

LOGISTICS OF EXPORT SHIPMENTS FROM ECUADOR

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ABSTRACT

The development of economic relations with countries in the Asia-Pacific region, and improving the efficiency of logistics contacts is one of the most promising directions of trade relations for Russia. Among its trading partners in the Asia-Pacific region Ecuador occupies an important place. The authors'

analysis gives a fairly clear picture of transport channels (sea and air) and costly mechanisms in the supply chain used by shippers and transitors of Ecuadorian products. It is proposed to use the concept of «logistics laws» to search for options to reduce costs in the supply chain of goods exported to Russia from this Latin American country.

Keywords: transport, logistics, foreign trade relations, Ecuador, supply organization, exports, logistics costs, reduction of losses.

Background. Latin America is an intensively developing region of the world, attractive by its unique capabilities and having a significant impact on the global economy.

Expansion of trade relations and participation in infrastructure projects meet Russia's national interests and objectives of the Latin American countries. An important place in relations with the Russian Federation is occupied by the Republic of Ecuador.

Objective. The objective of the authors is to consider logistics aspects of deliveries of goods from Ecuador to Russia.

Methods. The authors use general scientific methods, statistics, comparative analysis, economic evaluation, risk assessment.

Results.

Foreign trade relations of the countries

Ecuador ranks second after Brazil in terms of trade turnover with Russia among the countries of Latin America. The main items of the Ecuadorian exports are bananas, cut flowers, coffee, cocoa and seafood (Pic. 1). Especially popular in Russia are long-stem roses. A number of Russian importers of fruit crops have their own banana plantations in Ecuador.

Deepening trade relations between Russia and Ecuador were confirmed during the meeting in Yekaterinburg in November 2014 of the delegation of major Ecuadorian companies operating in the international market of fruit, vegetables and seafood, with representatives of retail chains of Urals. The delegation was headed by the Ecuadorian Ambassador to Russia, it included senior management of UNA state company that represents at the international level the interests of small and medium-sized farms. It was noted in particular that seafood from Ecuador, according to the resolution of Rosselkhoznadzor, can be exported by 57 companies. In the first 9 months of 2014 deliveries of seafood in Russia, especially shrimp, increased by 3 times. Although the overall share of seafood in the total trade turnover is relatively small.

Logistics of bananas supply

The largest importers of Ecuadorian bananas are Russia and the United States (Table 1, Pic. 2).

Ecuador's main competitors in banana supplies to Russia are Costa Rica, Colombia and the Philippines.

As a rule, bananas from Ecuador are delivered to Russia by sea to the port of St. Petersburg through the Panama Canal (Pic. 3).

Delivery of flower production

Various kinds of flowers are exported from Ecuador comprising rose (over 300 varieties), gerbera, gypsophila, aster, hypericum, carnation, limonium, chrysanthemum, liatris and others. In areas with a humid tropical climate one can find heliconia.

The largest importers of Ecuadorian flowers are the United States, Russia and the Netherlands (Pic. 4).

The share of the United States, Ecuador's northern neighbor in purchase of flowers for five years (2008–2012) has dropped by almost half, from 71 to 39%. In 2008, US citizens bought Ecuadorian flowers for almost \$400 million, then four years later for just slightly over 300 million.

During those same years, the share of Russia in the Ecuadorian exports of flowers has increased almost by 3 times and amounted at about 25%, i. e. out of every four dollars of export revenue for the flowers, Ecuador received one dollar from Russian buyers.

If we look at the absolute figures of sales of flowers to Russia, their volumes have increased by 3,5 times: from \$55 million to \$190 million. This circumstance shows the weight of the Russian market for the producers of flower production in Ecuador.

For deliveries of flower production to Russia sea transport is not acceptable, because the travel time is from 21 to 35 days. Therefore, exclusively air transport is used (Pic. 5).

There are no direct routes of air transport, connecting Russia to Ecuador. It is possible to use routes to European cities as Amsterdam, Rotterdam, Luxembourg, Frankfurt, Paris, London, Madrid and Rome, then by road flowers are delivered to Russian customers.

Estimated delivery time of goods by air is 17 hours. Air transportation from Ecuador is performed via the international airport «Jose Joaquin de Olmedo» (IATA-GYE) or the international airport «Mariscal Sucre» (IATA-UIO).

The actual supply chain is quite complex and is not always reflected significantly in the statistical reporting. For example, we can find the information that in flowers deliveries to Russia the biggest share falls on the Netherlands (45,1%) and Lithuania (43,0%) [4]. It is obvious that Lithuania is only a transit country, because in the Baltic States there are no conditions for year-round production of popular flower products.

