## **Protected Areas as a Tool for Regional Development?**

## Ingo Mose<sup>1</sup> & Norbert Weixlbaumer<sup>2</sup>

<sup>1</sup>University of Oldenburg, Germany ingo.mose@uni-oldenburg.de

<sup>2</sup>University of Vienna, Austria norbert.weixlbaumer@univie.ac.at

Keywords: Protected areas, paradigm shift, integrated nature conservation, regional development.

Abstract: The last decades have witnessed significant changes in protected area policies in Europe as well as throughout the world. As a result, the total area set aside has more than quadrupled, and today almost 14 percent of the world's ecosystems are protected compared with only about 3 percent in 1970. In Europe, first and foremost, large protected areas with an integrative character gain importance increasingly. Based against this background, this paper on the one hand deals with the multifunctionality of post modern large protected areas as well as with the paradigm shift in protected area policies in Europe. On the other hand this paper analyses the advancement and future perspectives of these policies, and reflects upon the current use of protected areas as tools for a sustainable regional development.

#### Introduction

In the course of the global debate on sustainability large protected areas with an integrative character are becoming increasingly significant. The expectations on protected areas are outgrowing the mere species and area protection functions. The current paradigm shift according to the Durban Accord (2003) demands the simultaneous satisfaction of diverse functions. This change in area protection policy – often seen as progress - bears however a multitude of dangers and unresolved questions respectively: Are all types of natural and cultural landscape represented? Are they adequately protected? Are those that claim to be a model landscape for sustainable regional development living up to their promise? Are there too many protected areas that exist merely on paper?

What are the formulas to meet these dangers and to find the answers to the unresolved questions respectively? In other words, keeping in mind the innovative paradigm of area protection and regional development, where does the potential of large protected areas lie?

The goal of this paper is to lead to this set of questions and issues. From a theoretical perspective of the paradigm shift this paper should further establish the basis for discussing the practical examples laid out in the consecutive papers treating area protection policy.

Multi-functionality as a basis for the continued paradigmatic advancement

Large protected areas based on current scientific knowledge are rarely mono-functionally oriented, but rather often fulfill a multitude of different tasks simultaneously. Today the general consensus is that the following goals and functions, which leave the traditional nature protection paradigm behind, are the center of attention:

- Preservation and advancement of biodiversity regulatory function
- Regional and supra-regional welfare-effects habitat function
- Gene pool as well as natural disaster-prevention
  support function
- Sustainable regional development development function
- Environmental education and training information function

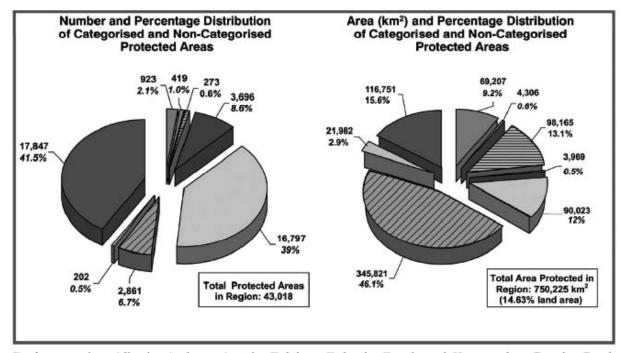
The multi-functional orientation of large protected areas bears in equal measure enormous challenges and substantial conflict-potential. The multitude of diverse expectations for these protected areas has great potential to create conflict about the very purpose of beneficial use of the area. This conflict can break out because of opposing interests between the protected area and its surroundings or even due to clashing interests within a protected area. The spatial overlapping of nature protection and tourism or of nature protection and agriculture exemplifies this issue. Today, it is therefore all the more important to spatially coordinate and steer the diverse goals and functions with all of the different available tools. This is particularly important when it comes to defining and designating different categories of protected areas.

## International and national categories of protected areas — the IUCN category V

Throughout the world the role of protected areas is covered by very diverse nationally and regionally protected area concepts. Europe on its

own is covered with protected areas of great – oftentimes confusing – diversity. In Germany there are for instance eleven different types of protected areas (cf. Büchter & Leiner 2000), in Austria there are twelve (cf. ÖROK 1997, 18). In order to increase internationally the transparency and at the same time the comparability of protected areas with regards to their goals, the IUCN developed a worldwide category-system of protected areas.

