

National Report

Greece

Deliverable: IO1-A1

SnailVille

17/02/2021

Authored by: UTH
Project Number: **2020-1-UK01-KA204-079017**



Co-funded by the
Erasmus+ Programme
of the European Union

The European Commission's support for the production of this publication does not constitute an endorsement of the contents, which reflect the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.

REVISION HISTORY

Version	Date	Author	Description	Action	Pages
1.0	17/02/2021	UTH	Creation	C	TBS

(*) Action: C = Creation, I = Insert, U = Update, R = Replace, D = Delete

REFERENCED DOCUMENTS

ID	Reference	Title
1	2020-1-UK01-KA204-079017	SnailVille Proposal
2		

APPLICABLE DOCUMENTS

ID	Reference	Title
1		
2		

Contents

1. Introduction.....	4
1.1 Project Context.....	4
1.2 Project Objectives	4
1.3 Project Target Group.....	4
2. National Report.....	4
2.1 The Objectives of the Report	4
2.2 The methodology.....	5
2.3 The results.....	5
2.4 Conclusions.....	6
3. References	6

1. Introduction

1.1 Project Context

Despite being among the most prolific consumers of snails in the world, European countries that consume snail meat do not produce sufficient quantities domestically and must instead rely on import to cover demand. Given this, in addition to its apparent profitability, rapid return on investment, and low capital required for an initial investment snail farming (Heliculture) could be a good fit for those who may be low-skilled, unemployed, farmers without substantial capital, or other who aspire to augment their income.

1.2 Project Objectives

The Snailville project aims to develop a heliculture training game for low-skilled marginalised adults that can help them set up cooperatives in rural areas. This training game will function as a single information point guiding a potential snail farmer on how to start a profitable business depending on their situation (financial capability, business skills, geographical location, etc.) by minimising the risks associated with traditional snail farming (snail diseases, egg hatching, formulation of the best feed, mortality rate).

The project also hopes to contribute to the preservation of the snail population in the wild by promoting heliculture.

1.3 Project Target Group

There are a few main target groups – most centrally low-skilled adults from rural areas that can support heliculture, heliculture enthusiasts, and of course snail farmers themselves. More broadly, assorted persons and organisations in the field of agriculture will be targeted, including for example university or college agriculture departments, government ministries or agencies relating to agriculture, or rural development organisations.

Aside from this, game developers may also be targeted for the more technical aspects of the project relating to development of the game.

2. National Report

2.1 The Objectives of the Report

The national report concerns the identification of the current state of play in the heliculture sector in each partner country, and in particular the identification of barriers that heliculturists face in each country. These national reports will form the basis of the Snailville training game, influencing its structure and content, that will guide users and target groups to gain the skills necessary for and surmount the barriers to success in snail farming.

Therefore, the National report will examine the current situation in partner countries with reference to snail farming and the barriers to successfully undertaking it (the "AS-IS" situation). The next step comprises the identification of the actions, skills, and context required for the ideal situation in which to practice heliculture (the "TO-BE" situation).

2.2 The methodology

Partners will conduct desk research on the current situation around heliciculture and the barriers to it in their own country. They will identify qualitative and quantitative data to describe their national "AS-IS" situations and may present good practices in the field that will be used as examples to provide motivation and ideas to the project participants.

Good practices from countries outside of the partnership will also be identified, setting out the TO-BE situation, with particular support from the domain experts on the project at UTH.

Lastly, a comparative report will be put together based on the findings of the National reports to identify the needs, challenges, and opportunities of the partner countries.

2.3 The results

2.3.1 Briefly outline the size, importance, and general context of snail farming in your country

According to the latest available data (2013) from the Hellenic Ministry of Rural Development and Food in Greece, 131 snail farms are in operation, occupying 578,000 m². Of these, 75 (57%) are the open-air type, which occupies an area of 482,000 m², and 56 (43%) intensive (net-covered houses) type, which occupies an area of 93,000 m² (www.minagric.gr).

2.3.2 What laws or standards do heliculturists follow in your country (local, regional, national, or EU level)?

Animal husbandry requires the issuance of an installation permit for the snail farm in accordance with article 6 of Law 4056/2012. In addition, the snail farmer as a holder of farm settlement must be registered in the register of farmers and agricultural holdings in accordance with Law 3874/2010 through Greek Payment Authority of Common Agricultural Policy (C.A.P.) (www.oepeke.gr/en/). According to European Legislation, snails must come from farms that are required to comply with regulations, in order to avoid the potential danger to humans from consuming these products. The European Parliament and the Council of the European Union, by Regulation 852/2004 on food hygiene and 853/2004 on food of animal origin, as well as Decision 96/340 on the handling of snails, provide that snails (cooked or preserved) may be traded for human consumption only if their processing, maintenance and transport is done under the appropriate hygienic conditions.

