
SUMMARY OF THE PHD THESIS

European Union quality schemes in the Romanian agri-food sector: Consumer and producer perceptions and knowledge

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1. Introduction

In the realm of European agricultural products and foodstuffs, the sanctity of product quality, authenticity, and traceability is maintained through a robust regulatory framework established by the European Union. Among these regulatory measures, the quality schemes - Protected Designation of Origin (PDO), Protected Geographical Indication (PGI), and Traditional Speciality Guaranteed (TSG) - stand as pillars that not only preserve the cultural heritage and traditional practices of European farming but also enhance the economic viability of agricultural sectors across the continent. These labels serve not just as markers of quality and authenticity but as crucial tools in safeguarding the integrity of the food supply chain from producer to consumer.

Romania, with its rich tapestry of historical farming practices, provides a setting for exploring the effectiveness and impact of these EU quality schemes. The integration of these certifications into Romanian agri-food sector is not merely a compliance measure but a strategic approach aimed at bolstering the competitiveness of Romanian agricultural and food products. By certifying products under these schemes, producers seek to communicate the distinctiveness and superior quality of their offerings on both a national and global stage, thereby capturing the attention and trust of consumers.

Furthermore, the implications of these schemes extend beyond the producers, to the consumers, who are increasingly seeking transparency and high quality in their food choices. In this context, the role of promotion becomes paramount in educating consumers about the value and significance of PDO, PGI, and TSG labels. Through effective communication strategies, producers can enhance consumer awareness and appreciation of certified products, thereby driving demand and fostering a more responsible consumption model.

In addition to promoting quality and authenticity, these certification schemes also contribute to broader goals of sustainability. By adhering to stringent standards, producers not only ensure high-quality products but also support environmental stewardship, social equity, and economic resilience. This holistic approach aligns with global trends towards sustainable development, making EU quality schemes a vital component of modern agricultural practices. The focus on preserving traditional methods while embracing sustainable practices ensures that these products remain relevant and highly valued in today's market.

2. Research aim and objectives

This doctoral research aims to dissect the multifarious impact of EU quality schemes on Romanian agri-food sector, with a specific lens on the consumer

perceptions of certified products and producers' insights about them. Through an in-depth analysis of Romanian consumer awareness and producers' experiences, the study endeavors to unearth the challenges shaped by these European quality labels.

To achieve this, the doctoral research is directed towards the following objectives, each accompanied by specific actions to ensure thorough analysis and insightful findings (Figure 1).

Objective 1: to map the food chain related to EU quality scheme-certified agricultural and food products.

This involves several key actions:

- evaluating the impact of cultural and geographical factors on consumer perceptions of certified products.
- analyzing consumer trust in the certification labels and their perceived value.
- examining demographic differences in recognition, preference, and willingness to pay for certified products.
- analyzing consumer behavior for purchasing certified agri-food products online.

Objective 2: to assess the sustainability of agricultural and food products certified by EU quality schemes, through the environmental, social, and economic dimensions.

The actions to achieve this are:

- evaluating the environmental impact of production processes for PDO, PGI, and TSG certified products, focusing on soil preservation, water conservation, and biodiversity.
- analyzing the economic benefits provided by certified products to rural economies, including job creation, fair pricing, and support for agrotourism.
- examining the social equity impacts of certified products, including the participation and empowerment of women and young farmers.
- recommending a set of comprehensive sustainability metrics to quantify the overall sustainability of certified products, considering environmental, economic, and social dimensions.

Objective 3: to analyze the perceptions of EU quality schemes from producers to consumers, with a focus on consumers.

This involves:

- studying the level of knowledge and understanding of EU quality schemes among consumers.
- evaluating the factors that influence consumer purchase decisions.
- analyzing consumer satisfaction and trust in certified products.
- assessing the impact of certification for producers.

