

PAPESHE

Protection of Autochthonous population
of Pelagonia Sheep breed in the
cross-border area



3rd Newsletter

August 2020



Profile of PAPESHE project


The objective is to save, protect and valorize existing populations of the Pelagonia sheep breed in the cross-border area, which are currently in danger of extinction, through coordinated synergies. The PAPESHE project through an interdisciplinary holistic approach pursues to:

- record the existing situation of the Pelagonia breed in Greece and North Macedonia
- describe the relevant research regarding the production characteristics of the breed
- establish the necessary infrastructure for genetic improvement initiatives in the cross-border area (CBA)
- improve the quality and hygiene of milk and dairy products from autochthonous breeds in the CBA
- propose market-based strategies which will increase the incomes of sheep farmers and benefit the whole value chain of sheep farming in the CBA
- convince sheep farmers about the benefits of indigenous sheep breeds and to increase public awareness towards the protection of genetic diversity
- promote networking among actors in the CBA to achieve synergies in increasing the quality of farmer education.

The main outputs of PAPESHE will include:

1. A genetics laboratory, an Artificial Insemination laboratory and a nucleus farm for future experimental actions
2. A database with information about Pelagonia sheep populations in the CBA
3. Improvement of quality and hygiene of dairy products in the CBA
4. Training of farmers on best hygiene techniques for milk.
5. An integrated strategic plan for the conservation and development of Pelagonia sheep.

The budget of the PAPESHE project is € 771,738 and concerns research on sheep farming and in particular the endangered native breed of sheep Florina - Pelagonia of the research team



headed by the Laboratory of Livestock Economics of the Department of Veterinary Medicine of the Aristotle University in the framework of competitive bilateral INTERREG IPA Cross Border Cooperation Programme "Greece - Republic of North Macedonia 2014-2020".

Partners of the project

1. Aristotle University of Thessaloniki - School of Veterinary Medicine
2. Hellenic Agricultural Organization DEMETER-Research Institute of Animal Science
3. Geotechnical Chamber of Greece - Branch of West Macedonia
4. Faculty of Veterinary Sciences Bitola
5. Municipality of Dolneni
6. Centre for Rural Development

More information about the project is available at:

Papeshe.vet.auth.gr

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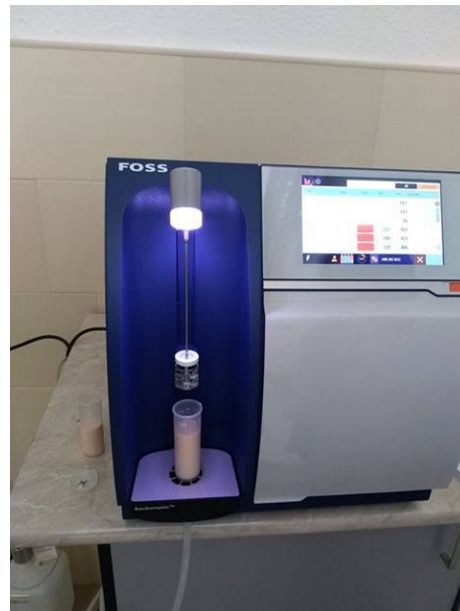
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[Watch our launch video](#)

Update on project activities

Installation of laboratory equipment - Veterinary School in Bitola

New Laboratory equipment was installed in July 2020 in the Faculty of Veterinary Sciences in Bitola (North Macedonia) for milk quality assessment. Chemical analysis (fat content, protein content, lactose and total solids, bacteria and somatic cell count) of milk samples collected from Pelagonia sheep is performed. The equipment will be used to monitor milk quality in areas of North Macedonia and to support the education of Faculty students.



