

MOLDOVAN AGRIFOOD TRADE POTENTIAL IN THE FRAMEWORK OF DCFTA – A PATH TOWARDS EU ACCESSION

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Abstract. *The agri-food trade of the Republic of Moldova plays an important role in the total trade of the country, with a share of about 45% in the total exported goods and 14% in imports (2021). The trade policy of the Republic of Moldova is focused on development of strong trade relations with EU countries in the framework of DCFTA and geographical diversification of the agri-food exports to other countries. The agri-food trade by regional country groups has evolved during 2014 - 2021, being noticed certain switches of export direction from one group of countries to another, mainly in the favor of EU. This change of trade pattern is a natural one, resulting from the DCFTA agreement, thus increasing the diversity of Moldovan agri-food products, a better quality and reach of new markets. The aim of the paper is to explore the Moldovan agri-food products' export potential to EU in the new context of a candidate state. The trade values of the commodity groups 1-24 have been analyzed, also pointing to the most competitive groups of products on the EU market by using the Revealed Comparative Advantage indicator. A quantitative and qualitative analysis has been performed while observing the trade data at the level of imports and exports for the period 2014 – 2021. As a result, a series of recommendations have been provided in order to increase the competitiveness of Moldovan agri-food products in the framework of the EU future accession.*

Keywords: *agri-food trade, Moldova, EU accession, trade potential*

JEL codes: Q17, F13

Introduction

The agri-food sector of the Republic of Moldova plays a significant role in the growth of the national economy, contributing with about 10% to the GDP of the country. The most recent crisis that hinder the development of the sector like adverse climate conditions, war in Ukraine, Russian embargo on Moldovan fruits, increased prices for inputs, etc. contribute negatively to the economic growth, and therefore, must be overcome by adjusting the agricultural policies to the new realities, especially in the context of the path towards EU accession.

International trade can play an important role in promoting economic growth through the specialization of each country in producing the products in which it has a comparative advantage and by transferring the resources among the different countries (Belloumi, Alshehry, 2020). The Moldovan agri-food trade has been changing the vector since the DCFTA, being now focused on the EU market and other countries and less on the CIS countries market.

The trade with agri-food products of the Republic of Moldova has been in view of different scientists and institutions from the country (MIEPO, 2015; Savva, 2015; Stratan, 2017; Lucasenco,

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Ceban, 2020; Cimpoiu, Gherman, 2016). Competitiveness of the foreign trade was foreseen through Revealed Comparative Advantage (RCA) by (Lucasenco, 2021; Cimpoiu, Sarbu, 2020). Nevertheless, there are still few studies and analysis on the potential of some of the most important agri-food products to be valorized on the EU market in the framework of the DCFTA and the tariff quotas established.

The paper aims to explore the Moldovan agri-food products' export potential to EU in the new context of a candidate state, by assessing the competitiveness of the agri-food products by using the RCA indicators and by arguing on the increase of the tariff quotas for a series of products in the framework of the current DCFTA with EU.

Data sources and methodology

The content of the given paper is based on the analysis of data on trade, for the period 2014 – 2021, provided by the UN Comtrade database, World Integrated Trade Solutions database and the National Bureau of Statistics database. At the same time, a series of other data resources have been accessed and analyzed in order to present the future potential of trade with EU: official web sites of the Ministry of Economic Development and Digitalization of the Republic of Moldova and DCFTA in Moldova official web site.

The HS-12 codes 1 to 24 have (agri-food products) have been used for the analysis performance. Taking into account the general and complex context of the researched theme, the 2 digits aggregation level has been selected for analysis. Although it is recommended to use some additional agri-food commodity codes (i.e. 290543, 290544, 3502, 3503, 4101, 5001, 5302, etc.), taking into account that share in the total agri-food trade of the Republic of Moldova is less than 0,1%, they were not taken into consideration.

The data processing and exemplification takes place as a result of using statistical analysis, comparative analysis and the Revealed Comparative Advantage (RCA) indicator.

The formula used for calculation of RCA is the following:

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

where, X represents exports, i – a country, j – a commodity or an industry, t – a set of commodities or industries, and n – a set of countries (Balassa, 1965). If $RCA > 1$, it denotes a comparative advantage, for example: the sector in which the country is relatively specialized in the terms of exports (Moroz et al, 2011).

Results and discussios

During 2014 – 2021, the total exports of Moldovan goods experienced an important increase from 2339.5 mil. USD to 3144.5 mil. USD. Nevertheless, during this period, some diminishes in export values has been also observed. Decreases in the growing trend of the total exports from 2015 and 2020 were due to various factors, like drought, which affected the agricultural sector capacities, devaluation of the national currency and the Covid-19 pandemic (Stratan, Lucasenco, 2022). As for imports, the figures reached 7176.8 mil. USD in 2021, increasing from 5317.0 mil. USD in 2014. The general trade balance of the total trade with goods of the Republic of Moldova has been negative during the above-mentioned period, with an important decline in 2021 (-4032.36 mil. USD).

EU countries hold the highest shares of total exported goods of Moldova – 61% in 2021, being followed by other countries – 24.1% and CIS countries with 14.8%. During 2014 – 2021, the shares hold by EU increased from 53.3% to 61%, other countries – from 15.3% to 24.1%, while CIS country group diminished from 31.4% to 14.8%. With respect to imports, EU is also leading with 43.9% of total imports in 2021 (48.3% in 2014), followed by other countries with 29.6% in 2021 (24.5% in 2014) and CIS with 26.6% in 2021 (27.3% in 2014) (Figure no. 1).

