aktivnostima ukazivati na pogubni uticaj "zagađivača" na četiri točka na kvalitet vazduha i podržati ideju o zabrani uvoza "polovnjaka" emisione klase ispod Euro 4 standarda.

-

⁴ Deljenje prevoza" (*carpooling, car-sharing, ride-sharing*) je deljenje putovanja automobilom tako da više osoba putuje automobilom i sprečava potrebu da drugi moraju sami da se voze do željenog mesta.

• U cilju prevencije i očuvanja zdravlja urbane populacije podržati realizaciju projekta monitoringa, odnosno svakodnevnog merenja koncentracije zagađujućih materija u vazduhu i shodno dobijenim rezultatima alarmirati javnost i permanentno promovisati održive modele mobilnosti.

Na osnovu rečenog proizilazi da su, edukacija stanovništva o prednostima nemotorizovanog prevoza, informisanje i organizovanje kampanja za podizanje kolektivne svesti o potrebi održivog ponašanja u sferi urbane mobilnosti i mogućnosti izbora "zelenijih" načina prevoza u gradskim naseljima rešenja, koja, po uzoru na razvijeni deo sveta mogu biti prihvaćena i involvirana u planove urbane mobilnosti lokalnih samouprava. Kreiranju svesti o neophodnosti održive urbane mobilnosti doprinelo bi organizovanje tematskih i niskobudžetnih događaja (konferencije, štampani materijali i brošure), kao i projektovanje uspešnih priča iz gradova širom sveta čiji su stanovnici "ekološkim" i odgovornim ponašanjem doprineli stvaranju nisko-emisionog društva. Na putu izgradnje "zelene" urbane mobilnosti neophodno je promovisanjem ideje o životu u gradu u harmoniji sa prirodom posvetiti posebnu pažnju mlađim generacijama, angažovanjem na organizovanju serija edukativnih predavanja i kreativnih radionica, kako bi se mladi, još u ranom dobu podstakli na razmišljanje o socijalnim i ekološkim aspektima, ali i prednostima korišćenja alternativnih načina mobilnosti u gradskim sredinama. Činjenica da nekolicina gradova samo sporadično obeležava Dan bez automobila koji u sklopu evropske nedelje mobilnosti promoviše viziju gradskih ulica kojima ne dominiraju motorna vozila ukazuje na činjenicu da u našoj zemlji još uvek nije prepoznata neposredna uslovljenost povećanja kvaliteta života u urbanim sredinama i "zelenije" mobilnosti.

Analogno tome, razvoj održive i energetski efikasne urbane mobilnosti svakako treba usmeravati u pravcu podizanja kolektivne svesti o neophodnosti stabilizacije koncentracije gasova sa efektom staklene bašte i prevencije negativnih antropogenih uticaja na devastiran i u značajnoj meri ugrožen i narušen ekosistem. Naravno, na putu supstitucije tradicionalno ukorenjenih načina razmišljanja, navika i ponašanja u gradovima i urbanim naseljima i kreiranja dugoročne "zelenije" urbane mobilnosti uloga koncepta održivog marketinga postaje neprocenjivo značajna.

Literatura

1. Cole M. A., i E. Neumayer. 2004. Examining the impact of demographic factors on air pollution. Population and Environment 26, (1): 5–21. https://doi.org/10.1023/B:POEN.0000039950.85422.eb

- 2. Fuller D. A. 1999. *Sustainable Marketing*. Thousand Oaks, CA: Sage Publications.
- 3. Hunt D. Sh. 2011. Sustainable marketing, equity, and economic growth: a resource-advantage, economic freedom approach. *Journal of the Academy Marketing Science* 39: 7-20.
- 4. IUCN, UNEP, WWF-I. 1991. Caring for the Earth. London, UK: Earthscan.
- 5. Jamrozy U. 2007. Marketing of Tourism: A Paradigm Shift toward Sustainability. *Marketing of Tourism* 1, (2): 117-130.
- 6. York R. 2007. Demographic trends and energy consumption in European Union Nations, 1960–2025. *Social Science Research* 36: 855–872. https://doi.org/10.1016/j.ssresearch.2006.06.007
- 7. Kotler Ph., H. Kartajaya, i I. Setiawan. 2010. *Marketing 3.0: from Products to Customers to the Human Spirit*. New Jersey: John Wiley & Sons, Inc. Hoboken.
- 8. Kotler Ph., H. Kartajaya, i I. Setiawan. 2017. *Marketing 4.0: Moving from Traditional to Digital*. New Jersey: John Wiley & Sons, Inc., Hoboken.
- 9. Miličić D. 2004. Osvrt na demografske tokove urbanizacije kod nas i u svetu, *Demografija* I: 165-172.
- 10. Milutinović, S. 2004. *Urbanizacija i održivi razvoj*. Niš: Fakultet zaštite na radu.
- 11. Ministarstvo građevinarstva, saobraćaja i infrastrukture Republike Srbije. 201). Nacionalni izveštaj Republike Srbije za konferenciju Habitat III, Beograd, available at: http://habitat3.org/wp-content/uploads/Habitat-III-Report-Republic-of-Serbia-SRB.pdf,
- 12. Munitlak-Ivanović O., J. Zubović, i P. Mitić. 2017. Relationship between sustainable development and green economy emphasis on green finance and banking. *Economics of Agriculture* 64, (4): 1467-1482.
- 13. Petrović P., G. Nikolić, i I. Ostojić. 2018. Emisija CO2 u Evropskoj uniji: empirijska analiza demografskih, ekonomskih i tehnoloških faktora. *Stanovništvo* 56, (1): 63-82. https://doi.org/10.2298/STNV180614005P
- 14. Poumanyvong P., i S. Kaneko. 2010. Does urbanization lead to less energy use and lower CO2 emissions? A cross-country análisis, *Ecological Economics*, 70: 434–444. https://doi.org/10.1016/j.ecolecon.2010.09.029
- 15. Republički zavod za statistiku. 2014. Popisni atlas 2011: Popis stanovništva, domaćinstava i stanova 2011. u Republici Srbiji, Beograd.
- 16. Republički zavod za statistiku. 2019. Registrovana drumska motorna i priključna vozila i saobraćajne nezgode na putevima 2018. Statistika saobraćaja i telekomunikacija, Saopštenje br. 062 god. LXIX, Beograd.

