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## **Opportunities for, and threats to, marketing regionally produced food: a consumer survey near the Elbe-Valley**

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# **Opportunities for, and threats to, marketing regionally produced food : a consumer survey near the Elbe-Valley**

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## **Abstract**

*The objective of this report is to present preliminary findings of a consumer survey<sup>1</sup> analysing the purchase behaviour towards regionally and environmentally friendly produced food in general and especially for food of nature conservation from the Elbe-Valley in Lower Saxony. The research was undertaken in June 1999 at three localities at and near the Elbe-Valley in Lower Saxony. The ongoing data analysis includes cross tabulations, factor analysis, regression, cluster - and conjoint analysis. The main findings at this stage are :*

- *Regionally produced food is bought out of preference by the majority of the sample.*
- *The Elbe-Valley, known by nearly 80 % of the interviewees, seems to have a quite positive image.*
- *Interviewees from Hamburg, Lüneburg and the Elbe-Valley indicated preference and 'willingness to pay more' for food from the Elbe-Valley, the last especially if it is food of nature conservation.*
- *Concerning the point of sale for regionally produced food, the majority of the sample showed acceptance of the idea of a mini-market in co-operation with shopping centres as well as of a mobile sale in rural areas.*

## **INTRODUCTION**

Within the European Union, regional marketing concepts are receiving increasing interest<sup>2</sup> - in particular in less favoured areas, such as the Elbe-Valley in Lower Saxony. This region, with its unique virgin landscape and diversity of biotopes and species, is particularly significant for nature conservation and part of the biosphere reserve *Flußlandschaft Elbe*. Besides tourism, farming represents the central economic base. The NNA<sup>3</sup>-Elbe-Project, run by 8 institutes, is looking at the central question, "How can agriculture and nature conservation be brought in accordance with one another ?". In this context and with respect to the competitiveness of the production area, the objective of the marketing-project is to develop a regional

marketing concept aiming to improve marketing structures supported by the attempt to add value by means of a regional brand strategy. A regional brand can only be based on the image and the peculiarities of the region (Besch/Prummer, 1997, S.329). Nevertheless previous economic studies (e. g. Hauser, 1994, S. 176), as well as the EU Regulations for the protection of regional brands (EWG 2081/92), state that the regional aspect on its own is not enough. Additional quality criteria are required. In this case, for instance, an environmentally friendly production system by means of regional models of nature conservation.

The objective of this report is to present preliminary findings of the consumer survey. In this frame, the central questions were :

- How frequently is regionally produced food purchased ?
- Are there preferences and willingness to pay more for regionally produced food from the Elbe-Valley as well as food of nature conservation ?
- What do consumers associate with the Elbe-Valley and especially with the term "biosphere reserve" (image of the region) ?
- Is there an acceptance of the two special outlets : Mini-Markets on car parks of shopping centres and mobile sale ?

The research was conducted in June 1999 at three localities at and near the Elbe-Valley in Lower Saxony. Detailed information of the research design are shown in Table 1 :

**Table 1 : Research design of the consumer survey "Buying behaviour for regionally and environmentally friendly produced food"**

<b>Objective :</b>	To examine the purchase behaviour for regionally and environmentally produced food – especially preferences for food of nature conservation from the Elbe-Valley	
<b>Survey :</b>	Consumer survey by face to face interviews	
<b>Place of survey :</b>	The survey was undertaken at Hamburg, Lüneburg and the Elbe-Valley, with each at two points of sales (shopping centres / super markets)	
<b>Sample :</b>	600 housekeeping persons with one third in each region : Sex : 70 % females and 30 % males Age : 4 quotas for age-groups with further restrictions	
<b>Object of research :</b>	Regionally <sup>4</sup> and organically <sup>5</sup> produced food as well as food of nature conservation <sup>6</sup> by means of a selected products	
<b>Analysis methods :</b>	Cross tabulations Factor analysis Regression analysis	Cluster analysis Conjoint analysis
<b>Criterion for measuring the relevance of consumers' attitudes for their purchase behaviour :</b>	Purchase intensity of regionally and organically produced food with the help of purchasing indices	

## PRELIMINARY FINDINGS AND DISCUSSION

The following pages briefly summarise the first results of the consumer survey.

