

Summary Report on the Status of the Endangered Balusha Sheep Breed of Kosovo during the June–July 2026 Monitoring Period

Summary Report of Monitoring Activities Conducted under the Project "Strengthening the Conservation and Sustainable Development of the Balusha Sheep Breed in Kosovo"

1. Introduction

The indigenous Balusha sheep breed represents one of the most valuable components of Kosovo's animal genetic resources. Moreover, the breed carries rich history, culture and tradition which has deep meaning to the rural community especially in the hilly areas of the country. Nevertheless, due to the constant decrease in the number of sheep, poor cross-breeding practices, lack of a breeding and selection program, as well as insufficient institutional support, the Balusha sheep is today regarded as an endangered breed which is under serious threat of becoming extinct. In the context of the project "Strengthening the Conservation and Sustainable Development of the Balusha Sheep Breed in Kosovo", monitoring visits were conducted to the seven farms involved in the project within the period of June-July 2026. The purpose of these visits was the evaluation of the condition of the flocks, their reproduction, management, and achievements in the field of conservation. This report summarizes the present state of affairs, achievements, problems and future activities that need to be done to secure the conservation of the Balusha sheep breed.

2. Current Status of Farms and Flock Management

Field monitoring confirmed that during June and July, most flocks were grazing on summer pastures, following the traditional sheep production system practiced in Kosovo. Of the seven farms participating in the project, three manage their flocks on lowland pastures located near their farms, while the remaining four have moved their sheep to alpine and mountain pastures, following the traditional practice of transhumance. This production system is not unique to the Balusha breed but represents the traditional sheep farming system widely practiced in the mountainous regions of Kosovo. Summer grazing provides the primary feed resource during this season while contributing to animal welfare, the conservation of pasture biodiversity, and lower feeding costs. Field observations showed that the overall body condition of the sheep was very good. There were no major health concerns, and the number of infections and metabolic diseases that could be recorded was minimal. The results show the progress in managing the flocks as well as the dedication of farmers towards ensuring their health and productivity. In the same way, the lambs' status was excellent. Lambs exhibited normal growth rates, satisfactory skeletal development, and good nutritional status, demonstrating the success of the lambing season and the high

quality of husbandry practices adopted by farmers who directly benefited from the technical training provided by the project's experts.

3. Improvement of the Genetic Selection Program

One of the most significant achievements during the current year has been the practical implementation of a more organized breeding selection system. Working closely with farmers, the project team identified and selected lambs with the most desirable phenotypic characteristics to be retained as future breeding animals. Selection was based not only on external morphological traits but also on pedigree information available from farmers, particularly regarding the maternal lineage. Under the current traditional breeding system, where at least three breeding rams are typically used simultaneously within each flock, determining the biological sire of individual lambs remains difficult. Consequently, maternal performance currently provides the most reliable basis for selecting future breeding animals. This initiative represents the first step toward establishing a structured breeding and selection program, which will eventually be strengthened through systematic performance recording and, in later stages, molecular parentage verification and genetic analyses.

4. Improvement of Reproductive Management

An important development during this breeding season was the introduction, for the first time, of the physical separation of breeding rams from breeding ewes on four participating farms. This management practice aims to:

- improve control over the mating season;
- facilitate the planning of lambing periods;
- optimize the utilization of breeding rams;
- improve pedigree control and parentage recording;
- reduce uncontrolled mating.

This change represents a significant step toward modernizing the reproductive management of the Balusha sheep breed and is fully consistent with international recommendations for the conservation of indigenous livestock breeds. Following the completion of the dry period, a considerable proportion of the ewes have already entered their second reproductive cycle, creating favorable conditions for improving reproductive efficiency at the farm level.

5. Prospects for Improving Productive Performance

Analyses conducted during field visits indicate that most farmers primarily consider the Balusha sheep as a meat-producing breed. This economic orientation offers good opportunities for the future development of the breed, provided that productivity improvements are achieved without compromising its genetic integrity. In this regard, the project aims to work closely with farmers to enable breeding ewes to achieve at least seven effective lambings within a four-year reproductive period. Another strategic objective is to improve the fertility index. At present, the fertility rate within the monitored flocks is estimated to be below 105%, meaning that approximately 104 lambs are born from every 100 lambing ewes. This represents one of the lowest fertility levels observed in sheep production. Through improved selection of breeding rams, better nutritional management, and more efficient utilization of locally available feed resources, the project aims to gradually increase the fertility index to 120%. Achieving this target would increase lamb production by approximately 20% per lambing season, thereby substantially accelerating the numerical recovery of the Balusha sheep population. Over time, this approach is expected to become a standard management practice across participating farms, creating a sustainable production model that can be transferred to additional Balusha sheep breeders throughout Kosovo.

6. Farmers' Commitment

One of the most encouraging outcomes of the project has been the strong involvement of young farmers. A considerable proportion of the most active Balusha sheep breeders belong to the younger generation. Beyond the economic benefits, these farmers maintain a strong emotional, cultural, and traditional connection with the breed. This factor is particularly important for the long-term success of the conservation program, as international experience demonstrates that indigenous breed conservation is most successful when local communities—and especially younger generations—are actively engaged. Their willingness to cooperate with research institutions and adopt improved management practices provides a highly promising foundation for the continued development of the conservation program.

7. Major Challenges

However, despite the good progress made so far, there are still many major issues that threaten the success of the program in the future. The first problem is the low institutional commitment to recognizing the Balusha sheep as an endangered breed. Although important progress has been made through the current project, a comprehensive national conservation program has yet to be established. Another important challenge is the increasing market demand for lamb meat. In response to these market pressures, farmers are often encouraged to introduce highly productive commercial breeds, increasing the risk

of uncontrolled crossbreeding and reducing the number of purebred Balusha animals. Moreover, the exodus of the youth from rural locations to urban and foreign locations constitutes an equally serious threat through lowering the number of potential breeders. In addition, continued cooperation between the farmer, government, and research institutions is crucial. This three-way cooperation is critical in ensuring that the conservation program succeeds. Should any party become less committed, it could threaten the gains made so far.

8. Overall Assessment

Based on the monitoring activities carried out during June–July 2026, it can be concluded that the conservation status of the Balusha sheep breed shows clear signs of improvement. The excellent health status of the flocks, satisfactory lamb performance, strong farmer commitment, and the introduction of advanced Best Management Practices (BMPs) in reproductive management all represent positive indicators that provide optimism regarding the future of this endangered indigenous breed. Collaboration between farmers and the research team has developed into a highly productive partnership characterized by mutual trust, professionalism, and effective implementation of project activities. In any case, future advancements will heavily rely on the institution of a National Balusha Sheep Conservation Program and its official adoption along with the allocation of sufficient financial means in the long run. As far as the overall outcome of current initiatives is concerned, it can be concluded that there is some hope for the recovery of the Balusha sheep population, on condition that joint work between farmers, governmental organizations and science proceeds. The above-described approach can become a good example for other livestock breeds as well.

This report, in its Albanian-language version, is also submitted to the Livestock Production Sector of the Ministry of Agriculture, Forestry and Rural Development of Kosovo.

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