RESEARCH ARTICLE



Information Relevance and Perception of Albanian Consumers when Purchasing Meat

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Abstract

Information is a key element for customer's perception now days. There are many channels from where consumers get information from internet, TV, other consumers experience, but no certified method to be informed i.e. trusted label of meat and meat stuff. Education level, gender and age of the consumers interviewed in Tirana and the surrounding areas are analyzed through a tow step cluster and cross tab statistics to see how the five clustered groups of the above mentioned variables, influence the interest to get information before and during the purchase of meat in Albanian market. The meat origin form specific regions of Albania, the farm name (brand if any) or the farmer name, the meat fat ratio and the search attribute if consumers see the veterinarian stamp in the carcass in shops, outlets or other places where meat is traded/exposed. The results show that females in mid age, on their 50s, tend to pay more attention to attributes related with credence, based on their previews experience, their information they collect asking friends, or directly the butcher, when purchasing meat and meat stuff. Higher is the sensitivity for checking fat in meat when man in mid age, on their 50s, are the decision maker and purchase the meat seems to be the most concerned. It's hard to define a clear distinction for the farm of production or farmer name, because this info is hard to be traced and reliable. When it comes to female consumer they pay more attention, despite the word of butcher that have a measured impact also in other studies [1]. Food safety remain a persistent problem for Albanian consumers. The need for intervention in the sector is on time and will open the sector to new and interesting international markets [2]. TLIS are an effective tool that improve the food safety in general and the meat value chain from the farm to the fork, as is in the objectives of EU.

Keywords: food safety; customer perception; traceability systems, standards.

1. Introduction

Agriculture sector for the Albanian families and national economy, consumption and wellbeing remains a strategic sector [3]. Geography of natural resources, agriculture economy legacy and the agriculture development in the centralized economy period, reflects still comparative advantageous of this sector. [4]

Meat production and processing sector in Albania, have impacted in increasing meat and sub-products of meat consumption, holding an important share of the food market. Meat and meat products cannot be exported in the EU countries [5] and from 2015 also in US the export is banned [6]. These export prohibitions comes as a consequence of missing necessary monitoring and safety measures in the meat

value chain, insurance of hygienic practices, and not meeting the minimum standards required form the global international markets. Missing the exporting opportunity have impacted in the potential development of this traditional sector in Albania. Improvement of monitoring standards and the value chain control in the meat production, enforcing the adaption of food safety already approved by the authorities, further improvement of laws and regulations with those of the EU, will for sure impact and make possible a better national value chain [7], and increase chances to be accepted for exporting with no barriers. Under these unsecure and uncertain conditions the Albanian costumers have developed their skills to use their alternative channels to collect

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information before and during meat purchase process. They use word of mouth, ask somebody before purchasing meat, being these friends, family members, acquaintances, colleagues, and the most important one the butcher, or sales person when visiting the meat shops. TV and marketing activity, have also influenced partially the consumer, however doesn't enter in their favorite information channels. Traceability and Labeling Information Systems (TLIS) are missing. Only in few cases in some of the meat processors we find evidence of structured and semi-structured¹ data. However these data are not accessible from the customer at the shop or through labeling process. Sensibility for non-law enforcement in both ends, consumer and producers community as well also other indicators make the value and necessity of the traceability and labeling information systems invaluable. Even though the law definition is a comprehensive package of rules and regulation for the standards of production and trade of meat and meat stuff, the law enforcement still remain a challenge. Despite the law enforcement issues another fact is the small size of farms in Albania [8]. The small size make impossible to invest in systems and human capacity building to keep updated and accurate records in their farm register for farm inputs, feeding and continues monitoring of animal health and animal welfare. Another fact is the lacking of programs for training and human resources capacity building updating on regular bases production best practices, and the education level as well. Farm fragmentation is their distribution although the country is making difficult for monitoring and control all the production units to the authorities [9]. Different studies have analyzed the food safety issue in different prospective. Some of the authors judge that is the supply chain, the producers, that define when is appropriate to start investing in TLIS [10]. Other authors create a strong link with the need to ensure quality with the help of TLIS, started from demand, the consumer's behavior

and preferences, bringing at the first plan consumer culture, market indicators, marketing and influence of information on trusted labels [11]. Again there are other point of views from other authors that find the food safety as an imposed measure from the government authorities, communities (as in case of EU and KE). The research also from the theoretic part is divided in tow main streams. Impact of the demand in the food safety and the willingness to pay for high quality and standards, and the availability of the TLIS to ensure the monitoring and control [12]. The phases of interest for the study are to collect information and analyses what are the main information at customer interest before, during the purchase of meat. These attributes are also known as credence and search attributes, of course pointing out here that the experience plays also an important role to build the credence attributes [13].

