ENVIRONMENTAL ASSESSMENT OF EXTERNALITIES ASSOCIATED WITH TOURIST PROPERTY DEVELOPMENT PROJECTS IN COASTAL AREAS

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Abstract

Purpose – Coastal areas in the Republic of Croatia are the object of increasing interest of property developers in tourism and leisure sector. The paper is focused on the analysis of environmental and social impacts of such projects in local communities.

Methodology - As the problem must be observed in depth and with holistic focus, the authors applied qualitative research based on observations, authors' own experiences and the reports on previous research.

Findings – Considering the fact that the sea and the coast are assets of particular interest for the Republic of Croatia, its citizens should be accorded particular legal protection, meaning that the aspects of public interest should be reviewed while considering the requirements of individual investors.

Contribution – The research provides the framework for holistic analysis of the impacts of projects in tourism from the standpoint of their various externalities detrimental for public funds, taxpayers, environment and local communities and proposes a model for conducting integrated cost-benefit analysis of such projects taking into account economic development, well-being and health of local population, preservation of natural beauty, of natural assets and of sound environment. Apart from the need to facilitate economic activities in the area of maritime demesne, all citizens should be granted in an equal and equitable way the use of coastal area, provided its designated purpose is respected. It is improper to grant all benefits to the potential investor and transfer all costs, disadvantages and externalities to local communities and the state. **Keywords**: environmental assessment, tourism property development, coastal area, externalities, cost-benefit analysis

INTRODUCTION

Considering that tourism industry is constantly experiencing growth in global terms, that Croatia has undergone a period of transition and that it is a land of exceptional and by large a still undiscovered beauty, cultural and natural heritage, its coastal areas in particular are the object of increasing interest of property developers in tourism and leisure sector. Such projects are usually presented by national and local governments as well as the media as highly beneficial for Croatian economy and society.

The paper evaluates environmental, community and economic impacts of tourism and presents the threats on ecotourism destination as is the case of Croatia. The analysis particularly concentrates on the role of beaches and their uniqueness in karst landscape, contrasting those with current promotion of theme parks and pools. The paper then

elaborates the importance of preserving the so-called green infrastructure and natural capital in general as opposed to engineered assets and provides an overview of the aspects leading to reduced income and externalities on the community incurred by tourism development projects. Finally, the emphasis is placed on the importance of legal framework.

1. THE IMPACTS OF TOURISM

Tourism is a sector that greatly conduces to economic growth and development of a number of countries and localities, national and regional economies, and of the wellbeing of population, that being evidenced by common measurement standards. Depending on a locality, circumstances and surroundings, tourism may however potentially exert actual negative effects on the environment, local and wider community, as well as the economy. Therefore, methods of valuation thereof should be considered and developed as basis for taking decisions on the policy, intensity, and method of development of this vital sector.

In Europe, very little information on the environmental impact of tourism is available, both at the EU or Member State level (EC 2015).

The authors presume that natural environment represents an asset of the locality and tourist destination and that uncontrolled expansion of tourism leads to environmental destruction. Negative impacts of tourism involve those from tourist development (e.g. hotels, resorts, marinas, transport infrastructure) and from the tourists themselves. However, those at the end of life cycle should not be neglected either. Some of the most pertinent impacts are listed hereinbelow.

Ecological:

- Loss of terrestrial and freshwater habitat caused by clearing of vegetation for site preparation and changed land use of the surrounding environment. Also, very often "small-decision effects" (Odum 1982) prevail resulting in loss of farmland, acid precipitation to mismanagement of huge, significant, rare water ecosystems.
- Loss of habitat in offshore areas caused by dredging or reclamation works, construction of berthing facilities and marinas, changed circulation patterns caused by water-based facilities, by the earthworks on land in close proximity to the shoreline for industrial, land, ports, airports, roads and recreational facilities resulting in siltation and construction runoff, and anchor damage from large cruise ships and other vessels (Saenger 1990).
- **Decline in water quality, eutrophication** caused by sewage discharges, particularly if inappropriately sited or inappropriately treated (Saenger 1990).
- Presence of hazardous substances in seawater, some of which may be bioaccumulated, originating from outboard motors and coatings of recreational boats.