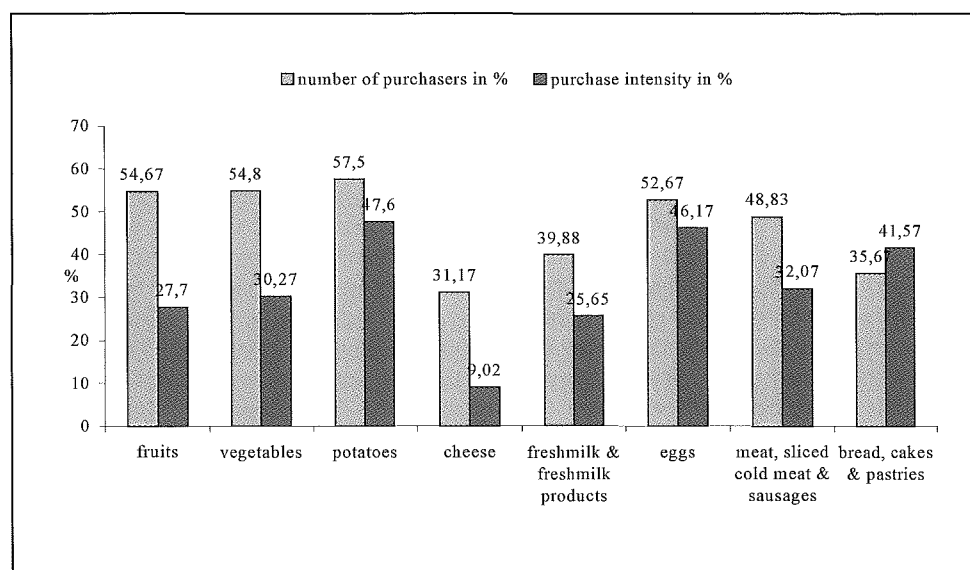
### Purchase intensity of regionally produced food

Regionally produced food is bought on purpose by 60 % of the sample. The buyers indicated to buy at least one

product intentionally originating from their own region. From figure 1, it can be seen that the most frequently bought regionally produced food are potatoes with nearly

60 % regional buyers and an average purchase intensity of nearly 50 % of the whole potato-purchase. The product with the least regional purchase intensity is cheese.

Figure 1 : Purchase intensity of regionally produced food



Question: Do you purposively buy regionally produced food, even if it is just in the case of one product? If yes, do you buy regionally produced fruits ... (etc.), if yes, is this – concerning the volume - more than 20, 40, 60, 80 or 100 % of your total fruit ... (etc.) purchase?

Source : Consumer survey June 1999

### Purchase criteria when buying potatoes

Although potatoes show a relatively high regional purchase intensity, table 2 indicates that the regional origin on its own is not sufficient. More important for the potato purchase – and as other studies show (compare e. g. (Wirthgen et al., 1999a, S. 245 ; (Wirthgen et al., 1999b, S. 143) as well for the general food purchase - seem be hedonistic- and health-orientated aspects like flavour, freshness, "not genetically produced" and healthy. The next important criterion is the German origin followed by the environmentally friendly and regionally production, while the aspects "of nature conservation", "controlled" and the general environmentally friendly production way is of much higher importance than the organic one (see table 2). An interesting result is the German origin being more important than the regional origin. This is probably strongly depending on the image of the region, as in Bavaria for instance, it seems to be the other way around (Balling, 1997, S. II-17).

Table 2 : Importance of criteria when purchasing potatoes (n = 600)

Criteria	Means <sup>7</sup>
<i>Hedonistic- and health-orientated criteria</i>	
Flavour	4.68
Freshness	4.61
Not genetically produced	4.44
Healthy	4.25
<i>Environmentally friendly production ways</i>	
Environmentally friendly production	3.90
"Controlled"	3.88
"Of nature conservation"	3.85
Low "nitrate" intensity	3.74
Organic production	3.21
<i>Origin</i>	
German origin	4.19
Regional origin	3.72
Origin-/Quality mark	3.35
Regional brand	2.32
<i>Price criterion</i>	
Price	4.44

Question : How important are the following criteria for your potato purchase ?

Source : Consumer survey June 1999

## The Elbe-Valley as one part of the biosphere reserve *Flußlandschaft Elbe*

After these general results towards regionally and environmentally produced food, the following findings refer to the Elbe-Valley of Lower Saxony being one part of the biosphere reserve *Flußlandschaft Elbe*.

The image of the region, as the essential base of a regional marketing concept seems to be quite positive. Attributes like "nice landscape", "relaxation" and "nature" were most frequently named by the respondents. These results can be considered as quite positive as the region is close to two nuclear power stations, contains an atomic waste bearing and additionally to that had big problems with the implementation of the national park "Elbtalaue". The population and especially the farmers of the Elbe-Valley combated this national park for the last two years and the debate is still not finished. These were - like expected - the negative aspects of this region, but unexpectedly stated each only by 1 to 6 % of the respondents knowing the Elbe-Valley. However, there were also many interviewees (22 % of the sample) with no associations at all. For this aspect, there are significant (at a level of 5 %) differences between the three survey places. Unexpectedly numerous respondents from Hamburg (the Elbe flows through Hamburg) almost do not connect anything with the Elbe-Valley. The region is much more known by the interviewees from Lüneburg and clearly as well by the interviewees from the Elbe-Valley. Quite a lot of people think of food. The most known regional products of the Elbe-Valley seem to be potatoes followed by fruits and asparagus.

The next question dealt with the consumers' knowledge about, and their associations towards the term "biosphere reserve". Is there - in the consumers' eyes - any positive effect for the image of the region and for food being produced in a "biosphere reserve"? The possible influence is clearly depending on the knowledge about this term. The term seems to be quite unknown (only 17.5 % gave a roughly correct explanation) and even often associated with negative aspects like limitations for private use and agriculture. These strong negative associations with this term in Hamburg, Lüneburg and the Elbe-Valley, could be influenced by the recent debate of the national park "Elbtalaue". Although there are as well some positive connections like nature conservation and healthier food, the term "biosphere reserve" is probably not an adequate term for marketing use - at least not in this region.

