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ODRŽIVOST JAVNIH KOMUNALNIH USLUGA U OBALNOM PODRUČJU

SUSTAINABILITY OF PUBLIC UTILITY SERVICES IN COASTAL AREA

SAŽETAK

Rad analizira društveni, tehnički, prostorni i komercijalni okvir pružanja i korištenja komunalnih usluga koji doživljava promjene. Novi pritisci za promjenom, pored privatizacije i liberalizacije tržišta komunalnih usluga također podrazumijevaju strože ekološke standarde, naročito u priobalnom području, nove oblike gospodarskih poticaja, visoke troškove modernizacije mreže, utakmicu među sve većim brojem prihvatljivih tehnologija, neizvjesnost u pogledu budućih obrazaca potrošnje i prekapacitiranost u nekim mrežama. Posebna pažnja je usmjerena na područje vodoopskrbe, odvodnje i gospodarenja otpadom te se predlažu moguća rješenja za kontrolu kvalitete usluga od strane javnih vlasti.

Ključne riječi: *održivost, upravljanje zaštitom okoliša, javne usluge, komunalne tvrtke, obalna područja*

ABSTRACT

The paper analyses social, technical, spatial and commercial contexts of utility provision and use that are changing. The new pressures for change, besides privatization and liberalization of utility service markets also include the tightening of environmental standards, particularly in coastal area, new forms of economic incentives, the high cost of network modernization, competition between a growing number of viable technologies, uncertainty over future consumption patterns and overcapacity in some networks. Particular attention is focused on the area of water supply, wastewater and solid waste management services, and the author proposes feasible solutions for controlling the quality of services from the part of public authorities.

Key words: *sustainability, environmental governance, public services, utilities, coastal areas*

1. UVOD

Komunalne usluge vodoopskrbe, pročišćavanja otpadnih voda i gospodarenja otpadom (ekološke usluge) spadaju u kategoriju javnih usluga ili usluga od općeg interesa¹. Novi zahtjevi u pogledu pružanja komunalnih usluga prvenstveno podrazumijevaju liberalizaciju tržišta komunalnih usluga, strože ekološke standarde, visoke troškove modernizacije mreže, utakmicu između sve većeg broja prihvatljivih tehnologija, neizvjesnost u pogledu obrazaca buduće potrošnje i prekapacitiranost u nekim mrežama [1]. Potreban je velik zaokret, od konvencionalnog pristupa jednostavnog pružanja većeg opskrbnog kapaciteta do novog na potražnju okrenutog predloška učinkovitijeg upravljanja i očuvanja bogatstava kao što je voda i otpad [2]. To je od posebnog značaja za obalna turistička područja s neuravnoteženom ponudom i potražnjom za vodom, posebnom osjetljivošću na neprimjereno zbrinjavanje otpada i na klimatske promjene na koje utječu i neodržive obrasce komunalnog gospodarenja.

2. JAVNI INTERES KOD KOMUNALNIH USLUGA

Javne usluge se razlikuju od ostalih usluga na način da su javne vlasti odgovorne za osiguravanje njihovog pružanja bez obzira na to jesu li profitabilne na slobodnom tržištu. Načela vodi-lje za javne službe moraju biti visoka kvaliteta, kontinuitet i sigurnost, jednak pristup, prihvatljive cijene, univerzalan pristup, transparentnost i visokokvalitetna radna mjesta². Usluge od općeg (ekonomskog) interesa ne smiju biti regulirane samo komercijalnim pravilima slobodnog tržišta, jer bi to značilo da će najslabiji i najsiromašniji uvijek izgubiti [3]. Stoga opći in-

¹ Javna usluga je djelatnost opskrbljivanja javnosti neophodnom robom ili uslugom. U terminologiji Europske unije, javne usluge su poznate kao usluge od općeg interesa i usluge od općeg ekonomskog interesa. Spomenuta kategorija također obuhvaća velike mrežne gospodarske grane kao što su energija, telekomunikacije, transport, audiovizualno emitiranje kao i poštanske usluge, obrazovne, zdravstvene i socijalne usluge.

² Prijedlog Nacrta europskog okvira za osiguranje i razvoj usluga od općeg ekonomskog interesa kojega je usvojio Koordinacijski odbor Europske konfederacije sindikata (ETUC) 20.09.2006. navodi sljedeća temeljna načela koja trebaju uzeti u obzir pružatelji usluga zaduženi za usluge od općeg ekonomskog interesa: dostupnost, raspoloživost, kontinuiranost, solidarnost, priušćanje, univerzalnost, održivost, transparentnost, odgovornost, demokratska kontrola, nediskriminacija i kvaliteta postupanja.

1. INTRODUCTION

Public utility service of water supply, waste water treatment and waste management (environmental services) fall within the category of public service or service of general interest¹.

New requirements as regards utilities provision involve primarily the liberalization of utility service markets, the tightening of environmental standards, the high cost of network modernization, competition between a growing number of viable technologies, uncertainty over future consumption patterns and over-capacity in some networks [1]. A major shift is required, away from the conventional approach of merely delivering more supply capacity, to a new demand-oriented paradigm of more efficiently managing and conserving the resources such as water and waste [2].

This is of particular significance for coastal tourist areas with unbalanced supply and demand for water, particular vulnerability to inappropriate waste disposal and climate changes to the unsustainable patterns of utility services management make contribution to as well.

2. PUBLIC INTEREST WITH REGARD TO UTILITY SERVICES

Public services differ from other services in that public authorities have a responsibility to ensure their supply regardless of whether they are profitable in a free market. The guiding principles for public services must be high quality, continuity and security, equal access, affordable prices, universal provision, transparency and high quality jobs². Services of general (economic) interest should not be governed merely by commercial, free-market rules, because this

¹ Public service is the business of supplying an essential commodity or a service to the public. In the European Union terminology public services are known as services of general interest (SGI) and services of general economic interest (SGEI). The category also includes large network industries such as energy, telecommunications, transport, audiovisual broadcasting, as well as postal services, education, health and social services.

