Do We Protect Nature Responsibly?

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Abstract. The paper deals with the responsibility of stakeholders concerning nature conservation. It addresses two cases of national and local plans and strategies in terms of their active support to sustainable development. Considering national legislation and the current EU nature conservation policies, as well as the CBD 2010 and 2012 goals, the paper concentrates on low awareness and inconsistency within the main decision making bodies and their policies in terms of nature conservation and sustainable use of natural resources. In spite of a sort of latent general presence of sustainable development principles, the analysed cases point to a relatively weak awareness and low responsibility when it comes to concrete activities and actions.

Keywords: nature protection, nature conservation, sustainable development, biodiversity, Natura 2000, environmental impact, environmental problems, spatial planning, tourism

Ali varujemo naravo odgovorno?

Povzetek: Prispevek obravnava odgovornost deležnikov glede varovanja narave. Zajema dva primera nacionalnih in lokalnih načrtov in strategij z vidika, koliko aktivno podpirajo trajnostni razvoj. Upoštevaje državno zakonodajo in veljavne smernice Evropske unije za varovanje narave ter cilje CBD 2010 in 2012, se prispevek osredotoča na vprašanje našega zavedanja o pomembnosti ohranjanja narave in na to, koliko je neskladnosti znotraj glavnih odločitvenih organov in njihovih politik, ko gre za varovanje okolja in trajnostno sonaravno rabo naravnih virov. Četudi načela takega razvoja latentno obstajajo v nekakšni splošni zavesti, analizirani primeri kažejo, da sta zavest in odgovornost dokaj šibki, ko gre za prehod od besed k dejanjem.

Ključne besede: varstvo narave, ohranjanje narave, (sonaravni) trajnostni razvoj, biološka raznovrstnost, Natura 2000, vpliv na okolje, okoljski problemi, prostorsko planiranje, turizem

1. Introduction

During the last years, the term *social responsibility* has been frequently used; sometimes even abused. Different types of social responsibility are mentioned, e.g. in the frame of: human health, economic and social security, legislation (the rule of law), and also *environment*, including the responsible use of natural resources. One can observe a major difference between humans' declarations and actions: governments are able of producing general strategies in the sense of what we should or should not *do* with a great ease, but when it comes to *doing*, the declared principles can even easier be overlooked. Our experiences make us wonder, why is there such a large discrepancy between our moral principles and our actions? It seems that Slovenian society is not far from the top of this contradiction.

For the field of nature conservation, we can also witness a growth of awareness of its importance during the last years, but when making investments (e.g. building infrastructure) humans tend to favour humans to nature, i.e. we only wish to take in account benefits for humans (the so called development) while neglecting nature (preserving the proper habitats for plants and animals). We humans are very short-sighted: it seems that we do not want to understand that it takes just a drop after edge to make the difference – going too far in degrading our natural environment could jeopardize its ecosystem services and its ability to sustain our own existence. Diamond [5] gives examples of quite a number of bygone societies which failed or collapsed.

Through the perspective of nature conservation, we will describe two cases of using the nature resources: the spatial planning in one of the Slovene municipalities, and the tourism in the costal part of the country. Further on, we will focus on some of the answers obtained through an opinion polling research related to the protection of nature and environment in Slovenia. In such a way we will try to illustrate the observation about contradiction between *declaring* and *doing* which we exposed above. The two cases will demonstrate that the society's principal declarations towards conservation of nature and environment (the majority of residents declare themselves much *pro* nature, as shown through the mentioned opinion poll) fail when confronted with other interests, in particular economic (profitable) ones.

Slovenia, just as almost any other modern state, declares its attitudes towards nature protection, and defines its most valuable natural areas in the corresponding act, which is aligned with the EU legislation. The nature protection act is an indispensable prerequisite; however it cannot guarantee the adequate degree of nature protection by itself. It is the society, its GOs and NGOs, and it's every single member who should blow air into the lungs of the law to bring its provisions into real life. It would be expected that the UN declaration of 2010 as the international year of biodiversity, based on the awareness of growing threats to the existence of the plethora of Earth's forms of life should at least increase the awareness of the urge to change our behaviour towards the planet and its natural resources. It's time to face the truth: our exaggerated and selfish use of natural resources

may finally lead not only to the extinction of a number of plant and animal species, but also to the degradation of our own environment and that of our children, while the Earth itself will remain revolving the Sun, and nature itself – though possibly without humans – will recover sooner or later *in any case*.

2. Principles of sustainable use of resources

One of the most widely used expressions in recent strategic documents, programs, etc, is *sustainable development*. Yet as stated already the Agenda 21 [31], the unsustainable patterns of consumption and production are the actual cause of permanent deterioration of the environment. Cohen [3] gives an overview of the post-Rio endeavours, pointing also to an (unsurprising) difference between the internationally agreed directives and national environmental policies. The Brundtland Commission was convened by the United Nations in 1983, to address the growing concern about the "accelerating deterioration of the human environment and natural resources, and the consequences of that deterioration for economic and social development". In establishing the commission, the UN General Assembly recognized that environmental problems were global in nature and determined that it was in the common interest of all nations to establish policies for sustainable development. Cohen [3] further describes that environmental deterioration is a consumption problem rather than a production problem. We could not agree more! The sustainable development process has to permanently take into account the feedback (of consequences of human activities for nature) and suitably apply the precautionary principle [16].

