

AN ANALYSIS OF HOUSEHOLD CONSUMPTION OF DAIRY PRODUCTS

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ABSTRACT

Currently agriculture in Albania makes up about 25% of GDP (MoAFCP 2014). The dairy industry, and along with it the milk collection system, are still in the course of modernizing structures and technologies. 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. The milk industry and its marketers may benefit from this information by using it to strategically market their milk to different groups. Also, in this study we have to analyse the quantity of milk production, which is consumed in some of the most important cities of Albania. Considering that how the way of quality is subjective and what factors have impact on them, depended on the personality of the customer and the connection to the quality to the concept of health and how strong is the relationship between.

Keywords: 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. Forecasting the future direction of household consumption, and how that direction might be modified through industry efforts or by national programs and policies, requires information on the relationships among prices, incomes, household characteristics and consumer demand. This study focuses on households as consuming units, explains and analyzes their purchasing behavior for dairy products.

Household consumption of dairy products is one the major component in the total sales of the Albanian dairy industry. 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 profiles based on their preferences and socio-demographic factors. To reach these objectives, this research designed a conjoint choice experiment survey and collected primary data in the most populated cities of Albania. This study provides useful information to different stakeholders including milk producers and importers. The milk industry and its marketers may benefit from this information by using it to strategically market their milk to different groups.

In the last ten years Albania has gone through a lot of changes, which has also been reflected in the Albanians diet, product preferences and quality. As milk is a very important component of the Albanians diet, in this study we are trying to focus in different preferences of consumers toward milk attributes. These preferences might lead to market segmentations, in which producers and policy makers might focus to improve the product quality and to meet the consumers' needs. The evolution experienced by the food sector along with the

availability of higher computational power has greatly changed in the last ten years the models analysts employ to explore the purchase and consumption patterns of the post-industrial society. Nowhere is the change in determinants of food selection by consumers more evident than in urban food markets. Here consumers are furthest removed from food production processes, and hence more dependent on cues and labeling information. Typical food products must now compete in markets, which are wider and more segmented than they have ever been. Within this context, the purpose of this research is to analyze and contrast the preferences of urban Albanian consumers with regards to milk, which is a traditional component of the Albanians diet, widely adopted throughout Albania

LITERATURE REVIEW

Consumer preferences

Consumer preferences are defined as the subjective (individual) tastes, as measured by utility, of various bundles of goods. They permit the consumer to rank these bundles of goods according to the levels of utility they give the consumer. Note that preferences are independent of income and prices. Ability to purchase goods does not determine a consumer's likes or dislikes. One can have a preference for Porsches over Fords but only have the financial means to drive a Ford.

Today, the quality of goods and services perceived by customers are highly important, it has become an obligation for firms to supply quality goods and services into the market. So it is necessary to follow customers' expectations closely and promptly take the essential steps to meet them (Çırpın & Sarıca, 2014). In addition, the customer is the center of attention and customer service is the distinguishing factor (Jham & Khan, 2008). Furthermore, quality is one of the key organizational innovations of the twentieth century, which has contributed a methodically grounded methodology to focus attention on customers (Lillrank, 2003).

Numerous studies have tried to determine the relationship between service quality and customer satisfaction. For example Uddin & Akhtar, (2012) indicate that service quality has a positive direct impact on customer satisfaction in a mass service industry (i.e., banking industry). Kuo & Ye (2009) analyzed the relationship between service quality, corporate image, satisfaction and loyalty in a sample of students from a vocational training center in Taiwan. The study of Kuo & Ye (2009) showed that both service quality and corporate image have a direct and significant effect on student satisfaction.

Customer expectation revolves around their conviction about the products and services that they receive from the organization and company that serves them. It is comprehended as the reference point against which the performance of the service provided is judged. This understanding is imperative for marketers because customers compare the performance or quality of the services received and determines these as the reference points when they experience and evaluate the service quality (Zeithaml et al., 2006).

Halbrendt et al. (1991) observed buyer-preferences for farm-raised hybrid striped bass by studying fish size, product form, seasonal availability and purchase price. This study evaluated the preferences of wholesale buyers, retail buyers and those buyers purchasing the hybrid striped bass for restaurant use. Using a conjoint analysis, Halbrendt et al. found that both the wholesale and retail markets preferred the low price and round form, while the restaurant sector preferred the filleted form. All three groups of buyers preferred year-long availability and a larger fish size.

