

EFFICIENT WASTE MANAGEMENT OF THE FOOD INDUSTRY IN THE CONTEXT OF THE TRANSITION TO THE CIRCULAR ECONOMY

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The food industry is one of the largest industries at the global level that is an indispensable part of the entire system of human life. In the Republic of Moldova, the food industry has an important share in the manufacturing industry according to the number of enterprises, the number of employees and sales revenues, this industry also has the highest production volumes in terms of quantity, generating multiple types of waste of the technological process of production, not to mention other big generalizers of food waste such as: households, supermarkets, restaurants, hotels, etc.

As the world's population grows, the problem of the needed resources for the food industry and the problem of waste becomes more and more pronounced socially and environmentally. On the other hand, in the context of the global orientation towards sustainable development through the promotion of the circular economy, the role of research in the field of rational use of waste is increasing. Also in this context, there is an urgent need to study value chains and model them according to waste recycling scenarios. This research is aimed at identifying new trends and opportunities in waste management specific to the food industry.

The study aims to analyze the categories of waste resulting from the activity of enterprises in the food industry and their management, taking into account the specific problems of waste management and related risks. An important role belongs to the study of the experience of other countries in the field of stock management in terms of identifying the value chain in their management. The main methods used in this paper are analysis and synthesis, as well as research through the prism of cause-effect method.

The results of the study show that the practices of the national companies in the food industry in terms of waste management remain considerable following the good practices applied by the countries of the European Union, USA, Japan, China. Often the problem of inefficiency in inventory management is related to insufficient investments, lack of motivation of entrepreneurs, their opposition to changes in waste management and insufficient involvement of the state through economic and financial levers in solving those problems.

The proposal for the following research serves to model the value chain of products according to the possible scenarios used in waste management, with emphasis on the effects of the circular economy and the most innovative products developed from such waste.

Keywords: *green economy, processing, recycling, value chain*