² The proposal of draft Draft European framework to guarantee and develop services of general economic interest adopted by the ETUC (European Trade Union Confederation) Steering Committee on 20/09/2006 specifies the following fundamental principles to be taken into account by the service providers in charge of services of general economic interest: accessibility, availability, continuity, solidarity, affordability, universality, sustainability, transparency, accountability, democratic control, non-discrimination and quality of treatment.

teres treba prevagnuti nad tržišnim zakonitostima, što znači doprinos održivom razvoju i većem zapošljavanju.

Javna usluga mora biti neprofitna jer nastoji zaštititi opće dobro. Javno upravljanje se mora obavljati s ekološkom vizijom koja štiti ekosustave³, promiče sudjelovanje i riječne slivove smatra temeljnim organizacijskim jedinicama. Nadalje, mora promicati razmjenu znanja [4]. Postoje brojne bitne razlike između lokalne javne tvrtke i tvrtke u privatnom vlasništvu. Dok privatna tvrtka ima misiju maksimiziranja dobiti i povrata vlasnicima, lokalna javna tvrtka ima djelomično drugačije ciljeve. Lokalne javne tvrtke moraju na primjer staviti dobrobit zajednice iznad komercijalne koristi dugoročnijim preuzimanjem odgovornosti i poštivanjem odluka o posebnim prioritetima koje postavljaju političari [5]. Nadalje, javna vlast je uvijek ta koja preuzima javnu odgovornost za obavljanje takve usluge neovisno o vlasničkoj strukturi pružatelja javne usluge.

Na razini EU komunalne usluge opskrbe vodom i okolišne usluge nisu predmetom posebnih propisa. Općenito pružanje i ustroj ovih usluga podliježe unutarnjem tržištu, utakmici i pravilima o državnim potporama pod uvjetom da ove usluge mogu utjecati na trgovinu među državama članicama [6]. Posebna pravila Zajednice kao što je zakonodavstvo koje se tiče javne nabave, okoliša i zaštite potrošača se odnose na neka obilježja usluge [7]. U nedostatku jasnih i detaljnih pravila, nastupa sudska praksa Europskog suda pravde kako bi se razriješili sukobi između obveza koje se tiču javnih zadaća i sloboda koje pruža jedinstveno tržište [8]. Popis usluga od općeg interesa isključenih iz Direktive o uslugama na jedinstvenom tržištu je ograničen na samo četiri područja (zdravstvena zaštita, društveni stanovi, briga za djecu i pomoć obiteljima i pojedincima u nuždi), što dokazuje da je u svijetu tržišta i prava jedan od temeljnih problema s kojima se suočava suvremeno pravo iste pomiriti [9].

Usluge od općeg interesa su bitne za svih, bogate i siromašne, "stare" i "nove" države članice, kao i za budućnost Europske unije u cjelini. Visokokvalitetne usluge od općeg interesa su nezaobilazne za svaki gospodarski i društveni napredak u Europi. Njihovo pravilno funkci-

³ Iako je voda poput zdravstva i obrazovanja, brine to što je najmanje razrađeno pitanje vodnih sustava ekološka održivost.

would mean the weakest and neediest will always lose out [3]. Therefore general interest should take precedence over market laws, which means contributing to sustainable development and to a high level of employment.

Public service must be non-profit, as it seeks to defend a common good. Public management must be carried out with an ecological vision that protects ecosystems³, promotes participation, and considers water basins as the basic organisational units. Moreover, it should promote an exchange of knowledge [4]. There are a number of crucial differences between a local public enterprise and a privately-owned company. While a private enterprise naturally has a mission of maximising profit and return to the owners, the local public enterprise has partly different aims. Local public enterprises must, for instance, put the benefit of the community before commercial utility by a more long-term taking of responsibility and by complying with the decisions on special priorities reached by the politicians [5]. Furthermore, it is always the public authority which continues to take public responsibility for the performance of such service regardless of ownership structure of the provider of public service.

At the EU level public utility services of water supply and environmental services are not subject to self-standing regulatory regime. In general, the provision and organisation of these services are subject to internal market, competition and State aid rules provided that these services can affect trade between Member States [6]. Specific Community rules such as public procurement, environmental and consumer protection legislation apply to certain aspects of the service [7]. In the absence of clear and detailed rules, the case law of the European Court of Justice comes into play in order to resolve conflicts between the commitments associated with public missions and the freedoms enjoyed within the single market [8]. The list of services of general interest excluded from the Directive on services within the single market is restricted to four fields only (healthcare, social housing, childcare and assistance for families and individuals in need), proving that in a world of markets and rights one of the most fundamental problems faced by modern law is to reconcile the two [9].

³ Although water is like health and education, it is worrying that the issue least developed by water systems is environmental sustainability.

oniranje je uvjet da Europa koristi cjelokupni potencijal svojeg proširenja u globaliziranoj ekonomiji [10].

3. ODRŽIVOST KOMUNALNIH USLUGA

Brojni ekološki problemi su posljedica neinternaliziranja ekoloških troškova, te nedostatka spoznaje o tome od strane društva. Okoliš je klasičan primjer područja politike koji prožima sve druge, gdje su ciljevi i jezik jednostavni za usvajanje, ali je njihovo postizanje puno teže [11]. Okoliš se ne može zaštititi ukoliko se njegovoj zaštiti ne pristupa integralno, sagledavajući istovremeno zaštitu svih njegovih sastavnica. Isto tako, rješavanje problema zaštite zdravlja ljudi, ne uzimajući u obzir prijemni kapacitet okoliša, se prostorno i vremenski vraća kao bumerang. Tako su rješenja centralizirane odvodnje s kraja 19-og stoljeća koja se i danas smatraju standardom ozbiljno ugrožavala i ugrožavaju izvore pitke vode [12], more, odnosno tlo i zrak ukoliko govorimo o zbrinjavanju (odlaganju ili spaljivanju) mulja iz takvih centraliziranih sustava u kojima se miješaju otpadne vode iz različitih izvora, vrlo često i iz industrije.