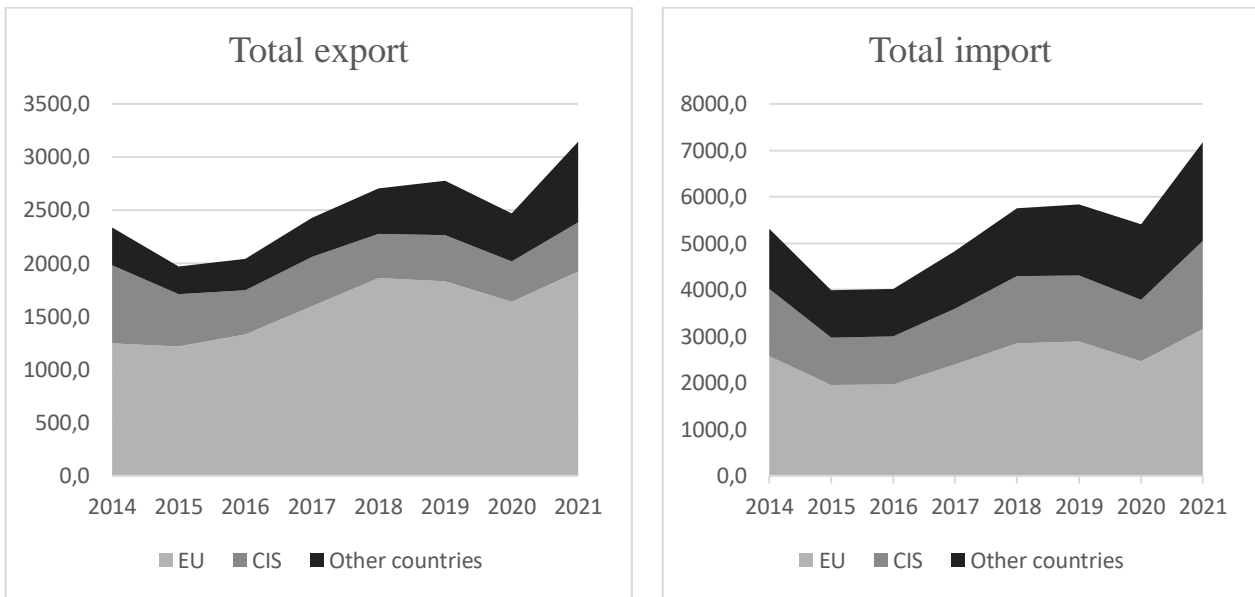


Figure no. 1- Foreign trade with goods of the Republic of Moldova by country groups, 2014 – 2021, mil. USD

Source: developed by authors based on National Bureau of Statistics database, 2022

The agri-food trade plays an important role in the total trade of the Republic of Moldova. Agri-food products hold an impressive share in the total exported products (Ceban, 2022). The share of agri-food exports in total exports of Moldovan goods reached 45.7% in 2021. As for the imports, having a high self-sufficiency level for such commodities like cereals (wheat, maize), technical crops (sunflower seeds), leguminous crops, fruits (apples, plums, nuts) dried fruits, etc. and less for vegetables and meat products, the share of agri-food imports in the total Moldovan imports accounted for about 14.1% in 2021.

The agri-food trade by regional country groups has evolved since 2010, being noticed certain switches of export direction from one group of countries to another (Lucasenco, Ceban, 2022). In 2021, the agri-food export to EU increased with about 47% compared to 2014, to other countries – with about 2 times, and with CIS countries – decreased with almost 30%. The share of agri-food exports to EU in 2021 in the total exported agri-food products accounted for 45.2% (41.4% in 2014), to other countries – 37.0% (24.0% in 2014) and to CIS – 17.8% (34.5% in 2014 and 53.9% in 2010). At the same time, in 2021, the agri-food imports from EU increased from 270 mil. USD in 2014 to 451 mil. USD, from other countries – from 164.8 mil. USD to 211.0 mil. USD, and from CIS countries – from 283.7 mil. USD to 348.2 mil. USD. The share of agri-food imports from EU in 2021 in the total imported agri-food products accounted for 44.6% (37,6% in 2014), from other countries – 20,9% (22,9% in 2014) and from CIS – 34,5% (39,4% in 2014) (Figure no. 2).

Overall, during the analysed period, the agri-food trade balance is positive, with a significant increase in 2021 (+425,7 mil. USD).

