

## COMMUNITY BASED NATURAL RESOURCE MANAGEMENT <sup>1</sup>

### **Improving environmental decision making in the countries of Central and Eastern Europe. The case of the nature protection in the Slovak Republic.**

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#### *Abstract*

*The paper discusses present situation and future possibilities in the nature conservation under the transition process of the Central and Eastern European countries. Special concern is given to the development in the Slovak Republic, where in addition to lack of capacities and financial resources, there is a gap between formal status of nature conservation declared by national legislation and practical situation in management. This project has no ambitious to solve this complex issue but is offering methodology for communication and co-operation of major stakeholders when designing and implementing common regional policies. Main concern is also support for regional development based on sustainable economic practices (egg. sustainable tourism, rational use of natural resources, etc) and implementation of Agenda 21 on local community level. The core method is Positional Analyses, institutional analyses, methods of environmental valuation, etc. Selection of methods follows various criteria. In addition to efficiency and applicability at local level, essential aspects of this research are stakeholder approach applied from the earliest stage of the project and integrated management of natural resources. Results are interpreted on case studies.*

*Key words: Central and Eastern Europe, Community management, Decision making, Environmental valuation, Nature protection, Regional development, Stakeholder approach.*

#### **Introduction**

The transition process of the countries in Central and Eastern Europe from command and control to democratic society may result in significant areas of conflict. A problem includes weak tradition of private property rights, a high demand for consumptive development and institutional weakness. In previous regimes, environmental protection was not a major interest of society. Present economic development focused on material values and consumption hinders the public's recognition of environmental protection as an important element of

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society. As a result devastation of the nature protected areas and natural resources exploitation has dramatically accelerated after political changes in most of the Central and Eastern European (CEE) countries. The reasons vary from country to country but there is one common feature – absence of mechanism for efficient enforcement of management rules and control and weak public participation. Hence, the successful transformation of environmental policy should focus not only on the legal and technical aspects but also on changing public perception, understanding priorities, values and awareness building.

## ***2. Environmental Decision Making***

Decision making in pre-1989 Command and Control (CAC) regimes in Central and Eastern Europe was made by political representation and based on ideological or political principles rather than economic characteristics. Environmental decision making was generally limited to a supplement of land use - planning documentation with very low influence in the decision making process. The key element missing in the former command and control approach to decision making is consensus building and public involvement.

Today, most of the countries of CEE have made considerable progress in the area of economic reform towards free market economy. However, development of civil society and implementation of democratic and transparent decision making process on all level of society is in question. In the area of environmental decision making, the major accomplishment today is well-developed legislative framework. On the other hand, implementation and law enforcement is still inadequate. Citizens as individuals are not very active in environmental decision making. Generally, there is a lack of interest in public matters and apathy towards getting involved in community life. Not only the average citizen, but also those who are more environmentally concerned are not fully aware of the value of their natural heritage (Zylicz 1994). The relationship between the government and NGO's in general has been contradictory during recent years, which is far from satisfactory. Information is not transparent or accessible neither for the public nor for non-governmental organisations or research institutions. Any involvement of the public or other interested parties occurs in the late phases of the planning process when the detailed proposal already exists and it is too late to initiate meaningful change.

Political changes in 1989 and the economic transformation have resulted in a radical change in environmental policy of the Slovak Republic. Decision-making is two folds. First of all, via parliaments which exists on national and municipal levels only. Secondly, state authority represented by national government and district offices, which concentrate most of decision making power in the regions. Due to the rural and mountain character of the country<sup>2</sup>, communication of citizens with authorities is difficult<sup>3</sup> and such a scheme leads to inefficiency and non-transparency. In addition, community life is paralysed by various administrative constrains, weak human capacities, clientelism, minimal financial resources and practically non-existed regional and local policy instruments. Reform of public administration that has been presently prepared by the government, shall fully implement bottom up democratic decision making with competencies divided between national, regional and local authorities. Political will to adopt such model is in question.

