

AGRICULTURAL TRADE AND TRANSFORMATIONS: THE IMPACT OF MOLDOVA – EU TRADE AGREEMENT ON COMPETITIVENESS

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Abstract

In June 2014, the Republic of Moldova signed the Association Agreement with the European Union, a key element of which was the creation of a Deep and Comprehensive Free Trade Area (DCFTA). Thus, from September 2014 an important part of Moldovan agricultural products started to benefit from this agreement and full liberalization for both sides was presumed to be achieved by July 2016. Over last decade the trade value between the signing parties has doubled, while Moldova's exports of agricultural and agri-food products to the EU have tripled. This alleviates concerns regarding the Moldovan agricultural sector's ability to maintain competitiveness under conditions of eliminated protectionist barriers. This research aims to present export dynamics on the EU market of the main Moldovan agricultural products at the same time revealing the impact of the DCFTA on the competitiveness of these products applying the Net Export Index methodology. Secondary data on trade dynamics of various agricultural commodities was sourced from the UN Comtrade Database. Research results outline the reasons why certain products (e.g cereals, grapes, stone fruits) performed better on the European market, while others had a longer journey in reaching their success.

Key words: agricultural products, DCFTA, export, free trade, Net Export Index

INTRODUCTION

The year 2024 marked a decade since the Republic of Moldova and the European Union engaged in a free trade agreement. This milestone offers a suitable occasion to evaluate the economic transformations that have taken place, particularly in Moldova's agri-food trade sector. Prior to this agreement, Moldova maintained a highly open economy, with foreign trade constituting 96.31% of GDP in 2012. However, trade patterns were heavily influenced by historical dependencies, particularly with the Commonwealth of Independent States (CIS), notably Russia, a reliance that had proven economically and politically risky, as exemplified by the 2006 Russian embargo on Moldovan wines and fruits.

The global landscape of agri-food trade has undergone substantial transformations over the past decade. Various studies have documented these changes in specific regional contexts, highlights how structural adjustments, policy reforms, and external

demand dynamics influence trade patterns [2, 4, 7, 8, 9, 10]. Similar findings emerge from studies on the efficiency of European Union agri-food trade, which reveal significant variations in competitiveness and export market penetration across member states [9]. One important aspect of agri-food trade competitiveness is the ability to leverage comparative advantages in specific product categories. Some research highlights that market dynamics are significantly influenced by product differentiation, value chain efficiencies, and regulatory frameworks [8]. Moldova's experience with certain agricultural products exports aligns with these findings, as the country has emerged as a competitive exporter in niche markets. Similarly, trade patterns in non-traditional agricultural commodities, such as silk in the European Union, demonstrate the importance of market adaptation strategies in maintaining trade competitiveness[10].

Given these broader regional and global trends, this study aims to analyse Moldova's agricultural export competitiveness under the

Deep and Comprehensive Free Trade Area (DCFTA). While current research has extensively examined the macroeconomic and sectoral implications of DCFTA, our study seeks to complement this understanding by focusing on specific high-export-value agricultural commodities. Different research employs a range of trade performance indicators, including export-import dynamics, competitiveness indices, and price trends, to assess whether Moldovan agricultural products have successfully integrated into the European market or have faced significant trade barriers [2, 3, 4, 11].

This paper evaluates the impact of the DCFTA on Moldova's agricultural exports, assessing trade dynamics, competitiveness, and key factors influencing market integration.

By integrating insights from broader literature on European and global agri-food trade competitiveness, this study provides a more comprehensive contextualization of Moldova's trade experience. It also highlights key lessons learned that may be relevant for policymakers and industry stakeholders aiming to enhance Moldova's position in the international agri-food trade landscape.

MATERIALS AND METHODS

The study was based on the analysis of statistical data series on the international trade of the Republic of Moldova with agricultural products that had significant shares in the country's exports during the period 2011-2023. This series include data starting from 2011, thus capturing the last years preceding the conclusion of the DCFTA agreement allowing to have a more solid basis for comparison for subsequent developments, knowing that the agricultural output in Moldova can vary significantly from year to year depending on climatic conditions.

To ensure that the trend analysis captures data on relevant products and that the research does not omit any commodities that have undergone major developments, the first stage of the study focused on determining the top of the most exported products in 2013 (prior to the conclusion of the agreement) but also the

most recent year (2023) for which there are available valid statistical data. Admitting that the hostilities in Ukraine could have influenced the agricultural products market at European level, this topic is also presented for the year 2021, which preceded this intervention.

