DAIRY FARMING – INTEGRATION INTO EUROPE

M. Jovanović, B. Bulatović, Aleksandra Despotović

Abstract: Because of the increasing trend in globalization in dairy farming resulting in joining and taking over some companies with the aim of rationalization of production and realizing greater market participation, it seems quite real to expect such a trend to appear in our country as well.

After the process of privatization had been realized a significant part of Montenegrin economy fell into the hands of private owners. In such conditions it can be expected that efficiency and competitiveness of some producers of milk and dairy products in the Republic of Montenegro will be increased, since in previous period this industry was characterized by insufficient exploitation of already existing capacities for milk processing while the quality of milk was considerably under the standards prescribed by the European Union.

Depending on the dynamics of entering Montenegro into international economy the national dairy industry must be ready to face the challenge which will certainly be imposed on it. The object of this paper was to try to find the answers to the two questions. First where we are now and where we will be in the next five years in order to improve the competitive potential of domestic dairy farming.

Key words: dairy farming, market, economic policy, integration.

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2 Dr Miomir Jovanović, scien. assoc., dr Bogdan Bulatović, sen. scien. assoc., mr Aleksandra Despotović, sen. res.ass., Biotechnological Institute, Podgorica.
Introduction

Our intention was to make a short review on the current state of affairs in dairy farming and dairy market including dairy products both in Montenegro and neighbouring countries. A current level of production was especially examined, then import and domestic consumption of milk and milk processed products. Finally at the end of the paper we stated some of the major requests that are placed before Montenegrin dairy farming, as well as the recommendations which will have to be fulfilled in the next period.

Material and method

In this paper we have used the available documentary material of the Ministry of Agriculture of the Republic of Montenegro, published statistical data, and documentation of some economic companies dealing in milk processing. Also, we have used both tabular and comparative analyses in order to make a comparison between the events in Montenegro and surrounding countries.

Results and discussion

A. Analysis of dairy farming and dairy market in Serbia, Croatia, Slovenia and EU

In the territory of Serbia and Montenegro there are 36 registered industrial firms and about 130 private ones, out of which percent the majority applies to Serbia. Over 80% of total number of cows is in private ownership. The overall production of crude milk in SR Yugoslavia is approximately 1.8 billion liters per annum, with less than 50% being used in industrial processing. The market supply is characterized mostly by pettiness while the exploitation of already existing capacities for milk processing is insufficient. As regards the participation at the dairy market we can say that domestic producers of milk prevail although the participation of foreign competitors is evident in a small degree especially in the field of sour-milk products. The distribution of products is being conducted mostly through retail trade, with the presence of village green market and so called policlinic sale (home delivery). In most regions the purchase of milk is realized through
9 bigger dairy stations, where 314.000.000 liters of milk was purchased in 2000. The production of pasteurized milk in Serbia, during 2000, was 228.470.000 liters, sour-milk products and sour cream 84.300.000 liters, production of butter 1.890 tons, and industrial cheeses 9.802 tons.

In Croatia, according to some estimates, there are 427.000 cattle and 287.000 cows. The production of milk reaches about 620 million liters what together with the imported milk makes 695 million liters available for overall consumption, and when the processed milk products are added to this amount it is 714 million liters. Average milk consumption per capita in Croatia is 175 liters. Every day about 980.000 liters of milk (3100 purchase places) are purchased from 61.000 dairy producers.

The Republic of Slovenia, observed according to the activities deemed necessary to enter EU, has accomplished the most significant results in relation to other former Yugoslav republics. In the course of 1998. it joined the reform programmes in the field of agriculture and food production, whose main activities were price policy, direct payment, programmes of reconstruction in agriculture and agroindustry and programmes for rural development. Previously, they worked on taking up the important market regulations valid in the territory of EU, what in particular concerns the regulations regarding the production of milk and milk products.