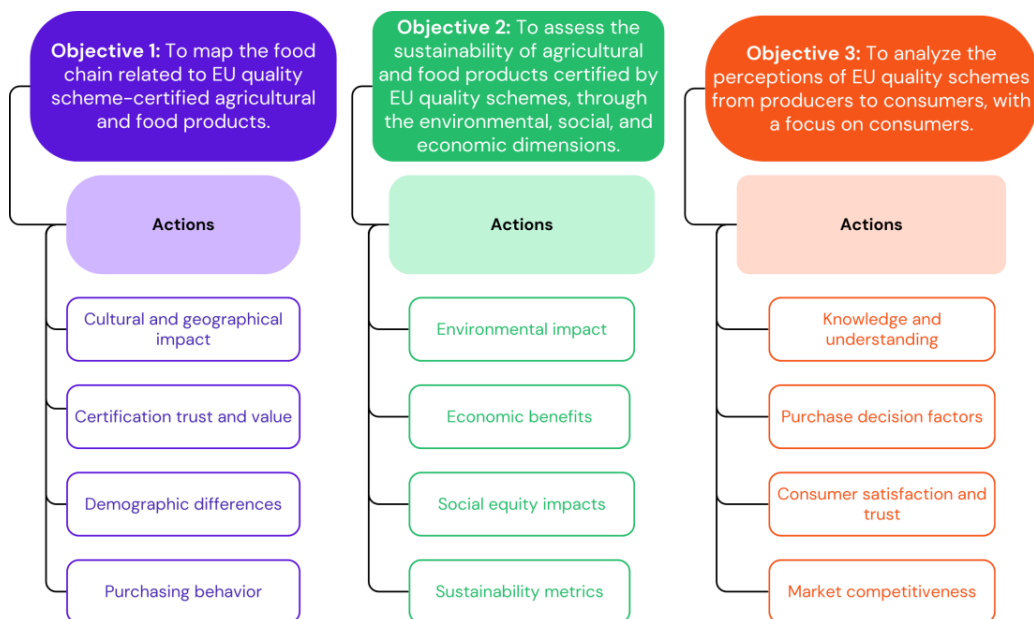


Figure 1: Doctoral study objectives and actions
Source: Own development

3. General methodology

To achieve the objectives set forth, the study harnessed a mixed-methods approach, meticulously blending quantitative and qualitative research paradigms to draw a comprehensive landscape of the EU quality scheme's impact within Romania.

Firstly, consumer awareness and preferences are analyzed through a two-pronged approach: deploying a carefully designed consumer questionnaire to delve deeper into consumer perceptions, knowledge, and preferences regarding PDO, PGI, and TSG certified products and leveraging Google Trends for real-time insights into the popularity and regional variations of certified agri-food product searches. Concurrently, the consumer questionnaire extends this inquiry by gathering detailed insights into the motivations, barriers, and drivers behind consumer choices related to certified agri-food products. It probes into the depth of consumer understanding of what these certifications entail, their willingness to pay a premium for certified products, and the influence of these labels on their purchasing decisions. This dual approach to analyzing consumer trends is innovative, combining the broad reach and immediacy of digital search data with the nuanced understanding afforded by direct consumer feedback.

Secondly, the research extends to encompass the perspective of Romanian producers, utilizing a questionnaire survey to extract empirical data on their

encounters with the certification process. This segment of the study is instrumental in uncovering the practical realities faced by producers in their quest for certification under the EU's quality schemes. It examines the producers' level of awareness and recognition of PDO, PGI, and TSG logos, their efforts towards obtaining these certifications, and the perceived obstacles.

The results of the present doctoral research are published in five articles. The first two articles are published in an ISI journal, respectively a BDI one: Sustainability (Q2, I.F. 3.9) and Agricultura (at University of Agricultural Sciences and Veterinary Medicine Cluj-Napoca). The third article is published in the ISI journal Foods (Q1, I.F. 4.7) and the fourth and fifth are published in the Bulletin of University of Agricultural Sciences and Veterinary Medicine Cluj-Napoca-Food Science and Technology (Q4, I.F. 0.3).

4. Results

The doctoral study titled “European Union quality schemes in the Romanian agri-food sector: Consumer and producer perceptions and knowledge” incorporates 25 tables, 14 figures and is organized into two primary sections: the initial segment presents a current review of knowledge through two articles (**chapters 1 and 2**), while the second segment details the original research, which includes the working hypotheses/objectives (**chapter 3**) and general methodologies (**chapter 4**). This is followed by **chapters 5 to 7**, which document the original research findings. The doctoral research concludes with **chapters 8 and 9**, presenting the general conclusions and recommendations, and **chapter 10**, which highlights the research's originality and innovative contributions.

In the first part of the research, the focus is on setting the theoretical and contextual groundwork by reviewing existing literature related to the EU's quality schemes - PDO, PGI, and TSG - and their impact on consumer behavior and sustainability perceptions.

In **chapter 1** are presented the results of the study entitled “Consumer perception and understanding of European Union quality schemes: A systematic literature review”. The article delves into how agricultural food products, along with environmental considerations and labeling, are intertwined within the broader framework of national and international regulations.

