Alban CELA*, Edvin ZHLLIMA, Engjell SKRELI**, Drini IMAMI** and Catherine CHAN*****

Consumer preferences for goatkid meat in Albania

The objective of this paper is to analyse consumer preferences for goat-kid meat attributable to the market potential of mountainous areas and the valorisation opportunities arising from the certification of origin. The study explores consumer preferences toward the main attributes of goat-kid meat such as origin, weight and quality-certification. A Conjoint Choice Experiment was utilised to design the survey and a Latent Class Analysis Model employed to analyse the results of a survey carried out with 250 residents living in urban areas of Tirana. Origin was found to be the most important factor for all three identified consumer classes. This result can be used to producers' advantage if labelling and other marketing tools are available to inform consumers of the products' origin. Implementation and enforcement of origin identification should be a priority for the government and other stakeholders.

Keywords: consumer preferences, goat-kid meat, Albania, conjoint choice experiment
JEL classification: Q13

* INSTAT and Faculty of Economics and Agribusiness, Agricultural University of Tirana, Albania.
** Faculty of Economics and Agribusiness, Agricultural University of Tirana, Albania. Corresponding author: ezhllima@ubt.edu.al.
*** Department of Natural Resources and Environmental Management, University of Hawaii, Mänoa, USA.
Received: 2 August 2019, Revised: 7 November 2019, Accepted: 13 November 2019.

Introduction

Knowledge of consumer demand for niche products is crucial for market development. It is a significant theme of inquiry for businesses, and for decision-makers so as to be able to make strategic decisions. The patterns of consumer preferences for food products vary by income and country. In developing and transition countries, the increasing levels of income, degree of trade liberalisation and increasing urbanisation have enabled fast changes of consumer lifestyle and preferences. Within the wide range of agri-food products, demand for meat products has received growing attention from researchers due to food security, food safety, and health concerns and the impact on farmers' incomes, especially in remote and rural areas in developing countries (Guerrero *et al.*, 2013; Krystallis and Arvanitoyannis, 2006). Despite the growing importance of small ruminants in rural farming systems, particularly in mountainous areas, there is a dearth of information on consumer demand, perceptions, preferences for small ruminants' meat, especially for goat meat (Grunert *et al.*, 2004; Knight *et al.*, 2006; Van Loo *et al.*, 2014; Vukasovič, 2013).

The change in incomes and dietary habits of transitional countries like Albania has prioritised chicken, pork and beef over small ruminant meat (FAOSTAT, 2018). Moreover, small ruminants' meat seemingly is affected much more by income changes as is indicated by their subsequently larger share of the food budgetary expenditures. Consumer preference studies for meat in the developed countries have been extensively studied and it has been found that consumers are attaching more weight to extrinsic factors such as product origin, sustainable production practices, social and environmental values (Font i Furnols and Guerrero, 2014; Montossi *et al.*, 2013). However, there has been only limited research on consumers' purchasing behaviour and preferences in developing countries.

Also in the case of Albania, there is a lack of research and knowledge about consumer preferences for small ruminant meat, particularly goatkid meat. Related studies such as consumer preferences for lamb meat was explored by Imami *et al.* (2011), while consumer awareness and perceptions for food safety with focus on small ruminant meat was analysed by Zhllima *et al.* (2015). However, these studies have not investigated origin preferences and certification as a signal for ensuring meat quality.

The purpose of this paper is to analyse consumer preferences for the main quality attributes of goatkid meat such as local origin, size (weight) and food safety certification. The study also aims to group consumers according to their preferences for goatkid meat and provide more specific recommendations for effective marketing and policymaking purposes.

This study was organized in the framework of an action research conducted in partnership with the mountainous farmer association ADAD Malore under the auspices of the project funded by EFSIM (Empowering Smallholder Farmers in Markets). The questionnaire was developed after conducting extensive literature review, focus groups of goat shepherds of Kukes region, and the butchers in Kukes and Tirana region and semi-structured interviews with various stakeholders.

The recommendations from this study are crucial for policymakers to understand the potential opportunities for valorising smallholders' production in Albania by taking advantage of the perceived importance of Geographic Indication, based on consumer preferences and behaviours. Small ruminant meat is considered a priority subsector by the government of Albania (MARDWA, 2014). However, sector investments supporting this subsector (by government and donors) should have strong market research information to support any change in their market orientation. In this context, understanding consumer preferences for goatkid product attributes is instrumental to the design of efficient and sustainable intervention activities by any programme/organisation, and this includes both private entrepreneurs' and investors' strategies.

The paper is structured as follows. The following section consists of the overview of the small ruminant sector

in Albania, focusing on goats (kids), and is followed by a literature review, whereas Section 4 provides a description of the methodology. Section 5 consists of analysis of the results and the last section provides conclusions of the study.

