

SOME APECTECTS OF FARM ANIMAL BIODIVERSITY FORMATION ON ROMANIA'S ACTUAL TERRITORY

M.Th. Paraschivescu*, M.Paraschivescu*, A.T.Bogdan*, G.F. Tobă*, Mariana Sandu*, Judith Ipate*, Simiona Stan, Dana Dobre***

*CSCBA-Romanian Academy

** University Bioterra

Abstract

Farm animal patrimony of Romania has been formed along the time altogether with the social evolution of the people speaking the Romanian language or living on the territory of Romanian states. From ancient times people living on Carpathian Mountain Chain were known as transhumant shepherds moving their flocks to South an East or some time even to West. That meant that shepherds' families were established in mountains where they could be protected since young and stronger man led the flocks. The main species were sheep together with some goats, dogs and the donkeys to carry closes and tools. Still now there are in Romania the Tzurcana sheep, a breed on gross wool, resisting long runs, rains and snow and the small donkeys able to carry weights on wooden saddle fixed on their backs. The short interval of time between the two World Wars didn't give opportunity to many changes in the livestock of Romania. Never the less during this time The National Institute for Zootechny has been created, under the leadership of the grate professor Gh. K. Constantinescu of the Veterinary Medicine Faculty in Bucharest. The first action of the research stuff of the Institute was to now the genetic patrimony of the livestock. They have produced remarkable monographs concerning horse, cattle and sheep breeds. I After the Second World War in Romania socialization of economy has been imposed. The land property of gross landowners was transferred to the State, all the land prêt abele to was included in collective husbandries of "artel" type and the private property of facilities, of tools and of animals was abolished. The farm animal biodiversity was due to the same populations as before, but each of them altered by uncontrolled crosses. After 1990 the transition to the market economy based on the private property of the land of animals and of the tools were lead more politically than economically.

Keywords: biodiversity, farm animal, Romanian breeds.

Farm animal patrimony of Romania has been formed along the time altogether with the social evolution of the people speaking the Romanian language or living on the territory of Romanian states.

From ancient times people living on Carpathian Mountain Chain were known as transhumant shepherds moving their flocks to South an East or some time even to West. That meant that shepherds' families were established in mountains where they could be protected since young and stronger man led the flocks. The main

species were sheep together with some goats, dogs and the donkeys to carry closes and tools (**C. Draganescu**). Still now there are in Romania the Tzurcana sheep, a breed on gross wool, resisting long runs, rains and snow and the small donkeys able to carry weights on wooden saddle fixed on their backs.

When the first stately organization were founded and state boundaries were traced the transhumance routes were modified and shortened. Shepherdess was practiced further but it took an extensive form moving from home to

mountain or from mountain to plain and backward inside narrower territories less different from the climatic point of view. Thus it can be explained why flocks start to differ and a new breed, Tzigaia, with uniform half thick fiber wool appeared. Both Tzurcana and Tzigaia breeds are light animals able to graze walking and are milked. Because of the long distances between home and sheepfolds the sheep milk is not consumed as fresh milk but is clotted in curd milk to prepare particular sorts of cheese at sheepfolds or is fermented in different ways. There for still there is strong connection between animals and their environment and so reproduction pattern and the physiologically parameters remained unmodified along the time.

When the boundaries of the new states were accomplished the need to protect them became necessary. The need for faster displace of army troops for one place to the other increased the interest for horse breeding. The ancient history books wrote about the Moldavian saddle horses that were fast and effort lasting. Vassalage political relations with the Turkish emporium pushed local families to keep pigs, undesired by Moslems. When they started to sell cereals to neighbor countries draft cattle have been bred. Outside Carpathian Mountains, to South and East, animals were kept, for security reasons as well, mostly free, in natural conditions. There were then to types of swine the Stocli breed, lean and slowly growing, fed on fruits of oak and birch forests, along the Danube and in Danube Delta the Swamp Pig a little bit larger and fatter disposing on better feed stuffs (**N. Teodoreanu 1944**). The breed of

cattle, the Steppe Gray, was the one kept in the neighbor countries also cereal producers. They were fed on roughage only, were strong and resistant.

Over the mountains where Austrian emporium developed a feudal society building fortresses and burgs animal farming was more developed and less natural. The area was occupied more and more with dual purpose breeds of cattle, horses became heavier and pigs were able to grow faster and be fatter, a desired trait in that time. The Simmental, the Brown and the Pintzgauer breeds of cattle have been imported from Switzerland and the Edelshwein breed of pigs was imported from Germany. Following the German model pork consummation increased. From the local pigs two native breeds were created the Mangalitza and the Basna, the first one offering good lard and the second one, a black pig with a white strip around the body in the saddle area, being fast growing and having larger farrows.

After the Grate Romanian Union the Transylvanian experience wanted to be applied in the Old Kingdom as well. In fact this tendency was already noticed immediately after 1900 when Brown and Simmental cattle and also Mangalitza and Edelstein pigs were imported from over the mountains (**A.T. Bogdan – 1998**).

