

DEVELOPMENT OF LIVESTOCK PRODUCTION IN MONTENEGRO AND ITS ADAPTABILITY TO INTEGRATION PROCESSES¹

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Abstract: Over the last few years in the field of livestock production a series of measures have been undertaken with the aim to enhance development, mainly directed to increase the level of the production of milk and meat per animal as well as to increase the number of animals on the farms of individual producers.

This paper gives review of an existing state in livestock production in Montenegro as well as of the measures of supporting and subvention policy in the light of sooner adaptation to integration processes.

Key words: livestock production, supporting policy, subvention policy, integration processes.

Introduction

The agriculture in Montenegro, over the last few years, is going through a significant modifications (price liberalization, reforms of the institutions and services, and similar). Respecting the achieved level and need for further development of agriculture the adaptation to the time quests and creation of the conditions for the development of competitiveness of domestic producers has been carried out by the measures of both current and development politics.

Today, the agriculture of Montenegro, as well as the food industry in general, is faced with numerous challenges such as increasing the food production in the conditions of very strong competitors from the surrounding countries, acquiring the access to some other markets in greater degree, adopting technologically modern and sophisticated level of production, being recognized with respect to the ecological-organic production and geographical origin of our products.

The position of the agriculture in Montenegro is further complicated by already defined international frames by which important issues in the field of agricultural production are being regulated such as an Agreement on the Agriculture established by STO, the Uruguay round GATT /*General Agreement on Tariffs and Trade*/.

Material and method

The paper gives an analysis of the current state of livestock production in Montenegro as well as of the support and subvention policies undertaken with the aim to accelerating adaptation to integration processes. The paper also gives an account of the activities of the Selection Service aimed at the improvement of livestock production in Montenegro.

The analysis was conducted on the basis of the records obtained in the Ministry of Agriculture, Forestry and Water Management of the Republic of Montenegro.

Results and discussion

In recent years in the field of livestock production a series of measures have been undertaken in order to improve development, and they were primarily directed to elevate the level of production of milk and meat per animal and increase the number of heads raised at the farms of individual producers. The creation of the Selection Service at the Ministry of Agriculture should especially be pointed out, since this service

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monitors the application of measures of improvement on the spot and organizes exhibitions and reviews of high quality breeding animals and gives awards to winning producers.

Marking of animals is an important segment in the realization of breeding and selection programme and precedes other measures in selection.

Marking of cattle in Montenegro is done by a special ear tags which are used also in EU countries where the marking of animals is done by a pair of ear tags (one for each ear of an animal).³

In a previous period 13.845 heads or approximately about 12% of total number of breeding females (cows and breeding heifers) have been ear-marked. Ear-marking of breeding animals shall also be continued in the future according to the same principle with the effort being made to ear marking the largest number of artificially inseminated cows and their offspring, as well as a quality female descendants of licenced bulls.

All animals that are ear marked are entered into the register for "Z" control. The "Z" control is the widest kind of control since by its operation we have a pretty real picture about the population quality regarding the race composition, age structure, physical fitness or health state of animal, way of nutrition and other parametres essential for successful realization of breeding-selection programme.

For the introduction of animals into the "Z" control, the Service observes following criteria:

- highest quality animals in population,
- all animals imported in 2000 within the EU Programme "Restoration" and their offspring,
- the animals which are being artificially inseminated⁴,
- offspring of selected-licenced bulls,
- animals raised on larger private farms, as well as the highest quality heads from smaller-size farms.

Records on "Z" control are being collected and entered into registration in regional centres and later forwarded to the Republic Centre for Selection Service where the unique data basis is kept for a whole Republic of Montenegro. These data represent the basis for other selection activities such as milk yield control, making a plan of insemination, selection of quality breeding heifers, licencing, etc.

For ear-tagged and registered number of breeding animals the following is determined: race composition, age, or more precisely, lactation group, and the size of farms entered into the Register.

Breed composition

As regards pure breeds, the largest participation therein is of a Brown cow (35%), represented from 12 % in the Adriatic coastal region to 48 % in the area of Pljevlja town, that is 50 % in the area of Berane Municipality. However, we should take into consideration that the registration included all heads of Brown Race from the last import (2000) and their female breeding offspring, so that a participation of this race in total population is probably considerably lower than in a part of population kept under control. Due to well adaptability of offspring of imported animals and high participation of semen of bulls of this race for the purpose of artificial insemination the participation of Brown race has lately been increasing throughout the whole Montenegro.

Slightly more than one fifth of registered heads (22,7 %) goes to Holstein – Fresian race, its highest participation being in a central part of the Republic (46 % in Zetsko - Bjelopavlička lowland and 43 % in Nikšić). Exterior characteristics of registered animals indicate that in that population the animals ranging from the old European type to a modern dairy Holstein heads are represented. Within this race there is also a smaller number of Red Holstein animals which have been in last few years purchased from some larger farms in Serbia.

The participation of crossbreds is rather high, between 20 % in the region of Pljevlja town to 47 % in coastal region.