## Preferences and "willingness to pay more" for regionally produced food of nature conservation from the Elbe-Valley

Concerning the preference for food from this region, more than 1/3 of the interviewees stated that they would always prefer food from the Elbe-Valley. In the same statement battery, the consumers were asked about their attitudes towards food of nature conservation in comparison to conventionally or organically produced food. There is a similar preference indicated for food of nature conservation, which would be preferred by 40 % of the sample even if it were more expensive than conventionally produced food. Furthermore, it would be preferred by 1/3 of the sample if it were only a little cheaper than organic food. Roughly, 80 % of the sample share the opinion that food of nature conservation is better than conventionally produced food and nearly 50 % suppose that there is no difference between food of nature conservation and organic food.

Besides the indirect way of examining the importance of the price, there are also some findings from a direct question, measuring the "willingness to pay more" in the case of one litre fresh milk. Nearly 50 % of the sample would pay on average of 30 % more for the regional aspect "from the Elbe-Valley" and even 70 % of the sample would pay 36 % more for milk of nature conservation. For the combination of both attributes, they would be willing to pay an extra charge of about 43 %. Comparable acceptance (roughly 50% of the sample) was found for a 30 % extra charge for 1 kg flour and 1 kg beef each "from the Elbe-Valley" and "of nature conservation". These surprisingly high figures have to be put into perspective with the discrepancy between attitudes and behaviour (compare Meffert/Kirchgeorg, 1993, p. 96).

## Point of sale - acceptance of two special outlets : Mini-market<sup>8</sup> and mobile sale<sup>9</sup>

Concerning the point of sale for regionally produced food, the study aimed to examine the acceptance of two special outlets : on the one hand, mini-markets on car parks of shopping centres in Hamburg and Lüneburg and on the other hand a mobile sale in co-operation with delivering-service of a regional retailer. The idea of mini-markets in loose co-operation with shopping centres as well as the mobile sale were highly accepted by the interviewees. 80 % of the sample in Hamburg in Lüneburg stated that they would make use of such a point

of purchase. Additionally, they indicated that such a mini-market would increase their purchase frequency at the respective shopping centre. This aspect can be used to show shopping centres their profit of such co-operation. A similar acceptance for this special outlet was found in a first general study undertaken in several German cities (Wirthgen et al., 1999b). Compared to the mini-market, the idea of the mobile sale in the rural area seems to be less attractive, but was still wanted by about 60 % of the sample of the Elbe-Valley. 2/3 of these potential customers would be willing to pay an average extra charge of about 4.5DM per purchase. 40 % of these interviewees wish in addition to the regional offer, a basic product assortment of the regional super market. A supplementary offer of a home delivery-service seems to be of interest for more than 1/3 of the interviewees of the Elbe-Valley.

## CONCLUSION

Taking into account the positive consumers' attitudes towards regionally produced food of nature conservation from the Elbe-Valley, there are opportunities for integrated marketing concepts like e. g. for mini-market in loose co-operation with shopping centres. Nevertheless, there will probably be a problem of labelling products of nature conservation, as referring to a "biosphere reserve" did not prove to be a good solution. The term "food of nature conservation" might be a way, but it has to be considered that – for the consumers- this might be just another confusing "new" way of production and marking environmentally produced food.

## NOTES

- (1) The consumer survey builds one part of the marketing research activities of the Elbe-Project presented as whole by the poster.
- (2) In Germany (Wirthgen et al., 1999a, S. 243, (Hausladen/Besch, 1998, S. 1), (Besch/Prummer, 1997, S. 327), (Balling, 1997, S. II-17 ; in France (Trogon et al., 1999, p. 30) ; in the United Kingdom (Tzamaras, 1999, p. 48) ; in the Netherlands (Ittersum, 1999, p. 45) etc.
- (3) This Elbe-Project in Lower Saxony (as one of 25 Elbe-Projects financed by the BMBF (Bundesministerium für Bildung, Wissenschaft, Forschung und Technologie) is co-ordinated by the NNA (Niedersächsische Naturschutz Akademie).
- (4) Defined as produced and processed in the region – not more than 50 - 70 km away from ones' home.
- (5) Defined as produced without chemical pesticides and fertilisers.
- (6) Defined as especially considering the maintenance of nature, partly stronger and partly lower than the guidelines for organic production.
- (7) Scaling : 1 (very unimportant) to 5 (very important).
- (8) The interviewees of Hamburg and Lüneburg, standing in front of a shopping centre, were asked to judge the hypothetical situation, that on the car park of this centre, farmers from the Elbe-Valley would sell their regionally produced food.
- (9) The interviewees of the Elbe-Valley were asked to judge the hypothetical situation of a mobile sale offered by the farmers from the Elbe-Valley in co-operation with a regional retailer. The farmers would sell their regionally produced food and combine this service with a supermarkets' delivering service.

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