

DIRECTIONS OF ECOLOGICALLY ORIENTED LOGISTIC MANAGEMENT IN THE REGIONS

Rodymchenko A.

Sumy State University, Sumy, Ukraine

The development of the region is analysed as a revolving process, which includes production, exchange, distribution and consumption of goods and services. The regional reproduction process is a restored circulation of labor, material, financial and information resources available in the region.

Thus, the development of a new, scientifically-grounded regional policy concerning the most efficient use of natural resources, scientific and technical potential can be considered as one of the perspective ways to solve the key problems of nowadays.

Hence, the examination of the directions of ecologically oriented logistic management is an important task for the improvement of the environmental situation in the regions, as shown in figure 1.

The concept of eco-logistics or "green logistics" - is a relatively new trend, which aims at reducing the negative environmental impact, caused by the logistic activities, as well as at minimizing the use of non-renewable resources through the effective flows management in the eco-systems.

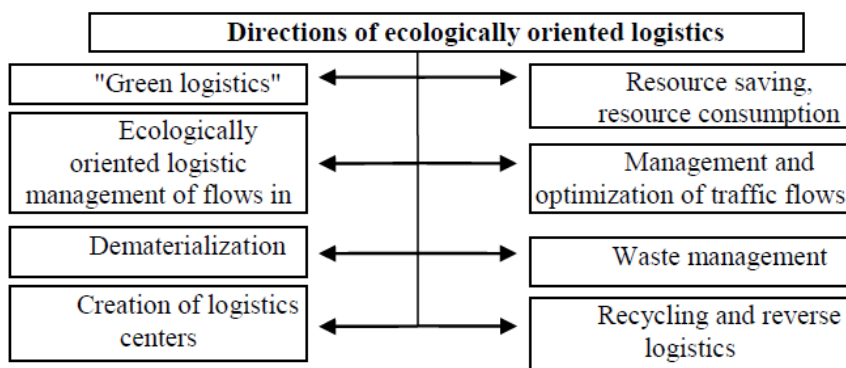


Fig. 1 - The main directions of ecologically oriented logistic management

The eco-oriented logistic management of flow processes in the region assumes managing material, financial, labor and information flows, which is based on the efficient

usage of resources within all the stages of the logistic process with the minimal ecological and economic costs and impact on environment.

Another important direction, presented at figure 1, is the resources saving. The main reasons of this area activation are a significant increase in production volumes, partial use of these outputs resulting in wastes and their accumulation, which leads to the resources depletion, increased pollution of environment and global worsening of ecologic problems. Hence, the logistics of resource saving and resource consumption should be focused on minimizing the use of resources without reducing the volumes of provided services and consumer demand satisfaction.

Particularly, consistent with the researches by I. Skorokhod, N. Rebryna, in order to maintain a regional ecologic and resource security it is necessary to:

- introduce the resource-saving concept of logistics, which would provide an opportunity to reduce the consumption of natural resources;
- use secondary resources;
- conduct the development of resource-saving technologies.

For example, there are many opportunities to reduce the consumption of non-renewable resources in warehouses, in particular through the use of wind turbines and solar panels, natural cooling systems and innovative lighting systems. So-called warehouse-accumulators, which are cooled or heated by extra 2-3 degrees when the electricity usage is minimal in order to reduce the load on the grid during the peak hours, are becoming more and more popular.

An application of logistics in managing the flows at enterprise, and optimization of traffic flows has also an important role in reducing wastes and pollution.

Another significant method of ecologically-oriented management to reduce an eco-destructive influence is the creation of logistic centers, which would enable to control effectively traffic flows, decrease traffic load in the cities, as well as meet customers' needs with the minimal ecological and economic costs.

Thus, in order to reduce the eco-destructive impact on environment it is suggested to use the whole set of the available logistic infrastructure possibilities, and as a result, to increase the regional level of environmental management and ensure sustainable development of the regions. With the worsening of environmental problems the logistic activity has started to focus more on the effective flow management aimed at mitigating the human impact, use of environmentally-friendly transport, production waste management and recycling etc.

Therefore, according to the analyses of the parameters, which characterize the level of eco-destructive logistic influence in the regions of Ukraine, it is found that the highest eco-destructive impact on the environmental systems is experienced by Dnipropetrovsk, Donetsk, Kyiv, Kirovograd, Lviv and Sumy regions, as well as the city of Kyiv. In order to address these disproportions it is necessary to use all of the tools and directions of ecologically-oriented logistic management at the regional level and establish

the regional logistic centers. They will provide an opportunity to optimize transport flows in the regions, which consequently will significantly reduce the negative impact on the environment.

At the same time, the above-mentioned approaches to the problem are impossible without an active policy, implemented by regional executive bodies, local authorities and governmental bodies in general.

Economics for Ecology [Текст]: матеріали XX Міжнародної наукової конференції, м. Суми, 6-9 травня 2014 р. / Редкол.: Д.О. Смоленніков, Л.А. Кулик. - Суми : СумДУ, 2014. - 145 с.