

EXPLORING INNOVATIVE PASTURE MANAGEMENT AND CERTIFICATION POTENTIAL IN ROMANIA WITHIN A EUROPEAN FRAMEWORK

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RESEARCH ARTICLE

Abstract

This study explores the interplay between traditional grazing practices and quality food certification in the European agri-food sector, emphasizing Romania's potential for sustainable agriculture. Grazing, vital for ecological integrity and biodiversity, is examined alongside the significance of Geographical Indications (GIs) in endorsing grazing-based production for high-quality dairy and meat products. Focusing on Romania, the research highlights the untapped potential for certified grazing practices to enhance agricultural sustainability, economic competitiveness, and access to premium markets. It calls for aligning rural development with bioeconomic and ecoeconomic principles and addresses the need for systematic research to support policy development for sustainable grazing certifications.

Keywords: Grazing Management, Quality Product Certification, Rural Development, Agricultural Technology, and Innovations

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INTRODUCTION

The confluence of grazing practices and quality food certification within the European agri-food sector offers a compelling narrative of sustainability, tradition, and innovation. Traditionally, grazing has been the linchpin of ruminant animal management, closely aligning with their natural behaviors and supporting the ecological integrity of farmlands (Jackson A. et al., 2018). This ancient practice, revered for its myriad benefits ranging from biodiversity enhancement to soil health improvement, faces modern challenges that necessitate a harmonious blend of tradition and innovation (D. Xiong et al., 2016). Amidst varying attitudes towards grazing among European farmers, influenced by an amalgam of local and broader socioeconomic factors (van den Pol-van Dasselaar A et al., 2021; JRC Policy Insights, 2018), there emerges a paradigm of quality food certification. This paradigm, rooted in agroecological principles, seeks to validate and valorize the intrinsic value of grazing-based production systems. These systems are acclaimed not only for yielding high-quality dairy and meat products but also for their positive contributions to societal well-being and environmental stewardship (Provenza, F. et al., 2019). Central to this narrative is the role of

Geographical Indications (GIs), which offer a legal framework to protect and promote products deeply intertwined with their place of origin, reflecting unique local environmental and human factors (El Hadad-Gauthie, et al., 2022; Vanhonacker, F, et al. 2010). This introduction sets the stage for a detailed exploration of the current knowledge surrounding grazing practices, challenges therein, and the synergistic potential of quality certifications to foster a sustainable, productive, and culturally rich agricultural future in Europe.

THE CURRENT STATE OF KNOWLEDGE

Grazing, a practice as old as agriculture itself, continues to play a critical role in the management of ruminant animals across Europe, promoting a way of life that is in harmony with nature and animal welfare. Recent surveys have illuminated a strong preference for grazing among European citizens, who recognize its benefits for ecosystem functions, such as enhancing vegetation growth, species diversity, and soil health in grasslands that have degraded over time (Jackson A. et al., 2018; D. Xiong et al., 2016). However, the transition towards sustainable agricultural futures through practices like organic farming and mixed grazing, which are known to bolster biodiversity and animal welfare, requires a significant

alignment of farmer attitudes with these environmentally friendly practices (Markiewicz-Kęszycka et al., 2023). In this context, the strategic management insights offered by (Iagar and Iagar, 2017) suggest that aligning rural development with bioeconomic and ecoeconomic principles can further support the sustainability of these practices, emphasizing a holistic approach that incorporates environmental protection and economic viability.

The challenges to grazing are multifaceted, influenced by a spectrum of factors from farm size and land fragmentation to the coexisting of large carnivores in regions such as Italy and Romania, adding layers of complexity to the management and welfare of grazing animals (Meuret, M. et al., 2020). Despite these challenges, the proven benefits of grazing on farmers' income, biodiversity conservation, carbon emission reduction, and food safety, among others, underscore its indispensability (Van den Pol-van Dasselaar. A. et al. 2020). (Iagar and Iagar 2017) further highlight the importance of strategic management in addressing these complex challenges within the framework of bioeconomics and ecoeconomics, suggesting that such an approach can help mitigate the impact of these challenges while promoting sustainable development in rural areas.