From the Netherlands supplies to Russia of flowers grown in this country are small. Most of flowers imported from the Netherlands are native to South America or Africa, and arrived at the largest flower auction in the world in the city Alsmeer (10 km from Amsterdam). Of total volume of fresh cut flowers exported from Ecuador to Russia, 95% are delivered to Amsterdam, and then reloaded to Russia.

The concept of «logistics laws»

In the specialized literature different interpretations and clarifications can be found in relation to the term «logistics». Sometimes researchers identify some

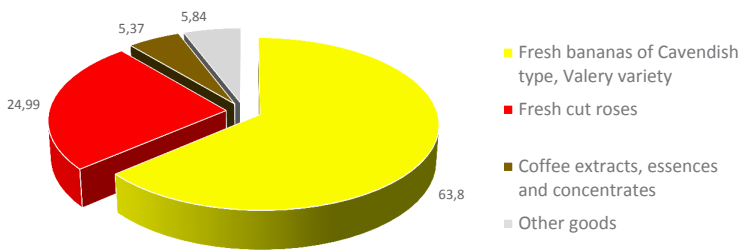


Table 1

Export of bananas «Cavendish Valery» from Ecuador

| Country | Tons | FOB-USD | % / FOB-USD |
|---------------------------------|------------|------------|-------------|
| Russia | 1289021,50 | 532,131.19 | 23,96 |
| USA | 785189,78 | 356,552.52 | 16,05 |
| Turkey | 511351,56 | 216,063.44 | 9,73 |
| Germany | 396823,94 | 171,879.14 | 7,74 |
| Belgium | 278412,93 | 129,401.94 | 5,83 |
| Chili | 352679,28 | 118,182.09 | 5,32 |
| Italy | 235458,82 | 106,296.59 | 4,79 |
| Netherlands | 151507,00 | 65821,28 | 2,97 |
| Ukraine | 153151,84 | 62706,51 | 2,83 |
| Great Britain | 136984,24 | 59889,53 | 2,70 |
| Argentina | 98183,64 | 41578,88 | 1,88 |
| Greece | 76224,10 | 34940,85 | 1,58 |
| Algeria | 69504,53 | 29953,16 | 1,35 |
| Georgia | 53015,62 | 22624,66 | 1,02 |
| Saudi Arabia | 50325,25 | 21845,40 | 0,99 |
| Libya | 50717,00 | 21389,15 | 0,97 |
| Japan | 40648,03 | 20542,91 | 0,93 |
| China | 32883,70 | 14565,38 | 0,66 |
| New Zealand | 29071,92 | 13362,07 | 0,61 |
| Albania | 27572,83 | 11244,55 | 0,51 |
| Egypt | 25470,40 | 10933,95 | 0,50 |
| Sweden | 21478,57 | 10198,44 | 0,46 |
| Norway | 22034,09 | 10157,99 | 0,46 |
| Bulgaria | 17507,56 | 8458,56 | 0,39 |
| Croatia | 17479,35 | 8173,42 | 0,37 |
| Other countries and territories | 148319,89 | 61238,00 | 2,76 |

Source: Central Bank of Ecuador. Direction of international trade and investment analysis.



Pic. 1. Cost structure of Ecuador exports to Russia according to aggregated nomenclature of goods, %.

Source: Central Bank of Ecuador. Direction of international trade and investment analysis.

aspects of logistics activities, using the phrase: «integrated logistics», «applied logistics», «trade logistics», etc.

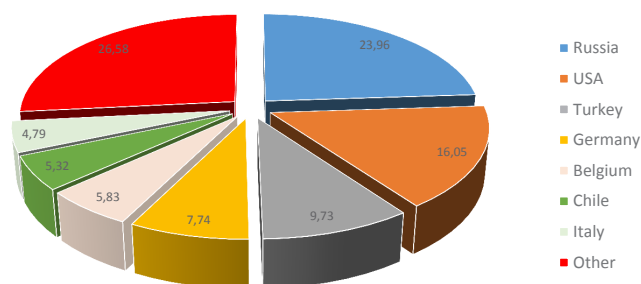
In order to emphasize the necessity of organizing product distribution in accordance with the logic of interaction of the supply chain and according to the «logistics laws» concept [1–3], which defines the processes of formation of costs in the supply chain, the concept of «logical logistics» (or «Lex logistics» from the Latin word «lex» that means law is proposed. Let's consider the possibility of implementing in the supply of Ecuadorian goods to Russian consumers

provisions of «logical logistics» in order to reduce logistics costs and expenses.

