

Market analysis for of the oxen meat sale

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In the past the oxen were used as working animals, but nowadays in some countries the young fattened oxen meat is the subject of trade. On the basis of questionnaire we wanted to investigate the wholesale and retail possibilities of oxen meat in Slovenian market. We used the method of the questionnaire and interviews. The results of our research indicate growing number of consumers being aware of the sustainable breeding technologies and health concerns. Those consumers revealed their willingness to pay higher premium for such products, but they have to be more widely accessible.

Key words: market research, oxen meat, questionnaire, interview, consumer.

INTRODUCTION

Successful marketing of a certain product means not just a challenge, but also a necessity in the competitive environment where gaining the appropriate income is not an easy task to achieve. Animal products are usually quickly perishable so the whole supply chain has to be planned very carefully. Many big retailers have appeared, so small-scaled stockbreeders have practically no control over the prices anymore. For this reason they have to produce higher value added products which the consumers will recognise and will be willing to pay for. The successful sale performance depends on permanent product supply - to ensure products of standard quality without any oscillation. But to ensure the high and permanent quality, one should start with appropriate choice of breed, breeding technology, quality standard management and quality forage. Appropriate breeding is the first step for ensuring of quality meat products, with storage and attractive packing as the elementary claim for a successful sale (Born 2000).

Born (2000) points out the questions, which have to be presented in the field of marketing. Such questions are for instance, which market segments need higher degree of attention, what are the needs and expectations of individual segment, what type of product shall be produced, with what profit... Beef meat is within the segment defined as healthy meat which is adapted to the friendly-to-environment way,

with low costs and the intention to sell something special with higher value added, which increases the price.

In Slovenia there are possibilities for sustainable oxen breeding on those farms, which have at its disposal less favourite area for another agricultural production, and on small-scale production farms, which had to give up the milk production. The sustainable production of high quality agricultural and food products will significantly gain both animal welfare and consumers' health concerns.

Aims of the research

For the oxen meat in Slovene circumstances we investigated

- The consumer perception of sustainable breeding
- The retail price
- Possible selling channels
- Appropriate marketing strategies

METHODOLOGY

The quality oxen meat considered in the research is a product from an ox – this is castrated male cattle, sustainable bred, with meat of excellent taste, with rich aroma and exceptional softness and succulence. In the research we were investigating subjects as follows:

1. Focus on users' (consumers') demand for oxen meat,
2. Revealed willingness to pay for such meat,
3. Appropriate selling channels for oxen meat,
4. What communication net is required for the successful promotion of oxen meat?

Methods of questioning and interviewing

In the market research we used the questioning method

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with a technique of a questionnaire, which was supplemented with an interview method. The individual interviews were performed, used for the research of consumers' preferences and the selling channels.

The questioning method is a process, which is, together with the filled question sheet, used to collect the data, information and opinions about the research object. Inquiry, means in the narrow sense gathering the data and information from the representative sample of population. The inquiry can also be used as a revelation method. It can be used for acquiring enormous amounts of data and information, which helps us to define appropriately the research problem and to set up a hypothesis (Zelenika 1998).

The method of the interview is very similar to the questioning method. According to Zelenika (1998; quoted by Milič 1965), an interview is a scientific discussion with an aim to use up all the gained information and data for a scientific purpose.

Selection of a sample

In a very short time given we wanted to obtain as many data as possible as well as opinions about the sale of oxen meat. For this purpose we divided respondents into two groups. The first group represented consumers who buy at the butcher's who already offers the oxen meat in Slovenia. We assumed that these consumers have been familiar and know the main characteristics of oxen meat. The sample comprised 112 consumers, which is approximately 50% of customers a day at the butcher's. The second group represented consumers who, we presumed, have not been directly acquainted with this offer of oxen meat and the interviews in this, second sample (n = 110) took place in the centre of Maribor.

In the table 1 the main socio – demographic characteristics of the sample 1 and 2 are revealed.