In the world production of cow milk European countries participate with 43,73% quantities, while the EU members produce 120,6 billion liters of milk (24,48% of the world production). The marketing of milk is very high in EU countries reaching 94,0%. By the new strategy of developing agriculture – Agenda 2000 directions for developing agriculture in EU according to the globalization process and integration into the world markets are established.
Table 1. Custom and levies in some surrounding countries and EU
Tabela 1. Carine (C) i prelevmani (P) u nekim susjednim zemljama i EU

<table>
<thead>
<tr>
<th>Products/proizvodi</th>
<th>Montenegro/ Crna Gora</th>
<th>Serbia / Srbija</th>
<th>Slovenia / Slovenija</th>
<th>Croatia / Hrvatska</th>
<th>EU-efek.st.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Milk / Mlijeko</td>
<td>0-5 0.10</td>
<td>20</td>
<td>7.7 -9 +p</td>
<td>5 max 15 +0.17</td>
<td>13.8 -182.80</td>
</tr>
<tr>
<td>Yoghurt / Jogurt</td>
<td>5 0.20</td>
<td>20</td>
<td>0.13</td>
<td>10.9 +p</td>
<td>27.80</td>
</tr>
<tr>
<td>Butter / Maslac</td>
<td>0 1.00</td>
<td>30</td>
<td>0.58</td>
<td>10.9 +p</td>
<td>189.60</td>
</tr>
<tr>
<td>Cheese / Sir</td>
<td>0 0.30</td>
<td>30</td>
<td>0.33</td>
<td>9 +p 9 max 35</td>
<td>124.8 -221.20</td>
</tr>
</tbody>
</table>

Izvor: Ministarstvo poljoprivrede Republike Crne Gore/Source: Ministry of Agriculture of Montenegro

In the table1 we can see that, no matter the accomplished stage in economical development, and with the aim to eliminate negative influences in foreign trade policy (export subventions, damping prices, etc.) the herein presented countries protect their domestic agricultural production by both high customs rates and certain tax rates.

Analyzing the level of customs rates and levies in Montenegro and surrounding countries it can be concluded that Montenegro even after the introducing tax rates for some of the products by the half of 2002 has altogether lower customs protection than countries with which it was compared. It is because of low customs protection that Montenegro has retained the contingent system for limited range of products. Slovenia, as a candidate for impending entry into EU has customs rates higher than Montenegro having at the same time tax rates for numerous products. Similar can also be said for Croatia, which is already the member of WTO, and which has considerable deficiencies for certain products, but has kept the protection system at a pretty high level.

It is very important to point out the protection system in EU. For example, nominal customs rates range from 0 to 33%, but the effective rates (customs rates that are really paid for import) for certain food products reach even a few hundred percent (milk 13.8-182.8%; cheese 124.8-221.2%).
Table 2. Subsidies of agricultural production in 2002  
Tabela 2. Subvencije poljoprivredne proizvodnje u 2002

<table>
<thead>
<tr>
<th>Product/Proizvod</th>
<th>Measuring unit / Jed. mjere</th>
<th>Slovenia/ Slovenija</th>
<th>Croatia/ Hrvatska</th>
<th>Serbia/ Srbija</th>
<th>Montenegro/ Crna Gora</th>
</tr>
</thead>
<tbody>
<tr>
<td>Milk/Mlijeko: -lowland region / ravnica podsje</td>
<td>€/l</td>
<td>-</td>
<td>-</td>
<td>0,066</td>
<td>0,025</td>
</tr>
<tr>
<td></td>
<td></td>
<td>-</td>
<td>0,07</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-hilly-mountainous region / brdsko - planinsko</td>
<td>€/head-grlu</td>
<td>18</td>
<td>40,79</td>
<td>9,8</td>
<td>7,5</td>
</tr>
<tr>
<td>Sheep/Ovce</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Goats/Koze</td>
<td>€/head-grlu</td>
<td>18</td>
<td>-</td>
<td>-</td>
<td>7,5</td>
</tr>
<tr>
<td>Cows/Krave</td>
<td>€/head-grlu</td>
<td>118</td>
<td>74,47</td>
<td>90</td>
<td>75</td>
</tr>
</tbody>
</table>

The data from the previous table indicate that the subventions given for milk production and breeding some kinds of cattle are at a considerably lower level in Montenegro than in Serbia, Slovenia and Croatia.

