Determinants of interest in mountain food products: A European crosscountry study

Cleo Tebby, Georges Giraud and Corinne Amblard¹

VetAgro Sup, c.tebby@vetagro-sup.fr; g.giraud@vetagro-sup.fr; c.amblard@vetagro-sup.fr

Abstract: Developing and promoting mountain food production is a way to encourage sustainable development of mountain areas, which are generally rural areas, with specific geographic and climatic constraints. A key interest lies in identifying consumer propensity to purchase "mountain-type" food. The present paper measures the adequacy between a) the importance of a set of characteristics as consumers' food purchase criteria and b) the appeal of these characteristics in mountain food products according to retailers, in five European countries. We used a weighted adding procedure that produced an index of fit, showing which consumers have purchase criteria that match best the mountain product characteristics. The socio-demographic characteristics, purchase behaviour, and the perception and expectations of mountain food products of the consumers whose purchase criteria match best were then identified by means of a statistical criterion. The results show that consumers most likely to be interested in mountain food products are older, more often women, and more often from Austria. They more often purchase preferably at producers or speciality shops rather than in supermarkets and pay more attention to environmental and social issues when purchasing food. They expect to find mountain products in short supply chains. They tend to link mountain food products with supporting local employment and regional culture, and are stricter on the mountain origin of raw materials and on processing in mountain areas. They are more favourable towards a governmental/EU label for mountain food products. The results meet those of previous research on environmentally-friendly or regional food products.

Key-words: mountain food products, consumer purchase criteria, weighted adding.

Introduction

Mountain areas were defined at a European level in 1999 (EC, 1999). They cover 40.6% of the European territory (EU 27, Norway and Switzerland) and are inhabited by 19.1% of the European population (Nordregio, 2004). Maintaining and developing food production and processing in mountain areas can be a way to preserve economical activities, counteracting the negative effects of geographical and climatic constraints. The market for mountain food products (MFP) could be supply-, subsidy-, and demand-driven. Even in organic farming for example, where subsidies are very important in production, a steady consumer demand is a paramount for the market development (Michelsen et al., 1999). A central question is how mountain foods may be marketed in order to generate revenue for the mountain areas.

The mountain origin is a characteristic that can be appealing in itself as it conveys appealing symbols, but it can also act as a quality cue hinting to other characteristics, as is the case for instance with the indication of region of origin (Stefani et al., 2006). The geographical and climatic constraints in mountain areas imply that the methods of production and characteristics of the products are different from those of non-mountain food products (Euromontana, 2006) and cannot be dissociated from the mountain origin in itself. Mountain food products can also be viewed as regional products, with the specificity that mountain areas in Europe form a discontinuous region (Ambrosini et al., 2008). Regional products can be purchased by consumers to satisfy their need for distinctiveness with respect to food, to support, protect and reflect their own identity, to preserve and defend the own culture and identity, and to learn about other regions (van Ittersum, 2002). In the region of

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production, the consumption of local products by consumers can also reflect ethical and environmental concerns (Tregear and Ness, 2005). Mountain products may however not benefit from the same expectations as do regional products, as the expected value of food is higher for narrowly defined areas (Stefani et al., 2006) and mountains cover a vast area in Europe. Mountain products will therefore be considered as a distinct type of product in the present paper.

The EuroMARC project (European Mountain Agrofood products, Retailing and Consumers, SSPE-CT-2006-044279), an EU-funded research project, investigated consumers' general food habits and expectancies with regards to mountain food products as well as mountain food retailers' perception of mountain foods.

The present paper compares consumers' purchase criteria with characteristics of mountain products which may appeal consumers from the point of view of retailers, who have knowledge both of the consumers and of the mountain products. Distributors are indeed often used as sources of information on the end-users (Grunert et al., 1996). The importance of purchase criteria that consumers have for given product categories are compared with the appeal of mountain food products' characteristics, as seen from the retailers, in order to identify the consumers who are the most likely to be interested in mountain food products. The adequacy between the consumers' purchase criteria and the mountain product characteristics was assessed by a weighted adding procedure: the importance of each characteristic as a purchase criterion was weighted by the centred mean appeal of the characteristic as seen by the retailers. The sum of this product over all characteristics was used as an index of fit, showing which consumers have purchase criteria that match the mountain product characteristics. Characteristics of the consumers whose purchase criteria fit best were then identified by means of a statistical criterion.