Table 1: Separation of the candidates according to sociodemographic variability

Sociodemographic variability		Group				
Sex	Men	Women				
Age	Till 25 years	26 - 36 years	37 - 47 years	48 - 59 years	Over 60 years	
Status	Student	Worker, Employed	Farmer	Pensioner		
Consumers of beef meat	Once a week	Occasionally				

Data manipulation technique

The data collected were put into database in Excel program. The answers which we got from asked questions were rated with numbers (1, 2, 3, 4, 5), depending on the number of possible answers. For the statistic purpose the SPSS 10.0 for Windows was used. The frequency separation was used for all variability. Later on the analysis was done with the One Way ANOVA. Statistically significant changes between the groups were marked with ** at $p < 0.01$.

RESULTS AND DISCUSSION

The respondents have answered on 16 (in advance prepared) questions from the field of basic market net components, which are important, for the consumer's decision making. We formed the questions into four basic groups:

- questions, concerning the product; in our case it is oxen meat
- questions, which included the price component
- questions about the market strategies and
- questions about the marketing communication.

In table 2 we show the description of the sample interviewed, which include the number of respondents after grouping them (N), average values of answers, standard deviation (SD) and standard error estimation.

Table 2: Average values individual answers of questioned groups

Question	Group	N	Average \pm SD*	Standard error
Sex	1	112	1.57 \pm 0.55	0.05
	2	110	1.60 \pm 0.49	0.05
Age	1	112	3.45 \pm 1.07	0.10
	2	110	3.09 \pm 1.33	0.13
Status	1	112	2.56 \pm 0.97	0.09
	2	110	2.32 \pm 1.00	0.10
Do you eat the beef meat at least once a week?	1	112	1.51 \pm 1.20	0.11
	2	110	1.84 \pm 1.47	0.14
In which way do the consumers use beef meat?	1	112	23.04 \pm 39.61	3.74
	2	110	17.48 \pm 35.67	3.41
What do the consumers demand when buying beef meat?	1	112	16.35 \pm 36.85	3.48
	2	110	11.05 \pm 11.34	1.08
Do the consumers know oxen meat?	1	112	1.55 \pm 0.50	0.05
	2	110	1.69 \pm 0.46	0.04
The importance of the sustainable breeding?	1	112	1.62 \pm 0.70	0.07
	2	110	1.70 \pm 0.63	0.06
Does sustainable breeding ensure food safety?	1	112	1.10 \pm 0.30	0.03
	2	110	1.14 \pm 0.34	0.03
Would the consumers buy oxen meat?	1	112	1.05 \pm 0.26	0.03
	2	110	1.18 \pm 0.49	0.05
Do the consumers already buy oxen meat?	1	112	1.63 \pm 0.48	0.05
	2	110	1.85 \pm 0.41	0.04
In which form would the consumers prefer the oxen meat?	1	112	1.14 \pm 0.38	0.04
	2	110	1.18 \pm 0.47	0.04
Would the consumers buy oxen meat at the higher price?	1	112	1.32 \pm 0.65	0.06
	2	110	1.49 \pm 0.71	0.07
Where would the consumers like to buy oxen meat?	1	112	2.23 \pm 0.92	0.09
	2	110	2.62 \pm 1.20	0.11
Should the special trade mark be used for sustainable produced oxen meat?	1	112	1.05 \pm 0.23	0.02
	2	110	1.10 \pm 0.36	0.03

* values are means \pm standard deviations

We had a very similar sample of men and women in both samples - 42.8% of men and 57.2% of women. The age intervals of the consumers were evenly represented as follows: 9.0% of consumers up to 25 years of age, 18.1% from 26 to 36 years old, 28.8% from 37 to 47 years, 25.2% from 48 to 59 years and 18.9% 60 years old or more.

Consumers' attitude towards the product

In the first part of the questionnaire we have asked the consumers about their preferences, which they might have concerning the product and their opinion about the sustainable breeding of beef.

Table 3: Organising the candidates according to the first demand when buying beef meat

The relative importance of the factor	Group					
	1		2		Together	
	N	%	N	%	N	%
Price	6	5.4	10	9.1	16	7.2
External appearance	26	23.2	14	12.7	40	18.0
Origin	30	26.8	23	20.9	53	23.9
Breeding	13	11.6	17	15.5	30	13.5
Combination	37	33.0	46	41.8	83	37.4

We can see from the table 3, that the consumers had some difficulties to decide for only one answer, so many of them chose two. In both treated samples we have noticed, that the combination origin-breeding was chosen in most cases, namely in the first group 17 times, which is 15.2% and in the second group 13 times, which is 11.8%. Proportionally small number of consumers has chosen the price as the primary factor when deciding for buying. Even the combination price – and other criteria do not step out into the foreground. Combinations with price totals in the first group 11 or 9.8% and in the second 16 or 14.5%.

