Developing a tourism zoning concept for the cross-border Morava-Dyje floodplains based on species sensitivity and stakeholder participation

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Introduction

The European Green Belt is comprised of valuable nature conservation areas with a high biodiversity of flora and fauna, which were left undisturbed except for some land use during the Cold War. Since the fall of the Iron Curtain in 1989 the Green Belt area between Austria and Slovakia has also provided recreation potential for millions of people who live in or near the "twin cities" of Vienna and Bratislava. The cities are only 60 km apart and connected by the floodplains of the Danube and Morava Rivers. In 1996 the Danube floodplains were designated as a National Park with an authority to regulate excessive recreational and touristic use by appropriate visitor management. No such measures have been applied to the Morava-Dyje floodplains as yet. This is despite its internationally recognised importance as a Trilateral Ramsar Site (together with the adjacent Czech area) as well as a Natura 2000 area.

This recent project aimed to address the intentions of the municipalities along the Green Belt to boost their economic development with nature-based tourism. While recreational activities may be an opportunity to raise people´s awareness of biodiversity, they may also pose threats to sensitive habitats and species.

In this bilateral project ("Ramsar Eco NaTour"), which was facilitated by the European Cross-border project funds (ETC AT-SK), sensitive as well as suitable areas and activities for nature-based tourism were identified. The process adopted a two-way approach: analysis of scientific data of the distribution of sensitive species and habitats, as well as participatory workshops to identify and locate residents` needs and visions for touristic and infrastructure development. The combination of both methods resulted in a zoning plan, which is intended to create a basis for future tourism development. This paper presents the first results.

Methods

Participatory collection of tourism data

The first step towards creating a zoning map in GIS consisted of collecting all available data on existing tourism- and environmental-education-related activities and infrastructure in the Austrian and Slovak areas. Large map prints (scale of 1:20.000) were provided for the use in participatory workshops. The workshops were held in communities in the region and mainly addressed stakeholders, but were also open to the public. A metaplan-technique (Schnelle 1991) was first used to collect people´s assessments of current activities and infrastructure, general ideas and proposals for future development, as well as "favourite places for personal experience". In the second step participants were asked to locate their inputs on the analog maps ("PGIS", or participatory GIS, Brown & Kyttä 2014). Preliminary results were presented to and discussed with the participants at the end of the workshops.

Collection and evaluation of nature conservation data

For the designation of zones, index species and habitats were assessed to fulfil two criteria: (1) priority species/habitat in terms of legal obligations or international treaties (Natura 2000, federal protected areas, Ramsar), and (2) sensitivity of the species or habitat to disturbance by the relevant touristic activity or infrastructure. The mapping of the index species and habitats was based on surveys and/or telemetric data (for tree-nesting birds, river-breeding birds, river morphology, habitat surveys, etc.) and meta-data from spatial planning processes (Alpine-Carpathian corridor, wind farm exclusion zones based on birds and bats). Parallel to this data collection, workshops with experts (biologists and landscape planners) were held to specify areas of particular importance on the basis of their local knowledge.

Production of zoning maps

The degree of species importance and sensitivity, as well as the experience factor, determined the classification into "protection zone" (areas where further touristic activity or infrastructure is not recommended), "experience zone" (areas with high experience value but also potential disturbance, where most developments would be subject to impact assessment) or "white zone" (with no restrictions besides the existing legal framework). The participatory input on recreation was mapped as "experience point" and "wish or proposal". For the discussion process, this input was displayed regardless of a potential overlap or conflict with nature conservation interests.

In total, nine workshops were held in the regions. Participants included mayors and other council representatives, tourism officials, nature conservation authorities and regional development agencies at various levels, land users, tourism enterprises, nature conservation and environmental education NGOs, etc.

Results: The zoning map

A concept for the development of nature-based tourism as well as a monitoring system (e.g. visitor management system) had been lacking the region so far. Thus, a draft concept was compiled to put the outcome of the participatory workshops into perspective. This concept identified target groups (families, 50+) and lifestyles (LOHAS, DINKS) as well as potential key tourist attractions (cycling, walking, canoeing, bird watching, environmental education).

The zoning map showed clearly that the experience value is the highest at the outskirts of the protection zone, because of the beautiful scenery and the spectacular species to be seen (such as white stork and other large bird colonies, nests or feeding grounds), as well as the relative ease of access. It also showed that new activities could be located just outside the protection zone if adaptation measures are applied to minimise disturbance (such as enclosed hides for bird watching).

Two potentially serious areas of conflict were revealed: cycling routes and canoeing. The (re)location of cycling routes has been reason for controversy within the area for years, since the existing Austrian routes (mostly on roads) are not attractive or safe for cyclists. Many cyclists prefer to use the routes along the Slovak side of the river. In the absence of bridges to allow regular border-crossings, the Austrian side loses out on potential tourists. It became apparent that necessary factual and background information is lacking in the municipalities, but "nature conservation" is often used as a scapegoat for deficiencies. The zoning map showed that re-routing would not harm nature-conservation goals in many places and compromises could be found.

Outlook

The approach of using scientific data combined with a participatory method seemed to open up new perspectives for the people involved in the process. It may even lead to a new culture of communication and should provide a framework to include authorities, stakeholders, residents and NGOs in the cross-border planning processes and the development of new projects.

Fig. 1. Section of a working map resulting from a PGIS-Workshop (17.2.2014).

References

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