

# Criteria for Biosphere Reserves in Germany

*In the spring of 2007 the German MAB National Committee adopted the revised 'Criteria for the Designation and Evaluation of UNESCO Biosphere Reserves in Germany'. Below we are publishing this new catalogue of criteria as well as some extracts from the introduction, with kind permission of the MAB National Committee. The elaborate explanations relating to the criteria are not included here. The authoritative version of these criteria will be published in the near future by the Federal Agency for Nature (BfN).*

## Introduction

In order to do justice to its international commitments the German MAB National Committee adopted 'Criteria for Designation and Evaluation of UNESCO Biosphere Reserves in Germany' in 1996. With the help of these criteria, in line with the international guidelines, several new applications for biosphere reserve designation have been assessed, as well as for changes in existing biosphere reserves. The national criteria implement a clear-cut international assignment, with the goal of developing a network of exemplary areas in Germany. At the same time the criteria contribute towards safeguarding and developing the quality of German biosphere reserves.

Ten years after the adoption of these first national criteria, the MAB National Committee in cooperation with the 'Permanent Working Group of the German Biosphere Reserves' (AGBR) decided that the time had come for a revision. The 'Working Group on Nature Conservation, Landscape Management and Recreation of the Federal States' (LANA) played a part in the process, resulting in a formal statement issued in autumn 2006. As before, the criteria are supported by scientific results and incorporate technical requirements on the one hand; on the other, they are based on extensive experiences made during the course of the regular evaluation of biosphere reserves in Germany to date.

Applications for designation of a region as a biosphere reserve are to be filed by the Ministry in charge at the respective Federal State. The application should be agreed upon by all Federal State Ministries or similarly confirmed by an overarching cabinet decision, in order to guarantee that, in future all biosphere reserve conservation and development goals are formulated and implemented in agreement. Three copies of the application are to be sent to the chairman of the MAB National Committee at the German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU).

The Secretariat of the German MAB National Committee at the BfN will check the application for accuracy and completeness. This being the case a technical assessment, carried out by the German MAB National Committee, will follow, carried out on the basis of the mentioned criteria. Assessing the area specified in the application in depth at the location itself is an essential method of work of the German MAB National Committee. It makes a reasoned decision regarding the application and whether to forward it to the Director General of UNESCO. According to UNESCO rules, three copies of the 'Biosphere Reserve Nomination Form'

are forwarded to Paris following a positive vote. UNESCO can request additional information from the German MAB National Committee or from the respective Federal State.

The highest ranking decision-making body of the MAB programme, the International Coordination Council (ICC) makes a decision on the application during one of its bi-annual meetings as does the so-called 'Bureau' in the interim. The decision is based on a professional vote by the International Advisory Committee for Biosphere Reserves after which the ICC may make a recommendation to the UNESCO Director General regarding designation.



**Core area of the Vessertal-Thüringen Forest Biosphere Reserve**

Photo © Lutz Möller

## Legal framework of Biosphere Reserves in Germany

Nature conservation and environmental protection in Germany are under the responsibility of the federal states. The statutory regulation for biosphere reserves varies from federal state to federal state. The framework of nature conservation is fixed in accordance with the federal authorities. Since 1998 biosphere reserves have been a category of protected areas of the Federal Nature Conservation Act.

According to § 25, para. 1, Federal Nature Conservation Act, the biosphere reserves are „areas designated on a legally binding basis as areas to be protected and developed on a uniform basis, that meet the following criteria:

1. the area concerned is of major size and shows the characteristic features of specific landscape types,
2. the criteria defined for 'nature conservation areas' are met in es-

sential parts of the area concerned, and the greater part of the remaining area meets the criteria defined for landscape protection areas,

3. the area serves the primary purpose of preserving, developing or restoring landscape shaped by traditional, diverse forms of use, along with its historically evolved diversity of species and biotopes, including wild forms and formerly cultivated forms of commercially used or usable animal and plant species, and
4. the area concerned serves as a model for the development, practical application and testing of particularly sustainable cultivation and management methods, taking account of vulnerable natural resources.”

§ 25, para. 2, Federal Nature Conservation Act obliges the federal states to

“ensure that biosphere reserves are developed progressively via core areas, buffer zones and transition areas, while allowing for the exemptions required in view of the size of the area and existing human settlements in the area, and that biosphere reserves receive the same level of protection as that afforded to nature conservation areas or landscape protection areas.

