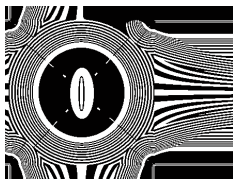

SUSTAINABLE DEVELOPMENT: ITS MEANING, PERCEPTION, AND IMPLEMENTATION
The Case of Ecotourism in Croatia

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A critical review of open literature and of institutional reports is given on the current discourse on 'sustainable development' (SD), and to its ascendant term 'sustainability' (SB). Results of the Johannesburg World Summit on Sustainable Development, which reiterated its commitment to Agenda 21, did show the differences between the developed North, who favors environmental issues, and the less developed South, whose primary problems are development and equity in resource use. One of the major problems is also absence of a clear distinction between science and policy advice, which results in politicization of science. In the second part of the paper the environmental issues are discussed for the concept of 'sustainable tourism' and for 'ecotourism', a development activity considered of prime importance for economic advancement of Croatia, in particular for its Adriatic coastal regions. Croatia's tourist industry has not established complex monitoring services, nor adopted a useful determination of the carrying capacity, not even for the major Adriatic islands, or some National parks. As a substitute there are some attempts to institutionalize environmental impact assessment, although maintenance of environmental quality seems of more importance for the tourist market. The extension into the future of the present form of management, promoted as 'sustainable', concentrating mainly on profit making, would result in environmental degradation and loss of market value of the Croatian tourist locations.

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INTRODUCTION

'Sustainable development' has been a perennial theme of discussion for a long time, but brought to the fore after the United Nations Conference on Environment and Development (UNCED) in Rio de Janeiro, Brasil in 1992. All countries foster development programs claiming these are designed to support 'sustainable development' (ECOSOC, 2002). Legislation, political declarations, programs, national environmental action plans (NEAPs) are being written and declared to support this evasive notion.

The United Nations called in a summit termed Rio+5 in 1997 in New York, at the seat of the United Nations to review what has been accomplished 5 years after the solemn adoption of Agenda 21 at UNCED, the action program for 'sustainable development'. The *Rio+5 Conference* was a big disappointment (HBF, 2001; Hinrichsen, 1997) showing that most of the programs of the Agenda 21 were not put into effect (Hein, 1998), and that the world economic development did not stop the deterioration of the environment, but that the degradation of the global environment continued. The meeting concluded that the principles and the prescriptions contained in Agenda 21, were still valid, and that the time for action on some major world's environmental problems (water, climate change, waste disposal, biodiversity preservation, and some others) is running out.

In late August – beginning of September 2002 the World Summit on Sustainable Development (WSSD) was called-in in Johannesburg, South Africa. Termed also as the *Rio+10 Conference* it had the intention to refresh the search for 'sustainable development' on the global and regional level. Some 60,000 participants and well beyond 100 of heads of states were present. They adopted a final document, reiterating most of the declarations in Agenda 21, and decided that the Summit was a success based on the mere fact that the meeting was held.

While the Rio de Janeiro UNCED exhibited the E, for environment, in its title, the Johannesburg summit was concentrating on development (Mueller-Kraenner, 2002). Indeed, the main reproach of the third world countries was that only the developed countries of the north profited from the notion of 'sustainable development'. In the rest of the world, notably in Africa, development in the last decade came almost to a standstill, in spite of plans and promises for assistance and outright help (Brusasco-Mackenzie, 2002).

Instead of channeling the promised 0.7% of the GNP of the developed world to sustain environmentally friendly development in the poor countries of Africa and Asia, the total

amount averaged from 0.1% (United States) to 0.3% for some western and nordic countries of Europe and Japan. Little, if anything new of substance could be documented on the implementation of Agenda 21. Huge amounts of money have been spent on military activities in the Gulf region, in Chechnia, in the Middle east, and in Serbia in the last decade. The world has become richer by thousands and thousands of words in UN declarations, resolutions, and programs. Yes, indeed the Global Environmental Facility (GEF) has supported many useful programs and monitoring exercises; there were some successful local and regional programs in nature conservation and in pollution abatement. The ideas of 'cleaner production' have benefited the technically and technologically advanced countries (Gibbs, 2000). The less developed world, notably Africa, has seen investments by which polluting and energy excessive industries have been transferred from the developed world into the poor regions. In all, the poor have remained poor, the hungry have received meager help in food or in production technologies, and the governments of the rich and developed countries continue their miserly efforts to help the needy, far below the critical threshold limits. Most significantly the Johannesburg Summit has been termed a 'Summit of sustainable disappointments' (HBS, 2002).

The aim of this paper is to illustrate the situation in Croatia, in one specific aspect: the preservation of the environment and Croatia's natural resources. Croatia has declared its intention to adopt measures for development that should be 'sustainable'. The diagnosis is that there is little development, and that the degradation of the environment and the consumption of space has not been checked. There is still an ongoing discourse on what should 'sustainable development' comprise, in general and in the specific aspects of development in Croatia. The externalization of environmental costs is still the *modus operandi* of most investors and enterprises in Croatia.

This paper will concentrate on two topics: (i) what is 'sustainable development', and (ii) the emphasis on 'sustainable tourism' or 'ecotourism' as the leading candidate for 'sustainable development' of Croatia.

The two themes will be treated theoretically, yet critically, and predominantly from the environmental protection viewpoint. The apologetic promotion of 'sustainable Croatia' (Silobrčić et al., 2001), and of the economic success of tourism, along with statistics and figures, will be left to those who are present in the business, in mass media, and in political strata. The emphasis of this paper will be on highlighting points that are often neglected: on theoretical approaches, and on the need to protect the environment. This will be done by screening the open scientific literature of the last few years.

WHAT IS SUSTAINABLE DEVELOPMENT?

In a few previous articles a critical stance of the present author (Pravdić, 1997, 2000, 2001a, 2001b) was advanced towards the use and misuse of 'sustainability' (SB) and its derivative, 'sustainable development' (SD) in many facets of contemporary life: the politics, the policies, the legislative activities, and the media. It is therefore, for reasons of consequence, and because of the absence of new breakthrough events in the current discourse on these terms, necessary to reiterate some of the previously advanced statements and quotes from scientific literature, corroborated by some new articles.

SD is set for goals that require a robust economy, rich and resilient natural systems, and flourishing human communities (Hales and Prescot-Allen, 2002). However, there is no agreed upon measure by which progress can be stated. Goals that are not measurable are unlikely to be achieved. Human societies are investing into what can be measured. Without a valid and reliable assessment methodology, there is risk of unintended and unanticipated results, and of waste of investments (Hales and Prescot-Allen, 2002). Furthermore, one of the largest barriers to 'sustainable development' is its failure to be institutionalized in the minds of key stakeholders (Bansai, 2002).

For the beginning of this discussion, a warning is necessary. In quoting 'sustainable development' as the basis of economic, social, and even technological considerations, the environmental issues are often relegated to the back burner. In most cases it is tacitly supposed that the sintagms of SB and SD involve, or do take care of all major global environmental problems. This is a wrong and dangerous assumption. In the same line local or regional environmental calamities are considered of minor importance in the perspective of globalization (The Economist Anonymous, 2001). The consequences of exploitation of natural resources, particularly of space, are largely neglected.

