SYSTEM OF BREEDING COW CALF IN THE SARAJEVO ROMANIJA REGION

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Abstract: Under the cultivation of the cow-calf system, the cattle breeding is understood as the cows on the pasture opening cows that at the end of the grazing season remain on the breeding or fattening economy or going to the market. In breeding, mixed and meat breeds of cattle are used. Through this work we will bring the basics of the technological process in the cow-calf system with a view to the condition of the same in the Sarajevo Romania region (12 municipalities) from the aspect of the cow-calf system. Areas that are particularly suitable for the cow-calf system are characterized as mountainous mountain areas with a large number of pastures that are the ideal habitat for cattle, and can be used to a large extent in this way. When it comes to registered agricultural holdings in the Sarajevo Romania region, the represented race is in the Simmental type. Given that the shortage of meat of cattle of all categories is also actual in the Federation of Bosnia and Herzegovina, which is a bigger market, this is another additional motive for increasing investments in this sector.

Key words: Simmental type, cow-calf system, Sarajevo Romania region.

Introduction

Cattle's breeding is the most important branch of livestock breeding, and livestock farming is an important component of agriculture. In the Republika Srpska in Romanesque Sarajevo region, livestock is often existential basis of rural households. Thanks to this branch of animal husbandry, milk and meat are obtained for themselves, but also for placing on the market of Bosnia and Herzegovina. There are very good conditions for holding livestock in our country (the tradition of animal food production, the necessary areas). Based on these facts, it is not difficult to conclude that livestock farming in the territory of Republika Srpska has all the conditions to become one of the leading branches not only of cattle, but also of agriculture as a whole. Through this work we will bring the foundations of the technological process into the cow-calf system with a view of the situation in the region of the Sarajevo Romania region.

A review of the technological process of the cow-calf system

Selection of race

For the keeping of cows by the "cow-calf" system, all breeds typical of meat production are suitable. Also suitable are dual breeds of breeds intended for the production of milk and meat, that is, hybrids of meat breeds with races of combined characteristics, as

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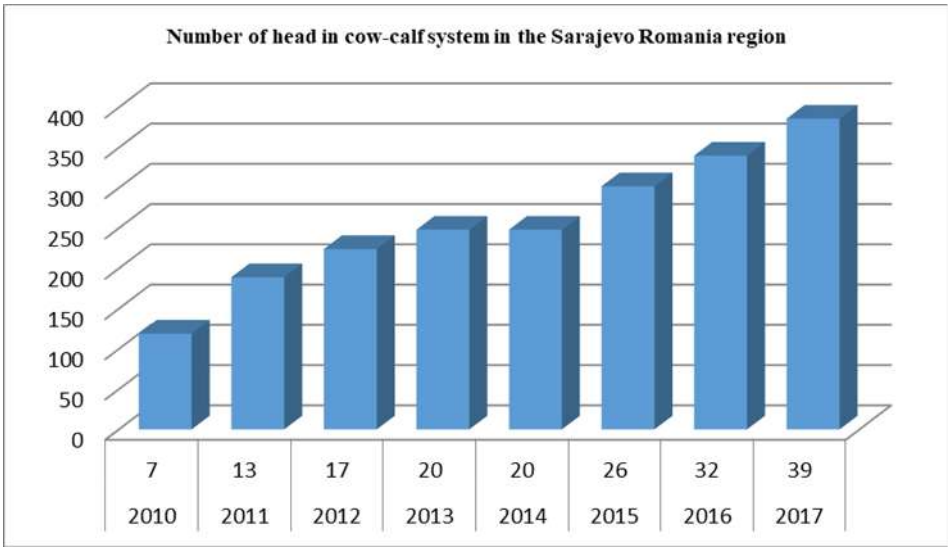
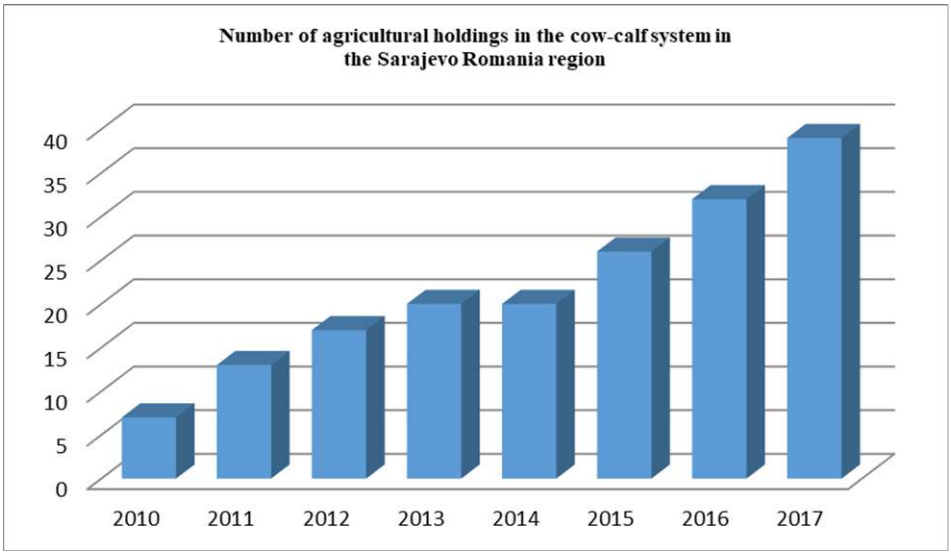
is the case in the Sarajevo Roman region. A typical race, a representative of this group, is in the Simmental type. This breed of cows has some important advantages when it comes to cultivating the "cow-calf" system in our country. First of all, they give more milk than meat, which allows the calves to have higher daily gain and thus at the end of lactation and higher body mass. Longevity and resistance, these races are known for the cow-calf production system in our areas. It maintains good health in the highest production, excellent maternal properties, good adaptation in herds, easy calving, calm temperament, good milkiness, persistence, good growth, quality meat (thickness of fat, juicy). When it comes to registered agricultural holdings in the Sarajevo Romania region, the represented race is in the Simmental type. In the analysis of the situation from 2010 to 2017, out of 39 registered agricultural holdings in the system of cows-calf in the Sarajevo Romania region, the total number of head was in growth, except in 2014, when it stagnated in relation to the previous year, was 386 head (Graph. 1, Graph. 2).