This lawful regulation of protected areas makes no explicit reference to UNESCO. Several federal states have passed laws to establish biosphere reserves in accord with federal law. Some federal state regulations require the designation as a UNESCO biosphere reserve whereas others differ from the MAB international guidelines. Many federal states had already laid down biosphere reserves in their own Nature Conservation Acts before this framework legislative regulation.

The Catalogue of Criteria consists of the 'application criteria' (A), which must already be fulfilled at the time of application on the one hand. The 'evaluation criteria' (B) on the other hand, need to be fulfilled imperatively, but after a grace period. Both types of criteria together describe the full set of goals of the biosphere reserve. The division of criteria into two categories does not place any particular emphasis on either of the individual criteria with regard to the goals of UNESCO biosphere reserves in Germany.

### Catalogue of Criteria

#### Structural Criteria

##### Representativity

- (1) The biosphere reserve must contain landscapes and habitats that, to date, are not well-represented by the biosphere reserves in Germany and which, as a result of their natural, cultural, as well as social aspects, are particularly appropriate for implementing UNESCO's MAB programme in Germany in an exemplary fashion, and for representing it internationally. (A)

##### Size of the area

- (2) The biosphere reserve should, as a rule, comprise at least 30,000 ha and should not be larger than 150,000 ha. Trans-federal-state biosphere reserves may have a total area

larger than this, if appropriate administrative resources are provided. (A)

##### Zonation

- (3) The biosphere reserve must be divided into core areas, buffer zones and transition areas. (A)
- (4) The core area must take up at least 3% of the total area. (A)
- (5) The buffer zone shall take up at least 10% of the total area. (A)
- (6) The core area and buffer zone, together, shall account for at least 20% of the total area. The core area shall be surrounded by the buffer zone. (A)
- (7) The transition area must take up at least 50% of the total area; in marine areas, this requirement applies to the land area. (A)

##### Legal Protection

- (8) The biosphere reserve's protective purpose, and its maintenance and development goals, both for the entire area and within the individual zones, must be safeguarded by legal ordinances – or through federal state and regional planning and programmes. On the whole, the majority of the area



Photo © Karl-Friedrich Abe

- must be under legal protection. The status of already existing protected areas must not be downgraded. (B)
- (9) The core area must be legally protected, as a national park or nature reserve or by similar lawful means safeguarding the goal of natural evolution. (A)
- (10) The buffer zone shall be legally protected as a national park or nature reserve or by similar lawful means if seen as being worthy of such protection or appropriate to its requirements, especially for reaching the goal of protecting biodiversity, in particular with regard to the genetic or biological and structural diversity as well as the diversity of use. (B)
- (11) Those parts of the transition areas that are worthy of protection shall be legally protected. (B)
- Administration and Organisation**
- (12) The biosphere reserve must be equipped with a capable and effective administration within three years of the designation of the biosphere reserve by UNESCO. Its set-up must be across scientific and administrative sections according to the three functions of the biosphere reserves. It must be equipped with the appropriate technical and administrative personnel as well as with the appropriate funds and equipment for carrying out its tasks. The application must include a commitment to provide the required institutional budgetary funds. (A)
- (13) The administration of the biosphere reserve must be organised as a part of the appropriate intermediate, higher, or highest Federal State Authority. The competencies of the biosphere reserve's administration and its cooperation mechanisms with other administrative entities should be dealt with at federal state-level. (B)
- (14) The area must be overseen by a full-time administration. (B)
- (15) The local population, the on-site responsible organisations and the stakeholders of the region must be involved as active partners in forming the biosphere reserve as an area for living, working and for recreation. (B)
- (16) In order to support the administration, suitable non-governmental structures and forms of organisation should be developed and involved as partners. (B)
- Planning**
- (17) A concerted 'framework concept' must be drafted and presented three years after the biosphere has been designated by UNESCO. The application must contain a commitment to provide the required budgetary funds. (A)
- (18) For those areas in the buffer zones and transition areas that are in particular need of maintenance and protection, maintenance and development plans shall be prepared within five years after designation of the biosphere reserve. Similarly, special planning schemes for the sustainable development of tourism, transport and settlement in the transition area shall be prepared within five years. The basis for these instruments shall be the 'framework concept' for the biosphere reserve. (B)
- (19) The goals of the biosphere reserve and the 'framework concept' shall be integrated as fast as possible within the federal state and regional planning and within landscape and urban land use planning. (B)
- (20) The goals for the protection, maintenance and development of the biosphere reserve shall be taken into account when updating other sectoral technical planning. (B)