Sustainable development in the framework of globalization

Indeed, the current discourse cannot avoid the issue of economic, technological, and cultural globalization. The World Trade Organisation (WTO), founded in 1994 as successor to the General Agreement on Tarrifs and Trade (GATT) (Jurčić, 2001), has been slow in incorporating environmental protection issues into its proceedings (Stonehouse, 2000). Until the late 1980s GATT did not have an environmental committee. By the late 1990s the WTO adopted SD as a banner slogan for its activities and regulations, although there was no substantive change in its *modus operandi*. Croatian decision makers

have adopted all the shortcomings of WTO, and for reasons of economic necessities during the prolonged transition period, have treated environmental protection as a less important side issue.

It is necessary to refresh the knowledge on some literature data regarding the discourse on SD and SB of the last decade (Pravdić, 2001b). The early criticism of SB was made by Munro (1994), a biologist and the former head of the International Union for the Conservation of Nature (IUCN), who admits the need for this concept, yet objects the use of its derivative, SD, for a number of shortcomings (IUCN/UNEP/WWF, 1991). The biggest danger is the misuse of these terms for specific, and sometimes hidden interests (Albrecht, 2002; Cairns, 1998; Carvalho, 2001; Holling, 2000; Münck, 1999; Papastavrou, 1998; Phillis and Andriantiatsaholiniaina, 2001). Munro (1994) warned of the vested interests of those who own and control modern technology. Shrybman (1999) extends this critique to the WTO who is, in his view, responsible for creating economic and trade conditions on the global scale, that serve these special interests. While some authors (Feiock and Stream, 2001; Langhelle, 2000; Zoeteman, 2001) refrain from accusing the WTO directly, they indicate the growing problems of the global environment in direct correlation with the growth of world economies and global trade. They concede, however, that in the past decade of 'sustainable development' only the developed North has benefitted. Then, there is no surprise that with the emergence of economically unfavorable circumstances there have been instances of strong opposition from social critics and from intellectuals, but also of a strong backlash to these from the entrepreneurial classes (Albrecht, 2002).

The imprecise meaning of SD is taken to advantage by some social strata: in the confrontation between environmental concerns and economic development they advocate common acceptance of principles in the mediating approach (Barrow, 1995; Hughes, 1995). Following Agenda 21, Barrow (1995) accepts both SB and SD if three prerequisites are met: (1) limits to population growth on the global scale; (2) use of technology to improve the use of resources and to restrict pollution; and (3) social transformation that will accept improved quality of life instead of quantitative economic growth. Of the three, only (2) is achievable in the short-to-medium term range; limiting population growth is a long-term endeavor that today seems almost impossible; and (3) is understood by a large number of the poor, lacking water, food and energy, that quantitative growth is the only means of improving their quality of life. Constanza (2000) avoids political connotations, and uses

the sociological worldview aspects to interpret the emerging confrontation. The fundamental dispute is between the technological optimists and the technological skeptics (Table 1).

TABLE 1
Some Characteristics of the Two Basic Worldviews (Constanza, 2000)

Technological Optimists	Technological Skeptics
1. Technical progress can deal with any future challenge	Technical progress is limited and ecological carrying capacity must be preserved
2. Competition	Cooperation
3. Linear systems with no discontinuities or irreversibilities	Complex, nonlinear systems with discontinuities and irreversibilities
4. Humans dominate over nature	Humans are partners with nature
5. Everybody for themselves	Partnership with others
6. Market as the guiding factor	Market as servant of larger goals

The 'technological optimist' worldview is the default vision of the Western societies. Any critics within this society are silenced by documented historical success of this worldview. Moreover, this worldview is considered to continue into the indefinite future.

Opposite views are few and far between, submerged in an avalanche of scientific, policy, and political papers. However, the skeptics have some strong arguments in their favor. Dovers (1997), and Dovers and Handmer (1998) consider SB, and consequently its derivative, SD, an umbrella concept under which many interrelated issues of environment and human development acquiesce, although unresolved. Dovers and Handmer (1998) concur with the opinion that SB is characterized by deep-seated contradictions between irreconcilable goals and directions. In the present debate on the global environment the profound conflicts are simply ignored. Frazier (1997) quotes the editorial in the US National Academy of Science's (USNAS) periodical I*ssues in Science and Technology* decision of 1994 (two years after the UNCED), saying that SD has no useful meaning, and is one of the most insidious and manipulative ideas to appear in decades. This opinion of the USNAS has been largely ignored, particularly by the UN system, exactly the one that should publicize the views of the large majority of nations, mostly those less developed who concur with this assessment.

Lee (1993) offers an exit from this impasse, stating that SD is just a goal, like liberty or equality: not a fixed endpoint to be reached but a direction that guides constructive change. While many interpretations of SD in the last few years would go along with this statement, the political usage of the term is tilted more toward it as an achievable, finite goal, even an operational alternative. Lee (1993) argues, and Frazier (1997) concurs that with this interpretation of SD, the concept should be

grouped with religious credos, not scientific principles. SD is according to Frazier, undefined objectively, infinite in its perception, and internally contradictory. It will continue to be a source of interminable confusion and misunderstanding, short of deceptions. Fraziers opinion has been substantiated at the recent Johannesburg World Summit on Sustainable Development (WSSD), substantiating the comment (HBS, 2002) of "a summit of sustainable disappointments". The final document has been criticized because of being full of "rotten compromises", and being devoid of critically needed decisions to combat poverty and protect the global environment. The deputy head of Worldwide Fund for Nature – WWF (CNN, 2002) said, that "economic interests were allowed to maintain their primacy over other global priorities". There was no shortage of suggestions the Johannesburg Summit was expected to initiate, and then, in the wake of that meeting, implement. (Buck et al., 2000; Khosla, 2001; Osborn, 1998, 2001; Sachs, 2001, 2002; Trittin et al., 2001). Among the real pragmatic goals there are five topics highlighted by the Secretary General of the UN, Coffee Annan (2002): 1. water and sanitation; 2. energy; 3. agricultural productivity; 4. biodiversity and ecosystem management; and 5. health. In retrospect, declarations have been adopted in Johannesburg, but within the same unsuccessful pattern of social behavior, little can be expected.

Is science in conflict with SB and SD?

If scientific rigorosity is to be expected, then answers are required for three unanswered questions on what SB and SD is (Roseland, 2000; Viederman, 1995).

The first is: What is to be sustained and developed? Ecosystem services? Biological processes and reproduction? Renewable or nonrenewable resources? Or just the economy? The very nature of these questions points to arbitrary answers, based on preferences – individual, of some interest group, of a nation, or of a state structure.

The second is: What system do we want to sustain? The whole natural ecosystem or a part of it? The existing political, social, or economic system? The answers will differ depending on whom this question is addressed to.

The third is: Sustain for how long? For ever? No one is seriously considering the latter; but it becomes obvious that SB and SD call for a temporal dimension. Biology offers several scales: the lifespan of a cell is relatively short; the life of an organism can be between a day and a hundred years, or more; the existence of a population can be very long, even several millenia. However, just on the population level evolutionary processes defy a scientific basis for SB.