Istovremeno se koriste ogromne količine pitke vode i električne struje za transport hranjivim tvarima bogate crne vode na velike udaljenosti, što uzrokuje truljenje i neugodne mirise. S druge strane, oborine se slijevaju na i ispiru krovove i sve nepropusne gradske površine. Samim tim i one same postaju otpadne, a da nisu bile iskorištene, te često neobrađene nalaze put do vodenih korpusa – rijeka, jezera, mora. Takvo raspršeno onečišćenje, na primjer u državi Washington godišnje preuzima količinu nafte koja je jednaka polovici mrlje od broda Exxon Valdez [13]. Nadalje, vodni resursi ne samo što su prirodno neujednačeni u geografskom i vremenskom smislu, već su ugroženi i klimatskim promjenama i fizičkim intervencijama čovjeka u okolišu (krčenje, izgradnja, itd.).

Ono što autorica uočava da je zajedničko kod postupanja kako otpadnom vodom, tako i krutim otpadom je da se u suštini najprije sve izmiješa, a onda se troše ogromna sredstva, energija i napor da se ta mješavina razdvoji, uz dvojbenu uspjeh. Prevladavajuće i uhodane metode komunalnog gospodarenja otpadom i vo-

Services of general interest are essential to all, rich and poor, “old” and “new” Member States, as well as to the future of European Union as a whole. High quality services of general interest are indispensable for any economic and social progress in Europe. Their proper operation is a condition for Europe to use the potential of its enlargement in a globalised economy [10].

3. SUSTAINABILITY OF UTILITY SERVICES

A number of environmental problems result from non-internalisation of environmental costs, as well from the absence of perception thereof by the society. Environment is a classic example of the policy area which interacts with all the others, where the objectives and language are simple to adopt, but their achievement is much more complex [11]. The environment may not be protected unless its protection is tackled in an integral manner, contemplating the protection of all its components simultaneously. Furthermore, the solving of the problem of protecting public health without considering receiving the capacity of the environment boomerangs in terms of space and time. Thus the solutions of centralized sewerage dating from the end of 19th century considered standard to these days have severely threatened potable water sources [12], the sea, as well as soil and air when speaking of disposal (landfilling and incineration) of sludge produced by such centralized systems where wastewaters from various sources are mixed, very often from the industry.

At the same time enormous quantities of potable water and electricity are being used to transport the nutrient-rich blackwater over great distances, thus causing decomposition and unpleasant odours. On the other hand the precipitation falls on and washes down the roofs and all the impermeable urban surfaces – rivers, lakes, and the sea. Thereby they themselves become wastewaters without being previously used and so untreated find their way to water bodies. Such non-point source pollution in the state of Washington for instance picks up on an annual basis a volume of oil that is equivalent to half of the Exxon Valdez spill [13]. Furthermore, water bodies are not only naturally unevenly distributed in terms of geography and time, but are also threatened by climate changes and physical interventions of man in the environment (clearing, development, etc.).

dom po mišljenju autorice nisu najbolje za okoliš, iako se one smatraju i nazivaju ekološkim uslugama, jer su osmišljene tako da se otpad (kruti, voda) samo prenosi na drugo mjesto, čime se ugrožavaju ekosustavi koji onda izravno ili neizravno utječu i na ekološko stanje mjesta (voda, tlo, zrak, priroda) na kojima je otpad izvorno nastao. Stoga, stavljanje komunalnog sektora u funkciju zaštite okoliša zahtijeva bitne promjene uhodanih obrazaca, važećih propisa i poimanja.

Do sadašnjeg stanja nije dovela nikakva nužda, već samo činjenica da se godinama slijede obrasci ponašanja čije se nedostatke uočava sada kada je situacija postala kritična. Istovremeno je neophodno ulagati u obnavljanje danas već trošnih sustava odvodnje i u njihovu izgradnju tamo gdje ih nije niti bilo, dok gradove pritišću sve veće količine otpada, što na deponijama, što u spalionicama, koji svaki na svoj način oštećuju okoliš.

Primjena načela održivosti u urbanim područjima predstavlja jedan od najvećih izazova s kojim se okoliš suočava u ovome stoljeću. Uspjeh će uvelike ovisiti o modelu grada koji će se razviti, posebno u pogledu odnosa između urbanog oblika i potrošnje okolišnih resursa. U tom smislu se smatra da će tzv. disperzirani ili rijetko naseljen grad imati daleko veći utjecaj na okoliš (u smislu potrošnje zemlje, energije, vode i drugih resursa) od koncentriranog ili gustog urbanog oblika. S druge strane, iz perspektive pružanja komunalne usluge, postoje mnoga manja naselja koja nisu obuhvaćena organiziranim programima zbrinjavanja vode i otpada.

Tako se komunalna djelatnost, da bi doista zaštitila okoliš, u stvarnosti suočava s problemima čije rješavanje nadilazi same okvire te djelatnosti, ali zato zadire u pitanja uhodanih obrazaca ponašanja, ulaganja, interesa i znanja.

4. UPRAVLJANJE ZAŠTITOM OKOLIŠA U PROCESU GLOBALIZACIJE

Održivo gospodarenje prirodnim resursima neće biti moguće dostići bez dobrog upravljanja koje zahtijeva koordinirano djelovanje svih ključnih sudionika, posebno lokalnih vlasti, privatnog sektora, sindikata, organizacija civilnog društva i pojedinaca [14], a samu održivost treba sagledati iz različitih perspektiva – tehničke,

What the author perceives as being common in treating the waste (wastewater and solid waste) is that everything is first mixed up and then enormous funds, energy and effort is needed to treat or decompose such a mixture, with dubious success. The prevailing and established methods of municipal water and waste management are in the opinion of the author not the most advantageous for the environment although they are deemed to be and bear the name of environmental services. Namely they are conceived in such a way that the waste (solid, water) is only transferred to another site, thereby threatening the ecosystems and directly or indirectly also the ecological state of the locality (water, soil, air, nature) where the very waste originated. Therefore, assigning the role of a truthful environmental protection to the utilities sector asks for essential changes of the established patterns, laws in force and the perceptions.