Kastenhofer&Rammel [11] discuss the failure of the scientific community to take the leading role in the process of sustainable development which could be ascribed to at least three causes: the failure of communication of scientific results, the lack of qualitative research (lack of inter-disciplinary approach), and the incapability of classical scientific paradigms to comprehend the problem (lack of trans-disciplinary approach). Their investigation (survey conducted at all nationwide important scientific organizations) in Austria showed that, additionally to the above given, the financing of sustainability research is even more limited than the usual research, both from private and public funds; the societal structures are rather rigid, and the 'transition' would need carefully directed systemic interventions.

Martens [15] writes that sustainable development is an "inter-generational" phenomenon: if we wish to say anything meaningful about sustainable development, we have to take into account a time span of at least two generations, around 25 to 50 years. There is also the level of scale question (global, regional, and local): what may be sustainable at one level is not necessarily so at another level. We would add here that everyone should take care of their *own* sustainability rather than counting that somebody else (i.e. those responsible for/at another level, neighbours, the state...) would (or should) provide *enough* sustainability for all. Sustainability is further on a multiple domains issue: economic, ecological, and socio-cultural; the significance of the sustainability concept lies precisely in the interrelation among them. Sustainability allows multiple interpretations, and none of them is truly objective. The described complexity of sustainability can be tackled from the opposite side, i.e. to pin the unsustainable development. The examples can be easily found in agriculture, energy sector, transport systems, etc, and also in tourism and spatial planning, as shown in our two cases in the following chapter. The consequent systemic faults are deeply bred-in into our society, thus they can only be solved through fundamental changes in the society. Martens [15] concludes that sustainability, and the science of it, can be represented as co-evolution, co-production, and co-learning, an on-going, ever-adapting system.

The 2009 Eurostat monitoring report on the EU sustainable strategy [27] gives predominantly worrying information: the electricity consumption of household has increased; the household consumption increases in general (the most for entertainment and clothing); the energy consumption of transport has grown only slightly less than GDP¹; the resource productivity – producing more with less resource input (defined as GDP over DMC, domestic material consumption) has not taken place, although breaking the link between economic growth and resource use is a key objective of the EU sustainable development strategy. Concerning conservation and management of natural resources, the report shows that of the evaluated indicators, only the amount of protected² areas (reaching 96% of that considered sufficient) and the water quality in rivers are clearly favourable. Others (e.g. abundance of common birds, conservation of fish stocks, change in land cover, etc) are unfavourable or not in line with SDS goals. Typically, Slovenia is not in the upper-top (the more favourable status) of EU27!

Yet some optimism can be read through the EC message of August 2009 [6]: in 2010, EC plans to introduce a new comprehensive environmental index for measuring progress in a changing world, which will be a step forward as compared to the GDP (which does not measure environmental sustainability and social inclusion), and will comprise the major strands of EU environmental policy: climate change and energy use,

¹ Gross Domestic Product (GDP) is nowadays still understood as the most relevant macroeconomic indicator of »the success of an economy's overall performance« [32]. It measures the market value of all final goods and services produced in a country during a year.

² The term »protected areas" here includes also areas like Natura 2000 sites which are not protected like national, regional, etc *parks* are. When we later use the term »protected area« through this paper, we understand this latter meaning, i.e. the areas with special regimes, which prohibit certain human activities, which could harm nature.

nature and biodiversity, air pollution and health impacts, water use and pollution, waste generation and the use of resources.

We are eagerly looking forward that this new indicator will, slowly at least, replace GDP and will help evolving us towards a truly sustainable society which will take out of nature only as much as really needed, i.e. will act *responsibly*.

3. Nature protection in Slovenia and in EC

The term nature protection is often associated to protected areas. Indeed, protected areas are areas where human activities are limited in a way to retain, conserve or protect wilderness, landscapes, endangered or/and rare species and their habitats, ecosystems, rare natural features, etc. Nature protection encompasses all that, but also much more than that; its contents, principles and strategies, change, evolve, and develop in parallel with our society and our current social, ethical, emotional, environmental and economic values. The first proposal concerning nature protection in Slovenia (a plant species) was tabled as far as 1838. Seventy years later the protection of a broader area – the Triglav Lakes Valley was proposed and it was just a decade later that the first Slovene national nature protection program was drafted. The above reflects very well the evolution of the whole concept that started with the protection of a single species and exceptional natural features, which a century and a half later resulted in the full concept of conservation of biological and landscape diversity. Biological diversity, or *biodiversity*, is one of the key terms in the field of nature conservation/protection, encompassing the richness of life and the diverse patterns it forms. The Convention on Biological Diversity (CBD) defines biodiversity as "the variability among living organisms from all sources including, inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part; this includes diversity within species, between species, and of ecosystems" [33].