- 17. Seretny M., i A. Seretny. 2012. Sustainable Marketing a new era in the face of social, economic and environmental change. *Foundations of Management* 4, (2). DOI: 10.2478/fman-2013-0011.
- 18. Službeni glasnik Republike Srbije, br. 47/2019: *Strategija održivog urbanog razvoja Republike Srbije do 2030. godine.*
- 19. Stojanović B., i G. Vojković. 2005. Urbane aglomeracije na glavnim razvojnim osovinama kao polovi demografske revitalizacije Srbije. *Stanovništvo* 1-4: 61-79.
- 20. Sudarević T., i O. Milovanov. 2015. Marketing strategije održivog razvoja, Paper presented at the conference of the Faculty of Economics, Subotica (655-667) from https://www.researchgate.net/publication/289345335_Marketing_strategije_odrzivog_razvoja
- 21. Tica M. S. 2018. *Gradovi i sistemi javnog gradskog transporta putnika*, Beograd: Saobraćajni fakultet.
- 22. United Nations. 2003. World Urbanization Prospects: The 2002 Revision. Department of Economic and Social Affairs/Population Division, New York.
- 23. United Nations. 2019. World Urbanization Prospects: The 2018 Revision, Department of Economic and Social Affairs/Population Division, New York.
- 24. WCED World Commission on Environment and Development. 1987. Report of the World Commission on Environment and Development: Our Common Future, Oxford University Press, Oxford.
- 25. Vujović S., i T. Vujović. 2017. Promocija "zelene" urbane mobilnosti u funkciji održivog razvoja. *Ecologica* 24, (88): 962-968.
- 26. www.un.org/sustainabledevelopment/cities, (accessed on April 15th 2020).
- 27. www.best-selling-cars.com/global, 2018 (Full Year) International: Worldwide Car Sales and Global Market Analysis, (accessed on April 5th 2020).
- 28. www.acea.be/statistics/article/report-vehicles-in-use-europe-2018, (accessed on April 15th 2020).
- 29. www.un.org/sustainabledevelopment/cities, Sustainable Development Goal 11, (accessed on September 24th 2020).

SUSTAINABLE MARKETING IN THE FUNCTION OF SUSTAINABLE URBAN MOBILITY

Sonja Vujović⁵, Tanja Vujović⁶

Abstract

As the survival and destiny of mankind are originally and inextricably conditioned by the state of the natural environment, it has become clear over time that man's relationship to the environment and economic growth and development "at all costs" were no longer possible or acceptable, and that man is, in fact, part of the ecosystem beyond whose legality will not be able to go unpunished. Faced with problems that, as a by-product of modernization, have for decades devastated and violated the quality of life in urban environments, the environmentally conscious global community has been pushing for the creation of sustainable cities and "greener" urban mobility. Hence the author's intention to emphasize the importance of accepting the concept of sustainable marketing in order to, by raising the collective awareness of the importance of transition to a low-emission society, encourage the substitution of urban mobility habits and behaviour that are in contrast the idea of sustainable urban form and the vision of a "green" city. The research is based on the use of secondary data, analysis of the content of available professional literature and relevant reports of the United Nations and national institutions, as well as on the application of descriptive methods and methods of analysis and synthesis. The article concludes by offering a framework for the implementation of sustainable marketing and measures that can be taken in the field of creating sustainable urban mobility.

Key words: urbanization, urban mobility, sustainable development, urban settlements, sustainable marketing

Introduction

The modern world, already largely faced with the awareness that the Earth must be preserved for both the present and future generations of people, views sustainable development in accordance with the definition of the World Commission for Development and Environmental Protection as "development that meets the needs of the present so not to jeopardize the ability of future generations to meet their own needs" and accepts the view that sustainable development is "essentially a process of change within which resource exploitation, investment direction, technological

⁵ Associate Professor Sonja Vujović PhD, University in Priština - Kosovska Mitrovica, Faculty of Economics, Kolašinska 156, Serbia, E-mail: sonja.vujovic@pr.ac.rs

⁶ Full Professor Tanja Vujović PhD, University in Priština - Kosovska Mitrovica, Faculty of Economics, Kolašinska 156, Serbia, E-mail: tanja.vujovic@pr.ac.rs

development orientation and institutional change are in harmony and enable use of current and future potentials, so that human needs and aspirations would be met "(VCED, 1987). In this regard, the obligation of today's generation to leave offspring at least as many chances for development as it has, stemmed from the fundamental principles of intragenerational and intergenerational equality, because the fact that the current generation has the right to exploit resource potential and a healthy environment, it also an obligation for generations to come. From this perspective, sustainable development conditioned by the need to respect the capacity of nature to provide the resources and services needed for life actually implies improving the quality of human life within the capacity (capacity) of the supporting ecosystem (IUCN, UNEP, WWF-I, 1991).

