# THE SOURCES OF SUPPLY OF FRUITS AND VEGETABLES IN NOVI SAD (SERBIA)

# Tamara LUKIĆ\*

University of Novi Sad, Faculty of Sciences, Trg Dositeja Obradovića 3, 21000 Novi Sad, Serbia, e-mail: <a href="mailto:tamara.kovacevic@dgt.uns.ac.rs">tamara.kovacevic@dgt.uns.ac.rs</a>

# Ivana BLEŠIĆ

University of Novi Sad, Faculty of Sciences, Trg Dositeja Obradovića 3, 21000 Novi Sad, Serbia, e-mail: <a href="mailto:ivana.blesic@dgt.uns.ac.rs">ivana.blesic@dgt.uns.ac.rs</a>

# Milka BUBALO ŽIVKOVIĆ

University of Novi Sad, Faculty of Sciences, Trg Dositeja Obradovića 3, 21000 Novi Sad, Serbia, e-mail: <a href="milka.bubalo.zivkovic@dgt.uns.ac.rs">milka.bubalo.zivkovic@dgt.uns.ac.rs</a>

## Dajana BJELAJAC

University of Novi Sad, Faculty of Sciences, Trg Dositeja Obradovića 3, 21000 Novi Sad, Serbia, e-mail: <a href="mailto:dajanab@dgt.uns.ac.rs">dajanab@dgt.uns.ac.rs</a>

# Bojan ĐERČAN

University of Novi Sad, Faculty of Sciences, Trg Dositeja Obradovića 3, 21000 Novi Sad, Serbia, e-mail: <a href="mailto:bojan.djercan@dgt.uns.ac.rs">bojan.djercan@dgt.uns.ac.rs</a>

# Tatjana PIVAC

University of Novi Sad, Faculty of Sciences, Trg Dositeja Obradovića 3, 21000 Novi Sad, Serbia, e-mail: <a href="mailto:tatjana.pivac@dgt.uns.ac.rs">tatjana.pivac@dgt.uns.ac.rs</a>

# Sanja KOVAČIĆ

University of Novi Sad, Faculty of Sciences, Trg Dositeja Obradovića 3, 21000 Novi Sad, Serbia, e-mail: <a href="mailto:sanja.bozic@dgt.uns.ac.rs">sanja.bozic@dgt.uns.ac.rs</a>

Citation: Lukić, T., Blešić, I., Bubalo Živković, M., Bjelajac, D., Đerčan, B., Pivac, T., Kovačić, S. (2023). The Sources of Supply of Fruits and Vegetables in Novi Sad. *Analele Universității din Oradea, Seria Geografie*, 33(1), 1-15. <a href="https://doi.org/10.30892/auog.331101-905">https://doi.org/10.30892/auog.331101-905</a>

**Abstract:** The paper talks about the facts that were established in the research of the origin of fruits and vegetables in the markets of Novi Sad. The results of the research are presented using graphic and cartographic methods. Observed illogicalities are clarified in communication with consumers and sellers. The

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<sup>\*</sup> Corresponding Author

obtained results were compared with foreign works. One of the goals of the work was to determine the extent of suburban agriculture, which should be the most competitive with others further away from the city. Economic factors have a decisive influence from where the city will be supplied with fruits and vegetables.

Key words: fruits, vegetables, origin, Novi Sad, market

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#### Introduction

Vojvodina Region, the northern part of Serbia is a region that represents a large food producer (Ćirić, Kalenjuk, & Janković, 2020). Agricultural products occupy a high share in the external trade of the Republic of Serbia. Among them, fruit and vegetable products stand out (Marković & Marjanović, 2021).

The paper examines where the markets of Novi Sad, the second city in terms of population in the Republic of Serbia, are supplied. Why is it important what the people of Novi Sad eat? According to the data of the Public Utility Company "Informatika", the city of Novi Sad has 406,672 inhabitants (https://nsinfo.co.rs/cir/broj-stanovnika-po-naseljima), which makes up 6.0% of the population of the Republic of Serbia. 71.0% of the mentioned number live in the city itself. These are people who do not produce food.

