

An Analysis of Green Environment-Friendly Logistics Management Concept

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Abstract—Nowadays environmental issues have become critical concerns all over the world, organizations are constantly under pressure to develop environmentally responsible and friendly operations. In recent years, the development form of China's market economy has been constantly changing and the accelerating development of e-commerce and other related online sales work has indirectly promoted the development of the logistics industry. However, in the development of the logistics industry, the methods and forms used in the traditional development mode have already caused some damage to the environment. With the expansion of the industry scale, this deficiency has gradually become prominent and has drawn the great attention of the public. To gradually reduce the damage on the environment in the subsequent development, relevant staff have put forward the concept of green environment-friendly logistics. This paper firstly analyzes the development background and necessity of green environment-friendly logistics, and then focuses on the problems existing in the development process, and further proposes some targeted optimization measures which would be helpful to reduce the damage on the environment.

Keywords: *Green environment-friendly logistics; Management philosophy; Concept popularization; Cultivation of talents*

I. INTRODUCTION

While environmental issues have become critical concerns all over the world, organizations are constantly under pressure to develop environmentally responsible and friendly operations. Commitment to the natural environment has become an important variable. Therefore, the interest in developing green logistics from companies, government, and the public is increasing dramatically especially because traditional logistics cannot meet the requirements of modern society and has huge impact on the environment [1]. Green environment-friendly logistics is derived from the traditional logistics industry with corresponding function of environmental protection measures. The concept can comprehensively guide the direction of people's subsequent development, and it can continuously enhance people's environmental protection awareness; to a greater extent, provide overall protection of its survival environment. The research is of great significance to promote the overall development of green environment-friendly logistics.

II. DEVELOPMENT BACKGROUND AND NECESSITY OF GREEN LOGISTICS

A. The development background of green logistics

Typically, logistics is seen as the actions of which the objective is to minimize costs and maximize profits. The term was used mostly in purely business areas, exhibiting companies and in financial reports. But, for many years, the term logistics was used in conjunction with the "green" by creating "Green Logistics" - the term containing costs, yet did not appear on financial reports and on the environment and society. The term "green logistics" is defined as supply chain management practices and strategies that reduce the environmental and energy footprint of freight distribution, which focuses on material handling, waste management, packaging and transport [2]. Green logistics consists of all activities related to the environment-friendly management of the forward and reverse flows of products and information between the point of origin and the point of consumption whose purpose is to meet or exceed customer demand. Simply speaking, green logistics can be defined as an organization's activity taking into account environmental issues and integrating it into supply chain management in order to change the environmental performance of suppliers and customers. Green logistics activities include measuring the environmental impact of different distribution strategies, reducing the energy usage in logistics activities, reducing waste and managing its treatment [3]. From the sustainable development point of view, green logistics can be defined as producing and distributing goods in a sustainable way, taking account of environmental and social factors [4].

With the continuous development of the times, China's economy is gradually achieving a benign development. Constant improvement of people's living standards brings constant increasing of the overall no-flow, and the impact of the logistics mode applied in the traditional development form on the environmental development is also increasingly obvious. The concept of green logistics came into being in the 1990s in China. This concept can solve the problems existing in the environment in a more scientific and reasonable way. With the prevalence of the principle of sustainable development, the field of practical application of green logistics has gradually expanded and become one of the important options. Further, it can realize the prospect of green manufacturing and consumption, and further promote the formulation of new development form of economic integration [5].

B. The necessity of the development of green logistics

In recent years, the development form of China's market economy has been constantly changing. Correspondingly, the related concepts and applications of green logistics can be implemented to improve the overall social and economic development strategies in a more comprehensive and harmonious way. For the development of enterprises, green logistics can greatly save the resources and reduce the costs, thus to strengthen the overall competitiveness of the economy[6].

Firstly, the application of green logistics can comprehensively promote the sustainable development in the socio-economic future. The practical implementation and application of green environment-friendly logistics is mainly based on environmental protection and sustainable development. During the subsequent development, it will gradually improve the optimization of management measures in logistics activities. Furthermore, it can greatly reduce the adverse impact of logistics activities on the environment in the actual implementation process, provide better protection of resources, and greatly promote the sustainable development of society.

