

**ACADEMY OF ECONOMIC STUDIES IN BUCHAREST**

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**SUMMARY OF THE DOCTORAL THESIS**

**THE IMPLEMENTATION OF INTEGRATED MANAGEMENT  
SYSTEMS (QUALITY-ENVIRONMENTAL-FOOD SAFETY) IN  
THE MILK INDUSTRY IN THE CONTEXT OF THE  
APPLICATION OF EU STRATEGY ON SUSTAINABLE  
BIOECONOMY IN EUROPE**

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**Keywords:** Sustainable development, sustainable and circular bioeconomy, integrated management system, quality, environment, food safety, food security, environmental protection, dairy products, consumer behavior, consumers, producers.

## **SYNTHESIS OF THESIS**

This doctoral thesis addresses the implementation of an integrated management system (quality-environment-food safety), in accordance with ISO standards (EN ISO 9001:2015, EN ISO 14001:2015, EN ISO 22000:2018), in the food industry as a concrete and viable tool for the development of a sustainable and circular bioeconomy in Europe. According to the EU strategy, the thesis addresses the concepts of sustainable development, bioeconomy and circular economy, but also the main characteristics and principles of quality, environmental and food safety management systems promoted by ISO standards.

The main purpose of the doctoral thesis is to show how to effectively implement a management system in the milk industry, in the sense of sustainable success and increase in the overall performance of the organization, by applying a business strategy based on the analysis of the context in which the organization operates, as well as the vulnerabilities and threats they face.

In conclusion, this thesis contributes to the literature by providing a new understanding on how management systems, according to ISO standards, can become useful tools for sustainable business success and a complementary vision on the contribution of integrated management systems (quality-environmental-food safety) to achieving the sustainable bioeconomy goal.

The doctoral thesis is structured in **7 chapters**, to which the introduction, annexes and bibliography are added, as follows:

The first chapter entitled “*Research methodology*” presents the applied research methods, but also the databases used for the realization of the doctoral thesis. It is argued the need to use several complementary research methods, such as: secondary data analysis (review of literature in the field, study of reports and publications issued by international and national bodies, analysis of normative acts and other international and national regulations, analysis of the information provided through the websites of various organizations or bodies), qualitative research, through the method of semi-structured interviews conducted to domestic dairy producers and quantitative exploratory research (market study) using a statistical survey, based on a questionnaire, in order to know the profile of dairy consumers in Romania.

The second chapter "*the contribution of integrated management systems to achieving the goals of sustainability and sustainable bioeconomy*" provides an overview not only of the concepts of sustainable development, bioeconomy and circular economy, but also of the complementary concepts, highlighting their similarities and differences (*sustainable development, sustainability, circular economy, green economy*) through an analysis of the specialized literature in the field – recent scientific papers published in peer-reviewed journals; it also highlights the essential role of the bioeconomy in achieving the sustainable development goals. In this chapter, the main characteristics and principles of quality, environmental and food safety management systems promoted by ISO standards are identified and the benefits of their implementation and the contribution to achieving the sustainable development goal are highlighted.

Next, in the third chapter "*Sustainable Development strategies and Circular Bioeconomy*", following the analysis of the normative acts and reports published by international bodies and organizations, the current evolution and objectives of the Global Strategy for Sustainable Development were presented, showcasing the strategies adopted by the International Organisation for Standardisation and the European Union on the 2030 Agenda on the sustainable and circular bioeconomy; The current state of implementation of EU bioeconomy strategies at regional and national level was also analyzed.

Chapter 4. *The study on the impact of the COVID-19 pandemic on the food industry in the context of a sustainable bioeconomy* is dedicated to the analysis of the impact of the pandemic on global food systems and on the global milk industry, including on the behavior and preferences of food consumers. Disruptions in supply chains, income cuts, social distancing and health care have led to an increase in awareness of the importance of food sustainability and, implicitly, changed food consumption habits. Thus, health, food safety, hygiene, natural ingredients have become a top priority in consumer preferences. The impact of the COVID-19 pandemic on the bioeconomy in Romania and on the milk industry in particular is also analyzed.

In Chapter 5. *Sustainability of Romanian dairy products - quantitative and qualitative research*, based on the particularities of the dairy sector in Romania described in the first subchapter, two market research are presented: a qualitative research addressed to domestic dairy producers and a quantitative research addressed to food consumers in Romania. Conducting the two studies was considered appropriate in order to better know the dairy market in Romania, both from the perspective of producers and consumers, and to later identify effective ways of sustainable development of the dairy business.

Chapter 6. *“The proposal of an organizational strategy model based on the integrated quality-environment-food safety management system for a sustainable business success”*, following all previously validated assumptions, proposes a model of sustainable development strategy for milk industry processors, in the author’s own view, which is based on the effective and efficient implementation of an integrated quality-environment-food safety management system according to ISO standards, with the possibility to apply it in other sectors of the bioeconomy. Based on the presented case study, the implementation stages of the integrated management system are described, leading to an increase in the performance of the organization and sustainable success. The proposal for an organizational strategy is also supported by a framework model of the integrated quality-environment-food safety management system documentation, useful for the implementation of the strategy (Annex 4).

The work ends with Chapter 7. *Final conclusions, limits and future research directions*, where not only the conclusions, but also proposals for improvement in relation to the problem under study are presented. This final chapter summarizes the theoretical and practical contributions to the sustainable success of an organization in the milk industry through the effective implementation of the integrated quality-environment-food safety management system. It is underlined that the implementation of an integrated management system is a strategic decision and a very complex process that becomes useful (provides the premises for sustainable development) only if it is designed and adapted according to the profile of the organization and the context in which it operates. The benefits of implementing an integrated quality-environment-food safety management system are also highlighted.

#### *Bibliographic references*

This section covers all academic sources consulted for thesis development, providing the reader with extensive resources for further exploration.