Anthropocentric (homocentric) understanding of the relationship between man and Nature created the idea of good and generous Nature, which as an inexhaustible resource submissively serves to satisfy man's insatiable needs. With the benefits of civilization initiated by industrialization and the unprecedented progress of new technologies, the problems of endangering and preserving the human environment grew. Rapid population growth at the global level, accompanied by intensive technical and technological processes, has resulted in growing needs for nonrenewable energy, raw materials and other natural resources, especially in countries with the highest population growth rates, i.e. in rapidly developing countries (Munitlak Ivanović, et al., 2017). "Throughout the entire 20th century, economic development has accumulated problems in the environment that cities have not escaped. The dynamics of urban development, the emergence of large agglomerations and the danger of increased levels of air pollution in cities and their surroundings are determined by the absolute increase in population on the planet and increasing the share of urban population. As living organisms, cities have developed, progressed and spatially and socio-economically transformed under the influence of the behavior and actions of all individuals who form an integral part of the urban community." Urban development took place in parallel with the "conquest" of fertile agricultural land, modification of its primary purpose, destruction of natural habitat and endangering sensitive ecosystems. "It is quite clear that man, his activities and habits that are shaped by the benefits of modern civilization and the modernization of all aspects of everyday life are actually the main cause and neuralgic point of increasingly endangered cities" (Vujović, Vujović, 2017).

It is therefore not surprising that the anthropogenic factor in the description of human negligence towards the environment is increasingly cited as a generator of long-term dramatic degradation and devastation of Nature and the devastation of available resources. In this regard, understanding the key current urban trends, but also those that are likely to take place in the coming years, is crucial for the

implementation of the 2030 Agenda, as inclusive, safe, adaptable and sustainable cities and settlements have become one of the seventeen global goals of Sustainable Development Goals stemming from the eight Millennium Development Goals for one World. Especially since urbanization is very often, in addition to population size and age structure of the population, cited as a demographic variable that is classified as a significant determinant of harmful gas emissions (Petrović, et al., 2018). The use of motor vehicles is particularly intensive in urban areas, so it is assumed that with the acceleration of the urbanization process, emissions of CO2 and other harmful gases in urban areas increase. Given that the positive impact of urbanization on greenhouse gas emissions has been confirmed as significant in numerous empirical studies (Poumanyvong, Kaneko, 2010; York, 2007; Cole, Neumayer, 2004), the idea is to show spatial and demographic changes in the direction of accelerated process of urbanization and increasing the use of motor vehicles indicates the urgency of changing the pattern of behavior and the transformation of established habits in terms of urban mobility. Given the high growth rates of urban settlements and the growing share of urban in the total population of the world, but also due to the fact that today, almost half of the world's population lives in settlements with city status, the issue of sustainable urban mobility is a priority.

From marketing to sustainable marketing concept

Decades ago, marketing was criticized for (allegedly) directly encouraging excessive consumption and further development of a highly consumerist (unsustainable) society. "Marketing is to blame for creating false needs, encouraging greed and even encouraging communities to over-spend and materialize. Also, to strive to promote excessive interest in ownership - people are judged by what they have, not by who they are" (Seretny, Seretny, 2012).

Evolving over time, marketing has significantly impacted environmental awareness at the national, regional and planetary levels. Today, the "greener" future we are striving for is becoming more and more certain, thanks to the concept of sustainable marketing. "Since the beginning of the twentieth century and most intensively over the last sixty years, marketing has evolved - from product-based marketing (1.0) to customer-centric marketing (2.0) to human-focused marketing (3.0)" (Kotler, Kartajaya, & Setiawan, 2017). Today we are witnessing the emergence of a new era, defined as Marketing 3.0, an era based on value, in which people are no longer perceived as a target consumer market based on demographic factors, but as quite thoughtful and intelligent partners with emotions, feelings and specific spiritual values (Kotler et al., 2010).

Ecological marketing, which was primarily aimed at challenging products and technological processes that have or may have a negative and harmful impact on the environment, evolved into green marketing, which, in order to enable a comparative existence of economic and natural system in the long run has initially related to popularization of "Green" products and encouraging their purchase. However, green marketing continues to follow an economic paradigm that focuses on the traditional process of economic exchange and profit as the ultimate goal (Jamrozy, 2007). Moreover, green marketing strategies focus on green consumers, who are happy to pay higher prices for environmentally friendly products.

By awakening the responsibility towards the Planet, but also the army of loyal and potential consumers, there are changes in the direction of supporting the development of products that are designed to minimize negative effects on the physical environment while improving and enhancing the existing level of quality. The modern concept of sustainable marketing contributes even more intensively to environmental awareness by insisting on creating, producing and delivering sustainable solutions that are in the function of continuously striking a balance between society's goals (environmental protection), consumers (needs) and companies (profits) (Sudarević, Milovanov, 2015). Thus, sustainable marketing suggests the need to create sustainable models of growth and development based on meeting three crucial criteria: meeting the needs of consumers and society as a whole, achieving organizational goals, respecting and emphasizing compliance with ecosystem's needs (Fuller, 1999).

Sustainable marketing should therefore be viewed as part of marketing that is an accompanying element of sustainable economic development. In this regard, within the framework of sustainable development, marketing has gone through three phases. The first phase: environmental marketing focused on environmental issues, such as air and water pollution, depletion of natural resources and the impact of fertilizers and pesticides used in agriculture. The second phase dates back to the 1980s: environmental marketing, focused on the development of modern, environmentally friendly "clean" technologies. The "green segment of customers" was at the center of marketing activities, because responsible action was recognized as a competitive advantage. The third phase is the current era of sustainable marketing aimed at responsible economic and social development (Hunt, 2011).

For this reason, the concept of sustainable marketing has an important role in achieving globally agreed goals of sustainable development primarily oriented towards achieving economic prosperity and social well-being while protecting the environment, as well as the idea of sustainable "greener" mobility in cities. The aim of the research is aimed at emphasizing the role that the concept of sustainable marketing can play in the process of creating sustainable urban mobility.

