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## **LARGE PROTECTED AREAS IN EUROPE - TOOL FOR SUSTAINABLE DEVELOPMENT**

My contribution aims - by giving a few examples - to show, how we can reach sustainability, and sustainable regional development with the help of both landscape planning and nature conservation. It seems to me, one of the best practises is to do so by different types of large protected areas (LPA). We can find such LPA, as such as in Germany, also in all European countries.

There are different specially protected spatial units for nature conservation dedicated to territorial protection of nature and landscape. So for instance such instruments as like as protected landscape areas and national parks in the Slovak Republic, national parks and landscape parks in Poland, national parks and protected landscape areas in the Czech Republic and so on.

To show, what several types of LPA can do, I will give you an impression by examples of Eastern Central Germany, especially by the help of both biosphere reserve and nature park. At least I will give you a few short remarks in order to functions of LPA to fulfil both tasks sustainable development of different regions and their cultural landscape on the one hand and nature conservation on the other.

### **Sustainable development**

Since the 1990-ties aspects of protection of environment, landscape and nature becomes more attention in the sphere of economy. Several organisations - governmental and non-governmental - have had putted nature and landscape in order to sustainability on the agenda during the time before, respectively since the end of the 60-ties. The UN-Conference on Environment in Stockholm 1972 and the Club of Rome 1972 have had mentioned such terms as "eco-development" on the one hand and as "sustainable world system" on the other. "Living resource conservation for sustainable development" was the title of a "World Conservation Strategy" expressed by IUCN in 1980. But, the term "sustainability" was used quite earlier since the beginning of 18th century. In the year 1713 Hans Carl von Carlowitz - a Saxonian civil servant for mining - has mentioned and proclaimed "sustained yield forestry". The aim of it was to fulfil and stabilize the task of mining in the Erzgebirge Mountains.

Today, in all member states of EU, as such as in the Federal Republic of Germany, aspects of sustainability and sustainable spatial development are mentioned in several Acts of Law. The sustainability principle, in conceptual terms, is included in the Federal Nature Protection Act. It means that natural resources should be used and managed only in a manner which leaves the capacity of ecosystems undepleted for future generations. With other words, to stabilize our communities, each generation should sustain its resources at a high level and hand them along undiminished.

The concept of sustainable spatial development can be seen as a central guiding vision in spatial planning. This principle is also implemented in the German Spatial Planning Act, seen as an important content. It was putted into the law a few years ago. The challenge, to bring in this

concept in planning, so it seems to me, can be understood as a hard work. It aims to achieve a balance between the social and economic demands made on the land, on the one hand, and its ecological functions, and in so doing to establish a spatial order which is both sustainable in the long term and balanced with regard to the territory in its entirety.

### **Different types of Large Protected Areas (LPA)**

Each spatial unit of Earth's surface - respected as a part of landscape sphere - can be seen as a concrete and characteristic product of the long termed and complicated interplay between a given particular set of natural elements and their interaction on the one hand and human community embodying certain cultural preferences and potentials on the other. Perhaps all of European landscape can be told cultural landscape. By a strong influence of human activity in shaping the use of natural resources the factor man has made landscape areas on different levels of landscape's diversity and naturalness.

Landscape is an area as perceived by local people or visitors, seen in the light of the European Landscape Convention (ELC). Such a landscape evolves through time, as a result of being acted upon by natural forces and human beings. This definition also underlines that a landscape forms a whole, whose natural components are taken together, not separately. Another fact is that landscape covers entire territory of each country, county or state (German Land), region, district and municipality. That means each landscape spatial unit covers different areas as such as natural, rural, urban, peri-urban, industrial and so on.



All European landscape and the cultural and natural values of it are part of Europe's common heritage. Therefore all European countries have a duty to make collective provisions for the protection, management and planning of these values.

In order to Trygve Sundt (2004) we should respect the following definitions of the ELC.

- Landscape protection means actions to conserve and maintain the significant or characteristic features of a landscape
- Landscape management includes the action, from a perspective of sustainable development, to ensure the regular upkeep of a landscape
- Landscape planning is strong forward-looking action to enhance, restore or create landscapes.

