

TRANSFORMATION OF THE FOOD INDUSTRY IN THE REPUBLIC OF MOLDOVA: TRENDS, CHALLENGES AND PROSPECTS

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Abstract: *The food industry in the Republic of Moldova has a significant role, together with the agricultural sector, in the development of national economy, ensuring food security, support of the diversified and high added value exports, as well as generation of job places. Nowadays, the food processing sector is still one of the most dynamic and valuable branches of the industry, dominated by the wine-making sector, fruit and vegetable processing, dairy, meat, and bakery industries, which hold a substantial share of domestic consumption and exports. Despite all of these, productivity and competitiveness of the Moldovan food industry is hindered by the obsolete equipment and partial access to modern technologies, as well as insufficient investment capital in digitalization processes. Thus, the paper aims to analyze the key trends that outline the food industry in the country and present the persistent challenges like limited capacity of investment, fragmented supply chains and market fluctuations. Particular attention is offered to the potential causes of the European Union integration processes, which present new opportunities for enhancing competitiveness, but also requirements for stricter compliance with food safety regulations. Based on analysis of available empirical data and policy analysis, the paper highlights the strategic directions for the sustainable development of Moldova's food industry, with an emphasis on innovation, export promotion and strengthening of public support mechanisms. The findings present that the transformation of the food industry of Moldova is essential not only for economic growth, but also for enhancing the resilience and long-term sustainability of the agri-food sector in the country.*

Keywords: *food industry, sustainable development, agri-food sector, competitiveness, transformation, Republic of Moldova, EU integration*

JEL classification: Q13, Q18, O13

INTRODUCTION

Together with the agricultural sector, the food industry in the Republic of Moldova plays an important role in the development of national economy, and the rural area (Moroz, Ignat, 2011). It ensures the food security at the national level and supports the diversified and high added value exports, being one of the most dynamic and valuable branches of the industry, dominated by the wine-making sector, fruit and vegetable processing, dairy, meat, and bakery industries, which hold a substantial share of domestic consumption and exports. The capacity of the food industry to stay and increase its competitiveness is still rather limited, but achievable (Gribincea, 2021). Adaptation to emerging changes in the dynamic international context through innovation, increasing the quality of food products and efficient management of resources is a must (Ghencea & Stanciu, 2024).

At the same time, the development of the food sector faces some important challenges like old equipment and partial access to modern technologies (Stratan et al, 2015b), as well as insufficient investment capital in digitalization processes. The issue of insufficient awareness on consumption of local products is also an issue that does not allow the sustainable development of the food industry (Stratan et al, 2015a).

Thus, the paper aims to analyze the key trends that outline the food industry in the country and present the persistent challenges like limited capacity of investment, fragmented supply chains and market fluctuations.

MATERIALS AND METHODS

The paper is based on the analysis of secondary data provided by the National Bureau of statistics of the Republic of Moldova, UNComtrade Database, and Annual report of the Agency of Intervention and Payments in Agriculture.

The international competitiveness, was evaluated with the aid of the Revealed Comparative Advantage indicator, based on the following formula:

$$RCA = \frac{\frac{X_{ij}}{X_{it}}}{\frac{X_{nj}}{X_{nt}}} = \frac{\frac{X_{ij}}{X_{nj}}}{\frac{X_{it}}{X_{nt}}}$$

where, X is represented by export, i – a country, j – a product, t – a set of products, n – a set of countries (Balassa, 1965).

The analysis was enhanced by the SWOT analysis, that represents a synthetic presentation of results, but also of the potential directions for the future sustainable development of the Moldovan food sector.

RESULTS AND DISSCUSION

Between 2015 – 2024, the industrial production indices with respect to food products have experienced a fluctuating growth path till 2022, reaching the maximum of 171.3% compared to the values from 2010. This period was followed by a steady decline in 2023 and even a stronger one in 2024, that was caused primarily by heavy weather conditions that reduced the agricultural production, energy crisis through the boost of energy costs for production, Russian – Ukrainian war that caused disruptions in supply chain but also uncertainties on behalf of potential investors, as well as preferential exports of raw materials as a deliberate choice of producers and exporters, in order to mitigate the potential effects of the nearby war.