Spatial-demographic changes and the process of accelerated urbanization on a global and national level

Until the late eighteenth century, urbanization was not a significant phenomenon for the world (Milutinović, 2004). At the beginning of the 19th century, only 3% of the world's population lived in urban settlements. Over the centuries, that number has almost increased fivefold, so that at the beginning of the 20th century, 14% of the planet's population lived in settlements that had the status of a city (Miličić, 2004). The world population has been going through the process of accelerated urbanization, especially since 1950s when 733.7 million of the world's 2,516.5 million inhabitants lived in cities, i.e. more than two thirds (70%) of the world's population lived in rural areas. At the beginning of the new millennium, the world faced an unexpected urban growth, and the result is that almost half of the world's population lives in settlements with the status of a city. According to the United Nations in 2000, the city's population reached 3,197.6 million, which is almost 700 million more than the world's population in 1950 (United Nations, 2003). In 2007, for the first time in history, the world's urban population exceeded the global rural population, and since then the urban population has continued to grow faster than the rural population. During the second decade of the new millennium, the planetary trend of increasing urban population has created a new reality of the modern world: more than half of the planet currently lives in cities. Namely, out of the total number of the world's population, today more than 55% of people (4.2) billion) live in urban areas, with a tendency to grow in the next thirty years. For the first time in history of human development in 2018, the number of inhabitants in rural settlements fell to less than 50% in relation to the population of urban settlements (3.4 billion). Based on available data, it is evident that in 70 years, the world's urban population has more than quadrupled, from approximately 0.8 billion in 1950 to 4.2 billion in 2018. The explosive growth of the world's urban population is illustrated by the data in Table 1.

Table 1. Total, urban and rural population by development groups and selected years in the period from 1950 to 2050

	Population (in billions)						
Development groups	1950.	1970.	1990.	2018.	2030.	2050.	
Total population							
World	2.54	3.70	5.33	7.63	8.55	9.77	
Developed regions	0.81	1.01	1.15	1.26	1.29	1.30	
Less developed regions	1.72	2.69	4.18	6.37	7.26	8.47	
City population							
World	0.75	1.35	2.29	4.22	5.17	6.68	
Developed regions	0.45	0.67	0.83	0.99	1.05	1.12	
Less developed regions	0.30	0.68	1.46	3.23	4.12	5.56	
Rural population			•	•	•		

World	1.79	2.35	3.04	3.41	3.38	3.09
Developed regions	0.37	0.33	0.32	0.27	0.24	0.17
Less developed regions	1.42	2.01	2.72	3.14	3.14	2.92

Source: United Nations, Department of Economic and Social Affairs/Population Division, World Urbanization Prospects: The 2018 Revision, New York, 2019.

If the latest long-term projections of the United Nations prove to be true, it can be expected that in the coming period, in fact, the entire growth of the world's population will be determined by the increase in the number of inhabitants in urban areas. That is, in the period between 2018-2050. The population of cities is expected to grow by 2.5 billion from 4.2 billion to 6.7 billion, while the world's population is projected to increase slightly over the next 30 years, by 2.1 billion, from 7.6 billion billion in 2018 to 9.8 billion in 2050. Significant growth of urban population, as in previous years will be driven by several factors, of which the following are crucial: natural increase, rural-urban migration and geographical expansion of urban settlements through the annexation and transformation of rural localities in urban settlements (United Nations, 2019).

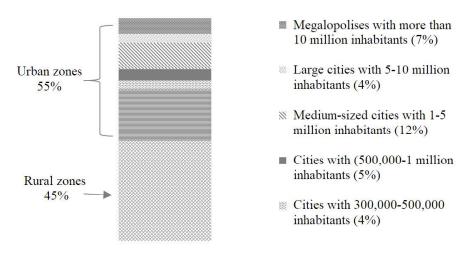
At the global level, there are striking differences in patterns of urbanization between more developed and less developed regions. While currently just under half of the population of less developed regions live in rural areas, the vast majority in developed parts of the world live in urban areas. However, the urban population of less developed regions is growing much faster than in developed regions, and as a result of modern trends, its share of the world's urban population is growing. In 1950, the urban population of more developed regions was significantly more numerous than the population of less developed regions (446 million versus 305 million), so that more developed regions had 59% of the world's urban population. Since the fifties of the last century, the patterns of urban population growth in developed and less developed regions have shown signs of divergence, with a tendency to slow down the growth of the urban population in the more developed part of the world. As a result, by 1970 the urban population of the less developed regions had outnumbered the urban population of the more developed regions (680 million versus 674 million), and the gap had increased sharply over the decades that followed. According to the United Nations report in 2018, three times more people lived in cities in less developed regions (3.2 billion versus 1.0 billion in urban areas of developed countries), so that cities in less developed regions accounted for 76% of the world's urban population and 84% of the total population of the world (United Nations, 2019).

Rapid urban growth that characterizes almost all geographical regions of the world has led to a large increase in the number of urban residents. Urban population of Africa increased sixteen times between 1950 and 2018, increasing from 33 to 548

million. The urban population of Asia increased ninefold, from 246 million to approximately 2.3 billion, while the population of Latin America and the Caribbean increased sevenfold, from 70 million to 526 million. The population of cities in North America has more than doubled (from 110 million to 299 million), while in Oceania it has tripled (from 8 to 28 million). Even Europe's urban population, whose growth rates are relatively low, almost doubled during the same period, from 284 to 553 million (United Nations, 2019). Despite a relatively low level of urbanization (around 50%), Asia, as the most populous continent, has the largest population living in urban areas (2.3 billion in 2018), followed by Europe, with a population of 553 million in urban areas, then Africa with 548 million (mostly rural, with 43% of the population in urban areas) and Latin America and the Caribbean with 526 million inhabitants living in urban areas.

