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Changing fresh fruits and vegetables trade from Turkey to Russia

Abstract. The purpose of the study was to assess the changing supply and export of the main types of fresh fruits and vegetables from Turkey to Russia. The task of the research was to analyse the problems that arise during the supply and export period, substantiate these problems and find ways to solve them.
Turkey is well endowed with agricultural resources and able to meet external demand after meeting domestic demand especially in terms of fresh fruits and vegetables. Turkey’s main and most important trade partner is Russian Federation, specifically for these products. Accordingly, it is important to evaluate the attachment of the markets considering overall productive capacity and export demand in Russia.

The data for main fresh fruits and vegetables being exported from Turkey to Russia was assessed regarding the change in time and potential affecting factors. Main exportable agricultural products selected for evaluation are tomatoes and onions as vegetables and mandarins and grapes as fruits. The yearly adjusted data is withdrawn from the databases of the Food and Agriculture Organisation for production and the United Nations COMTRADE for trade.

In the scope of this paper, it was aimed to evaluate changing supplies and exports of main fresh fruits and vegetables to Russia, challenges occurred in time and reasoning behind these challenges, and proposing potential improvement paths. Russia is the main importer of Turkish citrus fruits (mandarins) tomatoes, grapes and onions. It was seen fluctuations in the trade of these products due to marketing conditions including diplomatic situations between the two countries. It should be pointed out that historical contacts and geographical dependency leads to countries to maintain contacts and it was considered as essential to empower both supply and demand sides through cooperation in many areas.

**Keywords:** fresh fruits and vegetables (FFVs); export; Russia; Turkey; marketing

**Introduction**

Turkey and the Russian Federation have strong historical trade relationships. The relations are based on exchanging products that lack in one party. While Russia has always been the main supplier of energy and industrial inputs for Turkey, Turkey fills in the gap with its abundant agricultural production capacity for those products that lack in Russia. Russia exports around 60% of oil and natural gas requirements of Turkey followed with iron, steel and relevant metals. Yet, fresh fruit and vegetables (FFVs) ranks the first with more than 15% when Turkish exports are considered and FFVs are followed with textiles [7]. Accordingly, in terms of main products exchanged two countries are of great importance to each other [7].

The agricultural trade is bilateral actually. Russia is one of the main grain producers and suppliers of the world. Accordingly, missing grains, especially wheat, are supplied by Russian agriculture to Turkish markets. Due to 2017 data, almost 8% of Russian wheat exports were to Turkey that amounted 611, 6 thousand tonnes and Turkey was the second wheat importer after Egypt [12]. Yet, when fresh fruits and vegetables are concerned, Russian markets are pretty open to Turkish farmers, dealers and traders due to the proximity of the countries and availability of resources. There had been challenges in trade contracts and preferences. While almost 50% of Turkish agricultural exports to Russia were composed of sugar and grains, this share was reduced to 2%. Turkey had become a grain, specifically wheat, an importer that grain imports rose to 44% of overall imports. On the other hand, the share of FFVs in Turkish exports had risen to almost 80% partly signing to consumption attitude change and modified transportation systems [8]. This paper is devoted to the evaluation of the progress in fresh fruit and vegetable export from Turkey to Russia in comparison with the export to the world between 2000 and 2019.

**1. Material and methodology**

The data for main FFVs being exported from Turkey to Russia was assessed regarding the change in time and potential affecting factors. Main exportable agricultural products selected for
evaluation are tomatoes and onions as vegetables and mandarins and grapes as fruits. The yearly adjusted data is withdrawn from the databases of the Food and Agriculture Organisation for production and the United Nations COMTRADE for trade.

2. Changing supplies of selected agricultural products in Turkey

In order to understand improving trade dynamics, it is good to start with changing production in Turkey and the country’s share in the world. Checking out the data between 1990 and 2018, the changing supplies of Turkey and the evolution of productive capacity around the world is visible.

By 1990, Turkey had 7.8 % share in the global tomato production with 6 million tonnes over 76,31 million tonnes. The share did not change considerably within the defined timing but by 2018 Turkey supplied 6.6 % of the world’s production. Actually, within 28 years Turkey doubled its supplies to 12 million tonnes. Yet, world supplies had risen by more than two times. This means the extending covered production as green or glasshouses enabled many countries having similar endowments with Mediterranean or South American countries became able to produce tomato and relevant vegetables. However, the demand for tomato had risen as well and Turkish supremacy as an exporter within the region was maintained [6].