With respect to the previous year, the food production experienced some volatility between 2015 and 2022, while in the last 2 years, these indicators are constantly under 90%, pointing on challenges that the Moldovan food sector faces as a result of the above-mentioned factors. At the same time, the important decline from 2020 was caused by the Covid-19 measures imposed by public authorities, especially in the first half of the year that caused some disruptions in the production process.

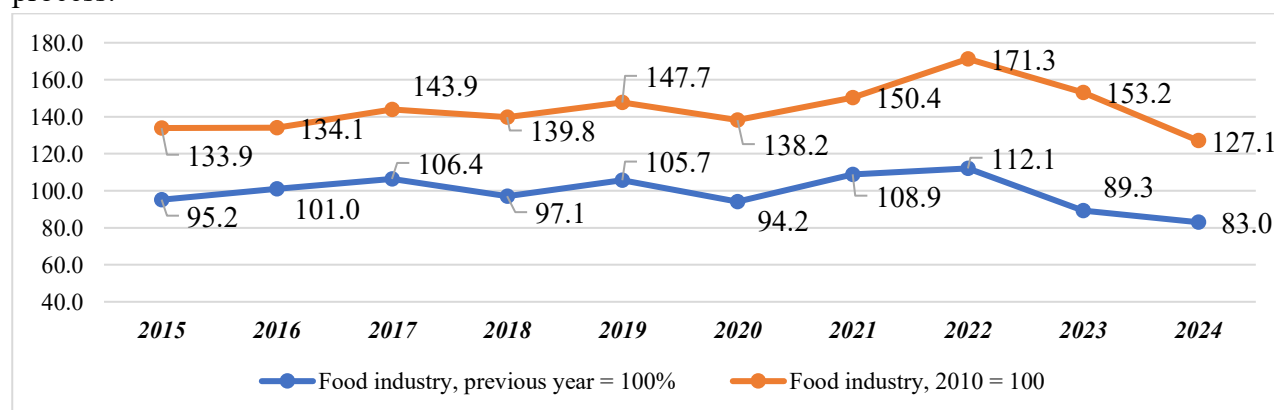


Figure 1. Industrial production volume indices, 2015 - 2024, %

Source: National Bureau of Statistics, 2025

The value of food production increased more than twofold from 13,600,242 thousand lei in 2015 to 29,605,752 thousand lei in 2022, because of increase in distribution prices and enhancement of exports. The subsequent decreases of -4.9% in 2023, amounting to 28,151,643 thousand lei and -12.6% in 2024 going down to 24,596,855 thousand lei have totaled a -16.9% from the peak of 2022. The share of the food industry in the total industrial production registered a minimum of 27.5% in 2018 and a maximum of 34.6% in 2022. In the processing industry, this share accounted for 34.3% in 2024.

