

## ASPECTS CONCERNING THE CHARACTERISTICS AND TRENDS IN PRODUCTION AND PROCESSING MILK IN ROMANIA

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### Abstract

Milk production in Romania's agriculture occupies second place in importance after meat production in 2007 and represented 21% of animal production and 8% of agricultural production. Milk is a highly perishable product, so it is necessary along the production chain - processing - use to be a logistical system that functionally able to provide consumer desired products in the shortest time, as appropriate and the superior quality parameters.

A key feature of milk and dairy sector in Romania is the use of small quantities of total production of milk by processing companies, only 21% of estimated production of milk being delivered for processing, the rest being for domestic consumption (41%) , feed consumption (12%), the producer sold through street markets and direct sales to consumers with low incomes (26%).

In Romania, the privatization process in the dairy farms has resulted in their fragmentation. Thus, the private sector has become predominant: in 2002, owns 99% of the herd of cows and provide 98% of milk production, but it is represented mainly by small family farms. In all countries there are 1.2 million dairy farms, which is concentrated in a flock of 1.7 million heads. Average size of holding is 1.46 cows, the highest share (95%) being held by households with 1-2 heads. Farms that have over 100 head is only 0.01% of total and 84% belong to the former state sector.

**Key words:** milk production, dairy, EU standards for milk quality

Milk production is one of the main agricultural activities in the EU. In 2008, one million farmers produced 150 million tons of milk, worth over 40 billion euros, representing 14% of EU agricultural production. Over 60% of EU-produced beef comes from dairy livestock. According to figures from the International Federation of Milk Producers (IDF), the EU is the largest milk producer in the world, with 27% of world production, followed by India with 20% U.S. 16%.

European and global market developments and dairy changing consumer preferences in the context of socio-economic development and diversification production through the introduction of new technologies influence related sectors (beef and veal, arable crops and feed) that have undergone profound reforms of policy instruments to facilitate the pathways that connect players to actual market signals will influence, more and more milk production and processing sector is supported by policy instruments that no longer fit current economic context. Thus, the need for radical reform of policy in this sector has become increasingly apparent and urgent.

Romania, although it already has EU membership, difficulties significant structural both in terms of farm structure in general (excessive

fragmentation of agricultural holdings) and in terms of processing. Farmers, processors and traders must comply with EU standards for milk quality and the rigors of the *acquis communautaire* in the field.

### MATERIAL AND METHOD

There are many uncertainties related to the combined effects of price support mechanisms within the common market organization for milk and milk quota mechanism.

The latter has limited growth in milk production that would have occurred as a result of price level in the CMO in the absence of quotas.

The combination of these two policies to stabilize milk production at a steady and predictable. In a continuous decrease in the number of dairy cows, resulting in increased efficiency in the EU and other regions, the total number of dairy cows and dairy farms were higher than during the CMO does not exist.

### RESULTS AND DISCUSSIONS

Compared with other sectors of milk production and cattle herds were concentrated in 1990, 82% private sector (agricultural production cooperatives and small producers).

Abolition of production cooperatives by 1989 and reducing the state sector and processing industry decline oversized, major structural changes occurred in the early years of transition, which persisted until accession. Policies applied in the first period of transition have failed to recover production for processing, which recorded a continuous decline until 1997. During 1998-2001 grants were stopped by the livestock sector, state sector was practically dissolved and prices were liberalized. Philosophy changed in 2006 to support sector policy by introducing a scheme similar support within the EU (by providing livestock decoupled payments but continued support for national animal breeding and purchase of race).

During the transition to a market economy, there were major changes in the agrifood sector and implicit in the production and processing of milk. In the first three years after 1989 there was a sharp decrease in the number of cattle (35%) but

also to dairy cows (8%) due to a natural reaction to the livestock sector as a political aberration, focusing on increasing the number at any price flocks without any economic rationale. Eliminate provisions that were restricted political slaughter, led to massive cuts of the bovine specimens especially sick, old and low productive potential. Consequently the same time productivity improved substantially (33%) and in the coming years the trend was positive until 2006 when he recorded the highest productivity since 1990.