Bearing in mind that the transition from rural to urban areas has been occuring since the time of the First Industrial Revolution, the group of large urban agglomerations has grown in population, expanding the network of metropolises around the world. Namely, during the last two centuries, another great change has taken place in the distribution of the world's population: an increasing and now unsurpassed concentration of people in highly urbanized areas, known as urban agglomerations. The largest of these agglomerations at the top of the urban hierarchy are those with 10 or more million inhabitants, the so-called megalopolises. Thirty-three megalopolises in Africa, Asia, Europe, Latin America and North America make up 7% of the total world population in 2018 (Chart 1). The next group consists of large cities with 5 to 10 million inhabitants, which concentrates another 4% of the world's population. Other categories of the urban hierarchy are defined as medium-sized cities with 1 to 5 million, cities with 500,000 to 1 million, cities with 300,000 to 500,000 and urban settlements with less than 300,000 inhabitants, which in 2018 participated in the total world population with 12, 5, 4 and 23%, respectively (United Nations, 2019).

Graph 1. World population by population zones and by size of urban settlements, 2018



Source: United Nations, Department of Economic and Social Affairs/Population Division, World Urbanization Prospects: The 2018 Revision, New York, 2019.

The following data also speak of the accelerated growth of urban agglomerations. In 1990, there were 10 cities with more than 10 million inhabitants and 153 million people, which represented less than 7% of the total urban population. In 2018, 33 so-called megalopolises, i.e. urban agglomerations with 10 or more million inhabitants, were located in 20 countries. Taken together, megalopolises are home to 529 million people, which is approximately one-eighth of the world's urban population. Tokyo is the largest city in the world with an agglomeration of just over 37 million inhabitants, followed by Delhi with 29 million, Shanghai with approximately 26, Sao Paulo (Brazil) and Mexico City with close to 22 and Cairo with 20 million inhabitants. The remaining top 10 mega-cities include Mumbai, Beijing, Dhaka (Bangladesh) and Osaka with just over 19 and New York with almost 19 million inhabitants, which shows that 6 of the world's 10 largest metropolises are located on the Asian continent (United Nations, 2019).

Given the high growth rates of urban settlements and the growing share of urban in the total world population, it is necessary to point out important facts. According to the United Nations, world cities occupy only 3% of the Earth's surface, but urban activities account for 60-80% of energy consumption and generate 75% of total carbon dioxide emissions as well as significant amounts of other harmful gases and pollutants. Since 2016, 90% of urban residents have been constantly exposed to the harmful effects of suspended airborne particles, resulting in 4.2 million deaths due to increased concentrations of air pollution (www.un.org/sustainabledevelopment/cities). More than half of the world's urban

population has been exposed to levels of air pollution at least 2.5 times higher than safety standards (www.un.org/sustainabledevelopment/cities).

Similar to most countries in Southeast Europe, the process of intensive urbanization in the Republic of Serbia began only in the second half of the twentieth century. Until the sixties of the last century, Serbia had an exclusively agricultural character in terms of economic structure, while in terms of population structure it was a rural area. In the years after the Second World War, significant spatial and demographic changes were noticed, initiated by a strong process of primary urbanization and deagrarization of the population, in fact, intensive migration flows on the rural-urban route. By 1953, the urban population accounted for just over one-fifth of the total population (22.5%), while at the same time about two-thirds of the active population was employed in agriculture (67%). After almost half a century (2011), 59.44% (4,271,872) of the total population lived in urban settlements in Serbia, and 11.8% of employees were in the primary sector (Ministry of Construction, Transport and Infrastructure of the Republic of Serbia). Understandably, the slowdown in the process of accelerated urbanization in our region will begin only with the "emptying" of traditional demographic "reservoirs", primarily rural areas.

The process of "outflow" of population in the direction of economically developed environments resulted in the creation of zones of demographic expansion and high concentration of population and zones of constant depopulation, i.e. increasingly pronounced spatial-demographic polarization. Comparative analysis shows that these two zones have diametrically opposed basic spatial-demographic characteristics. "Zones of demographic expansion are mainly determined by relatively small spatial coverage, high degree of agglomeration of population and activities, high level of general population and relatively favorable relevant demographic structures, and as a rule they represent immigration-attractive highly urbanized areas. In contrast, depopulation zones are demographically exodus, territorially large and relatively sparsely populated areas, predominantly rural, with a constantly declining population, where virtually all negative effects (aging process, constant decline in birth rates and rising overall mortality rates) of demographic transition are most pronounced" (Stojanović, Vojković, 2005). Thus, periurban rings were formed - gravitational areas that gravitate around stronger functional centers, among which the most pronounced ara the metropolitan Belgrade area, Novi Sad functional-urban agglomeration, as well as periurban areas around Nis and Kragujevac (Ministry of Construction, Transport and Infrastructure of the Republic of Serbia).

The phenomenon of forced migration is characteristic for Serbia, which has significantly influenced the trends of urbanization. As can be concluded, the mechanical component (internal migration) has played a dominant role in the

structure of demographic growth of Serbian cities for decades, while the impact of the biological component in the form of natural increase (due to slowing down of biological renewal) is significantly smaller. For that reason, it is not wrong to say that population migrations are the most important determinant of changes in the spatial distribution of the population of the Republic of Serbia. That the global tendencies of the population boom in urban areas are present in our country is confirmed by the data of the last census, based on which almost 60% of the total population lives in urban settlements, which make up 3.6% of the total number of settlements in Serbia (excluding Kosovo and Metohija) (Republic of Serbia Statistical Office, 2014). The reverse and products of depopulation and demographic depopulation of villages are reflected in the creation of congested, noisy and overcrowded cities which, very often as typically artificial environments, are opposed to Nature and alienated from it.