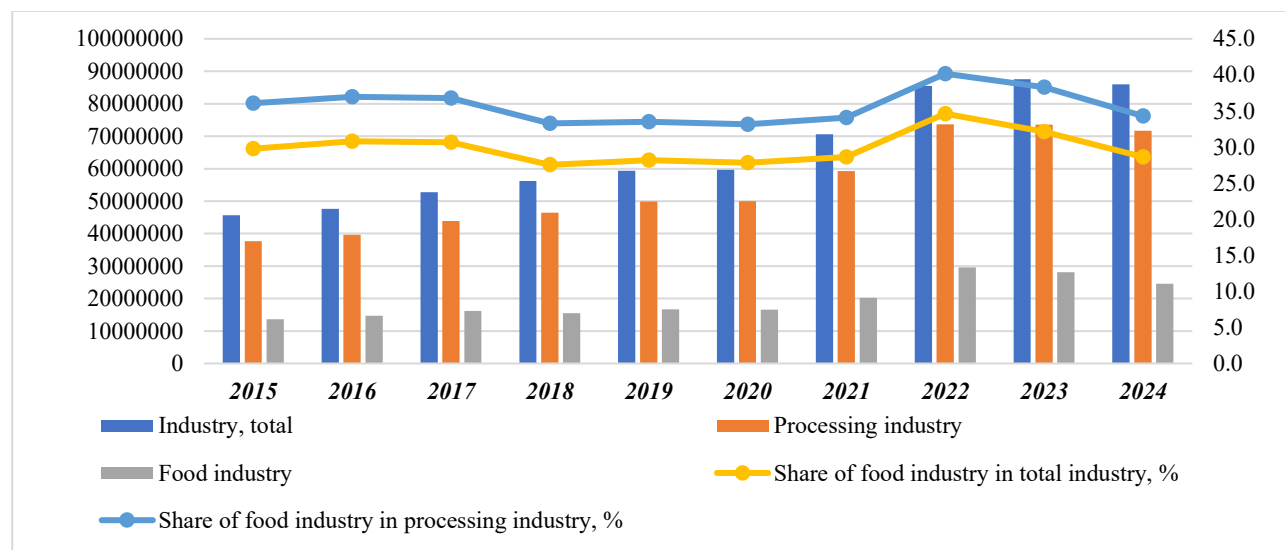


Figure 2. Value of manufactured industrial production, thousand lei

Source: National Bureau of Statistics, 2025

During the analyzed period, the sub-sector values presented quite large differences in terms of the value of production. Thus, the largest category in the last years, the one of oils and fats have recorded an almost 6 time increase by 2022 (from 1,391,747 thousand lei to 8,059,956 thousand lei). This excellent period was followed by a decrease with 28.1% in 2023 and even a more dramatic one in 2024 reaching 1.911.006 thousand lei, resulting from drought that has affected the sunflower yield, as well as from increasing exports of raw sunflower seeds.

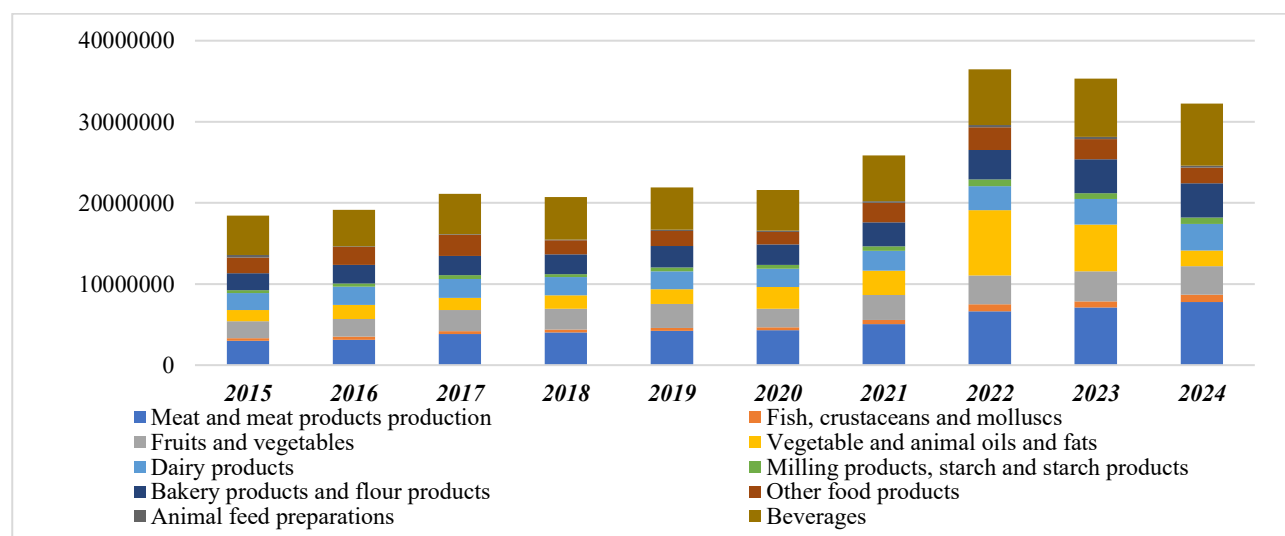


Figure 3. Value of industrial production manufactured by economic activities, thousand lei

