Perceptions of Non-Commodity Functions of Mountain Farming in South Tyrol: A Report on Survey Results

Wahrnehmungen zur Multifunktionalität der Berglandwirtschaft: Befragungsergebnisse aus Südtirol

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Zusammenfassung

In diesem Beitrag werden Schlüsselergebnisse von im Jahr 2005 in der autonomen Provinz Südtirol durchgeführten, repräsentativen Befragungen von Bergbauern (n=343) und der Allgemeinbevölkerung (n=1020) zur Wahrnehmung der Multifunktionalität der Berglandwirtschaft präsentiert. Die Befragungen zeigen generell ein hohes Niveau der Akzeptanz sozialer und ökologischer Funktionen der Landwirtschaft in der Gesellschaft, wobei die Landschaftspflege als bedeutendste Funktion angesehen wird. Unterschiede in der Wahrnehmung der Funktionen können für die Pflege traditioneller Kultur, welche in ihrer Bedeutung durch die Bergbauern am höchsten eingeschätzt wird und für den Naturschutz festgestellt werden, welcher in der italienisch sprechenden Bevölkerung den stärksten Zuspruch findet. Generell weisen Bergbauern jenen Funktionen eine geringere Bedeutung als die Allgemeinbevölkerung zu, die mit einem stärkeren Einfluss der Gesellschaft auf die Allokation von landwirtschaftlich genutzten Flächen einhergehen.

Schlagworte: Berglandwirtschaft, Multifunktionalität, öffentliche Meinung, Befragung, Südtirol

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Summary

This paper reports key results of representative surveys of farmers (n=343) and the general population (n=1020) in the autonomous province of South Tyrol (Italy), conducted for the purpose of exploring perceptions of non-commodity functions of mountain farming. Results show a generally high acceptance of the non-commodity functions of mountain farming in South Tyrolean society, with the cultural landscape function being the most widely accepted throughout the population. Differences within the population can be identified for functions of cultural heritage, which is ranked highest by farmers and nature protection, ranked highest by the Italian-speaking population. Farmers give a lower ranking to those functions, which are connected with a stronger influence of society on the allocation of land.

Keywords: Mountain farming, Multifunctionality, Public opinion, Survey, South Tyrol

1. Introduction and background

Mountain areas all over Europe have been recognised as an important living space, especially viable for recreation and tourism, as well as important for the survival of the ecosystem (HOVORKA, 2007). The autonomous province of South Tyrol is characterised by the Alps and alpine valleys. Mountain farming is important with about 86% of the total area being located at an altitude of over 1000 meters above sea level. About 90% of the farmers' utilised agricultural area (woodland not included) is pastureland, of which about 27% is permanent (AUTONOME PROVINZ BOZEN, 2002a, 63, 73; 2003, 76).

The aim of this paper is to address and compare views of mountain farmers and the general population with respect to non-commodity functions of mountain farming in South Tyrol. In doing so, language is a fundamental issue. According to the 2001 census, 69.2% of the total inhabitants of South Tyrol (around 430,000) belong to the Germanspeaking population; 26.5% to the Italian population; and 4.4% speak Ladino (AUTONOME PROVINZ BOZEN, 2002b, 43). In the capital town of the province, i.e. Bozen/Bolzano, the language distribution of the German and Italian-speaking populations is the opposite of the overall distribution in South Tyrol. The share of the rural population is much higher in the German-speaking in comparison to the Italian-speaking

group. Furthermore, the mother tongue of almost 100% of the farmers is German (MAURER et al., 2006). Language is presumed to represent culture, which therefore leads to the assumption of differing preferences and perceptions with respect to mountain farming and its functions by ethnic groups.

