

170 Funding outdoor recreational opportunities in Germany– conceptual foundations and state of literature and data

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A lot of the economic research on the management of visitors in recreational and protected areas focuses on the demand side (what makes visitors tick). It asks how management could relate/ react to the needs, interests, behavior of visitors to make the recreational experience worthwhile for these visitors. This is to a large extent due to the methodological advances in valuing recreational decisions. Comparatively, the amount of research on the supply side of recreational opportunities has been rather small.

The standard economic analysis of supply of other (e. g. consumer) goods (in economic terms private goods) focuses on the need to make the necessary resources available for the production of these goods, looks at the cost implications and sees how prices develop to cover these costs and how they fund the supply of these goods. This analysis has been applied to recreation as a recreational production process by Loomis & Walsh in their textbook in 1997. Within this approach, a public supply of recreational opportunities is combined with a household production involving time, money skill equipment to generate visitor use of the area (p.14).

I would like to propose a differentiation of their model, by pointing out that outdoor recreational opportunities are not managed jointly as a public supply (as in the National Parks in the USA), but that the major inputs to recreational opportunities (land, landscape qualities, water bodies, access, ancillary infrastructure, information about the opportunities and users' knowledge for use) are often provided separately, by different providers and funded by varying sources. This is the case in Germany and it can be observed in other countries as well. The inputs vary by the outdoor activity undertaken and the resulting necessary combination of inputs required. As a consequence, the analysis should be undertaken in an activity-specific manner, i. e. separately for hiking, biking, bathing, angling, mountaineering, canoeing, asf. and specific by the

inputs they require (e.g. for hiking access to land, trails, narratives, signs, visual quality).

As the inputs are provided separately, their funding sources vary. Here, the conceptual foundation relies on the distinction in economic theory which differentiates between public goods, club goods and private goods which are theoretically connected to ideal funding sources, taxes, member fees and prices respectively (Stiglitz, Rosengard 2015) Empirically, the picture is mixed and there is a variety of funding sources: Taxes play a prominent role with contributions from users as part of the association to undertake outdoor recreation activities. The funding sources of taxes are multisectoral and are of multiple sources from various federal levels, developed in a context of grantsmanship, making the total sources difficult to assess. With access to land and water bodies largely free in Germany, there are few expenditures for land purchases (as opposed to the USA), but the ancillary infrastructure and the necessary information have to be paid for and funded, similar to the USA, but the funding structure is different (cp. Banzhaf, Smith 2020). In addition, personal equipment, transport and lodging has to be funded, but in both areas via the supply structure of the respective markets.

I propose to use the approach of economics of supply to the management of recreational opportunities, to adjust it to outdoor recreation to provide an analytical framework and illustrate with a number of examples based on recreational outdoor activities. Based on this framework, I will summarize the available information on costs and funding, based on official statistics and the literature. The ultimate question is then how much of the expenditures made to fund recreational opportunities in Germany is discernible and how large is the share of governments?

The starting point is the analysis of the inputs necessary to gain a positive recreational experience (cp. Loomis, Walsh 1997): (1) A component of nature/the environment at a particular site central for the activity, (2) control over the use of this

component (3) access to the component from the residence of the user, (4) ancillary infrastructure at the site (usually man-made), (5) equipment for the visitor for his/her use at the site (6) training of the visitor using the equipment / (7) training of/ information for the visitor using the site (8) for tourists means for staying overnight. These inputs are managed by the visitors (5,6,7) and by a providing agency (1,2,3,4) which is usually thought to be a governmental agency, modelled after the US National Park Service. This is understandable given the development of the field, but it does not cover the variety to be observed in the field. In Germany, the available information of costs and financing is scattered among various stakeholders (various recreational associations and industries and selected government agencies), but an overall picture is difficult to assemble. The aim of the presentation is to provide a conceptual framework and to assemble available information, but not to give a complete and coherent summary of the costs and funding of outdoor recreation. Instead, an assessment of the existing situation and a gap analysis is pursued.

The supply of opportunities will be illustrated with examples of the inputs of specific outdoor recreational activities, e.g. angling, horseback riding, canoeing, rock climbing, alpine

skiing, hiking., based on the situation in Germany: Take angling as an example: For angling the central resource is the fish population in waterbodies (with some relevance of the surrounding landscape), which are privately and publicly owned (usually outside protected areas) and their angling use is rented to anglers' associations which manage the water body (maintain/improve the habitat) and the fish population (often restock them based on hatcheries). Anglers have to pass a competence test for which courses are provided by the anglers' clubs and they have to buy a permit from the association or the owner of the water body. Permit payments and membership dues and voluntary contributions cover the costs of maintenance of the water bodies and of governmental regulation. The visitors pay for their equipment and for access (important markets; particularly for offshore angling). External costs result from overstocking and are regulated. For some of these components, data are available on different levels, but it is not possible to assemble a complete picture based on publicly available information. (cp Arlinghaus, 2004).

References

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