

## **FRUIT PRODUCTION AND CONSUMPTION IN ROMANIA**

**OANA DOBRE-BARON** \*

**ABSTRACT:** *Romanian agriculture has undergone important changes in the last thirty years. This also applies to fruit production. On the one hand, facing a series of challenges, and on the other hand, benefiting from financial support, the Romanian producers managed to bring on the market a significant quantity of local fruits. Along with these, the import of exotic fruits comes to complete the consumer demand for these foods. In this article we have proposed a brief analysis of fruit production and consumption in Romania, highlighting the changes that have occurred recently in their evolution.*

**KEY WORDS:** *fruit production, food consumption, fruit consumption, fruit market.*

**JEL CLASSIFICATIONS:** *E21, E23, Q11, Q13.*

### **1. INTRODUCTION**

In Romania there has been, for centuries, a strong tradition of family farms. Unfortunately, this was interrupted by the process of nationalization and collectivization during the communist period when traditional farms were replaced, in most areas, by state-controlled administrative structures. After 1989, the restitution of nationalized lands to the former owners began, but, as the specialists claim, through a succession of poorly designed laws, whose repercussions were deeply felt on the production systems, post-harvest capitalization, on infrastructure, agricultural research and consultancy. This has led to dramatic declines in the levels of production of domestic products and has transformed Romania from a predominantly exporting country into a country which, in order to cover domestic demand, imports fruits and vegetables (Ministry of Agriculture and Rural Development, 2017).

In terms of consumption, international organizations recommend daily fruit consumption in order to support a healthy lifestyle. Traditionally, Romanians have a diet based on high consumption of meat, fats, potatoes and bakery products, to the detriment of vegetables and fruits. But, the abundance of information present in all

---

\* Assoc. Prof., Ph.D., University of Petroșani, Romania, [oanabaron@upet.ro](mailto: oanabaron@upet.ro)

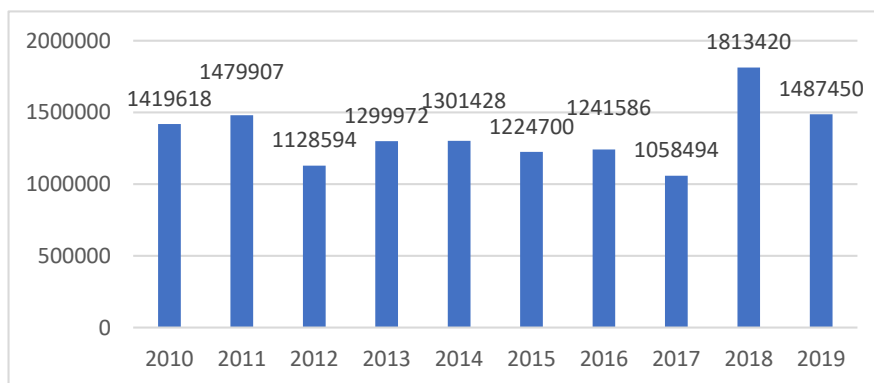
media regarding the healthy lifestyle, reducing the risk of illness, increasing life expectancy, etc. as well as the fruits varied local offer alongside the imported one have determined in the last years the awareness of the Romanians in terms of the benefits of including more fruits in their daily diet.

## 2. FRUIT PRODUCTION

The fruit sector comprises a wide variety of products distributed through very different supply chains. However, producers face many common challenges. Weather conditions can have a significant impact on seasonal crops, determining both the quantity and quality of products marketed. Product freshness and perishability limit the ability to adapt to a demand that is generally more consistent than supply. Price volatility can also severely affect producers (European Parliamentary Research Service, 2019).

Regarding Romania, the climate and soil offer favourable conditions for the cultivation of fruit trees and shrubs, species widespread, depending on their biological requirements, throughout the country, from the plains to altitudes of over 800-1000 meters. Orchards totalled in 1990 - 230.7 thousand ha., since then and until now decreasing considerably, as follows: in 2000 the area cultivated with fruit trees was 206.8 thousand ha., in 2010 - 144.8 thousand ha., and in 2019 - 135.1 thousand ha., the latter currently representing only 1% of the country's agricultural area. It is also important to note that the main fruit species cultivated on these areas in Romania are plum, apple and cherry (National Institute of Statistic).

