

Outdoor recreation destinations as model regions for adaption to climate change and protecting biodiversity

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Introduction

Outdoor recreation destinations depend on biodiversity, which is threatened by climate change, land use changes, but also by tourism. Key challenges for the future of these destinations include development of strategies to protect biodiversity and to integrate climate change issues. The Biosphere Reserve "Südost Rügen" (Baltic Sea coast), the Nature Park "Feldberger Seenlandschaft" (North German lowland) as well as the large protected areas "Feldberg-Belchen-Oberes Wiesental" (Black Forest mountain range) and "Allgäuer Hochalpen" (alpine area) are model outdoor recreation regions and cover the most important German landscape types.

Semi-structured interviews with stakeholders

First, we analyzed the individual perceptions of the central topics (climate change, tourism, biodiversity and their inter-relations) of different regional key stakeholders from recreation, nature protection, planning, local authorities, land managers, forestry, agriculture and regional development institutions through data collected in semi-structured interviews. Interviewees were selected according to the principle of maximum contrast (Hunziker, 2000). Study data suggest that there is sensitivity among all persons selected for the interviews that more efforts are necessary to protect biodiversity as a key resource for outdoor recreation. Climate change was not perceived to be a severe problem by many interviewees and many study participants expressed the believe that climate change would benefit tourism in Germany. These statements are also backed by other studies (e.g. Deutsche Bank research, 2008). Most interviewees do not feel it is necessary to take action on a regional level, which, however, is mandated by the German National Biodiversity Action Plan (BMU, 2007).

Workshops in the study regions

In each study region key stakeholders were invited to discuss their statements in informal workshops. By using focus groups (Krueger and Casey, 2009) and an open space approach (Owen, 2008) we offered stakeholders opportunities to bring in their own priorities and topics for coalition building.

In the workshops, we first presented results from the interviews with a focus on the study region along with findings from other regions. We also presented maps of perceived hotspots for biodiversity loss and impacts of climate change as well as impacts of tourism on biodiversity and climate. In the workshop, we discussed four core questions:

- 1) What is "biodiversity" in the context of tourism? How can tourism contribute to its protection?
- 2) Do energy landscapes, especially biomass production and wind farms as a reaction to limit climate change affect recreation? If so, how does tourism respond? Can outdoor recreation destinations influence energy landscape design?
- 3) How can climate-neutral mobility be enhanced?
- 4) What forms of cooperation between different stakeholders already exist in the model regions?

To stimulate discussion, we also presented examples from all regions identified as "good practice" by some of our interviewees. The intention was to test whether they were seen as suitable for all study regions. We presented eco-friendly accommodations, the eco-tax model of the Münstertal municipality in the Southern Black Forest, free of charge public transportation for tourists (Black Forest) and the legally binding planning category "tourism destination" or "tourism development destination" in the Federal State of Mecklenburg-Western Pomerania that bans the construction of wind turbines in the designated outdoor recreation destinations Südost-Rügen and Feldberger Seenlandschaft.

Results

Overall, quite little cooperation within the regions exists. The invited key stakeholders both from tourism and nature protection rarely meet to discuss tourism in the context of climate change and biodiversity issues in any of the study regions. Although managing institutions like park authorities and tourist organizations exist, a person or institution responsible for bringing together different stakeholders is missing. Only within the Biosphere Reserve some more intense approaches to stop climate change and biodiversity loss were seen.

As seen in the discussion with the participants, awareness for biodiversity in tourism is mainly related to landscapes patterns, colors and different vegetation types. However, there was a strong interest to raise awareness especially among tourism for the habitat and species level and this issue was identified as a main topic for cooperation and coalition building in the model regions.

No consensus was reached on wind turbines and their impact on recreation. In all study regions, a number of stakeholders perceive it as an attractive part of contemporary cultural landscapes and they were seen as landmarks for outdoor recreation destinations being part of the German energy revolution. Others demanded to provide recreational landscapes free from wind turbines. Landscapes without

wind turbines like those in Southeast Rügen were seen as having a “unique selling position” for marketing because they are distinct from other German and Danish coastal destinations.

Electrical powered bicycles were seen as the ideal means of climate neutral mobility for longer distances in all of the study regions. To some extent, this may compensate for a lack of public transportation in sparsely populated destinations like Feldberger Seenlandschaft or solve traffic congestions in Southeast Rügen.

In all model regions, interesting coalition building exists in improving management of visitor flows and awareness-raising among tourism for biodiversity on a species and habitat level. Tourism stakeholders were especially interested in promoting low-carbon emission accommodations as a key issue for marketing to gain extra bookings. Also the example of experiences with eco-taxes was of great interest in all model regions.

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