The same can be stated for legal and economic systems. They do sustain themselves by following technological innovations, by constant change and adaptation to prevailing conditions and social needs, and by the demise of those unadapted or unadaptable. Siebenhüner (2000) in his vision of a *Homo sustinens*, a human individual living within the requirements of SD, asks three basic questions: (i) what skills and characteristics of people are needed to implement SD? (ii) to what extent are people capable of fulfilling these requirements, recognized in a transdisciplinary scientific perspective? and (iii) what prerequisites have to be defined to achieve SD?

Siebenhüner (2000) claims that in absence of an emotional component, of a structure based on recognized ethical standards, changes that would lead to SB are improbable to expect. Even if human potential exists for the implementation of SB, forces of short-term, myopic economic and technical /technological imperatives, of scientific paradigms, and of political ideologies provide for serious obstacles to the implementation of SB practices.

Holling (2000) is reiterating the thesis, that SD, like management of regional or global resources, is not an ecological problem, nor an economic, nor a sociological one: it is an indivisible interaction of all of these. The problem is that an integrating theory of SD on this basis still does not exist. Time and again theories are advanced that highlight one or another disciplinary aspect of SD. The application of dynamic and evolutionary policies fails, probably due to the complexity of the social system. A way out of this unenviable situation Holling sees in analyzing not the state of individual components of the complex ecosystem, but the small number of basic processes that govern it. Economists have recently embarked on interpreting some basic processes in the economic system. Some of these are related to specific patterns of tropic interactions and energy flows among species in ecosystems (Ulanowicz, 1997), the patterns that may be common also to the organization of economic flows in the world economy (Matutinović, 2002). Another process, that may be responsible for intermittent avalanches of change, including catastrophes in biological and socioeconomic systems, is self-organized criticality, originally discovered by physicists (Bak and Chen, 1991). Its tentative application on explaining instability and abrupt change in social and economic interactions (Buchanan, 2001; Matutinović, 2002a) may prove fruitful also in discussion of the viability of a "smooth" process like SD. Ecologists have been comprehending the complexities of nature for a long time, and have understood changes in terms of fast and slow processes, some of them global, some localized, but those that help in understanding

what complexity means (Holling, 2000). Information research has dominated social sciences helping to sort out, from a wealth of contradictory information, how harmony between humans and nature can be established. Integration, needed to formulate SD, requires recognition of the dynamic dimensions in all spheres of life. Until the integrating theory is established, SB and SD will remain short of a scientific fundament, and remain in the realm of political sintagms (Sunderlin, 1995). Scientists have long been asking a crucial question: Is there any sense in pursuing the search for a meaning, or the definition, of terms hotly discussed, yet without visible, measurable results? Some find value in these discussions on the ground that they give an impetus to education for the environment (Jickling, 2000; Uhl and Anderson, 2001; Vargas, 2000). But even education has to aim for the recognition of educational values with the public at large; there is also an obstacle in intellectual exclusivism; and, most important, SB has to become accepted as a process, not a final goal. Jickling (2000) argues that if SB is just a direction indicator, education has to evolve and substitute the "for" (environment, sustainability) with "in harmony with" (environment, sustainability). The task of education is in highlighting opportunities, not in predictions of the future. In many instances, aware of the difficulties with 'sustainable development', politicians, governmental decision makers, and even scientists, have redirected their efforts to use and interpret *sustainability or sustainable living* (IUCN/UNEP/WWF, 1991).

Many of the educational efforts can fail. Jickling (2000) reminds us of George Orwell's famous term of *doublethink*. People are bombarded with contradictory explanations of the same term, with the result, that the term gets uncritically accepted and used, devoid of understanding. Jickling sees the future of SB only if it will be interpreted as a step in an integration process of positive thinking.

In interpreting SD Cifrić (2001; 2002) highlights the dichotomy of the term: it is both a description of a structure and of a static state, as opposed by the characteristics of a process and its dynamics. This dichotomy is often overlooked in attempts to describe SD in terms of real and material objects. The task is impossible if the values of symbolic structures are neglected. In the same sense, if sustainability and diversity are desirable values, then the concept of SD is, in the absence of a better concept, the only one providing an anchor for a responsible relationship towards the coming generations.

Lay (2001) observes a general lack of vision, characteristic of societies in many small transitional countries, such as Croatia, and the never formulated strategies for economic de-

velopment, as the main causes for slow, or unexistent implementation of SD. Such countries have never been able to establish governance based on knowledge – a meritocracy. Transitional societies are mostly unaware of the values of their country's *natural capital*, or if they are, then only on a verbal level, not on the level of policies, attitudes, and collective and individual behavior.

Some pragmatic issues

The most serious dispute on the state of the environment, was, in recent times, provoked by Lomborg's (2001) book *The Skeptical Environmentalist*. Lomborg claims that most of the contemporary worries of environmentalists the world over, such as the global temperature increase, the rise in global population, and the scarcity of natural resources, lack solid scientific proof. Lomborg shows that in spite of all the doom-sayers (*the litanies*), the world environmental situation is improving: the average life of individuals is on the rise, malnutrition is declining, and environmental pollution is being kept under control. Funds allocated to solve 'priority' problems that are wrong, politically exaggerated and motivated, would be much better spent in pursuing social problems such as unequal access to resources, or in pursuing the goals of equity. Lomborg asks: "Do we make correct decisions today, or are we just handing over our money purses?" Lomborg is also a proponent of the cost/benefit methodology, a cornerstone of environmental economy. Liking it or not, he states, this is the methodology by which both individuals and governments make decisions. In addition Lomborg sees no need for the concept of SD.

Lomborg has been criticized (Lomborg et al., 2001) for using global averages, while most of the serious environmental problems are those concentrated in some regions. Even before the appearance of Lomborg's book, Bradshaw and Borchers (2000) drew a devastating conclusion: science and scientific research have failed to address some crucial contemporary calamities. As long as such a state of affairs persists, environmental and developmental decisions will be made in the political realm, based on political interests (Pielke, 2002). These interests are those of economically, politically and militarily large and strong states. Small developing countries have little to say, even less to contribute. Globalization is the process to which they will be subjected, whether they consider, or feel, that it is not representing their best interests. Pielke (2002) points out the dominant reason for scientists' criticism of Lomborgs book: science defends itself as if the critics were speaking for science, rather than criticizing Lomborg's scientific claims and their significance for policy decisions. The dis-

tinction between science and policy advice is seldom addressed from within the scientific ranks. The belief of many scientists that science alone provides a sufficient basis for decision-making, is not only wrong, but leads to the politization of science (Harrison, 1998).

