

Business Plan: The Establishment of a Rabbit Farm and The Marketing of Innovative Rabbit Meat Products & Sausages

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Abstract. In the present study, we examined the development and organization of a rabbit-keeping unit, taking into account the ongoing economic crisis. Emphasis was given on the merchandising of innovative meat products and cold rabbit meat. Literature review and market research, using a questionnaire, helped us to compile the major elements of the study. The results of the study revealed a deficit in self-sufficiency of rabbit meat at national level, and a significant consumer interest in healthy foods, such as rabbit meat. Consumers prefer products with short preparation time, such as cold meat and meat products. The business plan is acceptable as to its realization, since it has been evaluated according to the basic economic methods. Moreover, it is concluded that there is much room for improvement in the promotion channels of this carcass. Therefore, this study can serve as a strategic planning guide for existing companies in the industry.

Keywords: Business plan, rabbit, innovative meat products

1 Introduction – Literature review

Recently, Greece shows a reduction of the overall consumption of animal products. The economic crisis, the food scandals and the fierce competition in meat imports are some of the reasons for this problem (Kaditi & Nitsi, 2010).

The livestock businesses suffer because of the aforementioned situation, showing reduced revenues. The adaptation of these companies to the economics rules is considered necessary. It is understood that this problem also extends to rabbit

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breeding units. The economic situation of rabbit breeders has been affected more seriously compared to other animal breeding units. The sale of rabbit meat as a whole carcass and not in pieces of meat, did not appeal much to consumers, since its cooking method is complex and time-consuming. Young consumers prefer eating foodstuff that requires only a short preparation time. Standardized rabbit products are the ideal solution to meet this consumer need (Petracci & Cavani, 2012).

In addition, consumers care mostly about the quality of agricultural products, which is reflected in the purchasing trends (Ferreira, 2002). Rabbit meat appears to be able to satisfy consumers' nutritional needs, because of its high nutritional value. Specifically, the meat examined is low in fat and cholesterol, thus being ideal for people with cardiovascular diseases (Wood et al., 2008).

This business plan examines the development of innovative meat products and cold rabbit meat, in order to improve the efficiency ratio at company and industry level. Specifically, the company will provide fresh and frozen rabbit meat (whole or in pieces), cold meat products (sausages, ham and parizaki) and meat products. In the context of sustainable development, the products will be offered in ecological packaging. These innovative foods will be first launched in the Greek market.

Based on international literature, the FAO (2007) reports that the global production of rabbit meat amounts to 1,000,000 tons. First producing country is China, which accounts for 30% of total production. Egypt, Italy, Spain and France follow. According to data of the Ministry of Rural Development (2011), the annual production of rabbit meat in Greece stands at 3,225 tons. Moreover, 3,775 tons are imported from France, Italy, Spain, Belgium and the Netherlands, in order to meet the domestic consumption needs (Table 2), which averages at 7,000 tons per year (ELSTAT 2015; Lebas 2004, FAO 2007; ICAP 2007).

The pricing of rabbit meat in our country is shown in Table 1.

In Greece, rabbit meat consumption is limited to 0.70 kg per capita per year (Colin & Lebas, 1994).

2 Object

The object of this study was a thorough analysis of both the functionality of the business and the market trend. A calculation of economic fundamentals of this dipole was carried out and further parameters that may affect the growth of the company were examined.

3 Material and methods

SWOT ANALYSIS of the company

SWOT ANALYSIS was used as a strategic planning tool.

3.1 Strengths

- Less operating cost, due to the utilization of all products of the livestock unit, the alternative forms of energy and the recycling programs that will be implemented.
- Elaborated marketing plan. Funds to be spent on advertising.
- Selection of an appropriate location to set up the business, with respect to distances from urban centers and the slaughterhouse.
- Creation of novel products, resulting in a higher market share. Claiming prizes in fairs.
- Cooperation with transport companies. In this way, the livestock unit has the necessary time to carry out its work unhindered and without deviating from its targets.
- Rabbit, as a farm animal, is characterized by high productivity and less food consumption compared to other species of animal production.
- Specialized staff for each of the company's works.
- Products certified for their manufacturing process.
- Satisfactory and competitive customer service.

3.2 Weaknesses

- Small capacity of the breeding farm, resulting in less revenue.
- Daily work at the breeding farm.
- Lack of experience in the industry where the business will operate.

3.3 Opportunities

- Cuniculture is eligible for financing by subsidy programs.
- Increasing demand for healthy foodstuff, such as rabbit meat.
- The cuniculture industry is characterized by rapid growth and development at a global level.

