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Balancing exports and agri-food security - strategies for Moldova's agri-food resilience in the EU single market

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Abstract

In the face of emerging challenges such as climate change, supply chain disruptions, increasing input prices, and neighbouring armed conflict, which the agricultural sector of the Republic of Moldova must address, enhancing the country's food security is a top priority. The paper examines the interconnection between the Republic of Moldova's agri-food exports and food security insurance at the national level, to achieve a resilient agricultural sector for better future integration into the EU single market. The evidence presented in the article suggests that increasing the competitiveness of agri-food products at the international level through enhanced exports does not affect national food security, but should be observed carefully in light of significant climate changes that can cause additional issues for the sufficient supply of some basic products.

Keywords: agri-food export, food security, resilience, Republic of Moldova, agriculture.

Introduction

Achieving a satisfactory state of food security represents one of the most important directions of the agricultural policy designed and implemented in any country of the world. At the same time, farmers are the primary link in the chain for providing the population with

enough, qualitative and affordable products. In this regard, food security may be observed as a public good for which responsibility is not only shared by agricultural policy designers, but also by farmers themselves and individuals (Kowalska *et al., 2022*). At the same time, one of the main challenges encountered when ensuring food security is determining the extent to which agri-food exports are foreseen and promoted, and whether they contribute to the state of food security in a respective country, as they have a supporting role in economic growth (Batool & Sheikh, 2024).

The wider used definition of food security is the one comprised in the 1996 World Food Summit declaration, stating that "Food security exists when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life" (FAOa, 1996). Nevertheless, the Zero Hunger goal of the Sustainable Development Goals remains unachieved, and progress in this direction is insufficient (FAO *et al.,* 2024). According to the State of Food Security and Nutrition in the World 2024 Report, in 2023, between 713 and 757 million people worldwide were estimated to be undernourished, a figure that has increased compared to 2019 (FAO *et al.,* 2024).

Together with the evolution of the food security concept, as well as an increased emphasis on its pillars (availability, access, utilisation, stability) (Guiné et al., 2021; FAO, 1996), more issues arise regarding the acceptable methods and instruments for its assurance. At the same time, the issue of sustainability is foreseen to be observed either as a separate pillar of food security or as a component of each of them (Berry *et al.,* 2015; Guiné *et al.,* 2021).

One of the main objectives of the Republic of Moldova's agricultural policy is to maintain and improve food security. Building a resilient agricultural sector will help integrate the country more effectively into the EU single market. To ensure food security, the Government of the Republic of Moldova adopted the Food Security Strategy for 2023-2030 (Government of the Republic of Moldova, 2022). The Strategy aligns with the key sectoral Strategy, namely the National Strategy for Agricultural and Rural Development for 2023-2030 (Government of the Republic of Moldova, 2023), as well as with the provisions of the National Security Strategy of the Republic of Moldova (Parliament of the Republic of Moldova, 2023).

The Food Security Strategy comprises seven chapters, and its structure is typical for this type of document, corresponding to the requirements outlined in existing normative acts. The developed strategic document is based on a fundamental theoretical component related to scientific research on food security, as well as applied aspects. The strategic vision of the document is aligned with the current realities of the agricultural sector, which has faced significant challenges in recent years. It supports the country's food security by establishing the necessary foundations for the development of an efficient and resilient food supply and social protection system, which can respond to emergencies and crises (Government of the Republic of Moldova, 2022). The Strategy content does not view exports as a threat to the country's food security; moreover, it states that Objective No. 2 of the document is the facilitation of international trade in agri-food products and means of production necessary for the agricultural sector.

Therefore, the aim of this paper is to explore the existing relationships between the Republic of Moldova's agri-food exports and food security insurance at the national level, with the

goal of achieving a resilient agricultural sector for better future integration into the EU single market.

Materials and methods

As a result of the bibliographic study of the specialised literature, potential interconnections between the country's exports and capacity to ensure food security were identified. The methodological approach of the paper is to analyse a series of indicators proper for the main agricultural products that contribute to ensuring food security in the Republic of Moldova. The methods employed, including indicator analysis and comparison, are based on the examination of several food products deemed most important in the population's food basket. The identified products are wheat, corn, sunflower seeds, vegetables, pork, poultry, beef, and milk.

An assessment of the effects of exporting selected products on food security has been conducted, and the interconnections have been identified. The quantitative data used for the analysis in the paper were retrieved from various databases, including the National Bureau of Statistics of the Republic of Moldova, the UN Comtrade Database, and the WITS Database, among others.