Installation of milk tanks - Municipality of Dolneni

20 milk tanks have been installed to registered sheep farms in Municipality of Dolneni. One of the aims of PAPESHE is to improve the quality and hygiene of dairy products in the CBA. Milk tanks keep milk cool right after milking and until it is picked up by dairy industries for cheese production. This way, it is ensured that the milk remains in good hygiene condition, with no pathogens and can produce safe and high-quality dairy products.



Nucleus farm in Aristotle University of Thessaloniki

Pure-bred Pelagonia sheep were transported from the experimental flock kept in the Research Institute of Animal Science (in Giannitsa, Greece) to the Farm Animal Clinic of the School of Veterinary Medicine in Kolchiko, Lagada for the creation of a new nucleus sheep farm. This nucleus farm will allow multiple experiments, better protection of the Pelagonia sheep flocks and an accelerated breeding process.



PAPESHE in EXTΠΟΤΡΟΦ 2020 exhibition

PAPESHE was present at the 7th EXTΠΟΤΡΟΦ, the Greek Fine Food Exhibition, held in Athens 24-26 Jan 2020. Participants were informed about the objectives and the activities of the project, the high quality of Pelagonia sheep products and the prospects that the breed has to develop local economies and provide employment.



Milk quality analysis

Milk is the most important product of the sheep and goat sector in the Cross-Border Area. The quality of this important product is measured through the analysis of its content (fat, protein, lactose - chemical properties) and also through analysis for common pathogens which are threats for public health. Therefore, quality analysis of sheep and goat milk is a very important activity for all those involved in the value chain (farmers, processors, practitioners, scientists) because



1. High quality milk can produce typical high quality dairy products
2. Safe dairy products (cheese, yoghurt etc) can only be produced by milk with minimum pathogens
3. The health of farmers is related to high quality milk



4. Farmers with high quality will have higher economic gains

Public health issues and safety for consumers and their families can only be ensured if strict quality controls are done constantly on milk samples from sheep farms, before this milk is used for cheese production.

Within PAPERHE, the monitoring and assurance of sheep milk quality is one of

the main objectives. For this reason, in both countries sheep milk samples are collected and analyzed. This way, PAPERHE team has also the opportunity to get to know local farmers better and provide them advice regarding the quality of their products.

In the photos, staff from the Veterinary Faculty in Bitola - "St Kliment Ohridski" University are collecting milk samples from various Pelagonia farms and from the milk tanks at various times of the year. These milk samples are being analyzed in the new laboratory establishments at the Faculty of Veterinary Sciences in Bitola demonstrating the hygiene of products and flocks.



Artificial Insemination station in Florina



The Artificial Insemination (AI) station will be an important tool to establish genetic improvement programs in the cross-border area in general and for Pelagonia populations that will be detected through the project in particular. It is important for the project itself but also it is very important for the sustainability of the project results after the conclusion of the project.

Artificial Insemination is a very useful technique, widely used within genetic improvement programs as it allows (a) quick results in the genetic improvement process; (b) controlled matings between animals with high production potential; (c) very high levels of fertility; (d) less risks of illnesses and infections. The method is less costly and can have very important results, as with AI scientists choose the best animals in order to improve in the future milk and meat quality and production..

Within PAPESHE project, a fully equipped AI Station has been installed in Florina. The building was restored and designed according to all necessary standards. New equipment was installed with the financial aid of PAPESHE. In addition, some of the best rams of the experimental flock kept



in the premises of the Research Institute of Animal Science (HAO - Demeter) were chosen and transported to Florina to support high quality semen collection. The Laboratory is actually in full operation.



The establishment of the AI station in the CBA will be important for the development of the livestock sector in general – not only for the protection of Pelagonia sheep – and will constitute a very useful tool for all future activities regarding genetic improvement. It is envisaged to perform AI for more flocks in the cross-boder area



PAPESHE is implemented in the framework of competitive bilateral INTERREG IPA Cross Border Cooperation Programme "Greece - Republic of North Macedonia 2014-2020". The project is co-funded by the European Union and by National Funds of the participating countries

More information about the project

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