Overview of the small ruminant sector in Albania

Albania has a long tradition of producing and consuming small ruminant meat. Small ruminants are an important source of income for smallholders in the mountainous areas, which are exposed to higher levels of poverty. The privatisation of the agricultural sector as part of the transition into a market economy, combined with increased consumer incomes, resulted in an increase in the production and consumption of meat (including small ruminant meat) during the 1990s and 2000s in Albania. The number of goats increased by 20% during the period 2005-2015, achieving an overall total of 932,000 heads (INSTAT, 2016). This increase is driven by the increase in local demand for both small ruminant meat and milk. In fact, Albanians consume almost twice the quantity compared to other Southern European consumers. On the other hand, there is also a strong consumer preference for goatkid milk which is mostly used for producing cheese (Imami *et al.*, 2016).

Most sheep and goat flock sizes are very small. An average sheep flock size is close to 30 milking sheep and the goat flock size is around 25 milking goats. There are about 40,000 farmers that have sheep, and 22,000 farmers that have goats (which is quite significant considering that the number of farms is around 300,000 in Albania). Many small ruminant flocks are mixed (combining both types, sheep and goat) and mixed activity (both milk and meat). In most cases, the production system is pasture-based. Sheep and goats depend nearly entirely on grazing in pastures in Albania, both in winter and summer (Skreli and Imami, 2019).

Slaughterhouses supply the domestic market for fresh meat (small ruminant meat is mostly sold fresh, but small amounts are also processed on-farm as dry meat). Restaurants or butchers (which are also the main outlets for small ruminant meat) often order live animals directly from slaughterhouses or slaughter points. Contracts between farmers and buyers are rare. Payment for live small ruminants and fresh meat sold to retailers is typically cash-based (Skreli and Imami, 2019).

Most small ruminants are sold and slaughtered when the animal is small, since for many farmers, milk production is the main activity. Consumers prefer small carcass meat weighing up to 10 kg (slaughtered weight) (Imami et al, 2011). The average consumption of goat meat in Albania is higher than world (and European) averages.

Literature review

Small ruminant meat consumers tend to consider certain factors as cues or proxies for quality. After price, origin is the most frequently reported attribute in studies of consumer preferences and frequently is cited to be related to feelings and emotions, including ethnocentricity (Pauselli *et al.*, 2009; Shimp and Sharma, 1987). Domestic small ruminants' meat is considered fresher and tastier by consumers in Albania (Imami *et al.*, 2011). Becker *et al.* (2000) conducted a consumer survey in Germany and found important extrinsic cues consumers used in judging the quality of fresh meat were country of origin and place of purchase, while flavour or smell were also important intrinsic cues. In some studies, more focus is given on the local origin as a credence attribute related to type of breed, production systems or relevant values given to certain regions (Pauselli *et al.*, 2009). Moreover, there is a stated preference about meat from mountainous areas compared to meat from flat areas, due to the perceived influence of feeding regime on meat flavour and odour (Imami *et al.*, 2011).

Information about extrinsic attributes related to a certain region, breed or production system has been in the focus of various studies. These attributes are valorised through the use of a brand or designation of origin schemes, which are more common in developed countries. In various studies such as Verbeke *et al.* (2009), guarantee of origin as a credence attribute has been included as a quality and safety indicator. Previous studies on Albania analysed consumer preferences for meat origin found a strong preference of the Albanian consumer towards Albanian-produced meat products (Imami *et al.*, 2011). However, there are no local territorial certification schemes in Albania.

Other attributes which are important to the quality of meat for small ruminant meat is carcass weight or size. A sensory analysis by Rodrigues and Teixeira (2009), Bernués *et al.* (2012) and other Spanish authors as cited by Guerrero *et al.* (2013) found that weight influenced fat and carcass yield, fat contents, meat colour, meat texture, odour and flavour intensities as well as juiciness and tenderness. Lighter weight carcasses were considered tenderer and with less flavour and odour intensity, lighter colour and juicier when compared to heavier carcasses. The relationship between carcass weight (size) and consumer perception on quality of meat has been identified by Imami *et al.* (2011). The authors found that Albanian consumers prefer smaller carcasses meat to bigger ones. Other factors of relevance for consumers include the type of rearing system (Alexandre *et al.*, 2008; Carlucci *et al.*, 1998) and halal certification (Ibrahim, 2011). The notion of feeding system (mountainous versus plain areas as stated by Font i Furnols *et al.* (2009)) may imply a preference for meat of small ruminant in mountainous areas.

Methodology

The conjoint analysis used in this study derives from the theoretical premise established by Lancaster (1966) according to which the utility of a product is based on the bundle of attributes it has. The Conjoint Choice Experiment (CCE) methodology was developed by Louviere and Woodworth (1983) and was originally used in the market research and transport literature. The utility of any good is derived from the characteristics of the good rather than the good itself (Lancaster, 1966). CCE is based on the idea that a good can

be described by its attributes or characteristics and by the levels of those attributes. There are five stages for developing a conjoint choice experiment, collecting data and conducting analysis (Cattin and Wittink, 1982; Green and Wind, 1975; Chan-Halbrend *et al.*, 2010). The stages for this study are shown in Table 1 below.