Croatia has indeed one activity that it considers as a possible candidate for SD: tourism along its Adriatic/Mediterranean coast. The Mediterranean declaration for the Johannesburg Summit (MAP, 2000), accepts 'sustainable development', but neglects the evident failures of the last two or three decades: (i) population in most coastal regions is increasing at an alarming rate due to the phenomenon termed *littoralization*; (ii) consumption of potable and fresh water exceeds available supplies; (iii) fossil fuel consumption, specifically of oil and gas, is on the increase; (iv) wastewater treatment facilities are few, exceptional, rather than commonplace; (v) solid waste disposal is an ever increasing, largely unsolved problem; (vi) tourist industry is booming as witnessed by the enormous consumption of previously unused space; (vii) the Mediterranean Sea is crowded with pleasure vessels (yachts); and (viii) overfishing is depleting commercial stocks. The action? Mostly words and declarations at a plethora of meetings; of concrete activities, worth mentioning, there are only water quality monitoring programs. And, possibly, space planning and coastal management implemented in some places, but largely ignored. Most of these problems and their trends have been identified a quarter of a century ago, at the time of adoption of the Barcelona Convention and its first four Protocols: these were the times, when a call for action was planned and implemented without using the sintagm SB or SD.

SUSTAINABLE TOURISM, NATURE TOURISM, OR ECOTOURISM. THE ENVIRONMENTAL PROTECTION ISSUES

Many a vision of 'sustainable development' of Croatia is illustrated by the concept 'sustainable tourism'. The vision suffers from the same shortcomings as those outlined in the discussions on SD (Frazier, 1997; Matutinović, 2000; Papastavrou, 1998; Pravdić, 2001a, 2001b). The debate in Croatia has been in the wake of the worldwide upsurge of interest in the concept of 'sustainable tourism' (Hughes, 1995; Garrod and Fyall, 1998; Institute for Tourism, 2002). The concept of 'sustainable tourism', although still vague in meaning, has nevertheless evolved from tourism as a commercial recreation activity towards the status of an extractive industrial activity. The tourism industry operates by appropriating natural (environmental) resources and transforming them into a product for sale in consumer markets. In this sense, it has been hailed as a

principal economic activity for Croatia (Institute for Tourism, 2002), a similar activity promoted in many less developed countries or countries in transition.

Welford (Welford et al., 1999) has enumerated 8 basic fundamental, truths about tourism from the environmental, economic and social viewpoints.

Tourism is:

1. an industrial activity creating waste, and setting demands on infrastructure (communications, energy, water);
2. a consumer, or even an overconsumer, of natural resources and space;
3. as a resource dependent industry, a competitor for scarce resources with other activities;
4. as a private-sector dominated industry, based predominantly on profit maximization;
5. as a multifaceted industry almost impossible to control (either socially or environmentally);
6. dominated by consumers, not scientifically minded people;
7. entertainment;
8. unlike other industries, importing people (consumers), rather than exporting products.

More often than not promoters of the tourist industry in Croatia neglect some of these truths, mostly those relating to the environmental conservation. In addition, the complexity of environmental impact, caused by tourism, requires an integrative, holistic approach, focussing on the totality of tourist, associated leisure activities, and other supporting commercial activities in the area. This requirement, if its consequences should be understood and mitigated, requires a well equipped environmental monitoring service (Dobers, 1997). Establishment of such a service should preferably precede tourism expansion, and have a feedback mechanism and powers to limit, or stop, environmentally destructive activities.

The knowledge of the carrying capacity is a prerequisite if ecologically 'sustainable tourism' is desired. The carrying capacity is a term that is describing the maximum level of loads that can be imposed on an ecosystem, a locus, or a region (IUCN/UNEP/WWF, 1991) if sustainability should be reached. It has four components (Gössling, 1999, 2000, 2002) that have to be taken into account: physical, perceptual, social and economical:

1. Physical carrying capacity is characterized by limits of loads imposed by various activities, beyond which environmental problems arise.
2. Perceptional capacity is the subjective view that tourists have on the conditions in an area (environmental quality, the comfort index) which in turn decides on their willingness to travel to that destination.

3. Social carrying capacity arises from the domestic population's willingness to tolerate foreign visitors, and accept the accompanying levels and rates of social change.

4. Economic carrying capacity measures the ability of a local community to absorb tourist activities accepting the associated benefits, but without displacing or disrupting traditional local activities or preferences, or the existing environmental quality.

Carrying capacity is difficult to define and to measure, the concept is arduous to apply and to enforce (Rees, 1996), although methodologies have been proposed (Pratto, 2001). The human – environment (physical, social, economic) interaction is a complex dynamic system. Except for signaling that there must be, somewhere, limits to unrestricted development, the concept has yet to demonstrate a successful application.

Croatia has neither established efficient environmental monitoring services (except for coastal waters and the Adriatic Sea), nor attempted to determine the carrying capacity (not even for the touristically and environmentally stressed Adriatic islands). The precautionary regulatory power of the monitoring services, or of the national authority to which it refers its findings, is nil, except in the relatively rare cases of incidents, or catastrophic events endangering human life, when fast response is mandatory. In any case the intervention is effectuated only *post facto*. In elaborating (Welford et al., 1999) the International Institute's for Sustainable Development (IISD) indicators for 'sustainable tourism', two levels are indicated: the national and the local (Table 2).

➲ TABLE 2
Suggested Sustainable Tourism Indicators (Welford et al., 1999)

National indicators	Local indicators
Area protected	Destination attractiveness index
Endangered space	Site stress index
Cultural protection	Consumption
Travel intensity	Tourist/residents ratio
Resource use intensity	Development intensity
Key resource consumption	Ownership of facilities (foreign vs. domestic)
Health/social impacts	Environmental quality change

The debate on sustainable tourism is still in its infanticity, mostly due to avoidance of the critical, unresolved issues of the term 'sustainable development' in general. The way out of this impasse (Verburg and Wiegel, 1997; Burney, 2001) has been tried in promotion of environmental ethics (Hughes, 1995), in drafting and promotion of codes of good conduct, and in guidelines for development and management of tourist in-

dustries. The guidelines, originating from the activities of the Worldwide Fund for Nature (Garrod and Fyall, 1998), have been condensed into 10 principles, that are well known and in line with principles outlined in Agenda 21, and with principles promoted in the IUCN's strategy *Caring for the Earth* (IUCN/UNEP/WWF, 1991). There is nothing new with respect to 'sustainable development' or 'sustainable tourism' in this arena.

With all social, behavioral, and economic considerations of 'sustainable tourism', the exploitation and irreversible use of natural resources, space, and of cultural amenities, remains an unresolved problem. In a recent paper, Casagrandi and Rinaldi (2002), have used a mathematical model for a purely theoretical approach to formulate policies that would guarantee that tourism can be maintained for a long time without unfavorably impacting the environment. They have attempted to analyse interactions between three main components of the tourist industry: (i) the individual tourists, (ii) the investment capital, and (iii) the environment. Based on simple (even: oversimplified) assumptions, they discuss the "minimal model" used to predict the economic and environmental impact of any given policy. They introduced into the context of tourism descriptive models, instead of the previously used *black--box* econometric models that have dominated the field. As economists they study the interactions in the investment vs. competition diagram (Casagrandi and Rinaldi, 2002, Fig. 5). They elaborate mathematically the conditions when increased competition carries the investments into the zone of risk. However, if agents regulating tourism reinvest their profits into the protection of the environment, at reduced competion and moderate investment, a state of sustainability could be achieved. But even at reduced competitiveness at the markets, but with increasing investments, the industry enters a zone of environmental risks. All the statements of Casagrandi and Rinaldi agree with conventional wisdom, but the remarkable result is that they follow from simple abstract principles. The authors suggest that although the simple models cannot cover all the cultural, social, and political aspects of tourism development, they still highlight some basic regularities that no adaptive management can change. One of the consequences of environmental degradation is not the abandonment of a tourist destination, but, by all likelihood, it will be visited by tourists of lower and lower classes and lower purchasing power. One of the still open and mostly neglected questions is in investment constrains, based on environmental quality and services, that can amplify the chances for sustainability. Such analysis is inherent in many discussions on the future of tourist industries, particularly in the Croatian Adriatic, but has

never reached the level of regulations, nor has it been a topic of strategic development plans (Institute for Tourism, 2002).