Why is the emphasis on fresh fruits and vegetables? Because they are the only products that are not created by mixing substances that can originate from different parts of the world. In addition, fresh fruits and vegetables are healthy and their consumption is recommended for the entire population, without exception. Based on this, everyone is expected to use them without reservation, in accordance with the possibilities of the household budget.

How do economic factors affect what is eaten? This question was included at the end of the survey. It was imposed from the comments of customers and people who are employed in fruit and vegetable stores. During the research, it was determined that fruits and vegetables are procured from different parts of Serbia, Europe, and the world. Originally, this was expected in view of the season and vegetation periods. However, other economic reasons began to be discovered, which will be discussed in the paper.

The following hypotheses were established and tested:

The supply of Novi Sad is decisively influenced by economic factors (H1).

World-renowned fruit and vegetable producers can also be found on the Novi Sad market (H2).

Suburban agriculture is the main supplier of the city (H3). How far does suburban agriculture extend in the case of Novi Sad?

The research on the origin of fresh fruits and vegetables was also initiated for the reason that the results of the research can be applied in several scientific disciplines. The obtained facts can be used in the economics of agriculture, the geography of the local environment, economic geography, but also represent a contribution to the development of urban geography. Since no similar research has been found so far, this will serve to organize similar ones in the areas of other cities, which will enable a comparison for which funds will also be requested from European institutions.

#### Materials and methods

The data required for the realization of the research was obtained through field observations of fruit and vegetable declarations that are available in markets, grocers (stores specialized in the sale of fruits and vegetables) and shopping centers. Field observations were conducted during the summer (July and August) of 2022. In addition, the origin of fresh fruits and vegetables that

temporarily appear near city intersections was taken into consideration. Fruit and vegetable declarations were analyzed from six out of eight Novi Sad markets (Limanska, Riblja, Futoška, Kvantaška, Detelinaska and Satelitska), several sawmills and seven large markets (Maxi, Aman, Univerexport, Idea, Mikromarket, Lidl, Metro).

Large supermarkets display the origin of each product individually. Some countries of origin are illogical, because it is known that they do not have the physical-geographic characteristics for large-scale production of certain crops. That is why the obtained data had to be approached critically. They were necessarily checked. It was concluded that the country of origin often means that the product was imported through that country, and not that it was produced there. In some declarations, it is stated that the origin of the product is from the country of Serbia and the name of the supplier's company is stated. In such cases, we resorted to contacting the mentioned companies. Contacting did not give the expected results. Some of the respondents did not want to cooperate; some stated that they were on vacation, while some said that they were not authorized by their employers to provide the requested information. Therefore, further research into the origin of that product had to be abandoned.

It often happened to come across the same country of origin, the name of the supplier or the town where the fruit or vegetable was purchased. Therefore, 501 articles where the declaration was repeated at least three times were selected. In the absence of declarations, communication with sellers was initiated. Information was obtained from them that clarified numerous observed illogicalities. The data were processed using mathematical and statistical methods. As a function of transparency, the results of the research are presented cartographically.

The explanation of the established illogicalities was obtained through interviews. The interlocutors were producers, sellers and buyers. Women aged 41-50 and with a high school diploma, most often agreed to be interviewed (Table 1).

	Categories	Number	Share (%)	
Gender	Male	5	25	
	Female	15	75	
Age	21-30	3	15	
	31-40	6	30	
	41-50	8	40	
	51-60	3	15	
Education	Elementary school	3	15	
	High school	15	75	
	Faculty	2	10	
Function	Producer	4	20	
	Seller	12	60	
	Buyer	4	20	
Total		20	100	

Table 1. Socio-economic structure of the interlocutors interviewed

# **Results and Discussions**

After the entry into force of the SAA (Stabilisation and Association Agreement) and liberalization of trade in foodstuff with the EU and CEFTA (Central European Free Trade Agreement) countries, followed with broadening of the network of wholesalers and supermarkets, which distribute imported agricultural products and food to Serbian consumers (Jovanić, Cogoljević, & Pejović, 2018).