Motor vehicles on the roads of the world, Europe and the Republic of Serbia

The negative effect of internal combustion engines on the environment, and thus cars that run on traditional fuels, in addition to the uncontrolled depletion of the Earth's natural resources, which are not renewable, is reflected on air pollution. The impact of exhaust gases on air pollution in cities and their surroundings is significant, and since the total number of motor vehicles at the global level is rapidly growing, "greening" of cities is one of the priorities of the third millennium on the path of sustainable development.

Today, cars are one of the most widespread means of overcoming physical distances. The number of cars, buses and trucks is increasing every day. Already in mid-2010, for the first time, more than a billion cars were registered worldwide. At the beginning of 2019, there were about a quarter of a billion more. With emerging and fast-growing economies, such as China or India, and the resulting improvement in the living standards of the local population, an increasing number of people will be able to afford a "pet" on four wheels. And due to the fact that these are countries with a huge population, the growth of the number of cars on a global level is likely to continue and increase even more. With 3.1 cars produced in one second, the world produces about 100 million new cars a year, and that number will certainly increase significantly in the coming decades, due to the expected explosive population boom and the development of technological achievements. Estimates say that by 2035, over 1.8 billion cars will be in use worldwide (www.live-counter.com/number-of-cars).

Although global sales of cars and light commercial vehicles decreased by 0.5% in 2018, about 86 million vehicles were sold in the world's 54 largest markets. Electric car sales reached a record high, with 1.26 million passenger electric cars sold during

the year, an increase of a whopping 74%. It was one of the largest increases among all car categories on the global market, which can be explained by the influence of several factors. First, Chinese demand for electric vehicles increased during the year, as this type of car gained greater visibility among consumers, in part due to the fact that local authorities promoted their environmental impact. Second, the Tesla Model 3 became the best-selling electric car brand in the world, as it was boosted by sales in North America, where it first became available. Finally, the diesel crisis in Europe has also contributed to raising consumer awareness of the benefits of driving electric cars (www.best-selling-cars.com/global).

The vehicle fleet of European Union passenger cars has increased by 5.7% over the last five years, so the number of vehicles on the roads of the European continent has increased from 243 to 257 million. Despite the increase in the number of registrations of passenger cars with alternative propulsion in recent years, cars that do not use traditional fuels make up only 3.4% of the total EU vehicle fleet. Cars in the European Union are on average 10.5 years old. The average age of cars varies drastically from country to country depending on whether they belong to the rich west or the poorer east. Lithuania and Romania have the oldest fleets, with vehicles older than 16, while the "youngest" cars are driven on the roads of Luxembourg (average age 6.3 years) and the United Kingdom (7.8 years). Interestingly, in Hungary almost half of all households (48.3%) do not have a car, and in Denmark almost 40%. In contrast, more than 30% of French families own two cars (www.acea.be/statistics/article).

Number of road motor vehicles registered during 2018 in the Republic of Serbia is slightly increasing compared to the number of registered vehicles in the previous year. When it comes to our country, the number of total registered road motor vehicles and trailers in 2018 was at the level of almost 2,472,748 million, of which 1,999,771 are passenger cars, and only in the city of Belgrade, 568,308 were registered, which is more than the number in the entire region of Sumadija and Western Serbia (527,623) (Republic of Serbia Statistical Office, 2019). When it comes to vehicles that do not use conventional fuels, the number of registered cars is still very low. There are a modest 173 electric vehicles on the roads of our country, as well as 255 hybrid vehicles, and the average age of cars driven in Serbia is estimated at 17 years. Given the current regulations, which still allow the import of "adult" vehicles, it is not surprising that our roads are dominated by vehicles from the last decade and that the number of vehicles from the last century is far above those with engines of the last two introduced emission classes (Euro 5 and Euro 6 standard). The fact that with the increase in the number of vehicles, especially those that "expel" developed European countries from their roads, pollution is growing, and that "pollutants" on four wheels greatly devastate air quality in urban areas indicates the urgency of protective measures to the ecological damage was prevented, which was announced and found ways to replace established habits and behavior in urban areas. Especially since the measurement of the concentration of pollutants, observed in urban settlements, shows that only a third of the population has good quality air, while two thirds have air whose quality needs to be improved (Strategy for Sustainable Urban Development of the Republic of Serbia until 2030).

"As the number of low-carbon vehicles (g / km) on Serbian roads is negligible, special attention needs to be paid to the promotion of "green" urban mobility and the creation of sustainable cities that offer the desired quality of living and working environment both now and in the future. In this regard, it is of multiple importance that as much as possible of the urban population know that local air pollution mainly has regional and global implications" (Vujović, Vujović, 2017).

Concluding remarks: how to achieve sustainable urban mobility

Through development strategies for compact cities, which are becoming the ideal of sustainable urban form, European countries are promoting planned limitation of spatial expansion of cities, but also greater energy efficiency and less impact on pollution, primarily due to mixed spatial use and higher population density, which requires shorter trips from housing to work and other activities and the use of sustainable modes of transport. At the same time, the acceptance of the concept of sustainable marketing and the application of the techniques available to it are in the function of creating "greener" urban mobility and finding ways to substitute established habits and behavior of residents in urban areas. In the process of preparation, adoption and implementation of sustainable urban mobility plans envisaged by the Strategy of Sustainable Urban Development of the Republic of Serbia until 2030, promotion of the transition to more sustainable modes of transport and support of ecological mobility in urban areas is possible through the following steps:

• Development of high quality, appropriate and "comfortable" infrastructure for cyclists, electric scooter riders and pedestrians (bicycle paths, pedestrian zones and promenades) in order to create a pleasant, safe and environmentally friendly environment, free of air pollution and noise and thus promote active mobility and healthy life, with a focus on physical activity (walking and cycling to prevent and prevent disease and obesity). Bicycle traffic and the system of organized bicycle rental are typical, primarily for Vojvodina, while bicycle paths are sporadically built in other parts of the country, but cycling is more promoted as a form of recreation in nature, which is why there is no significant share of urban mobility. (Ministry of Construction, Transport and

Infrastructure). In order to free central urban areas from motor traffic and integration of traffic areas, we should follow the example of positive practices of modern European cities, such as London and Milan, which have significantly reduce traffic congestion and the number of cars on the streets during the day.