During the first and second stages of CCE, the attributes and their respective levels are determined. Different studies have used several techniques for determining the most relevant product attributes such as focus group interviews, in-depth interviews or means-end chain analysis (Krystallis and Ness, 2005). For this study we chose to determine the attributes through extensive literature review on choice criterion for observing consumer preferences (Gázquez Abad and Sánchez Pérez, 2009; Goering, 1985; Sandalidou *et al.*, 2002; Siskos *et al.*, 2001) and two focus groups of stakeholders with goat shepherds of Hasi Association of Goat Breeders and other stakeholders with experience related to the Kukes region, situated in northeast Albania. One group was composed of two marketing experts from RASP (Rural Association Support Programme), two veterinarians, one zootechnician and one agri-economist, three butchers as well as 12 shepherds originating from the Hasi region. The shepherds grow a local breed of goat known as the "Goat of Hasi". The other focus group was carried out with civil society representatives, local experts, municipality representatives and members of Association of ADAD Malore. In addition, semi-structured interviews were also conducted with important stakeholders of the small ruminants' meat in Albania. The focus groups and semi-structured interviews results combined with literature review served as a basis for the choice of attribute levels. Four attributes were chosen for goatkid meat: (1) weight, (2) origin, (3) guarantee indication and (4) price.

Weight was considered very important since it was related to the feeding scheme and the quality of meat as discussed in the previous section. Considering the focus group results and the characteristics of goatkid in Albania, a carcass weight of 5, 10 and 15 kg was determined as representative for the market. Bernués *et al.* (2012) as well as Imami *et al.* (2011) highlighted the importance of carcass weight in determining the quality of the meat – Albanian consumers prefer smaller size in the case of lamb meat (and we expect similar preferences for goatkids too). Rodrigues and Teixeira (2009), exploring sensory characteristics of Cabrito Transmontano Protected Origin Designation, found that lighter weight carcasses were considered more tender with less flavour and odour intensity than heavier carcasses.

Product origin was considered a principal attribute for the study. Following focus group discussions, there were definitive regions where rearing in mountainous areas were more common like in Laberia (regions of Gjirokaster and Vlore), Kukes and the rest of the mountainous areas of the country[1]. Kukes/Has is situated in the Northeast areas of the country. Gjirokaster and Vlore are part of the agro-climatic and socio-cultural region named Laberia and are positioned in southwest Albania. The regions are completely separated from each other and represent two different areas of Albania where the major similarities are their mountainous characteristics and the large number of farmers engaged in small ruminant's activities. Gjirokaster has by far the highest levels of meat production available per inhabitant for small ruminants with about 83 kg/capita followed by Vlore in the 2nd place. The region of Kukes has a production per capita of about 34 kg per capita which is quite high compared to the country average (INSTAT, 2016).

Table 1: Stages of a Conjoint Choice Experiment and Analysis carried for goatkid meat.

Stage	Description
1. Selection of attributes	Attributes were selected based on a focus group with stakeholders and an extensive literature review.
2. Assignment of attribute levels	Attribute levels were determined by literature reviews and by the focus group comprised of stakeholders in the value chain of small ruminants meat.
3. Construction of choice sets	The SSI Web program using the Random Method that incorporated orthogonal array was used to create the profiles in the survey.
4. Data collection	Survey was conducted via face-to-face interviews in different weekdays in several areas of urban Tirana.
5. Data analysis	Data is analysed with Conjoint Choice Model & LCA Approach using Sawtooth Software Latent Class.

Source: Own composition based on Chan-Halbrendt *et al.* (2010)

Geographic indication was deemed as relevant given that in Albania there are no certificates determining the origin of the meat. Therefore, in a manner similar to other studies such as Verbeke *et al.* (2009), the authors added the existence of a guarantee of origin as a credence attribute. Guarantee of origin is not yet popular in Albania; however, consumers are concerned with discovering trustworthy ways for determining origin. An attempt of Geographic Indication (GI) registration was made by the farmers of Hasi (Hasi Association of goat breeders) within the framework of the Biodiv Balkans project[2].

Price has been established as a key attribute as in many other studies exploring consumer preference. Price levels were determined based on market observations. Four price levels were chosen, equally distant starting from a minimum price of 750 ALL to 1050 ALL[3]. Other attributes such as animal sex (Rodrigues and Teixeira, 2009), age, aroma, tenderness, flavour (Webb *et al.*, 2005) rearing system, freshness (Alexandre *et al.*, 2008; Carlucci *et al.*, 1998), halal certification (Ibrahim, 2011) were not included in the study since they were not ranked as attributes of primary importance by the focus group members and the butchers during the semi-structured interviews.

