

March–April

2016

European Science Review



ISSN 2310-5577

Austria, Vienna

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Section 10. Transport

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Problems of export of Uzbekistan's horticultural products

Abstract: The article describes problems arising from the export of horticultural products of Uzbekistan. There are brief propositions on improvement of the supply of the population with fresh horticultural products.

Keywords: fruit, vegetables, export, storability, transportability, export volume, national buyers, auto-refrigerators, international transport, railway transport, inter-model transport.

Fruit and vegetables are one of the most important and indispensable food products. They are called the spring of health for their high food, taste, diet and medicinal qualities. Fruit, vegetable and gourds cultures take special place in the food balance providing the human organism with healthy nutrients. Thus, their production should increase without a change in quality.

«I believe there is no need today to talk about the fact that the main reason determining the annually increasing tension in respect of food program solution is a gap between the outstripping growth rate of the population of the Earth and limited abilities of growth of the production volumes of food stuffs. In simple words, the growth of the volumes of food stuffs production is slower than the growth of population and its needs. One should take into account the fast pace of economic growth of the incomes of the population and respective growth of the food consumption in some Asian countries such as China, India and other. And, of course, with big losses of food stuffs under the scheme "from the field to the table", which, according to FAO, annually accounts for 1.3 billion tons of food stuffs in the world for the amount of about 1 trillion US dollars», — noted the head of the state Islam Karimov [1].

The results of the analysis revealed that the modern volume of vegetable production does not satisfy the need of the population of the Russian Federation in horticultural cultures. According to the scientifically grounded norms of alimentation, 150–160 kg. of vegetables is required per capita per year. In fact, it is around 70 kg. and even less in separate regions. Since the actual need is ensured at the level of 75 % of the norms included in the minimal consumer basket, there is unsatisfied demand for horticultural products from neighbor countries in the Russian Federation. In this regard, as well as because of the economic sanctions imposed by some states against Russia, Uzbekistan remains the main supplier of horticultural products to this country.

Due to high taste qualities, horticultural products of Uzbekistan are in high demand in world market. Thus, there is a need to transport it to significant distances preserving maximum quality.

Preparation for transportation takes special place in the preservation of quality of the shipped products. The scientific studies proved that the product should be sorted, calibrated and pass an advance cooling [2; 3; 4]. All these measures significantly improve the storability and transportability of the product. However, at present, the preparations are not applied. The product is sent for transportation being insufficiently sorted, calibrated and, let alone, preliminarily cooled. Absence of the signs of illness, mechanical damages etc. On fruit and vegetables is a sufficient requirement for loading the vehicle with the product. Biochemical analysis and the check of micro-biological content of the fruit surface are not performed. Sometimes, various products are loaded in same rail car, vehicle despite the absence of the results of the study of the issues of compatibility of different pomology sorts and kinds of fruit and vegetables.

Currently, fruit and vegetables are primarily exported to Russia and Kazakhstan. Herewith, the export is performed by private persons and companies due to the fact that since September 1, 2015, some agricultural products from Uzbekistan can be exported only by rail and air transport. This requirement is specified in the decree № 249 of the Cabinet of ministers of Uzbekistan as of August 28, 2015 «About measures of further improvement of the mechanism of export regulation with regard to fruit and vegetable products, potatoes, gourds and grapes».

The ban on the use of vehicles for the export of fruit and vegetable products, potatoes, gourds and grapes (code TN VED 07–08) is explained by the need to ensure the transparency of customs procedure during the execution of export contracts and prevent illegal transfer of the specified products through the customs boarder of Uzbekistan.

It is reported that vehicles are used to export agricultural products. Many small and mid-size enterprises of Uzbekistan manage to evade the rule implemented in early 2015 about the compulsory sale of 25 % of the currency return from fruit and vegetable export to the state. Moreover, from the 1st of October of same year, the register of unscrupulous exporters and their founders during the export of fruit and vegetable products, potatoes, gourds and grapes

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was put into use. Keeping of the register is done by the Ministry of external economic relations, investments and trade of Uzbekistan.

