MONITORING OF STILL EXISTING RARE BREEDS IN MOUNTAIN REGIONS OF BULGARIA

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I. Preservation of the rare cattle breed GREY ISKAR CATTLE (GIC) in the mountain regions of Bulgaria

From 1991 through 1998, the Mountain Stockbreeding Department at RIMSA, Troyan, developed and implemented the following two projects at the Agricultural Academy (nowadays - National Centre for Agricultural Sciences):

• Systems for reproduction and conservation of local sheep and cattle breeds;
• Methods for conservation of the Grey Iskar Cattle through breeding and embryo deep freezing.

The implementation of the second project was possible after equipment was provided for the embryo transplantation laboratory and a team was set up of researchers having attended appropriate training courses in Russia and France. During the BEP stage of the first project, having assessed the risk of extinction for GIC we inserted as item 10 of the working programme the following text: “Exploring the possibilities of contacts and co-operation with research institutes on the Balkans and in Europe directly concerned with conservation of rare local cattle breeds threatened with extinction”. Due to a number of reasons then these objectives were not attained. The work on the projects coincided with some radical reforms in agriculture and stockbreeding that resulted in liquidation of the available herds. The newly emerging private farmers took to preserving some of the herds that remained from the destroyed public sector, but their efforts were in vain. The economic crisis that set in did not allow for the preservation of GIC with its valuable qualities such as: excellent vitality and long life, good acclimatization potential, high fertility and early maturity, excellent taste quality properties of milk, resistance to some diseases and maximum suitability for mountain pasture utilization. Up to 1950 GIC used to be the most widely spread cattle breed in Bulgaria, up to 62%. The natural areas of spread were the valleys along the rivers Iskar, Vit, Osam, Rositsa and Ogosta and the high mountain regions of the Balkan Mountains. In the past GIC was mainly utilized for milk, meat and for labour on the farm. Since 1950 the breed has been crossed with improver breeds such as Brown Cattle, Black-and-white Cattle, Hereford and others. Because of the aspirations of breeders to replace it with more productive breeds, assimilation processes occurred which later resulted in its dramatic decrease and replacement by “more cultured breeds”. On recommendations by FAO, in 1972 the Bulgarian Council of Ministers issued government Decree _ 8 that regulated the genetic resources conservation. Nowadays we can state that the remaining Grey Iskar Cattle heads are on the border of critical minimum. In the region of the Central Balkan Mountains a small herd has been preserved in the Apriltsi municipality, and individual cows can be found in some settlements near Teteven, Troyan, Ougurchin, Loukovit and Sevlievo. In order to decrease the production expenses the herd in Apriltsi is kept as long as possible on mountain pastures together with cattle of Hereford, Aberdeen-Angus breeds and their crosses, and the management technology is that for beef cattle. The subsidy envisaged for Grey Iskar Cattle is not yet sufficient for the conservation of the breed or increasing of the number of livestock.
II. Conservation of rare local mountain sheep breeds

At the Sheepbreeding Department at RIMSA, Troyan, work has been currently going on the project entitled “Developing methods and systems for conservation of the local sheep breeds and varieties reared in the mountain and fore mountain regions and threatened with extinction”. The activities focus on preservation and increasing of the available breeds such as Karakachanska, Tetevenska and Staroplaninska. The genetic fund of breeds threatened with extinction has to be conserved and enriched through methods and systems that will preserve the levels of productive parameters as live weight, wool yield, staple length, lambing percentage and milk yield. The following tasks are included in the project:
- identifying of available animal breeds on farms in public and private sector;
- control on the main productive traits (live weight, wool yield, staple length, lambing percentage and milk yield);
- improving the udder morphological evaluation in view of machine milking;
- economic assessment of traits of commercial importance (meat, milk and wool yields).

The results from the project will be private and public farms rearing smaller number of livestock, sheep and cattle breeding associations, agricultural co-operatives and different experts. At present, the products from the activities of these two projects of RIMSA, Troyan, are utilized by BAF “Bioselena” and the project “Rare local breeds”.

Opportunities are still available for saving and preserving valuable local livestock breeds in the mountain regions if their biological and commercial characters are judged on their merits and actions are taken to conserve them as genetic resources of the Balkans and Europe. Therefore, we would be pleased and willing to take part in a project to this effect of the Monitoring Institute for Rare Breeds and Seeds in Europe, St. Gallen, Switzerland and the SAVE Foundation, offering the potential of modern biotechnological methods for enhanced reproduction.

Relevant Literature

Gray Iskar Cattle Herd in High Mountain Pasture – Apriltsi municipality

Cow in Mountain Park Pasture from the Apriltsi municipality Herd

Young Bull in High Mountain Pasture – Teteven municipality
Sheep herd of Staroplaninska Breed in Troyan municipality

Sheep herd of Tetevenska Breed in Teteven municipality