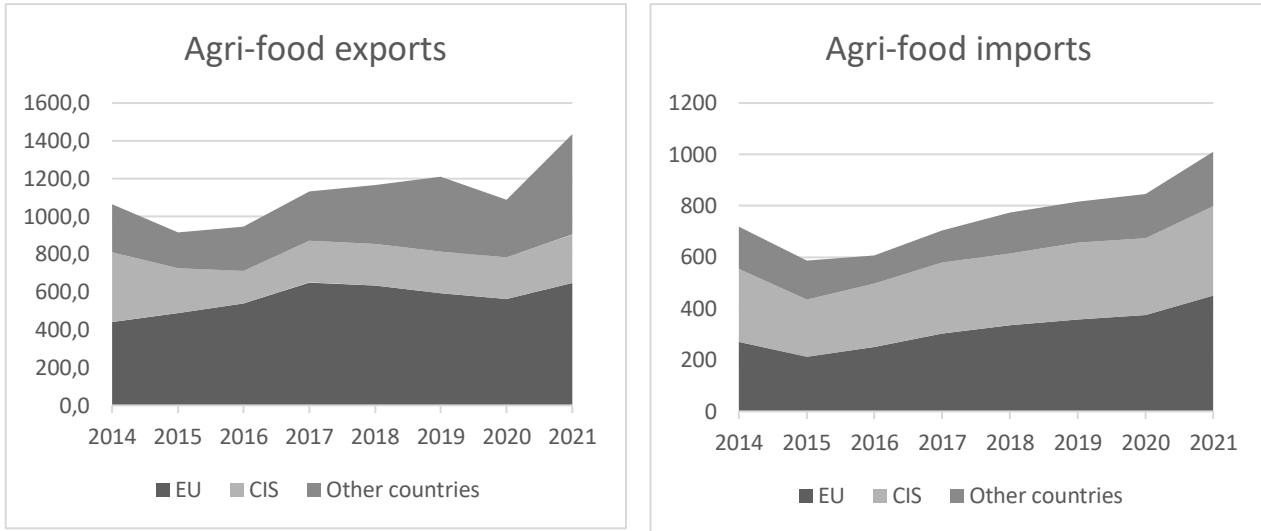


Figure no. 2 - Foreign trade with agri-food products of the Republic of Moldova by country groups, 2014 – 2021, mil. USD

Source: developed by authors based on National Bureau of Statistics database, 2022

The changes in leading export partner, in terms of country groups, from CIS to EU has occurred as a result of the liberalization of trade with EU through DCFTA from 2014. It allowed the Moldovan agri-food products to access the EU market as a result of an enhance quality of production, compliance with EU safety requirements, and diversification of production.

In 2021, about 33% of Moldovan exports to EU were of agri-food origin. 55% of exported agri-food products to EU are or vegetal origin, 26.8% - food and beverage industry, 16.4% - fats and oils and only 1.6% - live animals and products of livestock origin (Figure no. 3). If in the export structure, over the years, there is an obvious counterbalance of products of vegetal origin and food and beverage industry, then in the imports structure, three out of four main agri-food commodity groups are closer to each other: food and beverage industry – 44.8% in 2021, products of vegetal origin – 27.5%, live animals and products of livestock origin – 25.9% and fats and oils – 1.7%.

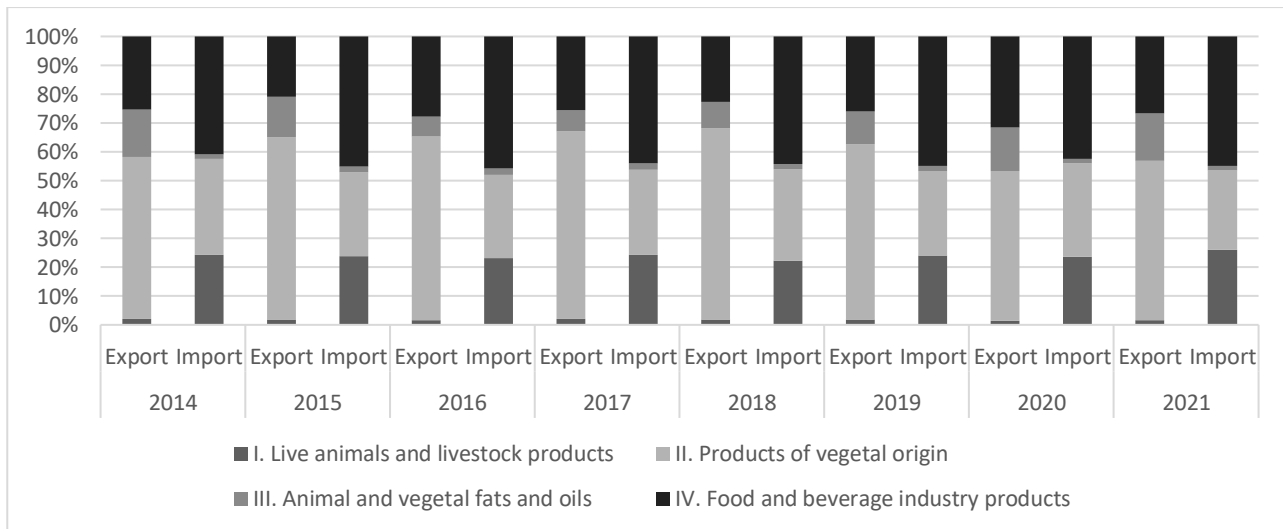


Figure no. 3 - Agri-food trade with EU by agri-food main commodity groups, 2014 – 2021, %

Source: developed by authors based on National Bureau of Statistics database, 2022

Out of the first agri-food commodity group Live animals and products of livestock origin, export to EU is based on sub-group 04. Dairy produce; birds' eggs; honey, with a share of 97.9% in this specific commodity group.

In the second agri-food commodity group Products of vegetal origin, the highest shares are hold by sub-gups 12. Oil seeds and oleaginous fruits – 43.2% in 2021, 10. Cereals – 32.2% and 08. Edible fruits and nuts – 23% (Figure no. 4).

