Section 4. LOGISTICS AND SUPPLY CHAINS MANAGEMENT

SUSTAINABLE SUPPLY: CURRENT DIRECTION OF FORMING LOGISTICS CHAIN

Sysoiev Volodymyr

Doctor of Economic Sciences, Professor, Head of the Department of Economics and Marketing, National Technical University «Kharkiv polytechnical Institute» Kharkiv, Ukraine

The rational allocation of production facilities, infrastructure commodity markets, globalization of trade, increasing the number of business transactions and application of new technologies of logistics, designed to reduce logistics costs and improve the quality of customer service, resulted in rapid expansion of the logistics supply chain, characterized by flexibility, integrity, partnership and optimality.

However, there are a number of risks increasing that appears in goods movement from suppliers of material resources to producers of finished products and then to its final customers involving various trade and logistics intermediaries.

These risks include not only the risk of supply abuse, cost volatility and compliance with applicable laws and regulations, but also the reputation of the brand; companies must correspondent the growing expectations of stakeholders and take the responsibility for the environmental, social and ethical practices of their suppliers. Thus, companies must make a responsible search of providers as an integral part of their processes of procurement and supply chain to understand and manage these risks.

For effective solution of volatility reduction and minimization the risks in the today process of product circulation in the practice of logistics chains there has being promoted a sustainable supply mechanism. Sustainable supply is the integration of economic, social, ethical and ecological factors of efficiency in the process of procurement and selection of suppliers.

The theoretical basis of sustainable supply mechanism is a series of economic and social theories, depending on resources, stakeholders, transaction costs, agency theory, sociology of rational choice, network approach etc. [1, 2].

The ultimate goal of sustainable supply mechanism is to build strong and long-term relationships with suppliers.

The basic principles of implementation the mechanism for any company as a part of logistics chain are:

- human rights (combating discrimination, socio-cultural diversity, compliance with labor laws);
 - safety and health (working conditions, health and safety);
- environmental sustainability (environmental protection, natural resource management, development of environmentally friendly technologies, availability of environmental programs and policies);
- integrity and business ethics (compliance with local laws and ethical and moral principles in business, struggle with corruption and bribery, products labeling, access to information).

The main stages of the sustainable supply mechanism implementation are:

- 1) development of procurement policy and its implementation in the process of procurement and selection of suppliers;
 - 2) clear requirements to suppliers and notification of all potential suppliers;
 - 3) integration of suppliers in the procurement and production of a buyer company,
- 4) training and support of providers to establish their own standards of responsible business;
 - 5) continuous monitoring of suppliers' corporate social responsibility;
- 6) managing expectations of stakeholders parties (suppliers and buyers of companies) and providing a transparent reporting process of supply.

Compared with the traditional policy of corporate social responsibility, sustainable supply involves mapping the social and ecological impact of interaction with suppliers in the value chain of the buyer, not as a parallel activity that is not related to business or market where the company operates.

Commitment to sustainable procurement policy is to ensure that the values that are fundamental to the business transferred through the company's supply chain in the life cycle of its products and services.

The driving forces of this policy is usually a combination of three approaches:

- risk management potential positive impact on corporate reputation and ability to mitigate any violation of regulations, the potential depletion of resources or abuse of supply;
- reduce costs by reducing energy consumption, reducing the cost of processing and production packaging;
- value creation by the development of new environmentally friendly products and using ecological resources suppliers.

Considering the existing imbalance between the economic, social and environmental performance of the companies in the supply chain, it is necessary to take into account these figures in view of their importance (weights) for the particular company in the organization of monitoring and control various aspects of sustainable supply.

An important component of the proposed mechanism is the choice of indicators for evaluating the effectiveness of stable supply, because different companies have their own views on the process of procurement and selection of suppliers, preferring the most significant issue for themselves. One way of forming system of indicators is a division of the total procurement process for certain activities of companies, that will choose a clear and significant figures for each area of assessment: economic, social and ecological.

These types of logistics activities include vendor selection, order management, procurement, distribution, delivery, handling, warehousing etc. Selected indicators can evaluate the economic, social and environmental factors in the implementation of each type of business, including logistics, operations, and therefore identify possible risks, to determine the influence of these factors on the efficiency of activities of both individual companies and supply chains in general (synergistic effect), as well as predict the consequences of the decisions taken.

A key instruments implementing sustainable supply are:

- codes of conduct and audit suppliers of first level;
- purchase certified products;
- direct interaction and liaison with suppliers below the first level.

The mechanism of stable supply lets companies – participants of the supply chain to integrate, build and redistribute its internal and external resources using a variety of methods, tools and organizational processes to increase economic returns and social responsibility and environmental safety throughout the supply chain.

Building a more sustainable supply chain provides a competitive advantage, better manages the impact of changes to reduce the risk and uncertainty of supply, stimulates innovation, increases productivity; meet the needs of clients and enables companies to create strong brands.

References:

- 1. Miemczyk, J., Johnsen, T., & Macquet, M. 2012. Sustainable Purchasing and Supply Management: A structured literature review of definitions and measures at the dyad, supply chain and network levels. Supply Chain Management: An International Journal, 17(5): 1-20.
- 2. Walker, H. 2012. Sustainable supply chain management: a literature review and future research directions. In C. M. Harland (Ed.), The Sage Handbook of Strategic Supply Management: 333-354. London: Sage.