

ABSTRACT

PhD thesis titled **“Strategies regarding the development of milk cattle and sheep breeding in the nearcity of Iași, to ensure demand for consumption of the local population for milk and dairy products”** is divided in two parts: a part of theoretical background and a research part.

The thesis has the following structure: summary (in Romanian and English), introduction, five chapters and bibliography.

The main purpose of this work consisted in the presentation, analysis and identification of potential market milk and dairy products in the nearcity area of Iași, at national and global level, both economically, statistically, from the perspective of marketing, as well as development of the consumption of milk and dairy products in the future.

By doctoral thesis *“Strategies regarding the development of milk cattle and sheep breeding in the nearcity area of Iași, to ensure demand for consumption of the local population for milk and milk products”* we are trying to offer some solutions to the problems related to recommended consumption for milk and dairy products.

Collocating with the crop production, animal breeding contributes to the development of the whole sector of agriculture, to increase labor productivity and economic efficiency, and it has contribution both directly and indirectly to the development of agricultural economy.

Milk is the first food that human comes about from the first day of life. It is an indispensable food valuable from a nutritional point of view. Unfortunately though, in Romania, regarding the consumption per inhabitant, indices express a serious reality: we consume the very least - 6.9 liters / month / per head, depending on age, while in EU countries, the consumption is four times higher. The causes are multiple, but noticed poor driving agriculture in recent years and continue to lower the standard of living.

First part, composed of the first two chapters represent a synthesis of existing information in specialized bibliographic sources in the country and abroad regarding the cattle and sheep livestock, the obtained production, consumption needs and proper consumption of milk and dairy products.

Chapter I, "*Studies and researches in the country and abroad regarding the cattle and sheep breeding for milk, the needs for milk and dairy products*", is mostly a theoretical. The analysis is oriented to inform on the importance of milk in human nutrition on the one hand, the situation and number of cattle and sheep existing in the world, in Europe and especially in our country, on the other hand.

The cattle breeding will occupy a priority place in the economy of animal production in our country. The importance is the variety of products they provide. Milk is the most important product because of complex chemical composition, biological value and high degree of digestability. The cattle transforms the consumed food into milk in the most economical way (**Silvas E., 1998; Radis D., 2006**).

The sheep breeding has been and it is a based job for many peoples, and especially the Romanians from ancient times. Sheep is one of the most profitable species because of the reduced requirements due to the conditions of food, fodder and valorificand resources areas that can not be used for other species (**Pasca I., Morar R., 2007**).

Analyzing the evolution of the cattle in the world, during 1989-2005, we observe a noticeable increase of 1.04%; the evolution of the number on continents is very variable. The higher increase is registered on the African continent, by 28.05%, followed by South America, with an increase of 19.86%, 19.78% Oceania, Asia 9.01%, while continental North American record of 30.71% reduction, followed by Europe with 22.27%.

In Romania, in terms of herds of cows, buffaloes and heifers, they know a significant decrease from 2468 heads in 1990 to 1812 head at the end of 2005. The same situation is recorded in the case of sheep and herds of sheep, which decrease by about 30% of the reference period.

If on the level of some countries and continents, the herd of sheep is decreasing, even globally, the herds are growing. Analyzed these data, we can observe herds of sheep raising in Asia from 229 million head in 1975 to 409.98 million head in 2005, and in Africa from 168.5 million head, achieving a total of 253.52 million head sheep. In the same period in other regions, the herds have declined (Oceania, Europe, South America, North America, Europe)

In Romania, the herds of sheep have increased since 1860, when the first census took place, from 441 thousand heads, to 17,342 thousand heads in 1986, dropping in 1999 to 9336 thousand head, and in 2005 to reach 7430 thousand head .

New orientation that shapes the increase of sheep herds in our country is heading in the production of meat and milk, because of good prices gained youth and demand for milk products on the market (**Pasca I., Morar R., 2007**).

Also in this chapter we have made a series of researches on the needs of consumer demand and the population for milk and dairy products.

The need is considered by the classic economists the base theory, and the consumption is the finalisation and the purpose of production. Human without a need is being nonsense and without purpose, and need is a mental state, an attribute of human subectiv and thus, economic theory has its origins in the psychological sciences. Through the study of consumption and consumer behavior is observed the interference between psycho-social factors and the culture and civilization of the social group of which that individual belongs.

In 2005, in our country, the quantity of milk consumption was 159,464 tons, which represents an increase by 5.7% compared to 2004 (12.4% whole milk, 86.1% semi-skimmed milk and 1.5% skimmed milk).

Analyzing the production of sheep milk in the world, based on statistical data provided by FAO, results the importance of this production in the Asian continent, where annual production varies between 3097 thousand hl between 1979-1981 and reached 3813 thousand hl in 2005.