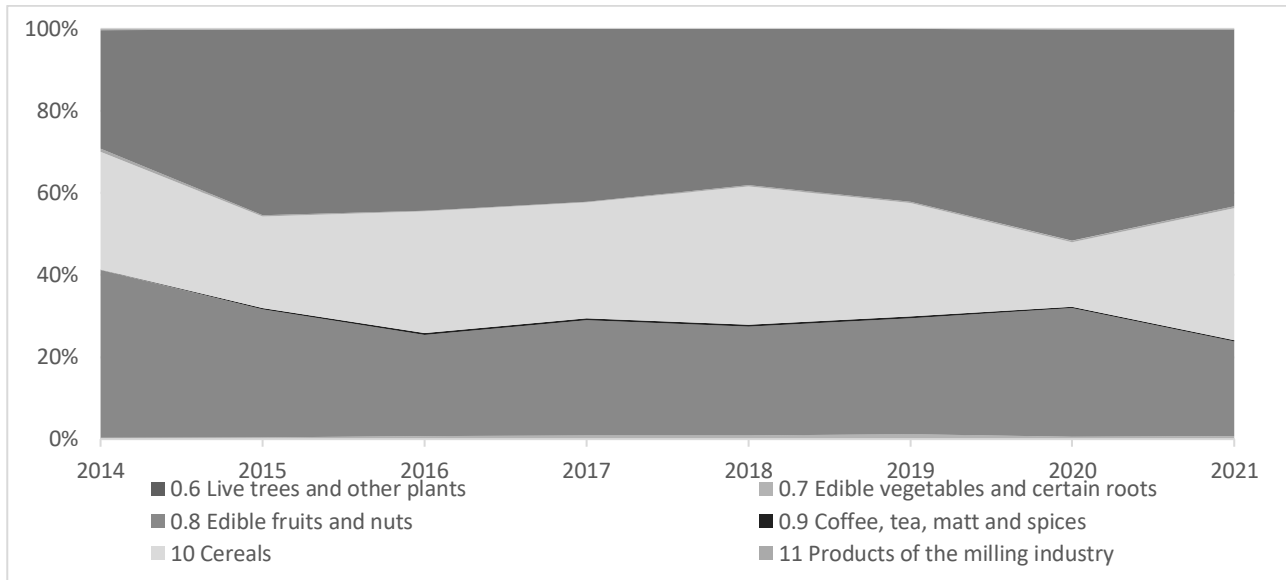


Figure no. 4 - Shares of exported agri-food products from the commodity group Products of vegetal origin, 2014 – 2021, %

Source: developed by authors based on National Bureau of Statistics database, 2022

In the fourth agri-food commodity group Food and beverage industry products, the highest shares are hold by 22. Beverages, spirits and vinegar – 47.6% in 2021 and 20. Preparations of vegetables and fruits – 26.8%. These two large groups are followed by 19. Preparations of cereals, flour – 9.1% and 17. Sugars and sugar confectionery – 8.5% (Figure no. 5).

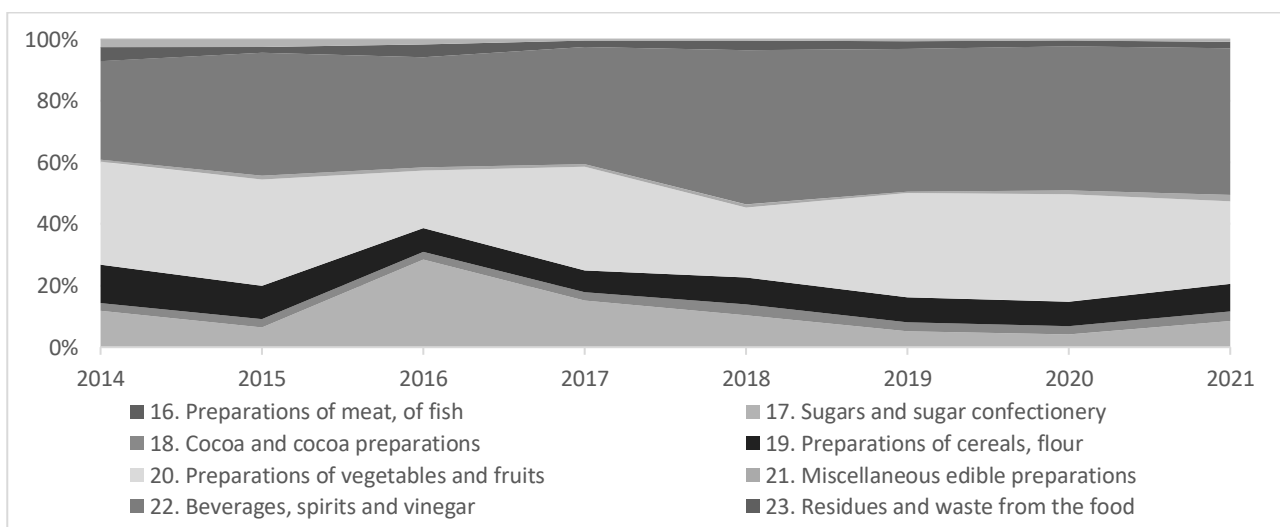


Figure no. 5 -Shares of exported agri-food products from the commodity group Food and beverage industry products, 2014 – 2021, %

Source: developed by authors based on National Bureau of Statistics database, 2022

On the EU market, a series of Moldovan agri-food products have an important degree of competitiveness. This assessment has been made based on the use of the RCA indicator with respect to EU market. Therefore, during 2014 – 2021, the average RCA values have been divided into four specific groups, namely: high competitive degree (Oil seeds and oleaginous fruits; Edible fruits and nuts; Vegetable plaiting materials; Cereals; Animal or vegetable fats and oils), high to moderate competitive degree (Sugars and sugar confectionery, Preparations of vegetables and fruits, Beverages, spirits and vinegar, Residues and waste from the food, Live animals; animal products, Tobacco and manufactured tobacco), moderate to low competitive degree (Edible vegetables and certain roots, Dairy produce; birds' eggs; honey, Preparations of cereals, flour, Cocoa and cocoa preparations) and low competitive degree (Meat and edible meat offal, Miscellaneous edible preparations, Live trees and other plants, Coffee, tea, matt and spices, Products of the milling industry, Products of animal origin, not else specified, Fish and crustaceans, Lac; gums, resins, Preparations of meat, of fish) (Table no. 1).