Simultaneously, the discourse around food quality certification, particularly through the lens of Geographical Indications (GIs), highlights a growing consumer demand for products that are not only of high quality but also imbued with a sense of place and tradition. GIs serve as a bridge between traditional grazing practices and modern market economies, offering a way to protect and promote products that embody specific local environmental and human factors, often summarized by the term "terroir" (Pick, B, et al. 2021; Leonardo, C, et al. 2018).

Integrating the perspectives of grazing management and quality certification, therefore, presents an opportunity to address the dual challenges of sustaining traditional agricultural practices and meeting contemporary environmental and consumer expectations. This integration not only champions sustainable land use and conservation but also positions traditional foods within a framework that can leverage geographical indications for product differentiation in global markets, thus enhancing the economic viability of sustainable grazing practices.

CERTIFIED GRAZING PRODUCTS IN THE EUROPEAN UNION

The European Union is home to a

diverse array of certified grazing products, each reflecting the unique agricultural traditions and environmental conditions of its region. These certifications are not just markers of quality; they are testament to the commitment of farmers, producers, and entire communities towards sustainable agriculture and ethical animal husbandry. Here's a closer look at some of the notable certifications across the EU:

Ireland: A Leader in Dairy Certification

- **National Dairy Council Guarantee (NDC):** This certification, specific to Ireland, underscores products originating from local, sustainably managed dairy farms. It emphasizes grass-fed dairy production, a cornerstone of Ireland's dairy industry, renowned for its lush, green pastures. The NDC mark assures consumers of the local sourcing and processing of dairy products, highlighting the Irish dairy sector's commitment to sustainability and quality.

- **Bord Bia - The Irish Food Board:** The Bord Bia Grass Fed Standard is another pivotal certification, ensuring that dairy and beef products come from animals that have grazed on grass for a substantial portion of the year. This standard not only showcases Ireland's natural advantage in grass-based farming but also aligns with consumer expectations for natural, sustainably produced food.

France: Emphasizing Pasture-Based Milk

- **Lait de pâturage:** This French certification is dedicated to milk products from cows grazed in open pastures for at least 150 days a year. It guarantees that the milk comes from cows that have access to natural grazing, aligning with agroecological principles and consumer demand for transparency and sustainability in food production.

The Netherlands: Promoting Open Grazing

- **Stichting Weidegang (Weidegang Foundation):** In the Netherlands, the Weidegang certification indicates dairy products from farms where cows have access to pastures for a minimum of 120 days per year, for at least 6 hours a day. This practice not only supports animal welfare but also contributes to the iconic Dutch pastoral landscapes, enhancing biodiversity and soil health.

Germany: Advocating Extensive Grazing Practices

- **PRO WEIDELAND:** Germany's Pro Weideland certification focuses on extensive grazing practices, requiring at least 120 days of grazing per year with specific land area allocations per cow. It champions animal welfare, biodiversity, and the production of high-

quality, grass-fed dairy and meat products free from GMO feed.

Portugal: Celebrating Biodiversity and Tradition

- Carne Barrosã: A standout example of certified grazing products in Portugal is the Carne Barrosã, a beef product from the Barrosã cattle breed, known for its exceptional quality and taste. The certification ensures that these cattle are raised in extensive grazing systems in Portugal's northern regions, adhering to traditional practices that support biodiversity and sustainable land management. This certification not only preserves a cultural heritage but also promotes the environmental benefits of grazing in maintaining the landscape and supporting rural economies.

Spain: Advancing Regenerative Grazing

- De Yerba: Spain's approach to certified grazing products is epitomized by the De Yerba certification, which focuses on regenerative grazing practices. This certification is part of a broader movement towards sustainable agriculture that prioritizes soil health, biodiversity, and carbon sequestration. Products bearing the De Yerba certification come from farms that employ holistic management practices, ensuring that animals graze in a way that regenerates the land, improves water retention, and enhances ecosystem services.