Present situation is in no way the result of a necessity, but of the fact that pursued for years are established patterns of behaviour the drawbacks of which are being identified now that the situation turned critical. At the same time it is necessary to invest in reconstruction of the nowadays worn out sewerage system or in its construction where previously non-existent, while the cities are stressed by ever increasing quantities of waste, both at landfills and incinerators where each in their particular mode degrade the environment.

Implementing the principle of sustainability in urban areas represents one of the major challenges facing the environment in this century. The success will to a great extent depend on the model of the city to be developed, particularly with regard to relationship between the urban form and consumption of environmental resources. To that effect it is considered that the so-called dispersed settlements or sparsely populated areas shall exert much greater impact on the environment (within the meaning of consumption of land, energy, water and other resources) than the concentrated or dense urban model. On the other hand, from the perspective of utilities provision, there are many smaller communities which are not covered by organised programmes of water and waste disposal.

Thus the local utility service sector, in order to actually protect the environment, gets confronted with issues whose resolving goes be-

ekološke, društvene, ekonomske, financijske, institucionalne i političke. U prošlosti su mnogi projekti propali zbog prenaplašavanja samo tehničkih aspekata [15].

U sadašnjem složenom procesu globalizacije oslabljuju javne institucije, postignuća države blagostanja postaju upitna, nejednakost je sve veća, a demokratska načela oslabljuju velike transnacionalne ekonomske sile i zakoni tržišta. Nepovjerenje javnosti je sve veće, te se javljaju ozbiljni problemi upravljanja. Predodžba da je stvarna vlast strukturirana oko velikih transnacionalnih tvrtki, izvan vlada i parlamenata, podriiva povjerenje u demokratske institucije. Na međunarodnoj razini, Ujedinjeni narodi ostavljaju vodstvo financijskim institucijama kao što je Svjetska banka i Svjetska trgovinska organizacija (WTO). Iako su ove institucije javne naravi i uživaju formalnu podršku vlada, nedostaje im povezanost koja bi im dala legitimitet u očima društva u kojem vlada sve veće uvjerenje o ovisnosti o međunarodnim financijskim elitama [14].

Budućnost javnih službi je također ugrožena globalnim i regionalnim pregovorima o liberalizaciji trgovine, kao što je Opći sporazum o trgovini i uslugama (GATS) koji se dogovara u sklopu Svjetske trgovinske organizacije [16,17] ili bilateralnih i biregionalnih pregovora o slobodnoj trgovini EU (FTAs) [18]. Ukoliko se sektor usluga dalje liberalizira, države će izgubiti glavninu svojih ovlasti vezanih uz identitet, podrijetlo, broj i aktivnosti privatnih pružatelja [19].

Naime, u posljednjih 15 – 20 godina je globalna politika bila usredotočena na promicanje privatizacije⁴, javno-privatnih partnerstava i ko-

⁴ Pored otvorene prodaje vodnih sustava postoje drugi načini na koje se vodni resursi mogu tiho privatizirati i tako izbjeći pozornost javnosti. Privatizacija zagađenjem se zbiva kroz rudarske projekte, sadnju monokultura, biogoriva i agribiznisa, između ostalih. Privatizacija prekomjernim iskorištavanjem vodnih korpusa iznad njihovog kapaciteta može nastati zbog nedostatka nadzora i kontrole od strane države. Šira kategorija je ona privatizacije privatnim prisvajanjem koja opisuje postupke kada interesi manjine smanjuju pristup većini. Ima više sastavnica, kao što je nepriznavanje volje i potreba stanovništva kada se zemljišne reforme provede na sličan način, prisvajanja rijeka, izgradnje infrastrukture, mega projekata i oblika privatizacije jer pružimaju kontrolu nad vodnim resursima i posebnim skupinama uskraćuju pristup vodi. Sličan scenario koji uključuje vodne resurse su sustavi navodnjavanja gdje se monopolizira pristup zajedničkom dobru. Ova kategorija također obuhvaća plaćanje za okolišne usluge i stvaranje privatnih rezervata kojima upravljaju tzv. "ekološke" neprofitne ili druge nevladine organizacije. Sljedeći oblik privatizacije se događa u obliku javno-privatnih partnerstava (JPP) i sl.

yond the framework of the very sector, but impinges upon routine patterns of behaviour, investment policy, interests and know-how.

4. ENVIRONMENTAL GOVERNANCE IN THE PROCESS OF GLOBALISATION

Sustainable natural resource management systems will not be attainable without good governance which commands for coordinated action of all key participants, especially local authorities, private sector, unions, civil society organizations and individuals [14], whereby the sustainability should be perceived from various perspectives – technical, environmental, social, economic, financial, institutional and political. Many projects in the past failed as a result of overemphasizing the technical aspect only [15].

In the present complex globalization process, public institutions are becoming debilitated, achievements of welfare state are becoming questionable, inequality is growing, and democratic principles appear to be weakened in the face of major transnational economic powers and the laws of the market. Public mistrust is on the increase, and serious problems of governance are appearing. The perception that real power is structured around the major transnational companies, over and above governments and parliaments, undermines confidence in democratic institutions. At the international level, the UN is leaving worldwide leadership in the hands of financial institutions, such as the World Bank and the World Trade Organisation (WTO). Although these institutions are of a public nature, enjoying the formal support of governments, they lack a link which would give them legitimacy in the eyes of a society in which there is a growing conviction of dependency upon international financial elites [14].

The future of public services is also threatened by global and regional negotiations on the liberalisation of trade, such as the General Agreement on Trade in Services (GATS) negotiated in the framework of the WTO [16, 17] or EU bilateral and bi-regional free trade negotiations (FTAs) [18]. If the services sector is liberalised further, states will lose most of their authority on the identity, origin, number and activities of private providers [19].

mercijalizaciju vodnih usluga. Iako se čini da ove politike u mnogim mjestima slabe, neoliberalna ekonomija (prodaja ponuditelju koji nudi najviše) još uvijek prevladava u upravljanju i gospodarenju vodom [4].