- Shadow and lighting. Floating structures such as pontoons, floating marinas or floating hotels can shade significant areas of seabottom. Also, shoreline night lighting or illuminated floating structures may influence the movement of light sensitive species (Saenger 1990).
- Noise. Underwater noise or vibrations may cause behavioural changes in resident or migratory species, while above water noise may affect organisms (Saenger 1990).
- Visual impact upon shoreline areas. Construction of resorts and other man-made structures blocking from view of marring once spectacular coastal views (Matsuoka and Kelly 2015).
- Climate change. Tourism involves the movement of people from their homes to other destinations so it is a significant contributor to the increasing concentrations of greenhouse gases in the atmosphere. Conversely, climate change and natural disasters such as floods, wildfires, avalanches, droughts and diseases can have a serious effect on local tourism industry. Global warming may for example cause less snowfall at ski resorts or tourists will stay away from immense heat and water shortages, it may cause harm to vulnerable ecosystems - rainforests, coral reefs (bleaching), rising sea levels which threat coastal and marine areas with widespread floods and loss of coastal areas, with beaches and islands that are major tourist attractions being the first areas to be affected. Apart from that, climate change is associated with increased events of extreme weather, such as tornadoes, hurricanes, typhoons which inflict wind damage, cause storm waves, heavy rains and flooding (UNEP 2015, Luttenberger and Runko Luttenberger 2015). Perhaps the most urgent of all the investments is to see that knowledge capital increases and that the destruction of natural capital is avoided. Merely introducing a tax will not make the greenhouse effect vanish (Pikkety 2014).
- **Development in scenic and pristine coastlines** as a result of hotels and resorts acquiring such rights (Matsuoka and Kelly 2015).
- Significant use of ozone depleting substances (ODS). Refrigerators, air conditioners, propellants are widely used in hotel and tourism industry, in addition to emissions from jet aircraft (UNEP 2015).

Community:

- Vandalism such as damage to rocks, underwater heritage and also littering.
- **Transformation of the face of the community and lifestyle** caused by poor physical planning policy and implementation and the escalation of land prices forcing farmers/owners to cut their losses and sell-out to developers (Matsuoka and Kelly 2015).
- **Conflict** arising from the competition for water and soil (common resources) between resorts and the community, from pre-emption of access by design, through heavy traffic, congestion or overcrowding, from ignorance of local custom, exclusive use of foreshores or the restriction of certain activities by tourist operators, the fact that some tourist activities are incompatible or competing with the activities of other user groups (Saenger 1990). Land-use patterns systematically consume open spaces and scenic resources only offering them to a minuscule

number of hotel guests. For instance, moving topsoil to create seaside golf courses not only ravages flora and fauna, it lays waste to potentially valuable agricultural lands. In addition, an exuberant amount of scarce groundwater is being used to keep golf courses green while water for agricultural purposes is being stringently controlled (Matsuoka and Kelly 2015). Recreational satisfaction and service quality are related and need to be conserved for tourists and residents alike (Saenger 1990).

• **Overlooked effect on future users** caused by short-sighted impact analyses - whether establishing a tourist development is the best use for a particular area. The concept of "opportunity cost" should be applied to future uses (or users) of the particular area, i.e. the benefits and costs of using a particular area for a particular purpose must be considered against the benefits and costs which are potentially attainable for a particular use of the area in the future (Saenger 1990).

Economic:

- **Economic dependence** as the market is often beyond the control of national government.
- Seasonal layoff and unemployment caused by seasonal character of tourist industry.
- Low-level jobs, development of "subservience" attitude amongst employees caused by little opportunity for local ownership, with few opportunities for management participation (Saenger 1990) and economy characterized by large profits to a minority and low-paying service jobs to the majority.
- Other cconomic impacts caused by import leakage, export leakage, enclave tourism, infrastructure costs, and the fact that tourists use vast quantities of resources - energy and water in particular - and create significantly more waste than local people. Import leakage commonly occurs when tourists demand standards of equipment, food, and the products that the host country cannot supply (or its supply is not in owner's interest) so much of the income from tourism expenditures leave the county again to pay for these imports. This also happens in developed regions where demand for products exceeds local supply. An export leakage arises when overseas investors who finance the resorts and hotels take their profits back to their country of origin. A 1996 UN report evaluating the contribution of tourism to national income found significant leakage associated with: (a) imports of materials and equipment for construction; (b) imports of consumer goods, particularly food and drinks; (c) repatriation of profits earned by foreign investors; (d) overseas promotional expenditures and (e) amortization of external debt incurred in the development of hotels and resorts (Goldman et al. 1994). With regard to enclave tourism, local businesses often see their chances to earn income from tourists severely reduced by the creation of "all-inclusive" vacation packages. When tourists remain for their entire stay at the same cruise ship or resort, which provides everything they need and where they will make all their expenditures, not much opportunity is left for local people to profit from tourism. All-inclusive hotels generate the largest amount of revenue, but their impact on the economy is smaller per monetary unit of revenue than other hotels (Goldman et al. 1994). Also, self-sufficient resorts have such tight margins, with

so little paid for each room that little is left with which to pay those at the bottom of the supply chain – the hotel workers. Staff at all-inclusive hotels was shown to receive significantly less in tips on which they are often heavily reliant. Because guests stay in the compound, working hours were longer and more stressful. Furthermore, tourists are being told that their insurance doesn't cover them if they leave their hotel grounds and sometimes people will barely know where they are, paying to just sit by a pool in the sunshine. Complete with their own bars, restaurants and entertainment venues, the resorts leave guests with little or no incentive to go anywhere else, whether to eat in local restaurants, visit locally owned nightspots or gift shops or pay entry fees to local attractions or hire local guides or drivers. The tour companies - few of which are owned locally - pocket most of the spending money (The Guardian 2014). As for cruise ship industry which provides another example of economic enclave tourism, guests are encouraged to spend most of their time and money on board, while opportunities to spend in some parts are closely managed and restricted (Goldman et al. 1994). With regard to infrastructure costs, tourism development can cost the local government and local taxpayers a great deal of money. Developers may want the government to improve the airport, roads and other infrastructure, and possibly to provide tax breaks and other financial advantages which are costly activities for the government. Public resources spent on subsidized infrastructure or tax breaks may reduce government investment in other critical areas, such as education and health (Goldman et al. 1994).

There is now also a plenty of evidence of the life-cycle of a tourist destination, that is, the evolution from its discovery, to development and eventual decline because of overexploitation and subsequent deterioration of its key attractions. In many developing and developed countries alike, tourism destinations are becoming overdeveloped up to the point where the damage caused by environmental degradation and the eventual loss of revenues arising from a collapse in tourism arrivals becomes irreversible (Neto 2003).

It is said that tourism contains the seeds of its own destruction; tourism can kill tourism, destroying the very environmental attractions which visitors come to a location to experience (Glasson et al. 1995).

2. ECOTOURISM AND ITS DRAWBACKS

If one would undertake an unbiased analysis of the pro-environment denominated variant of tourism, ecotourism can in fact be worse than mainstream tourism as "ecotourism often seeks out remote and fragile destinations where the negative impact of tourism may be greater", often turning the last nature reserves into concrete jungles (Yoke Ling et al. 2001).

The most damaging ecotourism initiatives are the ones which are the most successful financially because they lead to mainstream tourism. Environmental problems increase and the result is over-development. Also, an incredible amount of money is spent to promote ecotourism – road construction, accommodation, power stations, reservoirs – all environmentally damaging. Not all ecotourist initiatives cause problems for local

people or the environment, but the best examples are those run by communities themselves, benefitting those rather than foreign multinationals (The Irish Times 2001).

As an ecotourism destination, Croatia has a wide variety of exceptionally sensitive ecosystems, including karst (Cook 2014).

