



Consumer Impacts for the Milk Production in Albania (Descriptive Analysis)

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Abstract: As milk is a very important component of the Albanians diet, this study explores consumer preferences for milk in Albania and also tries to determine consumers types based on their preferences and socio-demographic factors. To reach these objectives, this study designed a conjoint choice experiment survey and collected primary data in the most populated cities of Albania. The milk industry and its marketers may benefit from this information by using it to strategically market their milk to different groups. A sample size of 200 questionnaires are realized with dairy consumers in two important areas, mainly Tirana and Durres. Is considered on appropriate size to ensure data safes and reliables for attributed milk analysis. Interviews were mainly taken from occasional consumers. Tirana and Durresi are two most populated cities, were selected for the study the ours sample, because we thought that in these two cities is more concentrated the large power purchasing.

Key words- Albania, milk, consumer preferences, market segmentation

INTRODUCTION

Understanding the factors which may significantly influence household consumption is important in the planning of farmers, processors and manufacturers. Consumers' responses to changes in price and non-price factors are basic to an economic analysis of almost all the policy decisions related to industry or government programs.

This study exploring consumer preferences for dairy product and has defined the types of customers based on preferences and socio-demographic factors.

For conducting, this study consulted a wide literature which considered studies and comparative data for the consumption milk in Albania. The study is conducted mainly in two major cities in Albania, Tirana and Durresi. The selection of sample is randomly.

The main objectives of this study are the identification and evaluation of customer preferences based on different attributes of milk, and evaluation of the willingness to pay by the customer depending socio-economic features. Another objective is also the dairy market survey and analysis of trends over the years. Dairy Market segmentation in customer classes based on their preferences towards product and measuring the impact of socio-demographic variables in consumer willingness to buy milk product. These constitute key objectives of our scientific paper which helped us to highlight and meet the desires and preferences of consumers interviewed.

METHODOLOGY

The study (the sample), is localized in two most populated cities in Albania, Durres and Tirana. The basis of the study was the accumulations data, obtained from the realization of directly at the consumers of milk. In this study, the realization of the questionnaire and data processing are realized in the period March 2015 to February 2016. The average time duration of the interview with a customer was 15 to 25 minutes. During the interview, customers, are taken in consideration, all the questions of our questionnaire ranging from gender, age, birthplace, residence, income ... etc, through random selection of our sample. During processing and data entry into the program, it was found that 200 respondents (except one of them) to both areas of Tirana and Durres, sportsmanship and fun answered questions asked by our questionnaire.

The data acquired from the questionnaires are processed by known program SPSS (Statistical Program Social Science). In this program were processed socio-demographic data of consumers interviewed.

LITERATURE REVIEW

Consumer behaviour is the study of individuals, groups, or organizations and the processes which used to select, secure, and dispose of products, services, experiences, or ideas to satisfy needs the impacts which have the consumer and society. It blends elements from psychology, sociology, social anthropology, marketing and economics. It attempts to understand the decision of



buyers, both individually and in groups such as how emotions affect the buyers behaviour. It studies characteristics of individual consumers such as demographics and behavioural variables in an attempt to understand people's wants. It also tries to assess influences to the consumer from groups such as family, friends, sports, reference groups, and society in general.

(Solomon, Bamossy and al. 2006) and (Schiffman and Kanuk 2007), gave a similar definition of consumer behavior:

"Consumer behavior" that appears during the search for the purchase, use, evaluation, disposal of products and services that they expected to accomplish their needs and desires.

"Consumer behavior is activity that people take when bought, consuming and used to have our products and services (Blackwell et al. 2001).

Although the foundation of conjoint analysis techniques be constructed in the 1920s, Luce and Tukey's 1964, paper is generally regarded from the beginning of conjoint analysis literature (Green and Srinivasan 1978). Green and Rao briefly discussed conjoint methodology in their 1969 working paper, 'Nonmetric Approaches to Multivariate Analysis in Marketing,' as did Green and Carmone in their 1970 book.