The EU commitment to the protection of biodiversity is clearly stated in the political call to halt biodiversity loss within the EU by 2010. The legal base for that are the Birds and Habitats Directives ([36], [37]) and consequently the national legislations of EU member states. In spite of all that the 2010 goal was not reached as it is not likely that we will reach the 2012 goal on representative networks of marine and terrestrial protected areas. The legal framework is there; what is clearly missing is a more responsible attitude towards its implementation.

3.1. Who is responsible to protect nature?

Addressing the question of responsibility towards nature protection leads to an apparently straight answer – we *all* are responsible to protect nature and to hand it over to the next generation in a good shape. But who is "we", who actually *does have* the means and ways to implement national and international legislation, directives, conventions etc? It is here that the apparently straight answer meets diversity – not biological diversity, but diversity of legal acts, implementation gaps, financial and technical constraints, mandates, authorities, private and corporate interests, different stakeholders' views, personal understanding, etc.

In general we could say that the burden of responsibility towards nature conservation is shared between two major groups. On one hand there are governments, which must provide a proper legal and institutional framework for nature conservation. On the other hand there are citizens and the civil society with sporadic concrete conservation activities. The interaction between the two groups would have to be reciprocal, top-down in terms of enforcing implementation of the existing legislation and ensuring a correct and friendly environment for nature conservation, and bottom-up in terms of the civil society being the promoter of new activities and an attentive supervisor of the governmental nature conservation policy and its implementation. While the bottom-up part of the interaction works reasonably well, there are two major gaps in the top-down interaction. The first one concerns the implementation of legislation (i.e. slow pace concerning nature conservation measures, including the designation of protected areas), the second one is the obvious *unfriendly environment* for nature conservation within the main Slovene decision making bodies. This unfriendliness shows up in budgetary terms (nature conservation holds 0.08% of the total Slovene budget for 2009 [29]), and in terms of the nature protection awareness of our politicians (regardless the political option), including members of the Slovene parliament, the legislative body of Slovenia [35].

3.2. The role of the NATURA 2000 network

The legal bases for the Natura 2000 network are given in the Birds Directive [36] that was adopted in 1979, and in the more recent Habitat directive [37] from 1992. The aim of the network is to assure the long-term conservation of Europe's threatened species and habitats, to serve in providing the long-term healthy environment. The Network comprises Special Areas of Conservation (SAC) designated by Member States under the Habitats Directive, and Special Protection Areas (SPAs), designated under the Bird Directive. The Natura 2000 sites are not strictly protected areas but rather areas that should be granted a long term ecologically and economically sound and sustainable use and management. The establishment of the Natura 2000 Network is also

the EU's first answer to its obligations under the UN Convention on Biological Diversity [34]. However, the fulfillment of the goals of the Convention as well as of the targets set by the Johannesburg World Summit on Sustainable Development [38], calls for immediate and concrete actions in terms of properly caring for the Natura 2000 sites. Filling the above mentioned gaps and misunderstandings seems to be of the uttermost importance for a more coherent sharing of responsibilities among the main decision makers, to assure the declared nature conservation also in practice.

4. Use of resources in practice: two Slovene cases

We will analyse two examples of Slovene planning documents: a municipal spatial plan, and the tourism sector-strategy. We will try to parallel the declared principles with the actual state of being. The later will be – to the possible extent, and in accordance to our best knowledge and the informative capacity of the available documentation – particularly focused to nature conservation.

4.1. Urban planning: the Celje municipality spatial plan

In Slovenia, the spatial planning has a long tradition, which originates in the ex-Yugoslav socialistic planning system. As an example, we chose the case of the Celje³ municipality, to illustrate the (dis)-accordance between a consensually adopted long-term spatial plan and its realization in the physical space. In the planning document, the physical space is divided into individual zones⁴ - plots of sets of municipal land parcels - where individual projects (e.g. a road, a business area, a residential area...) will be planned in details, including the whole series of permits and other documentation, which finally leads to what we call the construction permit. The procurement of a construction permit is lead and paid by the investor. A long-term spatial plan is followed by a mid-term spatial plan, which evaluates the interim realization of the long-term spatial plan by means of paralleling the so-far finalized individual projects to their rough delineation in the long-term municipal plan.

The Celje municipality adopted in 1988 its long-term plan for the period 1986 to 2000 [21]. This document was meant as a strategic act which would guide the future investments and development of the area according to the envisioned long-term goals. These goals were: economic growth, balanced social development (including culture, education, social security...), and care for the environment. The later was based on a controlled growth of the city centre and nearby settlements, the so called *absolute* protection of the best agriculture land, protection of forests, protection of waters, and also protection of cultural and *natural heritage*. In principle, all these should be well balanced, yet as far as nature is concerned it was subordinated to culture, in accordance with the valid legislation of the time where nature protection was submerged to the jurisdiction of the ministry of culture. The municipality as the plan's "carrier" pledged itself to manage the spatial development of the area in accordance to the long-term plan, and with participation of all stakeholders.