2.3.3 What are the main barriers preventing people from starting snail farming, in particular as a business?

The main barrier that prevents people from becoming snail farmers is the lack of information and guidance starting a farm. The legal framework for snail farm operation is unclear and the guidelines provided by the Hellenic Ministry of Rural Development and Food are not updated.

2.3.4 What are the main barriers preventing snail farmers from growing their business, earning money from their snail farming, or otherwise becoming more successful?

Most snail farmers do not have the necessary knowledge of proper animal breeding, but they have turned to snail farming in recent years due to the economic crisis. Thus, snail farms have been set up and operated without a clear operating framework as far as it concerns parameters such as livestock management, environmental impact, and welfare indicators. The most important problem in the promotion and marketing of farmed snails is the fact that the collection and sale of wild snails of dubious quality is uncontrollable. Snails collected in the Greek countryside or in third countries are

sold at low prices. This means that they can pose a serious threat and compete with snail farms. At the same time, snail farming systems are autonomous units of special characteristics and thus not very popular, making the market more competitive. The economic sustainability is also interlinked with some important social pillars including the decent livelihood and fair-trading practices as the two most important. Another threat faced by snail farmers is the marketing of their products abroad. There are problems and delays in distribution channels during the export of products.

Finally, a major problem is the lack of support from the Greek state and the lack of a central planning, despite the efforts made in recent years. The various agricultural compensations leave out the snail farms. Due to the above problems and difficulties, farmers turn to contract farming. But the companies that undertake the promotion of the products, buy the farmed snails at very low prices.

2.3.5 What are the particular strengths of the way snail farming is done in your country?

Greece is one of the richest countries in Europe in terms of terrestrial snails, of many snail species are indigenous due to its diverse geomorphology. They live in all the ecosystems which are found on mainland and islands in Greece, from sea level to the peak of Mt. Olympus.

Also, snail is a traditional gastronomic food famous in regions such as Crete and Macedonia, many traditional recipes include snails combined with vegetables and herbs.

Much of the country experiences a Mediterranean climate and the environmental conditions –which are emphatically seasonal in Greece, affect breeding stages. Factors such as humidity and temperature can influence snail productivity.

The Greek agri-food sector produces a large list of products including snails. Since the 1960s, there was a snail processing sector and snail products were exported.

2.3.6 Is there any heliciculture-focused training offered in your country?

In Greece, heliciculture-focused training programs are offered by universities. The University of Thessaly and the Agricultural University of Athens organize training programs for people interested in becoming snail farmers and for snail farmers who want to improve their skills and become more successful.

2.4 Conclusions

In conclusion, the heliciculture sector in Greece is small and not popular yet. Snail farming can be a potentially promising business, but this depends on a multitude of factors. In Greece, due to the favorable climatic conditions, the traditional nature of the agricultural sector and the intense interest of mainly young people, there is significant potential for the growth of the Snail farming sector. Due to improved handling procedures, quality product certification and product labeling, value-added products can be developed. The designing of novel products will lead to the growth of the snail-farming sector and the processing industry with a positive impact on the Greek economy.

3. References

Anonymus Heliciculture in Greece, Document D'information, Directorate General of Animal Production, Hellenic Ministry of Rural Development and Food, Athens. 2012. Available online: www.minagric.gr/ (accessed on 30 November 2020).

Apostolou, K.; Staikou, A.; Sotiraki, S.; Hatziioannou, M. An Assessment of Snail-Farm Systems Based on Land Use and Farm Components. *Animals* 2021, 11, 272.

<https://doi.org/10.3390/ani11020272>

Apostolou, K.; Hatziioannou, M. 2019. Classification and characteristics of snail farms in Greece: Preliminary results. Proceedings of the 7th Panhellenic Conference of Animal Production Technology, Thessaloniki, 1st February.

Hatziioannou, M., Issari, A., Neofitou, C., Aifadi, S., and Matsiori, S. 2014. Economic analysis and production techniques of snail farms in Southern Greece. *World J. Agricul. Res.* 2, 276–279. doi: 10.12691/wjar-2-6-5

Hatziioannou, M., Staikou, A., 2015. *Biology and Snail Farming*. [ebook] Athens:Hellenic Academic Libraries Link. Available Online at: <http://hdl.handle.net/11419/5869>

Hatziioannou, M Kokkinos K. 2021. Evaluation of Sustainability Determinants of Small Farming Systems via Participatory Modeling and Fuzzy Multi-Criteria Processes: The Case Study of Heliciculture in Greece. *Front. Sustain.* 2:629408. doi: 10.3389/frsus.2021.629408