Results and discussion

Recent trends in the agri-food trade

Between 2013 and 2023, the Republic of Moldova's external trade has been characterised by significant shifts in trade intensity and trade partners. Both exports and imports experienced significant increases (from $2,428.3 million USD to $4,048.6 million USD and from $5,492.4 million USD to $8,675.5 million USD, respectively), while the general trade balance continued to deepen in negative values, reaching -$4,626.8 million. USD in 2023.

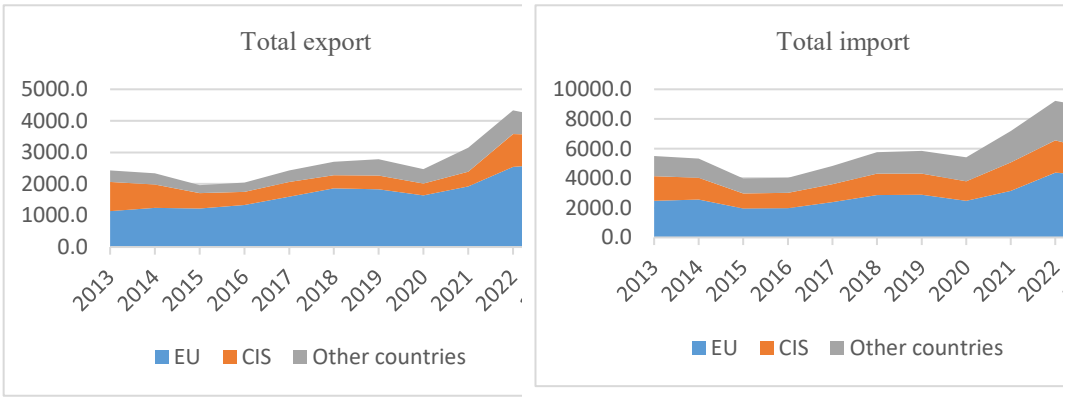

Fig. 1. Foreign trade with goods, 2013 – 2023, mil. USD

Source: WITS Database

The agri-food trade, on the other hand, has maintained a positive trade balance during the analysed period, with increases in both exports and imports. Thus, agri-food exports experienced an increase of approximately 70.4%, while imports increased by 63.5%. At the same time, the share of agri-food exports in total exports of goods fluctuates around 42-45%,

with a figure of 42.8% in 2023, while the share of imports in total imports of goods accounts for an average of 14.4%.

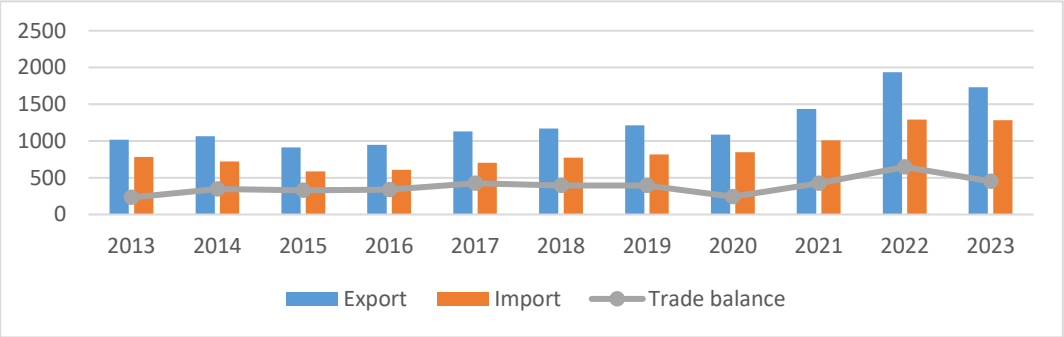

Fig. 2. Agri-food external trade, 2013 – 2023, mil. USD

Source: WITS Database

The DCFTA agreement between the Republic of Moldova and the EU from 2014 and further developments towards the direction of EU accession from 2022 (candidate country) and 2024 (start of the negotiation process) have materialised in a shift of traditional trade patterns from exporting Moldovan agri-food products mostly to CIS countries to a new, predictable and reliable partner - the EU. Therefore, if in 2013 (before the DCFTA agreement) the share of exported agri-food products to CIS countries in the total exported agri-food products accounted for 39%, then in 2023 this figure declined to 14,1%. At the same time, the EU, which held second place with a 37.4% share of agri-food exports in 2013, takes the lead in 2023, with a share of 69%. The group's agri-food exports from other countries decreased from 23.6% to 16.8%.