The long-term spatial plan was followed by the mid-term plan covering the period 1986 to 1990 [19]. which assessed the effects and results of the so-far execution of the long-term plan. It showed that the achieved positive results were outnumbered by negative ones. Among them, the protection of first class farming land and the protection of cultural and natural heritage were outliers. Its nature was not appropriately cared for while the Celje area was developing (= building the new infrastructure etc). For example, the valuable parts of nature were not detailed in appropriate analyses prior to making projects at or next to them, the new data on valuable natural features and species were not acquired by investors, the landscape concept was neglected. Overall, the quality of physical space was degrading: nature (and farmland) was decreasing on the account of increasing assignment of industrial, infrastructure, and similar land uses. Koontz [14] reports that 500,000 hectares of productive farmland in the United States is converted each year to development areas (housing, roads, parking lots, etc.), degrading biodiversity, wildlife habitat, and water quality. Unfortunately, we cannot report such a number here for our case: weeks would be used to pierce through hundreds of pages with descriptions only, and the accuracy of the results would be quite dubious, since no original GIS data on exact locations of individual projects and their numerous changes are available. But we can report undoubtedly that the productive farmland is decreasing steadily in Slovenia, too. The long-term "carrier" (the Celje municipality) did not even manage to retain the condition of physical space (nature) as it was in early eighties, prior to the long-term spatial development plan adoption, although one of its goals was to *improve* the environment.

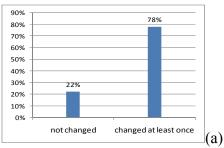
In parallel, the spatial legislation changed, the phenomenon of multiplication⁵ of existing municipalities took place, and the Celje municipality (which split into four new municipalities) adopted the Celje spatial plan [20] by a decree in 2001. It precisely determined only detailed spatial changes and supplements to the original plan [21], while all the strategic goals remained the same. One can not overlook that it has allowed many changes for almost all individual projects: of 131 Celje individual projects zones, their detailed project plans changed at least once for as much as 102 of them. Figure 1 (a) shows that a larger part – almost 80% of detailed zones' projects – has changed from their original contents. For many of these zones, the detailed plans were

³ Celje is the third largest city in Slovenia.

⁴ 131 zones for the Celje city's part.

⁵ The borders and the size of Slovenia after the end of Yugoslavia remained the same, but the prior 65 municipalities split to over 200 now.

changed more than once; on average, each of them went through 2.6 changes. It is as if Celje ended up with 265 projects instead of the originally planned 131 (Figure 1 (b)).



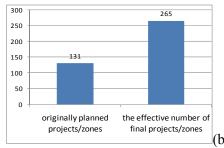


Figure 1. Almost 80% of detailed zones' projects changed from their original contents and only well 20% of them remained as originally planned (a). Many of them changed a couple of times. Should we count all these changes, we may as well conclude that Celje ended up with twice as much detailed zones' projects as they were planned in the original plan (265 instead of 131) (b).

The majority of these changes were initiated by private investors. In the absence of a proper information system⁶, nobody can follow all these details, nor assess them cumulatively, or accurately parallel them to the strategic (development) goals.

The described example is far from being a unique one, it is rather a rule than an exception in the Slovene spatial planning reality. It here serves as a case to sum up some of the main problems (and their solutions' suggestions), which call for a reset of our spatial planning system, should it manage the physical space responsibly, and offer an opportunity for the adequate background and the necessary constraints for assuring the sustainable development and the reasonable protection of nature:

- It is now too easy, and too subjective, to change the originally planned detailed zones' projects. There should be a rigid and well-defined procedure to change the originally planned detailed zones' projects; such a change should only be an exception.
- The procurement of detailed projects is lead and financed by investors, therefore some activities are simply accomplished, and legalized only *a posteriori* (by introducing a "small change" into the plan). The financing and preparation of detailed plans should be guided by the municipality to a much deeper detail than it is today, to set it free of the investors' money pressures.
- The land usage policy should take a more rigour care to assure the land use consistency. For example, the saleable quality farmland should preferably be sold to a nearby farmer.
- Due to a large number of municipalities in Slovenia (some of them having only a few hundred of residents), the municipal administrations lack the qualified personnel, which would be able to prepare and follow the plans appropriately.
- The newly introduced "absolute freedom" of the landowner rights should be much strongly curbed by some consensual general society's priorities, e.g. those stated in the national strategic plan [23].
- The quality strategic plans (like [21] in the described case) should be more rigorously followed. The existing regulating and controlling mechanisms at the state level should be fully employed and equipped by an appropriate information system which would allow quick overviews, cumulative estimates, and informed decision-making.
- Local policies should be able to think at least regionally. Not every small municipality needs its own business area, its own shopping-mall, etc. Its residents may as well use the nearest existing facility in the neighbouring municipality, to which they may only need drive for about ten kilometres. As given by Martens [15], what is "sustainable" on one level, may be unacceptable at another one.

Finally, the most important part is to make everybody aware of the importance of nature protection from the very beginning of education processes, to incorporate the processes of participation and stakeholders involvement at every level, and to strongly follow the already consensually accepted principles and proposed compromises.