Uzbekistan is a successful exporter of fruit and vegetables exporting over 180 kinds of fresh and processed fruit and vegetable products to 80 countries. Over the last three years the volume of exported products has increased by more than three times. As for the volume of export, the country is in top ten world leading suppliers of apricots, plums, grapes, nuts cabbage and some other fruit and vegetables [1].

In 2015, the volume of production of fruit and vegetable products in the country accounted for 15.5 million tons compared with 14.9 million tons in 2014. According to different estimations, 500 thousand tons of the indicated volume is annually exported to the CIS countries, mainly to Russia and Kazakhstan. According to the data of the State customs committee of Uzbekistan, 35 % of the detected illegal export of agricultural products from Uzbekistan accounts for Kazakhstan.

However, the document alters the decree № 249 of the Cabinet of Ministers of the Republic of Uzbekistan as of August 28, 2015 «About measures of further improvement of the mechanism of export regulation with regard to fruit and vegetable products, potatoes, gourds and grapes». It is certain that till July 1, 2016 the export of fruit and vegetable products, potatoes, gourds and grapes (code TN VED 07–08) with the use of vehicles is permitted to legal entities included in the list approved by the Working group on the solution of the issues related to the rational use of fruit and vegetable products, potatoes, gourds and grapes including legume products on the internal market of the republic as well as effective organization of their supplies for export established by the decree № 1 of the Cabinet of Ministers as of January 4, 2016 «About forecast parameters of production and use of fruit and vegetable products, potatoes, gourds and grapes in 2016».

The above mentioned was required because during the period of ripening of fruit and vegetables the vehicles of private firms and companies from neighbor states enter the territory of the republic to buy products and take them to their countries. Herewith, the national buyers are in the loss because the representatives of border countries enter the territory of Uzbekistan with the currency converted in the market. They purchase the products of high quality and the local buyers are left with the volumes of products of lower quality that were not purchased by foreign buyers.

As it was mentioned above, vehicles are widely used for transportation of fruit and vegetables; the vehicles do not only take part in the supplies of the cargo to a base station, but also participate in international transportations. The realization of national programs on the improvement of roads, taking them to quality parameters of international standards contributing to the accelerated development of transportation of fruit and vegetables by refrigerated vehicles in the international transport services stimulates accelerated development of these transportations.

However, it should be noted that the national vehicles traditionally used to transport fruit and vegetables currently depleted their technical resource and are not permitted by neighbor countries to the territory due to incompliance to international norms on the exhaust gas emission. In the European countries, they switched to norms Euro 4 and 5, and in Uzbekistan the vehicles barely correspond to the norm Euro 3. Foreign vehicles entering the territory of Uzbekistan pass borders under the «TIR» conditions.

Furthermore, the export of this cargo is performed by private companies and people who are not that familiar with the rules of transportation of the indicated cargo, which leads to additional

losses and refusal by the firms of companies to do such business. As a result, this niche is occupied by foreign vehicles of the consumer or supply firms of Russia and Kazakhstan. Railroad transport performs transportation of fruit and vegetables only to the station of Ilets (supplies to the European part of the Russian Federation) or Monetny dvor (supplies to Ural and Far East), where there is a terminal to process this cargo. The cargo is further transported by Russian vehicles.

In the near future, the Uzbek companies will open a transport logistic center in the Baltic port of Liepāja with the capacity of daily storage of 1.5 thousand tons, through which fresh fruit and vegetables will be delivered to the consumers in the countries of Northern and Western Europe. The head of Uzbekistan Islam Karimov stated this at the opening of an international conference «About the most important reserves of realization of food program in Uzbekistan» in Tashkent. According to him, today, the construction and complete reconstruction of 274 modern refrigerating chambers and warehouses for fruit and vegetable products of the total volume of over 190 thousand tons were finished as of today. One can recollect that transportations on such significant distances can be performed by different types of transport and sometimes with the use of combined, inter-model and multi-model schemes of delivery of cargo to the client.