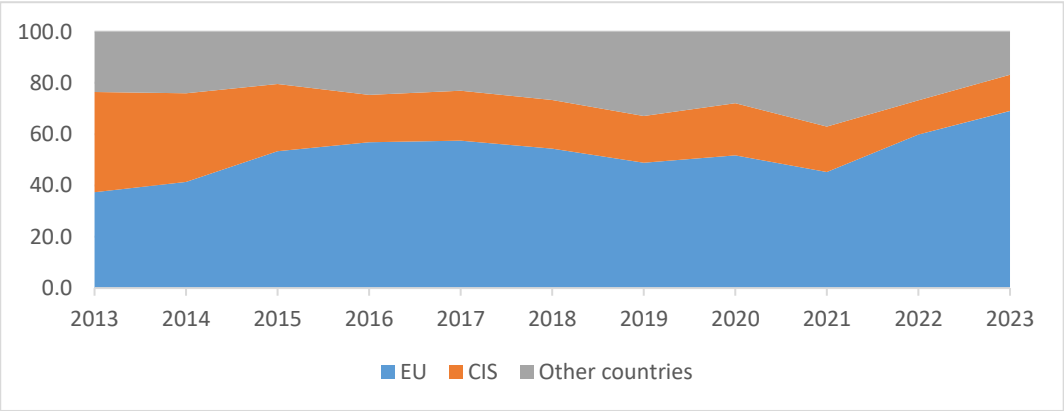

Fig. 3. Share of agri-food exports by country groups in the total agri-food exports, 2013 – 2023, %

Source: UN Comtrade Database

When analysing foreign trade with agri-food products by country groups, one can note the positive trade balances in trade with the EU and other countries and the recently negative trade balance (since 2016) with CIS countries. Therefore, the trade direction of Moldovan

agri-food products is more than obvious, with a special emphasis on accessing the EU market, as well as markets from other countries.

Fig. 4. Agri-food trade by country groups, 2013 – 2023, mil. USD

Source: UN Comtrade Database

Taking into account the linkage between exports and ensuring food security, further analysis of exports of agri-food products by commodity groups is warranted. Thus, during 2013–2023, on average, the largest share of exported agri-food products belongs to vegetal and crop products (56%), followed by food industry products (31.4%), vegetal and animal fats and oils (9.4%), and live animals and livestock products (3.2%). This picture illustrates the country's continued specialisation in raw materials for the food industry, with less emphasis on processed products, due to various reasons, including quality and food safety requirements, insufficient investments in the processing industry, and a lack of a specialised labour force.

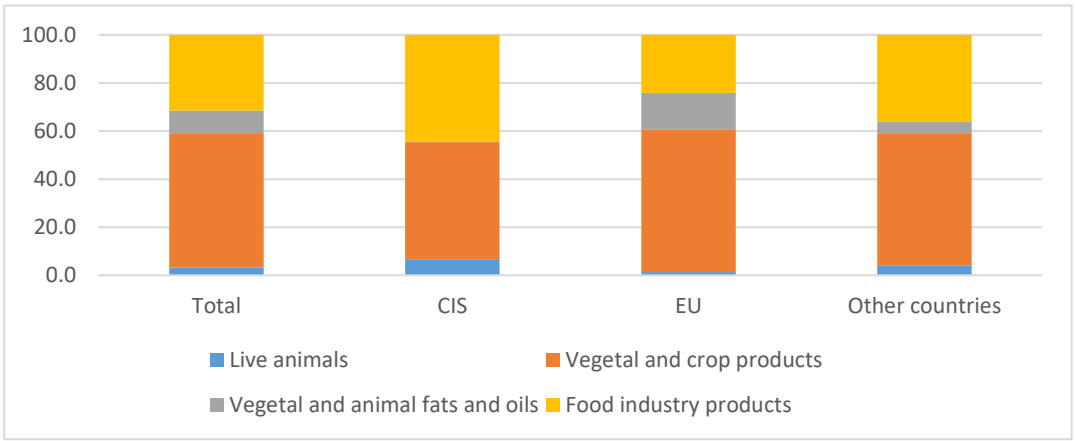

Fig. 5. Agri-food exports by commodity groups and country groups, average for 2013 – 2023, %

Source: National Bureau of Statistics Database

Considering the future integration in the EU single market, the competitiveness degree of the agri-food commodity groups with respect to EU countries (based on the Revealed Comparative Advantage indicator) has been analysed. Therefore, the data confirm that Moldova remains competitive on the EU market with raw products rather than added-value

ones. The highest competitive degree has been established for oilseeds and oleaginous fruits – 47.4; edible fruits and nuts – 37.8; cereals – 18.1; and animal or vegetable fats and oils – 10. Products from the food industry also have values over 1 (in order to be assessed as competitive), but rather lower than the previous group: sugars and sugar confectionery – 7.7; preparations of vegetables and fruits – 7.5; beverages, spirits, and vinegar – 5.1, etc. Livestock products still encounter significant challenges in accessing the EU market and complying with EU safety regulations, despite important steps in this direction having been taken.

