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PLUM EXPORT TRENDS IN THE REPUBLIC OF MOLDOVA

ABSTRACT

The agricultural sector of the Republic of Moldova stands out as the most important in the economy of the Republic of Moldova and contributes by 12% to GDP formation. Horticulture is one of the priority directions of agriculture, which provides high value-added products with a considerable share in exports. The purpose of the paper is to analyse the evolution of the fruit sector in the Republic of Moldova, especially the stone fruit plantations and the export trends of plums in some partner countries. The paper investigated the dynamics, structure, volume and sales revenues of fruit producers. Emphasis was placed on improving the quality and competitiveness of plum orchards as a stimulus lever in promoting the image and ensuring export to the market.

Keywords: quality, export, market, plums, horticultural sector.

JEL Classification: Q10; Q17.

1. INTRODUCTION

For the economy of the Republic of Moldova, horticulture has remained an important sector. More than 1000 companies directly involved in the primary production and further processing of horticultural production operate in this sector. They have more than 10,000 employees and generate an annual turnover of over 5 billion lei. At the same time, the horticultural sector has a multiplier effect on other sectors of the economy along the entire value chain, starting from suppliers of raw materials and resources for horticultural producers, as well as partners who subsequently support them in processing, packaging, distribution, logistics, transport and marketing of horticultural products on the domestic and foreign markets. The horticultural sector is a source of employment and income in rural areas. Recently, the horticultural sector of the Republic of Moldova has registered an increase in both the volume of production and of exports, especially as a result of the efforts made by agricultural producers, but also by the state through the implementation of the subsidy granting policy (subsidization).

2. STATE OF KNOWLEDGE

Horticultural producers have high expectations for increased fruit production to meet domestic needs as well as export production volumes, as the demand and prerequisites exist for continued growth in both the domestic and foreign markets. The methodological approach applied to the analysis of the fruit sector has elucidated the current state of the sector, as well as the opportunities and challenges facing the horticultural sector. There are several studies, articles, reports on this topic that address the major constraints in the fruit sector: human capital, market infrastructure, innovations and competitiveness. The horticultural sector in the Republic of Moldova lacks synchronization in product promotion, and the lack of visibility and brand awareness is a challenge to the sector. These problems have been addressed in the works of authors such as Câmpeanu (2000), Sumedrea *et al.* (2014), Zbancă (2014), Stratan *et al.* (2001), as well as in the Reports of the Ministry of Agriculture and Food Industry and foreign publications.

3. MATERIAL AND METHOD

In the paper, the materials of the legislative framework were used, such as: Government Decisions, reports of the Ministry of Agriculture and Food Industry, Ministry of Economy, data from the National Bureau of Statistics of the Republic of Moldova and from the literature. In the process of scientific research, the evolution of indicators was analysed for assessing the economic growth of the horticultural sector (plum plantations) in the Republic of Moldova, in all types of households (share of plum plantations in total fruit plantations, productivity of plum plantations, total plum harvest and plum export trends).

4. RESULTS AND DISCUSSIONS

The agricultural sector stands out as the most important in the economy of the Republic of Moldova, contributing by about 12% to GDP formation. According to the data of the National Bureau of Statistics, on January 1, 2018, in all forms of ownership, there were 2.50 million ha of agricultural land in total in this country. The utilized agricultural area in the agricultural year 2017 totalled 1832.4 thousand ha (73.4% of total agricultural land), out of which 1563.5 thousand ha (85.3%) belonged to privately owned agricultural holdings and 268.9 thousand ha (14.7%), to agricultural holdings in public property.

One of the priority directions of agriculture is horticulture, which provides value-added products with a considerable share in exports. The strategic direction of horticulture consists in the efficient exploitation of plantations with high productivity potential, the clearing of those with exhausted potential and their

consistent replacement by modern assortments and advanced technologies. They ensure early fruit set, high productivity, consistency, competitive quality in the domestic and foreign markets.

In order to transform the agri-food sector into a modern (especially the fruit sector), efficient and competitive sector, it is necessary to invest efficiently and gain support through agricultural policies. The development of the local horticultural sector is a practical way to modernize and diversify agriculture, as well as a source of income in rural areas. At the same time, the horticultural sector provides jobs and wages and is also an attractive business area for agricultural producers.