The dual goals of nature conservation and of income generation in tourist industries have spawn the concept of *ecotourism*. In many countries, including Croatia, the expanding system of national parks and nature reserves has brought the ecotourism concept to the level of the most desirable form of this industry. In Croatia ecotourism has been promoted not only in rural areas, as a new source of income, but also in areas under strong pressure from an avalanche of tourists: in the numerous National parks. Have the promoters of ecotourism considered all the possible environmental consequences? Quite possibly that these have been neglected (Wall, 1997) and that environmental protection, as a crucial feature of ecotourism, has not been included into the cost/benefit calculations (Collins, 1999). In other words, the environmental loads have been externalized in most cases. Furthermore, a strategy to attract tourists to protected areas results in a possible reduction of biodiversity, degradation of nature through access of humans to fragile ecosystems, production of litter and increased noise (Hearne and Salinas, 2002). Ecotourism in National Parks offers enjoyment of natural amenities, fresh air, physical exercise, education, and observation of natural plants and animals. A consumer would derive utility from these attributes, but also disutility from others, such as congestion and physical exertion. Additional investments into food and drink services, waste disposal, and damage mitigation, make the analysis of the real financial gain through ecotourism a highly complex issue. The baseline of all calculations on the feasibility of ecotourism is in the answer to the question: Are we protecting nature and natural resources, and do we really wish it?

The unanswered question pertains also to National Parks of Croatia. The annual 500,000+ visitors to the Plitvice lakes NP are stressing the ecosystem of the NP to a degree that in no way guarantees conservation of this fragile ecosystem based on waterfalls over travertine barriers. The hotels situated close to the Kozjak lake with its restaurants, and the automobile parking spaces, are, among other calamities, such as the movements of people over, or close to the travertine barriers, sources of environmental stress. Similar problems face other NPs in Croatia. What should be the final achievements of environmental management of these natural amenities, beyond generating income for a small segment of the population, is difficult to fathom.

The above contemplations on 'sustainable development', on nature tourism or ecotourism, advance the question of environmental management, or in some instances ecosystem ma-

nagement. In the subsequent discourse environmental management is limited to the issue of tourism.

Mihalič (2000) in an informative article recognizes that environmental quality has become an important issue. Mihalič rightly emphasizes that many environmental projects, that minimise impacts of travel and tourist industry, have been developed and marketed almost as a commodity, under the name of *sustainability, ecotourism*, and other green brands and trademarks. Reeves (2002) cites the fact that tourism is the world's largest industry, generating earnings of $430 billion annually. The drive for earnings is, evidently, pushing environmental issues to the background. Wearing and Wearing (1999) have advanced a notion and a strategy on decommodifying ecotourism. They criticize the current direction in ecotourism directed toward commodification of nature (Vatn, 2000) in the search for global profits and tourist revenues in the globalized economies. Indeed, the key difficulty for sustainable local ecotourist industries Wearing and Wearing (1999) see in the commodifying potential of global processes. The direction towards decommodification they see in stricter governmental controls. Wall (1997) questions the sustainability of ecotourism. He claims that the imprecision in terminology clouds the basic issues. There are strong economic, ecological, and cultural reasons for believing that ecotourism is likely to present substantial environmental challenges to destination areas, if it competes for scarce resources and displaces existing, traditional uses and users.

Mihalič (2000) advocates a two-tiered approach to the analysis of the quality of tourist destinations (as the ultimate points of measurement of competitiveness): (i) environmental impact (EI) and environmental quality (EQ); and (ii) choice of types of environmental management. The EI involves the environmental management related to the impacts of tourism and travel, of visitors, and of the domestic population on the state of the environment, and the one related to EQ of the destinations.

Environmental management, according to Mihalič, can be subdivided into four types:

(i) environmental management by establishment of environmental codes of conduct;

(ii) management by uncertified practices and self-declared labels;

(iii) management by "green" branding on the basis of competition prizes or certified good practices; and

(iv) management on the basis of accreditation schemes, involving internationally recognized eco-quality labels.

All these management activities are building stones towards the broad, yet undefined sustainability criteria. Mihalič

(2000) also notes that many forms of ecotourism are simply self-appointed marketing logos, intended to sell unspoiled natural environments, spiced with some information on local culture. Beyond the environment, such activities have damaged also the marketing image of ecotourism. On the market, there are far too many "eco" variations with widely different criteria, resulting in reduced marketing value of ecotourism. Mihalič (2000) offers a conclusion that to potential customers minimalization of EI is less important, than the EQ issue. The same conclusion is made by Buckley (2002) who states that the practice of voluntary codes, awards, accreditation and certification schemes is producing various kinds of ecolabels. If these are intended to contribute to informed tourist destination choice, to avoid a backlash of disappointments, there is need for an effective underlying framework of environmental regulation. Ryan (2002) amplified the statement: while many will agree with the intentions included in charters of environmental management, the pragmatic issues are complex and depend on how administrative power is used to implement policies.

The implementation success of sustainability is measured by application of environmental indicators (Hughes, 2002). A plethora of indicators have been suggested and accepted within the tourist industry. While purporting to represent the state of the environment, most of the indicator-based research fails to evaluate the ecological impact of tourism. One reason for this failure (Hughes, 2000) is the ambiguous character of science which promised a basis for a regulatory regime for managing the environmental impact of tourism, but has failed to deliver. Even more, such research carries little weight in cases of arbitration. Hughes (1995) indicates that the notion of 'sustainable tourism' in its many variants, is not more than an injunction for change arising from dissastifaction with present principles and practices of tourism. If tourism strategies are to be sustainable they must be developed not simply in conjunction with the public, but as forms of community development. This requirement originates from the observed situation that public discussion is dominated either by scientific constructions of ecology, or by political constructions of interests. Both modes fragment the wholeness of qualitative human experience and define environmental issues in oversimplified functional terms.

In advocating 'sustainable development' in Croatia and promoting it through tourism, using the labels of 'sustainable tourism' and of ecotourism, it should be recognized that the advocates tread on thin ice. Environmental and nature protection are well defined activities; so is space planning. What exactly does 'sustainable development' mean, is an unresolved, undefined, and ambiguous question.