### ***3. Nature Protection in the Slovak Republic***

Slovakia is geographically in the centre of Europe. It forms part of the Carpathian mountains<sup>4</sup> and the Pannonian lowland areas which allows for a rich diversity of flora and fauna which higher compared to most Western European countries (MoE, 1995). 40.6% of the total area is forested with more than 70 areas of natural and virgin forests covering some 20 000 ha. The biodiversity of Slovakia includes 11.270 plant species, more than 26. 700 animal species and 1000 species of protozoa. From all plant species, 92 are classified as endemic. Due to degradation of the natural environment 40.36% of higher plants are listed in the Red List. Similarly, the diversity of animals is declining. For example, from total of 548 wild species of vertebrate, 153 have become endangered. The most sensitive natural habitats are disappearing and there is a decline of sensitive species, both negatively affect the diversity of forest. National parks together with protected landscape areas comprise 23 % of the total country area. Currently there are 7 national parks and 15 landscape protected areas.

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<sup>2</sup> Only population of Bratislava, the capital exceeds 500 000 inhabitants.

<sup>3</sup> Quite often historically and economically homogenous microregions are divided into several districts. For example, residents of two municipalities located in the neighborhood on National park shall travel to different district authorities with distance often more than 30 km, in respect to get permission to build tourism services in the same park.

<sup>4</sup> 72% of the territory of the Slovak Republic belongs to the Carpathian Mountains, which is almost pristine ecosystems, registered under the Council of Europe among core Euroregions.

„Preservation of biodiversity, conservation and rational use of natural resources, and optimising the land use“ is one of the five priorities of the State Environmental Policy. The key piece of legislation in the field of nature protection is the Act on Nature and Landscape protection (The Act) that came in force in January 1995. According to this Act, the protection of nature is the fundamental priority within the protected areas. National priorities and goals in biodiversity protection were stated in the National Biodiversity Strategy<sup>5</sup>, which was approved by the Government of the Slovak Republic on April 1, 1997 and by the National Council in August of the same year. Following guiding principles have to be observed in implementing of the National Biodiversity Strategy of Slovakia:

- all biodiversity must be conserved – preferably *in-situ*
- induced loss of biodiversity must be compensated to the highest possible extent
- diversified landscape must be maintained in order to sustain the variety of life forms at all levels
- biological resources must be used in a sustainable way
- everyone must share the responsibility for conservation and sustainable use of biodiversity

However, none of these principles as well as several provisions of Nature protection law<sup>6</sup> have been implemented in practical nature protection management yet. This leads to the situation, under which nature conservation goals are properly declared but mechanism and instruments for implementation are missing. In addition, there is contrast between Act on Nature protection and other legal regulations at national as well as international level<sup>7</sup>.

Nature protection in the Slovak Republic is under the responsibility of the Ministry of Environment (MoE). The responsibilities of MoE with respect to nature protection are concentrated in the state administration at national level, state supervision via the Slovak Environmental Inspection and co-ordination of nature protection via State Nature Conservancy of the Slovak Republic (SNC). SNC has been established on July 1, 2000 and is

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<sup>5</sup> With reference to the Convention of Biological Diversity, adopted in 1992.

<sup>6</sup> Several articles of Act on nature protection have never been put into the practice, e.g. zonation of parks according to IUCN definition, compensation of land owners within protected areas.

<sup>7</sup> Article 14/1 of the Act states, that nature protection is fundamental priority within the parks. This is in contrast with forest law as well as with IUCN definition for protected category II – national parks, which allows beside scientific and educational use also tourism if it does not exceed carrying capacity. EU provisions on Natura 2000 also define sustainable tourism as one of the instruments for nature conservation and awareness building.

responsible for nature protection in Slovakia. It is a budgetary organisation directed by the Ministry of Environment of the Slovak Republic. SNC serves as expert organisation with focus on co-ordination of National Parks and Protected Landscape Areas. Despite this structure, district authorities (district offices) take most of the day to day decisions. As stated above, park administration serve as advisory body only. Hence professional experience and skills concentrated within the parks can not be fully applied. As a result of budget restriction, number of employees in nature protection dramatically reduced in past 5 years. Today, with 77 professional employees of nature protection it represents 21 890 ha per one professional (MoE, 2000)<sup>8</sup>. Thus personal capacities of park administration are overloaded by daily routine e.g. assistance with illegal constructions within the park or other radical activities, instead of active management of the park associated with sustainable land use, biodiversity protection and environmental education. In addition, park administrations are budgetary organisations with strictly limited financial resources that in no way could provide enough funds to cover extensive protection given by law on nature protection.

