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CONSIDERATIONS ON THE DIFFICULTY OF REDUCING THE TRADE DEFICIT IN VEGETABLES

ABSTRACT

The paper aims to analyse the conditions in which Romania could become self-sufficient in fresh vegetables and potatoes. For documentation, data from the National Institute of Statistics on the areas cultivated with vegetables and potatoes, production, imports and exports of vegetables and potatoes and the degree of self-supply were used. Data provided by the Ministry of Agriculture and Rural Development on the financing of the vegetable and potato sector were analysed, as well as the eligibility conditions imposed on farmers for receiving different types of support. The trade deficit in vegetables could be reduced over time if large retailers reduced their rate of opening new stores, and vegetable and potatoes production and the degree of organisation in the supply chain increased. The financial resources allocated from the European Union budget and the national budget can contribute both to stimulating the organisation of farmers in the supply chain, and to making investments in greenhouses and solariums, in conditioning, storage and processing of vegetables and potatoes.

Key words: vegetables, potatoes, financing.

JEL Classification: Q10, Q14.

I. INTRODUCTION

It is a well-known fact that, for several years, Romania has failed to reach self-sufficiency (NIS, 2016–2024, Population Consumption Availabilities), although one of the objectives of national strategies (Strategy for the development of the agri-food sector in the medium and long term, 2020–2030, National Rural Development Plan 2014–2022, CAP National Plan 2023–2027), as well as of the Government Programmes has been the reduction of the agri-food trade deficit.

Self-supply is an indicator that reveals the extent to which domestic production covers domestic consumption needs in the reference period, being used in the broader analysis of food security. Self-supply is influenced by domestic production, consumption and trade balance.

The present study focused on the analysis of Romania's self-sufficiency in fresh vegetables and potatoes. The evolution of productions, cultivated areas, imports and exports of fresh vegetables and potatoes was analysed, as well as of the degree of self-supply in vegetable and potatoes. Taking into consideration the support granted to this sector from national and EU funds, the conditions for

granting different types of support were analysed and recommendations were made for improving the conditions for granting support to reduce the trade deficit in fresh vegetables and potatoes and increase the degree of self-supply.

2. STATE OF KNOWLEDGE

Romania's trade deficit in agri-food products and live animals has steadily increased in the last 10 years, to reach 10.31 billion euros in 2023, while trade deficit in fresh and processed vegetables reached 1.12 billion euros, of which 56% represents the deficit in fresh vegetables.

While Romania is self-sufficient in cereals, a decreasing self-sufficiency trend can be seen in vegetables, ranging from 56% in edible roots to 116% in grain legumes.

Both the cultivated areas and the average yields and total productions of vegetables and potatoes decreased in the period 2014–2023, while imports increased under the background of climate change, of rising input and energy prices and labour shortages.

In the last 25 years, Romania's trade balance in agri-food products was negative both in relation to non-EU countries and to the European Union. As regards trade balance in vegetables, this was also negative, but greatly increased with Romania's joining the European Union. The poor organisation of local producers, the scattered supply of vegetables and the increasing demand for higher quality and more diversified products led to a fast increase in vegetable imports (Gavrilescu, 2023), while vegetable exports increased much more slowly.

In terms of reaching self-sufficiency in vegetables in the short and long term, the chances are quite small if measures are not taken to increase the degree of supply chain organisation (only 1% of producers are organised in producer groups and organisations) and contracted production (Alboiu, 2024). The higher direct payments per hectare, the continuation of coupled support for vegetables grown in greenhouses and solariums, for field tomatoes and cucumbers used for processing, and for seed potatoes, investments in the conditioning, storage and processing of vegetables financed through the National Strategic Plan can contribute to the development of the short supply chain and of larger processing facilities (Alboiu, 2024).

3. MATERIAL AND METHOD

For the purpose of the analysis, statistical data from the National Institute of Statistics (TEMPO Online database) on the degree of self-supply, production, imports and exports of vegetables and potatoes by categories for the period 2014–2023 were used. The subsidy expenditures from national and EU funds, the

national legislation on public policies for the vegetable sector from the same period, the specialised literature and press articles on the evolution of agri-food trade in Romania were analysed. Discussions were held with representatives of producer associations.

4. RESULTS AND DISCUSSIONS

4.1. DEGREE OF SELF-SUPPLY

In the last 10 years, as it can be seen from Table 1, the degree of self-supply in vegetables and vegetable products (in fresh vegetable equivalent) and potatoes has steadily decreased. While in the year 2014, Romania's self-supply in potatoes was 106.3%, in 2022 it reached 56%, down by 47% (the largest decrease in this period). In the case of vegetables, the decrease was slighter, *i.e.* 23%, reaching 70.1%.