The last written markets in the scientific literature on the procurement of fruit date from 2021. Namely, during that year, almost 294,000 tons of fruit were imported, worth almost 266.8 million euros, which is 7% more than the value of imports in 2020. In the period January-April 2022, fruit worth 94.3 million euros was imported. Most citrus fruits are imported, and the value of

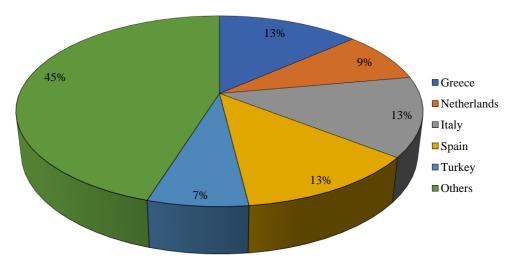
this purchase was 77.5 million euros, which is a decrease of 5% compared to 2021. Oranges cost 25.7, lemons 22.0, and tangerines 25.3 million euros. Bananas were imported in the amount of almost 58.0 million euros, which is 6% more. Frozen raspberries, blueberries, strawberries, currants, and fresh apples were also imported. The fruit arrived from Greece, Spain, Turkey, Argentina, South Africa, Ecuador, Colombia, Costa Rica (Gulan, 2022). After listing 501 articles whose origin is repeated at least three times, the following conclusions were reached.

## Imported items

In the market of Novi Sad, there are more imported fruits than vegetables (Table 2). Of the 157 fruit items, two thirds are of foreign origin. In Novi Sad shops, fruit is sold mainly from Greece, Italy and Spain, and then from the Netherlands and Turkey (Figure 1). The other twenty-two states make up the relative majority. Less than five products found originating from the same country. The relative majority are European countries (Albania, Croatia, North Macedonia, Poland), but also some Asian (Israel, China, Malaysia), African (Egypt, South Africa, Burkina Faso, Ivory Coast, Zimbabwe), or South American (Argentina, Brazil, Chile, Ecuador, Colombia, Costa Rica, Panama, Venezuela). It is expected that fruit that, due to the lack of adequate climatic characteristics, is procured from countries where it is possible to grow it. It is also expected that fruit that can grow on the territory of the Republic of Serbia will be imported at a time when it is not in its growing season. However, the import of fruit also occurs when that fruit appears in the orchards of Serbia. Radosavljević (Radosavljević, 2008) also noted that Serbia imports what it can produce.

**Table 2**. The origin of fruits and vegetables on the Novi Sad markets (Data source: Survey)

Category	Fruit from (total: 157)			Vegetable from (total: 344)				
	Abroad	Serbia	Suburban	Unknown	Abroad	Serbia	Suburban	Unknown
Number	104	19	34	0	89	40	123	92
Share (%)	66.2	12.1	21.7	0.0	25.9	11.6	35.8	26.7



**Figure 1**. Countries from which the largest amount of fruit that is offered at Novi Sad stores is imported (Data source: Survey)

From European countries, southern fruits, citrus, and continental fruits arrive on the market of Novi Sad, which, due to more favorable climatic characteristics, manage to ripen earlier than in the territory of Serbia. There are numerous clues in the scientific literature about the countries,

regions and regions where certain fruits are produced. Grapes arrive from the central regions of western Albania (Kopali, Libohova, Teqja, & Owens, 2021), the southeastern part of North Macedonia (Nickova, 2021). For many years, Poland has been a leader in apple production in the EU (4 million tons in 2021). It is ranked third in the world in terms of apple production after the USA and China (Głos, Bryk, Michalecka, & Puławska, 2022). Apples from Poland are available in Novi Sad markets. Plantations of nectarines (1.5% of cultivated area), grapes (4.0% of cultivated area) and southern fruits do not occupy significant areas of Greece (Paschalidis, et al., 2021), but they manage to reach the people of Novi Sad. Only citrus fruits arrive on the Novi Sad market from Turkey. They are an important product group for Turkey in terms of local production and global trade intensity (Gültekin, et al., 2022). Mediterranean countries, especially in Europe, because of their proximity to export markets and the advantage of EU member basin countries such as Spain, Italy, and Greece in international trade contributes to the increase of competitive power in citrus fruits (Duru, Hayran, & Gül, 2022). Therefore, the natural-geographical characteristics preconditioned and helped some countries to cultivate certain cultures.