B. The current state of affairs in dairy farming in Montenegro

In Montenegro today there is in effect the liberalization of milk prices. Following the EU recommendations by this measure we influence further the decreasing of budget meant for animal husbandry from 42% (2000.) to only 23% (2002). The Ministry of Agriculture of Montenegro, taking into account the importance of this sector, has conducted, previously, a set of activities aiming to improve its efficiency by forming the Dairy laboratory whose aim is to evaluate the milk in accordance with the percentage of milk fat, protein and sanitary cleanliness at its ransom, then by granting awards for bigger farmers in cattle, sheep and goat breeding, by forming the service office for the cattle selection, etc.

However, what is typical for the field of Montenegrin dairy farming in this moment is absence of proactive admission to increasing competitive pressure. It is enough to enter one of the supermarkets and to get an impression about competitive power of domestic dairy producers. Therefore, relatively low exploitation and economic inefficiency, insignificant production of sour milk products and cheeses, as well as relatively small number of household dealing in market production are major characteristics of domestic milk processors. If we add to this a considerable quantities of imported milk and milk products from surrounding countries it can be concluded that strategic orientation of
Montenegro is contained in inducing the development of efficient private sector, development of agroindustry as a generator of primary industry and the production of recognizable high quality and exclusive products and their placement through tourism. It is important to point out the unused chance in the production of autochtonous milk products from this region. But first it is necessary to standardize and round up the technological process, especially for cheese, and organize big market campaign for dairy products.

Table 3. Average of dairy products consumption per household member (all households) in Montenegro, 1999


<table>
<thead>
<tr>
<th>Number / Red. Broj</th>
<th>Name of product / Naziv proizvoda</th>
<th>Total / Ukupno</th>
<th>Purchased quantities / Kupljene količine</th>
<th>Own production/ Iz vlastite proizvodnje</th>
<th>Total on the level of Montenegro / Ukupno na nivou Crne Gore*</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Sweet milk/Slatko mliješko (l)</td>
<td>113,1</td>
<td>77,8</td>
<td>35,2</td>
<td>74.646.000</td>
</tr>
<tr>
<td>2.</td>
<td>Sour milk and yoghurt/Kiselo mlješko i jogurt (l)</td>
<td>3,8</td>
<td>2,8</td>
<td>1,0</td>
<td>2.508.000</td>
</tr>
<tr>
<td>3.</td>
<td>Domestic cheese (all types)/Domaći sir (sve vrste) (kg)</td>
<td>13,2</td>
<td>8,4</td>
<td>4,8</td>
<td>8.712.000</td>
</tr>
<tr>
<td>4.</td>
<td>Other types of cheese (hard cheese, etc.)/ Ostale vrste sira (kačkavalj i sl.) (kg)</td>
<td>0,2</td>
<td>0,2</td>
<td>-</td>
<td>132.000</td>
</tr>
<tr>
<td>5.</td>
<td>Butter/Buter (kg)</td>
<td>0,1</td>
<td>0,1</td>
<td>0,0</td>
<td>66.000</td>
</tr>
<tr>
<td>6.</td>
<td>Kajmak, cream /Kajmak, pavlaka i mileram (kg)</td>
<td>0,9</td>
<td>0,7</td>
<td>0,1</td>
<td>594.000</td>
</tr>
<tr>
<td>Total/Ukupno</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>148,600.000</td>
</tr>
</tbody>
</table>