The power and capacity of municipalities in local planning and environmental decision making is limited in present administrative system of the Slovak Republic. Most critical is lack of human capacities to develop and implement local and regional programs and lack of financial resources to support such programs. Especially critical situation is in small municipalities, which are mainly the concern of national parks<sup>9</sup>.

#### **4. Problem Identification**

##### **4.1. Property rights and economic interests**

After the political change in 1989, all property that was seized by the socialistic government in 1948 was returned to the previous owners. Since all national parks in Slovakia were created after 1948, much of the land within the parks is now privately owned<sup>10</sup>. However, the compensations for private owners even declared by Act on Nature protection, were practically not given which resulted to the development of intensive economic activities within the territory of protected areas. Thus the key question is: „*Who will control the local assets, which can*

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<sup>8</sup> According to the Approximation strategy in the nature protection additional 141 professional are needed.

<sup>9</sup> Administration at the level of small municipalities consist in most cases from 2 –3 employes, including major. There are no positions for local experts and cosultat bodies for special community programs. Budgetary revenues are restricted to minimal.

*generate decent revenues in the long term if managed in a sustainable way or much greater short term benefits based on natural resource exploitation“.*

#### 4.2. Effective management of protected areas

Present situation in nature protection<sup>11</sup> is clear evidence that nature protection is not real priority of the Slovak government and arguments of the Ministry of the Environment, that shall support conservation targets, are not effective. Especially critical is the fact, that Act on nature protection declares responsibilities of park administration in respect to park management but with NO competencies, limited personal capacities and financial resources insufficient to cover this task. In such a situation, to speak about systematic management in nature protection is purely theoretical issue. Practical management of these areas is far from legal status. The key question here is: “ *What is more feasible from economic and environmental point of view? Find resources and capacities to implement extensive nature protection program stated by Slovak legislation or to modify program, reflecting realistic situation in the country and following modern approach to nature conservation*<sup>12</sup> declared also by IUCN and Natura 2000.

#### 4.3. Effective Communication

Communication and co-operation among key actors is weak and very often missing what paralyse development and implementation of regional policies and instruments and alternative economic programmes. This is partly the result of legal and institutional gaps but major share is due to the reluctance to co-operate and still resistant top down approach to the planning and decision making which despite democratisation is still dominant way of thinking.

### **5. Community based natural resource management**

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<sup>10</sup> In Czech Republic, Poland or Hungary decision making in national parks is responsibility of the park authorities.

<sup>11</sup> Management of parks is under the responsibility of park administration but decision making is on district offices mostly located far from protected areas; contrast of Nature protection Act with other legal regulations, missing policy instruments to implement nature protection targets.

<sup>12</sup> Such a program would have to be build on sustainable development practices rather than strict nature conservation and requires democratic participation of all stakeholders on the use and management of protected sites.

The statement “Think globally, act locally” became a famous slogan all over the world. There is clear evidence from number of successful studies all over the world (see for example Aldred, Jacobs 2000, Edlund et al 1995, Marchi et al 2000, Soderbaum 1990, Zylicz 2000 and others) that it is worth of such popularity. Experience from some CEE countries in transition could also serve as positive example. Particularly successful is development in Polish national parks, where series of survey research studies conducted by Warsaw Ecological Economics Center (WEEC) an independent institution<sup>13</sup> disclosure, that rather than existence of national parks, lack of local policies and programmes, passivity of general public and missing innovative thinking of local enterprises are major barrier for local development.