Mackenzie (1990) even used conjoint analysis to determine consumer preferences for deer hunting. This study used both conjoint analysis and logit techniques to determine that hunters preferred a lower priced trip and license fee, shorter travel times and less congestion at the hunting site. The results also proved that the hunters preferred hunting with friends or family rather than just acquaintances and also preferred to bag a deer during the hunting trip. In Gineo's (1990) paper on rhododendrons, delivery time, flower color, origin, price, quality, size, terms of payment and other products offered by the seller were assessed to show the effects of these attributes on purchase behavior. This study used conjoint analysis, an ordinary least squares regression and a logit model to analyze consumer preferences. Gineo discerned that consumers most desired good-to excellent quality stock, taller plants, cash discounts from wholesalers, a wholesaler that offered a full line of additional plants and plants that originated from the Northeast.

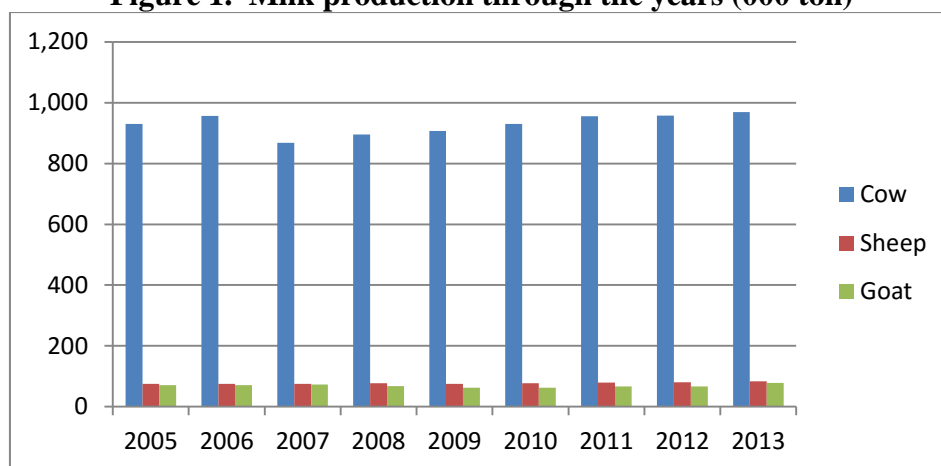
METHODOLOGY

In this study will be used data from the Institute of Statistics INSTAT as well as secondary sources of secondary data. Among secondary resources we have exploiting the world literature as regards the concept of quality and customer segmentation. The first phase consists of an in-depth exploration primarily. We will be reviewing Proper literatures. Then we will continue the phase of collecting information from secondary resources. By doing in-depth researches we will be able to explain exactly whom the production of milk is more importance as consumer. Through interviews and questionnaires will collect adequate data to show which of the production of milk we appreciate more the perception of the quality of milk and its influence on choice.

Milk production in Albania

Dairy activities have a long tradition in Albania due to the favorable natural resources for dairy production. In the plains, cattle production is dominant, while in the hills and mountains, sheep and goat production are more suitable. Traditional dairy products are yoghurt, butter, curd and different kinds of cheese from cow, sheep and goat milk. According to the statistics of MAFCP total milk production has increased from 948000 ton in 2008, up to 1016000 ton in 2014 from which cow milk production was 868000 ton in 2014 (MAFCP statistical yearbook 2014). Some data of milk production through the years are given below in Figure 1.

Figure 1. Milk production through the years (000 ton)



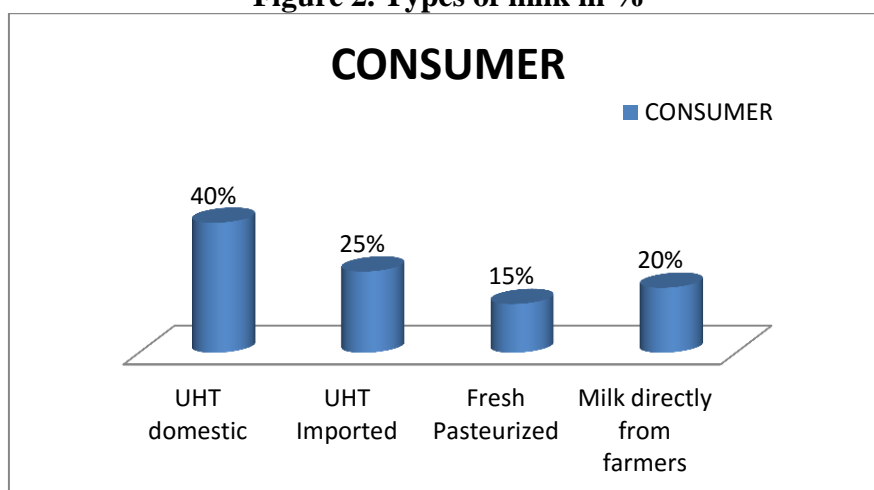
Source: MAFCP Statistical Yearbook 2014

Table 1. Milk production through the years

Description	2008	2009	2010	2011	2012	2013	2014
Total	1040	1045	1070	1101	1105	1131	1133
cows	895	907	930	955	957	969	965
sheep	77	75	77	79	81	84	89
goats	68	63	63	67	67	78	79