Italy: Bridging Tradition with Sustainability

- LaugenRind: Italy, with its diverse landscapes ranging from the Alpine north to the Mediterranean south, offers a unique context for grazing certification. The LaugenRind certification represents a commitment to sustainable beef production, where cattle are grazed in the pristine Alpine meadows of South Tyrol. This certification assures consumers of the ethical raising of cattle, emphasizing traditional grazing practices that contribute to the maintenance of alpine biodiversity and the production of high-quality beef known for its distinct flavor and nutritional properties.

Austria: Emphasizing Quality through Traditional Practices

- Heumilch (Hay Milk): As previously mentioned, Austria's Heumilch certification underscores the country's commitment to traditional dairy farming practices. By requiring that cows are fed exclusively on dried hay and fresh grass, avoiding fermented feedstuffs like silage, this certification ensures the production of high-quality milk with distinctive taste characteristics. The Heumilch certification is a testament to Austria's dedication to biodiversity, environmental sustainability, and

the preservation of its dairy farming heritage.

THE CURRENT LANDSCAPE AND OPPORTUNITIES IN ROMANIA

Traditional Grazing Practices

In Romania, traditional grazing practices, particularly for sheep and cattle, have been maintained over centuries, adapting to the country's varied climatic and geographical conditions. These practices, deeply embedded in the country's rural culture, offer a blueprint for sustainable agriculture that preserves biodiversity and supports ecosystem services.

Recognized Products with Geographical Indications

Romania has already made strides in recognizing the value of its agricultural products through geographical indications (GIs), such as "Telemea de Ibănești" (PDO), "Telemea de Sibiu" (PGI), and "Cașcavalul de Săveni" (PGI). These certifications, while focusing on product quality and regional specificity, also implicitly underscore the importance of traditional farming and grazing practices. The next logical step could be to introduce certifications that specifically highlight sustainable grazing practices, offering a clear link between the method of production and the quality of the final product.

PROSPECTS FOR GRAZING CERTIFICATION IN ROMANIA

By formalizing grazing certifications, Romania could further promote practices that enhance biodiversity, soil health, and carbon sequestration. Such certifications could help safeguard the country's extensive natural pastures and meadows, ensuring they are managed sustainably. The development of strategic options for the rural area through industries such as the food sector, as discussed by (Iagăru et al. 2014), underscores the importance of sustainable practices in enhancing the availability and distribution of high-quality food products. This approach not only supports environmental objectives but also aligns with the economic development goals within the Romanian rural context.

Globally, consumers are increasingly seeking products that are not only of high quality but also produced in an environmentally friendly and ethical manner. Echoing this sentiment, a study by Oroian et al. (2022) on biodynamic agriculture in the Transylvania area of Romania reveals an emerging preference among farmers for sustainable practices. Despite biodynamic agriculture being less familiar among the broader agricultural community, it is recognized for its

potential to protect biodiversity and the environment. Importantly, the study suggests that biodynamic farms can be profitable, given the growing consumer interest in healthy, sustainably produced products. This insight underpins the notion that Romanian products, enhanced by certified sustainable grazing practices, could gain access to premium markets and achieve higher prices, fulfilling consumer demand for sustainability.

Certified grazing practices could provide a significant boost to rural economies in Romania, supporting small-scale farmers and pastoralists by providing them with a competitive advantage in both domestic and international markets. This could lead to revitalized rural communities and a stronger connection between consumers and the origins of their food.

SUGGESTIONS FOR FUTURE RESEARCH

A notable gap exists in Romanian literature regarding the systematic study and promotion of certified grazing practices and their correlation with high-quality agricultural products. This oversight underscores a critical area for future research and policy development, particularly as Romania seeks to enhance its agricultural sustainability and economic competitiveness on both a European and global scale.

The myriad benefits of grazing, well-documented in broader European studies, highlight the ecological, economic, and social advantages of such practices. Adopting eco-technical practices within grassland agroecosystems, as recommended by Iagaru et al. (2017), could lead to improved pastoral value and biodiversity conservation in Romanian grasslands. However, the lack of a formalized framework for grazing certification in Romania suggests an untapped potential to elevate the status and marketability of Romanian agricultural products. Establishing a certification for grazing products in Romania could serve as a benchmark for quality, sustainability, and ethical production, aligning with increasing consumer demands for transparency and environmental stewardship.

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