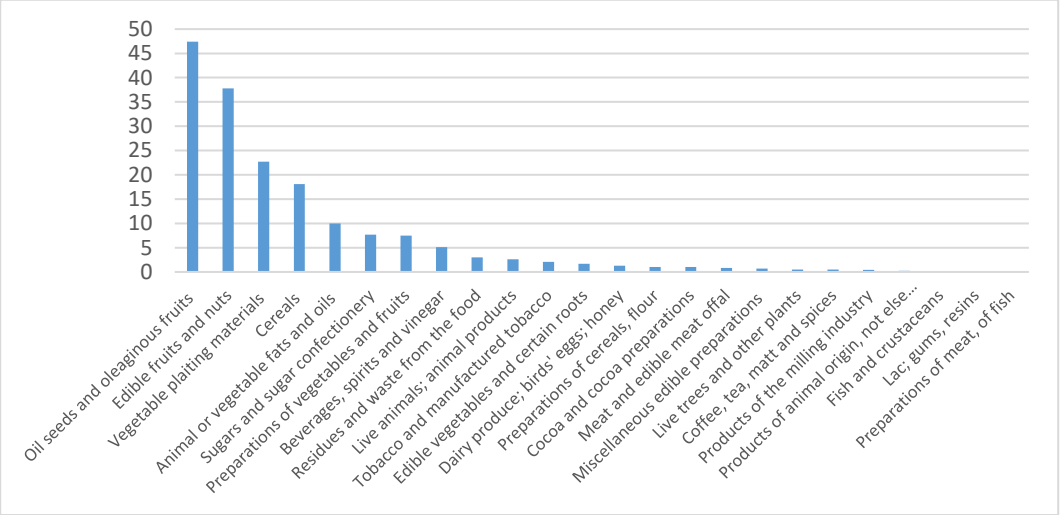

Fig. 6. Competitiveness degree of the agri-food commodity groups with respect to EU countries (based on the RCA indicator), average indices for 2014 – 2021

Source: Stratan *et al.,* 2023

Food security analysis based on assessment of physical availability and economic accessibility of selected staple products

The most recent available analyses on Moldovan food security have concluded that foreign trade, as well as food security, share some important risks and challenges (Staver & Erhan, 2023) that have to be addressed; otherwise, their impact on the economic growth may be quite significant (Stratan *et al.,* 2023).

Further discussions will be based on the analysis of the four main pillars of food security with respect to selected (staple) products and evaluation of the degree of satisfaction of food security criteria, focusing also on the inter-relation with exports of the respective products.

Vegetable and crop products

Thus, for ***wheat,*** considering the recent severe and frequent drought periods, production has been quite unstable from 2016 to 2023. The years with diminished production (569.8 thousand tons in 2020 and 855.0 thousand tons in 2022) have been balanced by the good years of 2021 (1,565.2 thousand tons) and 2023 (1,555.0 thousand tons). Against this background, the level of self-sufficiency in 2022 was 130.5%. During the period from 2016 to 2022, this figure dropped below 100% only once, in 2020, when it reached 87.7%. The maximum value of self-sufficiency was reached in 2023 – 242.4%. Acknowledging that

wheat is the most important cereal crop in ensuring the country's food security, a state wheat reserve has been established in the Republic of Moldova, which is periodically replenished with food wheat from the new harvest (Stratan *et al.*, 2024).

Exports of wheat are also fluctuating due to production reasons. Thus, during 2016–2023, the Republic of Moldova exported various quantities of wheat, with a minimum value of 152 thousand tons and a maximum value of 1,060 thousand tons. Although a measure not fully approved by the World Trade Organisation, particularly the ban on wheat exports, the Republic of Moldova has resorted to this measure on March 1, 2022, to ensure local supply and food security, following the outbreak of the war in Ukraine. However, the export ban was lifted in the middle of the same year, due to the new harvest season and the necessity to prepare the storage facilities for the new harvest.