3. BEACHES VS THEME PARKS AND POOLS

Beaches certainly constitute top tourism attraction, so it is important first of all to understand what they are and how they function. The beach is the landward edge of a gigantic ecosystem. The prerequisites for a beach are simple: a supply of sand or gravel (sediment), the energy of the waves, a setting where sand can accumulate, and a definitive sea (or lake) level. Beaches form a dynamic equilibrium within these parameters. When one of the parameters changes, the others adjust accordingly. The single greatest threat to the future of the world's beaches is not storms or rising sea level. Whatever the level of the sea, beaches will persist. The threat comes not from the nature, but from humans in their attempts to control the beaches. Beaches, left to their own resources, are extremely resilient. (Pilkey 2011).

It is precisely in the case of beaches that the interest of public health, being a pronounced anthropocentric interest, coincides with the interest of maintaining healthy ecosystems (Runko Luttenberger 2014). The beach is the place where people meet and recreate. Beach environments promote families' health and wellbeing and positive relationship with nature. Therefore, there should be a public interest for public beaches as opposed to the interest of viewing the beaches as places of pursuing various commercial, very often polluting activities (Ashbullby et al. 2013). Also, throughout the history of balneal culture, the conflicts between private and public interest resulted in the difficulty to set up and maintain the beach area, in reducing it, in intervening in its original aspect, in pollution, and closure of bathing places.

Karstic Croatian coast or East Adriatic Coast (EAC) is underrepresented in the relevant literature, notwithstanding the fact that it is all part of a classic Dinaric karst: a cradle of karst terminology in the world literature, and the locus typical of the Dalmatian type coast. Special attention should be paid to its pocket beaches, generally common, but small and scattered along the karstic rocky EAC. It is assumed that a total beach length (both in flysch and carbonate rocks) along the EAC does not exceed 5%. The small proportion of the beach length in relation to the rest of the EAC coast emphasizes their value in touristic valorisation (Pikelj and Juračić 2013).

In spite of natural balneal and coastal attractions, Croatia is subject to a trend of setting up and expanding the theme parks on the islands and in the vicinity of coastline, often at places where fresh water is not in abundance or where coastal ecosystems are fragile. Those are private investments heavily subsidized by public funds either through lavish development bank grants or state agency guarantees (tportal 2015). Nature provides us with a sense of inspiration, but today we give more attention to forms of artificial stimulation – theme-park retreats or holiday cruises. Meanwhile, pure bonds with the natural world are at risk due to the rapid decline of our environment, and unless government agencies and legal system begin to recognize these sensitive connections, future generations may be deprived of the deep experience of nature. In karstic Florida for instance, saltwater intrusion was traditionally due to groundwater withdrawals near the coastline. Today there is a new culprit to contend with in addition to those who excessively pump groundwater near the coast. Theme parks have been leaking saltwater from various sources, such as pools, ponds, and plumbing, into underlying aquifers (Boyette 2008).

A theme park also contributes to air pollution in indirect, but very important ways. Pollution is first caused by the massive amounts of energy needed to keep the park up and running. Fossil fuels are burned to power the rides and facilities, heat or cool buildings and light streetlamps that line the sidewalks and pathways of the park. Even more carbon dioxide emissions are created when excess gasoline is burned in order to transport people to the park, as most theme parks are far from populated areas and can only be reached by car. There is also a problem of excess waste. An attraction that draws in large crowds of people for extended period of time - especially one that has many concessions stands - is bound to create and collect a lot of trash. Another form of waste that increase dramatically when you bring crowds of people into a contained area is human waste which requires energy and water to operate. Also, there is excess water usage. Water rides require significant amounts of water to make them operational. Although a lot of water used for rides may be recycled, the park still requires a massive quantity of water when the rides are first installed. The basic upkeep of the park's attractions can also put a strain on local water supplies. Moreover, depending on the park's location, the impact on the environment can be quite drastic. Most theme parks aren't built in urban areas where they are replacing existing building or asphalt lots. Theme parks are typically built in rural areas largely untouched by man and those areas need to be cleared in order for construction to begin. Besides clearing of trees it involves levelling of the land and overall transformation of the property, which transformation often leaves various species of birds and animals without a natural habitat in which to make their home (eHow 2016).