2. Material and Methods

The study methodology used some data collection techniques for the study in order to use the outcome for the meat producers and trade industry in Albania. During the study discussions were conducted with important sector actors. Semi-structured interviews with industry representatives as well as political representatives in the field of food safety and meat production are organized. These analyzed and discussed information were used to build the questionnaire as a methodological tool for collecting information from consumers about the importance they have for information on the quality of meat in the purchase decision and the readiness to pay for this information.

The questionnaire, in addition to the socio-economic and demographic information on the consumer, was designed to understand the perception of food safety in general, the information that consumers gather before and during the purchase of meat. The last group of questions is related to the willingness to pay the customer for the label with reliable and controllable information as well as organic meat where, of course, in this case what is offered as

¹ With semi-structured data we understand mixture of documents and database records, that may are stored in information systems databases, electronic or paper based file systems.

organic is the guarantee based on reliable information on this product.

More than 280 consumers of meat were surveyed during July-August and September 2016. Tirana have almost 30% of the country population [14]. The questionnaire was designed and tested several times before the interviews started and the consolidated version was used to train interviewers and control them during interviews. The data analysis aimed to understand the degree of consumer awareness of the quality and safety of food and meat, the importance of pre-purchase information, the willingness to pay for information and credibility to the institutions.

To measure and analyze the impact of cultural factors, based on the Blackwell model, the consumer prevalence estimation was taken into account in order to obtain pre-purchase information measured by the frequency of search for marketable attributes during the purchase [15].

The decision in Albanian families to buy meat is generally trusted by adults, head of households, for the share of meat expenditure in household spending on food.

It seems that respondents have high allegiance to the butchers, shops, or other places where they believe buying meat for their families. This is an indication that the reliability of the label and the information it contains has low prevalence.

The label that has information on the age of the animal before slaughter, where it has been raised, when slaughtered, the weight before slaughter, the expiration date where all such data as well as other relevant information may be controlled by the consumer by searching the internet [16] on the system information created specifically for this purpose, with a specific assigned code on the label. This information is based on the main concerns that the consumer needs to have as pre-purchase information. A tow step cluster aggregated with crostabultaion of the data is analyses, for a specific [12] group of variables. Education level, age and gender are the clustered groups, resulting in four main groups. Than for the following variables are created the crosstabulation; the

consumer have information before purchasing for the region of origin of the animal; information about the farmer name/producer name; search attributes regarding are mainly focused if consumers check the veterinarian stamp on the carcass and the quantity of fat on meat.

3. Results and Discussion

Consumers have a high preference for locally produced meat consumption, however the knowledge of institutions tasked with monitoring standards and the quality of domestic meat production is very low. Very low is the degree of customer confidence in monitoring institutions of compliance with meat production standards.

The prevalence to obtain information through the label and the impact of cultural factors such as education or consumer behavior at household level was elaborated through analysis and included as an explanatory factor in households' willingness to pay a top up on the current price of meat or meat products to have the right information through a tracking system [13].

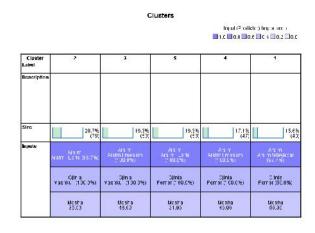


Figure 1. Clusters and their distribution.

Education level (university degree, high school, elementary school) is combined gender (in order male and female) and age groups (respectively in average, between 31 and 55 years old).

The clusters are formatted as follow:

- 1. University level Male Avg. Age 35
- 2. High Scholl level-Male Avg. Age 48
- 3. University level Female Avg. Age 32
- 4. High Scholl level-Female Avg. Age 46

5. The last group is and aggregate with male and females for a minority of interview customers with elementary school level.

data are evaluated with the level of significance 95%, using the Pearson Chi-Square test.