Source: MAFCP Statistical Yearbook 2014

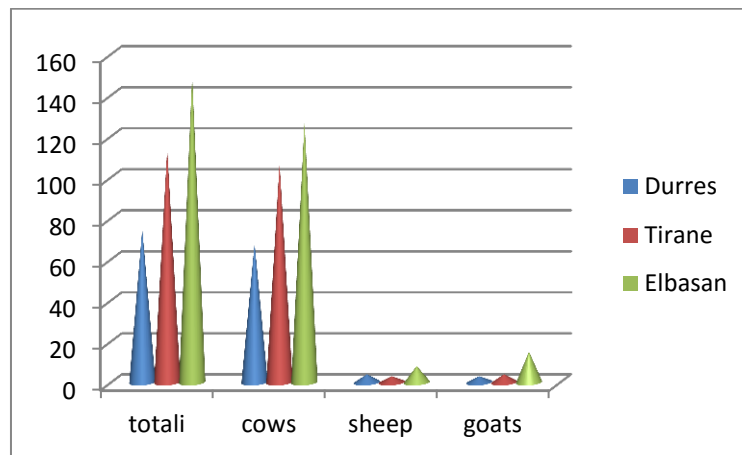
Production of milk and its dairy products from year to year has been increasing. The dairy sector is often exposed to risks linked to the raw material supply because there is not in place a vertically integrated system, concerning the raw material supply and the distribution of the products to the final consumer. While when talking about for the new factories, that are already sufficiently recognition in Albania, the conditions regarding the processing and pasteurization of milk are very good.

Figure 2. Types of milk in %

Source: Direct interviews with Albanian consumers

We have realized a hundred interviews directly with customers in Tirana. From the data collected we have concluded in these conclusions. Firstly, we can say that the majority of consumers prefer UHT domestic. We see that 40% of consumers prefer UHT domestic, 25% UHT Imported, 15% Fresh Pasteurized and 20% Milk directly from farmers. Already the Albania consumers become aware in choosing of product, that they want. But there are still consumers who buy milk directly from farmers, because they thought it is 100% natural and fresh. These results especially have seen on the periphery of the city. While the consumers, who lives in cities prefer more UHT Domestic. They believe, that UHT domestic is qualitative and controlled. The majority of citizens find more security to this type of milk, because it is safe for their health and of their children.

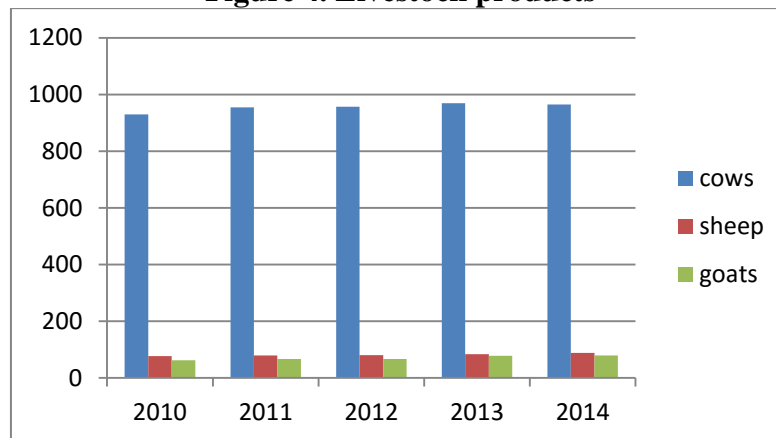
Figure 3. Livestock production in (000 tons)



Source: MAFCP Statistical Yearbook 2014

We have taken data in the most populated cities in Albania, in connection with the milk product. From this data we have seen, that dairy product consumption had a significant increase. Also would be noted a greater increase we see in the city of Tirana and Elbasan, while in the city of Durres we have less growth. Also in Albania in recent years opened several factories, processing milk with a capacity of more sophisticated and modern equipment. And this has led to the withdrawal of the consumer to buy UHT and pasteurized milk. From the data collection we have seen that consumer preferences was focused mostly to the Domestic and Imported Milk.