The short interval of time between the two World Wars didn't give opportunity to many changes in the livestock of Romania. Never the less during this time The National Institute for Zootechny has been created, under the leadership of the grate professor Gh. K. Constantinescu of the Veterinary Medicine Faculty in Bucharest. The

first action of the research staff of the Institute was to now the genetic patrimony of the livestock. They have produced remarkable monographs concerning horse, cattle and sheep breeds. In between from Basarabya province entered the karakul sheep, famous for the beautiful lamb furs they produce. In Banat region a loved white pig livestock was developed. Poultry, Silk Worms, Bees, Rabbits and Fur animals were not ignored. **(A.T. Bogdan – 1998)**. No matter how difficult was to do it the professional staff of the Institute managed to conserve valuable nuclei of above mentioned breeds which later state as foundation for animal farm patrimony of Romania.

After the Second World War in Romania socialization of economy has been imposed. The land property of gross landowners was transferred to the State, all the land prêt abele to was included in collective husbandries of “artel” type and the private property of facilities, of tools and of animals was abolished. The farm animal biodiversity was due to the same populations as before, but each of them altered by uncontrolled crosses.

When within the Ministry of Agriculture the State Agriculture Department (SAD) was organized and most of the collective agriculture farms were founded it was noticed that the animal genetic patrimony of the country was very poor. Then the need of farm animal improvement was claimed. Two trials to organize a Selection Animal Farm Division in the Ministry of Agriculture have been unsuccessful. Only later in 1966 when in the Ministry of Agriculture Animal Reproduction and Selection Division, led by

Marcel Paraschivescu Phd, was founded and the Animal Production Division of SAD was led by Ioan Moldovan, afterword state secretary for animal production in the Ministry of Agriculture, the enrichment and efficient administration of the genetic animal patrimony took frame.

Success of these time trial was obtained because the actions started with artificial implementation in cattle and sheep the target being to concentrate semen production in big artificial insemination centers. The importance of good sires became more evident. In 1976 “The State Council DECRET on Reproduction Material Prices in Farm Animals” has been published. A competition to become elite farm developed both in state and in cooperative farms. An event of this period was black and white cattle importation from Holand and Danmarck. Breed improvement programs for dual purpose breeds were emitted.

In sheep the target was to produce thin wool. The solution was found in applying artificial insemination. The action started in 1959 in Dobrodja region using the young rams produced in Palas Research Station where Palas Merino was bred. The action spread in all the plain areas of the country. At the end of the year 1970 about 40% of the sheep stock in Romania produced thin wool.

In pigs 6 selection farms were formed mostly as new units working on the same selection programs under the control of the Pig Research Institute in Perish, not far away from Bucharest. A great success was the creation by the research officer in Perish Liviu Beris of the paternal breed Peris 345. This one still exists.

On independent way Stan Tsarlea developed the a very efficient net of industrial poultry production units. The net included both for egg and broiler production, grandparents farms, parents farms, incubation stations and commercial units with hybrids. The model started to be extended in turkeys.

In pork production the state enterprises developed the commercial production of industrial type disposing of huge livestock (up to 300000 heads in one location). Many of them used artificial insemination using boars bought from the selection units mentioned above.

In this time animal production activity was successful but it did not attain the finish of managing genetic resources to create and conserve biodiversity. Reproduction of breeds was not closed. Open genealogical registers have been used so we can't say we dispose of a real biodiversity. Much old population disappeared (Stepp Gray Cattle, Mocanitsa, Stocli, Karnabat and others).

After 1990 the transition to the market economy based on the private property of the land of animals and of the tools were lead more politically than economically. All former successes were lost. The question of conserving biodiversity is wrong approached. There was considered that global allocation of some funds and signing international convention is enough for biodiversity conservation. Or it is necessary to create adequate institutions and to dispose of knowledge how they have to function.

At the national level some impulses to approach the conservation of rear populations

have been done. In this order the conservation of the Stepp Gray Cattle in the Research Station Dancu, county of Iassy, the conservation of Mangalitsa and Bazna pigs in Agriculture Research Station Turda, county of Cluj or the conservation of Ratsca sheep breed with screwed horns in Caransebes Sheep Research Station might be mentioned. Unfortunately some of these results are already lost. There are also researches concerning biodiversity conservation that aren't applied. Also there is legislation and funds for this purpose. On these bases it is possible to organize a net of units acting in biodiversity conservation, including a bio information data base for monitoring and guiding their steps towards a sustainable management of genetic resources.

B I B L I O G R A P H Y

1. Bogdan, A.T., 1998 – *Concepția profesorului dr. G.K. Constantinescu despre zootehnizare agriculturii românești și rolul managerial actual al inginerilor zootehniști în realizarea acestui obiectiv strategic național*”, *Lucrări științifice* Vol. 41– U.S.A.M.V. Iași, pag. 268-278
2. Drăgănescu, C., 2003 – *Managementul durabil al resurselor genetice la animalele domestice din țară*, Raport de țară, contribuție la analiza resurselor genetice animale mondiale de către FAO - I.B.N.A. Balotești.
4. Teodoreanu, N., 1944 - *Producția porcului* - Ed. Eminescu S.A., București.