The second stage of the study includes the analysis of the performances for each commodity separately for the entire period 2011-2023 (on a biannual basis) considering a comprehensive list of indicators: export volume, trade balance, price trends, export growth rate compared to the baseline (year 2013 being considered as 100%), share of exports to the EU compared to total exports, and the evolution competitiveness level of the respective product on the EU market.

Since the EU is also a customs union, we admit that a significant part of trade within EU member countries may not be captured by international statistics. Therefore, the Net Export Index was considered as the most relevant indicator to determine competitiveness level as it is calculated based on trade figures between the Republic of Moldova and the EU in which case the records are more accurate due to necessity to fill-up customs declarations [13].

The Net Export Index (NEI) is calculated according to the formula below [5]:

$$NEI(ij) = \frac{X(ij)-M(ij)}{X(ij)+M(ij)} \dots \dots \dots (1)$$

where:

j denotes the evaluated commodity;

i designates the country (in our case Moldova);

X are the exports of the respective commodity from Moldova to EU and

M are the imports of the same commodity from EU to Moldova.

The Net Export Index can vary between -1 and 1, and a higher positive value pointing to a higher competitiveness of the product.

The main source of statistical data was the UN Comtrade Database [12] and National Bureau of Statistics [6].

RESULTS AND DISCUSSIONS

Analysing the structure of the agricultural sector in Moldova since 2012, it was noticed that throughout the entire period, crop production has dominated compared to animal production, the discrepancy between them only increasing over the years (about 60% to 40% in 2012 and 70% to 30% in 2023). During this period, crop production enjoyed a growth of 65% (1,659 million USD in 2023, vs. 989 million USD in 2012), while the increase in animal production was much more

modest, only 8% (670 million USD vs. 622 million USD) (BNS, 2024) [6]. The same trend is also followed by exports. So, animal products remained at low export levels, while crop products enjoyed a positive trend.

Analysing exports from structural point of view, we can primarily observe that those products that were best exported until the conclusion of the free trade agreement (see year 2013) would continue to dominate the top in recent years (2021 and 2023).

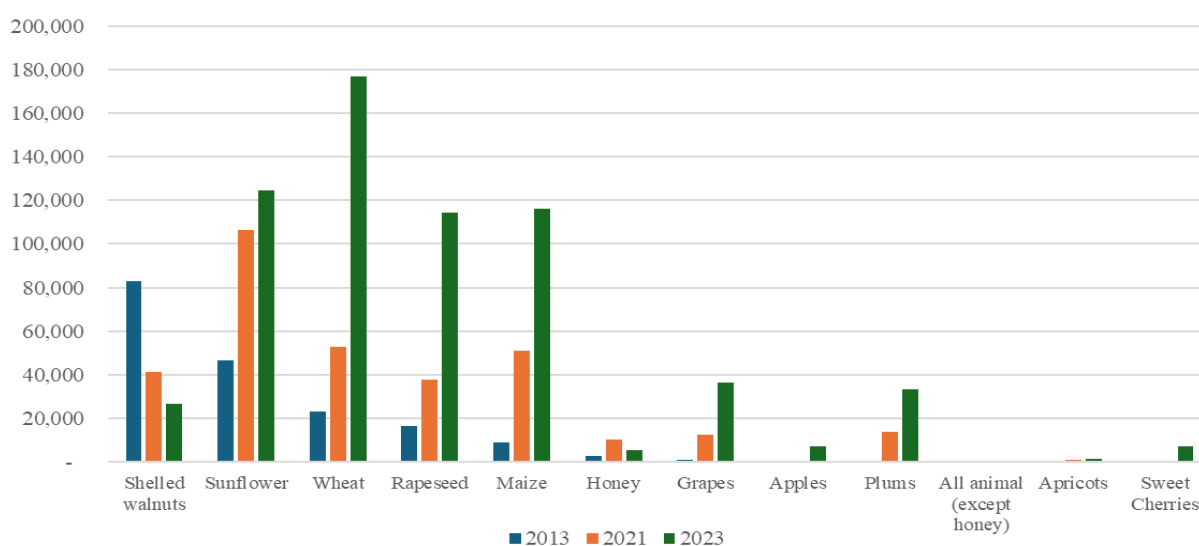


Fig. 1. Top of the most exported Moldovan agricultural products in the EU (million USD)
Source: elaborated by authors based on UN Comtrade Database, 2024 [12].