- Promoting the use of public transport⁷ with a tendency towards the introduction of alternative buses in city traffic. Public transport is often a faster and cheaper solution than using a car, especially in environments where parking space is limited. Greater use of public transport has benefits for the environment and the community, thus reducing pollution, traffic congestion, traffic congestion and noise. Of course, it is necessary to improve the perception of public transport in public and change the stereotype that public transport is the only alternative for transporting people who cannot afford the daily use of passenger vehicles.
- Bearing in mind that the modern systemic approach to the development of public urban transport system presupposes the transformation of the concept from "system for itself" to "subsystem of the city system", it is necessary to change the long-standing business philosophy of PPP and reorient the subsystem from the concept of quality satisfaction of the largest number of identified needs of system users" (Tica, 2018). In that sense, the subsystem of public urban passenger transport, by accepting the concept of holistic marketing, must harmonize its goals with the goals of the city as a hierarchically higher system and meet some of the crucial requirements in terms of: being comfortable and affordable in space and time; to be available for use by all citizens, under equal and pre-known conditions; to provide facilities (arranged stops) and services that are efficiently integrated into the humanely oriented urban environment; to stimulate the desired urban development and form of the city; to have small negative ecological side effects and by-products on the living environment and cause minimal or zero damage to the ecosystem; to be adaptable in terms of constant adaptation to the requirements and goals of higher systems and interested participants in the system, for efficient adaptation and transformation according to the principles of sustainable urban form and the concept of "green" city.

⁷ The share of urban population that has convenient access to public transport (defined as living 500 meters from the bus and 1,000 meters from the train and/or ferry station) remains low, especially in developing countries. Based on data from 227 cities in 78 countries in 2018, on average 53% of urban residents in all regions of the world had convenient access to public transport, from a low 18% in sub-Saharan Africa to a high 75% in Australia and New Zealand

- The promotion of the use of electric vehicles can be seen as an important aspect of solving the issue of pollution and congestion of urban areas with traffic. Following the example of an environmentally conscious part of the world, state government and local governments should be engaged in creating development policy, additional appropriate infrastructure, expanding the network of chargers, subsidies and incentives (which is not the case), which will increase use and accelerate expanding the use of electric vehicles and buses in cities across Serbia. At the same time, we must not lose sight of the fact that the use of electric cars does not automatically eliminate the use of fossil fuels, given the fact that coal-fired power plants will "continue" to pollute the air while producing electricity for "clean" electric vehicles.
- Promotion of the use of cars with lower fuel consumption (1 / 100km) and low-carbon vehicles (g / km), so-called, energy efficient vehicles according to the carpool / carshare concept, which would directly reduce the level of pollution in the city and improve local air quality. Also, increased use of energy efficient vehicles (hybrids, electric vehicles and vehicles running on alternative fuels: biodiesel, ethanol, hydrogen) would bring significant financial benefits to citizens and the local economy, as the use of these vehicles means consuming less energy and thus less energy. saving devastated resources. In many cities on the European continent, local governments support "green" vehicles by encouraging energy-efficient vehicles, offering numerous benefits to users of energy-efficient cars: abolishing taxes on purchases, free parking and tolls, free charging of electric batteries in public areas, etc... a more environmentally friendly and sustainable way of traveling as it reduces air pollution, carbon emissions, traffic congestion and the need for parking spaces.
- Stimulate the purchase of new passenger cars with special emphasis on the purchase of cars that emit less CO2.
- Provide controlled import of used cars, which should include strict control of the level of technical correctness of imported vehicles, which, in the current conditions, regardless of external preservation, mostly represent automotive waste, primarily from Europe. Following the example of the countries in the region, promotional activities should point out the detrimental impact of "pollutants" on four points on air quality and support the idea of banning the import of "used" emission class below the Euro 4 standard.
- In order to prevent and preserve the health of the urban population, support the implementation of the monitoring project, ie daily measurement of the concentration of pollutants in the air and, in accordance with the obtained results, alert the public and permanently promote sustainable mobility models.

Based on the above, it follows that educating the population about the benefits of non-motorized transport, informing and organizing campaigns to raise collective awareness of the need for sustainable behavior in urban mobility and the possibility of choosing "greener" modes of transport in urban areas solutions, the world can be accepted and involved in urban mobility plans of local governments. Organizing thematic and low-budget events (conferences, printed materials and brochures), as well as projecting success stories from cities around the world whose "environmental" and responsible behavior contributed to the creation of a low-emission society, would contribute to creating awareness of the need for sustainable urban mobility. On the way to building "green" urban mobility, it is necessary to pay special attention to younger generations by promoting the idea of life in the city in harmony with nature, engaging in organizing a series of educational lectures and creative workshops to encourage young people to think about social and environmental aspects, but also the benefits of using alternative modes of mobility in urban areas. The fact that several cities only sporadically mark Car Free Day, which promotes the vision of non-motorized city streets as part of European Mobility Week, points to the fact that our country has not yet recognized the immediate condition of increasing quality of life in urban areas and "greener" mobility.