Surprisingly low is the number of heads in the type of Grey Tirolska race (4%), which once had been the most represented race in cattle breeding of Montenegro. However, it is most probable that considerable number of crossbreds has been made by crossing of this race with other races..

³ The ear-tags are made of polyurethane with impressed label CG (Montenegro), number of 6 digits, bar code and 4 last digits of 6 digit number enlarged. The number is unique and unchangeable, so that each of 6 regions has its own series of numbers. In this way, according to the number, we can easily detect the region which the animal comes from.

⁴ Since the number of artificially inseminated breeding females (cows and heifers) is increasing, the Service tries to include the greatest possible number of heads into the "Z" control, although not each individual animal, but those raised on larger farms in the first place.

Participation of Simmental breed, in a registered population, is being 6,1 %. In relation to last year, when the participation of this race was 4,7 %, a new 223 heads have been registered so that its relative participation has substantially increased. It has been predicted that the participation of this race shall more rapidly increase due to the demands of meat processing industry for higher quality fattening material. Among existing races Simmental breed is in that respect at the first place simultaneously producing satisfactory quantities of milk.

The above mentioned data indicate that Buša race has almost disappeared and given place to more productive races and crossbreds. Therefore it is necessary to take measures to protect Buša genome from complete extinction. That genome has its place in Montenegro cattle breeding and can be of invaluable benefit in the future. This could be attained by a consistent conducting of a programme of preserving Buša, with indispensable financial support from the Agrarian Budget.

Size of Farms

On the basis of the ratio between the number of farms and total heads registered we have established an average number of heads per farm. In this way we obtained the results indicating 3,24 head per farm, though with considerable variations per regions, from 2,7 in the region of Berane to 4,8 in the coastal region, mostly at place called Ulcinj.

By help of support measures, we succeeded to increase the number of animals per farm in a previous period. Thus in 2004 the number of farms with more than 5 breeding animals was higher by 99% than in previous year. The process of increasing is more expressed in the regions where dairy stations regularly buy milk.

The control of dairy cows means the inspection of the quantity of milk milked in one of the ways prescribed by the ICAR -International Committee for Animal Recording. The control includes also taking a sample of milk for determining a milk chemical composition and number of somatic cells.

Semen for artificial insemination of cows is being supplied from the Reproduction Center in Temerin six times per year, since the semen bought in this centre, from the aspect of bulls genetic potential, meets the needs in Montenegro. However, it is necessary to introduce some changes in financing of this measure in the direction that the owners themselves pay entire cost for artificial insemination while the purchase of semen should be provided by the agrarian budget.

A developmental premiums are distributed according to the criteria defined in Agribudget for 2004. The owners of the farms outside the ransom zone had a right to this support measure if they raised more than 5 breeding females (premiums have been granted only to those with more than 5 heads), the owners of sheep with flocks greater than 40 heads and goats in flocks greater than 30 breeding heads. Data about development premiums indicate the following: in cattle breeding the number of farms has been increased by 20 (1,2 %), and the number of animals prized by 8,9 %, in sheep breeding by 86 (7,4%), i.e., 10,4 %, goat breeding by 21 (12,1%), i.e., 15,8 %. The data indicate increased number of farms along with greater number of animals. The process of increasing animal heads is being faster since all kinds of animals increased in number more than was the case with the farms. This is the best proof of the right way of stimulating individual farm producers by premiums.

In the Agribudget for 2004 the encouraging young bulls fattening in semi-intensive rearing (stable-pasture) was defined. Premium for stall feeding per kilo of body weight gain was 0,20 EUR, under the condition of minimum of 1.500 kg body weight gain be realized in fattening period, while for open pen feedlot the premium was 0,30 EUR with minimum 1.000 kg realized body weight gain per farm. A major purpose of this measure was to stimulate the production of beef meat in order to decrease its deficit. The encouragement of beef fattening is closely connected both with the use of cheap sources of forage animal feeds and rural development because of which reasons in EU countries this kind of fattening is being supported by a substantial financial means. Introducing this measure into the Agribudget was aimed at encouraging domestic production according to the EU model of Common Agriculture Policy - CAP.

Up to 2001 in the structure of Agrarian budget of Montenegro, granting premiums for milk production was quite often, so that in certain years (2000) for this purpose was assigned more than 20 % means. This measure was aimed to increase the production of milk and milk processing, as well as the income of farmers. The abolishing of premiums took place in 2002 because of the transition to the policy of liberalization of milk prices which before that had been under the state control.

Up to 2002 the livestock production was of particular interest for a development of agriculture in Montenegro. In the last few years the advantage was given to financing the causes of wider importance for agricultural development what resulted in initiating the structural changes in the agriculture of Montenegro. This is best illustrated by the fact that the participation of the programme of general importance from 13,9 % in 1999 increased to 62,6 % in 2004.

The organization of measures in the policy of agriculture, primarily supporting measures, is one of the most serious problems in the process of joining EU. Therefore the countries which are being candidates for entering EU have already elaborated and used the model of subsidizing according to the EU example.

