

УДК 656.07

ANALYSIS OF THE CURRENT STATE OF LOGISTICS OF MEAT PRODUCTS SUPPLY IN UKRAINE

O.V. Pavlenko, PhD (Tech.)

Kharkiv National Automobile and Highway University

Today, in the current situation in Ukraine and the world, to guarantee a sustainable balance in the food security system, it is necessary to ensure appropriate harmony among economic indicators of development and rational use of natural resources, and as a result, high-quality production of all types of agricultural products and food supply. The livestock industry directly provides society with the necessary products, thereby maintaining the required level of food security in the world [1]. The analysis of developments has shown that there are a number of approaches to improving the technology of delivery of various goods, including meat and meat products, which allow building effective supply chain systems, taking into account risks [2, 3], possible failures and minimizing resource costs [4]. Research has shown that a well-developed transportation services market with professional operators and high-quality infrastructure [5, 6] will allow for effective implementation of the technology for delivering these products to reduce costs.

The process of organizing the transportation of meat and meat semi-finished products is related to the peculiarities of the functioning of the consumption market. Since 2002, the Ukrainian market has seen an increase in consumption from 32.6 kg to 56.1 kg per person in 2013. In 2022, the consumption level amounted to 53.1 kg, which is 0.18% more than in 2021 [7].

Supply chains are becoming more complex, and the variety of indicators and tools for measuring warehouse performance is increasing. In addition, the indicators used to measure performance are assessed differently, and therefore there is no clear definition for some of these indicators [8, 9].

The analysis of the developments of scientists in the field of introduction of modern technologies for the delivery of various types of goods, including perishable ones, allowed to obtain the following results: 1) the main resource-saving technologies for the delivery of products in different conditions of transport operation are determined [10-11]; 2) assessment of the risks of failures at each stage of decision-making in the formation of alternative options for the delivery of goods [12-14]; 3) forecasting models are built, with the help of which the values of the influence parameters are recognized [15-16]; 4) methods for improving the technology of delivery of various types of cargo under conditions of uncertainty [17].

The meat and meat products market has plenty of prospects for development in Ukraine. This is confirmed by statistical indicators of consumption, production

structure, production volume, and sales structure. Therefore, there are prospects for growth in this market and ways to improve product delivery should be sought. This is likely to be achieved by finding new technological solutions in the organization of the process of delivery of meat and meat semi-finished products.

- [1] Родіна О. Аналіз ринку м'яса птиці в Україні: сучасний вектор у контексті продовольчої безпеки. Підприємництво та інновації, (23), 2022. С. 91-96.
- [2] Павленко О. В., Нефьодов В. М., Великодний Д. О. Побудова логістики поставки консолідованих вантажів з України в Європу. Комунальне господарство міст. 2021. № 161. С. 191–198
- [3] Нефьодов В.М. Павленко О.В. Побудова моделі системи автомобільних перевезень партійних вантажів в містах. Комунальне господарство міст. 2021. 161. С. 187-190
- [4] Waqas M., Honggang X., Khan S.A.R., Ahmad N., Ullah Z., Iqbal M., Impact of reverse logistics barriers on sustainable firm performance via reverse logistics practices, LogForum, 2020, № 17(2), 213–230
- [5] Ersoy P., Tanyeri M. Risk management tools in the road transportation industry with mediation and moderation analysis, LogForum, 2021, № 17(4), 555–567
- [6] Павленко О.В., Шраменко Н.Ю., Северін О.О., Горбачов П.Ф., Калініченко О.П. Математичні методи оптимізації транспортних процесів: навчальний посібник. – Харків: Видавництво ХНАДУ, 2008. – 204 с.
- [7] Офіційний сайт Державної служби статистики. <https://www.ukrstat.gov.ua/>
- [8] Dewi D.R.S., Hermanto Y.B., Tait E., Sianto M.E. The product– service system supply chain capabilities and their impact on sustainability performance: a dynamic capabilities approach, Sustainability, 2023, № 15, 1148
- [9] Нефьодов, В.М. Побудова моделі системи перевезення партійних вантажів у міжміському сполученні / В.М. Нефьодов, О.В. Павленко, О.П. Калініченко // Комунальне господарство міст. 2018. № 142. С. 103-107
- [10] Śladowski A., Utegenova A., Kolga A. D., Gavrishev S. E., Stolpovskikh I. Taran I. Improving the efficiency of using dump trucks under conditions of career at open mining works. Naukovyi Visnyk Natsionalnoho Hirnychoho Universytetu, 2019, №2. P. 36–42.
- [11] Muzylyov D., Shramenko N., Ivanov V. (2021) Management Decision-Making for Logistics Systems Using a Fuzzy-Neural Simulation. In: Čagaňová D., Hornáková N., Pusca A., Cunha P.F. (eds) Advances in Industrial Internet of Things, Engineering and Management. EAI/Springer Innovations in Communication and Computing. Springer, Cham.
- [12] Павленко О.В., Музыльов Д.О., Медведєв Є.П. Модель функціонування логістики для постачання спеціалізованих транспортних засобів в контейнерах із підприємств Північної Америки в Україну. Комунальне господарство міст, Т. 1, Вип. 182, 2024, С. 248-253.
- [13] Muzylyov, D., Shramenko, N.: Mathematical Model of Reverse Loading Advisability for Trucks Considering Idle Times. In: Karabegović I. (eds) New Technologies, Development and Application III. NT 2020. Lecture Notes in Networks and Systems, vol 128. Springer, Cham, 612 620 (2020).
- [14] Muzylyov D. Medvediev I. Pavlenko O. Risk factor assessment in agricultural supply chain by fuzzy logic. IOP Conference Series: Earth and Environmental Science 2024, Vol. 1376 (1), 012038.
- [15] Pavlenko O., Muzylyov D., Trojanowska J., Ivanov V. Rational Logistics of Engineering Products to the European Union. International Conference on Intelligent Systems in Production Engineering and Maintenance. Springer. 2023. P. 25-38.
- [16] Medvediev I., Muzylyov D., Montewka, J. A model for agribusiness supply chain risk management using fuzzy logic. Case study: Grain route from Ukraine to Poland. Transportation Research Part E: Logistics and Transportation Review, Vol. 190, 2024. P. 103691.
- [17] Bielecka, O., Liubiy, Ye., Ocheretenko, S., Muzylyov, D., Ivanov, V., Pavlenko, I., 2023. Approach to determine transport delays at unsignalized intersections. Communications - Scientific Letters of the University of Zilina, 25(3), pp. 124-136.