2. Material and methods

In Europe, broad views of agriculture and its multi-functional character can be found among policymakers and scholars (BERGMANN et al., 2006; HUYLENBROEK and DURAND, 2003; LEHMANN, 2002; RICHTER et al., 2001; SINABELL, 2006 ZANDER et al., 2005), not only including functions relevant for the ecology and nature protection, but also for cultural and social sustainability. On the basis of such a broad view of multifunctionality, the following nine non-commodity functions of agriculture were chosen to be included in the design of two surveys, one of farmers (n=343) and one of the general population (n=1020) in South Tyrol in 2005:

Preservation and maintenance of landscape – Maintenance of traditional culture – Allocation of land for protection of nature and the environment – Allocation and maintenance of recreational land – Construction and maintenance of local paths/roads – Safeguarding against natural disasters (e.g., avalanches, mudslides) – Provision of social services (e. g. childcare, care-giving for elderly people) – Protection of water resources – Services on behalf of the local community (e.g., snow removal).

In the surveys, on a four-point scale, the respondents rated the importance of these functions between VERY IMPORTANT and TOTALLY UNIMPORTANT. The research design for the survey of farmers (n=343) included quota sampling, which accurately adjusted the sample structure to the parameters of mountain farming in South Tyrol for region and farm size. The personal interviews were conducted at the farms. The 1020 personal interviews with respondents from the non-farming population were carried out in towns all over South Tyrol and were done on the basis of a quota sample for towns, language groups, sex and age. Due to the small percentage of Ladino-speaking people in the sample (1.5%), statistical comparisons (Kruskal-Wallis H-Test) are only made amongst the farmers and the two main language groups.

3. Results

Tab. 1. Perceptions of the importance of non-commodity functions of mountain farming by farmers and the two main ethnic groups in South Tyrol

	Importance (%))
Function	Group ¹	n	very important	rather important	rather un- important	totally un- important
Maintenance of traditional culture	Farmers	343	71.1	22.4	5.8	0
	German	692	48.8	36.0	12.7	2.9
	Italian	287	42.9	33.4	20.2	3.5
Preservation and maintenance of landscape	Farmers	343	95.0	5.0	0	0
	German	694	70.5	24.1	2.6	0.4
	Italian	287	65.9	29.3	4.5	0.3
Construction and maintenance of local paths/roads	Farmers	343	66.9	23.5	7.9	1.8
	German	691	44.0	34.3	16.6	5.1
	Italian	287	41.8	32.8	16.7	8.7
Allocation of land for	Farmers	335	23.3	39.1	29.9	7.8
protection of nature and the environment	German	690	46.6	34.3	15.2	4.0
	Italian	286	57.7	29.0	11.5	1.7
Safeguarding against natural disasters (e.g. avalanches,	Farmers	341	70.4	22.3	6.2	1.2
	German	692	53.0	31.9	10.4	4.6
mudslides)	Italian	285	50.5	33.0	11.6	4.9
Provision of social services	Farmers	341	53.7	29.3	14.4	2.6
(e.g., childcare, care-giving for elderly people)	German	690	24.9	33.6	26.4	15.1
	Italian	282	22.3	31.6	27.0	19.1
Services on behalf of the	Farmers	183	53.7	29.3	14.4	2.6
local community (e.g., snow removal)	German	689	36.0	33.8	19.2	11.0
	Italian	282	35.5	38.7	17.4	8.5
Allocation and maintenance of recreational land	Farmers	341	17.3	34.9	31.4	16.4
	German	693	32.9	36.5	21.4	9.2
	Italian	286	37.1	36.4	15.0	11.5
	Farmers	216	63.9	31.1	4.7	0.3
Protection of water resources	German	692	59.8	30.1	7.7	2.5
	Italian	281	51.6	34.2	8.2	6.0

¹ Mountain farmers, German-speaking non-farming respondents, Italian-speaking non-farming respondents

Source: Surveys of farmers (n=343) and the general population (n=1020), 2005

In all nine functions, the high level of statistical significance (Kruskal-

Wallis H-test, $p \le .001$) of differences in perceptions mainly stems from differences amongst farmers and the two main ethnic groups in the non-farming population. In table 1, functions are presented in order of greatest difference between farmers and the general population (both language groups) in the category VERY IMPORTANT.

4. Discussion and conclusions

Based on two surveys conducted in South Tyrol in 2005, in this paper, mountain farmers' (n=343) perceptions of non-commodity functions of mountain farming are compared with those of the Italian and Germanspeaking non-farming population (n=1020).