Most of the products that entered this top or enjoyed an increase in export to the EU, with the sole exception of shelled nuts, which will be analysed in more detail below.

Also, we can notice a dramatic increase of exports to EU for wheat, rapeseed and to a lesser extend of maize, grapes plums and sweet cherries in 2023 compared to 2021 the main cause for this being traced back to the war started by the Russian Federation in Ukraine.

Moldova had a remarkable increase of wheat exports to the EU in 2023 compared to the previous periods (Figure 1).

However, this is due mostly to interventionist measures, rather than economic ones.

On 1st of March 2022 the Moldovan Government imposed a ban on wheat exports to guarantee enough domestic supply for this strategic product in context of the Russian invasion of Ukraine that just had started.

As result the country's storage capacities went full up to their maximum of about 720thousand tons [1].

Next year, being pressed by the local growers, this ban was lifted, exports soared and in 2023 the wheat became the most exported agricultural product from Moldova to the EU market.

At the same time, having a Net Export Index close to 1, wheat can be considered as one of the most competitive Moldovan products on the EU market (Table 1).

Generally, sunflower seeds are the most exported agricultural product from the Republic of Moldova, however they had considerable decrease in 2023. The main reason for this rooted in abnormally increased exports of the product from Ukraine in 2022 (30 times more compared to 2021). Considering that this trend continued in 2023, EU being the main destination of these

exports, the market became oversaturated and as consequence prices went down in 2023,

what affected the exports from Moldova (Table 2).

Table 1. Dynamics of the main indicators of trade with the EU for Moldovan wheat compared to total country's exports of the product

Year	Export, th. USD	Export, tons	Average export price, USD/kg	Import, th. USD	Import, tons	Average import price, USD/kg	Trade balance, th. USD	Net Export Index	Export increase rate	EU export share in total	Total export, th. USD
2011	9,302	36,383	0.26	30	104	0.29	9,271	0.99	40%	54%	17,362
2013	23,107	101,092	0.23	223	347	0.64	22,884	0.98	100%	35%	65,879
2015	23,345	136,564	0.17	517	838	0.62	22,829	0.96	101%	44%	52,491
2017	75,863	483,168	0.16	599	1,032	0.58	75,264	0.98	328%	72%	105,238
2019	43,515	249,366	0.17	304	454	0.67	43,210	0.99	188%	45%	97,645
2021	52,946	214,537	0.25	579	604	0.96	52,368	0.98	229%	25%	207,713
2023	176,769	850,747	0.21	496	417	1.19	176,273	0.99	765%	79%	223,764

Source: Authors' research, based on UN Comtrade Database, 2024 [12].

Still, there is a certainly positive trend for Moldova considering that the export value in 2023 was almost tree times higher compared to 2013 (the year that preceded the start of the implementation of DCFTA). Unfortunately, the country remains dependent on imported seeding, that is purchased largely from the

EU. This is reflected in the table above showing the average import prices per kg, as well as in the NEI value, once both the product to be processed into oil and the one traded as seeding material were analysed together (as UN Comtrade Database displays these statistics under the same code) [12].

Table 2. Dynamics of the main indicators of trade with the EU for Moldovan sunflower seeds compared to total country's exports of the product

Year	Export, th. USD	Export, tons	Average export price, USD/kg	Import, th. USD	Import, tons	Average import price, USD/kg	Trade balance, th. USD	Net Export Index	Export increase rate	EU export share in total	Total export, th. USD
2011	66,037	120,101	0.55	3,138	384	8.17	62,899	0.91	142%	53%	123,720
2013	46,431	94,014	0.49	6,658	552	12.06	39,773	0.75	100%	34%	136,153
2015	121,994	318,395	0.38	5,797	463	12.51	116,198	0.91	263%	85%	143,692
2017	137,699	366,798	0.38	18,150	1,508	12.03	119,549	0.77	297%	70%	197,817
2019	111,146	290,477	0.38	19,733	3,054	6.46	91,414	0.70	239%	52%	213,988
2021	106,576	164,570	0.65	18,238	1,519	12.00	88,338	0.71	230%	54%	196,816
2023	124,379	256,499	0.48	30,529	2,175	14.04	93,850	0.61	268%	90%	138,739

Source: Authors' research, based on UN Comtrade Database, 2024 [12].