## Functional Criteria

### Sustainable economic use

- (21) Sustainable forms of economic use and sustainable development of the biosphere reserve and of its surrounding region should be promoted and supported in all economic sectors and areas of life, in keeping with regional and inter-regional possibilities and resources. Relevant administrative, planning and financial measures shall be identified and listed. (B)
- (22) Ecologically sustainable forms of land use shall be developed on a long-term basis within the primary economic sector (farming, forestry, fishing and mining). In particular, land use must take the zonation of the biosphere reserve into account. (B)
- (23) In the secondary economic sector (crafts and industry) energy consumption, use of raw materials and waste management, amongst others, shall be geared towards the vision of sustainable development. (B)
- (24) The tertiary economic sector (services, inter alia in retail, transport and tourism) shall be geared towards the vision of sustainable development. Biosphere reserves must rise to this challenge, not least because of their significance as target areas for tourism. (B)
- (25) The public authorities are particularly called for to act as role models with regard to sustainable development. (B)

### Ecosystems and landscape maintenance

- (26) Goals, concepts and measures for the protection, maintenance and development of landscapes and habitats, as well as for regeneration of impaired areas, must be spelled out and implemented. (B)
- (27) Animal and plant biocoenoses and their habitat locations must be documented, taking into account species and biotopes listed in Red Data Books. Species and biocoenoses typical for specific ecosystems should be particularly considered. (B)
- (28) When interventions are made in ecosystems or in a landscape and when compensation and replacement measures are carried out, applicable regional visions and environmental quality targets and standards must be properly taken into account. (B)

### Biodiversity

- (29) Important sites for floral and faunal genetic resources must be specified and described; suitable measures must be designed and implemented for conserving these resources at the sites where they were discovered. (A)

### Research

- (30) Applied research targeted at implementation shall be carried out in biosphere reserves; basic research would also be considered. The focus fields of planned research shall be

## A Transboundary Biosphere Reserve for Korea?

The demilitarised zone separates North Korea from South Korea since the ceasefire in 1953. The 4 km wide and 248 km long buffer zone resembles the former inner-German border. The area has not been exposed to human influence of any kind for more than 50 years. Today it is a natural treasure trove with many rare species such as the red-crowned crane and the Eurasian black vulture.

This makes the demilitarised zone unique and particularly worth protecting. The Republic of Korea has looked at various international programmes; a biosphere reserve appears to be especially suitable. Since 2001 South Korean authorities, with the Ministry of the Environment in the fore, have been developing specific strategies and schedules for a 'Biosphere Reserve Demilitarised Zone Korea'. As a go-between, UNESCO and the MAB programme introduced the project to the People's Republic of Korea. North Korea has thus far rejected the suggestion be-

cause of the military situation; the South Korean government is nevertheless in favour of the project and last stated this long-term commitment in 2005.

An internationally recognised protected area scheme serves as a key for the demilitarised zone, as the ecological value has international implications and as it could support peace in the area. A biosphere reserve is appropriate in that conflict resolution and protection are important in and around the demilitarised zone and local communities should be able to develop in a sustainable fashion.

Compared to other transboundary biosphere reserves, the states of the formerly unified Korea have many things in common. However the political situation makes it improbable that the biosphere reserve can be established in the near future. The South Korean side continues to work on solid action plans and is taking possible one-sided

steps, in order to be able to take advantage of unexpected possibilities.

*This information was supplied by Suk Kyung Shim. She is in charge of the MAB programme at the South Korean National Commission for UNESCO and is currently doing her PhD in Berlin on the subject of the inner-German Green Belt and the Korean Demilitarised Zone.*



**The demilitarised zone at the inner-Korean border.**

Photo © Flickr Creative Commons: Daniel Brennwald

documented in the application for designation and also in the 'framework concept'. The research relevant to the biosphere reserve should be coordinated by the administration of the biosphere reserve, adjusted and documented with the researchers. The application must include a commitment to provide the required budgetary funds; alternatively, it must substantiate other sources of research funding. (B)

### Monitoring

(31) The necessary qualifications for carrying out monitoring in the biosphere reserve, in terms of staffing, technical equipment and budgetary funding must be fulfilled. (A)

(32) Ecological environmental monitoring in the biosphere reserve shall be adjusted to the general approaches to monitoring in the biosphere reserves in Germany, in the programmes and concepts of the European Union, of the federal government and of the federal states as well as with the existing routine monitoring programmes of the federal government and the federal states. (B)

