

Forest management or greed of gain? – A case study of forest visitors' attitudes on forest operations

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Abstract - The forest-based sector has problems with regard to its acceptance in the society: people like the forest and they also relish wood products but often they do not agree with forest operations. It is researched, whether information about forestry activities directly provided at the harvesting site reduces negative attitudes towards forest operations. This study investigates the impact of information boards at the harvesting site on forest visitors' attitudes. First, a hierarchical value map (HVM) was created to investigate possible attributes and values. Second, 51 interviews with forest visitors were conducted to identify a shift of attributes and values in the HVM. Results show that the info boards have a calming impact to the forest visitors' attitudes: the naming of critical attributes and values was reduced by half when the visitors read the information boards.

INTRODUCTION

The forest is in the centre of conflicting interests: It is the habitat of animals and plants, it produces the economic resource wood and it offers a recreation area for the society (AGDW – Die Waldeigentümer, 2015; Eriksson, 2012; Rüter et al., 2007). This is also visible in the perception of the forest-based sector. Studies show that the forest and wood products are popular with the society, although forest operations and wood processing are tainted with critical or negative emotions and society in general has inaccurate ideas to the activities of the sector (EU Commission, 2002; Rametsteiner et al., 2009).

Since the majority of forestland in Austria is privately owned with 120,000 owners with lots smaller than 200 hectares (Statistik Austria, 2008) of which 79% have some sort of agricultural background (Hogl et al., 2005), negative attitudes put them under pressure to fulfil often conflicting societal demands.

However, research has shown that the forest-based sector often communicates its economic role (Korhonen et al., in press) and some messages are not being perceived by people without personal involvement in the sector (Ranacher and Stern, in press).

The aim of the study is to explore how forest visitors' attitudes are influenced by reading information boards at the highly emotional setting of harvesting areas. The results make a contribution on how to inform the society about the services and products of the European forest-based sector and to revive its image. A definition by Fishbein and Ajzen (1975) note that "an attitude represents a person's general feeling of favourableness or unfavourableness toward some stimulus object". In this study attributes and values are used to express people attitudes by using a hierarchical value map.

Thus, the specific questions which are answered by this study are "What attitudes have the forest visitors to the use of wood?" and "What influence have the information boards on the attitudes of the forest visitors to the use of wood?"

METHOD AND RESEARCH DESIGN

The method of the research is a combination of quantitative and qualitative exploratory primary research. In the explorative, qualitative preparation study a HVM (Hierarchical Value Map) was created. For the development of the HVM 12 participants were chosen by convenience sampling and asked about their attitudes on forest operations. The sample differed in age, educational background, and their involvement in the forest-based sector. All of them use to visit forest regularly for recreational purposes. In structuring their answers by condensing similar responses a HVM was created, which is the foundation for the survey in the Vienna Woods.

Thereafter a quantitative survey, however with qualitative inclusions such as the laddering technique was conducted using the HVM to see whether the forest visitors' attitudes change when info boards are used. For this main part where we tried to get the attitude of the respondents we used an adapted version of the qualitative laddering method according to Reynolds and Gutman (1988). The interview with a semi-structured guideline had open and closed questions. Besides the questions as to favour and accordance to the info boards and socio-demographic data an association test is conducted.

The survey took place on two fair weathered weekends in April 2016 in the Vienna Woods at a recently harvested area between Gaaden and Hinterbrühl. On the info boards information on forestry activities, its impacts and wood use, was provided

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directly at the place of emotional concern. Every passer-by was asked if he or she wants to attend the survey, which fortunately was affirmed by more than 90%. To measure the effect of the info boards, there have been periods, where the information boards were disposed, and periods, where they were put away, this resulted in three different groups: One group of visitors when no boards were disposed, one group, that had the possibility to read the boards but did not read them, and one group of visitors, that read the boards. For the analysis, the first and the third group take our further interest, because they show the difference between forest visitors in their usual environment (without info boards) and visitors that used the ability to read the boards when they were presented. In total 51 people aged 23-82 were interviewed. For the evaluation of the HVMs it is usual to count the number of mentions (Reynolds and Gutman, 1988). Therefore, the mentioned attributes in the different groups were compared based on which ones were mentioned and how often.

