

Considerations on the Present and Future of Buffalo in Terms of Sustainability

Stelian Sertu, Maria Paraschivescu, Maria Voiculescu, Marinela Enculescu

*Research & Development Institute for Bovine Breeding – Balotesti
Sos. Bucuresti-Ploiesti, km. 21, Ilfov, 077015, Balotesti, Romania, sertu_stelian@yahoo.com*

Abstract

This paper is a brief analysis on the evolution of the buffalo herds nationally and internationally. It is noted that depending on the size of herds in each country may speak of countries with active population, the countries of Italy in increasing Asian buffaloes for milk production or animal labor and Brazil as countries with vulnerable populations, the number of animals decreasing, as situation in Romania. Among the key factors that have decreased the buffalo herd of buffaloes are low fertility and low energy conversion of feed energy product compared to steers. In contrast to Romania is situated countries as Brazil and Italy recorded a large increase efectvelor buffalo .. If primary production in Brazil is produced in Italy tractive force main target is the production of milk, which is offering very little in Europe. For future increase buffalo in Romania is of great importance good milk price and the possibility of using coarse fodder. Growth strategy in Romania is transforming buffalo population of vulnerable indigenous active focusing on increasing its fertility.

Keywords: buffalo, working population, population at risk

Buffalo, animals that have their origins in Asia and Africa, had since the beginning of particular interest to humans because it yields thought they could get. Greater importance to mankind have a wild Asian buffalo because they come from domestic buffalo. With domestication and migration of peoples has been achieved and spread buffalo in the world. Today, buffalo are raised in a large part of Earth surface, buffalo herd is 174 million head. The main productions are obtained from buffalo milk, meat and labor. Milk production is obtained 6% of world production and meat production provided the population is 1.3% of global production.

Even if the buffalo are found in much of the earth's surface spread their world is not uniform and there are large variations between the actual continents and between countries but within the same continent. This is explained by climate,

vegetation, socio-economic development. Thus we can speak based on the number of copies of each country of countries with active population and countries with populations at risk. Populations at risk are classified by the degree of decrease of the number of buffalo in vulnerable populations, populations in danger and people in critical condition. The largest buffalo herds are found in the Asia followed by Africa, SouthAmerica and Europe.(table1).

Asia is the continent which totals about 97% of world buffalo herd. The largest contingent India meets Pakistan in the region where also is found most valuable biological material worldwide. Increasing buffalo in this region is based on both economic and religious arguments. In the context in which this region cow is considered sacred animals, so it is not exploited, buffalo are the main source of animal production in the region.

* Corresponding author: Sertu Stelian,
sertu_stelian@yahoo.com , Tel. 0726560507

Table 1. Evolution of buffalo herds in the last 50 years

| The largest continents ascending buffalo | Staff in thousand heads | | | | |
|--|-------------------------|--------|--------|--------|--------|
| | 1960 | 1970 | 1980 | 2000 | 2005 |
| Asia | 107000 | 119000 | 128000 | 160000 | 169000 |
| Africa | 1130 | 1950 | 2400 | 3400 | 3920 |
| South America | 60 | 120 | 360 | 1000 | 1100 |
| Europe | 880 | 845 | 803 | 250 | 305 |
| Total | 109070 | 121915 | 131563 | 164650 | 174325 |

The most important race breeds are Murrah buffaloes and Nili-Ravi breed mainly specialized breeds for milk production but that does not neglect any meat production. Average milk yield obtained is about 2000 kg and livestock productions submitted to the Genealogical made between 2500 to 5000 kg. The importance of meat production is evidenced by the fact that although buffaloes have a share of 25% of the total of cattle, they provide 48.6% of all bovine meat sold in the region. The third production achieved, the traction is as important as the first two productions (milk and meat). Workforce is exploited mainly in agriculture due to vast crops

of rice in the region but also in other activities that require work from the burden. Even if the Asian continent has the highest share of the population of buffaloes in the world largest demographic explosion meets the South American continent. In South America the role of buffalo in animal production economy is the trend of growth and expansion of buffalo in subtropical areas.

