# CHARACTERSTICS OF THE FRUITS MARKET IN ROMANIA

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## **RESEARCH ARTICLE**

#### Abstract

Fruits have an important physiological and biological role in human nutrition due to their high nutritional value. Romania is a country with favorable conditions for the cultivation of fruit trees, having fertile soils, a suitable climate for these crops, less soil pollution than in Western European countries, cheap labor (with the observation that we are currently facing a shortage of labor in this segment) and tradition in the cultivation of fruit trees and shrubsthroughout the country, from the plains to altitudes of over 800-1000 m. To carry out the research, several elements were considered, among which we mention the evolution of the number of fruit trees, the offer of fruits and the assortment structure, problems related to the organization and operation of the market.

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#### **INTRODUCTION**

Fruits are indispensable through the intake of vitamins, mineral substances, enzymes, as well as their role in preventing and combating diseases of the respiratory, digestive and circulatory system, specialists recommending a consumption of 80-100 kg of fruit/year/inhabitant.

Based on the recommendations regarding the daily physiological needs of the population for fruits and fruit products, the normal average physiological consumption annual is determined -104.5 Kg- differentiated by age categories, as follows: 91.25 Kg, in the "up to 19 years" category ; 109.5 Kg, in the category "20 -44 years"; 118.6 Kg, in the category "45 - 64 years"; 94.9 Kg, in the "over 64" category. The analysis of scientific works on this topic - the fruit market - was based on numerous documents from various databases, published between 2000-2019. The analysis of collaborative relations between states regarding this market is particularly complex. The main players in this market can be observed - China, USA, India, Brazil, Great Britain, Spain, Greece, Turkey (Alexandra Diana Chirescu, 2021).

### **MATERIAL AND METHOD**

We analyzed the fruit market based on the offer, its characteristics and the specific problems of organizing the producers and the market, the methods of intervention/support. We made a case study on the Western Region.

### **RESULTS AND DISCUSSIONS**

The fruit market is characterized by a specific behavior, different from other agrofood markets (Gavrilescu, 2018). This is given by its many particularities, the most important of which are:

Atomicity of demand and supply (number of producers and consumers with roughly equal economic powers).

**Seasonality of fruit products** -induces changes in population consumption. There are products with different degrees of seasonality that enter the market at the moment of their appearance, for short periods of time. In this sense, we can state that the supply of fruits, especially perishable ones, is rigid and is represented by the entire amount of products harvested in a period,

**Fruit zonality and the existence of a poorly developed collection system**causes a high level of self-consumption, mainly in rural areas where it can be 80%. As a result, only 20% of the total production reaches the farmers' markets.

**High degree of perishability**of some fruits is decisive in terms of the commercial aspect, which can only last a few days (raspberries, strawberries, apricots).

**The demand for fruit is continuous,**while the supply is seasonal.

The production of fruits requires a very high consumption of production factors, especially labor. This makes the agricultural producer enter the market that offers him the greatest advantages for covering expenses, through the selling price.

The range of fruits available on the market isvaried, which ensures diversified consumption. There is a strong competition between fruits on the market, precisely because of their substitutable nature (for example, they replace pears with apples, hazelnuts with walnuts, etc.).

**Fruit production has various destinations:** for fresh consumption, processing, export,

which requires the organization of distribution channels to consumers.

We analyzed the national fruit market, with an emphasis on the Western Region, through the

lens of market components - supply and demand. We started the analysis with the supply on the fruit market, expressed by the number of fruit trees and fruit production. The statistical data, by types of fruit trees, are summarized in table 1 and figures 1-6 below, and are based on the processing of statistical data from the statistical section dedicated to agriculture (National Institute of Statistics, – database Tempo-Online. Eurostat 2022).



Figure 1. Number of fruit trees in Romania/West Region



Figure 2. Number of fruit trees in the West Region/ component counties



Figure 3. Total number of fruit trees - private sector Romania



Figure 4. Total number of fruit trees - private sector West Region



Figure 5. Total number of fruit trees / categories - West Region

Fruit categories	Forms of ownership	Macroregions, development regions and counties	Years						
			2000	2005	2010	2015	2020	2021	2022
Total	Total	TOTAL	1301040	1647017	1419618	1224700	1590795	1704550	1484092
		West Region	143251	160687	125187	103766	140322	150506	130640
Private sector		TOTAL	1168832	1547429	1402406	1215553	1586443	1695630	1477980
		West Region	130475	159055	117293	103569	140224	150418	130629
of which: individual agricultural holdings		TOTAL	1130819	1298069	1261775	1133833	1530404	1624005	1409653
		West Region	130071	134444	96651	95913	134794	142477	121114

Fruit production ( total tons)

Source - tempoonline data - http://statistici.insse.ro:8077/tempo-online/#/pages/tables/insse-table



Figure 6. Total fruit production in Romania

Based on the SWOT analysis, we identified the characteristics of the fruit market in Romania.