Table 1
Romania's self-supply in vegetables and potatoes (%)

Products	Degree of self-supply (%)								
	2014	2015	2016	2017	2018	2019	2020	2021	2022
Potatoes	106.3	87.3	90.4	100.3	99.0	90.8	64.8	57.5	56.0
Vegetables and vegetable products (in fresh vegetable equivalent), grain legumes and melons	91.3	88.2	85.3	90.9	86.7	84.3	81.6	82.0	70.1
– Tomatoes	75.3	73.9	68.5	74.8	74.7	70.4	71.7	61.6	71.4
– Cabbages	109.3	109.1	105.4	105.9	105.6	100.6	96.4	72.6	95.0
– Dry onions	91.3	82.5	78.5	87.1	76.6	74.9	81.6	75.8	80.8
– Edible roots	84.3	73.7	74.7	70.8	70.8	72.2	71.9	55.9	68.5
– Various vegetables	88.5	85.1	79.3	80.3	79.3	77.5	79.8	71.4	78.6
– Grain legumes	77.2	95.1	135.6	197.4	119.3	122.9	75.8	94.4	116.0

Source: Consumption Availabilities, National Institute of Statistics.

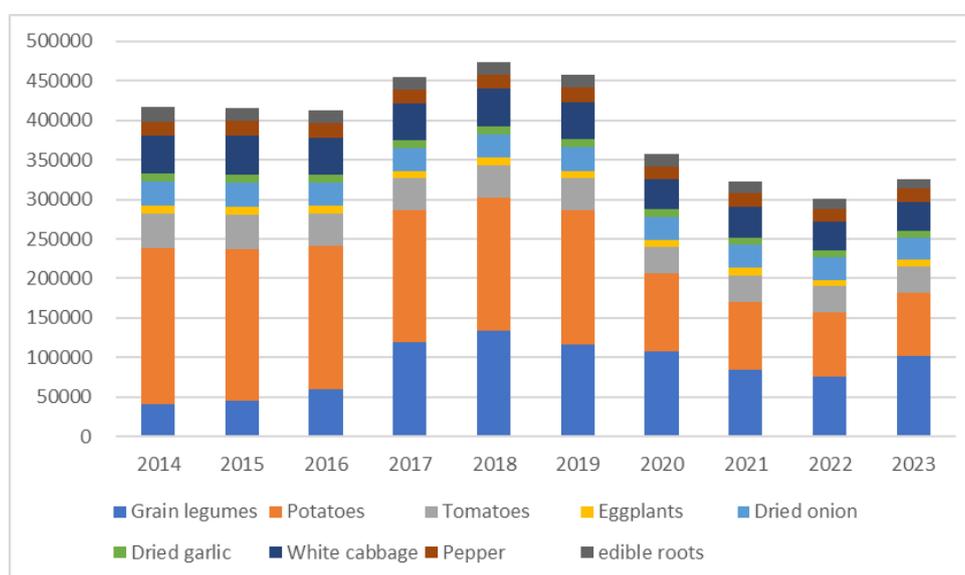
In vegetables, the largest decrease was found in edible roots, *i.e.* 19%, the degree of self-supply reaching 68.5% in 2022. The only product in which the degree of self-supply increased is grain legumes, which reached 116% in 2022 from 77.2% in 2014.

4.2. VEGETABLE PRODUCTION

The area under vegetables has steadily decreased over the last ten years, despite the support provided to producers in various forms: direct payments, coupled payments, state aid, investment support or support for producer groups and

organisations, and also despite the increasing demand and consumption. The greatest decrease is found in the case of areas cultivated with potatoes (60%), edible roots (26%), white cabbages (23%) and tomatoes (23%). Grain legumes is the only crop in which both the degree of self-sufficiency and cultivated area and production increased (Figure 1).

Under the background of climate change and rising input prices (energy, diesel, fertilisers, pesticides), of the COVID pandemic and war in Ukraine¹, the area cultivated with field vegetables decreased by 32%, while the area cultivated with vegetables in greenhouses and solariums increased by a smaller percentage (15%).