Source: National Bureau of Statistics, 2025

The second most valuable category of beverages accounted for a 58.2% cumulative increase from 4,827,433 thousand lei to 7,635,415 thousand lei, with a 6.6% annual average. At the same time, the top 3 of value of industrial production is held by meat, which experienced an increase of 2.5 times, from 2,997,491 thousand lei to 7,767,358 thousand lei, while processing of fruit and vegetables recorder a growth of 68.9% until 2023, when a peak of 3,689,647 thousand lei, followed by -4.4% in 2024. Dairy sector had a 58.5% cumulative increase during the analyzed period, from 2,063,812 thousand lei to 3,271,297 thousand lei, while bakery and milling products had increases of 2 times. The only sector that registered decreases in this period was animal feed preparations (-31%).

When analyzing by sub-categories, the meat production is dominated by manufacture of meat products (including poultry meat), that accounted for 60.3% in the total meat products in 2024 (58.7% in 2015), being followed by production, processing and preservation of meat (20.3% in 2024 and 19.9% in 2015 and processing and preservation of poultry meat (19.4% in 2024 and 21.4% in 2015). Each of the categories registered increases of more than 2 times, mainly due to the relatively stable demand on the internal market, as well as due to the resilience of this industry to shocks from the agri-food sector.

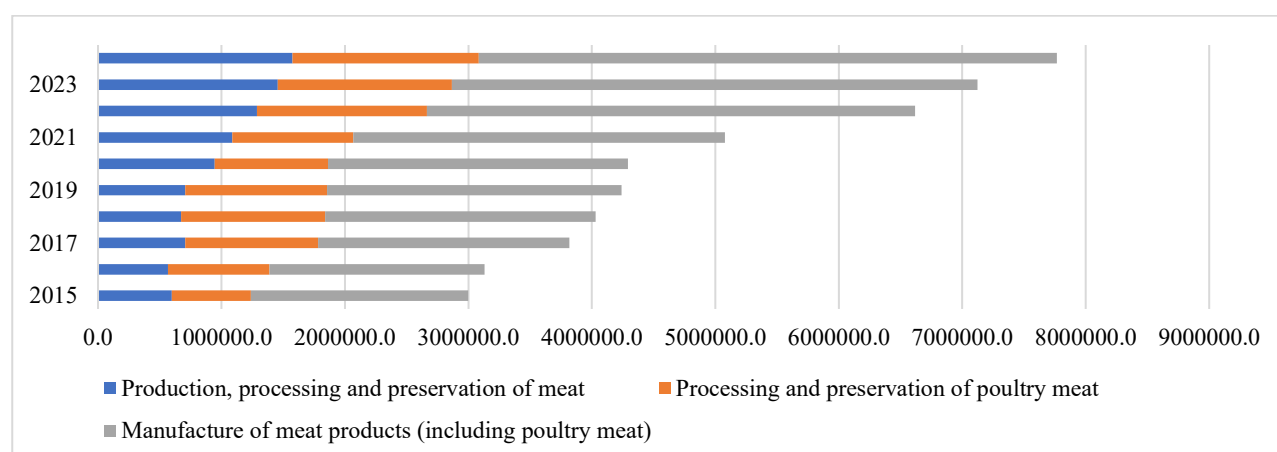


Figure 4. Value of meat production, thousand lei

Source: National Bureau of Statistics, 2025

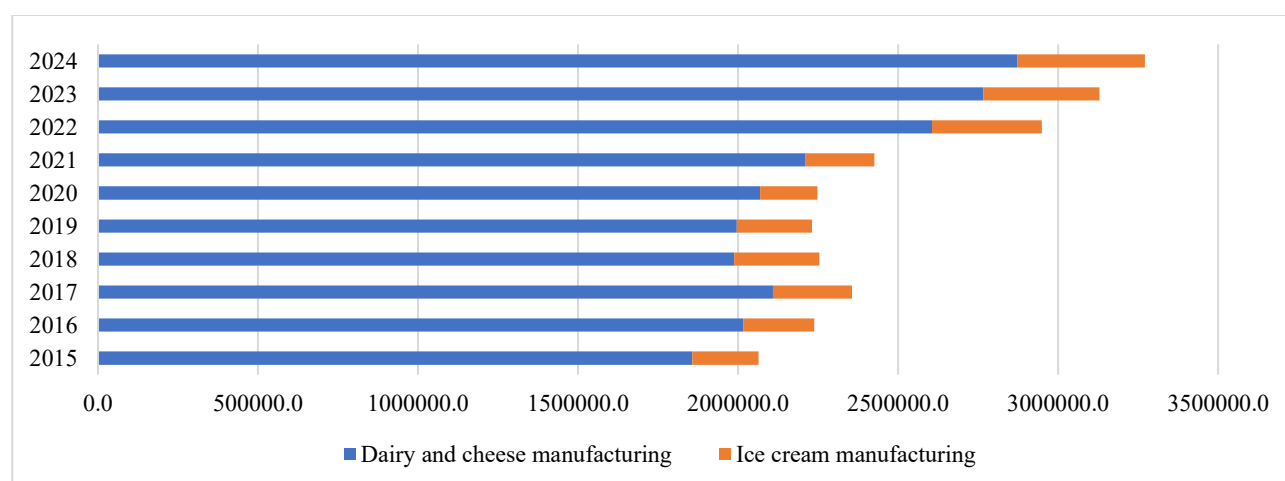


Figure 5. Value of dairy production, thousand lei

Source: National Bureau of Statistics, 2025

The dairy production is highly dominated by production of milk and cheese, that has experienced important increases in the last 3 years, mainly because of the important policy support measures in the cattle sector, like direct payments per head of livestock and per kg of product.

The local supply chains and value chains are highly developed and internal consumption of milk and milk products is also increasing, which determines increases in production.

In the category of production of other types of food, cocoa, chocolate and sugar confectionery is leading due to the highest share in this category, increasing with 40% from 730,261 thousand lei to 1,024,637 thousand lei. It is followed by sugar production which registered a sharp decrease of about 50% in the same period. Prepared food, production of spices and ingredients and tea and coffee production have increased each more than 3 times. The low values of production in 2020 in this category were determined by the reduced production in the agricultural sector due to the severe drought, as well as by the Covid-19 pandemic, that put on temporary hold or created important disruptions in some of the production systems.