Material and Methods

This paper is based on the data from five European countries: Austria, France, Norway, Scotland, and Slovenia. The data was collected in two surveys, a consumer survey and a survey of retailers carried out in 2008.

Methodology and questionnaire construction

The development of mountain food products would be fostered by an increase in consumption of these products. A prerequisite is that the products are available and accessible to consumers. Therefore, part of the study consisted in a survey of retailers. Secondly, market-orientation is well-known as a key factor of success (Grunert et al., 1996), meaning that assessing consumers' expectations and demands is essential: these were studied in a consumer survey on general food purchasing habits and attitudes and expectations regarding MFP.

Retailer questionnaire

Direct retailing by producers plays a small part in the supply of food products to consumers nowadays, generally retailers act as the link between production and consumption and have knowledge of consumers' general expectations, whether they are small independent retailers or super-/hypermarket chains.

The first step of this research will be to gain knowledge on the perception of mountain food products by retailers and how these products can appeal to consumers. The questionnaire will thus comprise five-point Likert scales (one to five) measuring the appeal of a set of characteristics in mountain food products. **Table 1** lists these characteristics.

Table 1. Items used for comparison of MFP characteristics and purchase criteria.

Abbreviation on graphs	Items suggested
Price	Price / Value for money
Dist	Short distance from producer to consumer
Scale	Support to small scale production
Local	Local origin
Brand	Well-known brand
Env	Environmentally friendly production

Consumer questionnaire

There are several approaches to studying consumer decision processes. Consumers can be assumed to be rational decision makers with well-defined attitudes that condition their behaviour, according to the theory of reasoned action. In this case measuring the attitudes of consumers regarding a product category partly enables us to predict the purchasing behaviour regarding this product category. Experimental methods are also used on samples of consumers to predict their behaviour in real-life situations. For example, conjoint analysis can be used to explain and predict consumer preferences according to the preferences of test persons (Anders, 2003; Green and Srinivasan, 1978). In this case a series of cards representing food products could be shown to the consumers displaying different characteristics, including whether or not the product comes from a mountain area for example. Many methods of estimation of the consumers' willingness to pay enable us to estimate the demand for goods (Wertenbroch and Skiera, 2002), such as the contingent valuation method (e.g. Skuras and Vakrou, 1999) or the price premium for a given category of products, for example specific regional products (van Ittersum, 2002). However, many of these methodologies are not quite adapted to the question of MFP: the following section justifies the choice of a different methodology, accordingly to mountain product specificities.

Several factors influenced the selection of the methodology for studying the potential appeal of mountain food products to different types of consumers: 1) mountain food products are not currently defined as a specific product category, 2) the methods should minimize social desirability bias, 3) the mountain origin is strongly associated with other product characteristics related to the environment and methods of production, 4) to enable respondents to focus fully on the issues and to ensure the most reliable data collection, the questionnaires or exercises must not be too long or require extensive cognitive effort. These issues are detailed hereafter.

The European Charter for Mountain Quality Food Products (Euromontana, 2006) provides a list of characteristics that should define a mountain quality product. It had 69 signatories in August 2009, but there is no official definition or certification label for mountain foods in the countries of this study: there was only a temporary official label in France (though without controls) from 1985 to 2005 (Ambrosini et al., 2008). Studies have showed the unfamiliarity with a product category leads to equal weighting of attributes instead of focusing on the most important attributes (Coupey et al., 1998). If we interview consumers solely on mountain food products as a specific product category, they would not know which characteristics are important. If we interview consumers simply on whether mountain origin is attractive in a familiar food product category (dairy products for example), then we may collect a strong social desirability bias. Also, mountain food products have specific characteristics: the natural environment can directly have an impact on some product intrinsic qualities and also have indirect effects via the constraints exerted on human activities (Euromontana, 2006). The word "mountain" may not convey all these characteristics, therefore it is important to know which of the individual characteristics are important and appealing for consumers. We therefore collected information on consumers' food purchase criteria, some of these criteria being specific attributes of mountain food products.