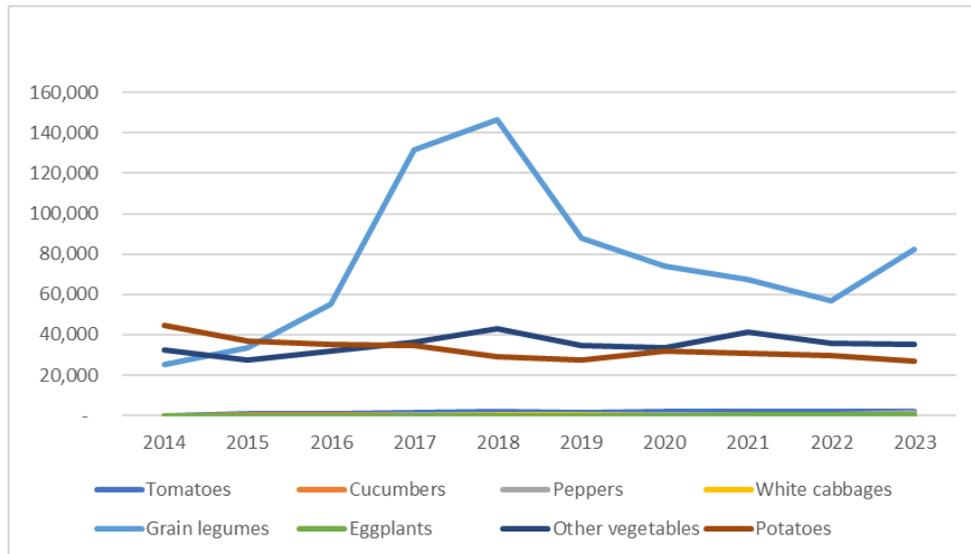


Source: TEMPO-Online, National Institute of Statistics.

Figure 1. Area cultivated with the main vegetables in Romania in the period 2014–2023 (hectares).

Analysing data from the Payments and Intervention Agency for Agriculture (APIA), it can be seen that the areas registered for support did not fluctuate very much, except for grain legumes, which increased very much in 2017 and 2018, and then decreased and remained relatively constant (Figure 2).

¹ From the discussions with I. Păunel, We Save the Romanian Peasant Union.

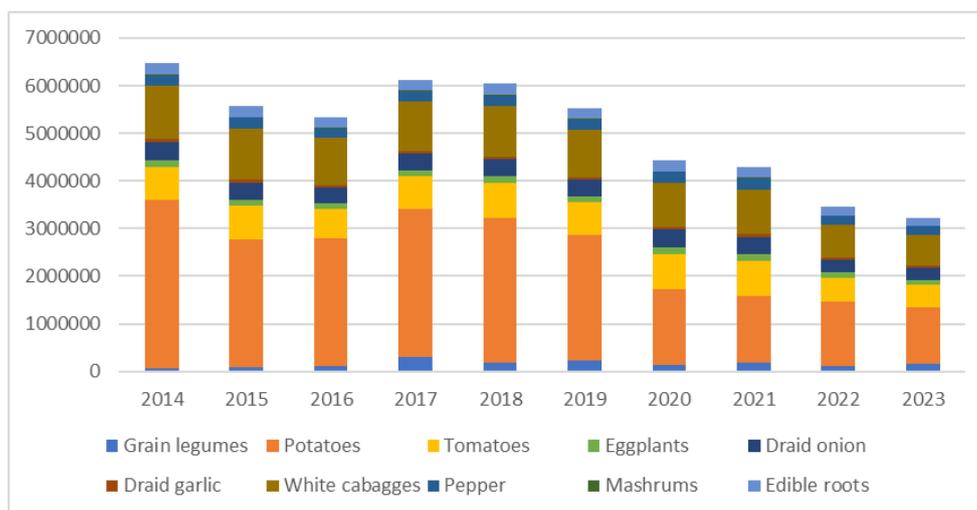


Source: Author's own calculations based on APIA data

Figure 2. Area for which support from APIA 2014–2023 was requested (hectares).

It can be seen that the areas cultivated with vegetables and potatoes declared to APIA for direct or coupled support represent a rather small percentage (around 50% for tomatoes and 30% for potatoes) of the areas cultivated with vegetables and potatoes from NIS data. This is mainly due to the small areas of parcels that cannot be included in the definition of a farm eligible for support (minimum area of 1 ha, with a minimum parcel area of 0.3 ha, and 0.03 ha in the case of greenhouses and solariums).

Production followed the same trend as cultivated areas, yet production decrease was much higher, which means that average yields per hectare did not increase in this period either (Figure 3). As an example, the area cultivated with potatoes decreased by 60%, while production decreased by 66%. Tomato production, for which de minimis aid was granted in the period 2017–2020 and in 2023, had an annual variation of +/-8% compared to the previous year in the period 2017–2020, and decreased by 32% in 2022. In the case of dry garlic, for which de minimis aid was granted in the period 2019–2023, production fluctuated compared to the previous year from +11% in 2019 to -17% in 2022. Possible causes would be the unfavourable climate conditions over the last years, the COVID pandemic and the war in Ukraine that led to an increase in input and energy prices, and also labour shortage.



Source: TEMPO-Online, National Institute of Statistics

Figure 3. Production of main vegetables in Romania in the period 2014–2023 (tonnes).