The horticultural sector is experiencing an increase in both the volume of production and exports, especially as a result of the efforts of agricultural producers, but also of the state through the implementation of the subsidy policy. In 2018, the multi-annual plantations accounted for about 290.1 thousand ha, accounting for 11.6% of the total agricultural land area. The multi-annual plantations in the private sector represented about 252.8 thousand ha or 87.1%, while in the public sector the multi-annual plantations represented only 12.9%.

Analysing the fruit sector development in the Republic of Moldova, the global volume of fruit doubled in 2018 compared to 2010, due to the modernization of technologies, increase of the intensity and of fruiting areas. The positive phenomenon that was noticed refers to the clearing of plantations with a long shelf life given the subsidization of the clearing of fruit plantations, which contributed to the increase of fruit harvest per unit area. The production areas of stone fruits in 2018 increased by 10% compared to 2010. At the same time, the production of stone fruits also has a slow growth trend, as in 2018 the production volume increased by 3% compared to 2010, when the areas under fruit trees increased by 2% in the same period (Table 1).

Table 1

Area and volume of stone fruit production

	2010	2011	2012	2013	2014	2015	2016	2017	2018
Total area thousand ha	39.3	40	40.4	41.1	36.2	42.03	42.16	42.9	43.3
Fruiting area thousand ha	30.4	31	32	27.6	26.2	35.3	35.79	36.2	36.4
Production volume thousand tone	91.52	84.8	79.3	91.8	102.3	153.8	153.26	143	187
Average yield tone/ha	2.9	2.63	2.41	3.33	3.54	4.26	4.18	3.77	5.01

Source: Author's calculations based on data of National Bureau of Statistics

In the territory, the stone fruit plantations are mainly concentrated in the Central area – 40.7%, followed by the Southern area – 31.3% and the Northern area – 27.9%. Over several years, the share of apple trees in the structure of the total area of fruit species remained at the same level, namely 41.1%; the share of areas under plum trees was 16.4% and of areas under walnut trees was 22.1% (Table 2).

Table 2

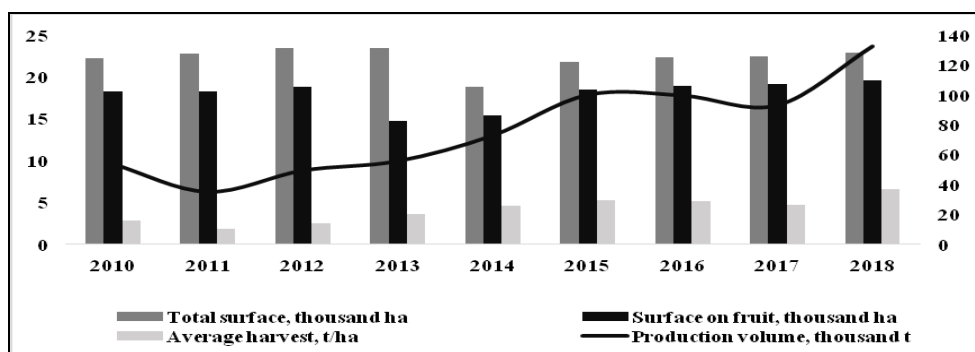
Production indices of the main fruits by fruit species in 2018

Species	Total area (thousand ha)	Share %	Fruiting area (thousand ha)	Share %	Volume of production (thousand tons)	Share %
Apple tree	57.4	41.1	52.7	46.5	665.2	74.4
Plum tree	22.9	16.4	19.1	16.8	132.8	14.9
Cherry tree	4.7	3.4	3.5	3.1	11.9	1.3
Walnut trees	30.8	22.1	17.7	15.6	20.2	2.3
Total, fruit plantations, fruit bushes	139	100	113.4	100	893.9	100

Source: Author's elaboration based on data from the National Bureau of Statistics

By the volume of production, we notice that apples had the largest share (74.4%), plums hold about 14.9% and nuts 2.3%. In recent years, we have seen an increase in the volume of fruit production compared to previous years, which was due to the modernization of fruit production technology, increasing the level of intensity and planting orchards with perspective varieties. For the horticultural sector it is important to select the varieties for cultivation, because the correct choice of them allows producers to guarantee their sales market.

In the Republic of Moldova, plum orchards are the most planted by agricultural producers. This is due to increased interest in regional markets, growing annual consumption and more uniform use of labour force (May-July when there are no other fruits to be harvested). The industrial production of plum cultivation, in 2018, amounted to 132 thousand tons. Regarding the data related to the average fruit harvest in the last two years, we can notice an increase, i.e. +6.65 t/ha. This increase was due to the clearing of unproductive areas and to the improvement of cultivation technologies.