Figure 4. Livestock products



Source: MAFCP Statistical Yearbook 2014

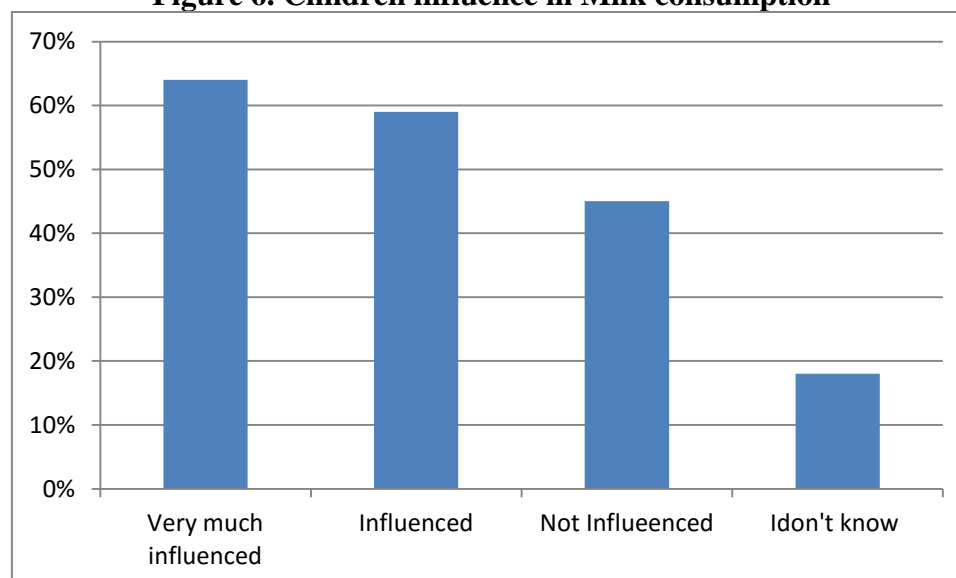
It is to make a comparative analysis from 2010 up to 2014, I will see that the product of cow's milk production, has increased from 895 tons to 965 tons, (MAFCP, 2014). Cow's milk is the most preferred by consumers in Albania. Cow's milk also it is used more, for the processing of dairy products. But also milk of sheep and goats is left behind. According their answers the majority of the households prefer goat cheese and sheep. This comparison makes specific the three types of milk to consumer tastes.

Table 2 Consumers distribution according to milk type and household income (€/month)

Consumers income	UHT imported	UHT domestic	Fresh pasteurized	Row milk	No preference	Total
- 400€	6	10	5	9	4	34
400€ - 800€	17	19	24	22	4	86
800€ - 1300€	6	12	22	6	6	52
Over 1300€	3	4	4	2	1	14
Total	32	45	55	39	15	186

During this study we presented how the household are distributed among the two variables included in the study, type of milk and income. For this reason we have done a cross tabulation as below:

From the data collected in 186 households in Tirana and Durres city it can be said that milk consumption is a very important component in the Albanian daily diet. Only 4.7% of the households haven't consumed milk recently, whereas the rest of them stated that they consume 2-3 kg a week. 87 (46.5%) of the households listed "health benefits" reason as the most important one for their every day milk consumption. Regarding the children influence in the household consumption we have got the following answers. As it can be seen from the figure below the majority of the households are very highly affected from the children presence in their milk consumption.

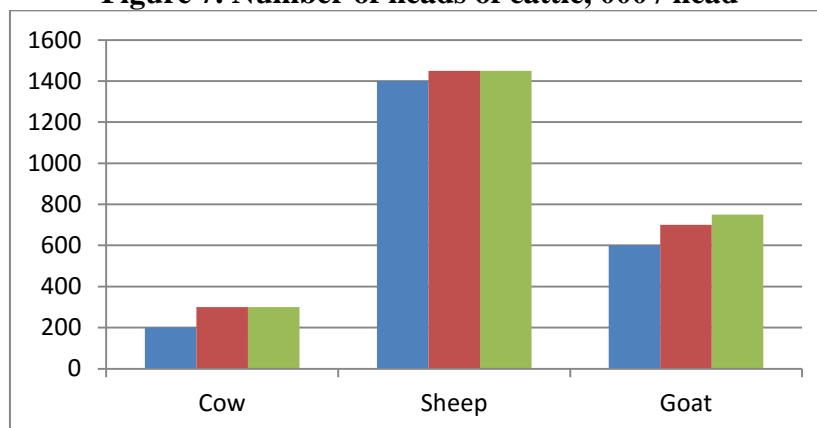
Figure 6. Children influence in Milk consumption

Source: Ministry of Agriculture Food & Consumer Protection. 2013. *Rural Development Strategy*. Tirana Albania

Milk type and the consumer reaction towards it has been another important point of the research. According to their answers the majority of the households prefer "Fresh pasteurized

milk). From the answers collected from field surveys, made to seeing that the children are very much influenced to the consumption of milk.