4.2. Natural resources's usage: the tourism sector

The general perception of tourism in Slovenia is, that it is a nature friendly and sustainable activity in contrast with the notorious environmental »bad guys«, like industry, energy production, transport or agriculture. If we speculate a bit on the causes of this perception of »friendliness«, we could say that there are at least two reasons for that. The first one comes from the fact that there is apparently no clear and evident pollution coming from tourist activity. No smoking chimneys, no pesticides, no industrial waste, etc. The second and maybe the most important reason is the fact, that we are almost all tourists - at least once a year. It is simply more convenient to

⁶ All the material, including the documentation which we went through, is available in piles of hardcopy documents only; one would need a lot of time to read it through or to make some extractions which could be used as a tabled "dataset" for detailed analyses.

feel a part of a nature friendly activity then it would be to admit, that we are in fact supporting unsustainable development and taking active part in the depletion of our planets natural resources.

Tourism and tourist activities all around the world undoubtedly relay and depend greatly on cultural heritage on one hand and on the other hand on natural resources and areas that still exhibit pristine natural features. This can be clearly seen also in all sorts of publications and products, from promotion campaigns to leaflets, books and movies, which address visitors to persuade them to come to Slovenia.

Talking about natural resources does not mean only great views of pristine landscape, beach & sea & sun and thermal health resorts. It also does not mean only air, potable water, and energy, but also the diversity of ecosystems and species. The exceptional diversity of species, habitats, ecosystems and landscapes is one of Slovenia's most evident characteristics, and also its advantage. The dependence on natural resources would imply sustainable use and a responsible attitude towards their conservation. In the case of ecosystem and species diversity, that would be towards nature conservation. However, while we can spot some awareness in the tourism sector, and even some activities in terms of use and consumption of the most evident natural resources as it is the case with water or energy, there are almost no signs of positive shifts when it comes to sustainable use of biodiversity or to active nature conservation initiatives. In this paper, an in-depth review of the Development Plan and Policies of Slovene Tourism 2007-2011 (hereinafter DPPST 07-11) adopted at the national level, and of one of its counterparts at a local level, the Strategy for the Development of Tourism in the Municipality of Piran 2009-2013 (SDTMP 09-13) was carried out. The aim of the review was to evaluate the concrete sector's contribution to sustainable use of natural resources and consequently also to the nature conservation.

In its basic premises, the DPPST 07-11 [30] states, that tourism constitutes an important business opportunity for Slovenia and that considering the current development level of Slovene tourism and the existing development potentials, tourism could become one of the Slovene economy's leading sectors in the ensuing years and thus provide for a major contribution to the achievement of the Slovene development objectives, defined in the Slovenia's Development Strategy 2007- 2013. Such an ambitious goal in terms of development objectives would call also for an ambitious action plan for the conservation of those resources that can be considered the basis for the future tourism development. According to the analysis of the business environment of tourism in Slovenia presented in the same document, pristine nature and proper management and/or presentation of protected areas are top-listed reasons for visiting Slovenia. Consequently, a pro-active attitude towards nature conservation in general and particularly towards a network of well managed protected areas, natural monuments, nature trails, etc would have to have an important part in the development plan of Slovene tourism.

This is however not the case, and the aforementioned natural resources are not responsibly recognized as corner stones of a long term comparative advantage for the future tourism development in Slovenia. No concrete activities in this sense were foreseen within the basic strategic objectives of DPPST 07-11 and none in the different policies that cover the principal measures and activities. In DPPST 07-11, it is stated that sustainable development of tourism is considered a key paradigm of the Slovene tourism development, however, the only concrete activity listed within the "Policy of sustainable and spatial development" chapter is "promoting the development and monitoring of the sustainable development indicators«. On the other hand it is stated in the document, that "it is highly important for the development of tourism that both the systemic, institutional and instrumental groundwork of spatial development, and the environmental protection policy become friendly towards tourist investments and activities, and towards tourists themselves as the bearers of tourist consumption". This is especially true for the protected areas in which it is necessary to provide for the equilibrium between the protection function and the development function [30]. So, while it expects a full support and a very friendly environment for the development of its own activities, the tourism sector does not seem to have a responsible position towards the same environment and especially not towards protected areas and nature conservation in general. In DPPST 07-11 there are no strategies, policies, or concrete investment plans in the development and/or management of protected areas for the sake of nature conservation.

As it could be expected, the review of the SDTMP 09-13 showed that the document is more or less in the same line as the national strategy of Slovene tourism and that the basic concepts of the national strategy were taken into account and adapted to the local environment. The area of Piran and Portorož has already a long tradition as the main Slovene seaside summer resort. Beach & sea & sun was for a long time the main product During the last years, all the investments still went into tourism infrastructure and resulted exclusively in the increase of accommodation capacities and the improvement of its quality [32]. The new local strategy of tourism development for the Municipality of Piran is apparently expressing a concrete shift towards a more sustainable development of tourist activities and products, including a more active and responsible role in the conservation of the natural resources of the area, amongst them two existing nature parks in Strunjan and Sečovlje and a planned park in the valley of the river Dragonja. The SDTMP 09-13 defines the pristine hinterland as an advantage of the area, the valorization of the natural features is one of the qualitative targets within the main goals of the strategy, and finally, nature parks are listed among the primary tourist products in need of further investments. Nevertheless, when it comes to concrete, we are faced with a planned increase of tourist capacities

for 24% and no real investments *into* the conservation of natural resources⁷. The planned further development of natural tourism and the increase in leisure yacht harbors and/or moorings is threatening the fishery reserve in the gulf of Portorož, while the pristine hinterland is perceived mainly as an area with a lot of "empty" space that could house a number of activities, which are often not in line with nature conservation goals.

