RESEARCH ARTICLE Agricultural Science Digest, Volume 43 Issue 4: 546-550 (August 2023)

Economic and Social Importance of the Breeding of Fur Animals in Greece and its Development Strategies

N.A. Semos[1], V.D. Dotas[1], V. Bampidis[2]

10.18805/ag.DF-413

ABSTRACT

Background: In the present work, a thorough research and study was carried out to determine the conditions prevailing in the creation and operation of fur farms in Greece, which are bred exclusively in the region of Western Macedonia in the northwestern part of Greece. In particular, all the parameters that affect the efficiency of breeding units were analyzed, the appropriate answers to the problems and weaknesses of the breeding of fur-bearing animals were evaluated and given.

Methods: The paper mainly deals with the applied practices and the situation prevailing in the field, from a technical, social and economic point of view and explored the development perspectives through proposed strategies, which are based on findings, literature, theoretical analyzes, statistical analyzes and primary sources from direct personal contacts. For the analysis of data of the fur industry, PESTLE and SWOT method of analyses applied.

Result: The general conclusion that emerges from the whole effort is a dynamic development of the fur-bearing sector since everything points in this direction and this development will significantly contribute to the improvement of the living standard of the inhabitants of the area.

Key words: Breeding units, Development strategies, Fur animals, Fur farming, Production process.

INTRODUCTION

The breeding of fur animals appeared for the first time in Greece, about 50 years ago, in the prefectures of Kastoria and Kozani with main centers for processing livestock products (furs) in the cities of Kastoria and Siatista. The fur processing industries used and still use raw materials that are mainly imported and only a small part is produced in recent years in the area with the breeding of fur animals. Efforts to increase domestic fur production began in the last 20-30 years with the prospect of replacing at least a portion of fur imports and making the industry more competitive. The prospect of increasing production is to raise at least 50,000 breeding animals. (Development of Western Macedonia SA 2012, Semos *et al.,* 2021).

Characteristic of the fur-breeding sector is the geographical concentration, in four prefectures of Northern Greece (Table 1 and Map 1), while most companies processing and producing fur garments are located primarily in Kastoria and, secondarily, in Siatista, cities of Northern Greece.

Today, the above areas are the only center for the production and processing of furs in Europe and one of the remaining centers in the global North, with most of their employees employed in this sector (Kastoria Chamber 2011).

Also, as shown in Graph 1, the increase in farming in recent years, shows a significant upward trend, which means that there are prospects for growth of the industry.

Therefore, the purpose of this paper is to investigate the significant economic and social contribution of the industry to the local economy and through systematic research to identify the most important factors that affect the development of this important industry and to identify its weaknesses and highlight the strategies that can be applied to its development. The findings of this research can provide industry development methods and reduce the country's dependence on imports, as is the case with other agricultural products in many countries (Malik *et al*., 2021) and assist in the design of industry development strategies (Kang and Na, 2020).

[1]Department of Animal Production Science, School of Agriculture, Aristotle University of Thessaloniki (AUTh), Thessaloniki, Greece. [\2]Department of Agriculture, School of Geosciences, International University of Greece, Thessaloniki, Greece.

Corresponding Author: N.A. Semos, Department of Animal Production Science, School of Agriculture, Aristotle University of Thessaloniki (AUTh), Thessaloniki, Greece. Email: semos@agro.auth.gr

How to cite this article: Semos, N.A., Dotas, V.D. and Bampidis, V. (2023). Economic and Social Importance of the Breeding of Fur Animals in Greece and its Development Strategies. Agricultural Science Digest. 43(4): 546-550. doi: 10.18805/ag.DF-413.

Submitted: 13-10-2021 **Accepted:** 28-02-2022 **Online:** 12-04-2022

MATERIALS AND METHODS

Usually, the development of an economic sector is not determined only by local, endogenous factors. It has been proven that the development of an industry in a specific area is always the result of a combination of intensive action between local-endogenous and non-local-exogenous factors. This is especially true for the export small and medium enterprises of the fur industry and consequently

the enterprises of fur animals, such as those in the Region of Western Macedonia but also for other similar European enterprises (Artelaris and Hatzimichalis, 2015).

According to the above it can be said that rural areas are complex spaces where relationships are formed and emerge between four dimensions (Ortiz-Guerrero, 2013).