Evolution herd of buffalo in Brazil

The largest buffalo herd is found in Brazil, was introduced at the end of the nineteenth century, repeatedly continuing imports from countries with tradition in growing buffalo.

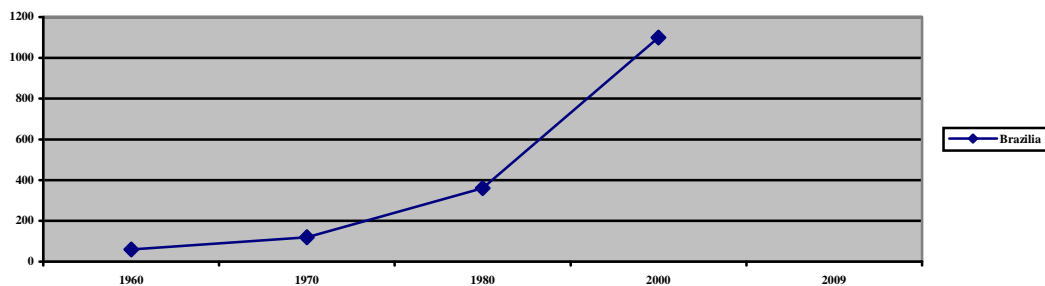


Figure 1. Evolution buffalo in Brazil

Number of buffaloes in the last 36 years came to 1,173,629 heads by making a 9.9-fold increase following an annual growth rate of almost 10%. Demographic explosion in Brazil and its jump from a country with a population at risk in an active population is primarily due productions obtained on the one hand and on the other geographical conditions in the area. Production of milk per lactation is 800-1.200 kg, close to world average. Production of meat produced is higher than in Europe because the buffalo is

recovered mainly as adult animals, after being used initially as a draft animal. This results in animals with large body mass of cut. Perhaps the most important production is obtained from buffalo advantage here is the labor used in agriculture, the extensive rice plantations, transport and as an excellent animal for riding in wetlands and marshes. When adding up all these great buffalo consisting acquiring their potential adaptability in this area that appear to not be competed by any other domestic animal.

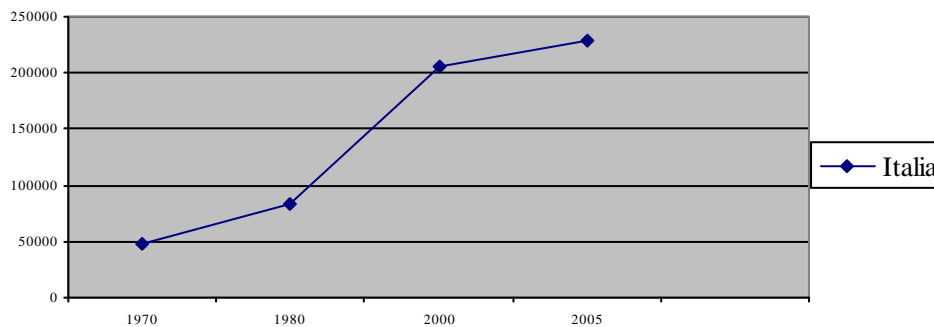


Figure 2. Evolution buffalo in Italy

Opposed to other continents where buffalo crec Europe is situated where the overall sign of buffalo population decline. The main European countries with tradition in growing buffalo are in the south - east of the continent. In other countries ascending distinguish Italy. If countries in the south - east of the continent are registered considerable decline of population of buffaloes Italy is the exception to the old continent. Flock of buffaloes in Italy increased over the past 40 years from 48 600 in 1970 to 205 000 in 2005.