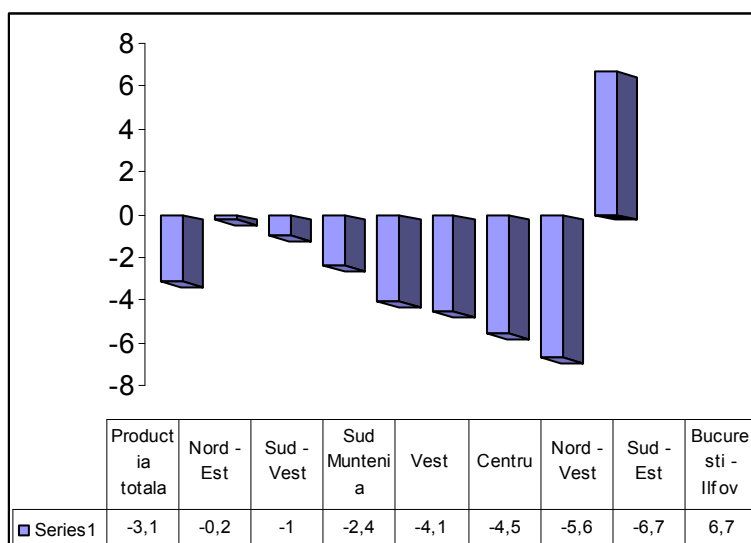
Since 2007 they started to implement common market organization and the quota system of complementary national payments and a premium for milk delivered to processing (whose quality is under EU rules). Unfavorable situation due to prolonged drought in summer 2007 led to a decrease in both livestock and milk production and therefore total production process and productivity.

Table 1

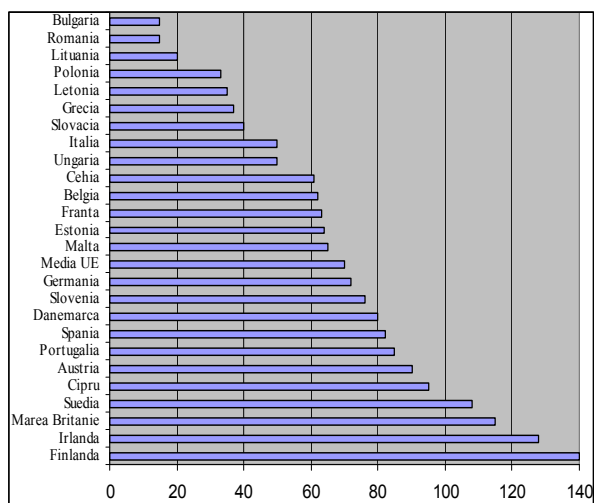
**Livestock and total milk production**

Specification	Cow (thousand heads)	Total production (thousand tone)	Processed production (thousand tone)
1990	2123	4,3	1,8
1995	1963	5,2	0,9
2000	1775	5,1	1,1
2001	1746	5,3	1,0
2002	1759	5,4	1,2
2003	1757	5,7	1,3
2004	1741	5,7	1,4
2005	1743	5,7	1,3
2006	1732	6,0	1,3
2007	1711	5,4	1,2
2008	1702	5,3	1,2

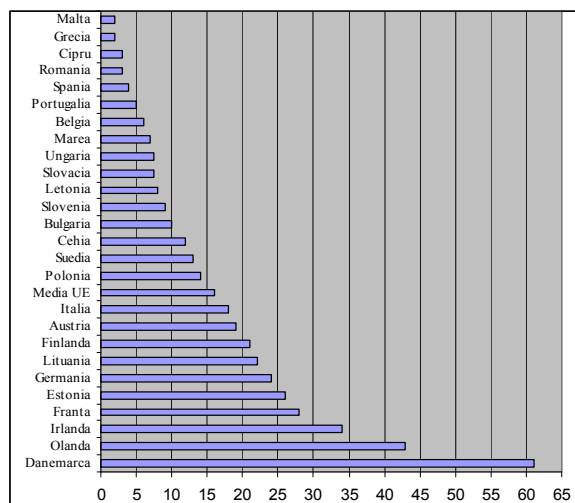
Source: Anuarul Statistic al Romaniei, 2009

Figure 1 **The total cow milk production in 2008 compared to 2007**

Source: Anuarul Statistic al Romaniei, 2009

**Industrial consumption of processed milk/pers. (liter)**

Source: Anuarul Statistic al Romaniei, 2009

**Cheese consumption/pers (kg)**

Source: Anuarul Statistic al Romaniei, 2009

Only Bucharest Ilfov region has increased production by 6.7%, other geographical areas decreases by 0.2% in the North - east to -6.7% in the South - East.