Multidimensional Scaling and Related Techniques in Marketing Analysis; however, "the first detailed, consumer-oriented paper did not appear until 1971" with Green and Rao's journal article, 'Conjoint Measurement for Quantifying Judgmental Data.' (Green and Srinivasan 1978). Since then, conjoint analysis has been frequently in the most types of marketing research. According to Green, Krieger and Wind (2001), "Conjoint analysis is, by far, the most used marketing research method for analyzing consumer trade-offs." In fact, one study deduced that more than 400 commercial conjoint studies has been performed in the early 1980s (Green and Srinivasan 1990). Large companies such as Ford, General Electric, General Foods, General Motors and Xerox have even employed conjoint analysis for research on a wide array of products (Green, Carroll and Goldberg 1981).

Other marketing research firms have used conjoint analysis for studies on advertising, competitive analysis, distribution, new-product identification, market segmentation and product repositioning (Manalo 1990). Besides use in marketing research, conjoint analysis applications have recently become more diverse. An area of increasing interest

is using conjoint analysis in litigation. Here, conjoint analysis techniques have given key contributions to the settlement of lawsuits in telecommunications, airline and pharmaceutical businesses (Green and Srinivasan 1990).

Conjoint analysis is a better method for determining consumer preferences than the other methods of research that have previously been used by the NWPB and others in the watermelon industry because "in compositional models, customers' explicit perceptions or beliefs about each attribute of a product are measured separately...[but] conjoint analysis takes a holistic view of a product. In other words, a researcher asks the respondent to rate his or her preference...for a product by evaluating the entire product...This approach is thought to reflect the situation buyers encounter in real life"(Reddy and Bush 1998).

Conjoint analysis has been utilized in a number of agricultural studies. For example, Frank et al. (2001) evaluated consumer preferences for color, price and Vitamin C content of bell peppers. Using a conjoint analysis, an ordinary least squares regression and a multinomial logit, Frank et al. concluded that consumers in this study preferred green bell peppers at a low price but containing a large percentage of Vitamin C.

Campbell et al. (2004) looked at price, color, size, seediness, blemishes, production region label and organic production to evaluate consumer preferences for Satsuma mandarins. In this study that facilitated the use of a conjoint analysis and a multinomial logit, Campbell et al. found that consumers preferred a large yellow-orange fruit with no blemishes and no seeds that was organically produced in Alabama and sold at a low price.

RESULTS OF THE STUDY

Demographic data, socio-demographic customer, Dairy case.

The data obtained in the table below, indicate socio-demographic comparisons interviews conducted by consumers of milk in Tirana, with the actual data of the population of Tirana and their age group.



Description		Consumers interviewed	Population in Tirana
Gender	Women	42.0	50.1
	Men	58.0	49.9
Total		100.0	100.0
The Age			
	18-25	27.0	25.0
	25-32	20.0	16.5
	32-39	14.0	15.7
	39-46	18.0	13.9
	46-53	13.0	17
	53-60	8.0	11.9
Total		100.0	100.0

Source: MAFCP statistical yearbook 2015

Table 2, The birthplace consumers of milk to the city of Tirana.

Description	The number of Interviewees	Percentage
City	69	69.0
Village	31	31.0
Total	100	100.0

Source:A.Shtepani (Basha), 2016

Looking at the customer assertions for their hometown are significantly compared to the residence of the interviewed customers. And only 31% of consumers interviewed live in villages and 69% of them live in the city.

Table 3.The birthplace consumers of milk to the city of Durresi.

Description	The number of Interviewers	Percentage
City	58	58.0
Village	42	42.0
Total	100	100.0

Source:A.Shtepani (Basha), 2016

Table 3, In the city of Durresi, 58% of the respondents live in towns and 42 % in the village, from 100 of the total respondents.

Table 4, Number of consumers interviewed by educational level(in Tirana).

Description	The number of Interviewees	Percentage
Without education	2	2.0
High school	12	12.0
Secondary school	40	40.0
University Diploma	46	46.0
Total	100.0	100.0

Source:A.Shtepani (Basha), 2016

Based on interviews in Tirana, the data obtained in table shows that 46% of consumers interviewed with higher education, 40% with secondary education, 12% had graduated eight years and only 2 100% free education from interviews conducted by customers in Tirana.