Table no. 1 - Competitiveness degree of the agrifood commodity groups with respect to EU countries (based on the RCA indicator), average indices for 2014 - 2021

| High competitiveness degree | High to moderate competitiveness degree |
|---|--|
| (12) Oil seeds and oleaginous fruits – 47.4 (08) Edible fruits and nuts – 37.8 (14) Vegetable plaiting materials – 22.7 (10) Cereals – 18.1 (15) Animal or vegetable fats and oils – 10 | (17) Sugars and sugar confectionery – 7.7 (20) Preparations of vegetables and fruits – 7.5 (22) Beverages, spirits and vinegar – 5.1 (23) Residues and waste from the food – 3 (01) Live animals; animal products – 2.6 (24) Tobacco and manufactured tobacco – 2.1 |
| Moderate to low competitiveness degree | Low competitiveness degree |
| (07) Edible vegetables and certain roots – 1.7 (04) Dairy produce; birds' eggs; honey – 1.3 (19) Preparations of cereals, flour – 1.0 (18) Cocoa and cocoa preparations – 1.0 | (02) Meat and edible meat offal – 0.8 (21) Miscellaneous edible preparations – 0.7 (06) Live trees and other plants – 0.5 (09) Coffee, tea, matt and spices – 0.5 (11) Products of the milling industry – 0.4 (05) Products of animal origin, not else specified – 0.2 (03) Fish and crustaceans – 0.0 (13) Lac; gums, resins – 0.0 (16) Preparations of meat, of fish – 0.0 |

Source: developed by authors based on World Integrated Trade Solutions database, 2022

The DCFTA represents an agreement between the EU and the Republic of Moldova that provides for a preferential trade relation, offering each of the parties a better access to market. The agreement aims to eliminate import customs duties in the trade of products between the parties. Nevertheless, for a series of sensitive products like grapes, apples, plums, cherries (since 2020), grape juice, tomatoes and garlic the EU established some tariff quotas, meaning that annually, only a limited amount of these products can be traded with no custom duties. Taking into account that some of these agri-food products are very important for the Moldovan sector, further, we will focus on their analysis and argumentation for increasing the quotas.

Valorization of tariff quotas for table grapes. Since 2014, the quotas for Moldovan grapes have been valorized in almost every year, as a result of a significant production capacity and availability of export potential.

Table no 2 - Valorization of tariff quotas for the export of grapes to the EU

| Products | Quota (tons) | Sept. - Dec. 2014 | | 2015 | | 2016 | | 2017 | | 2018 | | 2019 | | Quota (tons) | 2020 | | 2021 | | Jan. - Oct. 2022 | | Quota (tons) 2022 ⁴ |
|----------|--------------|-------------------|------|--------|------|--------|-------|--------|-------|--------|-------|--------|-------|--------------|--------|----|--------|----|------------------|----------------|--------------------------------|
| | | (tons) | % | (tons) | % | (tons) | % | (tons) | % | (tons) | % | (tons) | % | | (tons) | % | (tons) | % | (tons) | % ⁵ | |
| Grapes | 10000 | 7708 | 77.1 | 9366 | 93.7 | 10000 | 100.0 | 10000 | 100.0 | 10000 | 100.0 | 10000 | 100.0 | 20000 | 13841 | 69 | 16298 | 81 | 15274 | 76 | 58000 |

Source: dcfta.md, me.gov.md

During 2015 – 2021, production of table grapes continues to be at high levels, reaching a maximum value of 125.9 thousand tons in 2018 and the minimum one – 84.4 thousand tons in 2020 (due to severe drought). The share of export of table grapes from the total production varies between 73.8% in 2017 and 38.2% in 2018. Taking into account that in the last years, important amounts of table grapes are directed to processing sector (36 thous. tons in 2019, 39 thous. tons in 2020 and 17 thous. tons in 2021) there is still an untapped potential of export of fresh table grapes that can be valorized within the EU market.

Table no. 3 - Main indicators of Moldovan grapes, 2015 - 2021

| | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
|---|------|------|-------|-------|-------|------|------|
| Table grapes production, thous. tons | 85 | 86.7 | 108.7 | 125.9 | 111.9 | 84.4 | 90.2 |
| Fresh grapes export, thous. tons | 45.4 | 51.4 | 80.2 | 48.1 | 62.7 | 41.3 | 57.8 |
| % of exported grapes in total production | 53.4 | 59.3 | 73.8 | 38.2 | 56 | 48.9 | 64.1 |

Source: National Bureau of Statistics, 2022, UNComtrade, 2022

At the same time, since August 15, 2022 Russian Federation imposed an embargo on import of Moldovan fruits and vegetables. The share of exported Moldovan fresh grapes to Russian Federation accounted for 46.9% of exported fresh grapes in 2021, 48.3% - 2020, 40.5% - 2019. As a result of the embargo, the Russian market being closed for Moldovan grapes, EU market could represent an important direction to be considered, as fresh agri-food products are perishable and the distance factors plays a significant role when exporting and accessing new markets. Moreover, in 2017, 2018 and 2019 the export quantities of Moldovan grapes overpassed the allocated quota of 10.000 tons, while in 2021, the valorization of the 20.000 tons quota was about of 81%. With the new quota of 58.000 tons and compared to the total exported quantity of grapes in 2021 (57.8 thous. tons), it means that the entire table grapes export could potentially be liberalized under this allocated quota.

Table no. 4 - Exports of fresh Moldovan grapes, 2017 - 2021

| Fresh grapes exports to: | 2017 | 2018 | 2019 | 2020 | 2021 |
|---|------|------|------|------|------|
| EU, thous. tons | 20.0 | 13.6 | 20.3 | 13.8 | 16.3 |
| EU, % of total exports of fresh grapes | 24.9 | 28.2 | 32.4 | 33.4 | 28.2 |
| Russian Federation, thous. tons | 48.2 | 27.4 | 25.4 | 19.9 | 27.1 |
| Russian Federation, % of total exports of fresh grapes | 60.1 | 57 | 40.5 | 48.3 | 46.9 |

⁴ New tariff quotas entered into force from July 2022 and are valid for 1 year (July 2023)

⁵ % for 2022 is calculated according to the quota value from 2020 (not 2022).