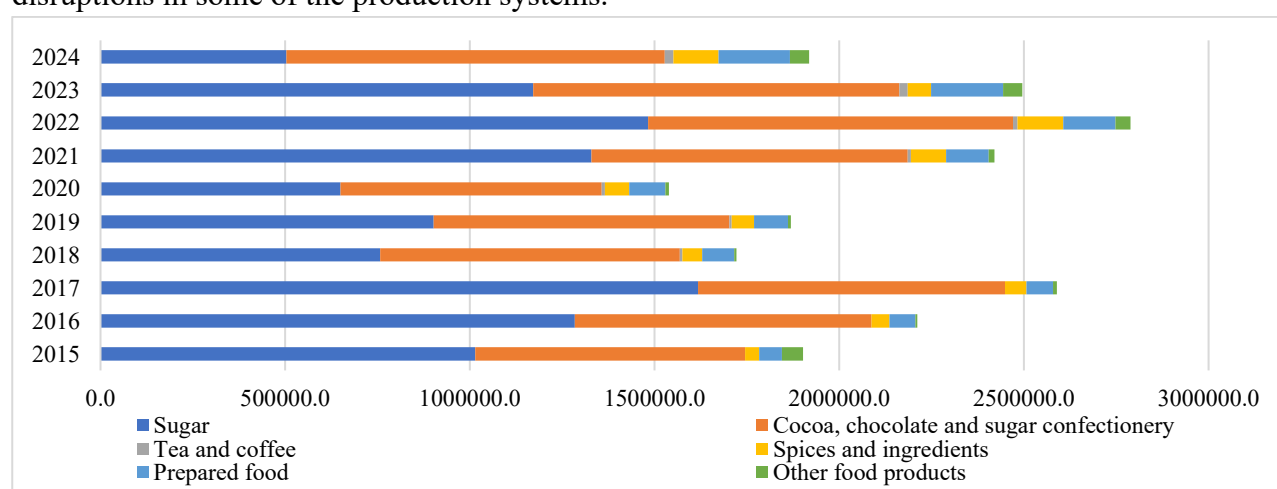


Figure 6. Value of other food products, thousand lei

Source: National Bureau of Statistics, 2025

Production of beverages recorded high increases in all categories, except for production of non-alcoholic soft drink and water, which has relatively stable values. It is worth mentioning that this category holds the smallest share in the production of beverages among the other categories. The wine made from grapes increased with 67%, production of beer – with 85% and other alcoholic beverages – with 72%. The last three years were mainly responsible for the respective increases.

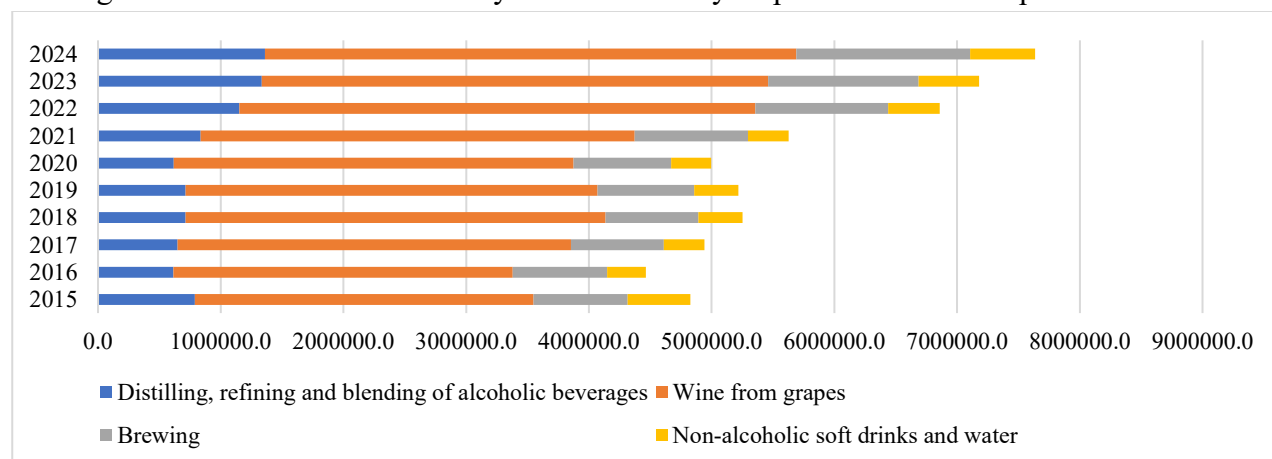


Figure 7. Value of beverages, thousand lei

Source: National Bureau of Statistics, 2025

Thus, based on the presented statistical data, there can be detected some sectors high in resilience, mainly oriented towards internal or external consumption like beverage or meat production, vs the vulnerability of other sectors that are more dependent on the climate conditions. All the sectors need transformation through injections of investments in order to reduce their volatility degree.

In order to support the investments in processing and post-harvest infrastructure, the public aid to farmers aiming at increasing the added-value of their production has relatively high shares in the total public support. During 2015 – 2023, this share increased to a maximum value of 36.7% in 2019, and minimum of 15.5% in 2015.

