Research on Cross-Border Emergency Logistics Collaboration Mechanism under the Background of Belt One Road Initiative

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Abstract: Emergency logistics is a special part of the logistics system. When emergencies occur, emergency logistics is indispensable. Currently, the current situation of cross-border emergency logistics has many drawbacks. In order to further reduce the losses caused by emergencies, it is necessary to improve the cross-border emergency logistics system, in-depth analysis of the current problems in the four aspects of cross-border logistics management, systems, logistics information, and material distribution in countries along the Belt and Road Initiative, through the establishment of a cross-border emergency logistics coordination mechanism, relevant strategies are established to ensure the effective implementation of emergency logistics.

Keywords: Belt One Road Initiative; Cross-Border; Emergency Logistics; Coordination Mechanism

1. Introduction

In the context of the Belt One Road Initiative, from 2013 to 2018, the total volume of imports and exports of goods between my country and the countries and regions along the route has exceeded US$6 trillion, and has maintained an average annual growth rate of about 4%. However, at the same time of high economic development, countries along the route have ignored some uncertain factors in cross-border logistics. In emergencies, developing countries along the route are unable to make emergency logistics plans in the shortest time due to their own factors. As a result, their cross-border materials cannot be delivered to their destinations in time, and the effectiveness of materials is lost. This year’s epidemic is the best witness. Cross-border emergency logistics between countries has disadvantages such as low efficiency and high cost. For this reason, the study of cross-border logistics coordination mechanism under the background of Belt One Road Initiative aims at the organic combination of economic efficiency and time efficiency of cross-border emergency logistics in the countries along the route, and improves the ability of coordination and speed of material transportation in emergencies[1].

2. Development status of cross-border emergency logistics under the background of Belt One Road Initiative

In recent years, the cross-border logistics industry between ASEAN countries and my country has grown rapidly. According to the data of China-ASEAN cross-border trade in 2019, ASEAN has risen to China’s second largest trading partner, with a total trade value of 27,400 between China and ASEAN. Billion yuan, an increase of 11.7%, accounting for 13.6% of China’s total foreign trade value, in addition, my country’s total import and export trade with ASEAN
countries grew the fastest, with a growth rate of 14.1%. However, compared with developed countries such as the United States and Japan, the level of cross-border emergency logistics in ASEAN countries is generally backward, with high costs, high risks, and low efficiency.  

3. Problems in cross-border emergency logistics under the background of Belt One Road Initiative

3.1 Non-linkage of response agencies

In response to major emergencies, there is a lack of unified leadership among countries along the Belt One Road Initiative, and there will be many problems in the temporary joint emergency department, for example, there is an embarrassing situation of “multiple commanders and disagreements between top and bottom”. In addition, the organization system among the countries along the route is not sound, the decision-makers cannot make decisions in the first time, the order dispatchers issued by the temporary joint emergency department cannot be implemented in time, and the internal order is not uniform, which greatly weakens the timeliness emergency logistics.

3.2 The inconsistency of quality inspection standards

Emergency logistics pursues time efficiency, but the intermediate process of cross-border logistics is very complicated. As each country has different policies and systems, each country has different standards for quality inspection of transport materials, which has brought many problems to domestic and foreign logistics companies. Even if the emergency logistics does not meet the local product quality standards, it still cannot be effectively transported, and the emergency supplies cannot be delivered to the disaster-stricken area in the first time, resulting in a delay in the transportation of emergency supplies.

3.3 The asymmetry of logistics information

Among the developing countries along the Initiative, Laos is mainly based on agriculture, with relatively backward infrastructure construction, and most of the countries with underdeveloped information industries. In response to emergencies, the lower-level emergency logistics and transportation cannot provide timely information feedback in real time, and there is an asymmetry of logistics information, which will cause wrong information judgments for upper-level commanders, and emergency materials cannot be delivered to the scene within the specified time, affecting emergency rescue work in the disaster area.

3.4 The irrationality of material distribution

When emergencies occur, there will be many uncertain factors. Timely supply of materials is the most effective way to reduce losses in the disaster area, however, unreasonable distribution of emergency supplies is common in developing countries along the route. Because of the mistakes of the upper-level decision-making, the emergency supplies were evenly distributed and transported to the disaster-stricken areas, resulting in the unreasonable phenomenon of “the hardest-hit areas are scarce, and the less serious areas are surplus.” Emergency logistics pays attention to time, demand, and unreasonable material distribution, which missed the “golden rescue period”, which severely increased the rescue process in the hardest-hit areas.

4. The establishment of cross-border emergency logistics coordination mechanism under the background of Belt One Road Initiative

4.1 Establish a unified command department

Emergency logistics is different from ordinary logistics. The most important thing is to pay attention to timeliness and order. For this reason, in response to emergencies, countries along the Belt and Road need to set up a special emergency joint department. Under the unified command of this department, the local disaster situation such as traffic con-
ditions, emergency material requirements and other related data will be integrated and analyzed, general judgments will be made, and tasks will be issued, letting local governments and social organizations assist and cooperate, conduct unified personnel scheduling, and ensure that emergency supplies are carried out in an efficient and orderly manner.

4.2 Improve relevant legal systems

Regarding emergency logistics, countries along the route need to sign an agreement to unify the quality inspection standards of relevant emergency supplies under special periods, and open VIP channels for emergency supplies, simplify customs clearance procedures, and provide more sufficient time for local logistics companies to transport emergency supplies.

4.3 Integrated logistics information platform

From the current point of view, my country and the countries along the Initiative” urgently need to develop information technologies such as “5G” and “blockchain” to jointly establish an emergency logistics information sharing platform. Under the condition of ensuring that countries are in relative safety, governments and logistics companies of all countries carrying out real-time transmission of logistics information of emergency materials to ensure that materials and logistics are in the synchronization stage of “openness and transparency” synchronization stage, in order to allow the emergency joint command department to make accurate judgments through the logistics information platform and improve the efficiency of emergency material transportation.

4.4 Improve the material distribution mechanism

The occurrence of emergencies caused traffic in the disaster-stricken area to be paralyzed, and emergency supplies could not be delivered in time. The disaster-affected country needs to allocate transportation vehicles and transportation personnel reasonably, improve the emergency material distribution mechanism, coordinate with local governments and social organizations to plan transportation routes, divide the hardest-hit areas and low-risk areas, and store materials in the hardest-hit areas, and under the escort of the armed forces, the “one-stop” transportation is carried out to ensure that important emergency supplies are transported to the storage warehouses in the hardest-hit areas within the first time, so as to meet the urgent needs of the hard-hit areas for materials and avoid causing more loss. The logistics infrastructure resources in developing countries along the Initiative are not sufficient. Joint emergency command departments can assist disaster-stricken countries in emergency logistics distribution, improving the timeliness of emergency logistics and transportation and the ability to distribute and dispatch materials.

5. Conclusion

The setting of the four aspects of the cross-border emergency logistics coordination mechanism under the background of the Belt and Road is conducive to making more timely and accurate judgments between countries in the process of responding to emergencies as a reference to ensure the delivery of emergency supplies’ safe and efficient. The coordinated development of cross-border emergency logistics can enhance the cooperation and exchanges between my country and the countries along the Belt One Road Initiative, and promote the gradual and high-quality development of emergency logistics and transportation between countries in the direction of intelligence, integration and internationalization.

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