Against a relatively stable figure for the population's consumption, one can conclude that the physical availability of wheat in order to ensure the country's food security is satisfactory, and exports do not have a significant influence on its assurance. At the same time, the economic accessibility of wheat is also assessed as satisfactory, based on the evolution of wheat prices on the local market. Thus, in the period 2016 – 2023, the price of wheat increased from 2174 lei/t to 2732 lei/t, with a maximum of 4179 lei/t in the dry year of 2022.

Table 1. Food balance for wheat, 2016 – 2023, thousand tons.

	2016	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**
Production	1 293	1 251	1 163	1147	570	1565	855	1555
Import	66	79	75	66	26	26	51	22
Export	675	683	511	564	152	887	279	1060
Forage	194	192	198	176	123	121	128	120
Personal consumption of the population	373	381	443	454	450	466	450	447
Self-sufficiency level, %	*198.5*	*189.6*	*160.8*	*161.6*	*87.7*	*236.5*	*130.5*	*242.4*

Source: NBS

Corn production, like wheat, depends largely on the existing climatic conditions, as well as on inputs. Between 2016 and 2023, corn production varied significantly, ranging from a minimum of 752 thousand tons in 2022 to 2,793 thousand tons in 2021. The level of self-sufficiency in corn also fluctuates, reaching a high of 157.9% in 2023, but with a low of 61.1% in 2020.

Exports of corn account, on average, for about 30% of the total value of production. At the same time, a high amount is intended for forage. Taking into account that a large part of the corn produced is intended for feed, the decrease in corn production affects not only the food security of the population through the consumption of processed corn products, but also significantly affects the development of the livestock sector, which, likewise, may register decreases in the livestock population and in production (Stratan *et al.*, 2024). At the same time, corn prices increased by about 9% during 2016 - 2023, reaching 2831 lei/t in 2023. The maximum price was reached in 2022 – 3,855 lei/t. However, the price of corn is still affordable, which allows for assessing economic accessibility as satisfactory. Nevertheless, the physical accessibility of corn remains under question, as it is one of the most affected crops by climate change.

Table 2. Food balance for corn, 2016 – 2023, thousand tons.

	2016	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**
Production	1 392	1 773	2 074	2130	785	2793	752	1352
Import	11	9	14	13	44	17	92	42
Export	256	287	587	738	450	490	1192	606
Forage	1 140	1 214	1 344	1229	1240	1232	967	813
Personal consumption of the population	37	40	32	29	28	27	18	21
Self-sufficiency level, %	*115.3*	*139.5*	*148.9*	*166.8*	*61.1*	*216.8*	*74.8*	*157.9*

Source: NBS

The production of sunflower has an unstable character, registering 758.4 thousand tons in 2023, which varied from 492.5 thousand tons in 2020 to 960.1 thousand tons in 2021. Annually, approximately 30-50% of the total sunflower production is intended for the processing sector, with a well-developed industry of sunflower oil production. The level of self-sufficiency was high in 2023, amounting to 203.3%. Against the background of a more than sufficient level of self-sufficiency, over 50% of local production is exported annually. Therefore, the amount of sunflower produced in the Republic of Moldova is sufficient to ensure food security of the population, and existing stocks meet the needs of consumption and production of sunflower oil. Sunflower prices fluctuate, depending on the quantity produced and developments in international markets, due to fierce competition from neighbouring countries. In 2023, the price of sunflower amounted to 6,554 lei/t, with a maximum of 10568 lei/t in 2022. Thus, economic accessibility is considered satisfactory, with some reservations for the future, arising from the fact that production costs are increasing and there is a risk of rapid price increases.

Table 3. Food balance for sunflower, 2016 – 2023, thousand tons.

	2016	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**
Production	677	804	789	811	493	960	627	758
Import	6	5	3	5	5	21	105	15
Export	446	521	526	577	381	303	434	279
Processing	170	155	282	301	211	300	313	354
Personal consumption of the population	5	5	4	4	4	4	4	4
Self-sufficiency level, %	*368.7*	*473.1*	*264.2*	*251.9*	*215.7*	*301.8*	*191.2*	*203.3*

Source: NBS

Vegetable production in the Republic of Moldova, during 2016 – 2023, reached 269.7 thousand tons in 2023, which represents a relatively average value for the analysed period. The shortage of vegetable products on the local market is emphasised by the low level of self-sufficiency, which amounted to 94.1% in 2023. In the same year, low self-sufficiency levels were registered for tomatoes – 66%, cabbage – 82.9%, and cucumbers – 83.6%. Exports of vegetables are relatively low, with an average for the analysed period of 11% of the production value.