From the model summary the cohesion and separation looks to be good, average silhouette = 0.6. Crosstab

Table 1. Clustered variables and their respective Likert scaled explanatory variables regarding the production region.

Get information for the region of the production of

	meat					Total	
		Never	Rarely	Regularly	Often	Always	
TwoStep Cluster Number	1	0	2	4	6	31	43
	2	11	16	16	16	20	79
	3	2	2	10	7	32	53
	4	0	4	6	6	31	47
	5	6	5	8	16	18	53
Total		19	29	44	51	132	275

Source: Field survey results

From this table can be seen that meals with a university level of education and with average age of 48 years old (*cluster number 2*) are spread in all options from never to always, differently for the other cluster with the same profiles but females (*cluster number 4*) tend to have a higher concern, answering

in majority, always, for the region of origin. In contrast young man, but educated with graduate level, have a similar perception, when it comes to compare the first cluster to the third one, the results shows that mostly are interested and get information about the region of meat production before purchasing it.

Table 2. Clustered variables and their respective Likert scaled explanatory variables, Information regarding the production farm.

Get Information regarding the farmer (name)

		Never	Rarely	Regularly	Often	Always	Total
TwoStep Cluster Number	1	9	10	2	12	10	43
	2	12	14	11	14	28	79
	3	10	11	4	22	6	53
	4	14	9	9	4	11	47
	5	5	8	7	12	21	53
Total		50	52	33	64	76	275

Source: Field survey results

Getting information about the farm of production is not always easy. In most of cases customers have to trust the butcher, there is no other way, such as label or any trade logo where you can see such information. This may be the reason why there is almost a normal distribution of answers from never to always, that is shown in table 2. However the tendency is to have slightly more frequencies, for often and always almost in all cluster groups. One evident alteration we find in the fifth cluster, that differ from their low level of education (elementary school), in this case they are the most interested to know about the production farm, from where the meat come. From the survey we have e very high number of costumer (almost 95% of the population interviewed) that are born in rural area

and then migrated in the Tirana urban are. Mostly in this group we find almost all the interviews with elementary school, and it seems they tend to connect the farmer name, with some credence attributes regarding quality. In this case, how much is the ration of fat in the meat, we distinguish man interviewed that are scared from diseases related with cholesterol, so this group cluster, specifically number 2 compared with cluster 4 females with high school and age average 46. Last results brought to this study is if the consumers see the vet stamp on the carcass, an important indicator enforced by Albanian law, and do represent the institution presence and indirectly the trust consumers have in state mechanisms to ensure food safety.

Table 3. Clustered variables and their respective Likert scaled explanatory variables, quantity of fat in meat.

Quantity of Feet in meat

		Never	Rarely	Regularly	Often	Always	Total
TwoStep Cluster Number	1	9	12	8	6	8	43
	2	14	9	19	17	20	79
	3	10	9	12	13	9	53
	4	9	11	13	8	6	47
	5	2	4	9	13	25	53
Total		44	45	61	57	68	275

Source: Field survey results

Table 4. Clustered variables and their respective Likert scaled explanatory variables, see the vet stamp on carcass.

See the veterinarian stamp on carcass

	- -	Never	Rarely	Regularly	Often	Always	Total
TwoStep Cluster Number	1	16	5	1	2	19	43
	2	24	15	9	16	15	79
	3	12	9	3	12	17	53
	4	5	5	4	9	24	47
	5	14	5	10	7	17	53
Total		71	39	27	46	92	275

Source: Field survey results

The main distinction we see from the elaboration of the data is that women in all cluster groups tend to pay more attention rather than man, on search attributes. Is seems that the women are more careful, despite the word of butcher that seems to be important they take additional action to look for additional attributes that complete their credence.

4. Conclusions

Food safety remain a persistent problem for Albanian consumers. The need for intervention in the sector is on time and will open the sector to new and interesting international markets [2]. TLIS are an effective tool to improve the food safety in general and the meat value chain from the farm to the fork, as is in the objectives of EU. Having in place an integrated national record keeping system, starting with slaughtering farm registers, process, and outlets and transportation, shops finally restaurants or house processing good practices studied and disseminated from some initiatives of UNDP projects [17], with help the sector meet the standards,

and consumers consume safe and better qualitative meat. Authors suggest that overwhelming consumers with many information may be no useful because most of them tend to not read all details in labels [18].

