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## **THE ROMANIAN AGRIFOOD SECTOR – BETWEEN SUSTAINABLE DEVELOPMENT AND ENVIRONMENTAL RIGORS**

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**Abstract:** *In the context of globalization trends, the expansion of markets, as well as the increase in competition, the Romanian agri-food sector is facing with major challenges. One of the challenges is related to compliance with the environmental rigors/requirements, namely the reduction of greenhouse gas emissions and the achievement of climate neutrality by 2050. Based on these considerations, the present approach proposes to analyze this challenge from the perspective of the sustainability of the agri-food sector.*

### • Introduction

Climate change represents one of the biggest threats to the environment, social and economic framework. Speaking about the impact on the environment, the agri-food sector is an area that generates important greenhouse gas emissions. Promoting the efficient use of resources and supporting the transition to a low-carbon and climate-resilient economy in the agricultural, food and forestry sectors is a priority for all states, in the context of the need to achieve climate neutrality by 2050.

### • Material and method

The approach is based on public data and information.

Methods of analysis: dynamics, structures and comparisons.

The analyzed period: the post-accession period.

### • Results and discussions

In Romania, the consumption of food products in households holds the first position with the highest levels of gas emissions, followed by food processing and transport.

Emissions resulting from crop production register significant increases in the post-accession period. Thus, in barley, nitrous oxide emissions have increased almost four times in 15 years, while in wheat they have tripled. Regarding animal production, it is worth noting that the highest values are recorded in the category of sheep, followed by dairy cattle.

### • Conclusions

According to the most recent studies, worldwide, agriculture generates 10% to 12% of global greenhouse gas emissions. The food system as a whole - which includes packaging, transport, consumption and waste management - generates one third of global emissions.

Other types of measures to reduce the impact on the environment:

- Orientation of consumption towards organic products;
- Digitalization in the agri-food sector;
- Diversification of proteins.