In the third stage, the construction of choice sets were made. Sawtooth Software SSI Web 6.6 was used to design the survey and to prepare the data for analysis. The attributes and levels were combined into choice tasks composed of triplets of profiles (concepts) or alternatives, as in the example shown in Table 2.

[1] The production of small ruminant (sheep and goat) meat is concentrated in the regions of Vlore (16.8 percent), Fieri (14 percent), Korce (13.0 percent) and Gjirokaster (11.4 percent), which together account for 55 percent of the total production. Kukesi produces 5% percent of the sheep and goat meat in Albania.

[2] The BiodivBalkans project aimed to identify and protect agrobiodiversity as a driver for a sustainable agricultural development in Albanian mountainous regions. Among other activities it developed Geographical Indications (GI) of Hasi goat (endemic breed) and its kid goat meat in order to address the territorial dimension.

[3] During 2016, the average exchange rate was 1 EUR = 135 ALL, according to the Bank of Albania.

Table 2: Example of a goatkid meat choice sets.

Attributes	Levels		
Origin	Other mountainous areas	Laberia	Kukesi/Hasi
Carcass Weight (Kg)	5	10	15
Guarantee of origin	Without certificate of origin	Without certificate of origin	With certificate of origin
Price (ALL)	750	950	1050
	I would choose		
	↓	↓	↓
	□	□	□

Source: own composition

Table 3: Age structure of the sample and comparisons with overall Tirana population.

Structure of the sample			Census data on Tirana		
Age category	Frequency	Share	Age category	Frequency	Share
0-17	0	0%	0-14	290,837	19%
18-30	51	20%	15-29	370,948	25%
30-40	56	22%	30-39	181,557	12%
40-50	53	21%	40-49	207,496	14%
50-60	60	24%	50-59	202,490	14%
Over 60	30	12%	Over 60	245,180	16%
Total	250	100%	Total	1,498,508	100%

Source: Field survey and Albanian Census of Population and Housing, 2011

Table 4: Socio-economic indicators of the sample.

Education			Employment			Income (ALL)		
Categories	Obs.	%	Categories	Obs.	%	Categories	Obs.	%
Primary school	29	11.6	Unemployed	57	23	0-30,000	8	3.2
Secondary sch.	106	42.4	Student	17	6.8	30,001-60,000	85	34.0
University	115	46	Self-employed	40	16	60,001-90,000	86	34.4
			Employed	113	45	90,001-120,000	57	22.8
			Retiree	23	9.2	120,001-160,000	11	4.4
						160,001-200,000	3	1.2
Total	250	100	Total	250	100	Total	250	100

Source: Survey results

Goatkid meat product profiles are constructed by selecting one level from each attribute and combining across all attributes. In this study, there are four attributes, of which one has four levels (price), two has three levels and one has two levels. Thus, the numbers of possible profiles were $4\times3\times3\times2 = 72$ profiles. A complete factorial design would use all the 72 profiles, which is impractical for respondents to evaluate at one time. The most commonly used method of constructing a fractional factorial design in conjoint measurement is the orthogonal array (Green and Wind, 1975). The complete enumeration option of Sawtooth Software SSI Web 6.6 was used for generating the choice tasks. In complete enumeration, profiles are nearly as orthogonal as possible within respondents, and each two-way frequency of level combinations between attributes is equally balanced. Within choice tasks, attribute levels are duplicated as little as possible - a property called "minimal overlap" (Chrzan and Orme, 2000). Twelve choice tasks (profiles), each made of three concepts, were included in each questionnaire and respondents were asked to choose 12 concepts, one from each triplet concepts in a task. Seven questionnaire versions were generated and eighty-four different choice tasks were created for the seven versions, a design that is optimal and efficient ($p < 0.05$).

Questionnaires were developed based on literature review and focus groups and seven versions of the questionnaires were developed. For each of the seven versions of the questionnaires, there were two parts. The first part of the questionnaires consisted of 12 concepts (one for each choice sets with three product profiles) and the second part was composed of additional questions that include the socio-demographic details of each respondent and questions to obtain insight into consumer purchasing and consumption habits.

A sample of choice sets (profile) used is given in Table 2.

In the fourth stage of the research, a total of 250 face-to-face interviews were carried out in Tirana, the largest city in Albania using a random approach. Interviews were conducted by four well-trained interviewers (students and graduates) supervised by the authors of this paper. The focus group with stakeholders identified Tirana as the main driver of market demand for goat kid meat. Tirana, given its size of the population and higher average income, is the ideal place to conduct such a study. The interviews took place in various places of the capital city such as entrance to butcher stores and supermarkets, the entrance to the main green park of the city and the roads to main green market places. The interviews took place during November - December 2016. The main interviewee target was "food buyers" excluding minors (younger than 18 years).