STRENGTHS	WEAKNESSES
<ul> <li>pedo-climatic conditions favorable for the culture of trees and shrubs</li> <li>fruit trees;</li> <li>increasing the areas cultivated with competitive varieties of fruit trees and shrubs;</li> <li>increasing the areas cultivated with fruits in modern protected areas;</li> </ul>	<ul> <li>chaotic, unplanned production according to market requirements;</li> <li>extreme climatic phenomena and various diseases and pests;</li> <li>imports;</li> <li>the various media articles that convey incomplete and incorrect information about the domestic fruit sector</li> </ul>

#### Table 1

<ul> <li>establishment and modernization of processing units</li> <li>the qualities of Romanian products are recognized and appreciated by consumers, who prefer them over products of other origin.</li> </ul>	<ul> <li>lack of permanent contractual relations between producers and processors</li> <li>failure to insure crops, as a result the producers bear the damages in case of calamity (for various reasons - lack of attractive and flexible policies, lack of collective efforts, lack of state concern for the creation of a guarantee fund for fruit crops, etc.)</li> </ul>			
OPPORTUNITIES	THREATS			
<ul> <li>✓ consumer preference for local products</li> <li>✓ the establishment of producer associations</li> <li>✓ financial support of the sector through various domestic and European financing programs</li> <li>✓ high potential for practice</li> <li>ecological agriculture</li> <li>the existence of research centers in favorable areas for fruit production, whose personnel have appreciable</li> <li>technical and theoretical knowledge</li> </ul>	<ul> <li>THREATS</li> <li>the lack of marketing knowledge that presupposes training methods a</li> <li>production for marketing (sorting, classification) and presentation</li> <li>(packaging and labeling) intended to ensure the product's attractiveness and safety in front of the consumer;</li> <li>lack of technical means for washing, sorting, packaging, labeling, keeping and</li> <li>transportation of production to the market;</li> <li>the lack of a production planning system and its articulation according to market requirements.</li> <li>low added value of products leads to instability and differentiation of products leads to instability and differentiation of</li> </ul>			

Figure 7. SWOT analysis of the national fruit market

Producer organizations represent the main actors of the common organization of the market, whose role consists in fruits concentrating the offer and adapting it to market demand, acting on behalf and in the the members. Producer interests of organizations can, with community financial support and based on an approved operational program, carry out activities in the field of production quality - biological production, environmental protection, marketing activities, product promotion and innovation, crisis prevention and management activities (Mateoc-Sîrb, N., Otiman P.I., Mateoc T., Mănescu C., 2013).

The financial advantages of the EU for producer groups and organizations represented the promoter for the organization of the Romanian fruit sector. Romania provided consistent financial support - 75% of the investment value (50% EU funds, 25% national funds in accordance with art. 47 par. (1) of the Implementing Regulation (EU) No. 543/2011 of the Commission of June 7, 2011 establishing the rules for the application of Council Regulation (EC) No. 1234/2007 with regard to the fruit and vegetable sector and the processed fruit and vegetablesector(<u>https://madr.ro/horticultura.h</u> tml).

In 2020, there were 23 producer organizations in Romania recognized in accordance with EU legislation, of which 3 were running an operational program each. the process consolidating Currently, of associative forms in the fruit sector continues, in the context of the new common agricultural policy, considering the need to stimulate the functioning of producer organizations. The primary activity of producer organizations is to concentrate supply and market the members' products for which they are recognized. These associative forms market increasingly large and quality quantities of vegetables and fruits, according to the standards in force, which currently reach agro-food markets, canteens, wholesale markets and supermarket chains. Out of the total number of these organizations, only four are registered in the West Region respectively in the counties of Arad and Timis. (https://madr.ro/horticultura.htmll),would like to point out, once again, that the data provided by the Ministry of Agriculture and Rural Development refer to the year 2020. The four producer organizations are: 1.SC Kronstadt Fructe SRL No. 11/18.03.2015

Vegetables/Fruits Benea Gheorghe Com. Periam, No. 866/A Timis county

2. SC V&F Logistic Center SRL No. 12/ 20.04.2015 Vegetables/Fruits Breaz Mirela Arad str. Pictor Cornel Minişan no 1 phone 0257/216550 Arad county.

3. SC Lesim Lero SRL No. 23/29.04.2016 Vegetables Rediș Simion Arad, str. Czigler Antoniu no. 16

4. SC Sinfrutta SRL, No. 30/29.03.2017 Vegetables and Fruits Fruits intended for processing Mutu Dan Constantin Loc. Sânnicolau Mare, Sânnicolau Mare City,

Also on the MADR website we can find a list of recognized agricultural producer groups, updated in 2023 (21.06.2023)<u>https://www.madr.ro/docs/dezvo</u> <u>ltare-rurala/grupuri-producatori/grupurileproducatorilor-reknugnose-update-</u>

<u>21.06.2023.pdf</u>, on product groups for which it obtained recognition.