4.3. TRADE BALANCE

As it can be seen in Figure 4, Romania's trade deficit in fresh vegetables has steadily increased over the last ten years, to reach 625 million euros in 2023. Imports increased in all commodity groups from the Combined Nomenclature, and those in which the highest increases were noticed as compared to the year 2014 are the following: 0702 tomatoes (+248%), 0703 onions, garlic (+319%), 0706 carrots, turnips, beetroots, celeriac (+302%), 0707 cucumbers (+403%), 0714 cassava roots, turnips (+1077%) and 0701 potatoes (+241%).

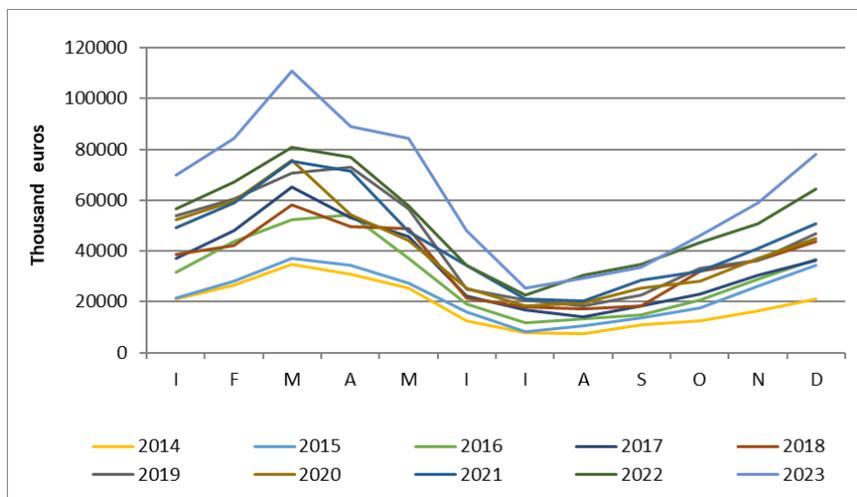
As regards exports, for several commodity groups from the Combined Nomenclature, export value increased in 2023 compared to 2014: 0701 potatoes (+96%), 0702 tomatoes (+255%), 0704 cabbages (+609%), 0708 leguminous vegetables (+465%); but there are also several commodity groups for which the value of export decreased considerably: 0714 cassava roots, turnips (-96%), 0711 provisionally preserved vegetables (-49%) and 0705 lettuce (-50%).



Source: TEMPO-Online, National Institute of Statistics.

Figure 4. Romania's trade balance in fresh vegetables in the period 2014–2023 (thousand euros).

If we analyse the value of imports by months, Figure 5, it can be noticed that they reach their maximum in the winter and spring months and the minimum in the summer and autumn months, when local production is available in larger quantities.

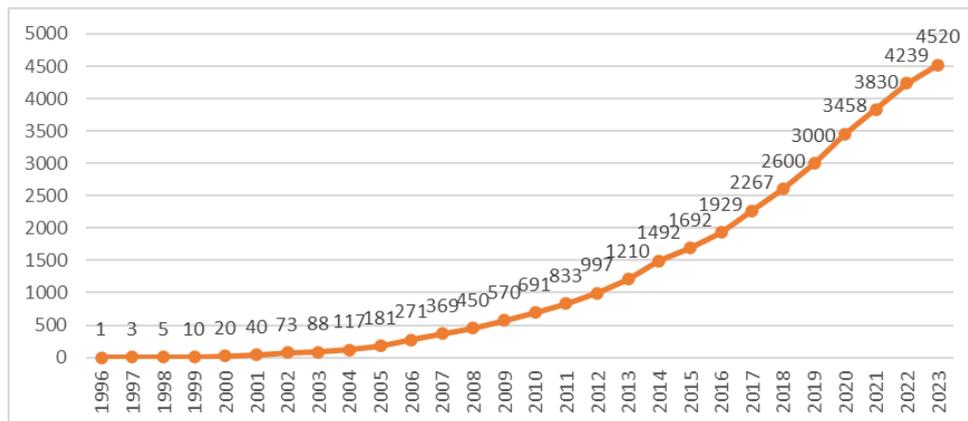


Source: TEMPO-Online, National Institute of Statistics.

Figure 5. Imports of fresh vegetables by month in the period 2014–2023 (thousand euros).

This evolution can be attributed to the accelerated growth in the number of modern trade units such as hypermarkets, supermarkets, discount stores, cash & carry

and proximity stores, which reached 4520 units in the year 2023 (Figure 6). These add to 45000–50000 “traditional” stores (Roşca, 2024). Based on their trade pattern, these need larger quantities of fresh vegetables throughout the year, and this quantity cannot be yet produced in Romania. This increase in the number of stores will continue, also expanding into rural areas, but their growth will no longer be so accelerated (Roşca, 2024). Therefore, I consider that imports will continue to increase, yet at a lower rate, and they will stabilise at the current level, or will decrease if certain measures are taken to increase local production of vegetables and potatoes.