Major problems in nature conservation of the Slovak republic described in part 4; can be summarised as follows:

- i. Conflict between nature protection and economic development (*strong ambitions of land owners in short term exploitation on one hand and still remaining strict approach to nature conservation on the other hand; contrast between provisions of national legislation on nature protection and other legal documents and international trends*);
- ii. missing governmental support for regional development and nature protection (*missing policy instruments, weak position of nature conservation in governmental priorities, especially in respect to the role of park administrations*);
- iii. low environmental awareness of landowners and general public (*nature protection is understood as the barrier of economic development, positive aspects of sustainable tourism are not experienced*);
- iv. lack of expertise and resources on municipal level (*lack of initiatives and capacities to strengthen community programs*);
- v. weak communication (*almost absent local communication and co-operation among nature protection authorities and local stakeholders*).

This project has no ambitions to solve this complex issue but is offering methodology for communication and co-operation of major stakeholders when designing and implementing common regional policies.

Community based management of natural resources is understood here as a concept that could build bottom up process to strengthen co-operation of local authorities, economic subjects and

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<sup>13</sup>For more details see Zylicz 2000.

general public, as stakeholders in solving practical local problems resulted from conflicts between development and nature protection. Secondly it could serve as platform for discussion and development of local programs based on sustainable economic practices (egg. sustainable tourism, rational use of natural resources, etc).

Different methodological instruments are proposed. Major are methods for environmental valuation and evaluation, institutional analyses, methods of community planning and similar concepts following successful reference of various case studies from environmental economics and those carried out under the VALSE project of the EU in ecological economics (O' Connor, 2000). Essential aspect for selection of methods is stakeholder approach.

The core method is Positional Analyses (PA) introduced first time in 1973 by Peter Soderbaum (Edlung J, Quintero R, 1995). It is a decision making instrument based on the holistic conception of economics. The main idea of PA is that decisions should be taken according to a matching procedure, where a specific set of chosen alternatives represents the starting point for the process. PA procedure is composed of several steps, e.g. description of the decision situation, identification of the problem and interested parties, design of alternatives, identification of potentially affected systems and effects, analysis of irreversible effects and the interests of stakeholders and conditional conclusions<sup>14</sup>.

Additional methods are known from community management, egg. Local Eco Budget, methods of environmental valuation, egg. Contingent valuation (CVM), institutional analyses and Citizens Jury developed parallel by Institute for Public Policy Research in UK (1997), by Peter Dienel in Germany (1995) and Jefferson Institute in USA (1996).

Selection of methods follows various criteria. In addition to efficiency and applicability at local level, essential aspects of this research are stakeholder approach applied from the earliest stage of the project and integrated management of natural resources.

## **6. Case studies**

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<sup>14</sup> For more details on PA please refer to the Soderbaum (1990) or Edlund et al (1995).



Main task is to show that valuation methodology based on stakeholder approach can be helpful instrument in managing protected areas under the conditions of transition economies where weak practices in past and lack of financial resources today are responsible for environmental degradation. Secondly, that productive communication between „conservationists“ and „developers“ is essential for efficient decision making in the environmental field. In addition, application of valuation methodology to real case can provide essential arguments to support nature conservation and sustainable way of economic development of nature protected areas. First results can be presented on the pilot study from Mala Fatra microregion undertaken in 1997-99 years. Next application is planned in 2000 in Slovensky raj NP.

### **Mala Fatra case<sup>15</sup>**

Pilot study<sup>16</sup> is based on survey research where stakeholder preferences were taken into account in the initial phase of the planning process. Selection of the stakeholders was an open process based on a preliminary analysis of the conflicts in the region and consultations with park managers. The stakeholders of the Mala Fatra region range from residents, local enterprises, municipalities to state administration and state organisations, and across domestic and international visitors.