In a similar manner, pools built along the coast (in Croatia subsidized by national development bank and the ministry responsible for tourism) or artificially conditioned air in impermeable living spaces may not by themselves ensure healthy living. Those could possibly convey a false message that benefits of the sea and/or bathing are granted also without actual presence of clean sea or air (Runko Luttenberger 2013).

4. GREEN INFRASTRUCTURE

Tourism at the same time depends and exerts an impact on local natural environment. Human modifications of the land have led to a loss of natural areas, fragmentation of natural spaces, degradation of water resources, decreased ability for nature to respond to change, loss of "free" natural services, and increased costs of public services (Benedict and McMahon 2001). Softscape areas provide storm-water management capacity and mitigate heat island effect; watercourses transport and clean water resources; and trees improve air quality by filtering out pollution particulates (Town of Gibsons 2015).

Haphazard development often increases the cost of public services by requiring huge investments in new roads, services and other public infrastructure. Namely, farming and forestry generate considerably higher revenue than the amount of public services they require, while residential development has the opposite effect. Inefficient use of land and resources require communities to provide services across a large geographic area. Because developments and buildings are spread further apart, sprawl stretches municipal services, resulting in scarcer services and higher taxes. There is also increased susceptibility to natural hazards (Coastal Regional Commission 2014). Furthermore, restoration of natural systems is far more expensive than protection and preservation of existing landscapes.

So-called green infrastructure (GI) comprises all natural, semi-natural and artificial networks of multifunctional ecological systems within, around, and between urban areas, at all spatial scales (Tzoulas 2007). GI incorporates green spaces (or blue if aquatic ecosystems are concerned) and other physical features in terrestrial (including coastal) and marine areas. On land, GI is present in rural and urban settings. Green infrastructure solutions, applied in synergy with biodiversity, are less energy-intensive and require less upkeep than conventional solutions and are therefore more efficient and sustainable (EC 2013).

Infrastructure investors unfortunately do not have a consistent and robust way to compare grey with green infrastructure in an apples-to-apples manner that is convincing to budget hawks (Talbert 2013).

One of the most effective ways of building GI is through spatial planning. Spatial planning helps sustain shared resources of land, air and water which are subject to ever—increasing development pressures. Particular strength of spatial planning is its ability to deliver the opportunities and counter the threats that arise from new development. It is therefore long term in its perspective but urgent in its actions (ECTP-CEU 2013).

Also, GI offers a smart and integrated way of managing natural capital (EC 2013). Canadian coastal town of Gibsons is considering not only the role of engineered assets such as roads and storm sewers, but also of natural assets such as forests, aquifers, creeks, wetlands and foreshores that provide essential services to citizens. The town reasons that if good asset management requires a holistic and strategic view of all assets, then it must consider not only built or engineered infrastructure, but also natural assets, or "eco-assets" such as forests, topsoil, aquifers, foreshore and creeks wherever these provide equivalent civil services on which the town relies. The aquifer, for example, costs about \$24,000 per year in monitoring costs, compared to sums many times that needed to operate a filtration and treatment plant (iPolitics 0215).

5. EXTERNALITIES AND COST BENEFIT ANALYSES

As pointed out earlier, tourism to a great extent thrives on public goods. Samuelson identified two characteristics of any public good (Samuelson 1954). The first is that it is 'non-rival 'which means that one's consumption has no bearing on the ability of others to consume. For example, no matter how much air one breathes this does not reduce the amount available to other. Second, it is 'non-excludable' in that it is practically impossible to prevent people from consuming the good. He pointed out that, because of these characteristics, individuals or private companies have little or no incentive to produce public goods, as they are not able to capture the benefits of doing so. Another example often cited is street lighting. No individual living in a street without lights has sufficient incentive to pay for their installation, as everyone else in the street would reap the benefits (and could not be prevented from doing so) despite the fact that they had not contributed. From an economics perspective, they are 'free riders'. The rule of law is also a public good. Similarly, maintaining broad economic and financial stability is a public good that is essential to underpin local, regional and national economies. Everyone benefits from this, but no single individual or group of individuals could or would maintain the rule of law or macroeconomic stability across a society or an economy (NEF 2010).