Secondly, the improvement of green environment-friendly logistics can greatly reduce the costs and resources needed in the development of enterprises. According to relevant statistics, analysis and research, during the actual development of products, only 10% of time is consumed by manufacturing and processing from production to sales, and the remaining 90% of the time is calculated in loading and unloading, storage, information processing and other work related to logistics management. Therefore, in the subsequent development, the active application of green logistics can comprehensively reduce the investment of enterprises and improve the overall delivery speed.

III. DIFFERENCES OF LOGISTICS DEVELOPMENT BETWEEN CHINA AND FOREIGN COUNTRIES

Different regions and different lifestyles can affect people's behavior habits to a large extent. The logistics industry is one of the industries that has emerged and gradually expanded in recent years. The logistics industry in foreign countries started earlier, and the awareness of green logistics has long been growing [7]. However, due to the short development time of domestic logistics, the related concepts of green logistics are still in the nascent stage. The relevant staff and the general public cannot fully recognize the specific role and significance. Therefore, in the actual operation of the logistics industry in China, there is still a very significant gap with the international development of logistics, and the gap is mainly shown as follows:

First of all, the concept gap. The content above has proposed that the logistics industry has a short time of starting up in terms of its development stage in China. Consumers and operators do not fully comprehend the concept of green logistics in the process of actual development and their knowledge is limited to warehousing, transportation, handling and other actions, unable to fully and meticulously recognize the significance of modern green logistics development, nor

clearly understand that comprehensive improvement of the green environment-friendly logistics industry can further protect the health of the ecological environment in the process of subsequent development.

Second, the policy gap. Any industry needs government-related support and protection at the beginning of its rise before it is able to fully implement the security and stability of the overall development to the largest extent. The support of some foreign developed countries for green logistics enterprises mainly includes: (1) formulating corresponding policies in terms of sources of pollution, traffic sources and traffic volume, etc.; (2) constructing sites capable of processing domestic and industrial pollutants. However, policy support is seriously lacking in view of the development of China's green logistics industry in this respect.

Moreover, the experience gap. The concept of green logistics has only been introduced to the domestic market in the recent stage. However, this kind of introduction can only learn the "surface" of application strategies of foreign advanced countries, and it is difficult to apply its "essence" into China's logistics industry. Therefore, in the current stage of development, successful green logistics related development samples are still extremely scarce in China. But there are still obvious deficiencies if relying solely on the success of foreign advanced units, and the root cause is the extremely significant differences in the actual form of development for each country.

Finally, the service gap. In the current stage, affected by the development of economy and culture, China's logistics industry has a very obvious segmentation phenomenon in the process of actual development. Each economic management department has separated from the enterprise to form a separate system. As a result, a relatively unified management plan cannot be formed in terms of the bearing equipment requirements, transportation specifications and so on applied in the logistics work, which greatly increases the cumbersomeness of logistics operations, reduces the logistics speed, increases the logistics cost, and makes the logistics industry related enterprises lost strong competitiveness and economic benefits in the actual development stage.

IV. ANALYSIS OF PROBLEMS IN THE DEVELOPMENT OF THE GREEN LOGISTICS MANAGEMENT

A. Backwardness of relevant management technology

For the development of green logistics, in the process of its actual operation, it needs to rely on the related concepts of green logistics, formulate and follow the corresponding logistics policy, and comprehensively master and apply green technology. However, in terms of the actual development of logistics industry in China, there is still an obvious gap between the relevant technology and the idealized green requirements [8]. For instance, the overall development scale of China's logistics industry is small with fragmented management patterns at present. The overall internal operation in the actual development is disordered and competitive for the lack of good planning, which brings great pressure on the

environmental protection work. Obvious shortcomings can also be found in the development of logistics network, information and automation. In the whole mechanical usage of logistics industry, its advanced form of development is difficult to match the green logistics indicators. Moreover, in the process of actual development, green logistics lays too much emphasis upon green materials, designing, packaging, technique and processing. Therefore, in the actual operation process, the work form carried out in the supply chain is broader than that in the traditional form.