On the other hand, Turkey’s productive capacity had declined for onions. While the country’s share was 7.5 % in 1990 with 186 thousand tonnes of production, it reduced to 2.6 % with 143 thousand tonnes. However, this change is related to farmer preferences and shifts to alternative products. Turkish grape production has been stable, the rise from 1990 to 2018 has been 12 % and this change did not lead to a significant rise in the trade potential. Yet, the supply of mandarins and their varieties had risen by almost five times. Turkey used to supply 2.7 % with 345 thousand tonnes in 1990 and it had risen to 1,65 million tonnes with 4.8 %. Considering Turkey’s trade potential, it is important to note that exports of citrus fruits rank the first for Turkey, followed by vegetables [11].

3. The change in the Turkish agricultural trade

Before proceeding, it is important to note that the first, the agricultural products produced by Turkey are grown using organic farming methods, have high organoleptic characteristics, and are therefore very popular in Russia [4; 10].

FFVs trade has a significant share in agricultural exports of Turkey with 25 % [1]. Tomatoes, onions and its variants, mandarins and grapes constitute a significant part of agricultural exports to Russia [11].

When tomato exports are considered, we can note that Turkey’s export figures in terms of quantity and value retrieved had evolved significantly through these years. While the amount of tomato sold in 2000 was 36 thousand tonnes, it was actualised at 96 thousand tonnes in 2019. The change in export revenues was more than seven-fold that Turkey earned 11.5 million Dollars in 2000, which ended with 85.5 million Dollars in 2019. However, checking out the export revenue change demonstrated below, it was understood that these 2019 figures were not the highest ones (figure 1).

The consistently rising trend observed was cut definitely after 2015 plane crash problems as Russian Federation had issued sanctions against Turkey and stopped imports of 18 different products including tomato [3]. Accordingly, both exported quantity and recorded export revenue for tomatoes had shrunk in 2016. After the diplomatic problems were solved by 2017 with the removal of the restrictions, tomato exports had restarted. However, it is expected that reaching previous levels requires additional timing. Yet, leaving this problematic process aside, it can be noted that around 50 % of Turkish tomato export is made to Russia and the revenue retrieved in response constitutes
53 % of total tomato export revenue. This means that the share of the revenue is slightly higher than the amount exported.

![Figure 1. Turkish Export Revenue from Tomato Export to Russia (source: UN COMTRADE)](image1)

The same situation is valid for onion trade. While Turkey had exported 85 thousand tonnes of onion and its variants to the world in 2000, the share of Russia was negligible with 197 tonnes. The aftermath of the diplomatic crisis, 28 % of total onion exports were to Russia with 70 thousand tonnes and 21.7 million Dollars in 2017. When compared with 2015, it was seen that both the amount exported and export revenue from onions had doubled. This signs a fast revival after 2016 crisis.

Mandarins and grapes constitute a significant share in fruit exports of Turkey. The changing share of Turkish exports of mandarins and grapes was demonstrated below (figure 2).

![Figure 2. Share of Turkish Mandarin and Grape Exports to Russia in Overall Exports (source: UN COMTRADE)](image2)
While the share of mandarin exports to Russia was 7% in amount and revenue of total exports in 2000, the share had risen to 40% in 2016. The change for grapes was from 13% to 28% in 2019. Turkey exported 266 thousand tonnes of mandarins for 135 million Dollars in 2016 and 37 thousand tonnes of grapes for 20 million Dollars in 2019. However, even though the Russian sanctions implied to agricultural imports from Turkey in 2016 did not cover these fruits, the decline in the share is visible. Yet, revival in trade relations seems to be faster than tomato exports as well.

4. Results and discussion

Being a significant FFVs producer, Turkey’s trade contacts to supply international demand for FFVs are essential. Due to historical relationships and neighbourhood conditions, the Russian Federation is one of the most important customers for Turkish FFVs. There have been changing trends due to mainly diplomatic relations, yet the contacts were maintained and revival of the volume and value of exports did not take much time.