(33) Data relative to the establishment and operation of national and international monitoring systems, whose collection is required by the MAB programme, must be made available by the administration of the biosphere reserve free of charge to institutions named for this purpose by the federal government and the federal states. (B)

### Education for Sustainable Development

(34) The content and structure of education for sustainable development as one of the central tasks of the administration should be laid down in the 'framework concept'

taking into consideration the specific circumstances of the biosphere reserve. Resulting measures should be implemented in the biosphere reserve on a long-term basis. (B)

(35) Each biosphere reserve must have at least one information centre with full-time staff present throughout the year. The information centre should be supplemented by non-central information offices. (B)

(36) Close cooperation should be sought with existing educational institutions. (B)

### Public relations and communication

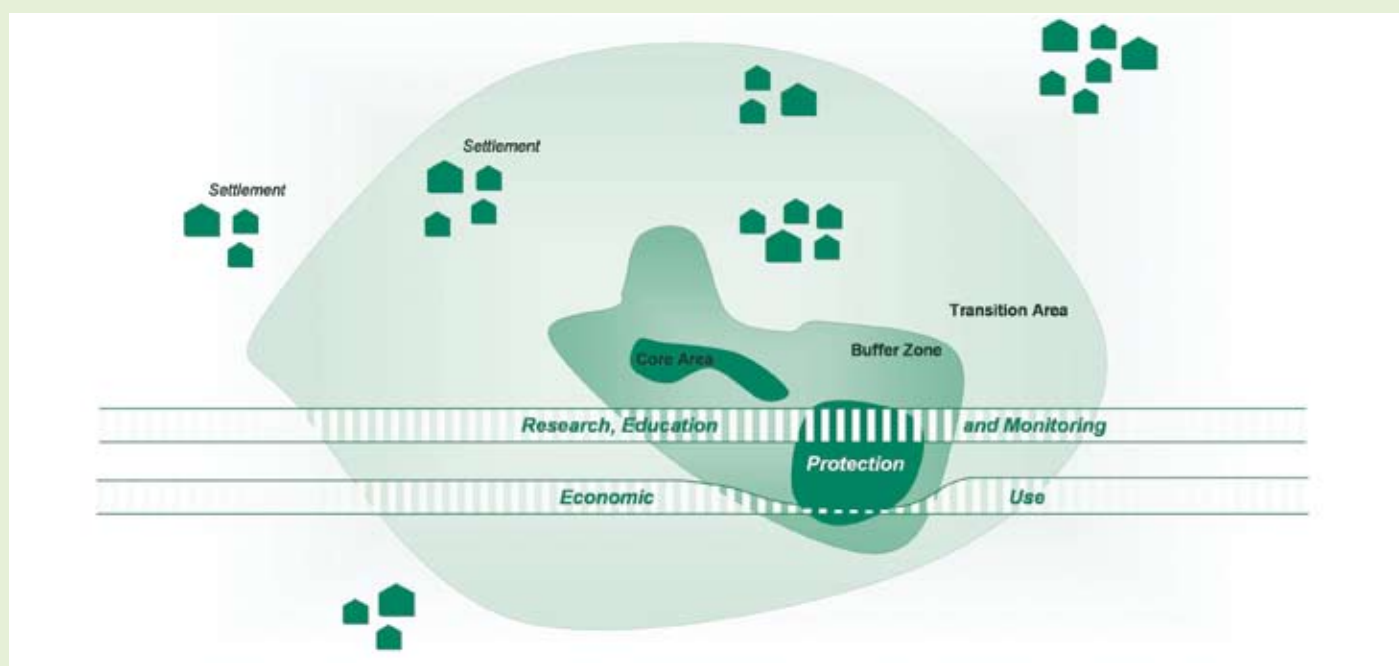
(37) The German biosphere reserves appear in public under the umbrella brand 'National Natural Landscapes'. (A)

(38) The biosphere reserve must do public relations according to an expert concept. Partners, from all walks of life, should be involved in the implementation of the MAB programme as a result of public relations activities of a biosphere reserve. (B)

(39) Regional networks should be established to encourage communication and to facilitate the balancing of interests. Consultants or moderators can be installed as supervisors. (B)

### Cooperation with the World Network

(40) Biosphere reserves shall make their contribution to the World Network according to the Seville Strategy and the international guidelines. Technical and funding qualifications for appropriate activities of the biosphere reserves must be fulfilled. (B)



### Zonation of a Biosphere Reserve

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