3.4 Threats

- Deterioration of the economic and political situation in Greece.
- Reduced domestic consumption of rabbit meat.
- Limited number of slaughterhouses which are suitable for rabbits.
- The price of imported rabbit meat is lower than that of the locally produced rabbit meat.
- Increased feed costs.

Structured questionnaire and financial methods

The questionnaire consisted of 22 questions. The first 5 questions concerned the educational and socio-economic status of respondents. The rest 17 questions concerned the shopping behaviour of consumers in relation to rabbit meat. The sample volume was 100 people. The questionnaire was available electronically. For financial analysis, the cost of starting, the funding scheme, the operating costs and the revenue from products sold, were calculated in a ten-year estimate. The evaluation of the investment program was performed according to the method of present net value and based on the internal rate of return.

Table 1. Rabbit Meat Pricing

Producer price €5.5/kg	Butcher price €8/kg	Imported meat price €6/kg
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Source: Ministry of Rural Development (2010)

Table 2. Evolution of rabbit meat imports-exports, Greece

Country - Year	Imports		Exports	
	Price in Euro	Quantity in tons	Price in Euro	Quantity in tons
France - 1st Semester 2015	4,704,000	1,568	-	-
The Netherlands - 1st Semester 2015	444,000	148	-	-
Italy - 1st Semester 2015	2,235,000	745	-	-
Spain - 1st Semester 2015	684,000	228	-	-
Belgium - 1st Semester 2015	615,000	205	-	-
Bulgaria - 1st Semester 2015	-	-	247,500	45
Cyprus - 1st Semester 2015	-	-	2,062,500	375
Total	8,682,000	2,894	2,310,000	420

Source: ELSTAT (2015)

4 Results

Structured questionnaire and financial methods

Out of 100 respondents, 47% answered that the price of rabbit meat is "quite" expensive compared to other types of meat, while the answers "a bit" and "very" represented 21% and 17%, respectively. Also, research has shown that customers are mostly interested in the color (46%), taste (55%), packaging (36%) and nutritional value (36%) of the purchased meat. On the other hand, a large proportion of consumers consider the specific categories of foods unhealthy (67% of respondents for cold meat and 70% of respondents for meat products). However, a significant

proportion of consumers is interested in trying innovative rabbit meat products (30% "very" and 12% "very much" for cold meat, 30% "very" and 10% "very much" for meat products (Fig.1 and Fig.2).

As to the results, the methods of the Net Present Value (NPV) and the internal rate of return (IRR) resulted in positive numbers. Specifically, the NPV: 241,119 and IRR: 0.26. Table 3 shows the key economic elements that characterize the business, as derived through calculations.

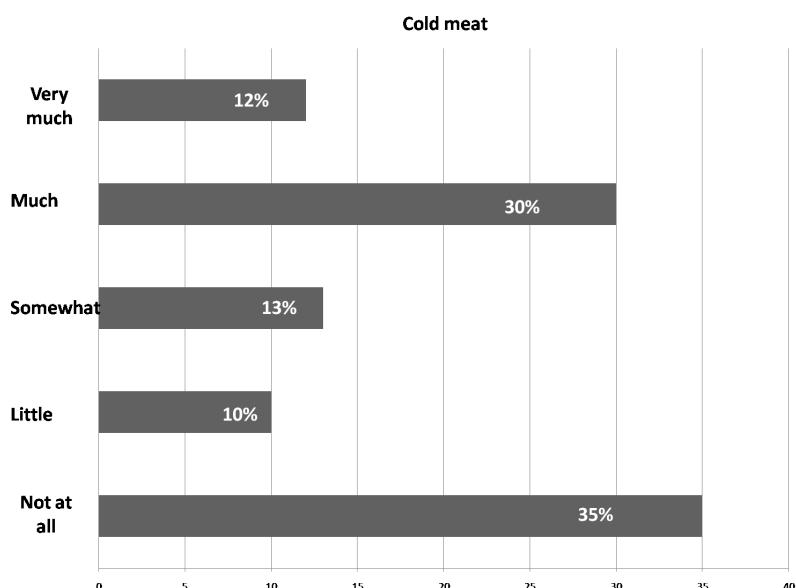


Fig. 1. Consumer interest in the standardization of rabbit meat in sausages
Source: Authors' calculations