As mentioned before, 2016 import restrictions issued against Turkey were effective, especially in tomato and citrus fruits trade. However, Turkey had some benefits during the process as well. In response to sanctions issued by the USA, the EU, Norway and Canada, the Russian Federation banned trade with these countries in 2014. These impositions led to an appreciation of Turkish exports and rising prices of the exportable products [5]. Therefore, the contacts between countries are maintainable.

In fact, rising trade of agricultural products is also related to rising mobility of people and their changing preferences. As well known, Russian Federation is also very important for Turkish tourism that around 15% of incoming tourists are Russian on average. Rising contact of Russian citizens with Mediterranean cuisine and fresh products lead to rising demand from Turkey [2]. Therefore, maintenance of touristic activities is important to secure Turkish FFVs exports.

Besides, cooperative actions in Turkish FFVs production and marketing field, which have been developing, should become more professional. The changing marketing trends should be observed and professional management of trade contacts are essential for further development [9]. Therefore, it is essential to support cooperation both in the supplier and demander dimensions and conducting in-depth research to empower the position of all actors involved in agricultural production and trade in Turkey and related institutions in Russian Federation.

Conclusion

1. It is considered the main directions of development of the market of fresh vegetables and fruits imported to Russia from Turkey. The General trends of bilateral trade and economic relations and the main directions of trade in fresh fruits and vegetables from Turkey to Russia are revealed. It is shown that political factors are strong factors affecting the trade in agricultural products in general, and the market of fresh fruits and vegetables imported from Turkey to Russia in particular.

2. In the scope of this paper, it was aimed to evaluate changing supplies and exports of main FFVs to Russia, challenges occurred in time and reasoning behind these challenges, and proposing potential improvement paths. Russia is the main importer of Turkish citrus fruits (mandarins) tomatoes, grapes and onions.

3. It was seen fluctuations in the trade of these products due to marketing conditions including diplomatic situations between the two countries. It should be pointed out that historical contacts and geographical dependency leads to countries to maintain contacts and it was considered as essential to empower both supply and demand sides through cooperation in many areas.

4. The research findings have provided scientific insights for future in-depth research.
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Исследование динамики торговли свежими фруктами и овощами, ввозимых из Турции в Россию

Аннотация. Целью исследования явилась оценка меняющихся поставок и экспорта основных видов свежих фруктов и овощей из Турции в Россию. Задачей исследования стал анализ проблем, возникающих в период поставок и экспорта, обоснование этих проблем и поиск путей их разрешения.

Турция хорошо обеспечена сельскохозяйственными ресурсами и способна после удовлетворения внутреннего спроса на плодоовощную продукцию, удовлетворить и внешний спрос. Главным и важнейшим торговым партнером Турции является Российская Федерация, особенно в том, что касается свежих фруктов и овощей. Соответственно, важно оценить вклад каждого из сегментов рынков с учетом общего производственного потенциала и экспорта спроса в Россию.

Данные по основным видам свежих фруктов и овощей, экспортируемым из Турции в Россию, были оценены с учетом изменения во времени и потенциально влияющих факторов. Основными экспорternalными сельскохозяйственными продуктами, отобранными для оценки, являлись в группе овощей – помидоры и лук, а в группе фруктов – мандарины и виноград. Ежегодные скорректированные данные были взяты из баз данных ФАО ВОЗ ООН.

В рамках данного исследования была проведена оценка изменения поставок и экспорта основных видов свежих фруктов и овощей в Россию, а также изучены и квалифицированы проблемы, возникшие во временной динамике, и предложены возможные пути их решения. Россия является основным импортером турецких цитрусовых (мандаринов), томатов, винограда и лука. В результате исследования выявлены колебания в торговле плодоовощной продукцией, что обусловлено изменением рыночных условий, включая дипломатическую напряжённость между двумя странами. Кроме того, исторические контакты и географическая зависимость приводят к тому, что обе страны поддерживают внешнеэкономические отношения. Это послужило стимулом для обоснования необходимости расширения возможностей, как спроса, так и предложения посредством сотрудничества во многих областях.

Ключевые слова: свежие фрукты и овощи; экспорт; Россия; Турция; маркетинг
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