Against the background of the decrease in the last decade of the cultivated area by 9.7 thousand ha, in the period 2010-2019, as can be seen from Figure 1, the production of orchard fruits in Romania had a fluctuating evolution, determined of course by the annual climatic conditions. In the analyzed interval, the peak was represented by year 2018, the production being 71.33% higher than in the previous year, this also due to the fact that in 2017 in Romania the smallest quantity was harvested.



Source: Author processing according to data available at: <http://statistici.insse.ro:8077/tempo-online/#/pages/tables/insse-table>

**Figure 1. Fruit production in Romania in the period 2010-2019 (tons)**

However, compared to the EU, Romania is not bad at all, given that it rank, according to European statistics, sixth in the top eight Member States after fruit production for three consecutive years. (Table 1).

**Table 1. Top 8 Fruit Producers in the EU (thousands tons)**

<b>Cuntry</b> <b>Year</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>
Spain	13,858	13,308	14,244
Italy	10,746	10,281	10,527
Poland	5,048	3,565	5,844
France	3,151	3,025	2,932
Greece	3,051	3,188	3,233
<b>Romania</b>	1,726	1,630	2,436
Germany	1,334	847	1,561
Portugal	1,067	1,270	1,184

*Source: Fruit Logistica (2020) European Statistic Handbook, p. 5*

In European statistics, fruit production includes, in addition to fruit trees, melons, grapes, strawberries, etc. Even if in 2018 the production of Romania is only 17.1% of that of Spain, it is well above that of other Member States. The fruit demand of the population is covered not only by domestic production but also by intra- and extra-EU imports. These are mainly exotic species that cannot be cultivated in Romania, but also native species imported during the periods when it is not their harvest season.

**Table 2. Intra and extra EU fruit imports in the period 2016-2018 (thousand tons)**

<b>Cuntry</b> <b>Year</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>
Netherlands	4,300	4,561	5,031
Germany	5,309	5,444	5,286
United Kingdom	3,719	3,715	3,564
France	3,261	3,420	3,433
Belgium	2,394	2,514	2,396
Italy	1,795	2,043	2,002
Spain	1,548	1,666	1,811
Poland	1,462	1,686	1,550
Portugal	745	835	867
<b>Romania</b>	<b>768</b>	<b>796</b>	<b>779</b>
Czechia	704	699	666
Other	4,682	4,779	4,710

*Source: Fruit Logistica (2020) European Statistic Handbook, p. 8*

The values included in Table 2. show us that, at least in 2018, Romania imports a quantity three times smaller than the one produced in the country, unlike, for example, Germany, where the proportion is reversed, the imported quantity being 3.38 higher than the one produced in the country.

Returning to the above, the decline in fruit plantation areas and by default of the production obtained had as main restrictive factors the particularly expensive investment for the establishment of a plantation, along with the high maintenance costs of the fruit plantation. Moreover, the vast majority of production technologies are uncompetitive, outdated, leading to low-quality, low-quality fruit production. That is why current producers as well as potential new entrepreneurs in this sector must embrace any support from national or European level, thus contributing to the revitalization of the sector and sustainable development in rural areas (Ministry of Agriculture and Rural Development, 2015).

Since 2007, as a member state, Romania must join the EU's common agricultural policy. For the fruit and vegetable sector, the policy must be geared to the demands of this market by reducing price fluctuations and the imbalance between supply and demand and encouraging the consumption of fruit and vegetables, while ensuring the competitiveness of products.

Producer organizations are the main actors in the common organization of the fruit and vegetables market, whose role is to concentrate supply and adapt it to market demand, acting on behalf of the interests of members. Producer organizations may, with Community financial support and on the basis of an approved operational program, carry out activities in the field of production quality - organic production, environmental protection, marketing activities, product promotion and innovation, crisis prevention and management activities.