Source: UNComtrade, 2022

As a result of the war in Ukraine, the traditional export routes to Eastern countries have been disrupted, either due to physical incapacity to transit the regular routes, or as a result of high costs for transportation (increased as a result of changes of routes through Europe or Turkey). Important export quantities of table grapes were accessing in the previous years the markets from Belarus and Ukraine, and less – Kazakhstan and Mongolia. In 2021, Moldova exported fresh grapes to only 10 EU countries. The most important EU partners are Romania, Poland and Latvia. Diversification of market in terms of export to other EU member states will increase the competitiveness of Moldovan farmers, including the small ones, and will contribute to make them more resilient to vulnerabilities and different shocks.

Valorization of tariff quotas for the export of plums to the EU. Plums are among the products with high levels of quota valorization, especially since 2017 (Table no. 5).

Table no. 5 - Valorization of tariff quotas for the export of plums to the EU

| Products | Quota (tons) | Sept. - Dec. 2014 | | 2015 | | 2016 | | 2017 | | 2018 | | 2019 | | Quota (tons) | 2020 | | 2021 | | Jan. - Oct. 2022 | | Quota (tons) 2022 |
|----------|--------------|-------------------|------|--------|-----|--------|-----|--------|------|--------|-----|--------|------|--------------|--------|------|--------|------|------------------|------|-------------------|
| | | (tons) | % | (tons) | % | (tons) | % | (tons) | % | (tons) | % | (tons) | % | | (tons) | % | (tons) | % | (tons) | % | |
| Plums | 10000 | 3948 | 39,5 | 6196 | 6,2 | 7534 | 7,5 | 10000 | 10,0 | 9862 | 9,9 | 10000 | 10,0 | 15000 | 15000 | 10,0 | 15000 | 10,0 | 14820 | 98,8 | 40000 |

Source: dcfta.md, me.gov.md

During 2015 – 2021, production of plums experienced important increases from 100 thous. tons in 2015 to 136.1 thous. tons in 2021. The share of export of plums from the total production varies between 21.2% in 2015 and 52.8% in 2017, while in 2021 this figure accounted for 33%.

Table no. 6 - Main indicators of Moldovan plums, 2015 - 2021

| | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
|--|------|------|------|-------|-------|-------|-------|
| Plums production, thous. tons | 100 | 99.7 | 93.2 | 132.8 | 131.9 | 103.2 | 136.1 |
| Plums export, thous. tons | 21.2 | 36.3 | 49.2 | 44.9 | 44.4 | 46.9 | 44.9 |
| % of exported plums in total production | 21.2 | 36.4 | 52.8 | 33.8 | 33.7 | 45.5 | 33 |

Source: National Bureau of Statistics, 2022, UNComtrade, 2022

As for the exports, Russian Federation represented an important market for Moldovan plums. The share of exported plums to Russian Federation accounted for 36.2% of exported plums in 2021, 47.8% - 2020, 50.7% - 2019. At the same time, in 2019, 2020, 2021 the export quantities of Moldovan plums to EU overpassed the allocated quotas. Taking into account the high degree of quota valorization in the last years, increasing the tariff quota for plums to 40000 tons would potentially cover almost all the exported quantities of plums (as long as safety and other EU requirements are followed), which also means the increase of the export potential of Moldovan plums in EU.

Table no. 7 - Exports of Moldovan plums, 2017 - 2021

| Plums exports to: | 2017 | 2018 | 2019 | 2020 | 2021 |
|--|------|------|------|------|------|
| EU, thous. tons | 19.3 | 9.9 | 17.6 | 21.6 | 25.8 |
| EU, % of total exports of fresh plums | 39.1 | 22.1 | 39.6 | 46.1 | 57.5 |
| Russian Federation, thous. tons | 27.8 | 29.5 | 22.5 | 22.4 | 16.3 |
| Russian Federation, % of total exports of fresh plums | 56.5 | 65.7 | 50.7 | 47.8 | 36.2 |

Source: UNComtrade, 2022

In 2021, Moldova exported fresh plums to 16 EU countries. The most important EU partners are Romania, Poland and Germany.

Valorization of tariff quotas for the export of apples to the EU. Moldovan apples are among the most important sensitive products to be exported. Since 2014, the exports of apples to EU are still very low, with no full quota valorization.

Table no. 8 - Valorization of tariff quotas for the export of apples to the EU

| Product s | Quot a (tons) | Sept. - Dec. 2014 | | 2015 | | 2016 | | 2017 | | 2018 | | 2019 | | Quot a (tons) | 2020 | | 2021 | | Jan. - Oct. 2022 | | Quot a (tons) 2022 |
|-----------|---------------|-------------------|------|--------|------|--------|------|--------|-----|--------|---|--------|---|---------------|--------|---|--------|---|------------------|------|--------------------|
| | | (tons) | % | (tons) | % | (tons) | % | (tons) | % | (tons) | % | (tons) | % | | (tons) | % | (tons) | % | (tons) | % | |
| Apples | 40000 | 1585 | 3,96 | 746 | 1,88 | 74 | 0,19 | 2191 | 5,5 | 1859 | 5 | 2300 | 6 | 40000 | 1577 | 4 | 1024 | 3 | 9524 | 23,8 | 80000 |

Source: dcfta.md, me.gov.md

During 2015 – 2021, production of apples increased significantly, reaching a maximum value of 665.2 thousand tons in 2018 and the minimum one – 308 thousand tons in 2015. The share of export of apples from the total production varies between 31.8% in 2021 and 45.2% in 2017. Therefore, there is still, theoretically, an untapped potential of export of Moldovan apples, especially, taking into account the increase of certifications in the last years in the GLOBAL G.A.P, GRASP standards, etc.