The European Landscape Convention applies to ordinary landscape no less than to outstanding ones, since all decisively influence the quality of European's surroundings. Thus everyday, outstanding and damaged landscapes all come within its scope.

Large protected areas (LPA) are belonging to the outstanding ones. Recently, there are preserved more than 12 percent of all European land under the umbrella of LPA. Most of them, as such as in Germany, are dedicated to the IUCN-category "Protected Landscape".

According to the United Nations List of Protected Areas (UN-List) and to the management system of the International Union for Conservation of Nature and Nature Resources (IUCN) the definition of several types of LPA has been changed. Now, in my opinion, LPA can be seen as an area of land, especially dedicated to the protection and maintenance of biological diversity, and of natural and associated cultural resources, managed through legal or other effective means.

IUCN category	German legal definition
II National Park	National Park (NaP)
IV Habitat/Species Management Area	Nature Reserve, Nature Protection Area (NSG) Protection Zone I of National Park (NaP) Core Zone of Biosphere Reserve (BR) NSG of Nature Park (NP)
V Protected Landscape	Biosphere Reserve (BR) Nature Park (NP) Large Landscape Protected Area (LSG)

Bringing together both nature circumstances and cultural components in space and time of every landscape at all levels, than several protected landscapes as such as biosphere reserves (BR) and nature parks (NP) are to be seen as models for sustainable spatial development. It can also be a part of the aim of the ELC. This is to promote landscape protection, management and planning and to

organise both European cooperation on landscape issues and also trans-border protected area planning and management. It also features a call to shape and manage landscapes with regard to further, well-considered landscape development. Unfortunately, Germany has not yet ratified the European Landscape Convention (ELC). Till now, 16 countries out of 46 countries of the continent have it already done.

## A few examples of LPA

Biosphere reserve (BR) and nature park (NP) they are protected landscapes in order to large protected areas (LPA) extending over more than 1,000 km<sup>2</sup>. Both LPA - BR and NP - are dedicated to multifunctional utilisation, conversation, development, shaping and designing of the whole territory with its own outfit of natural resources and landscape elements designed by mans society over a long time. The two types of LPA can be seen as examples for utilisation, planning and management of the landscape in its entirety of each country, which it is the most important aim of the ELC.

### BIOSPHERE RESERVE (BR)

The biosphere reserve (BR) is a large area and the management is oriented mainly toward the protection and sustainable development of a certain landscape and which serves for recreation. The cultural landscape developed over the course of centuries with its natural wealth of world- and nation-wide importance, as well as the established purpose of the protected area as a whole conform to the definition of IUCN.

Biosphere reserves, in their function as model landscapes for sustainable development, thus contribute in an exemplary fashion to national-level implementation of agenda 21 and of the Convention on Biological Diversity (Federal Agency for Nature Conservation 2002).

BR - they are zoned according to the intensity of human intrusion: the "core zone" is the subject of particularly stringent protection; the "care zone" (also termed "maintenance zone") serves to protect the core zone from harmful impacts and to conserve and maintain ecosystems created or influenced by human activities. The "development zone" (also termed transition area") serves as living, economic and recreational area for the population. It contains areas given over to traditional agricultural uses, trail areas for experimental research and areas for regeneration. The aim of it is to develop economic practices that do justice to the requirements of human society and the natural environment in equal measure.

BR should serve the following goals in an exemplary manner:



- The protection, care, development and restoration of cultural landscape with a rich natural and cultural heritage;
- The conservation of the great natural species diversity, created also by historic utilisation forms;
- The development of an environmentally and socially appropriate land use, recreation and industrial development;
- Environmental education and training as well as the long-term environmental surveillance and ecological research.

Since 1976 these reserves have been recognised under the UNESCO programme "Man and the Biosphere". The international network of such sites is stretching all over the world. It includes about 460 locations in 97 countries.