Romania has developed its strategy for operational programs in the fruit and vegetable sector in accordance with Article 36 para. (3) of Regulation (EC) No 1308/2013 of the European Parliament and of the Council stipulating that Member States which have recognized producer organizations (POs) in the fruit and vegetables sector have an obligation to draw up a national strategy for sustainable operational programs (OPs) in this sector (Ministry of Agriculture and Rural Development, 2017).

According to the latest update, from August 2020, and existing on the website of the Romanian Ministry of Agriculture and Rural Development, in the fruit and vegetable sector - there are 23 producer organizations recognized in accordance with Regulation no. 1234/2007 establishing a common organization of agricultural markets and on specific provisions for certain agricultural products (<https://www.madr.ro/docs/agricultura/2020/lista-organizatiilor-de-producatori-din-sectorul-fructe-legume-03.08.2020.pdf>).

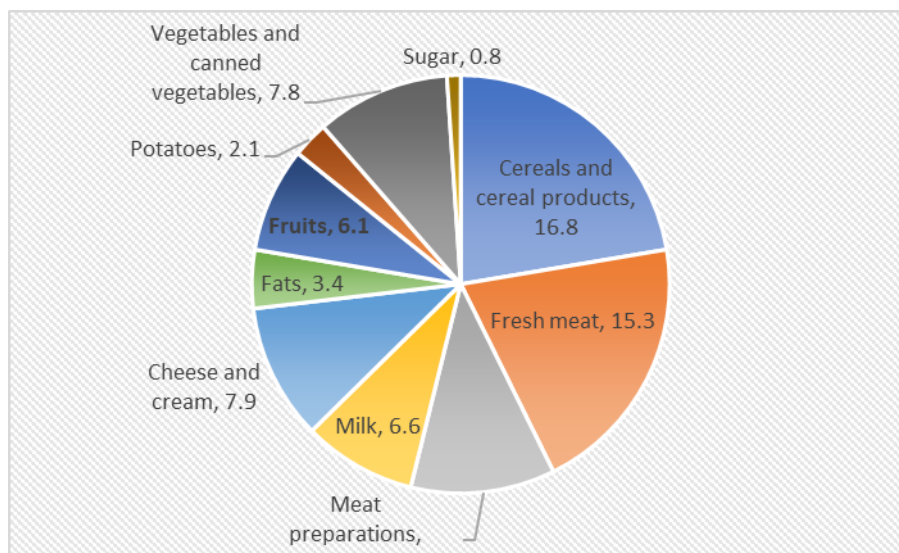
Thus, fruit growers have received and will continue to receive a series of financial subsidies in the form of direct payments from the European Agricultural Guarantee Fund (EAGF), including the single area payment scheme, the payment for young farmers, which do not exceed 40 years, the support given to producer organizations. Also, fruit producers can capitalize on their production through the Romanian School Fruit Program, through which the necessary quantities of fruit are purchased through public procurement procedures at the initiative of local or county

councils, as appropriate. They can also receive financial aid from the state for used diesel. In 2019, 1.73 lei per liter of diesel used in the performance of mechanized works was granted, and the amount for which orchard support was granted was 130 liters / ha.

### 3. FRUIT CONSUMPTION

In Romania, the main destinations of household expenditures are the consumption of food, non-food goods, services and transfers to public and private administration and social security budgets, in the form of taxes, fees and contributions, and to cover needs related to household production. In 2019, consumption accounted, on average, for all households, 61.0% of total expenditures. Among them, the expenditures for food consumption held, in all households, a share of 36.4%.

