
Farm Machinery and Processes Management in Sustainable Agriculture, 7th International Scientific Symposium

Formation mechanism of logistics cluster in Belarus

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Abstract

A relatively small number of large industrial enterprises and major exporting companies has a dominant position in the market and determines the corresponding demand for transport services. Logistics activity in the country is one of the growth points of the economic system. One of the ways for increasing the efficiency of logistics activities in agriculture and food transport management sectors in Belarus is the creation of logistics clusters. The article proposes a methodological approach to the formation of logistics cluster in the region. The approach is based on three phases of work: identification of a cluster, evaluation logistics rents and logistic potential of the region, where the cluster is located. This allows assessing the expedience of cluster formation and its subsequent development. This process is connected with agriculture and food processing activity.

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Peer-review under responsibility of the Centre wallon de Recherches agronomiques (CRA-W)

Keywords: logistic; cluster; rents; potential.

1. Introduction

Processes of globalization, increasing of competition, slowing down market conditions and declining of business activity during the recession create macroeconomic risks for the Belarusian enterprises. It determines the need of improving competitiveness of industrial production, the formation of a strategic reserve of economic growth.

Currently, the tendency of clustering the industries can be observed. This tendency also applies to logistics, which is now associated with the operation of enterprises based on integrated cross-flows (Szołtysek, 2010).

Transport and logistics clusters (TLC) – industry clusters, the end products of which are transport and logistics services in the cargo sector, the passenger sector, or both. Interest in the formation of these structures is caused mainly by two reasons:

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1. TLC – clusters of services, whereas the traditional literature on industrial clusters focused on clusters of commodity production.

2. Transport and logistics industry as well as transport and logistics systems occupy a special position in the country's economy, along with cities and metropolitan areas, important elements of regional economies and their sustainable development.

Because of these reasons the level of transport and logistics system development in the country to some extent determines its economic growth. The efficiency of the logistics industry in the country is estimated by its gross domestic product (GDP) share: in the US, Japan, EU logistics costs volume doesn't exceed 10–12%, while in China it is still less than 25% of GDP (Figure 1) (Zhudzhun et al., 2008).

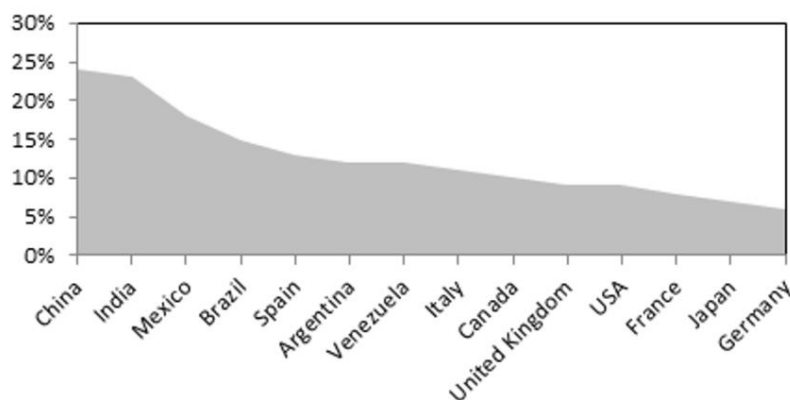


Fig. 1. The share of logistics costs in total GDP Worldwide for 2011

The analysis of Figure 1 shows that the largest logistics costs have those countries in which there are the long routes and logistics supply chain. Also worth noting is that not always the highly developed countries may have a perfect logistics network. For example, despite the fact that logistics in China is recognized as one of the most perspective sectors, the logistics market of China lags behind world standards and technologies. Construction of logistic networks, the introduction of modern logistics technology and the system of distribution and inventory management in China show low efficiency. The average period of raw materials storage for manufacturing enterprises in China is 20 days, finished goods – 51, trading stock of companies – 34 days. Percentage of goods damaged during storage and distribution exceed 2% (Buglak and Zverev, 2006). In Belarus, the situation in the field of logistics is improving in many aspects. Belarus is ahead of the Commonwealth of Independent States (CIS) in three areas of logistics, namely in the effectiveness of customs clearance procedures, the development of transport infrastructure and tracking the passage of goods. Nevertheless, Belarus lags in the availability of services for the organization of international traffic, as well as in competence of the national logistics industry. In Belarus, the transport and logistics sector plays an important role in the economy. The Republic is a net exporter of almost all kinds of transport services. Transit transport corridors between the countries of the European Union (EU) and, potentially, between the EU and Asia pass through the country. This is due to the fact that Belarus has a strategic geographical position on the routes of two European transport corridors, in the development of which the EU and the Russian Federation is interested. Along with a high level of geographical concentration of international trade, the structure of trade by commodity groups in Belarus is also characterized by a high degree of concentration. A relatively small number of large industrial enterprises and major exporting companies has a dominant position in the market and determines the corresponding demand for transport services. Logistics activity in the country is one of the growth points of the economic system. One of the ways for increasing the efficiency of logistics activities in Belarus is the creation of logistics clusters.

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