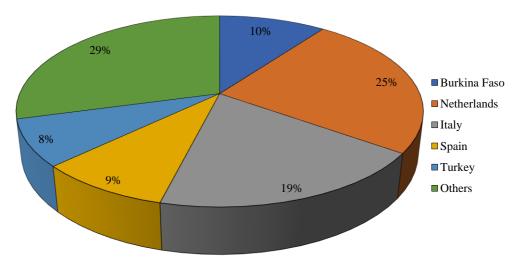
Continental, mediterranean and tropical fruits are procured from Italy and the Netherlands. Although it is not geographically located in the region, the Netherlands is one of the five largest suppliers of fruit to the Novi Sad market. As Mediterranean and tropical fruits cannot be produced in the Netherlands due to natural-geographical characteristics (De Mulder, De Pater, Fortuijn, De Klerk, & Van Dijk, 2019), it can be said that it is also a large reseller of these items. This fact was unreservedly agreed by the sellers at the new markets.

Asian fruit species are used by very few consumers. Lemon, pomelo and Japanese apple come from China, and carambola from Malaysia. China is one of the largest producers of pomelo and among the top five exporters in the world (Makkumrai, Huang, & Xu, 2021). China has the largest cultivated area and annual production of persimmons in the world (Dong, et al., 2022). Malaysia is famous for the production of carambola (Vargas-Madriz, et al., 2021). These statements support the second hypothesis (H2), which assumed that world-famous fruit and vegetable producers can also be found on the Novi Sad market.

Bananas come from Latin American countries. According to FAO (FAO, 2020) and Olivares et all (Olivares, et al., 2022), this fruit is an important source of income for producers, which indicates the volume of production that manages to reach the market of Novi Sad. Greenhalch (Greenhalch, 2021) testifies to the production of citrus and other tropical fruits in South American countries, which are also on offer in Novi Sad stores. The apple, for example, is a completely redundant import. In Serbia, it is grown on an area of 26,658 ha (Dašić, Stanić, & Živković, 2022). Although there are conditions for its preservation, it arrives from Chile, one of the world's largest producers (Federica, Sophie, & Pasquale, 2021).

It is unexpected to determine the origin of a fruit originating from the African continent. There is a common perception that this area lacks food (Adeyeye, Adebayo-Oyetoro, & Tiamiyu, 2017; Otekunrin, Otekunrin, Sawicka, & Ayinde, 2020; Suri & Udry, 2022). Burkina Faso appears on the declarations of both fruits and vegetables. The literature shows that tillage skills are being introduced into the education system of Burkina Faso (Schreinemachers, et al., 2019). In Burkina Faso, according to Carrico et al. (Carrico, Okoko, & Klaver, 2021) large investors, The Agricultural Development and Nutrition teams at the Bill & Melinda Gates Foundation, in collaboration with the UK's Department for International Development (FCDO), see opportunities for interventions to further develop the fruit and vegetable sectors. The literature also testifies to the successes in the production of fruits and vegetables in other African countries. The names of those countries are found on the fruit declarations of Novi Sad hypermarkets. Rukasha and all, (Rukasha, Nyagadza, Pashapa, & Muposhi, 2021) write about exports from Zimbabwe, Coulibaly et all (Coulibaly, Koné, Djina, Berté, & Yapi, 2021) from Ivory Coast, and Cramer and Chisoro-Dube (Cramer & Chisoro-Dube, 2021) from South Africa. Scientific considerations on the export of Egyptian oranges can be found in the work of Hassanain and Gabr (Hassanain & Gabr, 2020).

Every fourth vegetable that does not originate from Serbia was imported from the Netherlands. This knowledge is supported by the fact that they state (Donati & Tukker, 2022) that with an agricultural export of EUR 95.6 billion (over 10% of Gross Domestic Product, GDP), The Netherlands is, after the US, the largest exporter of agricultural products globally. Almost one in five comes from Italy, one in ten from Burkina Faso in Africa, followed by Spain and Turkey (Figure 2). The Netherlands and Spain, and then the other mentioned countries, are at the very top of the world's vegetable exporters (MEA, 2019). Italy is the fifth largest organic food producer in the world (Rahman, Mele, Lee, & Islam, 2021). Turkey has an advantageous position in the world. Because there are fruit and vegetable production in almost every season and every region (Kaya, A., Budak, D. B., 2021). The price determines the country of origin, not its distance from Serbia. More than a quarter of the states identified in the declarations are made up of twelve other states. That is a dozen less compared to the number of established countries from which the fruit comes. Most are from European countries (Albania, Belgium, Bulgaria, France, Greece, Croatia and North Macedonia), but there are also Asian (China, Kyrgyzstan), South American (Costa Rica and Brazil) and African (Kenya) countries.