Napomena: * ukupna potrošnja dobijena je množenjem prosječne potrošnje po članu domaćinstva sa brojem stanovnika u Crnoj Gori (660.000). / Note:* total consumption obtained by multiplying average consumption per member of household with the number of inhabitants of Montenegro (660.000)
The participation of purchased quantities of milk in total quantities was 68.8%, sour milk and yogurt 73.7% and domestic cheeses 63.6%. If we calculate other products into milk, in accordance with normatives, we obtain the total quantity of consumed milk in Montenegro to be 148.6 million liters. Presuming that average milk consumption and milk processed products per member of household in Montenegro in the period from 2002-2007. will be increasing per rate of 0.3% per annum on average, and that the number of inhabitants in Montenegro in the same period will be increasing per rate of 0.5% per annum on average, we can project the consumption of milk per household member for 2007 at the level of 229,05 l or 156,54 mil. liters in total.

In the course of 2000, according to data of Statistical Institute of Montenegro the participation of milk and milk products in total sold and bought quantities of agricultural food products in Montenegro was 36.6%. In the absolute amount 20.5 million liters of milk and 3.9 tons of cheese was sold and bought. So high a percentage surely speaks about the importance and place of these products in the nutrition of Montenegrin population. However, the participation of trade of milk and milk products by agricultural organizations was only 6.4%, while the ransom of milk from the individual agricultural producers, in the whole structure of ransom of agricultural products was 54.7%. In absolute amounts agricultural organizations sold only 1.2 million liters of milk, 1 ton of soft cheeses and 2.4 tons other dairy products. From individual agricultural producers 19.3 million liters of milk and 3 tons of soft cheese was bought.

During 2000 on Montenegrin green markets it was sold 142.000 liters of fresh milk, 340 tons of cream (kajmak) and 1.303 tons of cheese.

Installed capacities in Montenegrin dairy industry are about 32.6 million of liters of milk per annum. Depending on the level of their exploitation, they deliver to Montenegrin market about 14.5 million liters of milk per annum (data from the Statistical Institute of the Republic of Montenegro). The greatest part of milk production is done in the dairy plant in Podgorica, approximately 35% (the level of exploitation of capacities of thise dairy plant ranges from 66%-83%).

According to the results available at the Ministry of Agriculture of the Republic of Montenegro, in the structure of imported products in the course of 2001 the most significant is the participation of milk amounting to 63.8% and cheese 14.0%. Analyses into the country of origine of milk indicate that approximately ¼ of total imported milk is from Slovenia,
and 18.3% from Hungary. For cheese, most significant participation registered in the structure of import, according to the country of origin is Germany (41.6%), and Hungary (22.4%). Import dynamics of milk point out March 12% and July 16.2% as key months in total imported quantities. Greatest quantities of cheese were imported during February (21.9%) and May (15.6%). Therefore, the production of cheese in Montenegro should be matched with most expressed demand in certain months in the course of the year.

On the basis of precalculations for imported dairy processed products together with milk, in the course 2001. in Montenegro, approximately 24.9 million liters of milk was imported. On the basis of that year and presuming that the import of milk and dairy products will decrease per rate of 15% per annum on average, the projected quantity of milk which Montenegro will import by 2007 is 9.4 million liters. Therefore, one of the major assumptions of balance between the offer and demand in the turnover of milk and milk products in Montenegro is the substitution of imported quantities by domestic ones, for which, taking into account the possibilities and installed capacities there is a real possibility.

**Conclusion**

1. The current Montenegrin politics of subsidies (milk and cattle breeding) and incentives to cattle industry is under the framework of surrounding countries. Montenegro belongs to the countries whose customs rates and levies for some products such as milk, yogurt, cheese, etc., are at the lowest level.

2. In overall realized consumption of milk in Montenegro, from individual producers it was realized about 1/3 milk, 1/4 sour milk and yogurt and slightly more than 1/3 domestic cheese. Low level of market competitiveness demands as a priority, in the next period, more organized work on development of raw material basis for dairy industry. It is especially necessary to work on increasing the ransom quantities per farmer (out of total of produced quantities in Montenegro, about 10% milk was sold and purchased, and 6.2% of soft cheese).