The high ranking of non-commodity functions of mountain farming with respect to traditional culture and landscape by farmers might be closely connected to the traditional family farming value system (VOGEL and WIESINGER, 2003) which is centred around the intention of passing on the farm from one generation to the next. This intention results in a special perception of time, which makes farmers view their resources, e.g. farmland, in a long-term cultural perspective. Furthermore, considering the German population being a minority in Italy as a whole, the particularly strong attachment of the German speaking farmers to functions relating to the maintenance of traditions and culture might also express their resistance to "social and cultural encroachment through reliance on a traditional set of cultural responses" (COLE and WOLF, 1999, 272).

A remarkable difference in the ranking of importance between farmers and both non-farming groups of the population can be reported for *Provision of social services*: Only 17% of the farmers rank this function as rather unimportant or totally unimportant as compared to about 46% of the Italian and 32% of the German speaking non-farming population.

In comparison with the general population, farmers only ranked two functions, i.e. *Allocation of land for protection of nature and the environment* and *Allocation and maintenance of recreational land* lower in importance than the other groups. To them, these functions may not only represent a transfer of land use rights. More than that, they might fear a transfer of control rights over land from farmers to institutions of society. Here, conflicting opinions of farmers and the general population can be

identified, which indicates possible future areas of conflict regarding public financial support for farmers fulfilling certain non-commodity functions.

The assumption at the outset of the study was to obtain results with a significantly higher ranking of the importance of functions by the German-speaking non-farming group as compared to the Italianspeaking. This assumption was based on the identification of higher levels of affinity to rural life and farming in the German-speaking population. Anyhow, it is rather surprising that the differences in the ranking of the functions were not as great as expected. The Germanspeaking population ranked the importance of three functions moderately higher than the Italian-language group, two of these being traditional, non-commodity functions of agriculture (landscape and culture). There was only one difference found between the two language groups on a very high level of significance. The function Allocation of land for protection of nature and the environment was ranked VERY IMPORTANT by 58% of the Italian-speaking community, followed by 47% of the German-speaking non-farming population. Finally, farmers rank this function lowest for VERY IMPORTANT at about 23%. It should be noted that this is the function, which is the least important of all nine functions to the farmers. From the point of view of environmental sociology, this ranking may indicate - an "urbanrural value-gap", showing that environmental concerns are more widespread in urban populations in contrast to rural populations. The ranking with the highest share of votes for VERY IMPORTANT in the Italian population might interact with a declining sense of connectedness to mountain farming.

Overall, the ranking of importance of functions may be shaped through differences developed in larger historical and cultural processes. Through the historical autonomy of the Tyrolese rural settlement and the fact that historically the lives of the German-speaking were linked to South Tyrolean agriculture as main source of income they formed and preserved their South Tyrolean identity with a special attachment to territory, rural areas, agricultural land, farming and rural traditions. The major part of the Italian-speaking population descends from settlers in the last century. The Italian-speaking still do not perceive themselves as South Tyroleans and are not perceived as having developed a specific South Tyrolean identity (ZAPPE, 1996).

Differences of perceptions between societal groups might also be rooted in knowledge gaps. One such example can be identified by evaluating perceptions of the importance of *Safeguarding against natural disasters*. Because of the growing number of natural disasters (mudslides, avalanches, etc.), and the wide-spread reports about them in the media, paired with an assumed climate-change scenario, the remarkable difference in the perception or awareness of the importance of *Safeguarding against natural disasters* between farmers (around 70% responded VERY IMPORTANT) and both groups of the general population (53% of German-speaking interviewees and 50.5% of Italian-speaking responded VERY IMPORTANT) is astonishing.

Adjusted information policies can form a basis for the future understanding of mountain farming functions and should also fill some knowledge gaps in society in the evaluation of the importance of some functions. Finally, for purposes of policy design, farmers' associations and governmental institutions should be aware of the differences in societal perceptions, i.e. farmers' readiness to provide non-commodity functions of agriculture on the one hand and taxpayers' demand for functions on the other hand.

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