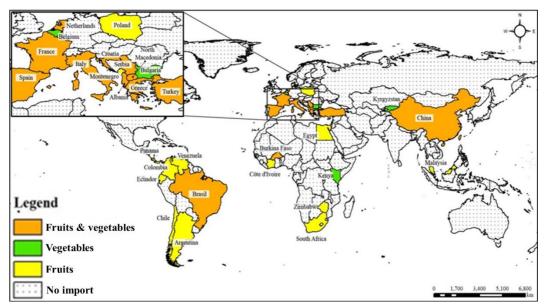


**Figure 2.** Countries from which the largest amount of vegetables that is offered at Novi Sad stores is imported (Data source: Survey)

Compared to fruits, vegetables do not come from great distances. Names of countries from other continents are rarely found in his declarations. Garlic from China is clearly different from the domestic one in terms of its size (Šćepanović, 2020) and appearance. Li and all. (Li, et al., 2021) state that the main garlic producing area of China is Jinxiang County. About the beans from Kyrgyzstan (Figure 3), which was found in Novi Sad markets, there are also scientific clues that talk about the problems of its branding. According to Suhrob (Suhrob, 2022) Talas region of Kyrgyzstan is famous for the production of beans. Vegetables found with South American origins are watermelons and melons. Brazilian watermelons from the distant provinces of Bahia and Rio Grande do Norte (Silva, et al., 2021) first precede, and then are simultaneously offered with those originating from the region of Southeast Europe (Northern Macedonia, Albania, Greece, etc.). The market position of vegetables will still be fluctuations and variability of their prices over the years (Mihajlović, Vukelić, Novković, & Mutavdžić, 2019). This is one of the reasons why they resort to importing something that already exists in Serbia.

The map, which shows the countries of origin from which fruits and vegetables are sourced, warns domestic producers in which direction to redirect their production. In addition, it is necessary to improve the production in order to exist even when it is not usual for certain products

to be found in the geographic latitudes of the Vojvodina Region. The improvement of production refers to the more frequent use of the geothermal potential of the Vojvodina Region (Košić, Pivac, Romelić, Lazić, & Stojanović, 2011; Bubalo-Živković, et al., 2018; Pešić, Brankov, Denda, Bjeljac, & Micić, 2022). In addition, increasing the area under greenhouses, irrigation and anti-hail protection systems; cold storages, dryers, storage capacities and related equipment; equipment for processing of primary agricultural products; purchases of used machinery and equipment (Popović, Janković, & Žaklina, 2018).



**Figure 3.** Countries from which products arrive in Novi Sad (Data source: Survey, Author: Dajana Bjelajac)

Producers usually strive to produce healthy and safe vegetable products. Well-organized and well-adjusted (timely) vegetable crop production helps create the space for continuous production throughout the whole year. By including more vegetable species into production as well as using crop rotation, we provide production security (Medić-Pap, Červenski, & Danojević, 2019). In communication with resellers, it could be heard that the price is influenced by "how many hands it passes through". This means that the price will be lower if the imported goods are directly on the market, instead of being resold several times.

Customers noticed a similar quality of goods in different hypermarket chains. The research, based on available declarations, revealed that fruits and vegetables in large retail chains often, but not entirely, have the same country of origin. The sellers mentioned the names of the same companies, importers. Some of them specialize in the import of one, and others import several types of fruit and vegetables. They distribute and sell the products of major importers and domestic producers.

Fruits and vegetables from the territory of the Republic of Serbia

Special attention during the research was devoted to determining from which regions of Serbia fruits and vegetables are procured and where are they most often sold? Analyzing the data from the declarations, it was found out that most of the fruit comes from areas near Belgrade, i.e. they belong to the Belgrade municipalities of Sopot, Mladenovac and Grocka. In other words, the fruit is procured from the suburban agriculture zones of Belgrade. Somewhat further away are the orchards near Smederevo, Šabac, Valjevo and Užice (Figure 4).