During the period from 2016 to 2023, vegetable prices increased by approximately 60%, representing a significant rise. Based on the relatively low consumption of vegetables and

self-supply in rural areas, economic accessibility is still assessed as satisfactory, with some reserves for the future. However, the population in low-income urban areas is one of the most affected by the price increases in vegetables, and their food security is compromised.

The vegetable sector is one of the least developed, with most production provided by households. At the same time, there is increased competition from vegetable imports, due to the predominantly seasonal nature and perishability of the products. Moreover, the sector is marked by unorganised value chains, insufficient technology and a lack of irrigation.

As a result of the above-mentioned factors, based on the current challenges, the low level of production and the insufficient self-supply rate, the physical availability of vegetables can be considered partially satisfactory.

Table 4. Food balance for vegetables, 2016 – 2023, thousand tons.

	2016	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**
Production	294	310	283	307	227	232	257	285
Import	57	42	66	76	76	63	68	66
Export	41	32	26	29	21	24	36	34
Personal consumption of the population	265	288	302	332	273	275	298	286
Self-sufficiency level, %	*99,8*	*96,9*	*86,3*	*85,5*	*78,2*	*79,0*	*81*	*94,1*

Source: NBS

Livestock products

The number of cattle decreased significantly from 2016 to 2024, from 186.1 thousand heads to 101.0 thousand heads. Most of the herds are owned by private rural households (71.5% in 2024). ***Beef*** production has decreased by approximately 45% (2023 compared to 2016). The level of self-sufficiency in beef during the analysed period is around 100%, but a sharp decrease was registered in 2023, to 52.4% (from 112.6% in 2022). The price of beef has increased considerably in recent years, exceeding the inflation rate in 2022. This is due to the high costs of production and feed. Exports of beef are relatively low and do not play a significant role in foreign trade. Moreover, according to the Food Security Strategy, the instability of feed supply due to drought could lead to a reduction in the livestock of households, which will affect the availability and accessibility of beef in the medium term (Government of the Republic of Moldova, 2022).

Table 5. Food balance for beef, 2016 – 2023, thousand tons.

	2016	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**
Production	9	7	8	8	8	8	10	4
Import	1	1	1	1	1	1	3	2
Export	3	2	1	1	0	0,8	1	0,6
Personal consumption of the population	7	6	8	8	9	8	9	8
Self-sufficiency level, %	*125,5*	*124,6*	*101,3*	*96,8*	*93,0*	*93,9*	*112,6*	*52,4*

Source: NBS

Between 2016 and 2023, pork production experienced a slight increase of only 1%. At the same time, the number of pigs in the period 2016 – 2024 decreased by 23%, from 453.2 thousand heads to 350.7 thousand heads. The level of self-sufficiency is below 100% during

the entire analysed period. However, considering that households supply a significant portion of the production, the demand for meat is met not only through local production but also through the import of pork. Exports of pork are insignificant, and in most years, nonexistent, mainly due to a lack of sufficient production capacities, as well as inadequate requirements for phytosanitary measures.

Table 6. Food balance for pork, 2016 – 2023, thousand tons.

	2016	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**
Production	73	62	66	65	63	61	64	74
Import	14	8	9	7	5	11	15	9
Export	0,1	0,0	0,0	0,0	0,0	0,0	0,1	0
Personal consumption of the population	86	70	75	72	67,5	71	73	80
Self-sufficiency level, %	*84,0*	*88,9*	*88,4*	*90,2*	*92,7*	*84,8*	*87,1*	*92,1*

Source: NBS

Poultry production has relatively stable values, standing at approximately 45,000 tons. In recent years, annual imports have been at a rate of about 25,000 tons. Exports of poultry, as for pork, are rather low or even non-existent. Even with additional imports, the level of self-sufficiency in poultry meat remains below 100%, currently standing at 68.1% in 2023. Therefore, the level of physical availability of poultry meat is assessed as partially satisfactory. However, for the population in rural areas, economic accessibility is more than satisfactory, due to the availability of poultry from their own production. Nevertheless, there is potential to accelerate the development of this branch in order to meet the population's consumption needs. To this end, improved technology for poultry farms is needed, as well as ensuring sufficient slaughtering capacities (Stratan *et al.*, 2024).