Reduction of costs

The purpose of the «law of logistics» is to reduce costs by reducing the volume of intermediate storage of goods on their way from the producer to the buyer. As another law experts distinguish the influence of speed of movement of goods on logistics costs.

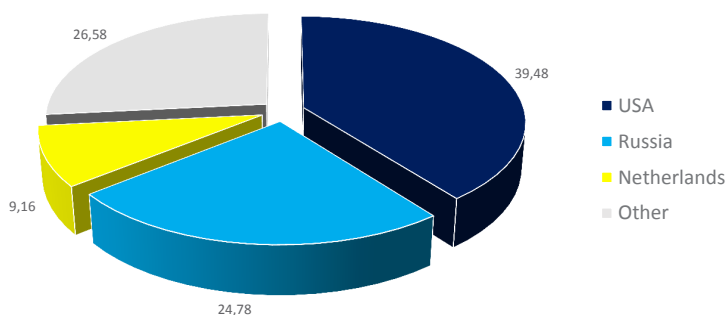
The current trend of development of flower market can be described in terms of increase of proportion of direct sales, i. e. reduction or complete elimination of resellers. This trend fits into the two marked



Pic. 2. Distribution of export of bananas from Ecuador to major importing countries, % of the exports in FOB-USD prices.



Pic. 3. The scheme of delivery of bananas from Ecuador to the port of Murmansk (Russia).



Pic. 4. The ratio of geographic distribution of main Ecuador flowers exports in value terms, 2012, %.

Source: Central Bank of Ecuador. Direction of international trade and investment analysis.

patterns of flow processes, under which logistics costs are formed.

Reducing inventory makes it possible to get the effect due to the fact that there is no immobilization of wealth and unnecessary costs associated with land use and maintenance of storage capacities (facilities, equipment, personnel) are eliminated. Furthermore, the elimination of intermediate storage, along with other factors, allows to reduce the overall time of goods in transit and to increase speed of movement from producer to consumer. This also has an impact on logistics costs.

Firstly, the reduction of time of material flow motion leads to a reduction in the cost of goods,

excluded at the time of its motion from the economic turnover. And it contributes to the growth of efficiency of the economy as a whole. Secondly, during transportation of, for example, agricultural products there are various biological processes, which can lead to damage of goods and to direct economic loss. Thirdly, even if the product damage during transportation has not occurred, reduction of delivery time results in a higher quality of product and its higher competitiveness in the market.

For example, the lifetime of Ecuadorian rose on average after cutting is 28 days. Usually it is purchased by the end user in Russia on the 20th day after cutting





Pic. 5. Logistical scheme for delivery of flower production from Ecuador to Russia by air.

and shortly gratifies a buyer with its beauty lasting for just a few days. If it is sold within a week after cutting, it may stay in the buyer's home after buying two or more weeks, adorning its interior. Of course, when buying a consumer will prefer a more long-lived flower production.

For goods to spend less time en route, there are three main approaches: 1) choice of a high-speed vehicle; 2) reduction of stops, which can occur for various reasons; 3) reduction of intermediaries in the supply of goods from the manufacturer to the end customer.

Ecuador is the only Latin American country that has a direct transatlantic route to Russia. Since March 2010, Maersk performs direct transportation on the line Guayaquil–St. Petersburg. Products from Ecuador (bananas, seafood and other products) are delivered in refrigerated containers in 21 days instead of an average of 35 days within traditional supply scheme. Now the company considers possibility of opening another direct route from Ecuador to Vladivostok. These solutions meet the provisions of «logical logistics». They will improve the quality of supplied products, reduce logistics costs and ultimately should lead to an increase in the volume of foreign trade operations.

Conclusions.

1. Ecuador is a major trade partner of Russia in the Asia-Pacific region. Almost 25% of the exported bananas from Ecuador and the flower production fall on Russia. An important place is occupied by the delivery of coffee and its derivatives. A

promising area is the delivery of seafood (shrimp and fish).

2. Using the laws of flow processes, set forth in the article, determines the value of logistics costs, helps to reduce delivery times of goods from Ecuador to Russia and the share of logistics costs in the price of the final product.

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Article received 17.03.2015, accepted 24.08.2015.

The article is based on the papers, presented by the authors at the International scientific and practical conference «International Logistics: science, practice and education», held on March 3, 2015 at the Institute of Management and Information Technologies of Moscow State University of Railway Engineering (MIIT).