

# A supply-side perspective on tourism enterprises in biosphere reserves – case study of Biosphere Reserve Rhön

**Felix Kraus**, Julius Maximilian University of Würzburg, Germany, felix.kraus@uni-wuerzburg.de;

**Cornelius Merlin**, Germany

## Introduction

In order to increase the positive impact of tourism on the regional economy, regional development agencies, politicians and researchers are focusing primarily on understanding the trend towards regionalization and regional labeling. Because of this shift, improving the efficiency of local business value chains is crucial. Such improvement strategies can be found in many rural areas in Europe, and are widely analyzed (Renting, Marsden and Banks, 2003; Ilbery and Maye, 2005).

The “Dachmarke Rhön” (DMR) represents a strong model for such improvements across the 15 German biosphere reserves. This article examines the supply-side linkages of the tourism business members of the DMR, and serves to answer the following research questions:

- Which types of companies are participating in the DMR trademark?
- How are these businesses integrating various value chains, particularly in terms of regional and non-regional buying?
- What types of management decisions are supported?

Finally, this study serves to provide the various management perspectives on this topic and through doing so to uncover the issues that local and regional supply chains may currently be facing.

## Case study Biosphere Reserve Rhön

Biosphere reserves are protected natural areas of the Man and Biosphere program of United Nations Educational, Scientific and Cultural Organization (UNESCO). These protected areas are designed to provide an opportunity to study the balance between nature conservation, biodiversity and sustainable economic development (MaB, 2008).

The peripheral mountain ranges of the biosphere reserve Rhön are located in central Germany (see map 1). Tourism to these mountain ranges is an important factor for regional development and a crucial source of income in the area and research shows that the biosphere reserve Rhön attracts a total of 6.37 million visitors per year. In total these visits generate a turnaround of €185.6 million per year (Job and Kraus, in press), proving the importance of the biosphere reserve as a tourism attraction for this rural area.

A common regional development strategy is to increase awareness for the region through integrated marketing campaigns. The content of the campaigns calls for cooperation from stakeholders and highlights the specific features and benefits of the area. The DMR network has been developed within the biosphere reserve Rhön with aims to promote the regional identity. In addition, as tourists are seen as an

important customer segment for local businesses, it aims to improve regional value chain efficiency specifically in order to support the growth of regional production.

## Theoretical background and methodology

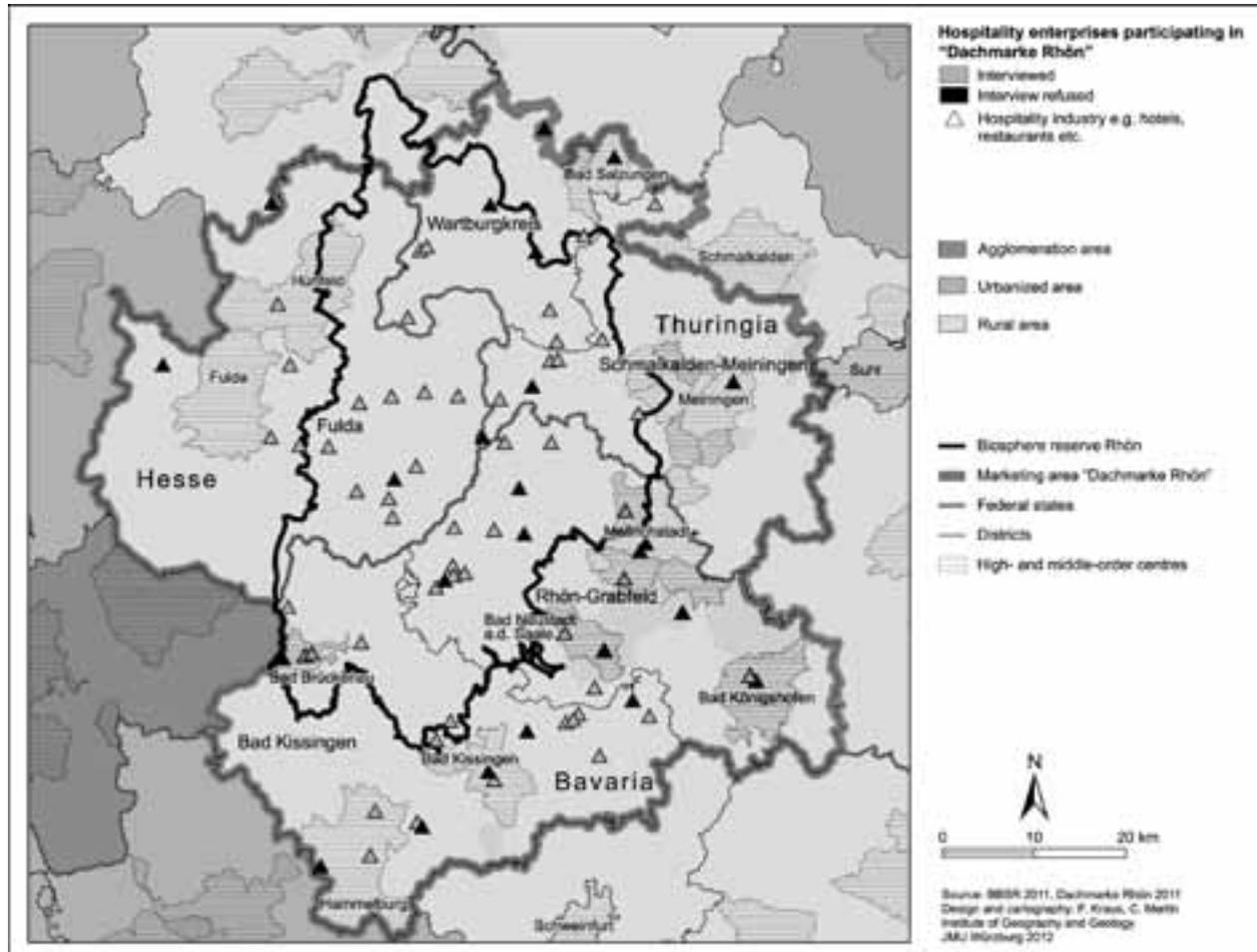
Several concepts including alternative food networks, short food supply chains and value chains are widely recognized tools for stimulating regional economies focusing on supply side activities. In order to promote sustainable economic development, these approaches aim to establish as many value-chain links (primary production, processing and consumption) as possible within a region. This does not mean economic autonomy for the given region, but rather greater access to regional value chains through increased regional collaboration and commodity flows (Rauch, 2009). One possible way of achieving this goal is through selling regionally produced goods in local businesses that experience a high rate of tourism. In doing so, the local population has the opportunity to increase prices of local goods in response to the increased product value perceived by visitors.