B. Shortage of talents in green logistics industry

The investment of resources in the education industry has been constantly improved along with the stability of the country and the rapid development of the economy. However, due to the short time of the overall development of the logistics industry, there is a severe shortage of talents in the field in the actual operation process, which has gradually become one of the major obstacles to the current development of the green logistics industry.

C. Unpopularity of the Concept of Green Environmental Protecting Logistics

In the development of the modern era, the logistics industry has an extremely obvious effect on people's life and work. If its overall development form can be comprehensively enhanced, it can promote the rapid development of China's economy and so on to a greater extent [9]. Although the development form of green environmental protecting logistics researched in this paper has extremely excellent ideas and practical methods in the process of actual operation, however, due to the short time and low popularity of this concept in the Chinese market, the operators, consumers and other people cannot better understand the foreign advanced green management and consumption patterns in the process of actual development. There is no such concept existing in their mind at all, a majority believing that green logistics, in the process of actual development, cannot bring advantages to the development of the enterprise, but increase the cost of logistics work invisibly. In addition, in the process of actual development, some enterprises believe that green logistics and other related environmental protecting work should be allocated to the work scope of the government, and that it is not related to the overall form and development of the enterprise. From the perspective of the long-term development of enterprises, the application of green environment-friendly logistics methods can closely combine and link green products and green consumption, so that the environment on earth can suffer less damage. This kind of measure is related to the development of all mankind. It requires the attention of relevant agencies and management personnel such as the government and enterprises [10].

Relative Backward Management of Logistics Enterprises

At present, with the rapid development of the e-commerce industry, the logistics industry also expands the operation method for its overall development in the process. However, in combination with its actual development form, there are still obvious management deficiencies and problems in the

current stage of development and operation. First of all, due to the lack of good communication between the staff, the logistics information cannot be presented to the customers in a more intelligent and accurate form, leaving obvious problems for the actual application for customers. Secondly, the communication between the staff and the customer is insufficient. It is difficult to further understand the individualized needs in the customers' actual development process, and further weaken the comprehensive quality of the service team in its development process.

V. ANALYSIS ON OPTIMIZATION STRATEGIES FOR SUBSEQUENT DEVELOPMENT OF THE MANAGEMENT CONCEPT OF GREEN LOGISTICS

A. Strengthening the Management Technology of Green Logistics

As is mentioned in the above analysis and research, in the process of overall development of China's current logistics industry, its internal management technology level lags behind that of people, and it is difficult to contribute more strengthened power to the development of green logistics in the actual development of the current form. Therefore, in the process of subsequent development, the relevant staff should consciously carry out the establishment and improvement of the logistics system, and then comprehensively improve the economy and utilization rate of the logistics industry. First, in the process of actual development, the government should consciously guide the development of the green logistics industry, enabling it to fully apply modern science and technology, such as electronic data exchange systems, global positioning systems [11], comprehensive quality management systems, radio frequency technology and plans for corporate resources, etc. [12] so as to optimize the industry level of enterprise information management to a greater extent. In addition, in the process of actual development, the government should protect and improve the public information network and other related information platforms in a more superior form, so that the regional or national logistics network can be further implemented and its function can be further played. Implementing the ability of data publicity, resource contribution, and information exchange between different logistics enterprises and departments to a greater extent, creating a more efficient and smooth communication speed for the subsequent development of the green logistics field, and enabling the overall management technology of green logistics to be improved and upgraded gradually.

