Construction of Theoretical Framework of Modern Regional Logistics Planning

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Abstract: Economic development provides supports for development of modern regional logistics. Despite certain degree of development in regional logistics, a perfect planning theory of modern regional logistics has not been established in China. The construction of theory framework of modern regional logistics planning has become an important issue in new period of logistics development, forming unified and comprehensive logistics theory. Meanwhile, it is also the requirement of changing situation of logistics economic development and new round of logistics development planning. Focusing on problems of modern regional logistics, the work analyzed basic theoretical framework of logistics, combined with the existing logistics management theories.

1 INTRODUCTION

Global economy has been developing in 21st century with the deepening of economic globalization, upgrade of competition, cooperation among countries and regions, as well as expansion of economic exchanges. Meanwhile, regional logistics obtained growth with regional economy. has Distribution costs in economic activity of various industries can be effectively reduced with good logistics system, thereby saving unnecessary service and traffic costs, and enhancing economic efficiency of entire industry. Therefore, modern regional logistics industry has become an important support for regional economic development. Trade between economies and regions has been expanded with continuous development of global economic integration. As the basic unit of global economic development, the quality of regional development has a direct impact on the improvement of national and regional economic level. With the development of economic integration, the division of labor between major economic industries has been increasingly deepening. Links among various economic agents in the region increasingly depend on regional logistics system. Thus, regional logistics has become an important impetus for economic development. However, traditional regional logistics theories and structures cannot adapt to the needs of modern regional logistics with change of times. New logistics system has been formed and developed

through continual exploration of new economic situation. Advanced scientific and technological means are used for most basic control and management of the entire logistics process, thus achieving the most efficient production value of the whole modern logistics chain. This is the fundamental characteristic of modern regional logistics.

2 NECESSITY OF CONSTRUCTING THEORETICAL FRAMEWORK OF MODERN REGIONAL LOGISTICS PLANNING

2.1 Overview of Modern Theoretical Construction of Regional Logistics

Modern regional logistics planning is based on economic activity of an area and correct understanding of the size and characteristics of regional logistics, thus establishing a sound regional logistics system. The development strategy of regional logistics should be further planned and constructed with the target of more effective development of economic activities in the region. Based on advanced logistics planning theory and

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existing planning system, the construction of modern logistics theory is designed to adapt to the basic framework of modern regional logistics development, forming a sound theoretical basis.

Based on traditional regional logistics theory, modern regional logistics theory was developed through reasonable application of traditional materials, transportation channels, transport, information tools, storage and vehicles. Combined with basic theories, including modern economy and logistics development theories as well as regional economic theory, advanced information technology and e-commerce are used for perfect combination of logistics and economy. Thus, more scientific and reasonable development can be promoted for regional logistics planning.

2.2 Importance of Modern Regional Logistics Theory Construction

1) Trend of Economic Development. Chinese economy has obtained rapid development since the reform and opening up. Meanwhile, the economy of other countries keeps moving forward driven by the technological revolution. The trend of global economic integration is becoming evident, with the deepening of cooperation between developed and developing countries. As the basic unit of global economic integration, regional development level has a direct impact on global economy. In recent vears, regional economic cooperation becomes increasingly common with the development of globalization. Aimed at maintenance of common economic interests and achievement of win-win situation, they have in-depth cooperation in economic and even political fields. Different regional cooperation forms are established for different purposes. For example, the Cooperation Organization European Coal and Steel was set up for tariff reduction and elimination of tariff barriers, promoting mutual development of coal and steel industries with coordination and common development. So does European Atomic Energy Community (EAEC). For better development of regional economy, problems in current economic coordinated development including shipping costs saving, transport investment reduction, improvement of operating margins and transaction time reduction. Under this trend, modern logistics has become the most important area in modern regional economic integration, which is focused by the whole world. Countries are busy carrying out studies to maximize the use of regional logistics planning, striving to be

in the dominant position of regional economic development.

2) Requirement of Costs Reduction for Interregional Economies. From a macro point of view, the development of inter-regional logistics economy is the requirement of regional economic development in all aspects. The rapid development of modern regional economy needs support of improved logistics planning system. The requirement for regional logistics will be higher with the faster economic development. Corresponding logistics industries will continue to improve their service system under huge interest and pressure. The reason that regional economy rely on logistics enterprises to such a large extent is decided by significant reduction of transportation costs and time for companies by regional logistics system. With the development of society and more in-depth division of work among enterprises, multinational companies have been rising as an important component of regional economy. For example, an automobile manufacturer does not produce all necessary parts, but import them from other professional enterprises to obtain more profits. Then perfect regional logistics system is needed to help enterprises transport parts with least time, thus reducing transportation time and cost, and improving economic benefit of enterprises.

3) Promoting Development of Tertiary Industry. In recent years, with the optimization and adjustment of industrial structure in China, tertiary industry becomes one of the industries greatly supported by government. Modern logistics industry belongs to tertiary industry, as an important pillar within the industry. The development of modern logistics industry can promote the development of transportation, catering, wholesale and retail trade, information industry, etc. Unemployment can be solved to certain extent, which is conducive to stabilizing social order and constructing harmonious society. In addition, other industries driven by development of logistics industry have increased the proportion of tertiary industry in the whole industry structure. Regional industrial structure will be optimized, contributing to industrial structure adjustment of entire society form, thus promoting continuous development of regional economy. Good regional economic environment provides basis environment to attract foreign investment. Investors from developed countries will take convenience of logistics and transport as an important condition of investment. Therefore, perfect logistics system has significant impact on improvement of investment environment in the region.