Maize (corn) is another product where Moldova succeeded very well on the European market, if to consider 12 times increase of exports in 2023 comparing to 2013. However, it looks like the country must boost investments in irrigation solutions for this crop, as well as work on elaboration on seedling material that can perform better in condition of shortage of precipitation. As Moldova experienced a severe drought in 2020 the output was very low in that year and

these affected the export volume, and the NEI went to the lowest figure (0.23) for the analysed period (Table 3).

This drought was one of the most severe in the past two decades, causing a significant drop in agricultural production by almost 30%. Besides maize, the drought also affected crops like wheat and rapeseeds. It is worth noting that Moldovan rapeseed is among the products with the highest competitive index (NEI was 0.92 in 2023) for the EU, which is

practically the only export destination (Table 4).

Table 3. Dynamics of the main indicators of trade with the EU for Moldovan maize compared to total country's exports of the product

Year	Export, th. USD	Export, tons	Average export price, USD/kg	Import, th. USD	Import, tons	Average import price, USD/kg	Trade balance, th. USD	Net Export Index	Export increase rate	EU export share in total	Total export, th. USD
2011	23,790	86,309	0.28	1,663	492	3.38	22,127	0.87	263%	61%	38,817
2013	9,043	42,064	0.21	5,071	1,143	4.44	3,972	0.28	100%	32%	28,080
2015	31,119	206,584	0.15	7,115	1,564	4.55	24,004	0.63	344%	71%	43,904
2017	25,021	154,917	0.16	9,626	2,169	4.44	15,395	0.44	277%	47%	53,655
2019	49,939	313,387	0.16	14,104	3,272	4.31	35,835	0.56	552%	40%	125,150
2021	50,983	204,909	0.25	15,746	3,213	4.90	35,238	0.53	564%	40%	127,207
2023	116,321	505,946	0.23	18,242	2,952	6.18	98,079	0.73	1,286%	81%	144,089

Source: Authors' research, based on UN Comtrade Database, 2024 [12].

Table 4. Dynamics of the main indicators of trade with the EU for Moldovan rapeseed compared to total country's exports of the product

Year	Export, th. USD	Export, tons	Average export price, USD/kg	Import, th. USD	Import, tons	Average import price, USD/kg	Trade balance, th. USD	Net Export Index	Export increase rate	EU export share in total	Total export, th. USD
2011	27,747	44,191	0.63	1,955	141	13.87	25,792	0.87	169%	85%	32,544
2013	16,432	35,007	0.47	1,308	90	14.48	15,124	0.85	100%	79%	20,704
2015	5,411	13,044	0.41	897	81	11.05	4,514	0.72	33%	72%	7,517
2017	29,534	76,554	0.39	2,661	176	15.10	26,873	0.83	180%	90%	32,840
2019	31,661	78,135	0.41	3,317	211	15.69	28,344	0.81	193%	94%	33,779
2021	37,935	62,575	0.61	2,598	180	14.46	35,337	0.87	231%	75%	50,802
2023	114,363	263,752	0.43	5,044	262	19.29	109,319	0.92	696%	98%	116,565

Source: Authors' research, based on UN Comtrade Database, 2024 [12].

The transition to hyper-intensive production technologies, huge investments in post-harvest and storage equipment have created the necessary infrastructure in the country to be able to supply fresh apples throughout the entire year. If 15-20 years ago it was common to have apple imports from Poland or other EU countries during winter or spring, currently the Republic of Moldova is more than self-sufficient in this regard and the country became a net exporter.

The embargo imposed by the Russian Federation in 2014 towards imports from Moldova, Ukraine and EU had a dramatic impact on Moldovan exports in the next periods. However, considering that the ban stayed for the rest of the competitors, while certain Moldovan exporters were granted access to the Russian market, where prices on condition of deficit went considerably up, Moldovan apple sector registered a boom

starting from 2018. On the other hand, this situation did also a bad service for the sector, as apples became the fruit with the least diversified markets, 95% to 99% of all exports being made to Russia. As result, the full scale war in the region had a shocking effect on exports, halving them, as transportation to traditional clients became extremely expensive. Exports to the EU rose to 11% of the total in 2023, but the situation in the sector remains critical, especially considering that apples have always been the main export fruit for the Republic of Moldova (Table 5).