The final questionnaire for consumers comprised a series of Likert scales for scoring the importance of a series of possible criteria in purchasing given product categories. Asking about purchase criteria for all food products in general would have proved difficult and yielded inaccurate results. When choosing between several products of the same type (several types of water for instance), the

consumer will trade off some values for other more salient values, the values being specific to each choice situation and thus to each type of product (Sheth et al., 1991). Even within a product category, for example fresh veal (Loureiro and McCluskey, 2000), the willingness-to-pay, or the desirability, given an extrinsic quality cue such as a geographical indication can vary according to specific characteristics (i.e. the cut). For comparison with MFP characteristics, we focused on product categories that could be produced in mountain areas, but covering the whole range of products with each consumer would have proved off-putting. We selected dairy products, fruits and vegetables, meat products and water. The consumers were finally interviewed on two different categories of products according to the country (**Table 2**).

Table 2. Products referred to in the consumer survey in each country.

	Austria	France	Norway	Scotland	Slovenia
Product No.1	Cheese	Apples	Meat	Cheese	Dairy products
Product No.2	Water	Water	Fruit & Veg	Venison	Meat

The aim is to know the weight of a series of attributes that the consumers may use when they work out whether to buy a food product, which means they explicitly estimate the weights they would use in an weighted adding decision process (Bettman et al., 1998). The criteria used were common purchase criteria (such as price) as well as criteria for which mountain food products could be distinctive (such as small scale of production). The importance of these purchase criteria were then compared with the appeal that retailers attribute to mountain food products on these same criteria.

The questionnaire also included sections on demographic characteristics (gender, age, occupation, etc.), decision-making processes (mountain product consumption occasions, place of purchase of the four food categories) and value perceptions (perception of mountain products, etc.), as these characteristics can all have an effect on the purchasing behaviour (Grunert et al., 1996). These were worded as open questions, categorical closed questions as well as Likert scales (**Table 3**). These questions are used in the second part of the analysis in order to characterise consumers whose purchase criteria fit best the MFP characteristics.

Table 3. List of questions in consumer questionnaire.

Question 1. Where do you most frequently buy A) dairy products? B) meat? C) fruits or vegetables? D) water?

Questions 2 and 3. How important are the following factors when you buy food product...(See Table 2)?

Question 4. What would you call mountain food products, or mountain drink products? Do you have an example? First example

Question 5. What kind of food or drinks would you call "mountain quality products"? First example

Question 6. Have you ever bought food coming from a mountain area such as ... and ...?

Question 7. Can you quote what sort of product it was?

Question 8. Below we have a list of statements regarding mountain quality products. We ask you to rank them on a 1-5 scale according to how much you agree with them.

Question 9. Where do you think these mountain quality products are available?

Question 10. For which occasion would you buy such mountain quality products?

Question 11. Do you think that for MFP there should be a governmental/EU label to certify that these products really are mountain products?

Question 12. Where do you live?

Question 13. In which year were you born?

Question 14. Your gender?

Question 15. How many years of education do you have, or what level of education did you complete?

Question 16. What is your occupation?

Data collection

The consumers were recruited according to databases of people willing to answer surveys, by adverts, self-recruited, or interviewed in the street, taking care to interview respondents in mountain and in non-mountain areas, and in rural and urban areas, however the proportions of respondents from the different locations varied according to the country. A total of 1604 consumers were interviewed. The number of respondents in each country is shown in **Table 4**. The consumer survey

was administered either on internet or face-to-face or on paper with indications from the interviewer depending on the country.

The retailer survey was aimed at a variety of outlets, from direct-retailers to members of supermarket chains. Owing to differences in retail structure and differences in terminology between the countries, there are considerable differences in sample between the countries. Some types of outlets do not answer as readily as others, which means that the answers collected may not reflect the perception of all retailers. The retailer survey was sent by post, and, in order to collect enough responses, in some countries the retailers were then approached to encourage them to fill in the survey. 424 retailers returned the questionnaire, of which 313 sold MFP.

Table 4. Number of respondents in consumer survey in each country.

	Austria	France	Norway	Scotland	Slovenia
Number of respondents in consumer survey	338	359	303	302	302
Number of respondents in retailer survey who sold mountain products	82	53	35	69	74

Method to assess the adequacy between purchase criteria for food and MFP characteristics

In the consumer survey, the respondents had to answer "How important are the following factors when you buy this food product?" for two different food product categories (not specifying "Mountain food"), by rating a set of items on a scale ranging from one (Not important) to five (Very important). In the retailer postal survey, the retailers had to focus on one MFP and answer a series of questions, including "Which of these characteristics ought to appeal to consumers for your MFP?" by rating the items on a scale ranging from one to five.