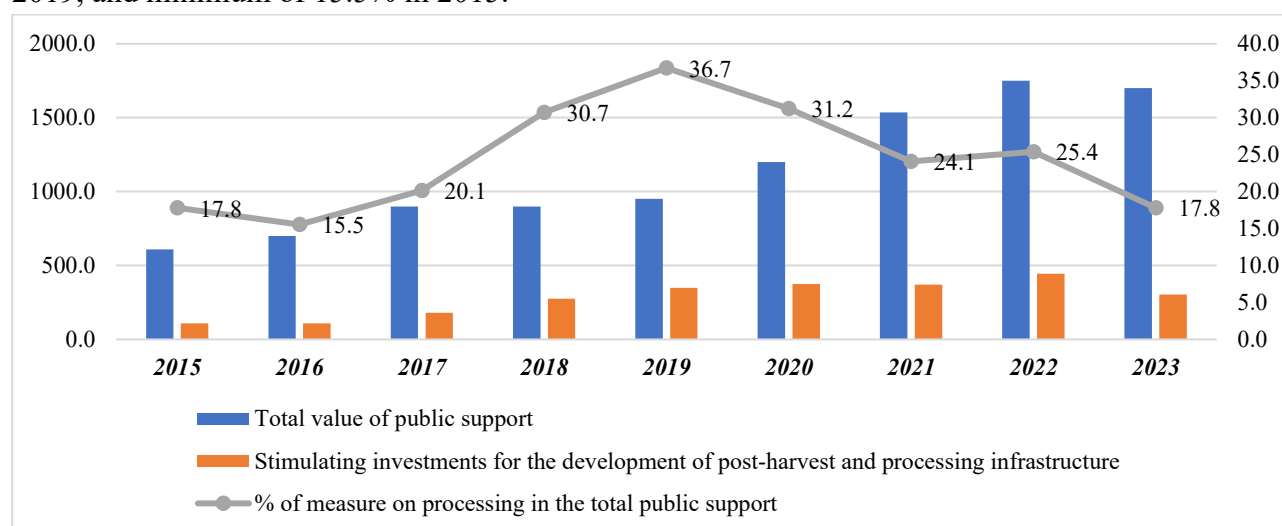


Figure 8. Public support in the Republic of Moldova by measure on development of post-harvest and processing infrastructure, million lei

Source: AIPA, 2015 - 2024

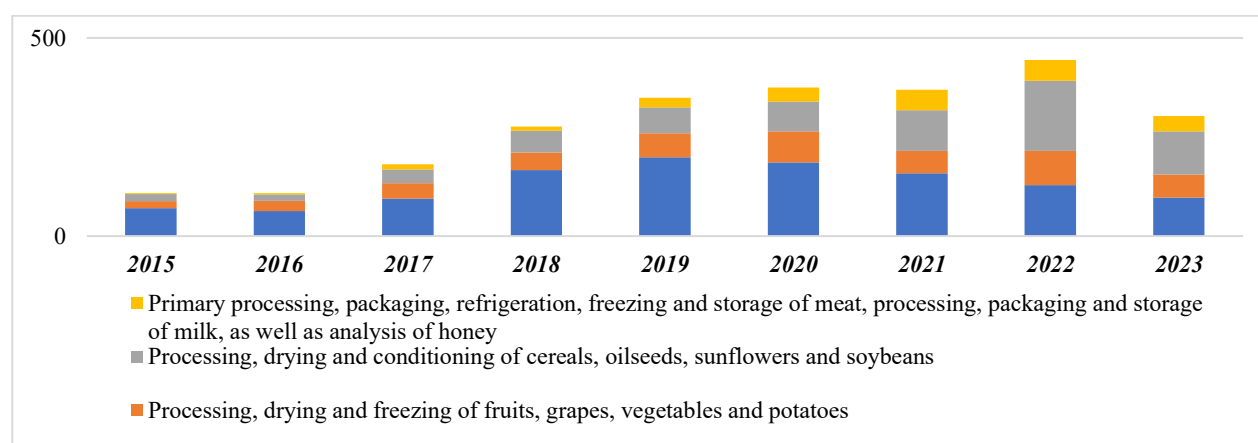


Figure 9. Public support in the Republic of Moldova by sub-measures from the development of post-harvest and processing infrastructure, million lei

Source: AIPA, 2015 - 2024

In the framework of the measure on stimulating investments for the development of post-harvest and processing infrastructure, the highest share in the last two analyzed years is hold by the processing, drying and conditioning of cereals, oilseeds, sunflowers and soybeans, with an increase from 17.74 million lei to 109.2 million lei. This is being followed by the packing houses and refrigerators for storing fruits, grapes and vegetables with an increase from 70.79 million lei to 97.3 million lei, and processing, drying and freezing of fruits, grapes, vegetables and potatoes (from 17.7 million lei 58 million lei). The measure for the livestock sector is less popular, but also increased significantly from 2.32 million lei to 38.5 million lei.