By opposite, going through similar kind of transformations with the regards of production technologies and postharvest infrastructure, grapes enjoyed for a much better market diversification. As a result, the war in Ukraine had a minor impact on the sector, and the EU taking over 55% of all exports in 2023 could replace some of the lost markets, especially

given a compensating effect of the increase in the average price per kg (Table 6).

Table 5. Dynamics of the main indicators of trade with the EU for Moldovan apples compared to total country's exports of the product

Year	Export, th. USD	Export, tons	Average export price, USD/kg	Import, th. USD	Import, tons	Average import price, USD/kg	Trade balance, th. USD	Net Export Index	Export increase rate	EU export share in total	Total export, th. USD
2011	541	2,968	0.18	1,995	2,101	0.95	- 1,454	- 0.57	114%	1%	57,768
2013	474	3,312	0.14	706	732	0.96	- 231	- 0.20	100%	1%	47,557
2015	248	746	0.33	381	935	0.41	- 133	- 0.21	52%	1%	17,965
2017	2,064	6,330	0.33	365	631	0.58	1,699	0.70	435%	4%	46,122
2019	784	4,536	0.17	604	1,107	0.55	181	0.13	165%	1%	53,775
2021	382	1,004	0.38	617	1,065	0.58	- 235	- 0.23	81%	0%	87,616
2023	6,963	12,712	0.55	160	237	0.67	6,803	0.96	1,468%	11%	62,601

Source: Authors' research, based on UN Comtrade Database, 2024 [12].

Table 6. Dynamics of the main indicators of trade with the EU for Moldovan grapes compared to total country's exports of the product

Year	Export, th. USD	Export, tons	Average export price, USD/kg	Import, th. USD	Import, tons	Average import price, USD/kg	Trade balance, th. USD	Net Export Index	Export increase rate	EU export share in total	Total export, th. USD
2011	971	2,099	0.46	189	123	1.53	783	0.67	115%	6%	17,554
2013	846	1,786	0.47	98	55	1.78	748	0.79	100%	5%	17,017
2015	5,766	9,810	0.59	29	27	1.11	5,737	0.99	681%	34%	16,779
2017	15,355	19,951	0.77	71	41	1.72	15,284	0.99	1,814%	40%	38,626
2019	12,616	20,339	0.62	69	31	2.26	12,546	0.99	1,491%	43%	29,665
2021	12,646	16,670	0.76	158	58	2.71	12,488	0.98	1,494%	35%	36,078
2023	36,221	32,730	1.11	294	92	3.21	35,928	0.98	4,280%	55%	66,275

Source: Authors' research, based on UN Comtrade Database, 2024 [12].

Fresh plums represent another successful example of market penetration. For plums export figures to EU were rather modest before DCFTA (Table 7). Despite this low starting point, plums became the most exported fruit in 2023 (in quantitative terms) and currently Moldova is considered as one of the main sources of fresh plum imports from outside the EU.

Considering favourable growing conditions in Moldova and the fact that comparing to other fruits stone fruits are more labour intensive, especially during the harvesting period, many market players consider these products as being the new stars (according to BCG matrix) of Moldovan agriculture.

Sweet cherries and apricot exports almost inexistent 5 years ago, started to boom reaching respectively to over USD 7.2 millions and USD 1.2 millions in 2023.

Currently about a half of these fruits are exported to EU and in the next years they expect that the share of Moldovan cherries and apricots on the European market will be as significant as the one of plums.

Stone fruits certainly need special attention, once the growing export figures are also complemented by a sizeable positive price trend.

On the other hand, the walnut sector, however, seems to be facing an opposite trend, with exports declining after peaking in 2014. The main cause of this decrease residue in increasing labour costs in the country, which has influenced the business model. Traditionally, besides its considerable own production, Moldova imported walnuts in shell and after shelling re-exported the already processed product, which explains why the NEI for walnuts in shell was being negative, while the NEI for shelled walnuts was

strongly positive. Currently, this type of business is losing popularity along with the diminishing labour cost advantage. This effect is also multiplied by the decreasing trend in the average price for both shelled and in shell walnuts (Tables 8 and 9).