If one examines the spatial dimension of each category in Europe, the significant predominance of Category V becomes a striking fact (protected landscapes) by taking up the largest surface ratio by far (cf. figure 1). Even if, according to the official IUCN-diction, all six categories are considered to be of equal relevance, one cannot deny a certain image-hierarchy between the different categories. In contrast to the prestigious and financially lucrative Category II (national park), the Cate-



Region contains: Albania, Andorra, Austria, Belgium, Bulgaria, Bosnia and Herzegovina, Croatia, Czech Republic, Denmark, Estonia, Faroe Islands, Federal Republic of Germany, Finland, France, Gibraltar, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Liechtenstein, Lithuania, Luxembourg, Macedonia, Malta, Monaco, Netherlands, Norway, Poland, Portugal, Romania, San Marino, Slovakia, Slovenia, Spain, Svalbard and Jan Mayen Islands, Sweden, Switzerland, United Kingdom, Vatican City State (Holy See), Yugoslavia,



Figure 1: Distribution of the IUCN categories of protected areas in Europe (Chape et al. 2003, 40).

gory V (protected landscape) receives only little attention (the reasons for this see: Mose & Weixlbaumer 2006).

The 'lack of clarity' with regard to the national and international categories of protected areas can be especially well exemplified with the Category V. According to the IUCN this category describes a protected area, "the management of which is mainly oriented towards the protection of a landscape or a marine area and also serves recreation" (EUROPARC & IUCN 1999, 30). It is an area, "where the interaction of man and nature has formed a landscape of a particular character over the course of time, with outstanding aesthetical, ecological and/or cultural values and oftentimes exceptional biological diversity. The undisturbed continuation of this traditional interaction is vital for the protection, conservation and enhancement of the area" (ibid.).

The disparity of large protected areas that fall into Category V is substantial. The classifications according to national law include Parco Naturale Regionale (Italy), Parc Naturel Régional (France), Parc Natural (Spain), Parque Natural (Portugal), Naturpark (Austria and Germany), Regionaler Naturpark und Naturerlebnispark (Switzerland), Area of Outstanding Natural Beauty und National Park (Great Britain). Lastly, cross-nationally the category of the biosphere reserve is also part of Category V. Thereby the multitude of terms does not just reflect different linguistic views, but also cultural, legal and most of all, conceptual views. For comparison purposes in literature cf. Henderson 1992, Schmidt 1995, Weixlbaumer 1998, 2001, Mose & Weixlbaumer 2002, Hammer 2003.

The large protected areas that fall into Category V of the IUCN, are not just of interest because of their large surface ratio, but also due to their underlying conceptual views. It is widely recognized that biosphere reserves, nature parks, regional parks etc. are considered to be the essential category of the dynamic-innovation paradigm. This paradigm is characterized by a moderate anthropocentrism, where man plays an essential integrative role.

# Paradigm shift in protected area policy

Depending on the latest trend of the understanding of nature and the zeitgeist respectively, different basic principles in area protection policy have developed within Europe and beyond (e.g. North America). Taking national park policy as an example, Henderson (1992) analyzed substantial characteristic differences between the United States and Canada as well as Great Britain. Referring to the 19th century he basically distinguishes between the preservationist-movement "protection without use" in the United States and the conservationist-movement "protection through use" in Canada and Great Britain. On the one hand wilderness was conserved, and on the other hand natural landscape was cultivated and value was added by tourism. Preservation and protection with little understanding for integration, i.e. without seriously thinking beyond the boundaries of the protected area, were the basic elements of the concepts of protected areas until the middle of the 20th century. By the end of the 20th century things had changed, at least in the United States and Canada, decisively. Today the trend in both countries is headed towards ecosystem-based management (Slocome & Dearden 2002, 297ff.), even though this term is not always explicitly used. The ecosystem-based management approach replaces the isolated nature protection aspect with an integrative approach, which was also expressed in the Durban Accord (2003).

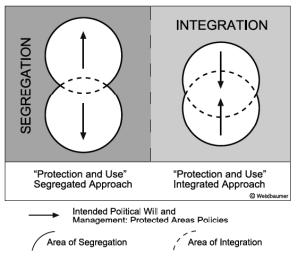


Figure 2: The main paradigm strands in area protection policy.