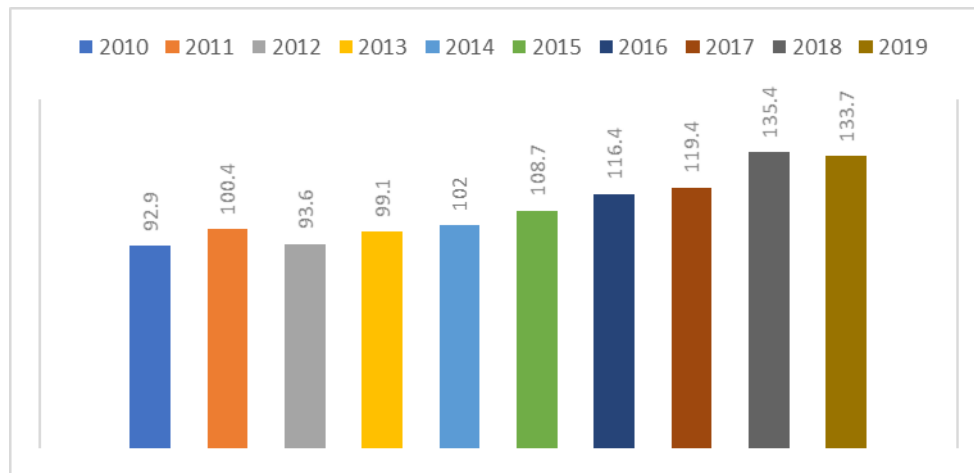
Among the expenditures for the purchase of the main food products, the fruit chapter represented 6.1%, in the conditions in which the share of meat and meat preparations was 23.7%. (Figure 2).



Source: Author processing according to data from: National Institute of Statistic (2020) *Coordinates of living standards in Romania. Income and consumption of the population, year 2019, p. 62*

**Figure 2. Expenditure structure for the purchase of the main food products in 2019 (%)**

Quantitatively, there is a predominantly positive dynamics of fruit consumption, the average annual consumption per capita being in 2019 by 40.8 kilograms higher than 10 years ago (Figure 3). Calculating the average consumption per capita per day, we notice that in 2018 an average of 370.9 grams of fruit were consumed per day, and in 2019 - 366.3 grams.



Source: Processing based on data available at: <http://statistici.insse.ro:8077/tempo-online/#/pages/tables/insse-table>

**Figure 3. Average annual fruit consumption per inhabitant in Romania in the period 2010-2019 (kg)**

By type of fruit, there are some changes in consumer preferences in the period 2017-2019, as follows: the amount consumed of local fruits such as apples and plums and that of southern and exotic fruits increased throughout the analyzed period, while for all others consumption decreased in 2019 compared to the previous year.

**Table 3. Average annual consumption per inhabitant of fruits by categories in Romania (kg)**

Fructe	Years	2017	2018	2019
Apples		26.3	31.7	34.5
Plums		4.8	7.1	7.8
Apricots		2.2	2.3	2.1
Cherries and sour cherries		3.1	4.8	4.1
Peaches - nectarines		6.6	5.4	5
Grapes		7.9	8.5	7.7
Southern and exotic fruits		34.7	38.6	39.3
Other fruits		10.5	12.4	10.8
Melons		23.3	24.6	22.4

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

Studies and the database of the National Institute of Statistics indicate that in recent years the consumption habits of Romanians have changed. Due to the desire to

have a balanced diet for a healthier lifestyle, the share of plant foods in total food consumption has increased to the detriment of foods based on animal fats, reaching around 60%.

#### 4. CONCLUSIONS

Although the fruit sector in Romania has faced in recent years a number of problems related to the decrease of cultivated areas, the aging of orchards, the lack of technical equipment of farms, etc. the level of production recorded in three consecutive years has placed us in sixth place among the EU Member States. Romanian fruits are found in the food consumption of the population along with the imported ones, especially the exotic ones that cannot be produced locally in an increasing quantity. And yet, the total consumption of fruit remains below the recommendations of international bodies such as FAO and WHO but also nutritionists, with all the benefits that such consumption has on health, being an important source of vitamins, minerals, trace elements and a factor in preventing many diseases by reducing the energy intake of food.