Evolution herd of buffalo in Italy Bull grew up in Italy comes from India and bull was introduced in this country with the advent of Islam and the Arab occupation, and along the Central European conquests of centuries VI - VII. While due to the influence of natural factors, social, economic and cientific Italian Mediterranean breed was formed. In the early stage of growth of the buffalo in this country fertility and milk production were comparable to other productions in Europe. Italian farmers have noted the integral quality of buffalo milk and started programs to increase milk production. Thus buffaloes have undergone over time an intense process of improvement as now reaching to enjoy great popularity among breeders due to higher productions of milk obtained from them. Today the products obtained from buffalo milk is appreciated all over the world and the income gained through their sale is much higher than the deficit due to higher interval between calving.

Evolution herd of buffalo in Romania

In Romania Bull Migrations entered once with about 1 500 years ago in the south of the country. While range and herd of buffalo has changed, today more than 93% of this finding is in Transylvania. The dates made buffalo population in 1920, an estimated 175 240 head. Later due to growth and improvement programs buffalo herds have registered significant growth reaching that recorded in 1980 to be 228 000 heads. Largest decline of the herd was recorded in the last 25 years. In 2005 there were only 64 028 head.

Romania's transition from a country with a population of buffalo turn to a vulnerable population are based on multiple causes. A possible explanation could be a massive exports made in European countries.

Another cause and most important is the decrease of population to increase interest in the context in which the buffalo in converting feed energy product is disadvantageous. If you compare the main productions obtained from cattle with those of the buffalo is significant difference between the two species. The interval between calving cow is an average of 420 days and milk production obtained is 17.5 kg / day / milking and 15kg/zi/furajata. The interval between calving buffalo is the air 455 days milk production is obtained 4.56kg/zi/muls and 2.38 kg / day / feed. Hence the yield of a cow is 6.38 times higher that of a buffalo.

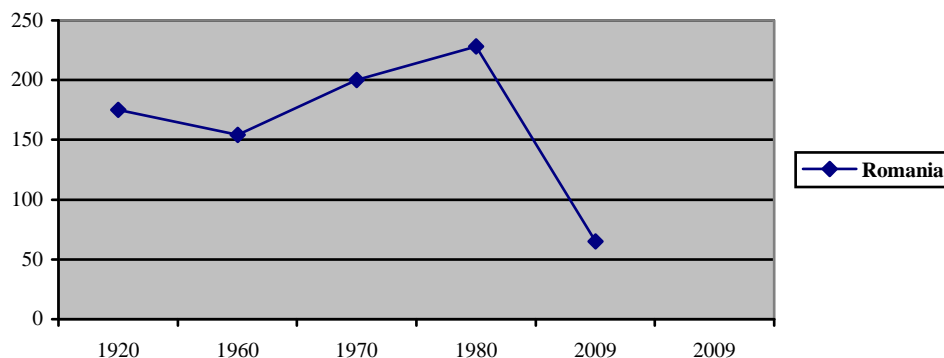


Figure 3. Evolution buffalo in Romania

When referring to the third production achieved, namely to drive traction in the conditions in which Romania is a country with mechanized agriculture that has lost importance. Even if our country is currently facing a dramatic decrease in the herd of buffalo can redress the current situation of Romania is a country with tradition and beneficiary of a population with high genetic value. In good growth, operation and management come together in Romania is high performance. For buffalo population growth in our country the best example to follow is the example of Italy. Economic measures imposed in Europe on the production of milk obtained from cows that can revitalize our country pursuit. If the EU cattle to avoid overproduction of milk quota imposed on buffalo this is not required. Moreover buffalo milk is characterized by a high in dry matter and higher fat milk produced by all other species of farm animals. It also has a high content in vitamins and mineral compounds. These qualities of buffalo milk makes a very sought food in the European market. Moreover preparations obtained from buffalo milk are considered delicacies. The product is the market that dictates the price. The more demanding and the offer is greater than the

minimum acquisition price of the products is high. At this time the European market for buffalo milk preparations are insufficient therefore can vorbii the existence of niche markets. Farmers in our country can be most favored as they can "speculate" very well when the marketing of milk and milk preparations at a high price and thus overcome the existing shortage of production compared with cows.

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