Source: Ziarul Financiar.

Figure 6. Evolution of the number of large retailer stores.

4.4. FINANCIAL SUPPORT FOR THE VEGETABLE SECTOR

In the last ten years, the support for the vegetable sector in Romania has taken different forms and has been financed by EU funds through the European Agricultural Guarantee Fund (EAGF), the European Agricultural Fund for Rural Development (EAFRD), as well as by funds allocated from the national budget.

4.5. EUROPEAN AGRICULTURAL GUARANTEE FUND

From the EAGF, support was granted for the payment of direct payments (direct payments decoupled from production and direct payments coupled to production) and for supporting producer organisations.

The coupled support granted to the vegetable sector, as sector in difficulty, has undergone changes over time, mainly aiming to stabilise and develop this sector; however, this apparently did not have the expected effect, with both cultivated areas and productions suffering contractions. In the period 2015–2022, coupled support was provided for: legumes for industrialisation, seed potatoes, early potatoes for industrialisation, field-grown tomatoes and cucumbers for

industrialisation, vegetables grown in solariums (tomatoes, cucumbers, peppers, cabbages and eggplants for fresh consumption and cucumbers for industrialisation), vegetables grown in greenhouses (tomatoes, cucumbers, peppers, cabbages for fresh consumption and cucumbers for industrialisation) and early potatoes for industrialisation. Since 2023, after the entry into force of the New Common Agricultural Policy, coupled support has been granted for legumes for industrialisation (garden peas, beans and green beans), seed potatoes, vegetables grown in greenhouses and solariums (tomatoes, cucumbers, peppers, eggplants) and field-grown vegetables for fresh consumption or for industrialisation (tomatoes, cucumbers, peppers, eggplants) (Table 2).

Table 2

Amounts authorised for coupled support payment (million euros)

Scheme	2015	2016	2017	2018	2019	2020	2021	2022	2023	Total
Early potatoes for industrialisation	15.75	4.08	1.70	0.18	0.09	3.32	2.75	4.35		32.22
Legumes	0.32	0.37	0.33	0.23	0.35	0.41	0.42	0.40	0.70	3.53
Seed potatoes	0.69	0.59	0.76	0.71	0.72	0.74	0.81	0.75	1.57	7.34
Vegetables grown in greenhouses and solariums	2.49	2.21	4.14	7.92	6.24	8.54	12.12	8.72	3.90	56.27
Field-grown vegetables	2.71	2.88	1.92	1.23	1.14	1.40	1.17	1.20	3.25	16.89
Total	21.96	10.13	8.85	10.27	8.53	14.41	17.27	15.42	9.42	116.26

Source: Author's processing based on MARD data.

The conditions for coupled support, besides those related to farmer and area eligibility, include the obligation to use certified seed and to provide proof of marketing a minimum quantity depending on the crop, conditions for an efficient use of money. In the case of these support measures, no specific period is imposed for production marketing.

In the period 2014–2023, support worth 13.36 million euros was provided (EAGF and national budget) for the development of producer organisations. The support was granted to 5 producer organisations, out of the 23 recognised organisations, which implemented operational programmes. These aimed at: increasing product competitiveness; optimising production costs, stabilising production prices, planning production and supply; promoting, preventing and managing crises, increasing the production potential (IAE, 2023).

The evolution of producer organisations in the period 2014–2023 shows a development of association in this sector, both through the increase in the number of recognised producer organisations and through the increase in the total number of members, of areas used by members, as well as of the volume and value of total marketed production (IAE, 2023).

However, I consider that farmers' organisation into producer groups and organisations has taken place at a very slow pace, and the quantity of products marketed through these organisations is still small compared to demand.

Table 3

Amounts authorised for payment to support producer organisations (million euros)

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	Total
Support for producer organisations	1.11	1.53	1.32	1.15	1.25	1.12	1.23	1.45	1.78	1.44	13.36

Note: * Producer organisations in the vegetable and fruit sector are included.

Source: Ministry of Agriculture and Rural Development.

4.5. EUROPEAN AGRICULTURAL FUND FOR RURAL DEVELOPMENT (EAFRD)

From the EAFRD, through the National Rural Development Programme (NRDP) 2014–2022, support was provided for investments in farms, processing units, for producer groups and setting-up of young farmers. Investments targeted the procurement of agricultural equipment and machinery, equipment for conditioning, sorting, and processing of vegetables and will continue with funds allocated from the CAP National Strategic Plan 2023–2027 that was approved in December 2022.

