

Research on Fresh Products Cold Chain Logistics

Current Situation and Development

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Abstract—With the promotion of economic development and changes in consumption structure, fresh electricity business is developing rapidly, delivering fresh healthy life increasingly become a pursuit of the new way of life, which also makes surge in demand for cold chain logistics. This article focuses on the status of cold chain logistics, big demand big competition, high cost, and on this basis propose ways to reduce the cost of using rail transport, analyze and measure the many advantages of rail transport fresh products.

Keywords-fresh products; cold chain logistics; trends

I. INTRODUCTION

Food transport is a matter of people's livelihood event. However, seasonal food transport requirements, transport temperature control requirements, unreasonable and improper operation of transport likely to cause food safety incidents. With the rapid growth of disposable income, the Chinese people have been moving away from the "subsistence" stage into the "quality" hierarchy of needs, rich people for cross-regional, trans-seasonal product demand is increasing. To better meet people's needs, shorten product time and space from the development of cold chain logistics is the trend.

II. FRESH PRODUCTS COLD CHAIN LOGISTICS DEVELOPMENT STATUS

The rapid development of cold chain logistics, summed up the current situation has the following:

A. Ample supply chain logistics

According to China Statistical Yearbook of Statistics, in 2013 the country 706 million tons of fruits and vegetables 250.93 million tons, 85.35 million tons of meat, dairy 36,495,000 tons, aquatic products output reached 61.72 million tons, and the overall yield on increasing year by year. According to recent survey results show that China has more than 2,500 large-scale meat factory, with an annual 60 million tons of meat production at a rate of about 5% per year increments; frozen food factory 2765, the annual output more than ten million tons; beverage industry more than 4,000, more than 150 million tons of annual production at a rate of about 7% per year increments; a number of large-scale dairy farming 2000, the annual output 10 million tons, the dairy industry with an annual growth rate of 30%; Aquatic years production of 44 million tons, and 4% growth rate. Domestic gradual emergence of a group such as Shuanghui, gongs, three full, thoughts, dragon and phoenix, Yili, Mengniu, and the way the snow, Guangming and other production, product variety of brand-name food companies. In addition, it is predicted that China cold chain logistics industry in the future will maintain an average annual growth of 25%, to 2017,

the market will reach 4,700 billion yuan. From the above, in recent years, production, processing and marketing of the development trend of perishable goods well, refrigerated and frozen food sales booming, the development of refrigerated transport has laid a good foundation sources, greater market demand also contributed to our refrigerated transport industry.

B. Fresh product sales channels diversification, cross-regional chain logistics majority

Today, people are the source of fresh products for a variety of everyday needs: First, the daily needs of fresh meat, fish, scale suburban farms, fish ponds developed rapidly, largely to meet the urban residents of meat, fish needs to get people through local procurement; Second, after the long-distance transportation to purchase place of origin farmers market, supermarket chains, such as seafood, some fruits, nuts and so on; Third, through the fresh product website online orders, waiting for home delivery. The above-mentioned three methods, in addition to a first outer require cold chain for distribution.

C. Cold chain logistics technology, equipment is relatively backward

Due to the special nature of cold chain logistics and transport of goods, require specialized cold storage, refrigerated vehicles and other hardware equipment and insulation technology, safety technology and energy-saving technologies, but in practice there are still many technical, equipment hysteresis phenomenon. For example, some local cold is converted from other buildings, which typically have a loading platform refrigerator is too narrow, no doors sealed, manual handling and other issues; obvious gap compared with developed countries, such as the United States Able Freight Company, the cold storage open 7d*24h per week, maintained at different temperatures with moisturizing refrigerator, cooling machine and cooling machine, using high-quality insulation, condensation plastic bags and ice to ensure the best goods reach their destination, and the whole are transported by refrigerated truck . Because of this, European countries have moved into the Chinese cold chain market.

III. CHAIN LOGISTICS DEVELOPMENT TREND ANALYSIS-RAILWAY COLD CHAIN LOGISTICS

Cold chain logistics development in the face of opportunities while also facing greater risks, one of the effective ways to fend off the risk is to ensure fresh products under the premise of quality reduce cold chain transport costs. Especially in today's primary reason for restricting the development of the cold chain, cold chain logistics covering the fresh produce low rate is the cost issue. Mainly due to the high cost of fresh products characteristics: perishable and therefore need to provide throughout the cold chain. To better link the transport, storage, handling and other logistics chain, convenience, road transport door to door service to provide as many company of choice throughout the cold chain. However, a series of hardware equipment investment cost of cold storage and cold chain trucks dedicated shelves, forklifts, inspection centers have caused a chain logistics cost. Based on the premise of the above factors, we proposed to develop of railway cold chain logistics. Development of Railway cold chain obvious advantages, mainly in the following aspects:

Firstly, transporting long-distance, bulk cargo railway had obvious advantages. First five modes of transport, long-distance transport by rail, sea transport costs low, but water transport infrastructure is inadequate, covering a wide range of rail transport is better; longer second transport time, rail transport faster; third, railway transport relative to road transport large volume, bulk cargo transport costs are significantly reduced. In order to better ensure the quality of transport, cold chain transport by rail in

long distance advantage.

Secondly, containers' types diversification. Cold chain transportation of transport vehicles higher requirements, with the wide application temperature, refrigeration, insulation, ventilation of the container, rail transport to better quality assurance chain products; In addition, container transport can be transported by rail trains, classes in the line, the time, the trips, the price and so obvious advantages compared with ordinary trains can run towards and fixed, fixed line, fixed train number, timing, pricing, to ensure timely delivery of goods.

Thirdly, the implementation of integrated transport. Rail transport is difficult to achieve the "door" to "door" service, while rail transport may well take advantage of rail and road transport, weaknesses. Containerized transport possible without unpacking the premise will be forwarding items to avoid loss and contamination of goods, cold chain rail transport will become more economical mode of transportation logistics.

IV CONCLUSION

From the foregoing, railway chain logistics obvious advantages, but also has a strong operability, cold chain logistics in order to make railway sustainable development, the following recommendations: First, for policy support. Comparable road "green channel policy" royalty relief for railway refrigerator line, create a fair competitive environment; give railway refrigerated transport special incentives or subsidies in the organization of transport, freight, infrastructure construction, railway refrigerated adapt to market demand. Secondly, a higher rate of road vehicles return empty to avoid the same problems exist rail transport should increase marketing efforts, expanding large customers, strengthen supply organizations, improve weight to return, triangular transport, network transport ratio. Third, the use of integrated transport, establish an information platform railroad cold chain logistics involved in the entire process. Strengthening food production enterprises, cold storage, cold chain logistics providers operating in cooperation with a large fruit and vegetable distribution center, cold chain integrate social resources, to actively participate in the whole logistics of fresh products, the formation of railway refrigerated logistics chain.

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