One of the key questions was the one about the meaning of sustainable breeding of cattle. We wanted to know if consumers prefer that type of breeding. Decision for sustainable breeding is a guarantee that those animals were fed with natural product, without any special supplements (e.g. genetically modified soy, maize). It is in generally assumed that the products coming from such breeding are more suitable for human's nutrition.

Table 4: What meaning give consumers to sustainable breeding

Importance of sustainable breeding	Group					
	1		2		Together	
	N	%	N	%	N	%
Very important	57	50.9	43	39.1	100	45.0
Relatively important	41	36.6	57	51.8	98	44.2
Not important	17	12.5	10	9.1	24	10.8

Table 4 shows that consumers care about the breeding techniques and animal welfare. The results shown in table 4 indicate that almost 88% of consumers stated higher preference towards less intensive or extensive breeding of home-grown animals, as it is the oxen breeding. In the previous studies it was pointed out (Menkhaus et al. 1992; Verbeke and Viaene, 1999), that a huge problem represents safety consummation of beef meat, so consuming patterns of beef meat in the future will likely depend on safe and irreproachable beef which depends on breeding technology. Oxen meat differs from other beef by its structure, smell and taste, which influences the consumer's decision for purchase. Araji et al. (1977) quotes, that consumer appreciate the tenderness of beef, which is typical for oxen meat. Structural characteristics, like size, material, smell and other visible ones influence the actual external appearance of a product (Wind 1982), and it affects the purchase decision.

Defining the price for oxen meat

Defining the appropriate price for the new marketable product is not an easy asks to achieve. This is even more evident in the case of creation and development of a brand new product (Kothler 1994).

By defining the prices for oxen meat, we have to consider both, economical and also psychological indicators for the price. Many consumers are likely to believe that the price indicates the quality, so we can expect that the consumers will be willing to pay the higher price for the quality oxen meat.

Table 5: Organizing questioned candidates whether they would buy oxen meat for a higher retail price

Higher price	Group					
	1		2		Together	
	N	%	N	%	N	%
Yes	87	77.7	70	63.7	157	70.7
No	14	12.5	26	23.6	40	18.0
I don't know	11	9.8	14	12.7	25	11.3

In table 5 we show consumers' willingness to pay oxen meat with the higher price.

From the results previously shown it is evident that the consumers have been aware of the higher value added to the oxen meat breeding in more sustainable way. These results are in accordance with the results shown in table 4, where most of consumers are not primarily interested in price of beef meat, but the origin and breeding techniques. Almost 71% of questioned candidates have answered with YES, when asked if they were prepared to buy the oxen meat at the higher price. This means at the same time they are aware of the meaning sustainable breeding, which results with more quality and healthier products. Such products are surely more expensive than products from classical breeding. If the product satisfies the consumers' criteria and preferences, the certain difference in price will probably not divert him or her from purchase.

Forming efficient selling channels

For efficient supply carefully planned selling channels needed for continuous delivery of oxen meat should be created. The storing, timing of delivery and place are more or less crucial in this process. The results of the questionnaire in table 6 show, that majority of interviewed consumers choose standard butcher's shops as the most convenient place to buy such meat.

Table 6: Organizing questioned candidates according to place of buying oxen meat

Place of buying oxen meat	Group					
	1		2		Together	
	N	%	N	%	N	%
Butcher's shop, specialised for the oxen meat	16	4.3	23	20.9	39	17.6
Butcher's shop	75	67.0	38	34.5	113	50.9
Retailing	0	0.0	7	6.4	7	3.2
Retailing and butcher's shop	21	18.7	42	38.2	63	28.3

Statistically significant differences between the groups are presented in figure 1. Consumers from the first group have mainly decided to buy in a standard butcher's shop, where they have been buying so far. But the second group has equally decided for the retailing and butcher's shop and also standard butchers. We may conclude that Slovene consumers buy meat mainly at the butcher's. To offer oxen meat in retailing it would probably lead to the growth in demand for such meat due to the likely-consumers interest.