Chart 1 presents the total number of animals per agricultural holdings from 2010 to 2017. In the system of the cow-calf in 2010 there were 109 head, in 2011 there were 178, in 2012 there were 214, in 2013 and 2014 there were 241 head, in 2015 there were 292, in 2016, was 331, 2017 had 386 heads. You can clearly see that there is a positive trend in the number of heads in the system above that, with short stagnation in 2013 and 2014. Chart 2 presents the number of agricultural holdings from 2010 to 2017. In 2010, 7 cattle farms were used by the cow-calf system, in 2011 there were 13, in 2012 there were 17, in 2013 and 2014 there were 20, in 2015 there were 26, in 2016 there were 32, 2017 was 39 total number. Collecting the number of agricultural holdings by age and number of heads in the system cow-calf is a cumulative character.



Graph 1. Absolute number of head in the cow-calf system in the Sarajevo Romania region



Graph. 2 Number of agricultural holdings in the cow-calf system in the Sarajevo Romania region

Rules of free breeding

The "cow-calf" cattle holding system is, as a rule, free to grow and has two basic characteristics. Also, all cattle (cows, calves) are kept freely outside all gaseous facilities in a significant part of the year (if this is climate possible). In the agricultural farms in the Sarajevo Romania region, in all 12 municipalities (East Ilidza, East New Sarajevo, Trnovo, East Old Sity, Pale, Sokolac, Han Pijesak, Rogatica, Cajnice, New Gorazde, Rudo, Visegrad) it supports free farming rules. This system is primarily introduced in the mountain-mountainous regions, which have larger areas for grazing. Depending on the qualities of pasture, one hectare can hold one to three cows with their offspring. Only one cow is kept if the grazing is weaker, primarily at the end of the summer. On average high quality pastures, where there are not too many precipitations, the most common are two cows. All cattle are held on average six months a year in indoor facilities-stables in the usual manner by categories. The stalls for this system are, as a rule, simpler and even cheaper. In principle, two broad categories are formed, namely cows and fattening animals. In the cattle stable, which in the last months of the steepness is recommended, free hold in the box lanes is recommended. This means that the number of boxing matches corresponds to the number of cows of a group (category). So all cows have calmer and safer accommodation for the preparation season for calving. Each production process has its own course, so this system consists of several phases: the first phase in the cow system is calving, as a rule, the cows are calving themselves or with the minimal assistance of a man. The birth weight of calves is between 35 and 45 kg. The next stage is lactation, it starts with calving, and ends with the weaning of calves when they are 6 to 7 months old. In this system all obtained milk

s intended for calves. The next phase, that is, the third phase is dry matter. At this stage, it is important that the cow recover from sucking the calves and to get a good breeding condition until the next harvest. The last phase of this system is a holiday, and it is mostly a natural holiday. The size of the herd in the cow-calf system is an extremely important parameter, from the aspect of financial, and as an example, the capacity of a farm of 100 cows (Knežević, 2002.). According to the author of a farm with 100 cows production with its bulls and calves for the restoration of basic herd, it is necessary to provide 145 hectares of farmland, in the structure of the 105 hectares of natural and planted grassland and 40 hectares of arable land.