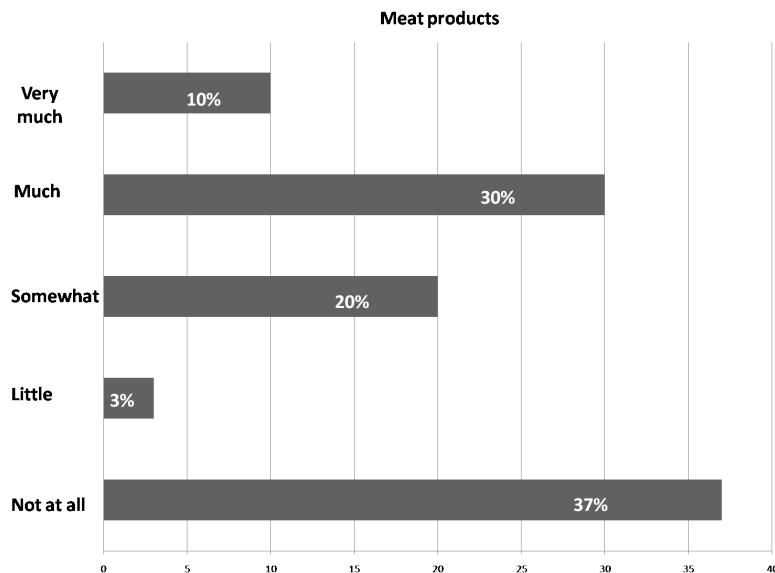


Fig. 2. Consumer interest in the standardization of rabbit meat in meat products

Source: Authors' calculations

Table 3. Key financial data of the business

Start-up costs		291,900 Euro	
		Funding scheme	
		Amount in EURO	Percentage
Equity		87,570	30%
Bank loan		58,380	20%
Grant		145,950	50%
		Production costs	
Total	1 st year	3 rd year	6 th year
	239,192	248,677	274,024
	10 th year		
			353,499
Key financial results			
Financial results	1 st year	3 rd year	6 th year
Gross income	199,829	254,843	305,812
Net profit	- 39,363	6,166	31,788
Agricultural household income	1,455	44,644	60,759
Profitability (%)	-5%	13%	31%
			112%

Source: Authors' calculations

5 Conclusions

Considering the trends of consumers as expressed through the answers of respondents, the company decided to supply the rabbit meat produced, at a slightly lower price compared to other competitors. The founding members of the company, aiming at quality assurance in production processes and handling of these goods, will give attention to the welfare of livestock, particularly in farming and transportation conditions to the slaughterhouse. Certainly, ensuring some distribution points of the products, is of outmost importance. In order to optimize meat quality, enriching of the feeding with essential oils and antioxidants is suggested. Moreover, for adopting healthier eating patterns, the company will provide meat products and cold meat, prepared on the basis of traditional recipes, without any preservatives or coloring. Regarding the packaging of the goods for sale, two types will be selected: a vacuum packaging for fresh meat and an envelope packaging for frozen meat and meat products, both from reusable materials.

In conclusion, according to the financial methods applied, the business plan seems appealing as concerns its realization. Therefore, the production of innovative foods may serve as an outlet from recession.

It is worth mentioning that the results of this study should be interpreted taking into account certain limitations. First, the number of studies on the promotion of rabbit meat is limited, therefore the authors have access only to a restricted volume of data. Second, the size of the test sample may not be representative. For this reason, it is necessary to carry out more studies and research on similar subjects. Finally, despite the immediate and quick gathering of data through the online questionnaire, it was not possible to establish a feedback mechanism between the researcher and the respondents.

References

1. Colin, M. & Lebas, F. (1994). *La production du lapin dans le monde*. Communication to 6es Journées de la Recherche Cunicole en France.
2. FAO, (2007). *The rabbit – Husbandry, health and production*.
3. Ferreira, W. N. 2003. Analysis of the meat processing industry in the United States. CLEMSON Extension: Extension Economic Report Department of Agricultural and Applied Economics, Clemson University, Clemson South Carolina 29634.
4. Greek Ministry of Rural Development & Food (2011) (in Greek).
5. Greece Ministry of Rural Development & Food (2010) (in Greek).
6. Hellenic Statistical Authority (in Greek).

7. ICAP, (2007). *Meat* (in Greek)
8. Kaditi, E. A. & Nitsi, E. I., (2010). The agricultural sector in Greece, The Centre of Planning and Economic Research – KEPE, Athens (in Greek).
9. Lebas, F. (2004). *Reflections on rabbit nutrition with a special emphasis on feed ingredients utilization.* 8th World Rabbit Congress, Puebla, Mexico.
10. Petracci, M. & Cavani, C. 2012. Trends in rabbit meat processing, World Rabbit Science Association , Proceedings 10th World Rabbit Congress, Egypt.
11. Wood, J., Enser, M., Fisher, A., Nute, G., Sheard, P., Richardson, R., Hughes, S., Whittington, F. (2008). *Fat deposition, fatty acid composition and meat quality: A review.* Meat Science 78: 343-358.