To achieve this objective there have been cited a number of authors such as Alecu I., Furtunescu Al., Chiran A., Gîndu Elena, Pascal C., Dinescu S., Mateoc Sîrb-Nicoleta, Ujică V., and others.

During 2002-2007, the consumption of milk experienced a growth of 4.11%, the consumption of cheese and sour cream has recorded an increase of 11.4%, and cow cheese knows a growth of approximately 12%. Regarding the sheep cheese this has recorded a more significant increase, 2.2 times respectively.

In Chapter II *"Characterization of the natural and organizational setting of the nearcity area of Iași"* we analyze the natural area of subject study doctoral thesis, with reference to the relief, soil and climate. Also in this chapter we took into account the labor factor that exist in the area studied. By number, structure, level of education and health population permanently influence the activities and economic development of the economy influence major demographic phenomen and consequently, the dynamics, especially population structure. The economic potential of the country is in direct connection with people who have the capacity to work.

The study was conducted in the nearcitycity area of Iași, which has 15 villages: Bîrnova, Ciurea, Miroslava, Holboca, Lețcani, Tomești, Victoria, Popricani, Aroneanu, Bosia, Golăiești, Comarnic, Prisecani, Costuleni and Rediu.

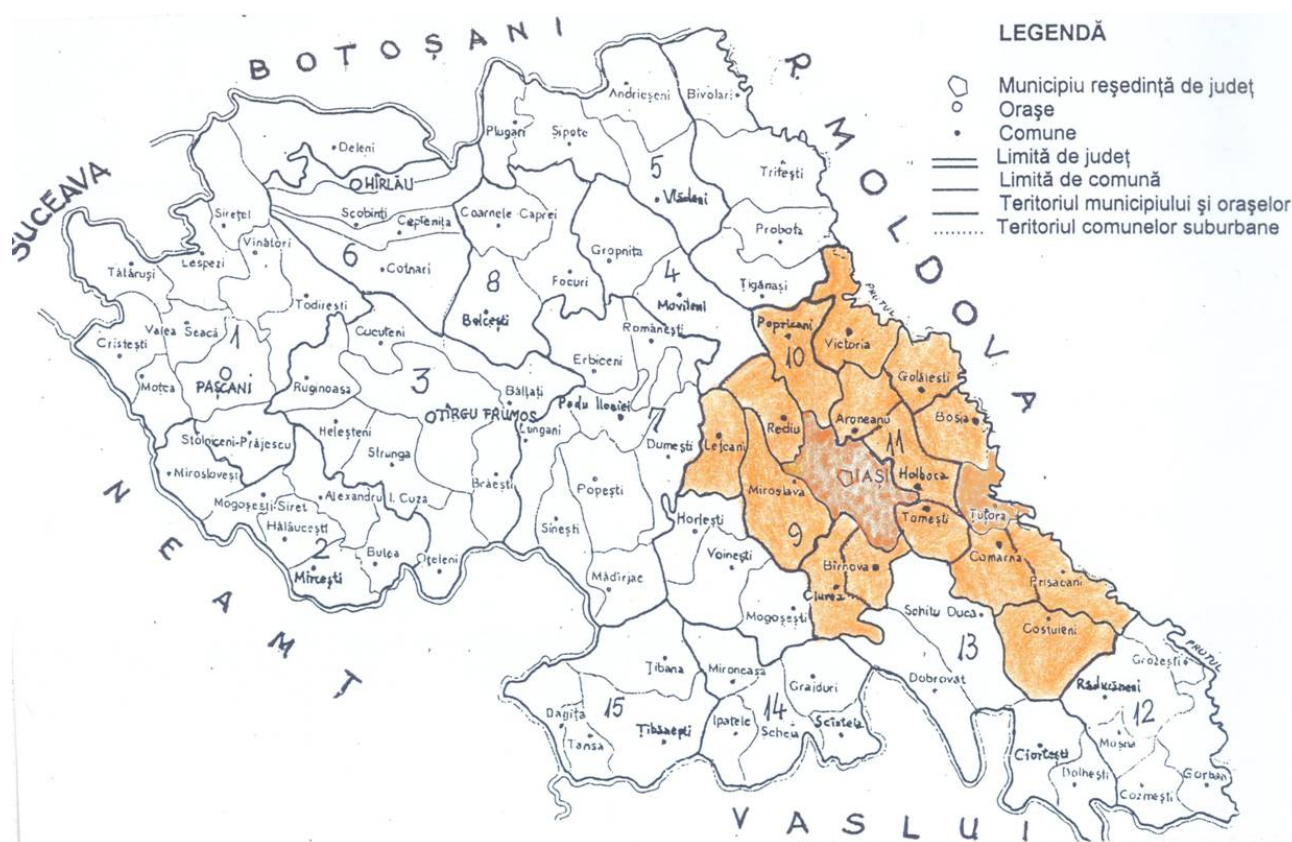


Fig. 1 - The territorial setting of the nearcity area of Iași

Part II starts with **Chapter III** *"The analyze of milk cattle and sheep breeding in the nearcity area of Iași, during 2003-2006"* which is intended for the analysis of cattle and sheep herds in the area, the forage base, and the average and total milk productions obtained.