Table 5, number of consumers interviewed by educational level (in Durres).

Description	The number of Interviewers	Percentage
Without education	10	10.0
High school	21	21.0
Secondary school	31	31.0
University	38	38.0
Total	100.0	100.0

Source:A.Shtepani (Basha), 2016

Based on the data obtained in table above, the data from surveys conducted in Durres city's show that consumers with university are 38- interviews, from the total of 100 respondents, 31 consumers interviewed are with secondary education, 21 consumers with education high school and only 10 respondents without education.

Table 6, Place of purchase of the product Milk of consumers interviewed in the city of Durres and Tirana.

Description	The answer of interviewers	
	The number of Interviewers	Percentage
Farmers	25	12.5%
Supermraket	70	35%
Shop(Local)	55	27.5%
Market	30	15%
Others	20	10%
Total	200	100.0

Source:A.Shtepani(Basha), 2016

In the table above, is indicated the way for the realization of interviews conducted by dairy customers. The data is evident that most of the customers then 35% of them, it comes to both the city selected for the study, buy a product of milk in supermarket, 12.5% to the farmers, 27.5% in local shops, 15% in the market. But random interviews participate a very small number of interviews completed about 10% of them.

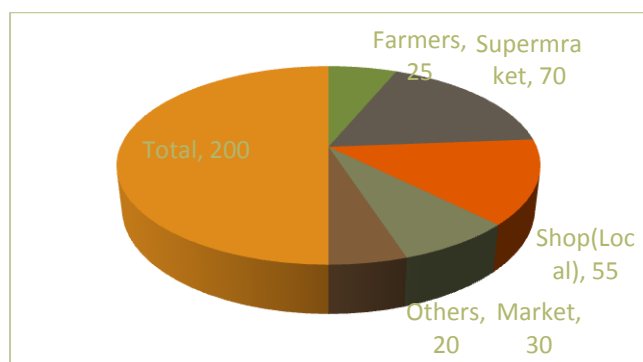


Figure 1,Place of purchase of the product Milk of consumers interviewed in the city of Durres and Tirana.

Table 7, Consumer Preferences for types of milk in Tirana

Description	The number of Interviewers	Percentage
UHT Domestic	64	64.0
UHT Import	7	7.0
Fresh Pasteurized	17	17.0
Non Packaged Milk	12	12.0
Total	100	100.0

Source:A.Shtepani (Basha), 2016

From the data collected was observed from 100 respondents prefer the 64% of UHT milk domestic, 7% prefer the UHT import, 17% prefer the Fresh pasteurized and only 12% prefer the non packaged milk or open milk.

Table 8, Consumer Preferences for types of milk in Durres

Description	The number of Interviewers	Percentage
UHT Domestic	49	49.0
UHT Import	11	11.0
Fresh Pasteurized	13	13.0
Non Packaged Milk	27	27.0
Total	100	100.0

Source:AalertaShtepani, (Basha) 2016

From the data collected in the table 8, was observed from 100 respondents prefer the 49% of UHT milk domestic, 11% prefer the UHT import, 13% prefer the Fresh pasteurized and only 27% prefer the non packaged milk or open milk.

Tabela9,The impact of children interviewed consumers' decision to buy milk.

Description	The number of Interviewers	Percentage
Strongly Disagree	26	13.0
Slightly agree	22	11.0
Averagely agree	35	17.5
Agree	49	24.5
Strongly Agree	68	34.0
Total	200	100.0

Source: A.Shtepani(Basha), 2016

The results obtained in the table 9, presents data concerning customer decision about buying dairy product feeding their children. Results from interviews with the Customers indicate that 34% of respondents are agree with the selection of dairy product, 24.5% of consumers interviewed agree, 17.5% of consumers surveyed are moderately agree, 11% of consumers less agree and 13% of respondents they disagree by 200 consumers interviewed in total.

Table 10, Statements of customers who have a positive effect of milk consumption to health.