Source: Author's elaboration based on data from the National Bureau of Statistics

Figure 1. Trends of plum cultivation in the Republic of Moldova, in the period 2010–2018

Of the total volume of production, fresh marketed fruit represent about 70–80% of the value of domestic fruit production. The processing industry is export-oriented and focuses on diversifying its markets and products. The fruit processing industry includes 8 large enterprises, with a share of 70–85% in the total volume of processed production, and about 90 small and medium-sized enterprises.

Both on the local and foreign market, Moldovan plums enjoy a high demand. In the top most exported fruits in Moldova, plums rank second, and by the volume of fresh delivered plums, the Republic of Moldova ranks among the top 10 exporters in the world. At the same time, the Republic of Moldova is among the main producers of dehydrated plums, and both fresh and dried plums have seen an increase in exports in recent years.

As a result, the EU-Moldova Deep and Comprehensive Free Trade Agreement seeks a preferential trade relationship based on mutually beneficial conditions, giving each of these parties better access to the market. The Free Trade Agreement aims at phasing out customs duties on imports and exports in the trade in products between these parties. It aims to remove barriers to trade in services and better access for companies to those markets. Since the signing of the Association Agreement between the Republic of Moldova and the EU and the application of the Deep and Comprehensive Free Trade Area (DCFTA), exports to the EU market have been growing. The impact of the DCFTA meant a change in the configuration of Moldova's foreign trade, with the EU becoming our country's main trading partner, with a share of about 70% in exports and 50% in imports, compared to 2014, when only 53% of exports were targeted at the EU. The EU's main export partners are Romania, Italy, Germany, Poland and Bulgaria. The Republic of Moldova has set certain export limits in the EU for certain categories of products, which are subject to duty exemption for certain tariff quotas. This category includes: tomatoes, garlic, grapes, apples, plums and grape juice. In the period 2014–2019, in the context of the capitalization of tariff quotas on fruit exports to the EU, producers of table grapes and plums managed to capitalize on the export of these products, and the share of apple exports was modestly capitalized, (Table 3).

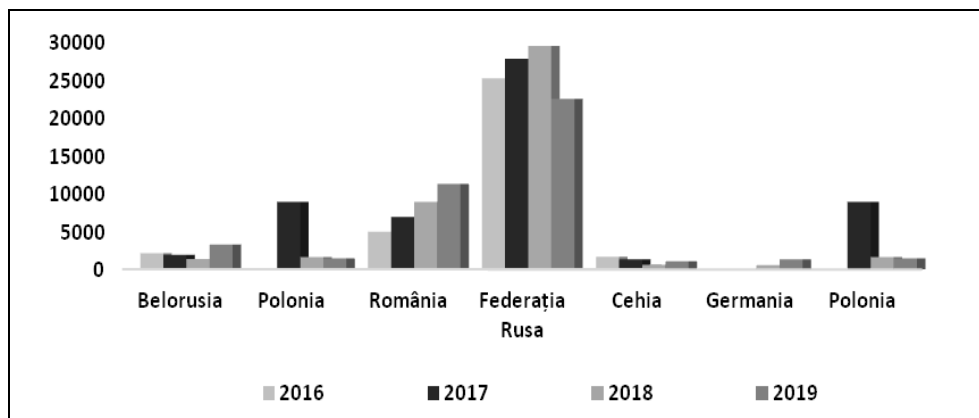
Table 3

Capitalization of tariff quotas on fruit export to the European Union

Product name	Quotas t	2016		2017		2018		2019		2020		
		t	%	t	%	t	%	t	%	Quotas t	t	%
Plums	10,000	7,534	75	10,000	100	9,862	99	10,000	100	15,000	15,000	100
Apples	40,000	74	0.19	2,191	5.5	1,859	5	2,300	6	40,000	1,577	4
Grapes	10,000	10,000	100	10,000	100	10,000	100	10,000	100	20,000	13,841	69
Cherries	*	*	*	*	*	*	*	*	*	1,500	4,188	13

Source: Author's elaboration based on me.gov.md

There is a higher added value for the delivered fresh production in the cold months of the year, i.e. when the fruits are commercialized. In domestic consumption, the highest revenues are found in the commercialization of fruits in local retail networks; in export, the best commercialization price is proposed by Germany, namely 0.75 USD/kg, the Russian Federation 0.34 USD/kg and Romania 0.28 USD/kg, according to east-fruit.com. The purchase of fruit by the processing industry offers the lowest prices to agricultural producers, often below the unit cost of production (i.e. with losses for horticulturists). The value of exports and the amount of exported fruit increased in the period considered. Between 2016 and 2019, the dynamic analysis of plum exports of the Republic of Moldova shows that the situation was much better both quantitatively and in value, because the plum market has diversified and consumption has constantly increased (Figure 2).