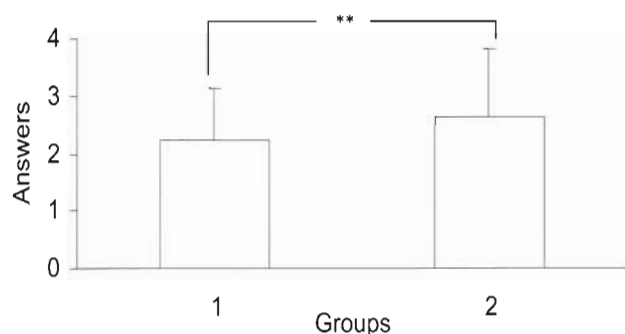


Fig. 1. Consumers' interest in buying on different locations (Legend: Answers: 1 – special butcher's shop, 2 – butcher's shop, 3 – retailing, 4 – butcher's shop and retailing; ** statistically significant different ($p < 0.01$)).

Figure 1 presents statistically significant ($p < 0.01$) difference between the two groups regarding the location of purchase. Consumers in the first group have mainly decided to buy in a standard butcher's shop and the ones from the second group have revealed their choice of a selling channel in a standard butcher and the combination butcher's and supermarket. The analysis shows the following values: $F=7.280$, $p=0.008$, SD for the first group is 2.23 and for the second one 2.62.

Forming marketing net in the case of sustainable breed oxen meat

Information about oxen meat can be spread at least into two directions among the target population:

- Through personal communication canals, by means that the information is transferred between two or more persons, who directly communicate between each other.
- Indirect communication canals - the information is spread by media without any personal contact.

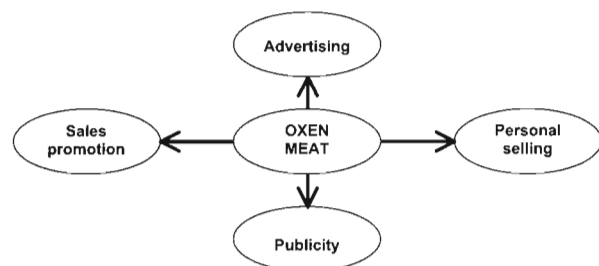


Fig. 2. Promotion net for oxen meat

Figure 2 shows the scheme of the net which should be used for promotion of oxen meat and its products.

In marketing net there are shown four spheres of activity, which have to be accomplished by an individual link in a supply chain.

Marketing of oxen meat will be carried out by the meat producing industry and the shop. On both sides the introduction of the new products to the potential consumers, and positive influence on their buying decision should be carefully planned.

Personal sale represents direct communication between the salesman and a potential buyer. When selling oxen meat the salesmen have to introduce in details advantages and benefits of oxen meat to the consumers. Selling promotion is crucial for all parts in the supply chain, which will for the successful performance have to inform and animate the consumers to purchase the new products.

Within the framework of public relation, impersonal form of communicating about the company and its product, it is very important to create a positive image about the oxen breeding, oxen meat and its products.

CONCLUSION

The consumers recognised the breeding technology and origin of meat as the most important factors when buying oxen meat. Society is in general more and more aware of the nature and animal friendly technologies, and so are the interviewed consumers, who assigned to the sustainable breeding technologies a huge importance, not just due to the environmental but also the health issues.

By defining the retail price for oxen meat one should consider economical as well as psychological meaning of the price. In most cases the level of the price indicates the quality of the product. The results of the questionnaire show, that the majority of consumers interviewed (86%) recognise the higher value added and therefore they agree with higher retail price of oxen meat in comparison with retail price of other types of beef meat.

Regarding the selling channels, the respondents expressed the preference of purchasing oxen meat in standard butchers and retailing shops.

For the successful promotion of oxen meat it is important to launch the information for actual and potential consumers. It has to contain the advertising part (presenting of oxen meat by mass media), sale promotion (to convince buyers to purchase), personal sale (sale presentations, tasting), and public relation or publicity (in form of adverts in newspapers, magazines, leaflets).

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