Based on this background, one has to conclude that there are essentially two different concepts of area protection that can clearly be separated: On the one hand is the paradigm of the static-preservation approach (segregation approach) and on the other hand the paradigm of the dynamic-innovation approach (integration protection) (cf. figure 2, Weixlbaumer 2005).

The following attributes characterize the static-preservation approach:

- Based on the dichotomy of "protection- and pollution area," nature protection and business areas are spatially separated i.e. bell jar and reservation policy respectively: Protected areas have only little contact with the outside world.
- It is a matter of sectoral protection that only targets certain species and is, subsequently, area-oriented. The two main tools of classical nature protection are species and area protection. The mechanistic worldview is the ideological basis of this approach.
- The basic principle of species and area protection is often pursued with a rather rudimentary management structure, that oftentimes is situated only on a supra-regional level (e.g. NGO or national government office). Furthermore the management frequently has no choice but to view this task as one of many others. Norms exist management however plays no essential role with the exception of national parks of the Category Ia and Ib. Nature protection happens through idealizing primarily to preserve the subjects of protection.
- The shaping of norms and the designation of protected areas happens top-down. It is a sort of "sovereign" nature protection, mostly prohibitive in nature.
- The acceptance of all interested parties (e.g. abutters to the protected area) is not scrutinized in this normatively driven approach.

Then again the paradigm of the dynamic-innovation approach (integration approach) is characterized by the following basic principles and attributes:

- Nature protection is a spatially and temporally basic principle that attempts to overcome the "protection and pollution area" dichotomy.
- The basic principle of sustainable development is expressed by turning from pure area protection towards procedural protection. Beyond that the principle is expressed by the aimed model effect for areas and procedures outside the protected areas. The transactionistic world view is the ideological basis of this approach.
- Integrative protection and landscape development measures are usually achieved by an adequate management structure (on location and oftentimes additionally by a supra-regional alliance or a governmental office). Nature protection becomes more and more professional.
- Nature protection by using a policy-mix is considered to be a societal task (top-down and bottom-up approaches are intertwined). Therefore measures are less normative, instead they build on a high degree of voluntariness.
- The acceptance of all relevant people is essential. In general it is the result of a cooperative effort of all parties involved.

The background to this dynamic-innovation approach, as opposed to the static-preservation approach, is the thought of "Mitwelt" (in the sense of Meyer-Abich 1990). A moderate anthropocentrism, declining any radical forms, has priority over a non-anthropocentric view. Nature can only be protected and advanced by man in a sustainable way if mankind considers itself to be a part of nature. In this way, mankind takes on the inside perspective to its protected areas. Therefore the criticism of "science-obsessed nature protection" does not apply to this approach (cf. Plachter 1991). In fact, research and management have to be oriented in an inter- and transdisciplinary way in order to give enough consideration to integrative basic principles and attributes. A stronger recognition of the human science component is explicitly required (cf. Erdmann 2000).

The outcome of this is the notion of area protection, which in Europe is above all oriented towards the sustainable development of stronglyaffected landscapes, with an explicit innovation element. The main tool of this approach is in many cases the large family of "nature parks" (and the IUCN-Category V respectively), that experienced a boom Europe-wide from the 1960's onward.

Even if in reality this generalized polarization is not all that black and white, one can more or less describe the traditional area protection policy as being a "protection and pollution area ideology". Due to an increase in knowledge in the nature protection realm, the dynamic-innovation approach has been established in Europe in recent years. The challenge of this approach is to make the integration of different interests (in use) possible. This approach attempts to satisfy the interests of protection and use on the "experimental ground" nature park in a socially, economically and environmentally sound way. In other words it is the goal to conserve and form the regulatory, habitat, support, development and information functions of protected areas, while simultaneously using large protected areas beyond their boundaries as tools of sustainable regional development.

In the practical everyday world of area protection, the strategic measures and main paradigm strands presented in this paper interact in a complementary way. Depending on the requirements of nature protection and the regional situation, both approaches can be legitimately used.

Based on its basic principles, attributes and "background-philosophies", Europe's booming landscape, nature, regional and biosphere parks, as well as numerous national parks (that are not part of the IUCN-Category II) of the past decades have to be attributed to the dynamic-innovation approach. If one excludes national parks, there are roughly 600 managed protected areas that fall into the IUCN-Category V in Europe alone.