3 BASIC THINKING OF THEORETICAL FRAMEWORK CONSTRUCTION IN MODERN REGIONAL LOGISTICS

Theoretical framework construction of modern regional logistics is a complicated process. A relatively clear thinking is required as a guide to make the process more effective, reasonable and smooth. Thus, the basic thinking was analyzed as follows, including theoretical basis of modern theory construction, as well as main contents and principles of regional logistics planning.

3.1 Theoretical Foundation

1) Modern Logistics Theories. Modern logistics theories began to experience continuous integration and partial systematization from 1970s, using advanced information technology to improve their logistics system. With systematic support of network in 21st century, modern logistics has been transformed into reduction of costs and achievement of maximum profits, achieving sustainable development of society in the long run. The scale of modern logistics has also been expanded from simple transportation logistics to comprehensive process covering the entire product procurement, including production, distribution, marketing, consumption and recycling. Meanwhile, its function has been transformed from original logistics transport to logistics creation, struggling to achieve overall optimization of modern logistics. Modern logistics system in modern logistics theory is a product of the times. As a large-scale and complex system, it is included in the large systems of society. The goal of modern logistics system is to use resources on other systems within society, ultimately achieving its overall goals through mutual influence and interaction. Currently, domestic and international researches on logistics theories more focus on logistics lines. Further study on relations among diversified network systems with different levels has a very important role in construction of multi-level and diversified regional logistics system.

2) Regional Economic Theory. Regional economic theory includes Non-balanced Development Theory, Gradient Theory, Growth Pole Theory and

Development Sustainable Theory. Regional economic theory emphasizes mutual support in terms of resources, transportation, information, and funding among regions. The above four economic theories are theoretical basis of economic activities in the region's economies, providing important theoretical support for regional supplies flow. The major role of goods flow among regions is emphasized in regional economic theory. Without material flows, gradient trend of rapid growth will not appear, not to mention the achievement of social sustainable development. This is a serious problem of regional logistics development. Therefore, regional logistics economic construction should be carried out under the guidance of regional logistics theory, promoting regional sustainable development with positioning analysis on regional logistics development.

3.2 Basic Principle of Modern Regional Logistics Planning

1) Satisfying Needs of Regional Economic Development. Economic development of the region is the ultimate goal of constructing modern regional logistics planning theory. The size of regional logistics market should be reasonably estimated, thereby providing more appropriate logistics services. Balance between supply and demand should be achieved to greatest degree, with mutual restraint and promotion with economic development in the region.

2) System Principle. Modern regional logistics system is a complex and complicated project. Sound principles are necessary to provide guidance in overall planning and rational development for full and successful completion of the whole planning process. Strength of various departments in logistics should be fully mobilized, with mutual cooperation and promotion. Reward and punishment system as well a promotion system can be implemented in internal departments, helping to enhance enthusiasm and initiative of the entire department.

3) Coordinated Planning Principle. Regional economic development aims at promoting regional economy. Moreover, it should be coordinated with development of other aspects, namely economy should adapt to political and cultural development. Therefore, coordinated planning principle becomes a basic implementation principle of regional logistics development.

4) Use of Existing Logistics Resources. Modern logistics resources were established on the basis of

traditional logistics resources. After years of development, logistics industry has formed a relatively complete system. Resources used in traditional regional logistics have an important role in development of modern logistics, including storage, transport tools, and transportation routes. Therefore, potential of the region should be fully explored for logistics development.

3.3 Main Contents of Modern Regional Logistics Planning

As an important component of modern regional economy, construction of modern regional logistics is a complex project. Development status of the region should be firstly analyzed, fully understanding logistics needs and development scale of the entire regional economy. Conclusions will be drawn after careful research and analysis.

Firstly, cautious attitude should be remained in construction of modern regional logistics planning. Operation laws of market should be respected with scientific analysis on the size of entire logistics market needs, reasonably analyzing natural and cultural environment of the entire market. Scientific outlook on development should be taken as guiding principle, with the action program of building environment-friendly society. Without destroying natural environment, the whole regional logistics should be reasonably constructed, promoting better development of regional economy.

Secondly, hardware facilities necessary for regional logistics development should be improved under the premise of rational planning theory, including plant and warehouse. In addition, regional logistics network, as the perfect combination of network and logistics, should be established to improve the efficiency of logistics. Only with hardware facilities can the value of human and material resources be fully played.

Finally, logistics personnel should be actively cultivated. Strong regional logistics economy requires support of logistics personnel. Therefore, personnel cultivation has become the focus of logistics development under the condition of abundant hardware facilities, which is also an important aspect in modern economic theory. Modern regional logistics planning theory is based on modern logistics. Thus, modern logistics should be firstly developed for drawing lessons, forming more convincing modern logistics theory.

4 CONCLUSIONS

Through summaries of various economic and international logistics theories, China has started the construction project of modern logistics planning combined with own experience. Complete planning thinking is necessary for guidance in complicated construction of theoretical framework. While some achievements in modern logistics have been made in China, there is a big gap compared with developed countries. Therefore, deficiencies should be recognized to improve planning theory of Chinese modern regional logistics with the basic foothold of modern logistics enterprises, thus promoting sustainable development of regional economy.

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