We base the analysis on the idea that if the factors that are most important for consumers are the characteristics that ought to appeal most to consumers in the MFP (according to the retailers), then the consumers are likely to find MFP appealing.

The calculation must assign a high index to consumers who give high scores on the most appealing characteristics. We shall use a weighted adding procedure, adding the importance of the purchase criteria that are appealing characteristics and subtracting the importance of the purchase criteria which are not appealing characteristics. As the retailers estimated the appeal of characteristics on a Likert scale, we are able to use the mean scores of the appeal of the characteristics as weights in the calculation. These weights are centred so that consumers with high (resp. low) scores on all items do not obtain high (resp. low) indexes, thus allowing for individual variations in the use of scales, which is an important issue in cross-cultural research:

$$c_j = b_j - \overline{b_j}$$
 with b_j the mean appeal of item j. $\sum_j c_j = 0$

For consumer i, $Score_i = \sum_j c_j x_{i,j}$ with $x_{i,j}$ the score for consumer i on item j. Thus a positive

(resp. negative) score would be assigned to consumers with high (resp. low) scores on appealing characteristics and low (resp. high) scores on non-appealing characteristics, and a 0 would be assigned to consumers with the same score on each item. We shall name this score the adequacy index.

For each consumer, we calculate two adequacy indexes: one between the purchase criteria of the product no.1 and the mean appeal of the characteristics of MFP and one between the purchase criteria of the product no.2 and the mean appeal of the characteristics of MFP.

Variable characterisation procedure

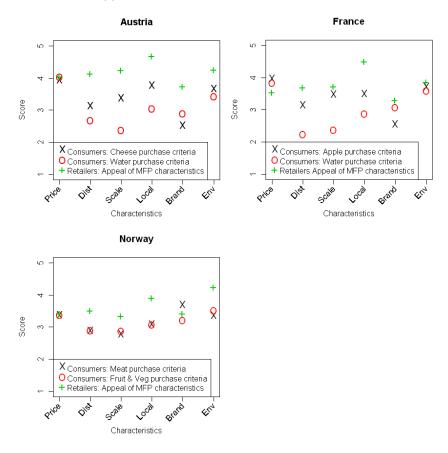
We shall estimate the effect of a series of variables, both categorical and numerical, on one numerical variable, the adequacy index, in order to identify characteristics of consumers with high scores (who could be interested in MFP) and of consumers with low scores.

Statistical tests such as t-tests enable us to determine whether the effect of each variable on the "response variable" is significant, assuming that the response variable has a normal distribution. We are using large sets of variables; instead of defining a very restrictive threshold as with the Bonferroni correction to avoid the occurrence of many type I errors, we wish to avoid defining a level of significance as a strict cut-off value; we shall thus use test values as indicators of the importance of each variable and rank the variables in order of significance, using the convenient Desco procedure included in the Spad software, version 6.0.1. This sorts the variables according to their relevance (Morineau, 1991). However, to avoid presenting very large tables of results, we do use a cut-off level, but remind readers that variables that are near the cut-off value could very easily be discarded as not having a significant effect. The relevance of a variable is based on a statistic, the test-value, based on a comparison of means or a test of the correlation coefficient, depending on whether the variable is categorical or numerical.

Results

Descriptive comparison for each country

The consumers were interviewed on two different categories of products according to the country (**Table 2**). As we assume that purchase criteria are different from one product category to another, the purchase criteria need to be analysed separately in each country and for each product category. On the other hand, in the retailer survey, the appealing characteristics were asked about the product that the respondent chose to describe. However, the retailer postal survey data analysis shows that for most product categories chosen, the appealing characteristics were similar, therefore the mean value of the appeal of MFP characteristics was calculated over all retailers' answers.



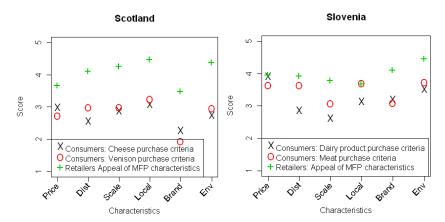


Figure 1. Superimposition of consumers' mean purchase criteria for given products and mean appeal of MFP characteristics according to retailers in each country. See **Table 1** for caption.