The economic and environmental viability of the tourist industry, or better to say, of tourist activities in a defined region, is, in this highly competitive field of economic activities, assessed by profits (Wunder, 2000). In this case the most probable victim of profit maximalization would be the environment: resources gradually used up, pollution increasing by waste generation and disposal, the ecosystem being degraded. At a certain point the profits would peak and begin to decrease, because emerging environmental crises will reduce the marketability of Croatian tourist destinations. Such conditions have already been observed in the western Mediterranean, specifically in Spain (Kovačević, 2001). The only hope for the sustainability of the tourist industry would be strict enforcement of governmental regulations (Hughes, 2002). At present these are in Croatia inadequate and enforcement would make little or no difference.

The present state of development affairs in Croatia is characterized by a dismal neglect of environmental issues. Like stated before, the concept has not been institutionalized in the minds of neither the consumers nor in those of the decision makers. At best solutions are sought, and sometimes applied, to a single specific problem. On finding a superficially satisfying solution, the same approach is repeated with another problem. That such reductionist solutions may create several new problems, displaced and temporarily delayed, is overlooked, or outrightly neglected.

CONCLUSION

'Sustainable development' and its application to 'ecotourism', is politically suitable and viewed favorable by international funding, or lending, institutions. Scientifically and environmentally these terms lack any substantial meaning. Most of the present day environmentally friendly development activities can be implemented without recurrence to such labels. Indeed, eliminating these terms from everyday phraseology, would make for transparent economic development activities.

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REFERENCES

Albrecht, J. (2002), Environmental Issue Entrepreneurship: a Schumpeterian Perspective. *Futures* 34: 649-661.

Annan, C. (2002), Towards a Sustainable Future. Spring Environmental Lecture, New York, May 14. American Museum of Natural History. http:// www.amnh.org/ join/ specials/ell

Bak, P. and Chen, K. (1991), Self-Organized Criticality. *Sci. American*, January, 26-33.

Bansai, P. (2002), The Corporate Challenge of Sustainable Development. Acad. Manage. *Executive* 16: 122-131.

Barrow, C. J. (1995), Sustainable Development. *Third World Planning Review* 17(4): 369-385.

Bradshaw, G. A. and Borchers, J. G. (2000), Uncertainty as Information: Narrowing the Science – Policy Gap. *Conservation Ecology* 4(1): 7. 14 pp. http://www.consecol.org

Brusasco-Mackenzie, M. (2002), The Road to Johannesburg after September 11. p. 11-13. In: K. Klotzle (Ed.), The Road to Johannesburg after September 11, 2001. *World Summit Papers of the Heinrich-Boell Foundation*, No. 9. http://www.worldsummit2002.de

Buchanan, M. (2001), *Ubiquity: The Science of History or Why the World is Simpler Than We Think*. Crown Publishers, New York.

Buck, M., Kollman, K. and Carius, A. (2000), *International Environmental Policy Making and Transatlantic Co-operation: Setting the Agenda for Rio+10.* Ecologic-Centre for International and European Environmental Research, Berlin. 10 pp.

Buckley, R. (2002), Tourism ecolabels. Ann. *Tourism Res*. 29: 183 -208.

Burney, J. (2000), Is Valuing Nature Contributing to Policy Development? *Environ. Values* 9: 511-520.

Cairns, J. jr (1998), What Sustainability is Not! *Int. J. Sustain. Dev. World Ecol*. 5: 77-81.

Carvalho, G. O. (2001), Sustainable Development: Is it Achievable within the Existing International Political Economy Context?. *Sust. Dev*. 9: 61-73.

Casagrandi, R. and Rinaldi, S. (2002), A Theoretical Approach to Tourism Sustainability, *Conservation Ecol*. 6 (1): 25 pp. http://www.consecol.org/vol16/iss1/art13

Cifrić, I. (2001), An Excursus on Sustainable Development (in Croatian). *Soc. ekol*. 3: 157-170.

Cifrić, I. (2002), Environment and Sustainable Development. The Environmental Pollution and the Aesthetics of Landscape (in Croatian). Vol. 14. in the library of the journal *Soc. ekol*. ISBN 953-6552-40-X. 261 pp.

CNN (Cable News Network) (2000), Greens Condemn Earth Summit Deal. September 3. http://europe.cnn.com/2002/world/africa/09/03/earth.deal.glb.index.html

Collins, A. (1999), Tourism Development and Natural Capital. *Ann. Tourism Res.* 26: 98-109.

Constanza, R. (2000), Visions of Alternative (Unpredictable) Futures and Their Use in Policy Analysis. *Conservation Ecol*. 4(5). http://www.consecol.org

Dobers, P. (1997), *Organising Strategies of Environmental Control. Studies in Environmental Business Strategies*, #2, Nerenius and Santérus Publ. Stockholm. 316 pp. ISBN 91-648-0108-X.

Dovers, S. R. (1997), Sustainability: Demands on Policy. *Int. Publ. Pol*. 16(3): 303-318.

Dovers, S. R. and Handmer, J. W. (1998), *Contradictions in Sustainability. Preprint, Centre for Resource and Environmental Studies*, Australian National University, Canberra, Act, Australia. 9 pp.

ECOSOC (2002), *UN Economic and Social Council. Implementing Agenda 21: Report of the Secretary General to the Second Preparatory Session of the CSD*. Doc. E/CN.17/2002/PC.2/

Ellerbrock, M. (2001), The Sorcerer's Tool: Technology as Servant or Master? *Conservation Ecology* 5(1): 18-31. http://www.consecol.org/5/iss1/art18

Feiock, R. C. and Stream, C. (2001), Environmental Protection vs. Economic Development: A False Trade-off? *Public. Adm. Rev*. 61(3): 313-321.

Frazier, J. G. (1997), Sustainable Development: Modern Elixir or Sack Dress? *Env. Conserv*. 24(2): 182-193.

Garrod, B. and Fyall, A. (1998), Beyond the Rhetoric of Sustainable Tourism? *Tourism Manage*. 19: 199-212.

Gibbs, D. (2000), Ecological Modernisation, Regional Economic Development and Regional Development Agencies. *Geoforum* 31: 9-19.

Gössling, S. (1999), Ecotourism: a means to Safeguard Biodiversity and Ecosystem Functions? *Ecol. Econ*. 29: 303-320.

Gössling, S. (2000), Tourism – Sustainable Development Option? *Environ. Conservation* 27: 223-224.

Gössling, S. (2002), Human – Environmental Relations with Tourism. *Ann. Tourism Res*. 29: 539-556.

Haas, J. (2002), After September 11: Towards a World Summit on Unsustainable Development, pp. 47-48. In: K. Klotzle (Ed.), *The Road to Johannesburg after September 11, 2001.* World Summit Papers of the Heinrich Böll Foundation No. 9, Heinrich Böll Foundation, Berlin. 54 pp. http://www.boell.de

Hales, D. and Prescott-Allen, R. (2002), *Flying Blind: Assessing Progress Towards Sustainability*. http://www.yale.edu/publications/geg/hales.pdf

Harrison, N. E. (1998), Why Science and Technology Require Political Guidance to Sustain Development. *Politics and Life Science* 17(2): 179-188.

HBS (Heinrich-Boell-Stiftung) (2002), Summit of Sustainable Disappointments (in German). *Information on WSSD*, September 6. http:/www.worldsummit2002.de/web/11.html

Hearne, R. R. and Salinas, Z. M. (2002), The Use of Choice Experiments in the Analysis of Tourist Preferences for Ecotourism Development in Costa Rica. *J. Environ. Manage*. 65: 153-163.