As the market does not take account of externalities¹, the state has long been seen as having a duty to prevent public 'bads' – like pollution. – and to produce public 'goods'. But if market prices reflect social and environmental costs and benefits accurately, 'bads' become expensive and are produced less while 'goods' become cheap and are produced more (NEF 2010).

After considering social, environmental and cultural impacts, one has to pose the question of who is truly benefitting from resort development and tourism and reaping the bulk of the economic profits. The data suggest that it is not native people (Matsuoka and Kelly 2015). So, before developing a plan or deciding to add facilities to increase tourist potential, ask the question "Is it worth it? Will tourism do for the community what we want done?" (Goldman et al. 1994).

Analysts considering the best alternatives for configuring major public infrastructure investments use social benefit-cost analysis (BCA). Some examples of benefit variables and their indicators applicable to drinking water interventions for instance could be sickness and caring time saved, household and government health-care costs saved, environmental gains, social capital benefits and proportion of financial benefits devoted to productive investment to increase future income (Cameron 2011).

¹ In economics, an 'externality' of an economic transaction is an impact on a party that is not directly involved in the transaction. In such a case, prices do not reflect the full costs or benefits to all those affected, and to society as a whole, of the production or consumption of a particular product or service. An advantageous impact is called a 'positive externality', while a detrimental impact is called a 'negative externality'. Producers and consumers in a markeet may either not bear all of the costs or not reap all of the benefits of the economic activity. For example, manufacturing that causes air pollution imposes costs on the whole society, while fireproofing a home improves the fire safety of neighbours.

The costs and benefits of tourism development can be measured with varying degrees of precision. For some tourist development projects, the benefits could be local income (wages, business profits, interest & rents) and local tax revenues (bed tax, property tax). The costs are support services such as parking lot expansion, resort rooms (amortized construction & operation), patrol car (amortized purchase & operation), police officer (benefits & salary), street repair (major cost usually for local government), the development of plan, preservation of heritage, environmental impact, and congestion at locality. Also, many important effects of tourism development cannot be considered in economic terms. Environmental costs and community resentment attributable to tourism are examples of negative items. With imagination and research, even these may be given dollar estimates in certain cases. Community members can determine appropriate weights for each plus and minus. There may not be agreement whether any one item is a plus or a minus (one person's solitude is another's loneliness) but all items should be consciously listed and net measured benefits calculated (Goldman et al 1994).

Croatian coast is undergoing intense urbanization. The last 50 years witnessed fourfold development of coastal areas compared to that undertaken by all preceding generations jointly (Šesto nacionalno izvješće 2014). Dominant tourist development model in Croatia are greenfield investments associated with new impermeable surface areas resulting in increased quantity, duration, intensity and destructive character of stormwater runoff which also constitutes an additional route for transmitting the pollution, reduces the recharge of underground waters and renders possible the microclimate change.

The aspects leading to reduced income and inappropriate financial burden for the community that should be considered and incorporated in the model of environmental and social cost benefit analysis of tourist development projects in Croatia are presented in table 1.

Item	Cause
1.	reliefs (tax, municipal contributions, etc.)
2.	privatization speculations (reduced public income)
3.	concession fees often symbolic (reduced public income)
4.	damages inflicted by intensity and pollution of stormwater due to growing
	impervious surface areas (land use change)
5.	landscape and visual-spatial deterioration due to lack of appropriate regulation
	or non-enforcement thereof
6.	degradation of natural capital and vulnerable ecosystems
7.	public expenditure for infrastructure supplying water, sewage, waste
	management services, energy, roads, airports
8.	less food produced on the spot
9.	employees often sourced from abroad, local employment negligible
10.	resort-type facilities resulting in poor market for local products and services
11.	no guarantee for long-term stay resulting in short-term objectives, the use of

 Tables 1: Overview of the aspects leading to reduced income and externalities on the community incurred by tourism development projects

Tourism & Hospitality Industry 2016, Congress Proceedings, pp. 404-417 L. Runko Luttenberger, A. Luttenberger: ENVIRONMENTAL ASSESSMENT OF EXTERNALITIES ...