The above relations of a rural area contain positive and negative factors that are characterized as important and that create opportunities and risks for development. What is required is, in these cases, effective risk management which, with proper handling, can bring greater benefits to industry performance, boosting productivity and reducing the impact of threats. Therefore, in the analysis process the first important step is the identification of risks which is the first step in the risk management process. Consequently, the identification of external risks related to the formulation of development strategies of the fur-breeding sector in the Region of Western Macedonia, is a priority. This identification will be done first using the PEST or PESTLE technique to minimize the negative impacts on the goals set for the development of the industry (Rastogi and Trivedi, 2016).

More specifically, the PESTLE analysis is a process for the analysis of the key factors (Political, Economic, Sociological, technological, legal and environmental) that influence an economic sector from the external environment. It essentially guides decision makers to identify the external factors that affect the financial sector. Analysis is simple and flexible and at the same time important so as to lead to useful results and which lead to correct decisions (Rastogi and Trivedi, 2016; Weeks, 2020).

One of the good reasons for conducting PESTLE is that too many external factors identified in this analysis can also be elements of the SWOT analysis. And because they are elements of the external environment of the financial sector are usually associated with opportunities and threats in the SWOT analysis.

The SWOT analysis is divided into two main parts. In the analysis of the internal environment of the company which are the strengths and weaknesses and in the analysis of the external environment of the company which are the opportunities and the threats.

The data for conducting the PESTLE analysis were obtained scientifically from the residents of the area through personal interviews and questionnaires, who either as ordinary citizens or as workers in the area in the fur farms or processing crafts, as is the case in many studies (Srinivasan and Roopa, 2021; Singh and Nandi, 2021). Data were also obtained from local public services, breeders' organizations and the breeders themselves. These data were analyzed with the help of descriptive statistics, the results of which were data of PESTLE analysis. These data were considered important and able to meet the requirements of the analysis.

Table 1: Distribution of fur farms in the prefectures of the Region of Western Macedonia.

a/a	Prefectures	2015	2019
1	Kastoria	43	37
2	Kozani	61	60
3	Grevena	11	10
4	Florina	8	4
	Total	123	111

(Data source: Region of Western Macedonia General Directorate of Regional Agricultural Economy).

RESULTS AND DISCUSSION

The results obtained from the PESTLE analysis can be summarized as follows:



Map 1: Geographical position of Western Macedonia in the Greek Territory (https://www.google.com/search?q=Maps).

- The fur industry is one of the regional specialization sectors in the Region of Western Macedonia, as it meets the characteristics (significant percentages of participation in regional GDP and the degree of its interconnection with other sectors, as well as employment).
- The main aim of the policy is to strengthen the involved producers and entrepreneurs in the fur-breeding sector - leather products with main characteristics with adaptation to the conditions that affect the production process of furskins and their processing into fur garments.
- The political climate in general is favorable for the further development of fur farms.
- The fur clothing industry and consequently the production of fur skins, is 100% export.

According to the data of the imports of fur skins, the breeding of fur animals has huge potential for development to satisfy to a greater extent the needs of the production of fur products in our country.

-The shift of many fur entrepreneurs but also independent breeders to the establishment of mink farming units, aims mainly at the verticalization of farms - fur businesses, with the aim of reducing production costs, securing raw materials and possibly participating in international fur auctions to ensure the production of finished fur products.