5. References

- D. Imami, C. Chan-Halbrendt, Q. Zhang and E. Zhllima, "Conjoint Analysis of Consumer Preferences for Lamb Meat in Central and Southwest Urban Albania," International Food and Agribusiness Management Review, pp. 111-126, 2011.
- T. Volk, M. Rednak and . E. Erjavec,
 "Western balkans Agriculture Policy Cross country overview and comparaison.
 Agriculture in the Western Balkan Countries," IAMO. 57: 27., Halle, 2010.
- 3. UNDP-Albania, "IMPROVING THE PERFORMANCE OF LIVESTOCK SECTOR IN ALBANIA," 17 09 2016.

- [Online]. Available: https://info.undp.org/docs/pdc/Documents/ALB /00044625_52560%20Livestock%20Sector%20 Support%20Prodoc%20-%20Alb.pdf.
- 4. A. Civici, "The Situation and Competitiveness Level of the Agro-food Sector in," Tirana, 2003.
- 5. C. E. EC, "Albania 2014 PROGRESS REPORT," EC, Brussels, 2014.
- 6. USDA, "Livestock and Poultry: World Markets and Trade," USDA, Washington, 2016.
- I. Kapaj, Assessing quality and safety of food and beverage products in Albanian processing enterprises, Hohenheim: Institute of Farm Management, Hohenheim University, 2011.
- 8. F. Guri, I. Kapaj, B. Musabelliu, M. Meço, E. Topulli, R. Keco, N. Hodaj, S. Domi, G. Mehmeti and S. G. y Paloma, "Characteristics of farming systems in Albania," Publications Office of the European Union JRC, Luxembourg, 2015.
- A. Qineti, M. Rajcaniova, K. Braha, C. Pavel and J. Demaj, "Status-quo Bias of Agrarian Land Structures in Rural Albania," ROUTLEDGE JOURNALS Vol. 27, pp. 517-536, 2015.
- 10. Dimitrios Buhalis, "Information communication technology revolutionizing tourism," Tourism recreation research vol. 30(3), pp. 7-16, 2005.
- J. J. McCluskey and M. L. Loureiro,
 "Consumer Preferences and Willingness to
 Pay for Food Labeling: A Discussion of
 Empirical Studies," Journal of Food
 Distribution Research, 34(3), p. 95–102, 2003.
- 12. F. Lashi and I. Kapaj , "Customer Preference for Consuming Organic Red Meat Case Study of Albanian Market.," European Journal of Economics and Business Studies ,

- vol. 7, no. 1, pp. 89-93, 2017.
- 13. F. Lashi and I. Kapaj, "Customer preferences towards food safety and traceability systems for meat value chain in Albania.," *Journal Of European Academic Research*, vol. III, no. March 2017, pp. 55-66, 2017.
- 14. INSTAT, "**Bujqësia**," INSTAT, http://www.instat.gov, Tirana, 2012.
- 15. K. Grunert, "Food quality and safety: consumer perception and demand,"

 European Review of Agricultural Economics
 32, pp. 369-391, 2005.
- 16. X.-t. Yang, J.-p. Qian, J. Li, Z.-t. Ji, B.-l. Fan and B. Xing, "A real-time agro-food authentication and supervision system on a novel code for improving traceability credibility," Elsevier Food Control, pp. 18-26, 2016.
- 17. FAOSTAT, "Production / Livestock Processed," Rome, 2016.
- 18. S. Stranieri and A. Banterle, "Fresh Meat and Traceability Labelling: Who Cares?," in System Dynamics and Innovation in Food Networks, Innsbruck-Igls, 2009.
- 19. A. Vercuni, E. Zhllima, D. Imami, B. Bijo, X. Hamiti and Y. Bicoku, "Analysis of Consumer Awareness and Perceptions about Food Safety," Albanian Journal of Agricultural Sciences, pp. Vol. 15 Issue 1, p19-26. 8p, 2016.