Description	The number of Interviewers	Percentage
Strongly Disagree	8	4.0
Slightly agree	18	9.0
Averagely agree	36	18.0
Agree	53	26.5
Strongly Agree	85	42.5
Total	200	100.0

Source: A.Shtepani(Basha), 2016

Table 10, presents the customer considerations that the positive effect of milk consumption on health. About 42.5% of the interviewed customers share the view that consumption of milk has a positive effect on health, 26.5% of consumers are agree with the fact that consuming milk has a positive effect on health, 18% moderately agreed, 9% of consumers share the opinion that. They are only 4% Strongly Disagree of consumers' interviewed responded from 200 interviewed.

Table 11.Evaluation of dairy products according to the customers interviewed in Tirana.

Description	The number of Interviewers%					Total
	Nothing	Slightly	Average	More	Too much	
Type of packaging	4.0	13.0	35.0	27.0	21.0	100.0
Origin	2.0	5.0	19.0	36.0	38.0	100.0
Nutritional facts table	4.0	10.0	18.0	22.0	46.0	100.0
% of fat	5.0	13.0	16.0	43.0	23.0	100.0
Taste	1.0	2.0	6.0	29.0	62.0	100.0
Afati i qëndrueshmërisë-freskia	2.0	10.0	11.0	22.0	55.0	100.0
Image	3.0	9.0	26.0	39.0	27.0	100.0
Lowest Price	14.0	20.0	34.0	17.0	15.0	100.0
Food safety certifying stamp	2.0	14.0	12.0	36.0	36.0	100.0
Label information stating that the product is 100% natural	8.0	11.0	35.0	22.0	26.0	100.0
Stamp that proves the product is certified by the state	6.0	9.0	20.0	34.0	31.0	100.0
Quality stamp inspected by public health institute	5.0	7.0	14.0	35.0	39.0	100.0

Source: A.Shtepani(Basha), 2016

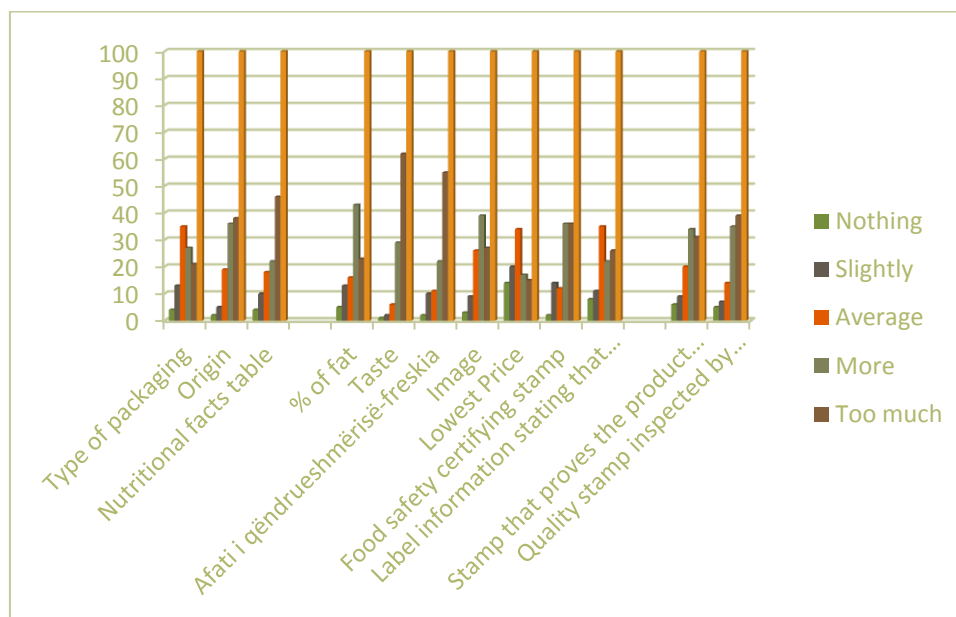


Figure 3. Evaluation of dairy products according to the customers interviewed in Tirane.

Table presents data that are based on the responses of consumers interviewed in Tirana, regarding the evaluation of dairy products. From a total of 100 interviews conducted, 35% rated average type of packaging, 27% of consumers interviewed v appreciate more, 21% at most, 13% less and 4% of interviewees appreciate you.