The BR "Rhön" - characterised as an upland up to 900 m above sea level - was established 1991, covering an area of 184,939 ha and extending over three German states (Länder): Bavaria, Hesse and Thuringia. The Thuringian share comes to an area of about 48,573 ha. It can be described as broad-scale near-natural deciduous forests over limestone and basalt; forests in ravines and on coarse colluvium; broad-scale grazed semi-dry grassland and near-natural upland rivers with their riparian meadows. Traditional land use is agriculture, first of all sheep and cattle breeding.

## Biosphere reserve "Rhön"

### Area

- 184,939 ha (Bavaria, Hesse, Thuringia)
- Thuringian share (settled by law 1991): 48,573 ha

### Zoning

- Core zone: 3 %
- Maintenance zone: 37 %
- Development zone: 60 %

### Land use

- Forests: 42 %
- Arable land: 32 %
- Grassland: 21 %
- Settlements & traffic area: 5 %

The zoned biosphere reserve is divided into core zone covering 3 % of the whole area. The care zone takes up a share of 37 % and at least 60 % of the area is dedicated to the development zone. Less than half of the biosphere reserve is only covered by forest (42 %). The majority of all land belongs to open landscape. Arable land takes a share of 32 % and that of grassland is 21 %. Settlements and traffic area takes up 5 % of the large protected area. The people living within the biosphere reserve take care for land use and utilisation of natural resources in order to

sustainable development, they are acting with the protected area and not against him. Sustainable agriculture, forestry, water management, nature conservation and species protection, regional development and tourism and last but not least environmental education and public relations working together. They created their own regional trade mark for fresh, mostly regionally typical culinary specialities in gastronomy, as such as lamb and beef, fruits, potatoes, vegetables and so on.

## NATURE PARK (NP)

The nature park (NP) belongs to large area and the management is oriented mainly toward the protection of a landscape and which serves for recreation. The cultural landscape developed over the course of centuries as well as the established purposes of protected area do conform to the definition of IUCN.

NP - they are large expanses of countryside with national and regional importance. The share of the area under protective status must amount to at least 50%. Most of its area is predominantly dedicated to nature conservation and landscape reservation in order to landscape conservation areas (LSG) or nature protection areas (NSG). But also Special Protected Areas (SPA) in order to Natura 2000 Network is used. Nature parks are required to be maintained and developed as a single unit. In accordance with the principle and aims of spatial planning, they are also to be considered as suitable for recreational use and for tourism.

The main protection goal is the conservation of this historically developed cultural landscape marked by the natural components in its regional and typical form, as well as its long-term protection and development for use of environmental appropriate recreational purposes. Selected parts of this landscape should be protected from any disturbance by economic utilisation, as refuge areas for rare and disturbance-sensitive species.

The NP "Dübener Heide" can be seen as one of the most effectively working conversation area. Extending over more than 79,000 ha and stretching on territories of Saxony (settled in 2000) and Saxony-Anhalt (settled in 2002). The landscape marked by the Ice Age as plains and hilly land is also the result of long termed agriculture and forestry. It is bordered by the river Elbe in the North and the river Mulde in the West. About 60 municipalities are working together to fulfil their own mutual masterplan connecting regional development with nature conservation. Besides of traditional types of land use, the extension of activities in order to recreation and leisure in a sustainable way is on the stake.



## Nature park "Dübener Heide"

### Area

- 79,000 ha (Saxony, Saxony-Anhalt)
- Saxonian share (settled 2000): 36,000 ha
- Share of Saxony-Anhalt (settled 2002): 43,000 ha

### Zoning

- Core and care zones: 78 %
- Transition zone: 22 %

### Land use

- Forests: 67 %
- Arable land & grassland: 29 %
- Waters: 1 %
- Settlements & traffic area: 3 %

More than four fifth of the whole zoned NP is dedicated to both core zone and care zone respectively maintenance area. Only 22 % of the territory can be used as development zone. Most of the area is forested land (67 %). 29 % are occupied by arable land, meadows and pasture land. 1 % is dedicated waters and 3 % belonging to settlements and traffic area. There is settled, the biggest centres of tourism and their adequate equipment should be located mostly in settlements and their neighbourhood situated in the development zone. One of the problems in order to regional development can be seen the successively development of the whole land by second home places and weekend houses depending on the ownership of land.