Granting of subsidies for the processing food industry is of particular importance for increasing the added-value of production and further reduce the export of raw materials. They also contribute to making the sector more resilient to external shocks and help it align to EU quality standards.

Table 1. RCA values for some of the selected food products

	2020	2021	2022	2023	2024
Sunflower oil	69.1	65.2	151.6	143.7	80.5
Chocolate blocks	5.9	5.3	4.5	4.1	3.8
Sweet biscuits	17.1	15.9	14.1	13.0	12.1
Waffles	3.6	3.3	2.2	2.3	2.6
Canned cucumbers	5.9	6.5	9.7	5.3	4.7
Canned peas	98.0	80.9	69.9	63.9	50.7
Canned sweet corn	17.1	28.8	24.5	10.7	15.4
Jams	11.3	12.3	9.1	10.7	14.0
Apple juice	194.5	171.1	177.5	178.0	203.6
Ice cream	5.0	6.1	10.2	8.0	11.0
Wine	103.5	93.1	73.5	98.0	106.4

Source: Calculated by author based on the UNComtrade, 2025

On the international market, some of the Moldovan food products have relatively high degree of competitiveness based on the Revealed Comparative Advantage indicator. Thus, during 2020 – 2024, the RCA values for juices averaged for 184.9, followed by sunflower oil with 102.0, wine with 94.9 and canned peas with 72.7. Less, but also positive values are recorded for sweet biscuits, canned sweet corn, jams, canned cucumbers, etc.

Table 2. SWOT analysis for the Moldovan food sector

Strengths	Weaknesses
Tradition in some food sectors like wine making, meat processing, dairy production; Access to EU market through the DCFTA agreement; Support through public policies and development projects High potential for niche and authentic products (GI, PDO, TSG) or organic production; Short supply chains for internal consumption	Reduced dimensions of the internal market; Obsolete technology in some of the food sectors; Limited logistics and port infrastructure; The need for accelerated adaptation to EU standards; Still insufficient access to finance for SMEs; Preferential exports of raw materials instead of processed products
Opportunities	Threats
Possibility to develop high added value products and development of recognizable national brands; Agricultural tourism and eco-tourism; Digitalization, smart irrigation, traceability, B2B, B2C, e-commerce; Growing global demand for organic and GI products	Geopolitical risks; Climate changes; Aggressive competition from some of the neighboring countries; Price volatility for inputs; Rural population aging and migration phenomenon.

Source: developed by author

Thus, the food sector of the Moldova has real chances for a sustainable transformation in case climate changes issues will be addressed, if a coordinated private and public support will exist and if innovation and digitalization will become priorities.

CONCLUSIONS

To ensure a sustainable transformation of the Moldovan food industry, some important directions are recommended, being related to:

Enhancing investments in modernization of the processing sector and its digitalization. This will help to replace the obsolete equipment and introduce new modern technologies, focused on the most vulnerable subsectors (oils, fruits/vegetables), especially to climate change. Stimulation of the local processing through the support of short value chains.

Acceleration of the alignment process with the EU standards, that will contribute to a better food safety certification, and will subsequently facilitate the access to the EU market for livestock and dairy products.

Promotion of the innovation, technology transfer and diversification of export through the support of joint research, development of GI, PDO and STG products. Strengthening the supply chains by developing agricultural cooperatives and post-harvest infrastructure (warehouses, refrigerators) common facilities.

Generally, the implementation of these recommendations will contribute to increasing the competitiveness, resilience and sustainability of the food industry, allowing its transformation and aligning it with the objectives of European integration.

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