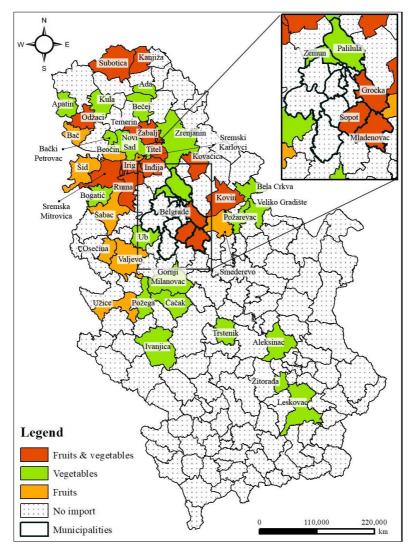


Figure 4. Municipalities in the Republic of Serbia from which Novi Sad is supplied (Data source: Survey, Author: Dajana Bjelajac)

Due to the importation of fruit species that cannot be grown in the latitudes of Serbia, the suburban agriculture of Novi Sad, according to Table 2, is not the main supplier of fruit to the city. Almost two-thirds (64.7%) of suburban settlements where fruit is produced for the Novi Sad market are located in Srem, the rest, except for one settlement in Banat, are from Bačka (Figure 4). In Bačka, on the fertile chernozem, absolutely everything that thrives in the conditions of a moderate continental climate can be produced. The land of Srem is not suitable for all plant species due to more diverse soils and hypsometric differences, which condition the sloping and sloping slopes. The fruit turned out to be something that matches the energy of the relief and loess and other pedological substrates.

Vegetables arrive at the Novi Sad market from several locations that are much further away from the city. The most distant are Žitoradja, Leskovac, Ivanjica, Čačak, Požega, Trstenik, Gornji Milanovac and Aleksinac. Leskovac could be called the most important supplier, because every fifth listed product was from the territory of its municipality. Closer vegetable gardens are in

Bogatić, Požarevac, Veliki Gradište, Smederevo, Ub and in the settlements of Belgrade municipalities (Mladenovac, Surčin, Zemun, Palilula). The municipality of Palilula, i.e. the settlements of Slanci and Veliko Selo, also provide a fifth of the listed products.

Compared to the number of suburban settlements from which fruit comes, about four times more suburban settlements produce vegetables for the Novi Sad market. Among these settlements, settlements located on the territory of Bačka predominate (67.4%). A quarter of them are in Srem (25.2%). Vegetables come from only nine settlements located in Banat. Looking at the origin of vegetables found in Novi Sad markets, the share of suburban agriculture in Novi Sad has a relative majority. Based on these facts, it can be said that the third hypothesis is partially confirmed (H3). The frequency of products grown around the city was higher in the markets. Organic products are more often found in large supermarkets. There are differences in the supply of large supermarkets and others that sell fruit and vegetables. Large supermarkets are often supplied from suppliers of the same origin. These facts were suggested by consumers and confirmed by sellers. Differences in supply come from differences in demand for certain quantities. Producers who have a smaller volume of production place their products on the markets (Grusovnik & Rozman, 2020), because they do not meet the needs of large supermarkets. And this fact supports the hypothesis about the importance of suburban agriculture.

#### Interview

Fruits and vegetables are supplied from all over the world, but also from nearby settlements. According to Beslać and Janošević (Beslać & Janošević, 2014), Serbia imports what it has. Marković (Marković, Zašto Srbija uvozi proizvode koje može sama da pravi: Ako kaniš pobjediti ne smiješ izgubiti [Why Serbia imports products it can make itself: If you want to win, you must not lose], 2021) writes that in addition to potatoes, garlic, and apples, Serbia also imports raspberries, which are a traditional export product. The interlocutors confirmed that one of the factors that affects the origin of fruits and vegetables in Novi Sad markets is the weather. A certain fruit or vegetable may or may not be in season during the year. If it is not, it is procured either from regions where it thrives at the time or is purchased from large European suppliers.