Subventions in agriculture apply to numerous products and are most often related either to the unit of surface (hectare) or cattle heads. In order to have a more clear insight on the amount of financial means granted per particular livestock species Table 1. shows the current state for some of the former Yugoslav republics.

Table 1. Subventions for some agricultural products in 2002

Product	Unit of measure	Slovenia	Croatia	Serbia	Montenegro **
Milk	€ /litre	-	-	-	0,025
-lowland region		-	0,07	0,066	-
-hilly-mountainous region		-	0,12	0,072	-
Sheep	€/head	18	40,79	9,8	7,5
Goats	€/head	18	-	-	7,5
Dairy cows	€/head	118	74,47	90	75

Source: Subventions in the agriculture in the region – comparative analysis

The premiums shown in table 1 in Montenegro comprise only 1/6 of ransomed milk, premiums per head concern only larger herds, so that in cattle breeding only about 5 % breeding animals is included, and in sheep and goat breeding about 20 % from the total number. The data from the Table 1 indicate that the surrounding countries subsidize many productions and with substantial amounts per unit at that. A similar situation is in EU too, where the distribution per hectare, that is, animal, is even greater. For example, premiums for young bulls fattening in EU ranges from 100 to 300 € per fattened animal. Montenegro belongs to the group of countries whose tax rates and levies are rather low what gives the possibility of their correction by which action the tax rates envisaged by EU and STO should not be surpassed.

It is very important to point to the system of protection in EU. Nominal customs rates range from 0 to 33 %, but effective rates (customs rates actually paid at import) for some food products reach even a several hundred percent (beef meat 154 - 316 %; lamb meat 141,6 - 324,6 %; chicken meat 32,4 - 107,6 %; milk 13,8 - 182,8 %; cheese 124,8 - 221,2) (*Ministry of Agriculture, Forestry and Water Management, 2003*).

The latest data indicate that in EU more than 50 % of total budget is spent on direct payment to agriculture for which purpose they spend more than 40 milijardi €. The projections of the Common Agricultural Policy – CAP predict that there shall occur the increase in subventions in some sectors or the introduction of new ones, such as for example the milk production. Thus it is predicted that the premium per diary cow in 2006/7 shall be 11,5 €, and from 2007 onwards 17,24 €, which was not the case in practice until now.

EU is spending more than 2 milliards \$ annually for export subventions, what makes the 90 % of export subventions of the world trade, while USA spent less than 60 milion \$ in 2001 for the same purpose.

In comparison with surrounding countries and European Union, Montenegro spends 13 € per capita for agricultural subventions, Serbia 17 € per capita, Hungary 70 €, Slovenia 130 €, and European Union 120 €. Or expressed per hectare of cultured land, in Montenegro in 2002 was spent only 50 €, while in the European Union countries 360 €. There is a rule in Europe which says: high BDP per capita – a small participation of agriculture in creating BDP – a highly subsidized agriculture, and the other way round.

Conclusion

The measures which have lately been undertaken for the improvement of livestock production in Montenegro have influenced both the increase of number of heads on farms and milk yield per animal. One of essential conditions for further development is the elimination of negative influences in foreign-trade policy (export subventions, damping prices, etc.).

Taking into consideration that Montenegro aspires to become member of EU and STO, a due attention is being paid to EU recommendations regarding the restricting of customs rates and to the support given to livestock production at home. However, Montenegro belongs to the group of countries whose customs rates and levies for some products are at low level what gives the possibility for their correction without violating the rates predicted either by EU or STO.

RAZVOJ CRNOGORSKOG STOČARSTVA I NJEGOVO PRILAGOĐAVANJE INTEGRACIONIM PROCESIMA

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Rezi me

Crnogorska poljoprivreda u posljednjih nekoliko godina prolazi kroz značajne promjene (liberalizacija cijena, reforme institucija i službi isl.). Sve to traži i podešavanje instrumenata razvojne i tekuće politike na način da se uvažavaju dostignuti stepen i potreba daljeg razvoja poljoprivrede, jer ukoliko se te mjere ne prilagođavaju izazovu i zahtjevima vremena, one mogu ne samo da uspore razvoj nego i da nanesu štetne posljedice ovoj osjetljivoj grani privređivanja.

Stočarska proizvodnja je najznačajnija proizvodnja u okviru poljoprivredne proizvodnje. U finalnoj vrijednosti primarne proizvodnja stočarska učestvuje sa 61,4 %, a računajući ribu i pčelinje proizvode sa 65 %. Pravci njenog daljeg razvoja treba da budu usmjereni na obezbjeđivanje prehrambene sigurnosti, uključujući zadovoljenje potreba domaćeg stanovništva i turističke potražnje.

S obzirom da Crna Gora ima za cilj prijem u EU i STO, posebnu pažnju mora posvetiti njihovim preporukama, koje se odnose na ograničenja carinskih stopa i domaću podršku poljoprivrednoj proizvodnji.

U radu će se sagledati pravci daljeg razvoja stočarske proizvodnje i njena pozicija u procesu prilagođavanja zahtjevima zajedničkog evropskog tržišta poljoprivrednih proizvoda.

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