The Filière concept is one key in understanding these issues, and was used to structure this study conducted in 2011. It demonstrates a clear model for understanding commodity flows, singular steps of production, stakeholders involved and the geographic dimensions of a particular production process (Schamp, 2000). From this information, the ratio of regional and supra-regional economic relationships is derived, which can be used to evaluate the effectiveness of regional supply chains. 55 managers of tourism businesses within the DMR were interviewed using both quantitative and qualitative face-to-face interviewing techniques.

## Results

Within the sample of 55 tourism businesses, 14 served only food and beverages while the remaining 41 businesses also offered lodging. 85% of the managers interviewed employed less than 10 full time employees year round. The overall average turnover was approximately € 300,000. These employment and turnover figures confirm the small nature of the businesses included in this study, which is normal for this sector within the study area.

On the supply side, the results show that purchase linkages to trade and processing trade are most important for the generation of services. Within this group, wholesale costs are accounting for 31.6% of expenditures, despite the DMR promotion of cooperation between small businesses. The wholesalers are mostly located in the cities outside of the biosphere reserve and due to the characteristics of wholesale only a small proportion of the revenue remains within



Map 1. Study area and distribution of DMR businesses

the region. This highlights that there may be a gap in the market for small food processing companies and farmers located within the biosphere reserve. Currently only 37.5 % of total purchasing is sourced from within the boundaries of the biosphere reserve.

In addition, results show various types of purchasing patterns, which are dependent on the company philosophy and the managers' understanding of regional sourcing. Further-

more quantity, price, quality, availability of products and flexibility for buying are key drivers for purchasing outside the region.

The results highlight the opportunities and constraints in developing regional value chains within tourism and will inform future development of regional programs in biosphere reserves.

- Ilbery, B., Maye, D., 2005. Alternative (shorter) food supply chains and specialist livestock products in the Scottish–English borders. *Environment and Planning A*, 37(5), p. 823–844.
- Job, H., Kraus, F., in press. Regionalökonomische Effekte des Tourismus im Biosphärenreservat Rhön. s.l.
- Rauch, T., 2009. *Entwicklungspolitik. Theorien, Strategien, Instrumente*. Braunschweig: Westermann.
- Renting, H., Marsden, T.K., Banks, J., 2003. Understanding alternative food networks: exploring the role of short food supply chains in rural development. *Environment and Planning A*, 35(3), p. 393–411.

- Schamp, E.W., 2000. *Vernetzte Industrieproduktion. Industriegeographie aus institutioneller Perspektive*. Darmstadt: Wissenschaftlich Buchgesellschaft.

- UNESCO MaB (United Nations Educational, Scientific and Cultural Organization, Man and Biosphere Programme), 2008. *Madrid Declaration on the UNESCO Man and Biosphere (MaB) Programme and the World Network of Biosphere Reserves (WNBR)*. Paris.