Analogously, the development of sustainable and energy efficient urban mobility should certainly be directed towards raising collective awareness of the need to stabilize the concentration of greenhouse gases and prevent negative anthropogenic impacts on the devastated and significantly endangered and disturbed ecosystem. Of course, on the path of substituting traditionally rooted ways of thinking, habits and behavior in cities and urban settlements and creating long-term "greener" urban mobility, the role of the concept of sustainable marketing becomes invaluable.

Literature

- 1. Cole M. A., i E. Neumayer. 2004. Examining the impact of demographic factors on air pollution. Population and Environment 26, (1): 5–21. https://doi.org/10.1023/B:POEN.0000039950.85422.eb
- 2. Fuller D. A. 1999. *Sustainable Marketing*. Thousand Oaks, CA: Sage Publications.
- 3. Hunt D. Sh. 2011. Sustainable marketing, equity, and economic growth: a resource-advantage, economic freedom approach. *Journal of the Academy Marketing Science* 39: 7-20.
- 4. IUCN, UNEP, WWF-I. 1991. Caring for the Earth. London, UK: Earthscan.

- 5. Jamrozy U. 2007. Marketing of Tourism: A Paradigm Shift toward Sustainability. *Marketing of Tourism* 1, (2): 117-130.
- 6. York R. 2007. Demographic trends and energy consumption in European Union Nations, 1960–2025. *Social Science Research* 36: 855–872. https://doi.org/10.1016/j.ssresearch.2006.06.007
- 7. Kotler Ph., H. Kartajaya, i I. Setiawan. 2010. *Marketing 3.0: from Products to Customers to the Human Spirit*. New Jersey: John Wiley & Sons, Inc. Hoboken.
- 8. Kotler Ph., H. Kartajaya, i I. Setiawan. 2017. *Marketing 4.0: Moving from Traditional to Digital*. New Jersey: John Wiley & Sons, Inc., Hoboken.
- 9. Miličić D. 2004. Osvrt na demografske tokove urbanizacije kod nas i u svetu, *Demografija* I: 165-172.
- 10. Milutinović, S. 2004. *Urbanizacija i održivi razvoj*. Niš: Fakultet zaštite na radu.
- 11. Ministarstvo građevinarstva, saobraćaja i infrastrukture Republike Srbije. 201). Nacionalni izveštaj Republike Srbije za konferenciju Habitat III, Beograd, available at: http://habitat3.org/wp-content/uploads/Habitat-III-Report-Republic-of-Serbia-SRB.pdf,
- 12. Munitlak-Ivanović O., J. Zubović, i P. Mitić. 2017. Relationship between sustainable development and green economy emphasis on green finance and banking. *Economics of Agriculture* 64, (4): 1467-1482.
- 13. Petrović P., G. Nikolić, i I. Ostojić. 2018. Emisija CO2 u Evropskoj uniji: empirijska analiza demografskih, ekonomskih i tehnoloških faktora. *Stanovništvo* 56, (1): 63-82. https://doi.org/10.2298/STNV180614005P
- 14. Poumanyvong P., i S. Kaneko. 2010. Does urbanization lead to less energy use and lower CO2 emissions? A cross-country análisis, *Ecological Economics*, 70: 434–444. https://doi.org/10.1016/j.ecolecon.2010.09.029
- 15. Republički zavod za statistiku. 2014. Popisni atlas 2011: Popis stanovništva, domaćinstava i stanova 2011. u Republici Srbiji, Beograd.
- 16. Republički zavod za statistiku. 2019. Registrovana drumska motorna i priključna vozila i saobraćajne nezgode na putevima 2018. Statistika saobraćaja i telekomunikacija, Saopštenje br. 062 god. LXIX, Beograd.
- 17. Seretny M., i A. Seretny. 2012. Sustainable Marketing a new era in the face of social, economic and environmental change. *Foundations of Management* 4, (2). DOI: 10.2478/fman-2013-0011.
- 18. Službeni glasnik Republike Srbije, br. 47/2019: Strategija održivog urbanog razvoja Republike Srbije do 2030. godine.

- 19. Stojanović B., i G. Vojković. 2005. Urbane aglomeracije na glavnim razvojnim osovinama kao polovi demografske revitalizacije Srbije. *Stanovništvo* 1-4: 61-79.
- 20. Sudarević T., i O. Milovanov. 2015. Marketing strategije održivog razvoja, Paper presented at the conference of the Faculty of Economics, Subotica (655-667) from https://www.researchgate.net/publication/289345335_Marketing_strategije_odrzivog_razvoja
- 21. Tica M. S. 2018. *Gradovi i sistemi javnog gradskog transporta putnika*, Beograd: Saobraćajni fakultet.
- 22. United Nations. 2003. World Urbanization Prospects: The 2002 Revision. Department of Economic and Social Affairs/Population Division, New York.
- 23. United Nations. 2019. World Urbanization Prospects: The 2018 Revision, Department of Economic and Social Affairs/Population Division, New York.
- 24. WCED World Commission on Environment and Development. 1987. Report of the World Commission on Environment and Development: Our Common Future, Oxford University Press, Oxford.
- 25. Vujović S., i T. Vujović. 2017. Promocija "zelene" urbane mobilnosti u funkciji održivog razvoja. *Ecologica* 24, (88): 962-968.
- 26. www.un.org/sustainabledevelopment/cities, (accessed on April 15th 2020).
- 27. www.best-selling-cars.com/global, 2018 (Full Year) International: Worldwide Car Sales and Global Market Analysis, (accessed on April 5th 2020).
- 28. www.acea.be/statistics/article/report-vehicles-in-use-europe-2018, (accessed on April 15th 2020).
- 29. www.un.org/sustainabledevelopment/cities, Sustainable Development Goal 11, (accessed on September 24th 2020).

Datum prijema (Date received): 14.11.2021. Datum prihvatanja (Date accepted): 16.12.2021.