Based on the review of the two documents it can be concluded that in the tourism sector in Slovenia, a minimal concern for nature conservation is shown even at the strategic level. Both documents lack concrete strategies, policies and activities that would support a pro-active role of the sector in the conservation of natural resources. Pristine nature and the diversity of species and ecosystems may currently not be understood as the most important resource of the tourism sector, while they certainly *are* the most evident advantage that Slovenia has in terms of a long term sustainable development of tourist activities and products. It is high time that our tourism sector should start to understand and treat them as such, *responsibly* and *sustainably*.

5. Public perception of the importance of care for nature and of "NATURA 2000" in Slovenia

After our attempts to give some theoretical introduction to sustainability and nature conservation, and our analyses of two practical cases, which try to examine the (un)sustainable care for nature in the real life, we will finally make a limited look into what do we believe in about environment and Natura 2000 in Slovenia.

In her MSc research study⁸, Nose Marolt [17] obtained a number of very important results on the awareness and knowledge about the importance of nature protection, and the level of consciousness on abuse and/or (possible) care of/for nature in Slovenia. She did the opinion pool in 2009. Out of almost a hundred questions, we selected eight which are important for this paper: they are closely connected to nature protection, biodiversity, and Natura 2000. Since we have no intention to comprehensively analyse the full pool⁹, we will focus only on those parts which are most relevant for this text, and try to connect them to our previous chapters.

Respondents were asked to estimate the importance of the listed environmental problems on the scale 1 (not important) to 5 (very important). These problems are: electricity consumption, climate changes, species extinction (red in Figure 2), ozone hole, (increasing) amounts of waste, water pollution, air pollution, soil pollution, natural disasters, and acid rain. Similarly, they were asked to estimate their willingness to contribute to the protection of the environment by means of: waste separation, reducing the electricity consumption, using public transportation, contributing money for environmental protection, volunteering in environmental protection actions, signing the pro-environmental statements.

Figure 2 shows the percentage of respondents who consider the problem as *very important*. Slightly more than half of respondents believes that the extinction of species is very important, yet five other problems: high electricity consumption, high amounts of waste, water, air and soil pollution are considered more important. The result is very comparable to the Eurobarometer results from 2007 [8] which showed that 43% of respondents consider that biodiversity loss is a very serious problem in their own country while almost 70% believe that the biodiversity loss at a global level is more important than biodiversity loss at a national level. As expected, we feel much more threatened (by an environmental problem) if we are more directly affected by it, if the problem is easier to be conceived, and if it has more publicity. We might have expected a more equal awareness of species extinction and water, air and soil pollution. On the other hand, this illustrates the divide between the consciousness of tight relation between the well-being of (animal and plant) species and humankind. In [18], Slovenia has a very good 5th place of EU 27 countries with 81% percent of respondents claiming that protecting the environment is very important to them personally. Further on, 55% of EU citizens feel informed about environmental issues; Slovenia with 74% takes the third place in EU!

Figure 3 shows the percentage of respondents who are *very much* willing to contribute to the protection of environment by every of the given six options. We can see that people are much more willing to be involved in activities which are already "available" and are relatively easy to use (as waste separation). A very large percentage of respondents (71%) would be very much willing to separate wastes which compares with 59% of EU citizens who recycled their household wastes in the month previous to the 2007 survey [18]. Taking into account the non-optimal situation of the Slovene public transport, it is no surprise that we are not very much (only 15%) inclined to using it (although we may well be aware, that using it may help save the environment). Similarly, 17% of Europeans [18] are willing to use their cars less. People in Slovenia are much more willing to declare that they are pro-environmental (signing statements) than to directly contribute money for environmental protection. This may be related both to a relatively low GDP (as compared to old-EC countries, for example), as well as to the relatively undeveloped non-governmental activism, and possibly also due to the uncertainty (doubts) about the ways of spending this money if donated.

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⁷ We do not understand projects like *paving a road* over a protected area as an investment into nature (conservation).

⁸ The sample size was 231, 34% male, and 66% female. The respondents were "average" citizens, i.e. not working in nature protection or environmental sciences. The opinion poll was conducted also at our Institute but these results were treated separately.

⁹ We will not deal with the statistical significance of the obtained results since this will be done by the author.

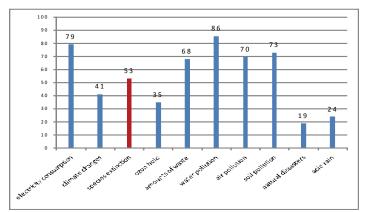


Figure 2. The importance of environmental problems. Every bar shows the percentage of respondents who consider the problem as *very important*.

