

## CONSERVATION OF RARE BREEDS THROUGH BY AN OPEN FARM VISIT

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### *Abstract*

*The paper studied the importance of bio conservation of farm animals from rare breeds in context of them using for maintenance of local culture and tradition, tourist attraction and leisure activities. We are supporting to promote active and sustainable use of animal genetic resources and create an effective interaction among relevant stakeholders for an active exchange of knowledge on genetic resources. In our country the following species and breeds were registered as vulnerable in 2013: 1 breed of cattle, 2 breeds of goats, 10 breeds of sheep, Romanian Buffalo, 2 breeds of pigs, 1 breed of hen and 8 breeds of horses. Many local breeds had played a central long role in the social and cultural life of rural populations. Bio conservation of rare breeds from farm animals help maintain biodiversity, improve the quality of agricultural products by promoting a sustainable agricultural production and fostering the sustainable development of rural areas.*

*Key words:* rare breeds, bio conservation, rural heritage, alternative tourism models

### INTRODUCTION

Animal from rare breeds can be used as research and teaching material in history, ethnography, sociology and biology. They are part of cultural heritage (living cultural heritage).

There are a lot of reasons, for which small populations, also-called rare breeds, should be preserved. Some authors [10] has found the following list of arguments for conservation: economic-biological reasons, scientific reasons, cultural-historical reasons. In UK exist a concept of a ”Farm Park”, as a breeding centre for rare breeds which function like touristic and education resource. This centre is a privately owned collection of British rare breeds in active breeding units. Its function like a public exhibition. [30]

Such an exhibition it could also has the role of information, training and teaching resource for local people. In this centre there are presented the advantages and disadvantages of the old local breeds. For visitors it could help them to understand and better appreciate the local culture. In this way the ”Farm Park” support the local agriculture and its breeds.

The breeders need to find viable niche markets for their value-added products. They have not the capacity to invest in creating advertising or distribution networks. They bring people to the farm to know the rare breeds. [4]

In nowadays is a growing interest in ”living history”, and interactive learning. A farm with grows animal from rare breeds offer the opportunity to the children’s to interact with animals.

In the USA the interactive experience of ”Living History” with historical settings brought back to old life from the past. An active farm can uses animals as teaching tools, and bring in attention the issues of livestock breeding, agricultural change and conservation.

The idea of ”Farm Parks”, ”Living History Museums” and ”Exhibition Farms” have no success in those countries were most people still have close links to the land. [9].

In countries with a developed tourism, there is a real possibility of linking the idea of living history, incorporating traditional skills, breeds and plant crop varieties into an exhibition.

## MATERIALS AND METHODS

This work is based on investigation of bibliographic resources regarding the sustainable use of animal genetic resources.

We have searched the livestock of endangered animal breeds and the national and European programs for bio conservation of them.

## RESULTS AND DISCUSSIONS

The base of this work is to propose the founding of an opened farm which could function like an exhibition of different rare breeds. This farm can be part of package tour for the young generation. In France are a lot of farms with different function: teaching farms, discovery farms, farms that are open to visit, tasting and selling products from the farms.

Conservation and sustainable use of animal genetic resources was subject to United Nations Convention in Rio de Janeiro in 1992, and one of the main objectives of the Worldwide Action Plan and also one of the global FAO International Treaty on Genetic Resources for food and agriculture. [22]

The project aims to promote active and sustainable use of animal genetic resources and create an effective interaction among relevant stakeholders for an active exchange of knowledge on genetic resources. Knowing that some breeds were created and stabilized thousands of years ago and then improved naturally by man, cannot ignore the cultural and historical importance of these races. [1]

According to international standards, animal populations belonging animal husbandry genetic resources are: critical populations or considered missing, which have less than 100 females effective; endangered populations, which have a number of females between 101 and 1001 heads; vulnerable populations, which have a number of females between 1000 and 5000 heads. [21]

The rapid evolution and technological civilization in recent centuries, involved a massive replacement of extensive production systems, primarily pastoral, with intensive systems. The danger of this rapid evolution

has imposed looking in all areas of sustainable development pathways, requiring greater attention to conservation pastoral operating systems, which do not require finite resources, preserving landscapes and genetic resources. [20]

The knowledge and information plays a major role in vitalizing livestock production and proper management of genetic resources. Starting with this concept we believe that its necessary a collection of Romanian rare breeds which can function as a breeding centre with the goal of conservation, preservation and promotion of animals. This centre can promote the historical, cultural and aesthetic interest of the breeds.

The breeding centre for this rare races can become a high-interest subject for the press and television and can become a popular visitor centre for school groups, holiday organizers and tourists. These centre act primarily to draw attention to the changing face of agriculture, to the loss of historical breeds and are not large scale breeding centre. However, it can help to raise interest and awareness of indigenous stocks and is effective teaching tools regarding domestic animals and local/traditional products. [3;11; 13; 14; 25; 26]

Developed and developing countries differ with regard to their portfolios of genetic resources and the management of these resources. [7]

Taking into account the wide spectrum of environmental and economic circumstances and the versatility of many farm animal species, it should be possible to find good economic niches for many minority breeds. [19]

Examples of special uses (utilization of rare breed in production) for cattle, goats, horses and sheep are: attractive power in difficult conditions; production of "biological" food; production at school farms; production in prison farms; production in greenhouses for research & health; experimental animals in research; production of luxury furs; animals in part-time farming. [29] The same author finds use of rare breeds in conservation of natural environment and for human pleasure and recreation (animals in national parks, farm

animal parks and museums, agricultural and native place museums, riding for hobby and racing, social company of humans, pet-keeping, aid in bringing up children, maintenance of local culture & tradition, exhibition in zoos, tourist attraction, folk art, ceremonial purposes). [12; 28]

From this point of view we believe in choose for use of rare breeds animals for maintenance of local culture and tradition, tourist attraction and leisure activities.