This chapter establishes how the EU encourages the adoption of quality schemes to not only protect producers of specialty foods but also to guide consumers in making informed purchasing decisions. Through an extensive review, the chapter explores the varied impacts these labels have on consumer behavior, particularly highlighting their increased relevance in the modern context. The analysis shows that these labels play a crucial role in consumer decision-making, reflecting a shift towards more conscientious consumer practices.

It is revealed that during the COVID-19 pandemic, consumer preferences shifted markedly towards certified foods with known origins, particularly those with PDO labels. Concerns about health and immune support led consumers to prefer certified products despite their higher prices, emphasizing the importance of controlled origin and quality.

The health benefits of consuming PDO, PGI, and TSG certified products are underscored, especially their pure ingredients and absence of artificial chemicals. These certifications are seen as beneficial for promoting public health and supporting local producers, reinforcing the value of certified foods in the consumer market.

Chapter 2 presents the results of the study “The sustainability implications of EU quality schemes - A literature review”, extending the discussion to the sustainability of agricultural and food products certified with EU quality schemes, analyzing consumer insights across the environmental, social, and economic dimensions.

The review identifies a strong consumer appreciation for the multifaceted benefits of these certified products, suggesting their significant role in promoting sustainable consumption. The findings also serve as a call to action for stakeholders - farmers, retailers, and authorities - to use this consumer insight to foster better choices through targeted information campaigns.

The positive impact of PDO and PGI labels on the sustainability of agro-food products is significant. These quality schemes contribute to maintaining rural economies, preserving the environment, and assuring consumers of product quality and authenticity. The sustainability implications are broadly recognized, reinforcing the importance of these labels in promoting sustainable agricultural practices and supporting rural communities.

The second part presents the original research that builds on the theoretical insights explored in the first part, focusing on the practical applications and real-world impacts of EU quality schemes in Romania.

Chapter 5 exhibits the results from the study “The role of promoting agricultural and food products certified with European Union Quality Schemes”. It examines the role of promotion in enhancing the visibility and appeal of local agricultural and food products certified with EU quality schemes. By analyzing consumer profiles and preferences through a survey of 903 respondents, the study identifies distinct consumer segments and their unique characteristics.

The study highlights the possible effectiveness of tailored marketing strategies in influencing consumer behavior, advocating for more sophisticated approaches to communication that align with the diverse needs of consumers.

The evolution of food quality perception has significantly influenced the demand for EU-certified food products. Quality schemes like PDO, PGI, and TSG have become crucial in differentiating products based on their unique qualities and origins.

These schemes play a significant role in shaping consumer perceptions and preferences by assuring quality, authenticity, and traditional production methods.

However, challenges remain in enhancing consumer awareness and combating fraud, suggesting a need for ongoing efforts to educate consumers and ensure the integrity of these certifications.

Chapter 6 presents the results from the study entitled “Consumer awareness and search trends for agrifood products certified with European Quality Schemes: PDO, PGI, and TSG - An analysis through Google Trends” and shows how is Google Trends employed in order to analyze Romanian consumer awareness and interest in Romanian food products that carry EU quality labels. This innovative approach reveals a gap between the popularity of certain products and the awareness of their quality certifications, indicating opportunities for improved marketing communications.

The study points out regional variations in consumer interest, which can be leveraged for more targeted marketing efforts. Is identified also a list of various search-terms related to Romanian agrifood products certified under PDO and PGI schemes, noting the consumers interests. This data can help in understanding their awareness of these products.

Chapter 7 presents the results from the study “The importance of certification with PDO and PGI quality schemes: A critical analysis of the Romanian beekeeping sector” and focuses on the producers, exploring how PDO and PGI certifications impact their perceived value and trust. Through a survey conducted on 433 beekeepers, the research finds that there is significant recognition of the benefits of these certifications, which are linked to enhanced marketability and economic efficiency within the sector.

Many have attempted to associate with other producers to obtain quality certifications, reflecting a strong interest in these labels. There is a notable correlation between producers who accessed support measures to increase the economic efficiency of their apiary and those associated with obtaining quality certifications. The chapter also discusses the strategic use of these certifications in fostering greater economic stability for producers through enhanced trust and higher product value.

5. Conclusions

The impact of promotion is profoundly significant in shaping consumer behaviors, particularly among certain segments of consumers who value authenticity and high quality. The segmentation of consumer groups further allows for targeted marketing approaches, enhancing the resonance of EU quality schemes with consumer values and preferences.