Figure 7. Number of heads of cattle, 000 / head

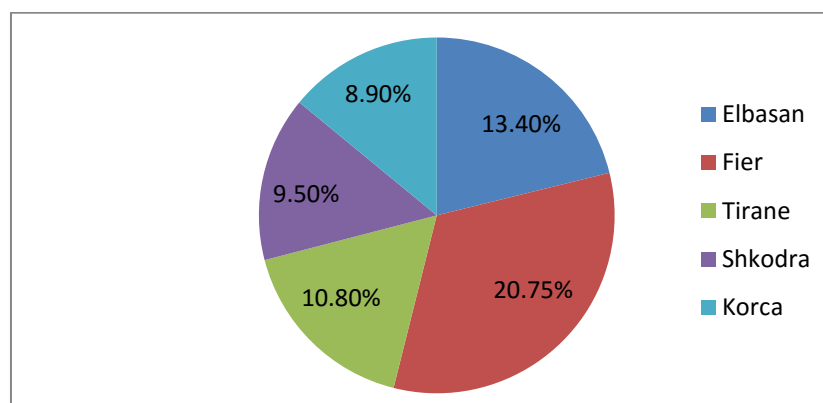


Source: MAFCP Statistical Yearbook 2014

According to INSTAT, the large cattle farms with over 6 heads are about 2,900, of which 2,276 are 6-10 headings; 7-50 611 heads, while only 20 farms are over 50 cows. The number of cattle farms with over 50 heads continues to grow from year to year and because a numerous difficulties encountered in the development of this economic activity. Over 75% of the cost of milk production in these farms voice as raw material concentrate and wet food such as alfalfa etc. Their import price is relatively high, so the cost of their production in the country is high. The cost of land is also working too high ,where a major focus is the fuel price's.

Albanians are among the biggest consumers of milk and dairy products in the world. MAFCP Statistical Yearbook 2014 show that are consumed and processed about 920 thousand tons of milk and imported about 25 thousand tons of imported milk, such as milk and by-products, cheese, yogurt, etc. For a population of 2.85 million, the consumption for person and year is 330 liters, consumption as fresh milk and cheese or other dairy products. But this is an average for the country; consumption for rural areas should reach the level of 400 liters for person in the year.

Domestic milk production reached about 1.1 million tons in 2012, an increase of 9% since 2007. This increase in production, when it was viewed in the context of the reduced number of cows and sheep and goats, highlights qualitative improvement of the sector. Milk production is dominated by cow's milk (87%), while the rest divided almost equally between sheep and goats. Most of the milk produced by many small manufacturers specializing half with less than 50 sheep or goats and cattle farms with less than 5 cows. Most of the cattle farms have 1-2 cows and about 2% of them have more than 5 cows. However, there is a trend toward consolidation, the number of farms with more than 5 cows has tripled compared to 2005, while the number of farms with over 10 cattle (1,390 in 2012) has increased more than five times compared to 2005. Currently there are 1,390 manufacturers with over 10 cows; 8536 farms with more than 50 sheep and 3646 farms with more than 50 goats.

Figure 8. Livestock production in same cities of Albania

Source: MAFCP Statistical Yearbook 2014

Cow milk production comes mostly from the plains and hilly areas; breeding sheep milk is concentrated in the south, where there are also specialized cheese factory. In more detail, it appears that the cow's milk production is concentrated in Fier (20.7%), Elbasan (13.4%), Tirana (10.8%), Shkoder (9.5%) and Korca (8.9%), which together make up 63.3% of total production.

CONCLUSIONS

Our study focuses on consumers' preferences for milk in Albania. The idea that motivated this research is that before any course of action supporting the domestic milk production industry can be undertaken, we need to know what consumers want. 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. 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. Also interesting is the high percentage of the row milk consumption, but in the case of Albania quality and safety of the dairy products especially milk is not very much reflected in the consumer behavior.

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