There is ambivalent and difficult relationship between recreation and tourism on the one hand and nature conservation on the other. Both branches are to be competitors in order to land use and in utilisation of resources burden nature and environment. Recreation and tourism should be seen also as items of precaution which nature conservation has to deal with. There are especially the two LPA - biosphere reserve and nature park - dedicated to the task of recreation and tourism.

## LPA as tool for sustainable regional development

Biosphere reserves and nature parks can be seen as such as all of the LPA which are most connected with sustainable regional development. Therefore they can be characterised as cut-out, as examples of landscape in its entirety. There are good practical exercises for protection, management and planning of European landscape sphere as a whole.

Instruments of management are dealing with twofold aims, at first for land development and to conserve and maintain the landscape character - its scenery and structure - and at second for regional development. It calls for integrative concepts in planning and management which can clarify conflicts connected within the circle of

protection, maintenance, utilisation and development within a certain large protected area. This management of circulation can result as win-win-solutions in this field. If there are the cultural landscape can be conserved, than the attractiveness of it will be higher and the whole region wins in order to attractiveness of the living-, working- and leisure-region. The most important task is - in my opinion - to maintain the cultural landscape with the help of traditional land use. Activities of agriculture and forestry should to be at first dedicated to conserve and maintain the landscape and at second to product local and regional crops as such as meat, fruits, vegetables and wood. Regional products offered under a special trade mark can also help to toughen up the region.

As well as protecting natural and cultural values, which will be even more important in future, a sustainable development concept also implies using LPA as models of sustainable agriculture, sustainable resource use and sustainable tourism:

### Sustainable agriculture

- Traditional farming by protection of rare and unusual breeds of livestock or endangered varieties of crops, vegetables and fruit
- Ecological organic agriculture
- Support for local products from LPA (as such as food, drink, crafts)
- Farmers to feel pride and job satisfaction in the quality of their produce and the part that they play in conservation of nature and landscape

### Sustainable Resource Use

- Energy generation with the help of renewable resources (wind farms, biomass, solar etc.), energy conservation
- Innovative domestic and commercial techniques to reduce water consumption and increase recycling for better management of waste and water

### Sustainable Tourism

- There is also a need for education of the public within and outside of the LPA to promote the message of sustainability by cooperation with schools and tourist offices
- LPA should be understood not as a patchwork of isolated strong protected areas, but as network large geographical unit of landscape sphere in which is both nature conservation and regional development on the agenda
- Regional development with tourism depends on willingness of individual players in the region.

As Birgit Nolte (2004) wrote: "One of the most difficult problems is a lack of initiative on the part of the local population that would have to be the main actors in the development process on a local scale". In order to sustainable regional development the sustainable development of landscape sphere is included in circulation among nature conservation and local and regional



economy. The better it does work the better will be the result of developing processes in each region.

By EU enlargement there will be changes, which must accommodate the landscape sphere. Reforms in agriculture policies offer the chance to develop more environmentally benign forms of farming practice, the rural economy, and the rural environment lie ahead. Partnerships made up of the local communities, farmers and foresters are vital to this work. Tourists are also needed as audience, which they are a source of income as well as a management challenge. It do belong also business, industry and commerce, regional government and last but not least neighbouring urban communities as spring area of visitors and tourists (EUOPARC 2003).

## Conclusions

Many structurally weak regions with attractive near-natural equipment of landscape pin their hopes on tourism as a means of generating economic development. For instance Eastern Germany as such as the other countries of East Central Europe have been able to conserve and maintain a very diverse range of animal and plant species in many areas and they have been increasingly put under protection by law. This is the reason why large-scaled protected areas seem to be very attractive to tourists, even though tourism and conservation have an ambivalent relationship to one another. Nature and landscape form the basis for tourist activities while simultaneously presenting the danger of irrevocably destroying the near-natural environment.

The way and the extent to which tourism utilises the landscape is an important question for keeping this danger to a minimum. The concept of sustainable development is a suitable basis for this since it is founded upon the three mainstays of economics, ecology and social welfare needs and natural-oriented tourism has put painstaking efforts into translating this idea into reality in the next some years.

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