Procesi privatizacije, liberalizacije i komercijalizacije nisu neutralni u pogledu njihovog učinka na okoliš. Oni mijenjaju ekonomske politike za korištenje resursa jer se ulaganja u ekološko osuvremenjivanje tehničke infrastrukture ili upravljanje potražnjom procjenjuju prema obimu u kojem povećavaju konkurentnost komunalne tvrtke. Stoga nije vjerojatno da će utakmica dovesti do ekološki učinkovitijeg i održivijeg korištenja resursa bez regulatorne korekcije tržišta.

Na slici 1. prikazuju se prevladavajuće činitelje koji utječu na pogoršanje ekologije i općeg interesa u području lokalnih komunalnih usluga.

Kao što je prethodno spomenuto, izgrađena infrastruktura i uhodana praksa ne predstavljaju najbolje rješenje za okoliš. Nadalje, subvencije i zajmovi se uglavnom daju za konvencionalne sustave ili vrlo često u korist određene tehnologije ili dobara temeljem interesne povezanosti između davatelja zajma/subvencije i dobavljača robe. Pored toga se prednost daje tehničkim rješenjima koja najmanje internaliziraju troškove onečišćenja ili odstupaju od načela „onečišćivač plaća“, a to su centralizirana rješenja na kraju cijevi koje u pravilu financiraju porezni obveznici. Kako su to najskuplji sustavi, proračuni se po mišljenju autorice nepotrebno troše u spomenute svrhe, što nije u interesu zajednice, a dugoročno niti pojedinca. Upućujući nadalje na sliku, privatni pružatelj komunalne usluge je zainteresiran samo za brzi povrat kapitala i čim veći broj redovitih obveznika plaćanja (poželjno paketa usluga) za svoje usluge, tako da manje i seoske zajednice nisu predmetom većeg interesa pružatelja okolišne usluge. Svemu tome izrazito pogoduju neinformiranost, propaganda i načini dobivanja potpore za

modela. Ovi modeli uključuju operatore odgovorne za „vođenje upravljanja“, dok javni sektor preuzima dugove, troškove proširenja infrastrukture, itd. Poslovna struktura omogućava privatnom kapitalu da uđe u različite aspekte upravljanja, što vodi ka podugovaranju glavnih zadaća tvrtke. U većini slučajeva ove kategorije prati dezinformiranje i nedostatak pristupa kapitalu za rješavanje vodnih i sanzijskih problema, pritisci koji proizlaze iz uvjeta koje nameću multilateralne banke u zamjenu za kredite, što ima za posljedicu gubitak suverenosti i kontrole nad vodnim resursima [4].

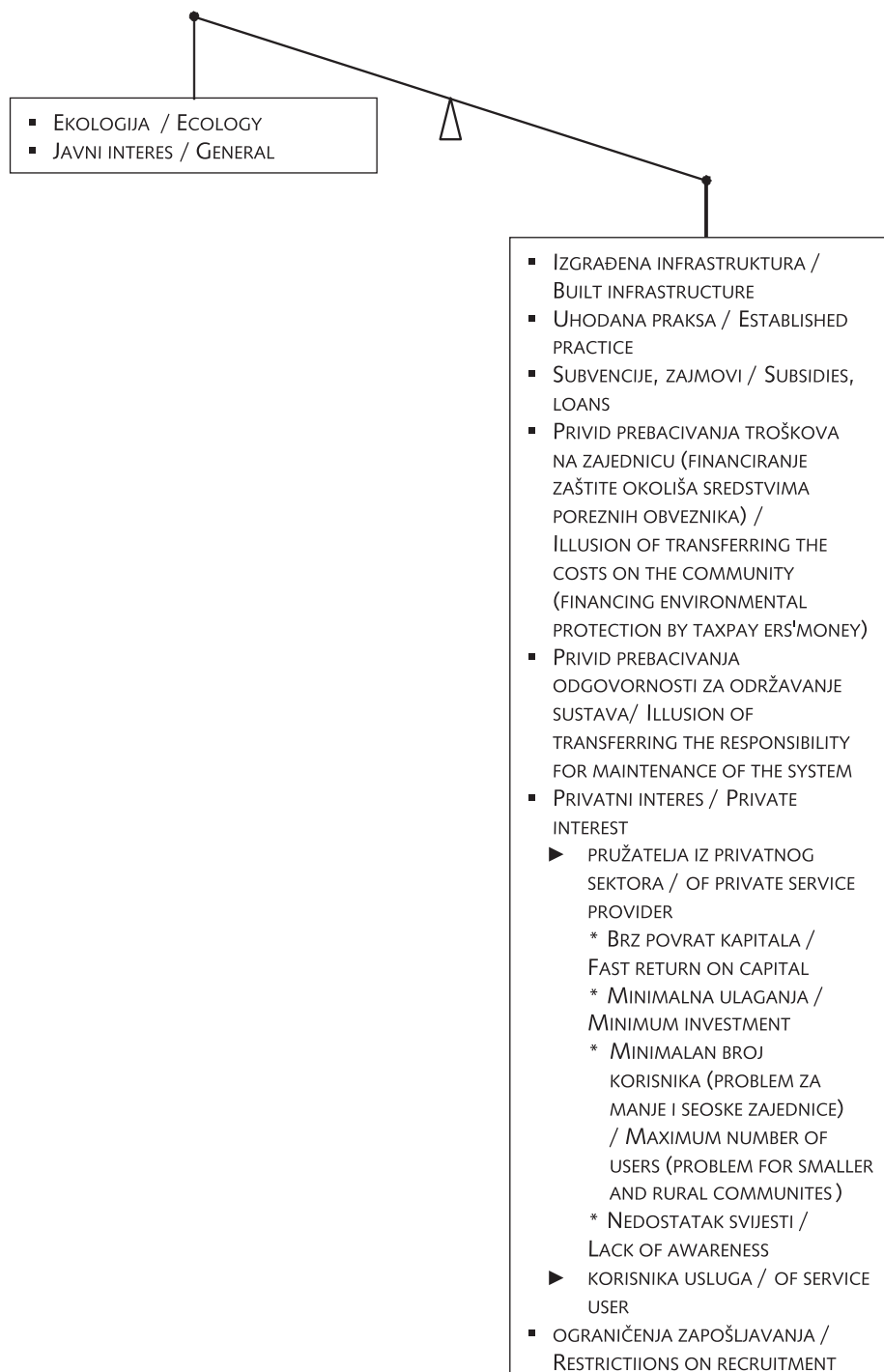
Namely, for the past 15-20 years, global policy has focused on promoting privatisation⁴, public-private partnerships, and commercialisation of water services. While these policies appear to be weakening in many places, the dominance of neoliberal economics (selling off to the highest bidder) is still prevalent in water governance and management [4].