Table 7. Food balance for poultry, 2016 – 2023, thousand. tons.

	2016	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**
Production	53	45	45	43	45	40	45	49
Import	15	17	20	22	25	26	24	23
Export	0,0	0,0	0,3	1	1	1	0,3	0,1
Personal consumption of the population	68	62	65	65	68	67	68	72
Self-sufficiency level, %	*77,8*	*71,5*	*70,0*	*66,5*	*66,6*	*59,6*	*65,6*	*68,1*

Source: NBS

The supply of milk in the country faces significant issues due to several factors, including a low number of herds and insufficient production capacities. Milk production reaches an unsatisfactory level of 261 thousand. tons in 2023, compared to 504 thousand tons in 2016. Exports of milk are relatively low and do not significantly impact on the country's food security. The self-sufficiency level is in continuous decline, with no obvious signs of recovery. The price of milk in the same period increased by about 48%. According to the Strategy, accessibility is currently ensured by about 60-65% of local products and 35-40% of imports. The consumption of dairy products is highly sensitive to price, with price increases leading to a substantial decrease in consumption (Government of the Republic of Moldova, 2022). Thus, economic access to milk and dairy products can be assessed as

partially satisfactory. The lowest value of 60.1% was reached in 2023, indicating an assessment of the physical availability of milk as unsatisfactory.

Table 8. Food balance for milk, 2016 – 2023, thousand tons.

	2016	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**
Production	504	485	412	367	322	295	271	261
Import	99	134	146	162	150	173	172	171
Export	50	33	22	13	15	15	12	4
Personal consumption of the population	538	562	514	518	454	442	423	433
Self-sufficiency level, %	*90,5*	*83,8*	*78,0*	*69,6*	*69,5*	*66,0*	*63,5*	*60,1*

Source: NBS

When approaching the utilisation pillar of food security, food safety is among the first aspects that come to the fore. Compliance with food safety requirements by farmers, exporters, and governments can have a significant impact on foreign trade, specifically exports, as it acts as a technical barrier to trade (Ataman & Berhin, 2005; Jaffee & Henson, 2004). In the Republic of Moldova, in the context of harmonisation with the EU market requirements, safety aspects are still under development and consideration, especially for livestock products. Low exports of beef, pork, poultry, milk and eggs confirm this fact. Important steps in this direction have been taken, and as a result, since January 1st, 2025, Moldovan companies can export poultry to EU countries.

The stability pillar evaluated by Stratan et al. (2024) emphasises that for several major products, the level of stability assessed is satisfactory, including sunflower and beef. For corn, vegetables, pork, poultry, and milk, the level is partially satisfactory, while for wheat, it is unsatisfactory.

Conclusions

Ensuring food security in the Republic of Moldova, while balancing it with exports of agri-food products, is crucial for the country's economic development and stability. The Food Security Strategy for 2023-2030 aims to ensure physical and economic access to sufficient, safe, and nutritious food for all citizens, without compromising export activities.

When analysing the exports of vegetable and crop products in relation to ensuring food security, one can note that climate change is among the priority challenges that decision-makers have to deal with. In this regard, bans on exports may represent a temporary strategy for addressing a year with a significant loss in crop production, but they are not a generally accepted approach, as they may cause disruptions in foreign trade and contribute to increasing food security issues in other countries. The current levels of production do not necessitate a ban on exports of crop products as a measure, and such interventions are to be discouraged. To increase the integration of Moldovan vegetable products on the EU single market without affecting food security, it is necessary to enhance the quality of the products, support small and family farms, promote sustainable practices, and strengthen the supply chains. Moreover, risk management should be integrated into future agricultural policies as a response to climate change and other potential challenges for the Moldovan agricultural sector.

Regarding the livestock sector, considering the low levels of exports for all analysed products as well as limited production, the overall strategy is to promote sector development through investments in farm modernisation, providing training and current education for farmers, improving access to markets and financial tools, and focusing on quality assurance. These measures are intended not only to boost future export activities but also to secure the country's population by integrating the livestock sector into food security efforts.

By focusing on these areas, both for the vegetable and livestock sectors, the Republic of Moldova can enhance its food security and increase its export potential, thereby contributing to overall economic stability and growth.

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References

Ataman, A. M., Beghin, J.C. 2005. Global agricultural trade and developing countries. *The International Bank for Reconstruction and Development / The World Bank*. ISBN 0-8213-5863-4, 327 p.