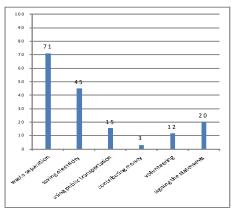


Figure 3. The willingness to contribute to the environmental problems solutions: the percentage of respondents who are *very much* willing to contribute by the given six ways.

Respondents were also asked to estimate on the scale 1 (not at all) to 5 (very much) their willingness to contribute to the protection of endangered animal and plant species, by means of: pay more for organic food, pay more for "green" electricity, saving electricity, use public transportation, stop using the phytopharmaceutical agents, attend cleaning actions, contributing money once a year, contributing money monthly, do volunteering work, to do something (anything at all). The next question was to estimate their willingness to directly contribute to the protection of endangered animal and plant species, by means of: taking part in a water pond restoration activity, helping frogs to cross roads by carrying them, mowing a meadow every season, donating a part of their land parcel to rebuild a wetland.

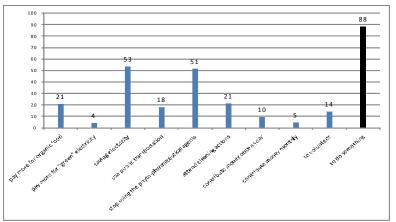


Figure 4. The willingness to contribute to the protection of endangered animal and plant species by indirect activities.

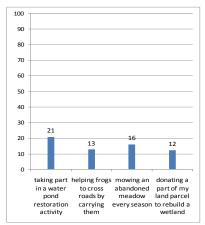


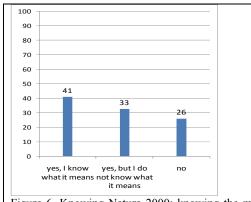
Figure 5. The willingness to contribute to the protection of endangered animal and plant species by direct activities.

Figure 4 shows our response to indirect animals & plants' protection activities while Figure 5 shows the response to activities which require some very direct involvement of a person in giving their free time (work) or property (e.g. land) for helping preserve the nature. As for the first pair of questions, only the shares of those who answered *very much* are shown in figures. First we may compare some results given in Figures 2 and 4. Let us recall that Figure 2 shows the awareness of environmental problems, while Figure 4 relates the background issues (which may be environmental problems themselves) and preserving nature itself (the endangered species).

We can see that almost 80% of the interviewed persons believe that high electricity consumption is an environmental problem (Figure 2), yet only a bit more than 50% of them would be willing to lower their electricity consumption, and an almost negligible part (4%) would be willing to pay more for the so-called "green" electricity (Figure 4), if it was for the sake of saving endangered species. Although people are quite well aware of the importance of environmental problems, they connect them to "nature" relatively weakly. This confirms our earlier speculation (see *Introduction*) that there's a lack of fundamental understanding, that (well preserved) nature is the precondition for the existence of humankind. Furthermore, the right-last (black) bar in Figure 4 shows that a large majority (almost 90%) of people would be willing to do *something* to contribute to the protection of endangered animal and plant species. (For comparison, 67% EU respondents [8] said that they have personally already *made* some efforts to protect biodiversity.) This high level is in contradiction to much lower bars of response to all other issues shown in Figure 4. We may speculate, that people are largely aware of (frightened by?) the seriousness of threats (to environment, to nature, to animal and plant species), but they are

puzzled about what would be the right thing to do (the issue is considered also in [1]). Figure 5 shows the willingness to be directly involved (to work, to donate) in activities which are intended to protect particular endangered species or habitats. Only approximately 10% to 20% of respondents would be very much willing to take part in these activities. As a comparison, these shares are 10% to 20% larger (i.e. 20% to 40%) for the separated sample of our Institute's employees. This shows that a proper education (awareness raising) may still largely change (improve) the general public willingness to contribute.

The following questions refer to the perception of the keyword "Natura 2000" amongst people. Respondents were asked if they know the term "Natura 2000", and to what is their first next thought when they hear the term "Natura 2000".



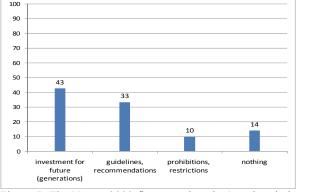


Figure 6. Knowing Natura 2000: knowing the meaning, knowing the term, not knowing (the sum is 100%, i.e. all the respondents).

Figure 7. The Natura 2000 first next-thought (see descriptions below the bars): the sum is 100%, i.e. all the respondents.

Figure 6¹¹ shows that almost ³/₄ of people have already heard of Natura 2000, more than half of them also know its meaning, and only slightly more than 1/4 (27%) of respondents has never (before taking part in this opinion poll) heard of Natura 2000. For EU, [8] gives the result of 80% of respondents who have never heard of Natura 2000, while only 6% of them have heard of it and know what it means. Similarly, the large share of those who understand Natura 2000 as a positive tool (investment for future – 43% of respondents, Figure 7) may be a non-typical result. Still, we may conclude that at least among the (formally) more educated people, Natura 2000 is known, and it is perceived positively. How come that our practical experiences are quite different? (We have in mind here both cases which were described above in Ch. 4, and also our other everyday's experiences at work.)