Socio-demographic characteristics are deemed important for representativeness (Juma et al, 2010; Knight *et al.*, 2006), thus the questionnaire included socio-demographic indicators of the respondents. The sample was divided quite symmetrically by gender (51% are male). The vast majority (96 percent) of the respondents were from urban areas. Age distribution of the sample is reflected in Table 3. With the exception of the group of consumers below 18 years old who were not the target of the survey, the age groups compared well to the census of the population of Tirana.

The sample is dominated by well-educated respondents (Table 4). The low share of respondents with primary education is explained by the high accessibility and immigration flows in the inner part of Tirana agglomerations, while also only adult population was targeted in the survey. More than a fifth of the respondents are unemployed. The unemployment coefficient is within the range provided by the official data, which is 14 % according to the Labour Force Survey 2017 (INSTAT, 2018) and 30% according to the Census of Population and Housing 2011 (INSTAT, 2012). The share of

households with an income level between 30000 ALL per month and 90000 ALL per month is comparable with the Household Budget Survey of 2016 (INSTAT, 2017).

In the fifth stage, the conjoint choice method combined with Latent Class Analysis (LCA) was used to the traditional aggregated or one-class model. In latent class analysis, the different segments that have different utility preferences are accounted for and hence better market predictions can be made. Sawtooth software SSI was used to design the questionnaire and web Sawtooth Latent Class software was used to analyse the data.

The LCA is a random utility model. Building on the seminal work of McFadden (1973), consumer utility can be represented as follows:

$$U_{ijt} = \beta X_{ijt} + \varepsilon_{ijt}, \quad (1)$$

where i refers to individual i, j refers to concept j and t refers to choice set t. The utility level U_{ijt} is a linear function of the observable vector of attributes X_{ijt} and their coefficients to be estimated, β. ε_{ijt} is a random error term, which captures all unobservable attributes and factors that influence the choice process.

McFadden (1973) showed that the probability that concept j in choice set t is chosen by individual i is given as:

$$P_{ijt} = \frac{\exp(X_{ijt}\beta)}{\sum_{k=1}^{J} \exp(X_{ikt}\beta)}, \quad (2)$$

The numerator is the exponent of the observable utility of concept j in choice set t, and the denominator is simply a collection of observable utility from all available concepts.

In our study, only product attributes (weight, origin, guarantee of origin and price) have been considered; therefore, an individual's probability of choosing concept j was considered as a function of goat kid attributes. The socio-demographic variables have not been considered, due to software limitations, as mentioned above.

Results

The conjoint choice experiments/latent class analysis enables the segmentation of the consumers into separate classes. Out of the best replications, we chose the replication with three classes. Our decision was based on the relative change of the Consistent Akaike Info Criterion and the Chi-square statistics but also based on the development of the goatkid market in Albania.

Of the three classes, class 2 (with 65% of the sample) is the largest class (Table 5). For class 2, the most important attribute is the guarantee indication of origin, meaning that respondents in this class preferred goatkid meat having a certification of origin. This class also shows high preference for goatkid meat of smaller carcasses (5 and 10 kg) and from other mountainous areas (other than Kukes/Has or Laberia).

Table 5: Market segmentation for goatkid meat.

Segment Size	Class 1	Class 2	Class 3
	13.0%	65.0%	22.0%
Importance of attributes			
Origin	46.8%	26.4%	83.6%
Carcass weight	4.1%	29.3%	2.6%
Guarantee indication	0.7%	40.4%	6.9%
Price	48.3%	3.7%	6.7%
Part Worth Utilities for each attribute			
Origin			
Kukes/Has	-0.8856***	0.0521	3.5975***
Laberi	2.1840***	-0.3074***	-1.9868***
Other mountainous areas	-1.2984***	0.2554***	-1.6107***
Carcass weight			
5 kg	0.1432	0.2189***	-0.1137
10 kg	0.0168	0.1857***	0.0619
15 kg	-0.1600	-0.4046***	0.0518
Guarantee of origin			
With certificate of origin	0.0273	0.4297***	-0.2313
Without certificate of origin	-0.0273	-0.4297***	0.2313
Price			
Price	-1.1999***	0.0267	0.1498

Note: ***T absolute value higher than 2,6 Alpha 0.01
Source: Consumers preferences Survey results

We will label this group as "*guaranteed baby goatkid fans*".

Class 3, representing 22% of the sample, is the second largest class. For this class, the most important attribute is origin. This class strongly prefers meat from Kukes and Hasi region. This class can be named as "*Kukes goatkid fans*".

Class 1 with 13% of the sample is the smallest group. The most important attribute in this class is price, while the second most important attribute is origin – there is a strong preference for goatkid meat from Laberi (provided that it is available at reasonable prices (within the 750 – 1050 ALL/kg price range). Given the importance of price attribute and (negative) price associated sign, this class may be labelled as "*price sensitive consumers*".