Hein, W. (1998), *Was UNCED Doomed to Fail? The Inherent Contradictions of the Rio Process*. WEED organization, Bonn. 12 pp. http://www.weedbonn.org/ env_dev/beyond4.htm

Hinrichsen, D. (1997), Earth Summit + 5 gets 'D' for Default. *People and the Planet* 6(3): 5.

Holling, C. S. (2000), Theories for Sustainable Futures. *Conservation Ecology* 4(2): 7-13. http://www.consecol.org/vol4/iss2/art7

Hughes, G. (1995), The Cultural Construction of Sustainable Tourism. *Tourism Manage*. 16: 49-59.

Hughes, G. (2002), Environmental Indicators. *Ann. Tourism Res*. 29: 457-477.

Institute for Tourism – Zagreb (2002), Tourism and Development in Croatia. Revised version. In: *Govn. of Croatia: Strategies of Development of the Republic of Croatia in the 21th Century*. 61 pp. http://www.hrvatska21.hr.

IUCN/UNEP/WWF (1991), *Caring for the Earth. A Strategy for Sustainable Living.* (David Munro, editor.) Gland, Switzerland. ISBN 2-8317--0074-4. 227 pp.

Jickling, B. (2000), A Future for Sustainability? *Water, Air, and Soil Pollution* 123: 467-476.

Jurčić, Lj. (2001), The World Trade Organisation (in Croatian). *Ekonomist* (Zagreb) 1: 1-23.

Koshla, A. (2001), *The Road from Rio to Johannesburg*. Issue 5, Millenium Paper, UNED Forum for the Earth Summit in 2002. 20 pp.

Kovačević, R. (2001), Tourism: Croatia should not Repeat the Errors of its Mediterranean Competitors (in Croatian). *Ekonomist* (Zagreb) 5/6: 12-13.

Lay, V. (2001), What would Sustainable Development of Croatia Mean? A Short discourse on Development Vision (in Croatian) *Hrvatska revija* (Croatian Review) 1: 112-118.

Langhelle, O. (2000), Sustainable Development and Social Justice: Expanding the Rawlsian Framework of Global Justice. *Environmental Values* 9: 295-323.

Lee, K. (1993), Greed, Scale Mismatch, and Learning. *Ecological Applications* 3: 560-564.

Lomborg, B. (2001), *The Skeptical Environmentalist. Ch.1: Things are getting better*, pp. 1-33. http://www.lomborg.com

Lomborg, B., Sandalow, D. H. and Baker, D. J. (2001), Debating the Real State of the World: Are Dire Environmental Claims Backed by Sound Evidence? A discussion. *Conservation Ecology* 5: 5 pp. http://www.consecol.org

MAP (Mediterranean Action Plan) (2000), Mediterranean Declaration for the Johannesburg Summit, *Bull. of Mediterranean Office of UNEP*, Athens.

Matutinović, I. (2000), Sustainable Development of the Croatian Economy in Conditions of Globalisation (in Croatian). *Ekonomski Pregled* 51: 1194-1209.

Matutinović, I. (2002), *Globalisation – An Evolutionary Event with Unstable Dynamics*. Paper presented at the international Conference An Enterprise Odyssey: Economics and Business in the New Millenium. Graduate School of Economics and Business, Univ. of Zagreb, Zagreb, Croatia, June 27-29. 18 pp.

Matutinović, I. (2002a), Organizational Patterns of Economies: an Ecological Perspective. *Ecological Economics* Vol. 40(3): 421-440.

Mihalič, T. (2000), Environmental Management of a Tourist Destination. A Factor of Tourism Competitiveness. *Tourism Manage*. 21: 65-78.

Mueller-Kraenner, S. (2002), The Nexus of Security, Globalisation, and Sustainable Development. *Woodrow Wilson Institute – Environ. Change and Security Project Report*, 8: 1-4.

Münck, H. J. (1999), "Starke" oder "schwache" Nachhaltigkeit? Theologisch – ethische Überlegungen zur ökologischen Grundkomponente des Sustainability-Leitbilds. *Z. für Evangelische Ethik* 43: 277-293.

Munro, D. (1994), Sustainability: Rhetoric or Reality? *Newsletter of the IUCN Commission on Environmental Strategy and Planning* 8: 1, 5-8.

Osborn, D. (1998), *Towards Earth Summit III in 2002. Issue 1: Millenium Paper*, UNED-UK Forum for the Earth Summit 2002. 12 pp.

Osborn, D. (2001), Enhancing Security by Promoting Sustainable Development, Ch. 5 in: *Environmental Security and Conflict Prevention*, Report based on Wilton Park Conference # 630, March 2001. 5 pp. Wilton Park Paper, December 2001.

Papastavrou, V. (1998), Sustainability: an Elusive and Misused Concept. *Oryx* 32(2): 86-87.

Phillis, Y. A. and Andriantiatsaholiniaina, L. A. (2001), Sustainability: an Ill-defined Concept and its Assessment Using Fuzzy Logic. *Ecol. Economics* 37: 435-456.

Pielke, R. A. jr. (2002), Policy, Politics and Perspective (Commentary). *Nature* 416: (28 March) 367-368.

Pratto, T. (2001), Modeling Carrying Capacity for Natural Parks. *Ecol. Econ.* 39: 321-331.

Pravdić, V. (1997), An Analysis of Sustainable Development and Environmental Protection in Postcommunist Countries: The Case of Croatia – A View Point. *Int. J. Environmental Studies* 53: 195-214.

Pravdić, V. (2000), Environmental Management: A Gap between Globalization and Ethics (in Croatian), *Soc. ekol*. (Zagreb) 9: 113-123.

Pravdić, V. (2001a), Sustainable Development and Sustainability: The Institutionalization and Discussion of these Terms from Rio de Janeiro 1992 to Johannesburg 2002. (in Croatian). *Soc. ekol*. (Zagreb) 10: 223-233.

Pravdić, V. (2001b), Sustainability and Sustainable Development: the Use in Policies and the Ongoing Debate on these Terms. *Croatian International Relations Review*, 7 (24/25): 93-100.

Rees, W. E. (1996), Revisiting Carrying Capacity: Area-Based Indicators of Sustainability. *Population and Environment* 17: 195-215.

Reeves, N. (2002), Managing the Impact of Tourism on the Environment. *J. Inst. Water Environ. Manage*. 16: 7-11.

Roseland, M. (2000), Sustainable Community Development: Integrating Environmental, Economic, and Social Objectives. *Progress in Planning* 54: 73-132.

Ryan, C. (2002), Equity, Management, Power Sharing and Sustainability – Issues of New Tourism. *Tourism Manage*. 23: 17-26.

Sachs, W. (2001), Rio+10 and the North-South Divide. *World Summit Papers of the Heinrich-Böll Foundation*, No. 8. Heinrich Böll Foundation, Berlin.