Figure 1 gives an overall idea of how the consumers' purchase criteria match the mountain product characteristics. In all countries, the price is an important purchase criteria but it is not one of the main characteristics the retailers think will appeal to consumers. The local origin is an appealing characteristic of mountain products in all countries except in Slovenia although the products the Slovenian retailers focused on are either local, or at least from Slovenia. The local origin and the environmentally-friendly production are not particularly valued by the Norwegian consumers whereas they are appealing in MFP according to the Norwegian retailers. A well-known brand is neither appealing in MFP according to the retailers nor a purchase criteria for consumers in Austria, France and Scotland. In Slovenia, a well-known brand is relatively appealing on the mountain products and is an important purchase criterion. The Norwegian retailers consider that the brand is not a major appealing characteristic of their products but the brand is an important purchase criterion for meat rather than for fruits and vegetables.

The items suggested reflect a variety of purchase criteria, and we do not expect all consumers to rank these purchase criteria the same way: the items are not expected to measure one single construct. Cronbach's alpha was calculated for both products in each country; its value ranged from 0.53 (cheese, Austria) to 0.84 (venison, Scotland), and the mean was 0.66. This value is relatively low, meaning that the scales do not measure one single construct, and thus confirms that relative importance of items varied according to the consumer. This is precisely what this study relies upon in order to determine which consumers are more sensitive to mountain-type food products.

Identification of consumers with "mountain-type" purchase criteria

Selection of the product category in each country

The adequacy is calculated between the each consumer's purchase criteria and the mountain product characteristics claimed by the retailers from that particular country (mean results in Table 5). The characteristics of mountain products meet best the purchase criteria in Scotland for venison meat, they also fit relatively well in France for apples, in Austria and in Scotland for cheese and in Slovenia for meat. They do not fit well either in France and Austria for water, or in Slovenia and Norway for meat.

Table 5. Mean adequacy between mean appeal of MFP characteristics (calculated in each country) and consumers' purchase criteria in each country.

		Austria	France	Norway	Scotland	Slovenia
Mean adequacy index	product No. 1	Cheese	Apples	Meat	Cheese	Dairy Products
		0.54	0.42	0.078	0.33	0.34
	product No. 2	Water	Water	Fruit & Veg	Venison	Meat
		-0.093	-0.19	0.25	0.80	0.11

For each country, the purchase criteria for only one product were selected (bold in Table 5). We chose the products for which the purchase criteria fitted the characteristics best, except for Scotland because venison is not an everyday product and a third of the respondents did not answer the question about venison purchase criteria.

Characterisation of consumers with "mountain-type" purchase criteria

Demographics. The results show that the consumers whose purchase criteria fit best the perceived mountain product characteristics are often aged 45-60 (older than average) and not often aged 25 to 44. Women, consumers living in Austria or consumers living in mountain areas also have more adequate purchase criteria. There are no major differences in adequacy between the various occupations of the respondents or their level of education.

Purchasing habits. Consumers who have already bought MFP, who buy their fruits and vegetables and meat and dairy products from speciality shops or directly from producers have better fitting purchase criteria. On the other hand, consumers who buy their meat, dairy products, fruits and vegetables, and water from the supermarkets are less likely to be interested by. Consumers whose purchase criteria fit best the mountain product characteristics declare they would buy MFP for everyday use, whereas consumers whose purchase criteria do not fit declare they would seldom buy MFP or only for very special occasions.

Purchase criteria. For the consumers whose purchase criteria fit best the mountain product characteristics, environmentally friendly production, local origin, support to small scale production, few additives, and short distance from producer to consumer are more important purchase criteria on the selected product categories than for other consumers. Price, well-known brand, and appearance are less important. These results must however be interpreted cautiously as the purchase criteria did not relate to the same products in each country. Interestingly, although on average the consumers do not highly rate the importance of brand and it is not an appealing characteristic of MFP, this is one purchase criteria where mountain products might not quite meet all the consumers' requirements.

Perception of MFP. The consumers whose purchase criteria fit best the MFP characteristics mention more often meat or dairy products as a MFP they already bought, they expect to find mountain products directly from the producers or from friends or family. They tend to agree more with the sentences "Mountain products support local employment", "Mountain products are connected to specific cultural areas", "Mountain products are part of the cultural identity of local communities" and less with "The main raw material of mountain food products does not necessarily need to come from a mountain area" and "Raw materials from mountain areas can be processed to mountain products also outside the mountain area".