Table 7. Dynamics of the main indicators of trade with the EU for Moldovan plums compared to total country's exports of the product

Year	Export, th. USD	Export, tons	Average export price, USD/kg	Import, th. USD	Import, tons	Average import price, USD/kg	Trade balance, th. USD	Net Export Index	Export increase rate	EU export share in total	Total export, th. USD
2011	-	-	-	400	484	0.83	- 400	- 1.00	0%	0%	5,116
2013	134	399	0.34	86	98	0.88	48	0.22	100%	2%	7,906
2015	2,025	6,004	0.34	2	1	2.68	2,023	1.00	1,512%	39%	5,182
2017	9,122	19,264	0.47	18	6	2.84	9,104	1.00	6,811%	52%	17,436
2019	6,097	17,588	0.35	141	147	0.96	5,956	0.95	4,552%	40%	15,218
2021	14,033	25,806	0.54	12	5	2.22	14,021	1.00	10,477%	61%	23,030
2023	33,108	55,574	0.60	220	146	1.50	32,888	0.99	24,720%	81%	40,805

Source: Authors' research, based on UN Comtrade Database, 2024 [12].

Table 8. Dynamics of the main indicators of trade with the EU for Moldovan shelled walnuts compared to total country's exports of the product

Year	Export, th. USD	Export, tons	Average export price, USD/kg	Import, th. USD	Import, tons	Average import price, USD/kg	Trade balance, th. USD	Net Export Index	Export increase rate	EU export share in total	Total export, th. USD
2011	54,518	6,788	8.03	0	0	24.40	54,517	1.00	66%	79%	68,824
2013	83,045	10,064	8.25	86	20	4.27	82,959	1.00	100%	87%	95,596
2015	81,815	10,985	7.45	0	0	19.25	81,815	1.00	99%	83%	98,777
2017	84,379	11,762	7.17	0	0	10.07	84,379	1.00	102%	88%	95,914
2019	73,876	13,222	5.59	2	0	7.56	73,874	1.00	89%	85%	86,606
2021	41,194	6,924	5.95	8	1	9.85	41,186	1.00	50%	83%	49,853
2023	26,642	5,506	4.84	235	78	3.01	26,407	0.98	32%	75%	35,667

Source: Authors' research, based on UN Comtrade Database, 2024 [12].

Table 9. Dynamics of the main indicators of trade with the EU for Moldovan in shell walnuts compared to total country's exports of the product

Year	Export, th. USD	Export, tons	Average export price, USD/kg	Import, th. USD	Import, tons	Average import price, USD/kg	Trade balance, th. USD	Net Export Index	Export increase rate	EU export share in total	Total export, th. USD
2011	1,421	573	2.48	3,831	2,186	1.75	- 2,410	- 0.46	141%	71%	2,011
2013	1,004	415	2.42	4,543	2,277	1.99	- 3,539	- 0.64	100%	54%	1,863
2015	169	92	1.83	6,621	2,610	2.54	- 6,452	- 0.95	17%	10%	1,659
2017	648	314	2.06	7,106	2,900	2.45	- 6,457	- 0.83	65%	31%	2,083
2019	445	324	1.37	6,641	2,873	2.31	- 6,196	- 0.87	44%	14%	3,179
2021	191	120	1.60	4,465	2,093	2.13	- 4,275	- 0.92	19%	19%	984
2023	726	585	1.24	2,671	1,520	1.76	- 1,945	- 0.57	72%	19%	3,859

Source: Authors' research, based on UN Comtrade Database, 2024 [12].

Honey is the only product of animal origin where Moldova stood competitive not only on the EU market, but in general. Unfortunately, beekeeping is still very much dependant on factors that are less possible to be controlled internally, such as weather conditions and global market prices. However, despite fluctuations, the evolution of NEI shows that

honey remains competitive on the EU market and the export figures show the positive effect of DCFTA as exports after this were

continuously higher than before signing of this agreement (Table 10).