#### REFERENCES:

- [1]. **European Parliamentary Research Service** (2019) *The EU fruit and vegetable sector*, [Online], Available at: [https://www.europarl.europa.eu/RegData/etudes/BRIE/2019/635563/EPRS\\_BRI\(2019\)635563\\_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/BRIE/2019/635563/EPRS_BRI(2019)635563_EN.pdf), [Accessed 28 September 2020]
- [2]. **Fruit Logistica** (2020) *European Statistic Handbook*, [Online], Available at: [https://www.fruitlogistica.com/FRUIT-LOGISTICA/Downloads-Alle-Sprachen/Auf-einen-Blick/European\\_Statistics\\_Handbook\\_2020.pdf](https://www.fruitlogistica.com/FRUIT-LOGISTICA/Downloads-Alle-Sprachen/Auf-einen-Blick/European_Statistics_Handbook_2020.pdf), [Accessed 25 September 2020]
- [3]. **Ministry of Agriculture and Rural Development** (2015) *Strategy for the development of the agri-food sector in the medium and long term horizon 2020-2030*, [Online], <https://www.madr.ro/docs/agricultura/strategia-agroalimentara-2020-2030.pdf>, [10 September 2020]
- [4]. **Ministry of Agriculture and Rural Development** (2017) *National strategy for operational programs in the fruit and vegetables sector*, [Online], <https://www.madr.ro/docs/agricultura/legume-fructe/strategie-legume-fructe-2018-2020.pdf>, [Accessed 10 September 2020]
- [5]. **National Institute of Statistic**, *Tempo Online statistical database*, [Online], Available at: <http://statistici.insse.ro:8077/tempo-online/#/pages/tables/insse-table>
- [6]. **National Institute of Statistic** (2020) *Coordinates of living standards in Romania. Income and consumption of the population, year 2019*, [Online], Available at: [https://insse.ro/cms/sites/default/files/field/publicatii/coordonate\\_ale\\_nivelului\\_de\\_trai\\_i\\_n\\_romania\\_2019-1\\_0.pdf](https://insse.ro/cms/sites/default/files/field/publicatii/coordonate_ale_nivelului_de_trai_i_n_romania_2019-1_0.pdf), [Accessed 7 September 2020]
- [7]. **National Institute of Statistic** (2020) *Consumption availability of the population in 2018*, [Online], Available at: [https://insse.ro/cms/sites/default/files/field/publicatii/disponibilitatile\\_de\\_consum\\_ale\\_populatiei\\_anul\\_2018.pdf](https://insse.ro/cms/sites/default/files/field/publicatii/disponibilitatile_de_consum_ale_populatiei_anul_2018.pdf), [Accessed 7 September 2020]
- [8]. **Niță, D.; Isac, C.; Dobre-Baron, O. and others** (2020) *Entrepreneurship: present and perspectives, Chapter 4 "Agricultural entrepreneurship"*, Universitas Publishing House, Petroșani, ISBN 978-973-741-720-6, pp. 117-182

- [9]. <https://www.madr.ro/docs/agricultura/2020/lista-organizatiilor-de-producatori-din-sectorul-fructe-legume-03.08.2020.pdf>, [Accessed 15 September 2020]
- [10]. <https://www.wall-street.ro/articol/Agricoltura/243668/cum-arata-productia-de-fructe-a-romaniei-suprafete-cultivate-in-scadere-inflorim-doar-cu-prune-si-mere.html#gref>, [Accessed 15 September 2020]
- [11]. <https://www.eufic.org/en/healthy-living/article/fruit-and-vegetable-consumption-in-europe-do-europeans-get-enough>, [Accessed 22 September 2020]
- [12]. <https://www.agroinfo.ro/economic/consumul-de-fructe-romanesti-pe-cap-de-locuitor-in-romania>, [Accessed 15 September 2020]
- [13]. [https://ec.europa.eu/info/food-farming-fisheries/plants-and-plant-products/fruits-and-vegetables\\_ro](https://ec.europa.eu/info/food-farming-fisheries/plants-and-plant-products/fruits-and-vegetables_ro), [Accessed 15 September 2020]