Utilizing Google Trends revealed a disconnect between consumer awareness and recognition of certified local products and their understanding of quality certifications like PDO, PGI, and TSG. Although there is notable recognition of the products themselves, many consumers are unaware of what these certifications entail

and their implications. This gap underscores the need for enhanced educational efforts to elevate consumer understanding and appreciation of these labels.

The study highlights that while a substantial number of producers recognize the benefits of PDO and PGI certifications, many still need more comprehensive support to fully utilize these tools. These certifications are not merely labels but are crucial for asserting the quality, authenticity, and regional uniqueness of products in a competitive market. They serve as a gateway for producers to achieve higher pricing and better market positioning against the influx of imported food products.

6. Recommendations

Robust educational initiatives are vital for both consumers and producers. For producers, understanding how to leverage quality certifications can significantly impact their market success and economic viability. Consumers, on the other hand, benefit from an increased awareness and appreciation of these certifications, which can lead to more informed purchasing decisions. It's important that these campaigns utilize both digital and traditional media to effectively reach a diverse audience.

Integrating digital marketing with traditional channels such as print media, community outreach, and direct consumer engagement through events and tastings offers a more comprehensive approach to consumer education and product promotion. This blend ensures that all bases are covered, providing various touchpoints for consumer interaction.

Producers should also consider tailoring their marketing strategies to align with the specific characteristics and consumption patterns of identified consumer segments. For example, storytelling that highlights the provenance, ethical production methods, and unique qualities of the products can be particularly appealing to consumers who prioritize these aspects. Such content should be optimized for engagement on social media platforms, where narrative-driven and value-laden messages tend to resonate strongly.

On the policy front, policymakers should work to streamline the certification process and provide active support in the form of financial aid and assistance, particularly to small and medium-sized producers. It would be beneficial to develop national digital platforms to centralize and simplify the dissemination of information regarding certified products, making it easier for consumers to access reliable and transparent data.

Future research should extend into other geographical areas and consider different consumer demographics to validate and expand upon the findings. Additionally, examining the long-term effects of marketing strategies on brand loyalty and consumer values could provide deeper insights into the evolving consumer

landscape. These steps will ensure a robust framework for continuous improvement and adaptability in market strategies and consumer education.

7. Originality and personal contributions

Building on the gaps identified in consumer knowledge, this doctoral research pioneers a comprehensive approach to consumer education regarding PDO, PGI and TSG certifications within Romania. The doctoral research not only identifies a gap on consumers' knowledge about these schemes, but it also provides a starting point for their effective education, by identifying categories of consumers that can be targeted for promotional campaigns aimed at improving awareness about certified agricultural and food products.

On the producer side, this doctoral research documents the economic impacts of these certifications for Romanian producers, uncovering both the perceived increased market value and the challenges that hinder their attainment of certifications. While these certifications significantly offer a competitive advantage for producers, there remains a limited number of PDO or PGI certified agricultural and food products in Romania.

The doctoral research shows a notable correlation between producers' membership in professional associations and their pursuit of these certifications, emphasizing the importance of collective efforts and support structures in overcoming certification challenges. The identified barriers, such as the complex certification process and a general lack of support mechanisms, suggest a pressing need for policy interventions. These should aim to streamline the certification process and provide necessary support, particularly to small and medium-sized producers, to enhance their competitiveness on both national and EU markets.

Moreover, the research employs Google Trends in an innovative approach to analyze Romanian consumer awareness and search behaviors for PDO and PGI certifications, a method employed first in this field. The analysis has revealed a profound gap in consumer knowledge about these European quality labels, despite significant interest in certified agricultural and food products such as "Salam de Sibiu." These findings underscore the critical need for targeted educational initiatives aimed at enhancing consumer understanding and appreciation of these certifications. Such efforts are crucial for bridging the information gap and promoting informed purchasing decisions.

This doctoral research contributes to the field by identifying geographic variations in consumer preferences, suggesting that marketing strategies need to be highly localized. This approach ensures that educational campaigns can be as effective as possible, catering specifically to regional nuances and maximizing consumer engagement. The doctoral research also makes a substantial contribution by demonstrating that regional-specific data could guide towards more nuanced

approaches, thus improving consumer awareness and enhancing the marketability of certified agricultural and food products, thereby supporting local economies.

Additionally, the research provides a comprehensive view of the sustainability impacts of these certifications, contributing to rural development. The findings advocate for a broader integration of certification benefits into national policies, establishing a crucial framework and underscoring the necessity for supportive measures that encourage and facilitate the certification of Romanian agricultural and food products.

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