The processes of privatisation, liberalisation and commercialization are not neutral in respect of their impact on the environment. They change the economic stimulus for using the resource as the investments into ecological modernization of technical infrastructure or demand management are estimated according to the magnitude of growth of competitiveness of the utilities service company. It is not probable that the competition will lead to ecologically more efficient and more sustainable use of the resource without regulatory correction of the market.

In Figure 1 the author illustrates the prevailing factors which greatly act to the detriment of the ecology and general interest in the area of local utilities services.

As mentioned earlier, the built infrastructure and established practice do not always constitute the best solution for the environment. Further-

⁴ Beyond the open sales of water systems are other ways in which water resources can be privatised on the downlow, escaping public notice. Privatisation by contamination occurs through mining projects, mono-cropping, biofuels, and agribusiness, among many others. Privatisation by over-exploitation of water bodies beyond their capacity can occur due to a lack of monitoring and control on the part of the state. A broader category is that of privatisation by private appropriation, which describes processes where the interests of a few reduce access for the many. It has several elements, such as a failure to recognise the will and needs of the population when land reforms are carried out in the same way, the appropriation of rivers, the construction of infrastructure, and mega-projects, are forms of privatisation because they take control of the water sources and deny specific groups access to water. A similar scenario involving water sources takes place in irrigation systems where access to a common good is monopolised. This category also includes payment for environmental services and the generation of private reserves administered by so-called “ecological” non-profit or other non-governmental organisations. Another form of privatisation occurs in the guise of public-private partnerships (PSPs) and related models. These models involve operators responsible for “managing the management,” while the public sector assumes the debts, the expansion of infrastructure costs, etc. The business structure allows private capital to enter different aspects of management, leading to the outsourcing of the main role of the companies. In the majority of cases these strategies are accompanied by misinformation and lack of access to funds to resolve water and sanitation problems, pressures arising from conditions imposed by the multilateral banks in exchange for loans, resulting in a loss of sovereignty and control over water sources [4].



Slika 1. Neki od razloga zbog kojih često ekologija i opći interes ne mogu prevladati u komunalnom sektoru
Figure 1 Some of the reasons why often ecology and general interest may not prevail in the utilities sector

privatne projekte. Također treba spomenuti privatni interes korisnika za kojeg ulaganje u ekološku naprednu decentraliziranu odvodnju na primjer ne predstavlja prioritet u njegovom kućnom proračunu, te mu više pogoduje da mu zajednica osigura priključak na centraliziranu infrastrukturu i brine se o njezinom održavanju. Konačno, često postoje i ograničenja glede zapošljavanja u ovoj po definiciji radno-intenziv-

more, the subsidies and loans are mainly granted for conventional systems or very often in favour of a particular technology or goods on the basis of interest-based link between the loan/subsidy grantor and supplier of goods. Additionally, technical solutions are preferred which least internalize the costs of pollution, or detach from the polluter pays principle, those being the end-of-pipe centralized solutions which as a rule are

noj djelatnosti i uvriježen izgovor o “neučinkovitosti” javne tvrtke.

Izazov upravljanja, zajedno s prihvaćanjem novog pristupa održivom gospodarstvu zahtijeva dalekosežne institucionalne reforme prikazanog sustava koje moraju jamčiti transparentnost, proaktivno sudjelovanje građana i interdisciplinarni pristup.

Alternativni programi gospodarstva vodom koji su uvijek postojali se javljaju sve više kroz sustave koji se temelje na zajednici, kooperative (zadruga), demokratizirane javne tvrtke, progresivne menadžere i participativne javne vlasti. Međutim, čak i kada postoji politička volja za takvim inačicama, rijetko kada postoje dostatna sredstva ili alati ili potpora od strane vlada, državnih institucija, donatora i međunarodnih organizacija, usprkos izrazitim mogućnostima i nadahnjujućim primjerima [4].

5. MOGUĆA RJEŠENJA ZA OBALNA PODRUČJA

Potrebno je usredotočiti napore na potpuno smanjenje otpada, čime bi se otvorila nova radna mjesta i očuvali prirodni resursi. Razdvajanje i ponovno spajanje materijala za dobivanje novih proizvoda traži puno više radne snage od jednostavnog odlaganja na deponij ili spaljivanje. Potrebno je staviti naglasak na štednju vode, prikupljanje oborinske vode i recikliranje sive vode, dvojne sustave vodoopskrbe i korištenje propusnih površina gdje god je to moguće kako bi se omogućila infiltracija oborinske vode u tlo. Treba uskladiti obradu crne vode, otpadne vode, obradu krutog otpada i oborinsku odvodnju. Sve aspekte vode i otpada treba staviti u jedinstveni okvir integralnog pružanja usluge. Decentralizirane ekološki prihvatljive sustave za otpadne vode treba primjenjivati kao trajno rješenja u manjim zajednicama, na mjestima gdje nema javne odvodnje i gdje god je to tehnički izvodljivo i ekonomski opravdano rješenja za upotunjavanje centraliziranog sustava. Nadležne vlasti trebaju propisati standarde za efluente, razraditi i objaviti hodogram opcija prilikom odabira sustava odvodnje i objavljivati podatke o odabiru najbolje dostupne tehnologije za male sustave. Potrebno je prikupiti i voditi centraliziranu evidenciju decentraliziranih sustava s posebnim naglaskom na praćenje ispravnosti i kakvoće njihovog održavanja. Poti-

financed by tax payers. As those are the most expensive systems, budgets are in the author's opinion unnecessarily exhausted for the mentioned purposes, that not being in the interest of the community, and in the long run neither of an individual. Referring furthermore to the figure below, private utility service provider is interested solely in quick return on capital and as many as possible regular payers (of preferable package rates) of his service, so that smaller and rural communities are not the object of major interest of the environmental service provider. All this is greatly advantaged by the lack of information, the propaganda and methods of winning support for private projects. One should also mention private interest of the user for whom investment in ecological advanced decentralized sewerage for instance is not a matter of priority in his home or business budget, and finds it more convenient that the community provides him the connection to centralized infrastructure and cares about its maintenance. Last but not least, there are usually employment restrictions in this by definition labour-intensive activity and the so widely used pretext of “inefficiency” of the public company.