Also on the MADR website we find the Register of professional organizations in the agricultural and agri-food sector that are members of the national civil dialogue groups – which support agricultural producers.https://www.madr.ro/docs/agricult ura/reg-org-profesionale-agricole-grupuridialog-civil/registru-org-prof-membre-grupuridialog-civil-nat-04.01.2023.pdf

At the macroeconomic level we are referring to issues related to value chains in the fruit sector. Global trends related to these chains given that today's consumer preferences are increasingly diverse and complex. Under these conditions, the international fruit trade is undergoing essential transformations. There are two distinctive scenarios:

(i) mature markets (Europe, North America), where the focus will be on quality, natural, harmless products and in most cases purchased at retail,

(ii) developing markets (Latin America, Africa and Asia) - where trade is more diversified, the market is much easier to penetrate, in case of ensuring the required logistics and quality.

In the international fruit trade, a significant increase in fresh fruit consumption is forecast in all parts of the world for the next 5-7 years, especially in countries with natural population growth. In this context, the sustainability of the sector is linked to quality fruits, competitive but above all considered healthy/ that contribute to the health of the population.

The increase in demand for fresh fruit will be determined, to a large extent, by the expansion of the population, in combination with the increase in expenditure on food, the increase in purchasing power and nutritional (healthy) choices, as stated above.

In the conditions of the market economy and the globalization of international trade, it is important to understand how the added value created in the sector can be increased and, more importantly, it is to understand the value chain both quantitatively (the component parts - the links of the value chain) and qualitatively (the contribution of each link to the formation of added value).

The value chainit is the most practical basic analytical tool for identifying sources of competitive advantage, and in the case of the fruit sector, it aims to develop and create added value to the sector and increase the competitiveness of fruit and processed products, which will ultimately allow the sustainable development of the analyzed sector. The fruit sector has two distinctive directions of value chain development: fresh fruit business and processed fruit businesses.

These two directions are complex and need to be developed in parallel to avoid sectoral shocks and uncertainty regarding the use - marketing of fruit production.

The production of fruit for the fresh fruit market offers quick income to agricultural producers, it is the most profitable, in the short term, if the quality and competitiveness of the product is ensured.

The processed products sector, in turn, comprises four major product groups: canned, dried, frozen and juices. Producing fruit for the processing industry offers higher incomes to farmers but also involves higher costs at the microeconomic level (farm, farm, micro or larger processing unit).

Within the group of processed fruits, frozen products are the most profitable for producers, because the related industries that use them perceive them as fresh products and have an increased demand. Frozen fruits are widely used in the food industry in the production of yogurts and natural additions in pastries, which is highly demanded and with an ever-increasing demand. Dry and preserved products (jams, jellies) and concentrated juices require raw material of lower quality, which allows a full exploitation of the production.

The fresh and processed fruit sectors have different value chains, which reflect their different level of development and different market segments. Due to the insufficient development of the market infrastructure (cold storage, collection and distribution centers, insufficient packaging lines) most of the fresh products are marketed during the harvest season and only a small part of the products benefit from storage for off-season marketing.

The primary customers of fresh fruit producers are traders, middlemen and exporters, who usually buy large quantities of produce directly from the field, offering relatively low prices. The fresh product is subsequently sold either on the domestic market (especially at agricultural markets, food store chains or in supermarkets) or is exported. Currently, only a small part of domestic fresh produce reaches supermarket chains directly from producers. This state of affairs is determined by the small volume of sales (due to the lack of associations), the appearance of the products, the sensitivity of perishable products, etc.

For the sustainable development of the fruit sector, adequate post-harvest infrastructure is required to meet market demands for stable supplies and compliance with fruit grading standards, both fresh and processed. In addition, the availability of cold storage allows sales to be postponed when market prices are low, leading to the identification of fruit marketing niches in regional markets for a longer post-harvest period.

However, in the last five years, at the national level, there has been an increase in the level of Romanian products in supermarkets, especially during the summer-autumn period, when domestic production balances market production. They also have a contribution thanks to the associative forms, which through better organization negotiate representative quantities with retailers over a period of about 4-5 months.

## CONCLUSIONS

The EU actively supports the fruit sector through its market management system, pursuing five broad objectives:

- a more competitive and market-oriented sector, thanks to producer organisations;
- less crisis-related fluctuations in producers' incomes;
- increasing fruit consumption in the EU;
- wider use of organic cultivation and production techniques;
- encouraging the provision of quality products and improving protection and transparency in the interest of consumers, through the application of marketing standards.

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