The last two questions of the research [17], which we roughly mention here were about how much do respondents agree with the given statements about Natura 2000, on the scale of five levels, from "absolutely agree" to "absolutely disagree". The first statement is: Natura 2000 means predominantly prohibitions & restrictions, and the second one: Human activities are allowed at Natura 2000 sites.

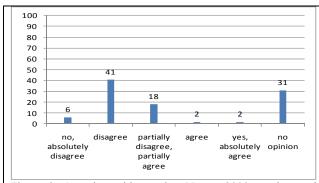


Figure 8. Agreeing with weather Natura 2000 restricts and prohibits only (the sum is 100%, i.e. all the respondents).

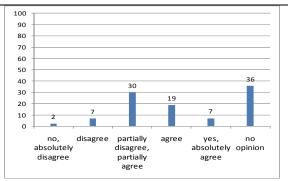


Figure 9. Agreeing with weather Natura 2000 allows human activities (the sum is 100%, i.e. all the respondents).

Figure 8 shows that quite a large part (almost half of respondents) does not agree that Natura 2000 would predominantly bring in restrictions and prohibitions (47%, 6%+41%). Yet a larger part of them believe

¹⁰ The selection of these activities was triggered by real-life experiences: in Slovenia, some activities (frogs, ponds, mowing of meadows, ...) have a certain tradition and a growing publicity during the last few years (thus one may expect at least some people have heard of them, or even experienced them, before the poll), also thanks to the endeavours of our Institute.

11 This result may be somewhat biased since the majority of respondents have higher education (at least the high school) which is above the

average in Slovenia.

this quite strongly (41%), while only a minority (6%) is absolutely sure about this. A very small part believes that Natura 2000 predominantly does mean restrictions and prohibitions only (less than 4%, agree and absolutely agree in Figure 8 together). Almost 1/3 of respondents is undetermined about whether Natura 2000 allows human activities or not (30%, Figure 9), which is a large share on one hand, while on the other hand we may point out, that 41% of respondents claim, that they know what is Natura 2000 (Figure 6). A similarly large share (almost 36%) have no opinion of whether human activities are allowed at Natura 2000 sites or not ("no opinion" bar in Figure 9). If we exclude those who agree or strongly agree (26%, 19%+7%, Figure 9), that Natura 2000 allows human activities, we can see that ³/₄ of respondents are not able to tell, or they are in doubts in how much does Natura 2000 really allow human activities. There are many conclusions possible here, but one of them is surely unquestionable: there's still a lot to be done as far a communication (on the importance of preserving nature, and of sustainable & responsible acting) and nature protection awareness raising are concerned.

But there is a group in our society which strongly believes, that Natura 2000 restricts and prohibits only, and that it bans almost any human activity, in particular those which deliver development. In October 2009, a member of the Slovene parliament asked the Minister for the environment why Natura 2000 areas seem to be "untouchable" as far as plans and projects are concerned. The minister explained the formalities related to the Natura 2000 network determination and designation, including the fact that it is true that the plans and projects in these areas have to be assessed prior to realization, but that this means no a priori rejection. What followed was a long discussion which prolonged also into November 2009. The transcriptions of the debate [35] show a lot of (deliberate?) misunderstanding of the concept and practical aspects of Natura 2000 by members of the Slovene parliament, and a clearly negative interpretation of the influence of Natura 2000 to the further development of Slovenia. A similar negative attitude towards Natura 2000 popped out again at the January session of the parliamentary committee for environment and spatial planning [39]. We cannot overlook a great divide between the public opinion of Natura 2000 ([17], [18]) and the attitude of our elected representatives.

But with this last brief comment, we can better understand, why (at least partially, or principally "positive") strategic documents (like the two cases described in Ch. 4) have such hard time to be put forth.

6. **Conclusions**

We tried to connect theory (of sustainable development and nature conservation) and some real-life situations in Slovenia where the theory could have showed up clearly in practice. We can see that in principle, that we (the society, the government, residents...) are very much inclined towards planning our activities and future investments in a sustainable, nature friendly way. This can be read in the objectives of national strategies and long-term plans. Also we (individuals) have a quite high 2 opinion on the level of our nature protection awareness and also about our informedness of what some related keywords mean, and what we should do to protect nature and to keep it for future generations. But as it comes to concrete activities it seems that we easily forget big ideas and prefer to take care only in very limited ways, on a short-term, and for close-by things, and predominantly for some narrow individual aims/interests which may largely differ from the general society's (sustainable development) objectives. We tried to show this contradiction by two cases which we have thoroughly described. First, the long-term spatial plan of the Celje municipality and its (short-term) realization, and second, the national tourist development strategy with its sub-document which concentrates on the Slovenia's coastal part, and its realization through the nature conservation view, through a few examples where the responsible behaviour against nature could have taken place but it hasn't.

Do we (still) do not understand what is it all about, or are we simply double-dealing?

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