Sachs, W. (Ed.) (2002), *The Jo'burg Memo: Fairness in a Fragile World. Part 2. The Johannesburg Agenda*, pp. 17-23. Heinrich-Böll Foundation, Berlin. http://www.boell.de

Shrybman, S. (1999), The World Trade Organisation: The New World Constitution Laid Bare. *The Ecologist* 29(4): 270-275.

Siebenhüner, B. (2000), *Homo sustinens* – Towards a new Conception of Humans for the Science of Sustainability. *Ecol. Economics* 32:15-25.

Silobrčić, V., Lokner, V., Lovrinčević, Ž. and Štulhofer, A. (2001), Principles of Development of the Republic of Croatia. *Ekonomist* (Zagreb) 7/8: 43-57.

Sinclair, M. T. (1998), Tourism and Economic Development. *J. Development Stud*. 34: 1-51.

Stonehouse, D. P. (2000), A Review of WTO and Environmental Issues. *J. Agric. Environ. Ethics* 13(1): 121-144.

Sunderlin, W. D. (1995), Managerialism and the Conceptual Limits of Sustainable Development. *Society and Natural Resources* 8: 481-492.

The Economist (Anonymous) (2001), Is Globalisation Doomed? An Editorial. September 29, p. 14.

Trittin, J., Eid, U., Müller-Kraenner, S. and Greger, N. (2001), From Rio to Johannesburg: Contributions to the Globalization of Sustainability. *World Summit Papers of the Heinrich Böll Foundation No. 5*. Heinrich Böll Foundation, Washington, D.C. USA. 35 pp. http://www.boell.de

Uhl, Ch. and Anderson, A. (2001), Green Destiny: Universities Leading the Way to a Sustainable Future. *Bioscience* 51: 36-42.

Ulanowicz, R. E. (1997), *Ecology, the Ascendant Perspective*. Columbia University Press, New York.

Vargas, C. M. (2000), Sustainable Development Education. *Int. J. Educational. Dev*. 20: 377-396

Vatn, A. (2000), The Environment as a Commodity. *Environ. Values* 9: 493-509.

Verburg, R. M. and Wiegel, V. (1997), On the Compatibility of Sustainability and Economic Growth. *Env. Ethics* 19: 247-265.

Viederman, S. (1995), Knowledge for Sustainable Development: What do We Need to Know? In: Th. Trzyna (Ed.), *A Sustainable World: Defining and Measuring Sustainable Development*. IUCN – The World Conservation Union & California Institute for Public Affairs, Sacramento, CA. USA. ISBN 1-880028-02-6. 272 pp.

Wall, G. (1997), Is Ecotourism Sustainable? *Environ. Manage.* 21: 483-491.

Wearing, S. and Wearing, M. (1999), Decommodifying Ecotourism: Rethinking Global-Local Interactions with Host Communities. *Loisir and Societe – Society and Leisure* 22: 39-70.

Welford, R., Ytterhus, B. and Eligh, J. (1999), Tourism and Sustainable Development: an Analysis of Policy and Guidelines for Managing Provision and Consumption. *Sust. Develop*. 7: 165-177.

Wunder, S. (2000), Ecotourism and Economic Incentives – an Empirical Approach. *Ecol. Econ*. 32: 465-479.

Zoeteman, K. (2001), Sustainability of Nations. *Int. J. Sustain. Dev. World Ecol*. 8: 93-109.

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Održivi razvoj: značenje, poimanje i primjena. Primjer ekoturizma u Hrvatskoj

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Proučavanjem otvorene literature i institucijskih izvješća opisana je rasprava o terminu 'održivi razvoj' (OR) i njemu nadređenom pojmu 'održivosti' (OD). Rezultati johannesburškog sastanka na vrhu o održivom razvoju – koji se ponovno obratio zadaćama Agende 21 – ukazali su na razlike između razvijenog Sjevera, koji brinu pitanja zaštite okoliša, i nerazvijenog Juga, čiji su primarni interesi gospodarski razvoj i pravednost u iskorištavanju prirodnih dobara. Kao jedan od važnih problema spominje se odsutnost razlikovanja između znanosti i predlaganja razvojnih ciljeva, koja uzrokuje politizaciju znanosti. U drugom dijelu rada raspravlja se o izazovima zaštite okoliša za koncepcije 'održivog turizma' i 'ekoturizma', razvojnih djelatnosti koje se smatraju važnim za hrvatski privredni napredak, posebno za jadranski pojas. Hrvatska turistička privreda nije uspostavila kompleksni sustav monitoringa niti je prihvatila upotrebljivu metodu određivanja kapaciteta prihvata, čak niti za veće jadranske otoke ili za nacionalne parkove. Kao nadomjestak nastoji se institucionalizirati procjenu utjecaja na okoliš, iako se održavanje kvalitete okoliša nameće kao važniji činilac za turističko tržište. Nastavak sadašnjeg načina upravljanja, kojem se pripisuje 'održivost', a koji nastoji ponajprije maksimalizirati dobit, vodi prema degradaciji okoliša i gubitku tržišne vrijednosti hrvatskih turističkih lokacija.

Nachhaltige Entwicklung: Bedeutung, Verständnis und Umsetzung am Beispiel des Ökotourismus in Kroatien

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Nach eingehender Untersuchung von fachliterarischen Angaben und Institutionsberichten umreißt der Verfasser die Diskussion, die zum Thema "nachhaltige Entwicklung" und zu dem ihr übergeordneten Begriff der "Nachhaltigkeit" geführt wird. Die Ergebnisse des Weltgipfels für nachhaltige Entwicklung in Johannesburg 2002, der auf die im globalen Aktionsprogramm "Agenda 21" formulierte Aufgabenstellung zurückgegriffen hat, verweisen auf die Unterschiede zwischen der entwickelten Nordhalbkugel, die sich mit Fragen des Umweltschutzes beschäftigt, und der unterentwickelten

Südhalbkugel, zu deren Hauptanliegen der wirtschaftliche Fortschritt und die gerechte Aufteilung bei der Nutzung natürlicher Ressourcen gehören. Als eines der schwer wiegenden Probleme wird die mangelnde Unterscheidung zwischen Wissenschaft einerseits und den Vorschlägen zu neuen Entwicklungszielen andererseits angeführt, was wiederum eine Politisierung der Wissenschaft nach sich zieht. Der zweite Teil der Arbeit widmet sich den Herausforderungen, die der Umweltschutz an das Konzept des "nachhaltigen Tourismus" und des "Ökotourismus" stellt sowie an Entwicklungspläne, die für das kroatische Wirtschaftswachstum, insbesondere im Küstenbereich, von großer Bedeutung sind. Als Ersatzmaßnahme versucht man die eingeschätzten Auswirkungen des Tourismus auf den Naturhaushalt zu institutionalisieren, obwohl sich die Bewahrung der Umwelt als relevanter Faktor für den Fremdenverkehr erweist. Die Art und Weise, wie man bislang in Kroatien mit den natürlichen Ressourcen umgeht, die aber zugleich als "nachhaltig" bezeichnet wird und dabei doch nur auf maximalen Profit ausgerichtet ist, führt zur Degradierung der Umwelt und zu Einbußen des Marktwertes der kroatischen touristischen Destinationen.