Dairy market continues to be dominated by own consumption, only 50 of 260 people who drink gallons per year in average per capita being produced in the industrial system.

Quantity of processed milk is very low in Romania, although the level of local market consumption exceeds the European average. Thus, the volume of milk produced and consumed in Romania last year was 298 liters per inhabitants, above the EU average of 260 liters / per capita, but the volume of milk collected for industrial processing by dairies was extremely low, ie 49.7 l / per capita.

Dairy companies that will move quickly to industrialize the entire production chain, from collection to expand the network to enter new market segments will benefit most from the inevitable transition to EU standards (EU ).

Analysis of investment volume and structure of milk production and processing sector in the period 1998 - 2006 highlights the following issues:

- Investment volume in 2000 was the highest share in total investment in the food industry (19.6%) that 57.3 million euros;

- During 1998 - 2006, the investment in milk was 10 930 billion (360.5 million euros), the largest volume is realizându in 2006 (75.1 million euros) and 2000 ( 57.3 million euros)

- Mostly private sector, the share of investment increased from 84% to 100% in the same period;

- In 2006, approximately 73% of total investments were their sources of financing, the difference being represented by internal loans or other sources.

On the investment structure elements can be stated as follows:

- The highest share (over 55%) of total investment has resulted in equipment, which shows the primary interest of firms to improve technology manufacturing;

- The highest investment, transport means"were made in 2005 (26%) and in special buildings and structures in 2006 (31%) and 1999 (30%).

Within the European Union statistics show that milk production is one of the main agricultural activities in the EU. In 2008, one million farmers produced 150 million tons of milk, worth over 40 billion euros, representing 14% of EU agricultural production. According to figures from the International Federation of Milk Producers (IDF), the EU is the largest milk producer in the world, with 27% of world production, followed by India with 20% U.S. 16%. Up to 40% of EU milk is processed into cheese, and about 30% is used for fresh dairy products. These two products were the main causes of growing consumption in the EU in the last decade. The remaining 30% is processed into butter, milk powder and casein.

Most milk producers in new Member States (Bulgaria and Romania) receive very little support

through direct payments are decoupled completely, using the principle of payment per hectare. Faced with this support so low, in conjunction with low productivity, lack of revenue from the market and difficult access to credit, farmers can not make investments to meet EU hygiene standards.

All imports of milk products in the EU must meet EU standards in particular in the areas of traceability, animal welfare, hygiene, veterinary medicine, food safety and sustainable production methods.

### CONCLUSIONS

It is necessary to devote significant resources for innovation, research and development and livestock to ensure greater efficiency in the dairy industry, farm and

processing level. Major investments are very important for dairy sector development.

In recent years, increased price volatility has been a particular problem for the European dairy sector. This causes big problems farms and consumers uncertain after frequent price changes. Therefore, care should be taken to reduce this increased volatility in markets, adequate measures.

### BIBLIOGRAPHY

**Merce, Iuliana Ioana, 2008** - *Piata laptelui și produselor lactate în România*, Ed. Eurostampa, Timisoara.

\*\*\*, **2009** - *Anuarul Statistic al României*.

\*\*\*, **2010** - Comitetul Economic și Social European - *Viitoarea strategie pentru sectorul european al laptelui*, Bruxelles.

\*\*\* - Institutul European din România - *Impactul generat de dinamica cotei de lapte asupra producătorilor agricoli din România în contextul reformei Politicii Agricole Comune, Proiect SPOS*.

\*\*\* - Ziarul financiar.