Source: Author's elaboration, based on data from <https://comtrade.un.org/Data/>

Figure 2. Trends in plum exports, in the period 2016–2019, thousand tons

The EU market is a market with great potential and the stone fruits enjoy a growing interest on this market. As we can see, Romania is the main partner in the import of plums from the Republic of Moldova. Quantitatively, the export of plums has increased and Romania has a share of 25.4% in the total export of plums in 2019, but it generates 20.4% of the value of exports. Russia is also a strategic partner and its share in total exports is 50.7%, generating 50.3% of the value of exports. More recently, a major partner in the export of plums has been Germany, which has a total export share of 3%, and 6.5% of the value of exports.

Table 4

Plum export trends for 2016–2019, main countries

Country	2017		2018		2019	
	Amount USD	Volume kg	Amount USD	Volume kg	Amount USD	Volume kg
Belarus	894,893	1,873,450	485,022	1,342,251	1,217,786	3,232,373
Poland	3,533,400	8,898,655	614,229	1,616,909	610,118	1,436,868
Romania	3,942,845	6,916,365	2,889,631	8,895,315	3,110,377	11,283,330
Russian Federation	7,332,957	27,800,110	7,695,161	29,491,900	7,652,144	22,503,379
Czech Republic	393,389	1,294,600	62,349	615,470	133,043	1,045,600
Germany	*	*	33,433	547,626	990,184	1,308,529
TOTAL	17,436,027	49,222,715	12,927,171	44,907,036	15,217,964	44,364,731

Source: Author's elaboration, based on data from <https://comtrade.un.org/Data/>

According to the data, Romania is the main partner of the Republic of Moldova, being a good market for Moldovan plums. At the same time, the Republic of Moldova has conquered new markets such as: Poland, the Czech Republic, Latvia and, more recently, Austria and Germany. The value of exports and the amount of exported fruit increased for the period considered. One thing is for sure: fruit exports are diversifying into more markets and more and more exports to EU markets. The stone fruits (plums, cherries) enjoy a more advanced demand (competition is lower) and annual consumption has a much higher trend than apples. At the same time, analysing the data in the table, we can notice that, in quantitative terms, the export of fruits is lower in the EU, yet generates much higher revenues compared to the CIS countries.

According to *EastFruit* data, the increase in plum exports has led to a steady increase in wholesale plum prices. At the same time, the process of polarizing the price was gradually activated: plums for the domestic market sold for 10–11 lei/kg (0.56–0.61 USD/kg), and for plums for export increased to 14–15 lei / kg (0.78–0.84 USD/kg).

5. CONCLUSIONS

In conclusion, we can mention that the horticultural sector (fruit sector) has a significant importance in the economic development of the agri-food sector of the country. The nutritional importance of the branch, the increase in the volume of global production, the average yields per hectare, the export, the positive trade balance and the upward growth trends, etc. have determined the multiplier role in the country's economy and its ranking among the main strategic branches of national economy.

Fruit production contributes to environmental conservation, economic growth and generates many direct and indirect jobs in the rural areas. At the same time, the production of fruit (apples and plums) for the "fresh" market provides the best income for agricultural producers. The dynamics of fruit-growing areas has the tendency to slow down, because a large part of the orchard areas have exceeded their exploitation period and are cleared due to government-granted subsidies.

There is a tendency to concentrate and consolidate the trade in fresh fruit, both at the level of buyers and suppliers, as a result of which the requirements for the quantity and quality of products are increasing.

The horticultural sector, as well as agriculture as a whole, are the most vulnerable to various factors. In order to overcome more easily these periodic crises that may occur in this field of activity, it is necessary to develop efficient strategies that would make it possible to maintain the development of this sector.

6. ACKNOWLEDGEMENTS

Elaborated within the State Program “Development of new economic instruments for assessing and stimulating the competitiveness of agriculture of the Republic of Moldova for the years 2020–2023” (code – 20.80009.0807.16), funded through the National Agency for Research and Development of the Republic of Moldova.

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