A socio-demographic analysis has been carried for each selected class. The variables were not significant except in Class 3 which reveal a higher inclusion of consumers with relatively higher incomes. The analyses did not show significance in other variables such as age, education, gender and employment.

Conclusions

This paper provides the first in-depth consumer study on goatkid meat in Albania. The study throws light into various important aspects of urban consumer preferences for goatkid meat attributes including origin, price, weight and origin guarantee indication. The findings of the study are useful to capitalise the market opportunities of small ruminants' meat and for the policymakers engaged in empowering smallholder producers in mountainous areas.

Origin is one of the most important attributes for all the identified consumer classes, and the most important attribute for the largest class (Class 2 covering 65% of the sample). Consumers in Class 3 show a strong preference for goatkid meat coming from Kukes/Has, whereas consumers in Class 1 (which is a price-sensitive class) prefer meat from Laberi.

Thus, these classes represent clear market potentials. Interestingly, considering the wide belief and regional differences in terms of traditional ways of producing small ruminants, consumers in this biggest consumer class prefer goat-kid meat from different mountainous areas (other than Kukes/Has or Laberi). One additional explanation could be that most residents in Tirana were born or come from households originating from different areas in Albania, and thereby have preferences tied to their origin.

The study highlights the important aspects of development aid interventions and influence to policymakers. Following EU rural development policies, several initiatives to develop local markets and efficient food supply chains can be developed to benefit farmers, distributors or consumers. Active involvement in bottom-up mechanism for valorising local value chains are excellent aspects for territorial development. Initiatives should interrelate improvement and guarantee of the quality of agricultural products and products with territorial marketing. Adoption of a national legal framework for Geographical Indications compatible with the EU regulation, with the goal of enabling the registration of local food specialties in the EU, is necessary. Albanian policymakers have to identify viable instruments of support for the adoption of GI certification schemes for the local markets. Development of capacities related to GI (PDO/PGI) certification can strengthen sector competitiveness. The development of quality schemes may be supported in the context of EU integration given the importance of GI regulations in the EU.

Our results may also be useful for local breeders, small ruminants' meat processors, business associations and policymakers. Farmers can use this information to decide which would be the most profitable and preferred goatkid type of meat to sell and what is the best product attribute to promote. The preference for smaller carcasses versus larger ones which may be translated as a preference for goatkid (or lamb) baby meat is a well-known phenomenon in Albania (Imami *et al.*, 2011) – given consumer preferences, farmers slaughter animals at an early stage causes loss both in efficiency and meat quality. Other reason for doing so is also the shortage of feed during summer. Based on this state of affairs, public agents/development agencies may consider consumer education on meat quality and providing farmers incentives for keeping goatkids longer (also as a temporary separate activity) until they reach the optimal weight. The results are limited for creating market segmentation due to the lack of significant socio-demographic factors. Groups of producers or associations, such as the case of the Hasi goat breeders association can consider introducing their own marks based on the characteristics of their breeds, the interests and values of their members and the image of their area of production. Cooperation with butchers and other retailers is crucial for achieving mutual benefits in terms of sale sustainability and market diversification. Other types of meat by-products can be developed, except for carcass meat, which can be valorised considering these findings.

One of the limitations of this study is that it focuses only on urban consumers (although almost half of the population still live in rural areas), who may have a different consumption pattern. The conclusions provided for the urban residents of Tirana are still important because it is the most important market and thus is useful *per se*. Furthermore, it can also be useful information for other urban areas in Albania or nearby countries which, despite differences, have a high degree of similarity in terms of culture.

Research in the future may investigate other sectors for exploring and discovering niche markets for local smallholder producer. Further research may also consider assessing various dimensions of 'origin'. Indication of geographical origin is a very important clue for scrutinising the potentials for using guarantee as a sign of meat quality. Considering that credence attributes are not transferable due to scarce information, efforts made to reduce confusion and lower transaction costs by revealing to consumers the origin, may provide assurance to consumers for the needed information on safety and quality of meat as well as for authenticity originating from the rearing systems characterising the place of origin.

References

Alexandre, G., de Beauville, S.A., Shitalou, E. and Zebus, M. F. (2008): An overview of the goat meat sector in Guadeloupe: conditions of production, consumer preferences, cultural functions and economic implications. Livestock Research for Rural Development, **20** (1), Article no. 14, 9 p.