Item	Cause
	inappropriate and inefficient construction materials and accelerated
	consumption of resources
12.	investment risk reduced as a result of low investment cost
13.	insufficiently regulated navigation and emission protocols and undercharged waste disposal services for cruise ships resulting in environmental problems, health costs and public expenditures
14.	end of life-cycle state to be repaired at the cost of the community

It is indispensable to assess what a natural asset is worth both in terms of civil services and substitution costs, to determine the asset condition, to assess the impact of predicted increased demand on the asset and to conduct ongoing assessments (The Town of Gibsons 2015).

It should be kept in mind that all public expenditures incurred in developing tourist projects are borne by domestic natural and legal persons who are payers of taxes and contributions. The company registered abroad is certainly not bearing such externalities.

6. THE ROLE OF LEGAL FRAMEWORK

Developing regulatory and policy frameworks that support key environmental and social goals, without stifling incentives for investment is one way the governments can help move tourism in a better direction is by (Mastny 2001). A 1997 Recommendation by the Council of Europe (Council of Europe 1997) calls on member government to limit tourism development to a level compatible with ecological and social carrying capacity, and to promote effective use of existing facilities and infrastructures in order to reduce needs for new constructions.

There are also international instruments such as Conference on Biological Diversity Guidelines on biological diversity and human development (Secretariat of the CBD 2004), 1999 Global Code on Ethics for Tourism adopted by World Tourism Organization (UNTWO 1999) and others.

Also, laws may forbid developers from building within a specified distance from the coast in order to prevent beach erosion. Elsewhere, governments are sometimes mitigating tourism's impacts by restricting the actual number of visitors allowed at a natural area or cultural site –though determining the appropriate level of use is often difficult. Governments can also work to ensure that international trade agreements like GATS and TRIMS do not undermine domestic environmental and labour regulations or compromise broader development goals (Mastny 2001).

However, tourism industry opposes intervention that it perceives as damaging to competitiveness and profits so that instead of tightening regulations, governments are granting leeway to private interests.

On the other hand, according to professor Robyn Bushell, destinations often attract the tourists they deserve. If locals aren't proud and active, and businesses aren't required by local government to value a place, then nor will the visitors (Mastny 2001).

The Republic of Croatia has a wide legislative framework in place concerning physical planning requirements, environmental impacts studies, public consultations, environmental impact assessments and assessments of impacts of projects on the ecological network. Environmental impact assessment is the process of evaluating the acceptability of intended intervention with regard to the environment and defining requisite environmental safeguards implemented within the framework of preparing the intervention not requiring the issuance of location permit or other approval for the intervention that issuing location or construction permit implies the fulfillment of complex requirements. All those should be properly implemented, holistically perceived and should provide for permanent monitoring of actual situation in space.

7. CONCLUSION

Coastal areas in the Republic of Croatia are the object of increasing interest of property developers in tourism and leisure sector. Such projects are usually presented by national and local governments as well as the media as highly beneficial for Croatian economy and society.

This research points out that investments in coastal areas need to consider comprehensively all pressures on the environment as well as benefits to local people. Investments should not be an isolated activity per se and particular interests of the investor should be controlled by local and national regulatory authorities. In addition to the need to facilitate economic activities in the area of maritime demesne, all citizens should be granted in an equal and equitable way the use of coastal area, provided its designated purpose is respected

The investment in coastal areas command for prior comprehensive analysis of all pressures on the environment and impacts on the locals. It is improper to grant all benefits to the potential investor and transfer all costs, disadvantages and externalities to local communities and the state. Experts in various disciplines should elaborate a method for calculating true cost and benefit of projects in tourism which should also integrate all environmental and social aspects.

The research urges for multidisciplinary analysis of the impacts of projects in tourism from the standpoint of their various externalities detrimental for public funds, taxpayers, environment and local communities. The authors are proposing a model for conducting integrated cost-benefit analysis of such projects taking into account economic development, well-being and health of local population, preservation of natural beauty, of natural assets and of sound environment. Further research implication is focused on the area of maritime demesne where all citizens should be granted in an equal and equitable way the use of coastal area, provided its designated purpose is respected.

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