3. Realized consumption of milk and milk processed products in retail channels (about 13.5 mil.lit and cheese only 389 tons) and poor placement of domestic products indicate the discrepancy – gap among the produced, imported and consumed quantities of above
mentioned products. Competitiveness of domestic producers on local market, besides wider range of products, means also better quality and creating original trade mark by which those products would be easily recognized both on domestic market and on the market of surrounding countries.

4. With the aim to substitute the imported quantities of milk and dairy products by domestic production, it is necessary to make competitive conditions for domestic milk processors. Also it is necessary to make a plan on the basis of which, according to predicted dynamics rate of decreasing import, the increase in the production of complementary and substitute products would be taken into consideration. Domestic dairy producers should especially take care about the market demands, preference of domestic producers and dynamics of production and placement of certain products.

5. Previous practice of domestic dairy producers must be replaced by the established strategy of market appearance for a longer period. Current products assortment (pasteurized milk and principal sour-milk products) should be gradually fulfilled by some more exclusive products, such as desserts, cheeses, etc.

MLEČNO STOČARSTVO – INTEGRACIJA U EVROPU

M. Jovanović, B. Bulatović, Aleksandra Despotović

Rezime

Trenutna politika subvencija (mleko i držanje stoke) u Crnoj Gori kao i razni podsticaji stočarskoj proizvodnji su u okvirima susednih zemalja. Crna Gora pripada zemljama čije su poreske stope i tarife za neke proizvode – mleko, jogurt, sir, i slično na najnižem nivou. U takvim uslovima postoji mogućnost korigovanja poreskih stopa za mleko i mlečne proizvode ka višim poreskim stopama, što bi oštetilo stope predložene od strane STO i EU.

U ukupnoj potrošnji stanovništva u Crnoj Gori, iz vlastite proizvodnje ostvoreno je otprilike 1/3 mleka, ¼ of kiselog mleka and jogurta i više od 1/3 domaćih sireva. Nizak stepen tržišne zastupljenosti postavlja kao zahtev da se ubuduće obrati veća pažnja organizovanijem
radu na razvijanju sirovinske baze za mlečnu industriju. Neophodno je raditi na povećanju količina mleka prikupljenih od individualnih proizvođača (od ukupnih količina proizvedenih u Republici, prodato je i sakupljeno oko 10%, i 6,2% mekih sireva).

Ostvareni obrt mleka i mlečnih proizvoda u maloprodajnim kanalima (oko 13,5 mil. litara i sira samo 389 tona) kao i slabo učešće domaćih proizvođača ukazuju na jaz koji postoji između proizvedenih, uvezenih i potrošenih mlečnih proizvođača. Konkurentnost domaćih proizvođača na lokalnim pijacama, pored šireg asortimana proizvoda uključuje bolji kvalitet i stvaranje robne marke po kojoj bi proizvod bio prepoznatljiv i na domaćem tržištu i na tržištu susednih zemalja.

Da bi se uvezeno mleko i mlečni proizvodi zamenili domaćim proizvodima neophodno je stvoriti konkurentske uslove za domaće preradače mleka. Takođe je neophodno razraditi plan prema kojem bi se, u skladu sa pretpostavljenom dinamikom smanjenja uvozne stope, obratila pažnja na povećanje proizvodnje komplementarnih proizvoda. Domaći proizvođači mlečnih proizvoda bi trebalo da vode računa o potrebama tržišta, preferencama domaćih potrošača i dinamici proizvodnje i marketingu nekih proizvoda.

Dosadašnje iskustvo domaćih mlekara trebalo bi da bude zamenjeno jasno određenom strategijom marketinga na duž period. Trenutni asortiman proizvoda (pasterizovano mleko i glavni proizvodi od kiselog mleka) trebalo bi da bude postepeno zamenjen ekskluzivnijim proizvodima poput raznih dezerata, sireva i slično.

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