Table no. 9 - Main indicators of Moldovan apples, 2015 - 2021

| | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
|---|------|-------|-------|-------|-------|-------|-------|
| Apples production, thous. tons | 308 | 411.8 | 487.2 | 665.2 | 610.9 | 480.4 | 647.7 |
| Apples export, thous. tons | 97.8 | 131.3 | 222.0 | 216.1 | 218.2 | 193.5 | 206.1 |
| % of exported apples in total production | 31.8 | 31.9 | 45.2 | 32.5 | 35.7 | 40.3 | 31.8 |

Source: National Bureau of Statistics, 2022, UNComtrade, 2022

Since the 2022 Russian embargo on import of Moldovan fruits and vegetables, although the apple sector has been previously affected from the 2015 embargo, apples are in the most critical situation out of the agricultural products who have export quotas, as the share of exported Moldovan fresh apples to Russian Federation accounted for 96.6% of exported fresh apples in 2021, 98.8% - 2020, 97.6% - 2019.

Table no. 10 - Exports of Moldovan apples, 2017 - 2021

| Apples exports to: | 2017 | 2018 | 2019 | 2020 | 2021 |
|---|-------|-------|-------|-------|-------|
| Russian Federation, thous. tons | 214.1 | 213.0 | 212.9 | 191.2 | 199.1 |
| Russian Federation, % of total exports of apples | 96.5 | 98.6 | 97.6 | 98.8 | 96.6 |

Source: UNComtrade, 2022

In 2021, Moldova exported apples to only 7 EU countries, the most important EU partners being Romania. Moreover, Romania may become the main market from EU for Moldovan apples in the future, as well as EU as a whole, fact proven by the first 9 months of 2022, when a record quantity of Moldovan apples was exported to EU – 9524 tons (compared to 1024 tons in 2021). It is worth mentioning that Poland represents an important competitor for Moldovan apples on the EU market.

Valorization of tariff quotas for the export of cherries to the EU. Quotas for cherries have been introduced in 2020, with a low level of valorization since.

Table no. 11 - Valorization of tariff quotas for the export of cherries to the EU

| Products | Quota (tons) | Sept. - Dec. 2014 | | 2015 | | 2016 | | 2017 | | 2018 | | 2019 | | Quota (tons) | 2020 | | 2021 | | Jan. – Oct. 2022 | | Quota (tons) 2022 |
|----------|--------------|-------------------|---|--------|---|--------|---|--------|---|--------|---|--------|---|--------------|--------|------|--------|---|------------------|------|-------------------|
| | | (tons) | % | (tons) | % | (tons) | % | (tons) | % | (tons) | % | (tons) | % | | (tons) | % | (tons) | % | (tons) | % | |
| Cherries | - | - | - | - | - | - | - | - | - | - | - | - | - | 1500 | 168 | 11,2 | 65 | 4 | 160 | 10,7 | 3000 |

Source: dcfta.md, me.gov.md

During 2016 – 2021, production of cherries increased from 7.6 thous. tons in 2016 to 10.2 thous. tons in 2021, with a maximum level of production of 12.3 thous. tons in 2018. The share of the total export of cherries in the total production varies between 53.1% in 2019 and 95.1% in 2018. With an allocated quota of 3000 tons, potentially, cherries have the more than enough quantities to enter the EU market.

Table no. 12 - Main indicators of Moldovan cherries, 2015 - 2021

| | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
|---|------|------|------|------|------|------|
| Cherries production, thous. tons | 7.6 | 10.6 | 12.3 | 11.3 | 10.4 | 10.2 |
| Cherries export, thous. tons | 4.4 | 8.4 | 11.7 | 6.0 | 7.7 | 6.4 |
| % of exported cherries in total production | 57.9 | 79.2 | 95.1 | 53.1 | 74 | 62.8 |

Source: National Bureau of Statistics, 2022, UNComtrade, 2022

After apples, cherries seem to be the next affected agricultural products as a result of the embargo. The share of exported Moldovan cherries to Russian Federation accounted for 68.8% of exported fresh sweet cherries in 2021, 74% - 2020, 80% - 2019.

Table no. 13 - Export of cherries to Russian Federation

| Cherries exports to: | 2017 | 2018 | 2019 | 2020 | 2021 |
|---|------|------|------|------|------|
| Russian Federation, thous. tons | 6.4 | 9.6 | 4.8 | 5.7 | 4.4 |
| Russian Federation, % of total exports of cherries | 76.2 | 82.1 | 80 | 74 | 68.8 |

Source: UNComtrade, 2022

At the same time, as a result of the war in Ukraine, the traditional export routes to Eastern countries have been disrupted. Important export quantities of cherries were accessing in the previous years the market from Belarus. In 2021, Moldova exported small quantities of cherries to only 3 EU countries (while in none of EU countries in 2017), the most important EU partners being Latvia. The progress of cherry exports to EU might be seen during the agricultural season in 2023.

Valorization of tariff quotas for the export of tomatoes to the EU. Since 2014, only 40 tons of tomatoes have been exported to EU countries in 2018.