B. Cultivating the Talent Team of Green Logistics Industry

With the comprehensive development of various industries and fields in China, the importance of the logistics industry has become more and more prominent. In order to be able to carry out in a more advantageous state in this kind of development state, relevant institutions and departments should increase their efforts to create a talent team that responds to the industry. First, strengthening the cultivation of talents in the campus logistics industry. As a product of the development of the new era, in the process of subsequent development, green logistics requires a large number of

operational planning staff and professionals in related fields, and the personal ability requirements for it are gradually improved. Therefore, campus education should be carried out consciously, so that students can develop better in this form and state. Secondly, offering training and management to existing employees in logistics-related enterprises. After long-term employment in a certain industry, employees gradually form a working state of familiarity, which is difficult to adapt to the development and needs of the times. And in the process of subsequent actual work and development, it is difficult for them to fully meet the needs of customers and industries. Therefore, in the process of actual development, enterprises should conduct more targeted training and management work for their employees, so that they can be more suitable for their jobs, providing customers with better service models. Finally, for employees with excellent performance in daily work, managers should give them corresponding spiritual rewards or material rewards, so that they can contribute more powerfully toward the development of green logistics in the process of subsequent development, and their working enthusiasm will get promoted in this form of development [13].

C. Promoting the Related Concepts of Green Logistics Vigorously

In the process of comprehensively developing the new working concept of green logistics, it is first necessary for the corresponding staff and leadership levels to have a relatively correct and complete cognition of the concept and follow its guidance to carry out the subsequent industry development. In order to fully enhance the individual's awareness of green logistics, firstly, the government's departments need to develop their own guiding abilities and establish a correspondingly strong security system. The overall development and operation of the green logistics industry will be comprehensively supervised, standardized and motivated under this system to enable it to develop in a more correct way in the social economy. Secondly, comprehensively planning and building corresponding public infrastructure facilities to green logistics [13]. In this work: (1) Focusing on the transformation and utilization of existing materials, re-integrating the layout, scale and functions of existing facilities to improve overall application efficiency on the basis of the existing state, and playing its own functions to the largest extent; (2) Strengthening the function integration and macro coordination of existing logistics facilities and equipment. In the process of this work, it should gradually improve the overall development of transportation modes, logistics planning and other related capabilities based on the overall development strategy of the enterprise, and use this as a benchmark to protect and construct public transport and transportation equipment in China to meet the overall development needs of green logistics [15].

D. Strengthening the Management Ability of Logistics Enterprises to Improve the Overall Service Quality

With the promotion and improvement of environmental protection work, the logistics industry, especially the green logistics industry, will gradually expand the overall scale in the process of follow-up development and construction work. In order to further expand the integrity and popularity of its

overall development, in the process of actual work, the relevant industry staff should comprehensively improve the overall management capabilities of the enterprise, so that its overall service quality can be further improved.

First of all, in the process of actual development, enterprises should use the scientific configuration optimization function to fully implement the conservation management and application of resources. Building a network development platform for logistics information, and then fully implementing application and information sharing of internal resources, so that the logistics information of all working platforms of the logistics industry can be well connected, ultimately reducing the application planning draft and building more complete development space for the subsequent development of the enterprise.

Second, strengthening communication and cooperation. In the process of actual development, logistics companies need to establish excellent cooperation with users. Therefore, in the process of actual development, in order to comprehensively improve the optimization measures of its overall development, relevant staff members should exert their own professional advantages and build active communicating methods with users, so that customers can fully accept the propaganda of the company themselves and the development and optimization of their own green logistics will be ultimately improved.

VI. CONCLUSION

In summary, in the process of actual operation in China, the implementation of green environment-friendly logistics is bound to face several major problems, such as backwardness of management technology, scarcity of talents engaged in green logistics industry, unpopularity of the concept of green environment-friendly logistics and relative backward management of logistics enterprises. To improve its overall development, this paper proposes four optimization measures, namely, strengthening the management technology of green environment-friendly logistics, cultivating the talent team of green environment-friendly logistics industry, vigorously promoting the related concepts of green environment-friendly logistics and strengthening the management ability of logistics enterprises to improve the overall service quality. Green logistics in China is still underdeveloped, however, in the course of economic globalization and the booming development of our national economy, sustainable development has been one of the biggest issues and slogans in recent years. Green environment-friendly logistics can not only fully optimize the logistics system, but also can improve the level of logistics management in our society. It is believed that the development of green logistics is the inevitable trend of logistics industry in modern time. It is hoped that the research of this paper can comprehensively promote the overall development of China's green environment-friendly logistics industry.

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