The consumers whose purchase criteria fit best the MFP characteristics are more favourable towards a governmental/EU label for MFP.

Discussion

Discussion on results

This study showed that, although there are strong differences in sensitivity towards MFP between countries, there are overall variations in sensitivity to MFP related to gender, age, shopping habits, living in mountain areas, living in rural areas, and expectations regarding mountain products. In our study, neither the level of education nor the type of occupation had a significant effect on the sensitivity towards mountain food products; although an effect of the education could have been expected as the younger respondents had a higher level of education². This may in fact indicate that, within an age group, respondents with a higher level of education are more inclined towards mountain products. The fact that the level of education and the age are not independent in our sample (likely also in the population) does not allow us to test this hypothesis on the whole sample. This would however be consistent with previous research showing that the slightly older, better educated, higher income consumers are more likely to purchase origin labelled products (regional products, often with a price premium): higher educated consumers have a higher willingness to pay for origin labelled products (Skuras and Vakrou, 1999), older consumers are more willing to buy locally-produced foods (Tregear and Ness, 2005). Other studies on the other hand did not show such effects, or at least that socio-demographics were weaker discriminators than attitudinal variables, as in the case of interest in local foods (Tregear and Ness, 2005), or only showed these effects in some countries and not all the countries of a particular study.

The fact that mountain area respondents are more sensitive to mountain food products confirms that the location of residence relative to the origin of the food has a strong impact on consumer behaviour relative to these products.

The fact that the consumers' purchase criteria for meat in Norway do not fit with the high social and environmental value of mountain food products as well as they do for fruits and vegetables confirms previous research showing that environmental concerns are more prominent with regard to fruits, vegetables and potatoes than meat (Wandel and Bugge, 1997).

The results confirm previous research on sensitivity of women towards environmentally-friendly food products and products with a strong social or economic supportive dimension. In particular, more women than men put priority on environmentally sound production in competition with other quality aspects and more women buy these products (Wandel and Bugge, 1997). However, the gender differences in consumer attitudes and behaviour are not always prominent in earlier research (Wandel and Bugge, 1997).

Limitations

The scores for purchase criteria are those declared by consumers, they were not experimentally measured, therefore there can be biases in favour of purchase criteria that are socially more acceptable, such as support to small scale producers, environmentally-friendly production. The appeal of characteristics of MFP was scored by retailers who, in some cases, were producers or had direct contact with producers; their perception of the appeal of MFP may be more or less accurate depending on whether they have direct contacts with consumers.

Currently there is no official definition of mountain food products, the consumers' answers are therefore much more based on their affective perception of these types of product than on cognition.

The data does not enable us to know the proportion of consumers who would really be willing to purchase MFP; it can only give us indications on which consumers are most likely to be interested. The relatively high cut-off threshold selected in the characterisation procedure implied that many

² Chi-squared = 155.09, df = 9, p-value < 2.2e-16

variables appeared to have an effect, although they may have been several type I errors. However, we are confident in the results as they were internally consistent.

The results are only based on six of the criteria that were considered relevant in a study on MFP marketing, which means that some important purchase criteria were left out such as taste (or memory of taste), type of packaging, size of portions, nutritional value, etc. Each of the purchase criteria used had the same weight in the analysis, although some (i.e. price) may be very important purchase criteria.

The results cannot be generalised to all product categories, they only apply to one specific category in each country; some product categories, like water, had definitely different characteristics and purchase criteria.

Conclusion

This paper compares the characteristics of mountain food products (MFP), with general food purchase criteria. It successfully takes account of both retailers' and consumers' points of view to identify demographic characteristics, decision-making processes and value perceptions of consumers likely to be interested in MFP. The results confirm research on origin-labelled or environmentally friendly products, in that the environmental concern depends on the product category considered and that some socio-demographic characteristics of the consumers affect their sensitivity towards the products.

People who have mountain-type food purchase criteria tend to shop more often via distributions channels other than supermarkets. People from mountain area are more interested, local retail should perhaps be encouraged in mountain areas. However, some consumers do expect to find MP in regular groceries and supermarkets. These results give patterns for better MFP marketing in mountain areas by locating added-value in mountain farming systems and supply chains more strongly, rather than only in downstream stages, and by avoiding multiplying the number of intermediaries between producers and consumers.