RESULTS

An extensive HVM is the first outcome of the preparatory study. It uses a wide range of attributes and values – like 'furniture', 'paper', 'sustainability', but also 'destruction of the environment' or 'greed of gain' – to describe possible attitudes people may have concerning to forest operations like harvesting wood.

At the survey in the Vienna Woods it could be seen that most of the passengers were willingly to read the information boards, because they found them optical attractive and they wanted to get information about the harvesting area.

The survey data shows that the information boards have an impact on mentioned attributes. Main differences between forest visitors that read the information boards and visitors who did not, were identified for the attributes 'visual appearance', 'destruction of the environment', 'recreation area for humans' and to the ecologic value 'worries about the environmental compatibility'. All of these attributes and values were mentioned maximum half as often when the visitors read the info boards. It is assumed, that this conduct is substantiated in the factual enlightening content of the information boards.

CONCLUSIONS

The study shows that people connect critical attributes to forest operations. It further shows, that when confronted with information directly at the point of emotion i.e. the harvesting site, this critical attributes can be reduced. Therefore it is concluded, that providing information about forest operations can alleviate negative attitudes.

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REFERENCES

- AGDW – Die Waldeigentümer. (2015). *Wald mit ökologischem und nachwachsendem Rohstoff Holz muss in den Mittelpunkt rücken*. forstpraxis.de. Downloaded 15-12-23 from <http://www.forstpraxis.de/wald-mit-oekologischem-und-nachwachsendem-rohstoff-holz-muss-in-den-mittelpunkt-ruecken>
- Eriksson, L. (2012). *Exploring Underpinnings of Forest Conflicts: A Study of Forest Values and Beliefs in the General Public and Among Private Forest Owners in Sweden*. Society & Natural Resources, 25(11): 1102-1117.
- European Commission. (2002). *Perception of the wood-based industries – Qualitative study*. Luxembourg: Directorate-General for Enterprise.
- Fishbein, M. and Ajzen, I. (1975). *Belief, Attitude, Intention, and Behavior: An Introduction to Theory and Research*. Reading, MA: Addison-Wesley.
- Hogl, K., Pregernig, M. and Weiss, G. (2005). *What is New about New Forest Owners? A Typology of Private Forest Ownership in Austria*. Small-scale Forest Economics, Management and Policy, 4(3): 325-34.
- Korhonen, E., Toppinen, A., Lähtinen, K., Ranacher, L., Werner, A., Stern, T. and Kutnar, A. (in press). *Communicating forest sector sustainability: results from four European countries*. Forest Products Journal.
- Rametsteiner, E., Eichler, L., Berg, J., Aggestam, F., Zane, E.B. and Plumet, C. (2009). *Shaping forest communication in the European Union: public perceptions of forests and forestry*.
- Ranacher, L. and Stern, T. (in press). *Are your messages being heard? Evaluation of the forest-based sector's communication on sustainable forest management in Austria*. Yearbook of the Austrian Society of Agricultural Economics.
- Reynolds, T.J. and Gutman, J. (1988). *Laddering Theorie - Method, Analysis and Interpretation*. Journal of Advertising Research (JAR), pp. 11-31.
- Rüther, B., Hansen, J., Ludwig, A., Spellmann, H., Nagel, J., Möhring, B. and Dieter, M. (2007). *Clusterstudie Forst und Holz Niedersachsen*. Göttingen: Universitätsverlag Göttingen.
- Seebauer, V. (2013). *Querschnittsmaterie Wald - Europäische Forstpolitik*. Zuschnitt, 51: 14.
- Statistik Austria (2008). *Agrarstrukturerhebung 2007 – Betriebsstruktur*. Wien: Bundesanstalt Statistik Österreich.