Origin-country of production, estimated by consumers interviewed by 38% at most, 36% consider more, 19% of value on average, 5% and 2% less at all.

Nutritional fact table, from surveys conducted almost see that nearly half of the respondents ie 46% of them have given the maximum evaluation, 22% have appreciated 18% on average, 10% less and 4% not at all.

% of Fat, is evaluated differently from the tables with nutritional values, with a difference in the responses received, 43% have appreciated 23% at most, 16% on average, 13% less and only 5% not at all.

Taste, derived from surveys is estimated 62% at the most, 29% more, on average, 6%, 2% and only 1% less at all.

Shelf-cold, interviewed customers are responded to 55% at most, 22% is highly appreciated 11% on average, 10% less and 2% not at all.

The image, 39% of 100 respondents in total have appreciated 27% at most, 26% mesatrisht, 9% less and only 3% not at all.

Lowest price, from surveys conducted seems that consumers are not very comfortable for very low prices. By directly interviewing them I reflected that prices are more real as they are, but be a very high quality. 34% of interviewees have estimated an average of 15% at most, 17% very, 20% less and only 14% not at all.

Food safety certifying stamp, is the most valued and more by 36%, averaging 12%, less 14% and 2% not at all.

Label information stating that the product is 100% natural, is estimated at 26% at the most, 22% very, 35% on average, 11% less, and only 8% not at all.

Stamp that proves the product is certified by the state, is estimated at 36% at the most, 34% very, 20% on average, 9% less and only 6% not at all.

Quality stamp inspected by public health institute, is estimated at 39% at most, and many therefore have the same rating, 14% on average, only 7% less and 15% no.

Table 12. Evaluation of dairy products according to the customers interviewed in Durres.

Description	The number of Interviewers %					Total
	Nothing	Slightly	Average	More	Too much	
Type of packaging	31.0	12.0	15.0	26.0	16.0	100.0
Origin	8.0	14.0	20.0	28.0	30.0	100.0
Nutritional facts table	2.0	10.0	12.0	11.0	65.0	100.0
% of fat	3.0	4.0	14.0	34.0	45.0	100.0
Taste	5.0	7.0	19.0	25.0	44.0	100.0
Freshness	6.0	9.0	17.0	31.0	37.0	100.0
Image	13.0	18.0	21.0	28.0	20.0	100.0
Lowest Price	4.0	8.0	9.0	43.0	36.0	100.0
Food safety certifying stamp	22.0	15.0	30.0	19.0	14.0	100.0
Label information stating that the product is 100% natural	56.0	18.0	13.0	6.0	7.0	100.0
Stamp that proves the product is certified by the state	38.0	23.0	17.0	13.0	9.0	100.0
Quality stamp inspected by public health institute	29.0	34.0	23.0	8.0	6.0	100.0

Source: A.Shtepani (Basha), 2016

Type of packaging, from surveys done in Durres see that interviewers estimated 31% at all about the type of packaging, 12% less, on average, 15%, 26% and 16% very most. This is worth mentioning because we see that there are differences regarding the evaluation have made consumers Tirana.

Origin-country of production, a total of 100 respondents, 30% of them have praised makismalisht, 28% very, 20% on average, 14% less, and only 8% not at all.

Nutritional fact table, surveys done by the interviewer see that given a maximum interest against tables with nutritional values are estimated at 65% at the most, 20% very, 10% on average, 3% less and only 2% you.

%of fat, is estimated at 45% at the most, 34% very, 14% on average, 4% less and only 3% not at all.

Taste, is valued at 44% at the most, 25% very, 19% on average, only 7% less and 5% not at all.

Shelf-cold, interviewed customers have appreciated by 37% at most, 31% very, 17% on average, 9% less and only 6% not at all.

The image, from surveys conducted assessment I see that the image is somewhat fluctuating percentage no greater emphasis on any of the abovementioned alternatives. 28% is much appreciated, 20% at most, 21% on average, 18% less and 13% no.

Lowest price, making a comparison with the city of Tirana we see here in assessing price adiabatic most ulët. Atëherdurres customers have appreciated by 43% very, 36% at the most, an average of 9%, 8% less and only 4%.