Contingent valuation with WTP was conducted in the study. Open question with three options for allocation of funds was offered to respondents. Second part formed Matrix of 15 potential effects and activities representing social, economic or environmental indicators of the quality of the environment in the region<sup>17</sup>. Respondents were asked to rate all 15 items according to

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<sup>15</sup> Reference : Kluvankova, T. (1999) „Sustainable Tourism in The Mala Fatra National Park, The Slovak Republic. International Journal of Sustainable Development, Vol. 2, No. 2, pp. 323-340

<sup>16</sup> The Mala Fatra region is composed of 6 municipalities surrounded on both sides by the Mala Fatra mountain range - National Park Mala Fatra. Due to the extreme climatic conditions, region was oriented on grazing and farming. Today the area represents a centre of Slovak folklore and tourism. The Mala Fatra NP includes a number of nature reserves, some protected highly sensitive limestone and dolomite rock formations. Most sensitive areas are alpine in nature and covered only by grasses and forbs which is the habitat for most of the endangered species with three local and about 20 regional endemic non vertebrates. Major environmental problem are erosion on tourist trails and biodiversity decrease. Most damaging economic activities are provided by local land owners.

<sup>17</sup> Effects/activities has been selected according to the problem description and the potential consequences for the environment. Four groups of indicators and one single indicator were identified.

their individual preferences on importance. Finally, three scenarios of the future development were designed with regard to the present situation and conflicts in the region. Each scenario follows three main ideas. First, decision making secondly, the negative impacts to the natural environment and visitor's services, last but not least the economic activities in the region.

Three scenarios offer three different possibilities:

- $A_0$  - *Non Action*: current uses would continue without any change in decision making, management and nature conservation practices.
- Second  $A_1$  - *development scenario*: no major change in decision making process, certain level of development is allowed but it should follow the conditions of sustainable development. Main focus on sustainable tourism.
- $A_2$  represents a strict conservation oriented scenario with no economic development of the park.

The results showed that major problem in Mala Fatra are communication and co-operation among various stakeholders. There was no support given to  $A_0$ -Non action scenario but 50% of respondents supported development based sustainable practices ( $A_1$ ). Most of the respondents wish to move management of protected areas from strict conservation towards modern management based on programs for protection that would attract local stakeholders in order to involve them into the planning process as both actors and fund raisers. The survey also showed that the value of the park indicated by various stakeholders<sup>18</sup> is clear signal to decision makers to consider park existence as an economic value rather than burden, as often seen in present. In addition, tourism based on sustainable development was selected by majority of stakeholders as most preferable economic activity. The fact that visitors, as the only source of income for tourism, are coming to the region because of the park gives protection of the park economic sense.

## **Slovensky Raj**

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<sup>18</sup> 82% of respondents gave positive bits for WTP.

Next case study is planned to be conducted in 2001 in the Slovensky raj NP<sup>19</sup>. It is the only park in the Slovak Republic registered as candidate for the PAN Parks scheme. Parks dominates by relief formed of compact eroded benchland with plateau and deep canyons and valleys and with relict karst pine and spruce growing on cliffs and stone steps.

Main problem planned to be address includes biodiversity loss (as a result of uncontrolled economic use of the park, egg. intensive tourism, fishing, hunting, timber and inefficient decision making) and soil erosion and vegetation degradation in canyons (result of intensive tourism; illegal cutting of forest for firewood by Roman' s population inhabited on the North border of the park; unsustainable forest management practices given by forest management plans). Main stakeholders range from forest management (state, municipal, association of private forest owners, individual owners); tourism industry (tourism enterprises, association of tourism of Spis/Gemer region, owners of family leisure houses); municipalities, state authorities, residents and NGO's.

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<sup>19</sup> Slovensky raj in English means Slovak paradise. Park is covering 19 760 ha and was established in 1988. It is situated in districts of Spisska Nova Ves, Roznava and Poprad. Altogether, 180 caves and abysses have been registered. Vegetation inversion can be found here, determining the occurrence of fauna species, richness of which can be illustrated by more than two thousand butterflies. Due to the extreme climatic situation and relief, park has been protected form negative impact by natural barriers, thus there are several untaught spots still present. Nevertheless park is surrounded by several municipalities, with certain impact on natural environment, especially illegal cutting of rare and endemic forest species for firewood. The area of Slovensky raj is affected by tourism, with two tourism centres in the north (Cingov and Podlesok) and from south by Dedinky, with water dam Palcmanska masa located on the edge of the park. Certain number of visitors may affect park from Spisska Nova Ves. Other economic activities have not expanded into the region, except mining which has been eliminated on the whole territory of the park, however but several sites remain as old environmental loads.

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