Many local breeds are able to provide unique products that may be of a higher quality than those obtained from high-output commercial breeds.

Local breeds and their products may also be valued as a characteristic part of traditional farming systems. Moreover, many local breeds have long played a central role in the social and cultural life of rural populations – including religious and civic traditions, folklore, gastronomy, specialized products and handcrafts [6]

These characteristics can potentially be a basis for diversified livestock production, and increased profitability for local breeds.

In France the publication “Sheep raised for milk in the Pyrrenees in 2020” presents five scenarios for building a strategy of selecting a local breed: metamorphosis (milk market economy piedmont and mountain ecology market); territory and quality brands; pastoral traditions decline in the economy; double quality; nature and food; balanced development of border regions. [5; 23]

At European level there is a strategy regarding biodiversity conservation. [17]

The Communitarian program of conservation, characteristics, evaluation and use of the genetic resources in agriculture established conservation activities both in-situ and ex-situ. They have increased knowledge on genetic resources and created European database for species and breeds of farm animals. [16]

Rural Development programs have contributed to the conservation of genetic resources at farms level and encouraged farmers to conserve local breeds and crops by rewarding them. [8; 15; 24]

According to the data provided by the

competent departments, in our country the following species and breeds were registered as vulnerable in 2013.

Table 1. Livestock breeding females belonging to breed endangered on species and breeds

| Species                  | Breed                        | No. of females used at reproduction (head) |
|--------------------------|------------------------------|--|
| Cattle                   | Grey Stepe Local Breed       | 67   |
| Bubalus                  | Romanian Buffalo             | 289  |
| Swine                    | Bazna                        | 22   |
|                          | Mangalița                    | 55   |
| Sheep                    | Țigaie, Ruginie Variety      | 1,120                                      |
|                          | Rațca                        | 3,680                                      |
|                          | Karakul of Botoșani          | 2,342                                      |
|                          | Merinos of Palas             | 4,364                                      |
|                          | Merinos of Suseni            | 300  |
|                          | Transilvanian Merinos        | 268  |
|                          | Cluj Merinos                 | 203  |
|                          | Palas Meet breed             | 635  |
|                          | Palas Milk breed             | 224  |
|                          | Back head Țigaie ofTeleorman | 3,438                                      |
| Goats                    | White of Banat               | 1,002                                      |
|                          | Carpatina                    | 1,661                                      |
| Hens                     | Nake necked of Transilvania  | 457  |
| Skil worms               | Bombyx mori-family           | 4,250                                      |
| Horses                   | Lipițan                      | 260  |
|                          | Furioso North Star           | 36   |
|                          | Horse of Bucovina            | 8  |
|                          | Huțul                        | 83   |
|                          | Gidran                       | 35   |
|                          | Arabian Shagya               | 68   |
|                          | Nonius                       | 38   |
|                          | Romanian Sport Horse         | 52   |
| Romanian Semi dray-horse | 62                           |  |

Source: [18, 27]

All these breeds are characterized by rusticity, longevity, adaptability, resistance of disease

according to the conditions of maintenance and feeding.

## CONCLUSIONS

For the global food security conservation of animal genetic diversity is essential. [30; 2]

We propose an opened farm which could integrate biodiversity conservation of farm animals with methods of alternative tourism.

In this farm we can promote innovative practices with benefits for rural areas and rural peoples. In rural areas are close ties to traditional and cultural values with local practices related to animal breeding and processing the local products.

In this model opened farm we propose a collection of rare breeds farm animals which can help maintain biodiversity. Applying the local cuisine we can improve the quality of agricultural products and promoting a sustainable agricultural production.

This model farm connected to tourism, will develop methods oriented towards traditional agricultural practices.

This opened farm to visitors will function like a centre for bio conservation of rare breeds. It can also function like a farm open visits for students, young people and tourists. It is possible to organize regular activities of alternative tourism in farm activities: workshops, local cuisine, tours knowledge, exhibitions of photography, drawing, painting, pedagogical models, reports, cultural days, debates on specific topics, watching movies and shows.

In this model farm they can be made:

(i) Research activities regarding in situ conservation of species and rare breeds of farm animals and studying their morpho-productive and reproductive characteristics.

(ii) To apply national conservation objectives for each species.

(iii) Recovery of traditional knowledge and acquiring specialized skills and knowledge required to work with local breeds.

(iv) Understanding the importance of preserving them.

(v) Integrating the use of obtained products from the protected genetic resources by involving small local industries, local

restaurants and alternative forms of tourism. It can use recipes from traditional local cuisine.

(vi) Producing and promoting traditional products and including them in a list with products HNVF.

(vii) Produce and conserve the biodiversity of those species.

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