In the period 2014–2023, around 136 projects for the development of vegetable farms were approved for financing, with a total public value of 145 million euros. By the end of September 2024, payments amounted to 98 million euros. If all contracted projects are completed by the end of 2025, which is the deadline by which the European Commission can reimburse expenses made from the NRDP 2014–2023, it means that capital infusion in the vegetable sector amounted to almost 150 million euros in the period 2014–2025, only for investments in primary activity. To these, the investments made in the period 2007–2013 must be added, worth 48 million euros (SC ACZ Consulting SRL and T33 SRL, 2017).

From the data analysed and made available by the Ministry of Agriculture and Rural Development, 95% of beneficiaries had an economic farm size between 12,000 and 250,000 euro SO (Standard output). Most projects also aimed to invest in buildings and warehouses, not only in the purchase of agricultural machinery, which means that farmers understood that investments in storage, sorting and packaging were needed to meet current marketing requirements (Table 4).

Table 4

Situation of NRDP projects on 30/09/2024

Measure (EAFRD)	Number of financed projects	Public value mil. euros	Payments made mil. euros
On-farm investments	136	145.04	89.91
Vegetable processing	46	44.96	44.81
Producer groups	5	1.97	0.51
Young farmers	1683	68.37	66.96
Total	1870	260.34	202.19

Source: Ministry of Agriculture and Rural Development.

Investments in vegetable processing had a lower value, one of the causes being the shortage of raw materials due to the decrease of areas cultivated with field-grown vegetables and production.

As regards the support to producer groups, in the period 2014–2024, only 5 producer groups out of the 64 currently operating in the vegetable sector received support. It is worth noting that in the period 2007–2013 no producer group in the vegetable-fruit sector benefited from support from the NRDP 2007-2013 (SC ACZ Consulting SRL and T33 SRL, 2017), given that producer groups were created specifically to support small farmers in the vegetable and fruit sector.

There was not much interest either from young farmers to start an activity in this sector. Out of over ten thousand young farmers that benefited from support for setting-up young farmers from the NRDP 2014–2023, only 15% are engaged in vegetable farming.

4.6. NATIONAL BUDGET

In the period 2014–2023, the Ministry of Agriculture and Rural Development financed the vegetable sector through 6 state aid schemes. The budget allocated to these schemes was 338 million euros.

From Table 5 it can be seen that certain schemes (*De minimis* aid for compensating the unfavourable effects on crops in protected areas and Aid for potato producers affected by harmful organisms in the potato crop) were provided on a one-off basis, to compensate farmers affected by certain phenomena, and others were provided to solve the problems that Romania is facing, such as the large trade deficit.

Table 5

State aids in the vegetable sector in the period 2014–2023

State aids	Budget (million euros)	Period
<i>De minimis</i> aid for compensating the unfavourable effects on crops in protected areas	1.66	2014
Aid for potato producers affected by harmful organisms in the potato crops	0.05	2014
<i>De minimis</i> aid for supporting tomato production in protected areas	224.81	2014–2020, 2023
<i>De minimis</i> aid for supporting garlic production	14.11	2019–2023
<i>De minimis</i> aid for supporting vegetable production in protected areas	93.79	2021–2022
<i>De minimis</i> aid for supporting potato production	3.66	2022–2023
Total	338.1	2014–2023

Source: Author's processing based on national legislation.

DE MINIMIS AID FOR SUPPORTING TOMATO PRODUCTION IN PROTECTED AREAS

This aid was granted to tomato producers for tomatoes grown in protected areas (greenhouses and solariums) to reduce the quantity of imported tomatoes in the periods when the production of field tomatoes is not available (January-June and October-December). Although during the implementation the conditions for granting support were modified, and the amounts allocated annually increased, there was no decrease in tomato imports, and in fact imports increased, while tomato production decreased. Farmers believe that these decreases are caused by labour shortage, unfair imports, mainly from Turkey, high energy costs, adverse weather phenomena, and also by the low support granted through this instrument (Table 6).

Table 6

Conditions for granting de minimis aid to support tomato production

	2017	2018	2019	2020	2023
Aid	3000 euros/ beneficiary/year	3000 euros/ beneficiary/year	3000 euros/ beneficiary/year	3000 euros/ beneficiary/year	3000 euros/1000 m ² / year
Minimum area	1000 m ²	1000 m ²	1000 m ²	1000 m ²	1000 m ² /production cycle
Minimum production obtained	2 kg/ m ² ;	2 kg/ m ² ;	2 kg/ m ² ;	3kg/ m ²	3 kg/ m ²
Minimum marketed production	2000 kg	2000 kg			3000 kg/1000 m ²
Marketing period	January 1 – June 15, inclusively, and/or October 23 – December 20, inclusively	January–May inclusively, and/or November– December 20, inclusively	January–June 15 inclusively, and/or November– December 20, inclusively	Until July 1 inclusively	Until July 15 inclusively
Budget (mil. euros)	40.00	47.83	62.81	39.48	66.26

Source: Author's processing based on national legislation.