This study does not show how much consumers value the mountain origin in itself, although part of the questionnaire does define what consumers associate with this concept. Future research may clarify whether a simple indication of mountain origin would be sufficient to trigger purchase or whether details on other extrinsic characteristics, such as production area and methods, would be necessary on a product's packaging. These considerations draw a link between the indication of mountain origin as a quality cue and other existing quality labels (PDO, PGI) that can be used (and often are) in delimited mountainous areas.

References

- Ambrosini, L.B., Baritaux, V., Amblard, C., Tebby, C. and G. Giraud (2008) Valorisation des produits alimentaires de montagne, vers une intégration des consommateurs dans les systèmes agroalimentaires localisés, un cas français, In *Congreso ALFATER Gis-SYAL, Mar del Plata (Argentina)*.
- Anders, G. (2003) Conjoint measurement, methods and applications, Springer-Verlag Berlin and Heidelberg.
- Coupey, E., Irwin, J.R. and J.W. Payne (1998) Product Category Familiarity and Preference Construction, *Journal of Consumer Research*, 24, 459–468.
- EC (1999) Council Regulation (EC) No 1257/1999 on support for rural development from the European Agricultural Guidance and Guarantee Fund (EAGGF) and amending and repealing certain Regulations, Official Journal of the European Communities L 160, 26/06/1999 P. 080-102, article 18.
- Euromontana (2006) La Charte Européenne des Produits Agroalimentaires de Montagne de Qualité: vers une dénomination européenne visant les 'consommateurs de produits' ainsi que les 'consommateurs de territoires', In III Congreso Internacional de la Red SIAL "Alimentación y Territorios".

- Green, P.E. and V. Srinivasan (1978) Conjoint Analysis in Consumer Research: Issues and Outlook, *Journal of Consumer Research*, 5, 103-23.
- Grunert, K.G., Baadsgaard, A., Larsen, H.H. and T.K. Madsen (1996) *Market Orientation in Food and Agriculture,* Kluwer Academic Publishers.
- Loureiro, M.L. and J.J. McCluskey (2000) Assessing Consumer Response to Protected Geographical Identification Labeling, *Agribusiness*, 16, 309-320.
- Michelsen, J., Hamm, U., Wynen, E. and E. Roth (1999) *The European Market for Organic Products: Growth and Development. Organic Farming in Europe: Economics and Policy, Volume 7,* Universität Hohenheim.
- Morineau, A. (1991) SPAD.N Logiciel pour l'analyse statistique des données, Modulad, 6, p27-60.
- Nordregio (2004) Mountain Areas in Europe: Analysis of mountain areas in EU member states, acceding and other European countries, Commissioned by DG Regio to Nordregio.
- Sheth, J.N., Newman, B.I. and B.L. Gross (1991) Why We Buy What We Buy: A Theory of Consumption Values, Journal of Business Research, 22, 159-170.
- Skuras, D. and A. Vakrou (1999) Willingness to pay for origin labelled products: a case study of Greek wine consumers, In *The Socio-economics of Origin Labelled Products in Agri-food Supply Chains: Spatial, Institutional and Co-ordination Aspects, 67th EAAE Seminar Le Mans*, Vol. 17 (Eds, Sylvander, B., Barjolle, D. and Arfini, F.).
- Stefani, G., Romano, D. and A. Cavicchi (2006) Consumer expectations, liking and willingness to pay for specialty foods: Do sensory characteristics tell the whole story?, *Food Quality and Preference*, 17, 53-62.
- Tregear, A. and M. Ness (2005) Discriminant Analysis of Consumer Interest in Buying Locally Produced Foods, Journal of Marketing Management, 21, 19-35.
- van Ittersum, K. (2002) The Role of Region of Origin in Consumer Decision-Making and Choice, Mansholt Graduate School, Wageningen, The Netherlands.
- Wandel, M. and A. Bugge (1997) Environmental Concern in Consumer Evaluation of Food Quality, *Food Quality and Preference*, 8, 19-26.
- Wertenbroch, K. and B. Skiera (2002) Measuring Consumers' Willingness to Pay at the Point of Purchase, Journal of Marketing Research, 39, 228-214.