The challenge of governance, together with the adoption of the new approach to sustainable management requires far-reaching institutional reforms of depicted system which must grant transparency, proactive participation of citizens and interdisciplinary approach.

Alternative water management schemes, which have always existed, are increasingly emerging through community-based systems, cooperatives, democratised public companies, progressive managers and participatory public authorities. However, even where political will for such alternatives exists, there are rarely sufficient means or tools, or support by governments, state institutions, donors and international organizations, despite extraordinary potential and many inspiring examples [4].

5. FEASIBLE SOLUTIONS FOR COASTAL AREAS

Efforts should be focused on the absolute reduction of waste, thus creating new jobs and preserving natural resources. Taking things apart and recombining them to make other products requires much more workforce than mere disposing at the landfill or burning in an

canjem korištenja inovativnih rješenja potrebno je smanjiti potrošnju vode za prijenos ljudskog otpada. Područje na kojem se problem ekološke odvodnje rješava treba biti čim manje, a otpad treba razrjeđivati čim je moguće manje.

Lokalne komunalne tvrtke moraju pružiti kvalitetnu uslugu lokalnim zajednicama ili građanima-korisnicima komunalnih usluga i objediniti čim više vrsta komunalnih usluga kako bi građani na jednom mjestu mogli rješavati sva pitanja koja se odnose na komunalnu problematiku. Lokalne vlasti trebaju surađivati s drugim općinama i koristiti njihove primjere dobre prakse, ulagati u obrazovanje svojih zaposlenika i građana i dokazati da se stanje okoliša može bitno poboljšati uz dobru volju i nevelika sredstva.

Lokalne komunalne tvrtke se mogu također djelomično privatizirati, ali javna vlast mora u svakom slučaju zadržati većinski udio u vlasničkom kapitalu i odlučivanju. Kada se radi o pitanjima okoliša, mogu nastati troškovi koje privatni interes, čak i kada je u mogućnosti, nije spreman snositi. Ukoliko ga regulator prisili da snosi troškove, privatni kapital se uvijek može povući iz posla i ostaviti zajednicu da rješava problem. Zaštita okoliša je imanentno javna stvar.

Velika većina vodnih operatora u svijetu pripada javnom sektoru – 90% svih većih gradova opslužuju takva tijela. To znači da je najveći fond iskustva i znanja i velika većina primjera dobre prakse i kvalitetnih institucija u postojećem javnom sektoru. Javno-javna partnerstva (JJP) – suradnja između dvaju ili više javnih komunalnih subjekata – su nastala kao bilateralna razmjena unutar i između država. U vodi i sanitaciji to znači neprofitni dogovor između javnog vodnog operatora i javnouslyžnog opskrbljivača koji daje potporu usmjerenu na jačanje kapaciteta putem obuke i tehničke pomoći [4]. JJP je oblik suradnje i razmijene koji omogućavaju subjektima, javnim tvrtkama, općinama i zajednicama da zajednički razvijaju održiva rješenja. Oni isključuju dobit za privatne poslove.

Značajna je usluga partnerstva na radnom mjestu u povećanju produktivnosti u javnom sektoru [20]. Produktivnost javnog sektora se ne ogleda samo u povećanoj proizvodnji, već i kroz postupke i rezultate. Novi obrazac javnog upravljanja naglašava aspekt vlasništva i sudjelovanja u postupku donošenja odluka uključiva-

incinerator. Greater emphasis should be placed on water saving, collecting stormwater and recycling grey water, dual water supply systems, the use of permeable surfaces wherever possible in order to provide for infiltration of stormwater into soil. Treatment of blackwater, wastewater, treatment of solid waste and stormwater drainage should be coordinated. All aspects of water and waste should be placed within a single framework of an integral service provision. Decentralized environmentally acceptable sewerage systems should be used as permanent solution in smaller communities, at sites not provided with public sewerage and wherever that is a technically feasible and economically justifiable solution for complementing the centralized system. Competent authorities should lay down the standards for effluents, elaborate and publish the flow chart with options when selecting the sewerage system, and publish the data on the selection of best available technology for small systems. It is necessary to gather and keep the centralised records of decentralised systems with particular emphasis on monitoring the regularity and quality of their maintenance. By stimulating the use of innovative solutions it is necessary to reduce water use for the transport of human waste. The territory where the problem of ecological sewerage is resolved should be kept to its minimum, and the waste should be diluted to the least possible extent.

Local utility companies must provide quality service to local communities or citizens-users of utilities services and integrate as many types of utility services as possible so that the citizens may at a single spot resolve all the issues related to communal issues (one-stop-shop). Local authorities should cooperate with other municipalities and use their examples of good practice, invest in education of their employees and citizens and demonstrate that the state of the environment may also be substantially upgraded with good will and modest funds.

Local utility companies may also be partly privatized, but public authority must in any case hold the majority share in capital and decision-making. When environment and community is dealt with, the expenditures may occur, which private interest, even when capable, is in any case not willing to bear. Should the regulator compel it to meet the costs, private capital may always withdraw from the business and leave the community to look after the problem. Protection of the environment is immanently a public issue.

njem raznih sudionika kao što su građani, dobrovoljni sektor, sindikati, gospodarstvo i različite razine vlasti [21]. Primjera radi, pristup lokalnog upravljanja se usredotočuje ne samo na poboljšano čišćenje ulica i usluge prikupljanja otpada, već naglašava ulogu građana u poštivanju komunalnih nastojanja da nitko ne treba bacati smeće na ulice, a da se materijale treba reciklirati, a ne jednostavno odbaciti.