While in the first two years the conditions for granting the support remained unchanged, in the next two years, the obligation to market a minimum quantity was eliminated, and in 2023 this obligation was reintroduced with an increased quantity from 2000 kg to 3000 kg/1000 m², and the minimum production that had to be obtained per m² increased from 2 kg to 3 kg. In 2023, the modality of granting the support was also modified, namely 3000 euros/1000 m² and not 3000 euros/beneficiary. This change may bring more money to farmers with larger areas.

It can be noticed from Table 7 that the number of support beneficiaries, except for the first year of implementation, was around 20 thousand. However, the amounts paid varied more depending on both the number of beneficiaries and the number of production cycles included in the scheme and the method of calculating the support.

Table 7

Number of beneficiaries and de minimis aid authorised for payment to support tomato production

	2017	2018	2019	2020	2023	Total
Beneficiaries	8,026	15,711	20,723	17,386	22,082	n.a.
Payments (thousand euros)	23,526	47,136	62,169	39,477	66,246	23,8554

Source: Ministry of Agriculture and Rural Development.

Analysing the conditions for granting the support, it can be mentioned that imposing a marketing period is justified, considering the months in which most imports are made. The obligation of marketing a minimum quantity is necessary to avoid fraud. However, this aid has not reached its goal yet. Perhaps a larger amount is needed to cover the high costs of heating the greenhouses and solariums and some other requirements may be included such as marketing the production through cooperatives/producer groups/organisations to strengthen the association system in this sector.

DE MINIMIS AID FOR SUPPORTING VEGETABLE PRODUCTION IN PROTECTED AREAS

The de minimis aid to support the production of vegetables grown in protected areas was granted to farmers only in 2021 and 2022. The conditions for granting this support are presented in Table 8.

Table 8

Conditions for granting the de minimis aid for supporting vegetable production in protected areas

	2021	2022
Aid	2210 euros/1000 m ² /crop	Maximum 4000 euros/beneficiary: a) 3000 euros/crop in cycle I/1000 m ² /beneficiary b) 1000 euros/crop in cycle II/1000 m ² /beneficiary
Minimum production obtained	a) in greenhouses: 2900 kg/1000 m ² for bell peppers and/or kapia peppers; 5000 kg/1000 m ² for cucumbers; 8500 kg/1000 m ² for tomatoes; 3000 kg/1000 m ² for eggplants; b) in solariums: 1600 kg/1000 m ² for bell peppers and/or kapia peppers; 3000 kg/1000 m ² for cucumbers; 3200 kg/1000 m ² for tomatoes; 2000 kg/1000 m ² for eggplants	3000 kg/1000 m ² for tomato crop; 2000 kg/1000 m ² for bell pepper and/or kapia pepper crop; 4000 kg/1000 m ² for cucumber crop; 1500 kg/1000 m ² for green bean crop; 10000 plants/1000 m ² for lettuce crop; 1000 kg/1000 m ² for spinach crop; 100000 bulbs/plants/1000 m ² for green onion crop.

Table 8 (continued)

Minimum area	cumulated area of minimum 1000 m ² cultivated exclusively with one of the above-mentioned crops.	to use a cumulated area of minimum 1000 m ² /production cycle exclusively cultivated with tomatoes in cycle I and in cycle II with one of the following crops: tomatoes, bell and/or kapia peppers, cucumbers, green beans, lettuce, spinach, green onions.
Marketing period	November 2 – December 2	March 1 – July 1 for production cycle I; October 15 – December 9 for production cycle II.
Budget (thousand euros)	31,551	68,721

Source: Author's processing based on national legislation.

In the case of this type of support, an impact assessment is not possible, due to the short period of granting the support. However, the marketing period does not seem to include the period December – March when great quantities of fresh vegetables are imported. Limiting the support only for certain vegetables in the conditions when Romania is deficient in all categories of vegetables may obstruct the diversification of vegetable production and can lead to an increase in imports of vegetables for which support is not granted, in the conditions in which consumer preferences have begun to diversify.

DE MINIMIS AID FOR SUPPORTING GARLIC PRODUCTION

This aid has been granted since 2019 with a budget that increased from 2 million euros in 2019 to 8 million euros in 2023 (Table 9). The granting conditions remained unchanged, except for the marketing period that has suffered minor variations from one year to another +/- 2 weeks.

Table 9

Conditions for granting the de minimis aid to support garlic production

Value of aid	3000 euros/ha
Minimum area	3000 m ²
Minimum production	3kg/10 m ²
Marketing period	July – November

Source: Author's processing based on national legislation

As it can be seen from Table 10, both the number of beneficiaries, the area for which support was requested and the value of payments made increased. However, garlic production decreased and imports increased.