Transportation of fruit and vegetables is mainly performed by vehicles and railroad transport. Despite the fact that fruit and vegetables refer to the category of perishable cargo, air transport is used unjustifiably less. In this case, it is explained by a high cost of transportation of cargo by this mode of transport. Although it is known that Uzbekistan Airways passenger planes fly at least once a week to major cities of Russia, Kazakhstan, Baltic countries and other from Uzbek cities and their commercial load is used at 60 % at maximum.

Currently, many airports in Uzbekistan expand their connections with foreign airports. Modern, capacious airplanes are used in these directions. If fruit and vegetables are loaded on passenger planes in the form of additional cargo, not all expenses on the performance of the flight are included in the cost of transportation of fruit and vegetables. A new tariff may include the costs related to the cargo loaded on the plane in the form of additional cargo, which will allow reducing the tariffs on fruit and vegetable transportation on passenger flights according to plane direction. However, flexible tariffs on transportation of fruit and vegetables by air are not applied.

Railroad transportation takes special place in transportation of fruit and vegetables, which accounts for up to 90 % of the volume of transportation of this cargo for export. Transportation of fruit and vegetables by this mode of transport is performed by refrigerator and covered train cars, in universal containers. Covered train cars and universal containers are used for a limited period — transitional period — from summer to autumn and from winter to spring. During this period, the temperature of the environment in the northern areas of Kazakhstan and the South of Russia is different from the temperature in Uzbekistan, and, consequently, in the cargo room of the train car by 7–8 degrees.

Most stations in the Uzbek railroad deal with shipping of fruit and vegetable products. Stations may have differences in the structure of shipped cargo, which depends on the development of production of this or that culture in the regions of the republic. There is the following scheme of cargo shipment: vehicle — cargo operation related to the transfer of cargo from one mode of transport to the other — refrigerated train car or universal container at a special rail lane. Then, the container is put on the platform and placed on the acceptance-shipment lane with the train car to form a train. Loaded

train cars remain there until a full train is formed and only then commence the trip.

At inter-state connecting stations, the trains wait for customs control the duration of which often exceeds regulatory norms.

Propositions on the improvement of supply of fresh fruit and vegetable products to the consumer

To achieve a stable position on the world fruit and vegetable market, Uzbekistan should create a state body for export of fruit and vegetables authorized to deal with the problems of supply of quality products to foreign partners, which requires:

- terminals short-term storage and processing of fruit and vegetables on the territory of the republic and beyond;
- organization of storage of fruit and vegetables in refrigerating chambers with regulated gas devices as well as shipment of this

product to the consumer maintaining the unity of refrigerating and gas environment;

- acquisition and exploitation of refrigerating containers and organization of circulation of speedy cool container trains between terminals;
- development of transportation technology for fruit and vegetables in refrigerator containers;
- further research of quality parameters of fruit and vegetables and their change in the process of transportation;
- organization of transportation of products depending on their bio-chemical and micro-biological content;
- fixation of a structure of business subjects of the Republic of Uzbekistan in the law specifying their responsibility for the quality of exported fruit and vegetables at world standards level.

References:

1. Speech of the President of the Republic of Uzbekistan Islam Karimov at the opening of an international conference «About the most important reserves of realization of food program in Uzbekistan» in Tashkent, 2014.
2. Instruction on the service of transportation of perishable cargo. TSM/TSV 2704. – M.: Transport, 1990. – 40 p.
3. Instruction on the service of transportation of perishable cargo internationally between CIS countries, Latvia, Lithuania, Estonia//№ДЧ-97. – M.: Transport, 1998. – 43 p.
4. Ibragimov N.N. Complex system of preservation of quality of fresh fruit and vegetables during railroad transportation (theory, calculations, experiments, practice). Dissertation for the application for doctoral degree in technical sciences. – Moscow, 1995.