Nutrition in the system "cow - calf"

In the winter period at altitudes above 800 m.a.s.l. provision of food for the winter period, starting from 01.November until 01.May a total of 180 days, and the summer storage period from 01.May until 01.November total of 185 days. Depending on the condition of the cow at the beginning of the winter period, it is possible, during the winter, without danger to the state of animmals and the reproductive ability of the cow, to reduce its body mass to up to 15% with the condition that the vitamin needs of the animal are taken into account (Knezevic and Stipic, 1996.). In the winter period it is necessary to provide quality feed with mineral vitamin supplements, and in the summer grazing season with addition of salt. The hay is very suitable for feeding at low outdoor temperatures (below -10 to -15 °C) and nurseries located in outdoor conditions. It must not be fed with frozen silage. Hay is also given calves in "nurseries" at the beginning of their feeding with grain feed. An integral part of a feed diet can also be straw, which is given to animals. In order for animals to receive and use sufficient amount of feeding stuffs, they must have permanent access to safe and healthy water (Chenoweth et al., 2005.). The raw material of this production consists of grassland resources with adequate participation of voluminous and concentrated fodder intended for production on the farms of the farm. Fodder must be above 85% produced on the farm, and at least 15% is being purchased on the market due to cost-effectiveness of production. This fulfills the conditions for natural and healthy meat production, which is more demanding and has better placement, which is an additional opportunity for farmers from the territory of the Sarajevo Romania region.

In general, the cow-calf system is based on the cheapest voluminous diet and the longer the grazing period, the less expensive the diet (Knežević et al., 2005).

Why support a cow's system in Republika Srpska?

Significant results have been achieved in milk production, but meat production of all categories in cattle breeding is not at a satisfactory level. The operational program for the development of cattle breeding, the measures of rural development, and the increase in the incentive for fattening the cattle, aims to raise the level of production in meat cattle breeding. Import calves are not a satisfactory solution because of: a long period of adaptation to our climatic conditions, poor racial composition, and poor quality of meat and slaughter randman. Coverage of demand for meat of cattle of all categories is regulated by its imports from surrounding countries. Meat production is therefore a gap in the market, which is the possibility of increasing and stabilizing

farmers' income. Livestock farming, as well as the cow-calf system, is therefore, logically, a sector that deserves the attention of farmers and relevant institutions responsible for its development. The serious introduction of the cow-calf system with all the benefits of this system, in a technological sense and output, will improve the state's complacency in foodstuffs in the Republika Srpska, stabilize the economic situation of the rural population and expand the supply of agricultural products to strengthen the stability of the entire sector. Given that the shortage of meat of cattle of all categories is also actual in the Federation of Bosnia and Herzegovina, which is a bigger market, this is another additional motive for increasing investments in this sector. We will cite one example in terms of the value of beef imports in 2017 in the period January-June, amounted to 73,463,305.71 KM and is higher by 8% compared to the same period in 2016 (67,692,304.04 KM). In the same period (January-June), the value of beef imports in 2017 in the Republika Srpska amounted to 21,448,954.09 KM and was 23.63% higher compared to the same period in 2016 (17,349,234.66 KM). The value of export of beef in 2017 from B&H, for the period January-June, amounted to KM 158,015.91 and amounts to only 1,8% of the value of exports for the same period in 2016 (8,667,792.79 KM). Also, the value of beef exports in 2017 from the Republika Srpska in the period January-June amounted to KM 158,015.91 and was lower by 62% compared to the same period in 2016 (415,561.46 KM).

Conclusion

Cattle breeding is the most important in animal husbandry. In Republika Srpska, in the Romanesque region of Sarajevo, cattle breeding is often the existential basis of the rural household. Thanks to this branch of cattle breeding, milk and meat are obtained for their own needs, but also for placement on the market of Bosnia and Herzegovina. Cattle breeding on the territory of the Republika Srpska has all the conditions to become one of the leading branches not only of cattle breeding but also of agriculture as a whole. Through this work we will bring the foundations of the technological process in the cow-calf system with a view of the situation in the Sarajevo Romania region. Areas that are particularly suitable for the cow-calf system are characterized as mountainous mountain areas with a large number of pastures that are the ideal habitat for cattle, and can be used to a large extent in this way. When it comes to registered agricultural holdings in the Sarajevo Romania region, the represented race is in the Simmental type. The serious introduction of the cow-calf system with all the benefits of this system, in a technological sense and output, will improve the state's complacency in foodstuffs in the Republika Srpska, stabilize the economic situation of the rural population and expand the supply of agricultural products to strengthen the stability of the entire sector. Given that the shortage of meat of cattle of all categories is also actual in the Federation of Bosnia and Herzegovina, which is a bigger market, this is another additional motive for increasing investments in this sector.

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