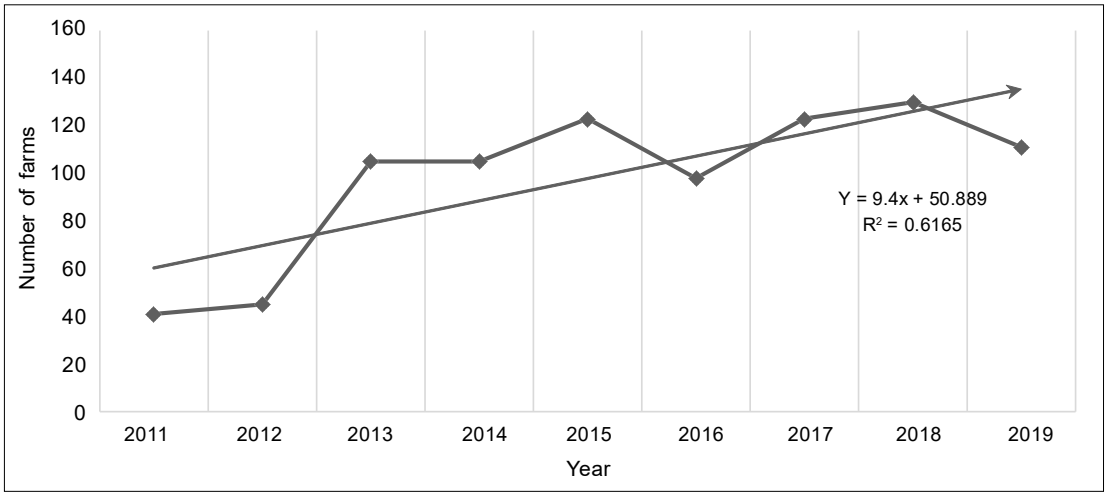
- Finally, the impact of fur farms on the environment of the area is negligible. A major problem is the deposition of corpses after skinning, where a tolerable method of deposition has not yet been found to avoid contamination of the environment of the area.

The SWOT analysis of an agricultural enterprise and specifically of a production sector, such as the fur farming sector in the Region of Western Macedonia, will be beneficial to establish development strategies and improve its competitiveness. Essentially, SWOT analysis studies two main parts of the sector, the analysis of the internal environment, *i.e.*, its strengths and weaknesses and the analysis of the external environment of the sector, *i.e.*, the opportunities and threats.

From the previous theoretical analyzes, PESTLE analysis and SWOT analysis and from the statistical analyzes, production analysis, international trade analysis, important data emerged and were recorded for the formulation of individual strategies and overall strategy for the development of the fur industry in the region of the Region of Western Macedonia.

- The first major finding from the findings of this research is that there are all those conditions in the area for industry development. These conditions emerged from the PESTLE theoretical analysis which showed that the general political, social and environmental environment is favorable in the region and the development of the fur-breeding industry will be beneficial for the region.
- The SWOT analysis highlighted the strengths and weaknesses within the industry, as well as the threats to the external environment, with the opportunities available to address both the threats and the correction of the weaknesses. Specifically, there were weaknesses in spatial planning and distribution of farms, animal health problems, complete lack of education of those employed in farms, insufficient supply of farms with food mainly for future farming growth and lack of professional organizations.
- The first important strategy to be adopted is to eliminate weaknesses. The actions to be taken are:

1. Systematic research and supervision for each new fur-bearing breeding unit, in terms of the size of the unit, the installation area so that the unit is fully serviced, from all aspects concerning the installation site, catering, communications, environment, manner and manner of storage of corpses.
2. To deal with competing countries, but also to maintain an excellent level of quality of the fur produced, but also of the quality of the fur garments, an initiative must be taken for the creation of specialized personnel for both farming and the processing process.
3. To serve a larger number of units and consequently a larger number of fur-bearing animals, which ultimately



Graph 1: Over time evolution of fur animal farms in Greece (2011-2019).

constitute the source of the final product, it is required and must be seriously considered in shaping the industry development strategy, the expansion or the creation of a production unit. ready-to-eat feed, to improve the nutrition of the animals but also to free the farms from the process of food preparation.

- The second important strategy is to address the identified threats arising from the external environment, mainly the international one.

1. Continuous monitoring of the international market developments in matters of quality of furskins and fur garments, in matters of development of innovation in processing, so that any deviation from market requirements is corrected immediately.
2. Technology in every production process is an important factor in improving production.
3. The growing distrust for the operation of the farms that have source mainly from the outside but also in many cases from the inside is something that must be limited. One strategy to curb this movement is to inform the public that raising fur-bearing animals is a livestock activity, like all others, does not affect the fauna of the area and of course gives a significant income directly or indirectly to all the inhabitants of the area.

- Another important strategy for the development of the fur industry is the economics of farming. Fur farming is an economic livestock activity. It is therefore important to emphasize the nature of the industry and to undertake performance-enhancing strategies.
- Necessary strategy should also refer to the professional organization of breeders. Of course, there are trade unions per prefecture, but a professional organization (*e.g* a cooperative) would solve significant problems. Collective treatment, supply of raw materials, food products, treatment of animal health problems, joint service of special facilities are some issues that can be dealt with more successfully.