### **Outlook**

In the last two decades large protected areas have increased their importance within Europe. This is not just true because of the substantial surface ratio in various European countries, but is also true with regard to the diverse functions of large protected areas. In connection with the above is the obvious paradigm shift, which is in a strict sense a paradigm complement. Accordingly the advancement

function of protected areas has received an increasingly significant importance as opposed to the protection function. An immediate expression of this fact is the downright boom of protected areas of the IUCN-Category V, which are all oriented towards the integration of protection and use functions. In Europe this is on a regional level particularly the very heterogeneous nature and regional park setting. On an international level one has to mention the prestigious biosphere concept. Examining its functions of (according to UNESCO) development, conservation, as well as logistical support, one can see that it represents the implementation of the sustainability notion into practice (cf. ÖAW 2005).

For the future advancement of protected area policy it will be important to primarily pursue the path of stronger integration of protection and use in the years to come. In addition, large protected areas ought to be used consistently (also) as tools for a sustainable regional development. As the previous practical experience shows, the approach of a dynamic-innovation area protection seems to be an increasingly suitable conceptual framework which can highlight practicable models for mankind to treat the landscape that we live in and that we use, be it as an individual or be it as a society. In short this framework should enable us to try out sustainable ways to live and do business.

#### References

Büchter, C. & Leiner, C. (2000). Schutzkategorien im Naturschutzrecht. Systematische und kritische Übersicht. Kassel.

Chape S. et al. (comp.) (2003). 2003 United Nations List of Protected Areas. Cambridge.

Erdmann, K.-H. (2000). Naturschutz – quo vadis? Anregungen zu einer Neuausrichtung. In: PGM (143), p 80-85.

EUROPARC & IUCN (1999). Richtlinien für Management-Kategorien von Schutzgebieten. Interpretation und Anwendung der Management-Kategorien für Schutzgebiete in Europa. Grafenau.

Hammer, T. (Hrsg.) 2003. Großschutzgebiete – Instrumente nachhaltiger Entwicklung. München.

Henderson, N. (1992). Wilderness and the Nature Conservation Ideal: Britain, Canada and the United States Contrasted. In: AMBIO (21/6), p 394-399.

Meyer-Abich, K. M. (1990). Aufstand für die Natur. Von der Umwelt zur Mitwelt. München.

- Mose, I. & Weixlbaumer, N. (Hrsg.) (2002). Naturschutz: Großschutzgebiete und Regionalentwicklung In: Naturschutz und Freizeitgesellschaft (5). Sankt Augustin.
- Mose, I. & Weixlbaumer, N. (2006). A New Paradigm for Protected Areas in Europe? In: Mose, I. (ed.). Protected Areas and Regional Development in Europe. Towards a New Model for the 21st Century? London. (forthcoming).
- ÖAW (Österreichische Akademie der Wissenschaften) (Hrsg.) (2005). Leben in Vielfalt. UNESCO-Biosphärenreservate als Modellregionen für ein Miteinander von Mensch und Natur. Wien.
- ÖROK (Österreichische Raumordnungskonferenz) (Hrsg.) (1997). Naturschutzrechtliche Festlegungen in Österreich (135). Wien.
- Plachter, H. (1991). Naturschutz. Stuttgart.
- Schmidt G. (1995). Naturschutzplanung in Spanien. Verbindung zwischen Naturschutz und umweltverträglicher Entwicklung ein Modell für die ländlichen Räume Europas? In: Naturschutz und Landschaftsplanung (27), p 69-75.
- Slocombe S., Dearden Ph. (2002). Protected Areas and Ecosystem-Based Management. In: Dearden & Rollins (eds.). Parks and Protected Areas in Canada. Planning and Management, p 295-320. Oxford-N.Y.
- Weixlbaumer, N. (1998). Gebietsschutz in Europa: Konzeption Perzeption Akzeptanz. In: Beiträge zur Bevölkerungs- und Sozialgeographie (8). Wien.
- Weixlbaumer N. (2001). Gebietsschutzpolitik in Italien und Frankreich Welcher Umgang mit welcher Natur? In: Berliner Geographische Arbeiten (91), p 97-105.
- Weixlbaumer, N. (2005). "Naturparke" Sensible Instrumente nachhaltiger Landschaftsentwicklung. Eine Gegenüberstellung der Gebietsschutzpolitik Österreichs und Kanadas. In: Mitteilungen der Österreichischen Geographischen Gesellschaft (147), p 67-100.