Table 10

Number of beneficiaries, area and value of payments to support garlic production

	2019	2020	2021	2022	2023	Total
Beneficiaries	341	1091	875	1264	1829	5400
Area (ha)	360	1337	1143	1671	2593	7104
Payments (thousand euros)	959	1579	3089	4261	7620	17508

Source: Ministry of Agriculture and Rural Development.

While in the case of support for tomato production, imposing a marketing period that is outside the optimal period for producing field tomatoes is justified, in the case of support for garlic production, imposing a marketing period in the period June – November does not seem to take into consideration that in this period the production of new garlic produced in Romania appears on the market, and due to the increased quantities of garlic on the market, prices may drop considerably.

DE MINIMIS AID FOR SUPPORTING POTATO PRODUCTION

The aid for potato production (Table 11) has been granted since 2022 following the drastic decline in cultivated areas and potato production, largely due to the lack of certified seed, increase in costs for establishing a hectare of potato crop, labour shortage, infestations with certain pathogens that require a longer land quarantine period as well as to the changes in consumers' behaviour, who prefer to purchase smaller quantities throughout the year and no longer purchase large quantities for the winter in November – December².

Table 11

Number of beneficiaries, cultivated area and value of payments to support potato production

	2022	2023
Number of beneficiaries	2065	2294
Area (ha)	8294	11492
Payments (thousand euros)	1598	2059

Source: Ministry of Agriculture and Rural Development.

Analysing the conditions imposed for receiving the support, I consider that those related to the minimum productions obtained and marketed are justified for an efficient utilisation of funds (Table 12).

² From the discussion with B. Chiripuci, Romanian Farmers Club.

Table 12

Conditions for granting the de minimis aid to support potato production

Conditions	2022 and 2023
Minimum area	03 ha
Minimum production	15 t/ha
Minimum marketed production	6 t/ha
Marketing period	Until November 29 for the year 2022 and until November 17 for the year 2023
Value of support	200 euros/ha
Budget	3000 thousand euros for the year 2022 and 2940 thousand euros for the year 2023

Source: Author's processing based on national legislation.

Farmers being forced to sell their entire production during the imposed marketing period will lead to a decrease in potato prices, and in winter and spring Romanian farmers will not have sufficient potato quantities to cover the domestic demand. Thus, potato imports will not decrease, they will most likely increase, and Romanian farmers will lose both economically by selling at lower prices and will be also eliminated from the supply chains of large retailers due to the impossibility of delivering the quantities requested by retailers.

5. CONCLUSIONS

Romania's trade balance in fresh vegetables and potatoes could be improved in the conditions in which the number of new stores opened by the large retailers will no longer increase at the fast rate of the recent years, and the vegetable production and the degree of organisation in the supply chain will increase.

Financial resources from the EU budget and the national budget should be used to restructure the vegetable sector and create a long-term programme to improve support predictability.

The support should be directed to:

- The vegetable production in protected areas or in the field regardless of the vegetables produced. It was noticed that Romania has a negative balance for all types of vegetables and that a wide range of fresh vegetables are imported in the period December – May. The support should be provided to producer groups/organisations or to farmers who are members of these organisations and sell their production through these. These would have the possibility to develop their annual crop plans based on supply and demand and not on the support provided. In this way, surplus production of vegetables and a decrease in prices at certain times would be avoided. The elimination of the product marketing period in the case of support for field-grown vegetables should be taken into consideration in order not to

influence producers' decision to sell their harvests through administrative constraints.

- Financing producer cooperatives/groups/organisations for the construction of warehouses so that products produced in summer and autumn can be stored in optimal conditions for out of season use (winter and spring). These warehouses could be used mainly for vegetables with a lower perishability degree, such as: edible roots, grain legumes, potatoes.
- Financing machinery and equipment for conditioning, calibrating and packaging vegetables by producer cooperatives/groups/organisations in order to sell the production through chain stores, taking into consideration the new requirements of consumers and traders.
- Financing the purchase of new equipment and technologies to reduce the heating costs in greenhouses and solariums and financing the expansion of areas under greenhouses and solariums in regions where climate and economic conditions allow vegetable production at lower costs (in areas with geothermal water or near biogas stations). Given the climate changes in recent years, vegetable production will gradually move from the field to greenhouses and solariums where optimal conditions can be created for their cultivation throughout the year and where production is protected from adverse weather events.
- Encouraging farmers to join producer cooperatives/groups/organisations and supporting the creation of producer groups and organisations given that Romania has a very small number of such organisations.
- Promoting local products and identifying foreign markets for the cultivated vegetables in summer and autumn when production is available in larger quantities.

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