According to the declarations on which the country of origin is written, it was concluded that some fruits and vegetables are procured even when they are not needed, that is, when they grow in the territory of Serbia (Figure 5). Suppliers explain this phenomenon that it happens because of the price. Some exporters have an interest in reducing the price so much due to the volume of purchases that it is more profitable for suppliers to import an agricultural product than to purchase it in the Republic of Serbia. This claim is supported by the fact that in 2021, Serbia brought down the prices of domestic production by excessive import of tomatoes (Đurić, 2021). A more favorable price suited the customers, but it had a negative effect on the income of domestic farmers. Therefore, in the background of the phenomenon is an exclusively earnings.

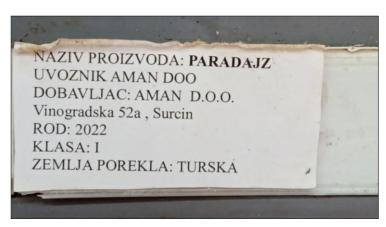


Figure 5. Tomato from Turkey

(Data source: Survey, Photo by: Tamara Lukic, September 2022)

Producers are rarely encountered in the markets. They explain that jobs are "waiting for them at home" and that most of them don't have time to stand around and wait for a customer. Most often, as soon as they arrive at the market, they sell goods to buyers. The resellers form the price by including the cost of renting the stall and their own earnings.

Producers also state that often the prices of annual plant products motivate more mass cultivation in the following season. Depending on the weather during the year, it happens that some fruit species give smaller yields. Numerous works (Subić, Nastić, & Jeločnik, 2015; Dozet, et al., 2019; Nalwanga & Belay, 2022) talk about exactly that. This is why it happens that they cannot satisfy the demands of the market. More demand than supply increases the price (Mason-D'Croz, et al., 2019; Li, et al., 2020).

When talking about the price of the product, all respondents noticed more of the same phenomena. Organic products are more expensive than those that are not (Radojević, 2018). The survey showed that all the respondents are familiar with the advantages of organic products, but first of all, they point out that it is a high price that they will not or do not have to pay. Therefore, according to the comments of consumers, organic products are for the rich or the seriously ill who believe that healthy food can help them, and at the same time they can afford it. It often happens that products are bought by the piece, which (Ozon, 2022) also writes about. All respondents linked this phenomenon to the decline in purchasing power. The prices of fruits and vegetables are the highest, according to the interviewees, in sawmills specialized only in their sale. However, everyone notices that those places have the best offer and the best quality of fruits and vegetables. If the focus is on markets and large markets, everyone is indecisive about the question of where it is more convenient to shop. Older customers are more loyal to the markets. Pensioners, for example, are able to shop at a time when a significant part of the workforce is at work. Some of the respondents stated that the prices in the markets are not fixed and can often be reduced in the case when a larger quantity is taken.

Perishable fruits and vegetables or those that are waiting for a customer for a long time can be obtained at a lower price. Some of the respondents stated that they visit the markets near the end of the working hours and then buy fruits and vegetables at a lower price. One interviewee said that she is constantly supplied at the same market and that products are often given to her "on credit or waiting until the new pension payment". In markets, they are not discounted randomly, but only as part of the promotion. The quality of products in markets depends on the management. Some supermarkets that "keep to themselves" have better quality products than others. Respondents noted four main advantages offered by supermarkets. The first is proximity. There are several markets, and supermarkets are closer and more accessible. Another advantage is the working hours. Markets usually end early at 3 pm or during the summer at 5 pm (https://www.nstrznica.co.rs/), and you can make purchases in supermarkets until 10 pm. The third advantage is the ability to pay by card. For the markets of Novi Sad, you must have only cash. The fourth advantage is saving time. In addition to fruits and vegetables, all other necessities are also purchased in supermarkets, thus saving the time required for procurement.

Sellers have noticed that customers prefer to hear that a product originates from the territory of Serbia. "Buy local" is a slogan used by some supermarkets, because they believe that this is the reason why some customers would decide to shop with them instead of a nearby competing supermarket. Customers who agreed to give their opinion on this survey also mention some facts that were not assumed.