Becker, T., Benner, E. and Glitsch, K. (2000): Consumer perception of fresh meat quality in Germany. British Food Journal, **102** (3), 246–266. https://doi.org/10.1108/00070700010324763

Bernués, A., Ripoll, G. and Panea, B. (2012): Consumer segmentation based on convenience orientation and attitudes towards quality attributes of lamb meat. Food Quality and Preferences, **26** (2), 211–220. https://doi.org/10.1016/j.foodqual.2012.04.008

Cattin, P. and Wittink, D.R. (1982): Commercial Use of Conjoint Analysis: A Survey. Journal of Marketing, **46** (3), 44–53. https://doi.org/10.2307/1251701

Carlucci, A., Girolami, A., Napolitano, F. and Monteleone, E. (1998): Sensory evaluation of young goat meat. Meat Science, **50** (1), 131–136. https://doi.org/10.1016/S0309-1740(98)00023-0

Chan-Halbrendt, C., Zhllima, E., Sisior, G., Imami, D. and Leonetti, L. (2010): Consumer preferences for olive oil in Tirana, Albania. International Food and Agribusiness Management Review, **13** (3), 55–74. https://doi.org/10.22004/ag.econ.93559

Chrzan, K. and Orme, B. (2000): An overview and comparison of design strategies for choice-based conjoint analysis. Sawtooth Software Research Paper Series. Available at: https://www.sawtoothsoftware.com/support/technical-papers/design-of-conjoint-experiments/an-overview-and-comparison-of-design-strategies-for-choice-based-conjoint-analysis-2000 (Accessed in March 2019)

FAOSTAT (2018): Food and Agriculture Organization of the United Nations Database. Accessed in February 2019.

Font i Furnols, M. and Guerrero. L. (2014): Consumer preference, behavior and perception about meat and meat products: An overview. Meat science, **98** (3), 361–371. https://doi.org/10.1016/j.meatsci.2014.06.025

Font i Furnols, M., Realini, C.E., Guerrero, L., Oliver, M.A., Sañudo, C., Campo, M.M., Nute, G.R., Cañeque, V., Álvarez, I., San Julián, R., Luzardo, S., Brito, G. and Montossi, F. (2009): Acceptability of lamb fed on pasture, concentrate or combinations of both systems by European consumers. Meat Science, **81** (1), 196–202. https://doi.org/10.1016/j.meatsci.2008.07.019.

Gázquez-Abad, J.C. and Sánchez-Pérez, M. (2009): Factors Influencing Olive Oil Brand Choice in Spain: An Empirical Analysis Using Scanner Data. Agribusiness, **25** (1), 36–55. https://doi.org/10.1002/agr.20183

Goering, P.A. (1985): Effects of product trial on consumer expectations, demand, and prices. Journal of Consumer Research, **12** (1), 74–82.

Green, P.E. and Wind, Y. (1975): New Way to Measure Consumers' Judgements. Harvard Business Review, **53**, 107–117.

Grunert, K.G., Bredahl, L. and Brunsø, K. (2004): Consumer perception of meat quality and implications for product development in the meat sector—a review. Meat Science, **66** (2), 259–272. https://doi.org/10.1016/S0309-1740(03)00130-X

Guerrero, A., Velandia Valero, M., Campo, M.M. and Sañudo, C. (2013): Some factors that affect ruminant meat quality: from the farm to the fork. Acta Scientiarum. Animal Sciences, **35** (4), 335–347. https://doi.org/10.4025/actascianimsci.v35i4.21756

Ibrahim, M. (2011): Consumer willingness to pay a premium for halal goat meat: a case from Atlanta, Georgia. Journal of Food Distribution Research, **42** (1), 72–76. https://doi.org/10.22004/ag.econ.139299

Imami, D., Zhllima, E., Merkaj, E., Chan-Halbrendt, C. and Canavari, M. (2016): Albanian Consumer Preferences for the use of Powder Milk in Cheese-Making: A Conjoint Choice Experiment. Agricultural Economics Review, **17** (1), 20–33. https://doi.org/10.22004/ag.econ.262432

Imami, D., Chan-Halbrendt, C., Zhang, Q. and Zhllima, E. (2011): Conjoint Analysis of Consumer Preferences for Lamb Meat in Central and Southwest Urban Albania. International Food and Agribusiness Management Review, **14** (3), 111–126. https://doi.org/10.22004/ag.econ.114711

INSTAT (2012) Preliminary data of Census of Poplation and Housing 2011. Available at: http://www.instat.gov.al/al/temat/censet/censusi-i-popullsis%C3%AB-dhe-banesave (Accessed in October 2019)

INSTAT (2016): Statistical yearbook for year 2015. Available at: http://www.instat.gov.al (Accessed in October 2019)

INSTAT (2017): Household Budget Survey data. Available at: http://databaza.instat.gov.al (Accessed in October 2019)

INSTAT (2018): Labor Force Survey data. Available at: http://databaza.instat.gov.al (Accessed in October 2019)

Juma, G.P., Ngigi, M., Baltenweck, I. and Drucker, A.G. (2010): Consumer demand for sheep and goat meat in Kenya. Small Ruminant Research, 90 (1-3), 135–138. https://doi.org/10.1016/j.smallrumres.2009.12.002

Knight, E., House, L., Nelson, M.C. and Degner, R. (2006): An evaluation of consumer preferences regarding goat meat in the South. Journal of Food Distribution Research **37** (1), 1–9. https://doi.org/10.22004/ag.econ.8543

Krystallis, A. and Arvanitoyannis, I.S. (2006): Investigating the concept of meat quality from the consumers' perspective: The case of Greece. Meat Science, **72** (1), 164–176. https://doi.org/10.1016/j.meatsci.2005.06.013.