Vlade mogu ubrzati zeleni razvoj na tri načina. One mogu regulirati ponašanje postavljanjem pravila, donošenjem propisa, utvrđivanjem standarda i ukazivanjem članovima društva što moraju i ne smiju činiti. One mogu ulagati novac – od izravnog trošenja do nuđenja poticaja i preuzimanja rizika. Uključivanje gradskih vlasti je dobro jer po prvi put u povijesti čovječanstva više ljudi na Zemlji živi u gradovima nego izvan njih. Urbane zajednice zauzimaju samo 2% površine Zemlje, ali troše više od 75% resursa Zemlje i proizvode 75% otpada na Zemlji (uključujući onečišćenje zraka i vode). Stoga, ono što činimo u našim gradovima, ovdje i diljem svijeta, će ili potopiti planet ili ga spasiti. Ukoliko želimo da planet održi ljudski život, moramo stvoriti humane gradove koji mogu održati planet [22]. Ukoliko tome dodamo da su obalne zone neproporcionalno urbane, tj. dostižu i do tri puta veću prosječnu gustoću stanovništva, kod čega su i ruralna područja obalnih zona znatno gušće naseljena od prosjeka [23], posebnu pažnju treba posvetiti obalnim područjima.

Nedavno donesena Rezolucija Ujedinjenih naroda o ljudskom pravu na vodu i sanitaciju [24] bi trebala upravo doprinijeti da države vodu i sanitaciju učine dostupnim na održiv način.

6. ZAKLJUČAK

Tradicionalni sustavi komunalne infrastrukture projektirani u 19-om i 20-om stojeću postaju sve skuplji za upravljanje i neprimjereni su za nove zahtjeve, posebno one obalnih područja. Usluge od javnog interesa kao što je gospodarenje otpadom i vodama nadmašuju kapacitete koje nude sustavi pod kontrolom privatnog kapitala usmjereni isključivo na stjecanje profita za vlasnika. Isto tako treba imati na umu da su subjekti u obalnim zemljama koje se moraju prilagođavati zahtjevima EU sami odgovorni za loš model komunalnog gospodarenja kao i za

The vast majority of water operators in the world are in the public sector – 90% of all major cities are served by such bodies. This means that the largest pool of experience and expertise, and the great majority of examples of good practice and sound institutions, are to be found in the existing public sector water operators.

Public-public partnerships (public utility partnerships - PUPs) – a collaboration between two or more public utility agencies or authorities – have emerged as bilateral exchanges within and between countries. In water and sanitation this means a not-for-profit arrangement between a public water operator and a supporting public service provider, aimed at building capacity through training and technical assistance [4]. PUPs are forms of cooperation and exchange which allow entities, public firms, municipalities and communities to jointly develop sustainable solutions. They exclude profits for private businesses.

There is a significant role for workplace partnership in productivity improvement in public sector [20]. It is not only through outputs that productivity in the public sector is enhanced, but also by the processes and outcomes. The new public governance paradigm emphasises the aspect of ownership of and participation in the decision-making process by including multiple stakeholders such as citizens, the voluntary sector, unions, business and different levels of government [21]. For instance, local governance approach focuses not only on improving street cleaning and refuse collection services, but emphasizes the role of citizens in respecting the communal desire that no-one should throw litter on the streets in the first place, and that materials should be recycled, not simply thrown away.

Governments can accelerate equitable green growth in three ways. They can regulate conduct – setting the rules of the game, laying down the law, establishing standards, and telling members of the society what they must or must not do. They can invest money – from direct spending, to offering incentives, to underwriting risk. And they can convene leaders – spurring the formation of new collaborative institutions that solve problems by bringing together public, private, and non-profit stakeholders. The involvement of city governments is a very good thing, because for the first time in the human history, more people on Earth live in cities than outside of them. Urban settle-

loš tehnički projekt jer međunarodni financijeri ne ispravljaju model i projekt u interesu domaćeg okoliša, već postupaju u interesu vlastite profitabilnosti. Najbolji model komunalnog gospodarenja u obalnom području je onaj koji je prihvatljiv za određenu sredinu, što znači da ne treba težiti jedinstvenim rješenjima, kod čega stručnu i tehničku sposobnost malih jedinica lokalne samouprave i manjih komunalnih tvrtki treba postizati kroz javno-javna partnerstva.

ments cover only about 2 percent of the Earth's surface, but they consume more than 75 percent of the Earth's resources and produce 75 percent of the Earth's waste (including air and water pollution). Therefore, what we choose to do in our cities, here and around the world, will either sink the planet or save it. If we want a planet that can sustain human life, we must create human cities that can sustain the planet [22]. If we add that coastal zones are disproportionately urban, experiencing as much as 3x the average population density, whereby rural areas in coastal zones are much denser than average [23], a particular attention should be given precisely to such zones. The recently adopted UN Resolution recognizing access to clean water and sanitation as human right [24] should contribute to governments making the access to water and sanitation sustainable.

6. CONCLUSION

Traditional municipal infrastructure systems designed in 19th and 20th centuries are becoming all the more expensive for management and are inappropriate for new demands, especially those in coastal zones. The services of a general interest such as municipal waste management and water management outdo the capacities offered by the systems controlled by private capital aimed exclusively at earning profit for the owner. It is also necessary to keep in mind that entities in coastal countries that must align with the EU requirements are themselves responsible for the poor model of utilities service management as well as for the poor technical design since international financiers will not rectify a model and a design in the interest of domestic environment, but act in the interest of their own profitability. The best model of local utilities service management in the coastal area is the one that is acceptable for a particular milieu, meaning that creating uniform solutions should not be pursued. Professional and technical capacity of small self government units and smaller public utility service companies should be achieved by public-public partnerships.

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