The residents of Novi Sad, who are of rural origin, bring fruits and vegetables from the areas where they come from. There are also residents of Novi Sad who produce fruit or vegetables on their cottages, farms, etc. Some stated that they often buy fruits and vegetables while driving their own vehicle on the roads leading to the city. During the growing season, producers bring out fruits (more often on the Fruška gora Mountain) and vegetables in front of the houses, near the

roads and sell them at better prices. Customers know that the prices are favorable and that the products are local (from the villages where they are sold). The respondents conclude that prices are lower, because producers do not rent sales space, do not have transportation costs, and do not waste time waiting for customers. Zarić et al. (Zarić, Vasiljević, & Anđelković, 2018) explain the benefits of roadside vending. These facts "go" in favor of the existence of suburban agriculture and the third hypothesis (H3).

However, it often happens that the products of suburban agriculture are brought closer to the urban population by wholesalers, by selling them at city intersections. This trade is temporary, seasonal and without fiscal accounts. The municipal police are fighting against it, but experience shows that such points still exist around the city (Figure 6).



**Figure 6**. Illegal trading of vegetables at intersections, (Data source: Survey, Photo by: Tamara Lukic, September 2022)

#### **Conclusions**

According to Vojnović et al. (Vojnović, Cvijanović, & Rodica, 2013) research such as this at the micro level has significance for overall development events. As one of the methods of marketing research, this kind of market research is a contribution to the knowledge of the organization of sales. It leaves a trace of the origin of the fruits and vegetables offered in Novi Sad stores at the beginning of the third decade of the 21st century. In support of this research is the fact that no similar ones were found by studying the literature.

Suburban agriculture is the dominant supplier of vegetables to Novi Sad markets, but not of fruit. This partially confirms the third hypothesis (H3). Fruit most often comes from the territory of Srem, while more vegetables are produced in Bačka. This is also influenced by the natural geographical characteristics of the area, among which the quality of the soil dominates. Fruit products arrive from distant parts of Serbia, mainly the river valleys of Velika and West Morava, Posavina and Danube. The rural municipalities of the Belgrade region are large suppliers of fruits and vegetables. Other vegetables arrive from the south of Serbia and from the area of the West Moravian Rift. Well-known European fruit and vegetable producers are also available to the residents of Novi Sad. Scientific literature leaves traces of exotic fruit production regions outside of Europe. The presence of fruits and vegetables originating from those regions on fruit and

vegetable declarations was also found in Novi Sad markets, thus proving the second hypothesis (H2).

Identified sources of supply are both expected and unexpected. The expected ones arrive from suburban localities where fruits and vegetables are specially grown for the needs of the city. They should be more competitive in the market, because their delivery requires minimal costs. Bringing products from distant parts of the Republic of Serbia is expected, because the purchase prices for larger quantities are lower. In addition, there are areas that, due to their specific microclimatic characteristics, traditionally cultivate large areas of certain monocultures. For fruits and vegetables that cannot grow on the territory of the Republic of Serbia, the sources are expected to be outside its borders. The existence of products of African origin in the offer of Novi Sad markets was not expected. It shows how important the price is to importers, due to the effort to achieve higher profits, and not the origin of the food.

Unexpected sources mostly refer to products that can be produced in Serbia and which, even during their growing season, are supplied from other countries in the region, Europe or even from other continents. Behind that illogicality are economic reasons, among which the lower purchase price stands out. It is the result of lower labor costs, higher volume of production and demand. Therefore, the basis of everything is the price, as assumed in the first hypothesis (H1). That's a price that as many consumers as possible can pay. Suppliers and traders are in a constant process of searching for the lowest possible purchase price, which can enable them to make as much profit as possible.

#### Acknowledgements

The authors are grateful to the reviewers, whose comments and criticisms have ensured the quality of the paper. Based on the reviewer's comments, the authors identified shortcomings and ambiguities and that the authors sincerely thank the reviewer for suggestions which will improve the future research.

This research is funded by the Provincial Secretariat for Higher Education and Scientific Research of the Vojvodina Province, Serbia, as the part of the project numbered 142-451-2615/2021-01/2.

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Submitted: November 10, 2022 Revised: March 30, 2023 Accepted and published online: April 27, 2023