Table no. 14 - Valorization of tariff quotas for the export of tomatoes to the EU

| Products | Quota (tons) | Sept. – Dec. 2014 | | 2015 | | 2016 | | 2017 | | 2018 | | 2019 | | Quota (tons) | 2020 | | 2021 | | Jan. – Oct. 2022 | | Quota (tons) 2022 |
|----------|--------------|-------------------|---|--------|---|--------|---|--------|---|--------|---|--------|---|--------------|--------|---|--------|---|------------------|---|-------------------|
| | | (tons) | % | (tons) | % | (tons) | % | (tons) | % | (tons) | % | (tons) | % | | (tons) | % | (tons) | % | (tons) | % | |
| Tomatoes | 2000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 40 | 2 | 0 | 0 | 2000 | 0 | 0 | 0 | 0 | 0 | 0 | 4000 |

Source: dcfta.md, me.gov.md

When analysing the food balance for tomatoes, one can note that the production of tomatoes has been sharply decreasing since 2012, reaching 32 thous. tons in 2021. Most of the internal consumption needs, as well as the needs of the processing sector are covered by imports, Moldova being a net importer of tomatoes. Nevertheless, the self-sufficiency level still accounts for 47.8% in 2021, which implies, also, the limited capacities for export – fact proven by the lack of exports to EU in the last 3 years.

Valorization of tariff quotas for the export of garlic to the EU. Like for tomatoes, Moldova does not have garlic exports to EU member states and is lacking in potential export.

Table no. 15 - Valorization of tariff quotas for the export of garlic to the EU

| Products | Quota (tons) | Sept. - Dec. 2014 | | 2015 | | 2016 | | 2017 | | 2018 | | 2019 | | Quota (tons) | 2020 | | 2021 | | Jan. – Oct. 2022 | | Quota (tons) 2022 |
|----------|--------------|-------------------|---|--------|---|--------|---|--------|---|--------|---|--------|---|--------------|--------|---|--------|---|------------------|---|-------------------|
| | | (tons) | % | (tons) | % | (tons) | % | (tons) | % | (tons) | % | (tons) | % | | (tons) | % | (tons) | % | (tons) | % | |
| Garlic | 220 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 220 | 0 | 0 | 0 | 0 | 0 | 0 | 440 |

Source: dcfta.md, me.gov.md

In order to cover the internal consumption needs, Republic of Moldova is importing garlic, being a net importer of this product. Exported quantities are very low and the production is declining in the last years.

Table no. 16 - Main indicators of Moldovan garlic, 2015 - 2021

| Garlic | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
|--------------------------------|------|------|-------|------|------|------|
| Area, thous. ha | 2.4 | 2.9 | 2.7 | 3.7 | 4.1 | 3.9 |
| Average yield per ha, quintals | 39.1 | 40.2 | 35.0 | 19.3 | 18.3 | 20.3 |
| Production, thous. tons | 10.2 | 11.5 | 9.5 | 7.1 | 7.4 | 7.8 |
| Export, thous. tons | | 0.02 | 0.008 | | | |
| Import, thous. tons | | 0.4 | 0.8 | 0.8 | 0.9 | 0.8 |

Source: National Bureau of Statistics, 2022, UNComtrade, 2022

Valorization of tariff quotas for the export of grapes juice to the EU. The Republic of Moldova does not export grapes juice to EU.

Table no. 17 - Valorization of tariff quotas for the export of grapes juice to the EU

| Products | Quota (tons) | Sept. - Dec. 2014 | | 2015 | | 2016 | | 2017 | | 2018 | | 2019 | | Quota (tons) | 2020 | | 2021 | | Jan. – Oct. 2022 | | Quota (tons) 2022 |
|--------------|--------------|-------------------|---|--------|---|--------|---|--------|---|--------|---|--------|---|--------------|--------|---|--------|----|------------------|---|-------------------|
| | | (tons) | % | (tons) | % | (tons) | % | (tons) | % | (tons) | % | (tons) | % | | (tons) | % | (tons) | % | (tons) | % | |
| Grapes juice | 500 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 500 | 15 | 3 | 86 | 17 | 0 | 0 | 1000 |

Source: dcfta.md, me.gov.md

Conclusion

During 2014 – 2021, the foreign trade with agri-food products of the Republic of Moldova has been progressively growing, with a positive trade balance during the entire period. In 2021, the general value of agri-food exports amounted to 1436 mil. USD, while the agri-food imports reached 1010.3 mil. USD. As a strong argument for the future accession to EU, EU countries represent an important foreign partner in terms of Moldovan exports of agri-food products, having a share of 45.2% in 2021.

As for the RCA indicator with respect to EU market, agricultural sector of Moldova is highly competitive in Oil seeds and oleaginous fruits, Edible fruits and nuts, Vegetable plaiting materials, Cereals and Animal or vegetable fats and oils. Having a closer analysis, as being noted an important presence of low added value products in these groups, it is becoming increasingly important to support and promote the exports of high value-added products, that will contribute to the development of small and large value chains in the agricultural sector of the country.

At the same time, with high valorization of tariff quotas for grapes and plums, with less valorization for apples and cherries and lack of valorization for tomatoes, garlic and grapes juice, the increase of tariff quotas for some of these products is vital for Moldovan farmers and represents a strong sign of support from the EU community.

EU market is a demanding one, requiring not only quantities of agri-food products, but also high quality and compliance with safety regulations. These can be obtained as a result of boosting investments in post-harvest and processing infrastructure, compliance with food safety standards through international certifications, transfer of knowledge and development of strong partnerships between private sector and academia.

Access of new markets from EU countries with some of the most important agri-food products subject to tariff quotas within the DCFTA like grapes, plums, apples and cherries will contribute to the development of these sub-sectors on the local level and meeting the demands of EU consumers at the international one.

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