Batool, S., Sheikh, M. 2024. Analysing the Role of Food Security, Agricultural Exports and Income Inequality in Shaping Economic Growth Trajectories in Developing Countries. *Journal of Contemporary Macroeconomic Issues*. June, 2024, Vol. 5, No.1, p. 91-106, DOI:10.5281/zenodo.11649780

Berry, E. M., Dernini, S., Burlingame, B., Meybeck, A., Conforti, P. 2015. Food security and sustainability: can one exist without the other? *Public Health Nutrition*, 18(13), 2293–2302. doi:10.1017/S136898001500021X

FAO, IFAD, UNICEF, WFP and WHO. 2024. The State of Food Security and Nutrition in the World 2024 – *Financing to end hunger, food insecurity and malnutrition in all its forms*. Rome. https://doi.org/10.4060/cd1254en

FAOa. 1996. Report of the World Food Summit. Rome. Retrieved from https://www.fao.org/4/w3548e/w3548e00.htm at 06.11.2024

FAOb. 1996. The State of Food and Agriculture. Retrieved from http://www.fao.org/3/w1358e/w1358e00.htm at 08.11.2024

Government of the Republic of Moldova. 2022. Food Security Strategy of the Republic of Moldova for the years 2023-2030. Government Decision no. 775/2022, Published: 13-01-2023 in the *Official Gazette* No. 5-8 art. 2

Government of the Republic of Moldova. 2023. National Strategy for Agricultural and Rural Development for the Years 2023-2030. GD no. 56 of 17.02.2023. Published: 06-04-2023 in the *Official Gazette* No. 117-118 art. 244

Guiné, R. P. F., Pato, M. L. J., Costa, C. A. D., Costa, D. V. T. A. D., Silva, P. B. C. D., Martinho, V. J. P. D. 2021. Food Security and Sustainability: Discussing the Four Pillars to Encompass

Other Dimensions. *Foods* (Basel, Switzerland), 10(11), 2732. https://doi.org/10.3390/foods10112732

Jaffee, S., Henson, S. 2004. Standards and Agro-Food Exports from Developing Countries: Rebalancing the Debate. *Policy Research Working Paper*; No.3348. World Bank, Washington, D.C.. http://hdl.handle.net/10986/14061

Kowalska, A., Budzyńska, A. & Białowąs, T. 2022. Food export restrictions during the COVID-19 pandemic: Real and potential effects on food security. *International Journal of Management and Economics, Sciendo*, vol. 58 no. 4, pp. 409-424. https://doi.org/10.2478/ijme-2022-0023

National Bureau of Statistics. 2025. Database, https://statistica.gov.md/ro/statistic_domains

Parliament of the Republic of Moldova. 2023. Decision No. 391 of 15.12.2023 on the approval of the National Security Strategy of the Republic of Moldova. Published: 17-01-2024 in the *Official Gazette* No. 17-19 art. 28

Staver, L., Erhan L. 2023. The evolving state of agri-food security in the Republic of Moldova - A review. *Scientific Papers Series Management, Economic Engineering in Agriculture and Rural Development*. 2023, volume 23, issue 2, 613-661. ISSN 2284-7995. Disponibil: https://managementjournal.usamv.ro/pdf/vol.23_2/volume_23_2_2023.pdf

Stratan, A., Lopotenco, V., Lucasenco, E. 2023. The interconnection model between the Republic of Moldova's food security and its agricultural products export. *Scientific Papers Series Management, Economic Engineering in Agriculture and Rural Development*. 2023, volume 23, issue 2, 681-689. ISSN 2284-7995, https://managementjournal.usamv.ro/pdf/vol.23_2/volume_23_2_2023.pdf.

Stratan, A., Lopotenco, V., Lucasenco, E., Staver, L. 2024. Studiu științific privind reziliența securității alimentare prin prisma comerțului exterior. Chișinău: TANAVIUS, 180 p. ISBN 978-9975-167-73-4.

Stratan, A., Lucasenco, E., Ceban, A. 2023. Moldovan agrifood trade potential in the framework of DCFTA – a path towards EU accession. *Annales Universitatis Apulensis Series Oeconomica*, 25(2), 2023, 132-144, https://newoeconomica.uab.ro/up/AUASO/articles/moldovan_agrifood_trade_potential_in_the_framework_of_dcfta_-_a_path_towards_eu_accession-article-663b14a15bcf1.pdf

UN Comtrade. 2025. Database, https://comtrade.un.org/

WITS. 2025. Database, https://wits.worldbank.org/