Food safety certifying stamp, is evaluated with a maximum of 14%, 19% very, 30% on average, 15% less and 22% no.

Label information stating that the product is 100% natural, from surveys done seeing that customers of Durres not have much confidence in the writings of products, 56% is estimated at all, 18% less, 13% on average, 6% more and 7% mostly.



Stamp that proves the product is certified by the state, is estimated at 9% at the most, 13% very, 17% on average, 23% less and 38% compared with customers aspak. Në Tirana fluctuations in customer responses to duresit. Shohim that distrust in the milk is eprodukteve assessment based on the abovementioned elements.

Quality stamp inspected by public health institute, I was given a maximum rating of 29% less, 29% no, 23% on average, 8% and 6% very most

CONCLUSION

- ✓ Dairy activities have a long tradition in Albania due to the favorable natural resources for dairy production. Milk producers must meet consumers' demand for milk when there is demand in order to remain competitive. Once we are able to clearly describe the existing demand for milk, a marketing strategy can be properly developed. In the dairy industry milk remains the most important component in terms of production and also in consumption.
- ✓ This study makes it possible to identify four milk consumers groups according to their preferences on the product attributes. All these groups represent different potential market segments with specific characteristics. The most populated consumers groups preferred UHT domestic milk and this is most common in the middle income groups. For conducting, this study consulted a wide literature which considered studies and comparative data for the consumption milk in Albania. The study is conducted mainly in two major cities in Albania, Tirana and Duresi. The selection of sample is randomly.
- ✓ From the data collected in the table 7, was observed from 100 respondents prefer the 64% of UHT milk domestic, 7% prefer the UHT import, 17% prefer the Fresh pasteurized and only 12% prefer the non packaged milk or open milk (Tirana).
- ✓ From the data collected in the table 8, was observed from 100 respondents prefer the 49% of UHT milk domestic, 11% prefer the UHT import, 13% prefer the Fresh pasteurized and only 27% prefer the non packaged milk or open milk.
- ✓ Conclude from our study we can say that UHT milk domestic is preferred by consumers in both cities where our sample was taken.

REFERENCES

1. Baker, G.A. 1999. "Consumer Preferences for Food Safety Attributes in Fresh Apples: Market Segments, Consumer Characteristics, and Marketing Opportunities." *Journal of Agricultural and Resource Economics* 24 (1):80- 97. Campbell, B.L., R.G. Nelson, R.C. Ebel, W.A. Dozier, J.L. Adrian, and B.R.
2. Hockema. 2004. "Fruit Quality Characteristics That Affect Consumer Preferences for Satsuma Mandarins." *HortScience* 39(7): 1664-1669.
3. Direct interviews with consumers in Tirana and Duresi (Albania).
4. Frank, C.A., R.G. Nelson, E.H. Simonne, B.K. Behe, and A.H. Simonne. 2001. "Consumer Preferences for Color, Price, and Vitamin C Content of Bell Peppers." *HortScience* 36(4): 795-800.
5. Green, P.E., V. Srinivasan. 1978. "Conjoint Analysis in Consumer Research: Issues and Outlook." *Journal of Consumer Research* 5(2): 103-121.
6. Halbrendt, C.K., F.F. Wirth, and G.F. Vaughn. 1991. "Conjoint Analysis of the Mid-Atlantic Food-Fish Market for Farm-Raised Hybrid Striped Bass." *Southern Journal of Agricultural Economics* 23(1): 155-163.
7. Kapaj 2011, "Milk Consumers Preferences in Urban Albania", Scientific Press, Vol. 1, Issue 3.
8. MAFCP statistical yearbook 2015
9. Ministry of Agriculture, Food and Consumer Protection, 2014 Rural Development Strategy. Tirana, Albania
10. Ministry of Agriculture, Food and Consumer Protection, 2014
11. Mackenzie, J. 1990. "Conjoint Analysis of Deer Hunting." *Delaware Agr. Exp. Sta. Miscellaneous paper no. 1341:109-117.*
12. Reddy, V.S. and R.J. Bush. 1998. "Measuring Softwood Lumber Value: A Conjoint Analysis Approach." *Forest Science* 44(1):145-157.