Krystallis, A. and Ness, M. (2005): Consumer Preferences for High Quality Olive Oil in Greece: A Conjoint Study. International Food and Agribusiness Management Review, **8** (2), 62–91. https://doi.org/10.22004/ag.econ.8161

Lancaster, K. (1966): A New Approach to Consumer Theory. Journal of Political Economy, **74** (2), 132–157.

Louviere, J.J. and Woodworth, G. (1983): Design and Analysis of Simulated Consumer Choice or Allocation Experiments: An Approach Based on Aggregate Data. Journal of Marketing Research, **20** (4), 350–367.

MARDWA (2014): Inter-sectoral strategy for agriculture and rural development in Albania, 2014-2020. Available at: https://anrd.al/publications/inter-sectoral-agricultural-and-rural-development-strategy-2014-2020/ (Accessed in September 2019)

McFadden, D. (1973): Conditional logit analysis of qualitative choice behavior. Chapter 4, 105–142. In Zarembka, P. (eds.) (1973): Frontiers in Econometrics, Academic Press, New York, USA.

Montossi, F., Font-i-Furnols, M., Del Campo, M., San Julián, R., Brito, G. and Sañudo, C. (2013): Sustainable sheep production and consumer preference trends: Compatibilities, contradictions, and unresolved dilemmas. Meat Science, **95** (4), 772–789. https://doi.org/10.1016/j.meatsci.2013.04.048

Pauselli, M., Morbidini, L., Lasagna, E., Landi, V. and Giangrande, R. (2009): Consumer acceptance of Italian or New Zealander lamb meat: an Italian case study. Italian Journal of Animal Science, **8** (2), 528–530. https://doi.org/10.4081/ijas.2009.s2.528

Rodrigues, S. and Teixeira, A. (2009): Effect of sex and carcass weight on sensory quality of goat meat of Cabrito Transmontano. Journal of Animal Science, **87** (2), 711–715. https://doi.org/10.2527/jas.2007-0792

Sandalidou, E., Baourkis, G. and Siskos, Y. (2002): Customers' Perspectives on the Quality Of Organic Olive Oil in Greece: A Satisfaction Evaluation Approach. British Food Journal **104** (3/4/5), 391–406. https://doi.org/10.1108/00070700210425787

Siskos, Y., Matsatsinis, N.F. and Baourakis, G. (2001): Multi-criteria Analysis in Agricultural Marketing: The Case of French Olive Oil Market. European Journal of Operational Research, **130** (2), 315–331. https://doi.org/10.1016/S0377-2217(00)00043-6

Shimp, T.A. and Sharma, S. (1987): Consumer ethnocentrism: Construction and validation of the CETSCALE. Journal of Marketing Research, **24** (3), 280–289. https://doi.org/10.2307/3151638

Skreli, E. and Imami, D. (2019): Meat Sector Study. Technical Report prepared for EBRD AASF Project. Available at: http://aasf.com.al/wp-content/uploads/2019/08/Meat-EN.pdf. (Accessed in October 2019)

Van Loo, E.J., Caputo, V., Nayga Jr, R.M. and Verbeke, W. (2014): Consumers' valuation of sustainability labels on meat. Food Policy, **49**, 137–150. https://doi.org/10.1016/j.foodpol.2014.07.002

Verbeke, W., Pérez-Cueto, F.J.A., de Barcellos, M.D., Krystallis, A. and Grunert, K.G. (2009): European citizen and consumer attitudes and preferences regarding beef and pork. Meat Science, **84** (2), 284–292. https://doi.org/10.1016/j.meatsci.2009.05.001

Vukasovič, T. (2013): Attitude towards organic meat: an empirical investigation on West Balkans Countries (WBC) consumers. World's Poultry Science Journal, **69** (3), 527–540. https://doi.org/10.1017/S004393391300055X

Webb, E.C., Casey, N.H. and Simela, L. (2005): Goat meat quality. Small Ruminant Research, **60** (1–2), 153–166. https://doi.org/10.1016/j.smallrumres.2005.06.009

Zhllima, E., Imami, D. and Canavari, M. (2015): Consumer perceptions of food safety risk: Evidence from a segmentation study in Albania. Journal of Integrative Agriculture, **14** (6), 1142–1152. https://doi.org/10.1016/S2095-3119(14)60997-7