Finally, for the foreign trade side, the strategy should have a clear extroverted orientation, a goal achieved by the search and integration of new high-demand markets, with smart penetration marketing policies. Improving exports will be able to restore and improve the comparative advantage of the sector.

CONCLUSION

After the thorough study of the subject, the previous analyzes, the results that emerged and from their evaluation, the appropriate answers were given to the problems and weaknesses of the fur-breeding sector that are bred, exclusively in the Region of Western Macedonia.

It should be noted that this work mainly concerns the practices and the situation prevailing in the industry from a technical point of view and production process and the development perspectives through proposed strategies, which are based on findings, literature, theoretical analyzes, statistical analyzes and primary sources from direct personal contacts.

- The first important conclusion that emerged from the research is the fact that the fur-breeding industry is a very important livestock and economic activity for the specific region but also for the country.

Although it has significant advantages in terms of breeding experience, suitability of the site, extensive experience of human resources and acceptance of the community as a whole, it nevertheless presents significant weaknesses and needs significant changes and development strategies.

In addition, the other branch of the fur industry, which is directly related to the livestock sector, shows weaknesses but also great growth prospects.

The breeding industry has significant potential for growth and is an attractive field for investment and engagement with significant prospects for successful and profitable results.

- The farming sector together with the fur industry which utilizes the primary product (fur skin) are important sources of jobs and income for the workers but also for the whole region with the connected economies created by the “furry animal-fur industry” sector.
- Finally, the “fur animals - fur industry” is an extroverted sector since most of the production of fur garments and part of furskins are exported with a large inflow of foreign exchange to the country from a relatively small area.
- The general conclusion that emerges from the whole effort, research study of the literature, analysis of data and statistics and with the help of the results and the reported findings, is a dynamic effort of development of the fur-breeding industry since everything supports this direction and this development will make the greatest contribution to improving the living standards of the inhabitants of the area.

Conflict of interest: None.

REFERENCES

Artelaris, P. and Chatzimichalis, K. (2015). Development / crisis, locality and human resources in the local fur production system of Kastoria (in Greek). http://repository.edulll.gr/edulll/handle/10795/3149.

Development of Western Macedonia SA (ADM SA) (2012). Business Plan: “Basket of Products of the Region of Western Macedonia” Action Code: 129 / Rp7, Region of Western Macedonia (in Greek).

Kang, S., Na, Y.K. (2020). Effects of strategy characteristics for sustainable competitive advantage in sharing economy businesses on creating shared value and performance. Sustainability. 12: 1397.

Kastoria Chamber (2011). Development Proposals of the Greek Fur Sector, http//www.Kastoriachamber.gr (in Greek).

Malik, P.D., Bishnoi, K.D, Pawar, N., Kumar, N., Sumit (2021). Additional income generation from cultivation of summer mungbean in rice-wheat system of Haryana. Legume Research. 44: 952-955.

Ortiz-Guerrero, C.E. (2013). The new regionalism. Policy implications for rural regions. Cuadernos de Desarrollo Rural. 10(70): 47-67.

Rastogi, N. and Trivedi, K.M. (2016). Pestle Technique - A tool to Identify External Risks in Construction Projects. International Research Journal of Engineering and Technology (IRJET) 03(1): 384-388.

Semos, N., Dotas, V. and Bampidis, V. (2021). Development strategies of the fur farming industry in Greece. Open Journal of Business and Management (OJBM). 9(6): 2683-2696.

Singh, P.S. and Nandi, K.A. (2021). Economics of mango production, marketing system and constraints faced by growers in Lucknow district of Uttar Pradesh. Asian Journal of Dairy and Food Research. 40: 213-219

Srinivasan, G. and Roopa, K. (2021). Socio economic status of the goat farmers in fringe villages of Western Ghat in Virudhunagar District, Tamil Nadu. Agricultural Science Digest. 41: 358-363.

Weeks, A. (2020). PESTLE analysis, https://www.cipd.co.uk/knowledge/strategy/organisational-development/pestle-analysis-factsheet; https://www.Kozan.gr