The increase of livestock and increasing their production are conditioned by the manner in which the feed is insured.

Localities who have pastures, they have a natural asset. Where there are pastures, breeding is a traditional occupation for thousands of years. For livestock farmers, especially for the owner of cattle and sheep, the source of nutrition is very important.

In the area studied, stock herd of dairy cows was 6384 head (average 2003-2006), representing 10.3 % of the total herd of cows and heifers of the county of Iași. During the period analyzed, the number of cattle for milk in the nearcity area of Iași had a tendency to decrease, except villages as Popricani and Holboca.

In the same period, the herd of sheep milk exceeded, on average, 19 thousand heads, representing 6.1% of total herd of sheep and sheep "of the county of Iași.

In terms of total production of fodder plants, it has a negative trend, significant decreases recorded in the cultures of clover, corn silage, roots, fodder beet and pumpkins. In the same period, production of other perennial forage plants, meet some growth (13 %) compared to 2006.

Area occupied by pastures in the nearcity area of Iași remained relatively constant, however, shine a drastic fall of production, about 45 % compared to 2006. Areas of known natural hayfields knows a reduction of 197 ha compared to 2006. Production, as in the case of grassland, recorded large reductions (36 %), which justify the fact that these areas are in a state of unprecedented degradation.

On average the four years analyzed (2003-2006), annual average production of milk cow was 3416 liters, the general trend is decreasing, a phenomenon found in all the villages; the average annual production of milk cow was 24.3 % below the county of Iași, even if the race structure is similar.

The annual average production of ewes presented a positive evolution (except villages as Miroslava and Reditu); the total increase growth area is 5.4%, with a maximum of 66.3 % in Holboca village; average annual production of milk feed per ewe was 8.3 % below the average achieved by the county of Iași.

We also examined the destination of the production obtained in the nearcity area of Iași, and the new European regulations on milk quota. The main purpose of this limitation is to reduce the imbalance between supply and demand in the market of milk and dairy products and result in structural surplus, thereby hoping to obtain a better balance of the market.

Chapter IV *"Strategies regarding the development of milk cattle and sheep breeding, in the nearcity area of Iași, to ensure the demand for milk and dairy products consumption, at the horizon of 2010"* has both a methodological character, resulted in the development of some variants recommended for milk and dairy products consumption and design models to maximize the average output, and an applied, consisting in the operational data in the area analyzed.

Investigation of the statistical population consumption, which is actually satisfied demand of goods and services for residents of a country depending on the offer and of their available income, is useful not only for the substantiation of macroeconomic management, but also of economic policies on economic development and growth standard of living of the population.

The science of foresight was born and develop, on the one hand, under the impetus of practice social demands, the economic reality that reflected in the theoretical and focused in the

sense desired. On the other hand, it was born, and most importantly, develop its own inner movement of science that pushes human thinking and knowledge to new areas of investigation.

The literature mentions the fact that, for maintaining human health, it would be necessary to annually consume 300 l / capita (by OMS), 240 l / capita (by FAO), or at least 0.5 liters per day (180 l / capita), including processed milk in the form of butter or cheese.

Consequently, based on these data, we prepared three versions of consumer milk and dairy products. Proposed variants were analyzed for the population of the nearcity area of Iași and for Iași county population, to determine whether the existing milk production can supply the needs for consumption for milk and dairy products.

Variant 1 (V_1) - which represents the minimum consumption is 180 l / person / year.

Variant 2 (V_2) - which represents the average consumption is 240 l / person / year.

Variant 3 (V_3) - which represents optimal consumption is 300 l / person / year.

In the analysis of these data, we designed a series of scenarios in which we maximize the average output, and we analyze to ensure optimum consumption of milk and dairy products in these conditions.

Chapter V "*Conclusions and recommendations*" presents a series of synthetic aspects theoretical, methodological and operational, related to population consumption for milk and dairy products, and some proposals.

The thesis contains a large number of statistical data presented in tables and figures, which provide deeper understanding of the processes and phenomena related to raising sheep and cattle for milk and the population consumption.