Table 10. Dynamics of the main indicators of trade with the EU for Moldovan honey compared to total country's exports of the product

Year	Export, th. USD	Export, tons	Average export price, USD/kg	Import, th. USD	Import, tons	Average import price, USD/kg	Trade balance, th. USD	Net Export Index	Export increase rate	EU export share in total	Total export, th. USD
2011	606	181	3.35	6	1	10.66	601	0.98	22%	49%	1
2013	2,811	872	3.22	5	0	10.83	2,807	1.00	100%	86%	3
2015	8,587	2,592	3.31	9	1	6.94	8,577	1.00	305%	90%	10
2017	13,477	4,800	2.81	4	1	5.65	13,473	1.00	479%	96%	14
2019	11,235	3,766	2.98	17	2	7.88	11,218	1.00	400%	97%	12
2021	10,336	2,729	3.79	33	4	7.82	10,303	0.99	368%	78%	13
2023	5,486	1,585	3.46	47	14	3.42	5,438	0.98	195%	91%	6

Source: Authors' research, based on UN Comtrade Database, 2024 [12].

Unfortunately, the rest of the animal sector of the country struggles to find its niche on the global market. Even cumulated, the exports to EU of the products of animal origin, except honey, are far below the figures for any other crops considered in this research. Primarily this is due to strict EU sanitary and phytosanitary standards that Moldova found it challenging to meet consistently. Still, there are signs the things can improve. For instance, due to sufficient progress in the area, Moldovan poultry meat gained access to the EU market starting from 2024.

CONCLUSIONS

During its existence as an independent state, the Republic of Moldova has always faced various risks characteristic of small economies. Most often, these were determined by the dependence on a limited number of markets, both for exports of products from the country, especially agrifood products, and for imports, in this case energy resources. The dependence on a limited number of markets also had an amplifying effect on political risks and circumstances as embargoes and war in the region represented serious challenges for the country.

Since a small economy like Moldova cannot resist globalization trends, the only realistic solution for the country is to integrate into a larger economy like the EU. The first step in

this direction was the signing of the DCFTA agreement. The analysis carried out in this study reveals that this was the right decision, even though there was a risk that some of Moldovan agricultural products would not be able to cope with competition in a liberalised trade. The figures show that the products that were most exported until the conclusion of the agreement remained in the top exports to the EU in 2023, and the level of competitiveness calculated based on the NEI was not affected in any way. It is remarkable that, apart from shelled walnuts, the analysed agricultural products registered significant increase in value of exports to the EU, some product categories registering notable successes (cereals, fruits). It is important that exports of value-added products such as fruits and table grapes are increasing.

Stone fruits have all the prerequisites to become the new cash cow for the Moldovan agricultural sector. However, this sector needs investments, especially in post-harvest infrastructure (hydrocooling, sorting, packaging lines), but also at the area of international marketing, because with exception of plums the country still has to confirm as genuine supplier at the European level. At the same time, since this category of products is extremely perishable, they require as little handling as possible. Thus, Moldovan producers must be able to offer packaging solutions for the final product that meet the

requirements of the most diverse segments of export markets, without need for any further manipulation.

Market diversification is another extremely important aspect to be considered by Moldovan exporters. Unfortunately, the hard lesson offered to winemakers in the mid-2000s was not convincing enough for those involved in the apple business. Being excessively dependent on the Russian market, apples exporters from Moldova had to learn from their own mistake in 2022 once the export routes to Russia became almost inaccessible because of the war in Ukraine.

To maintain and increase its competitiveness the country must develop its own potential to produce high quality certified seedling materials. This might be an opportunity for the main field crops, as well as for orchards considering that Moldova imports seedling materials for multiannual plantations valued to about USD4 mil annually and is still very much dependent on western breeding companies, which unfortunately do not always consider the specifics of climatic conditions in the country.

The animal sector necessitates substantial attention to enhance its competitiveness. The sector is too small yet, and there is no economy of scale that could make the products more competitive. Honey is the sole product successful on the EU market, however the apicultural sector also requires better conditions for its sustainable development, particularly concerning the establishment of adequate nectar sources to support bees during drought years. In this context, reforestation efforts across the country would be highly beneficial.

Low labour costs based not on the high productivity of this factor, but on low wages cannot provide a sustainable competitiveness. An eloquent example in this regard is the decline of the business based on the import of walnuts in shell to benefit from the cheap labour in the country that was used for shelling, with the purpose of re-exporting of the already processed product. The only way to keep labour costs low still ensuring decent wages, is to increase labour productivity. A solution with a noticeable impact in this

regard would be investments in equipment that would have a multiplication effect for the labour factor.

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