Current Situation and Countermeasures of Rural Logistics Distribution under E-commerce Environment
-- Take Huaibei City as an Example

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Abstract
With the development of social economy and the popularization of Internet mobile devices, online shopping has increasingly become an important part of household expenditure, whether in urban or rural areas, and its proportion has increased significantly. There are relatively many shortcomings in logistics in rural areas, with relatively inconvenient transportation, scattered living, and difficulties in logistics and distribution, which largely restrict the popularization of E-commerce in rural areas, especially for the "last mile" problem of rural logistics. Requirements, the need for modern logistics enterprises and national government policies to work together to promote the rapid development of my country's rural logistics. Taking Huaibei City, Anhui Province as an example, the article highlights the distribution of agricultural products, analyzes in detail the current situation of express logistics and distribution in rural areas of Huaibei City, and finds out the current difficulties and pain points of logistics in rural areas in my country, and puts forward corresponding suggestions for improvement. Logistics enterprises refer to it to better coordinate the interests of logistics enterprises and the satisfaction of consumers.

Keywords
E-commerce; Rural Logistics; Internet +.

1. Introduction
My country's Tmall Double 11 all-day turnover has been increasing year by year, and the express delivery volume has also set a new record. China's shopping carnivals, Double 11, Double 12, 618, and various festivals have created a nationwide shopping boom. Closely related to the rapid development of E-commerce is logistics and distribution services. The quality and speed of logistics and distribution directly affect the shopping experience of consumers. During the Spring Festival in 2020, the express delivery industry basically stopped delivery for one week before and after the Spring Festival. This year, affected by the new crown epidemic, the express delivery industry was postponed for more than a month, and the hard-hit areas such as Hubei could not resume normal operations. At the same time, since the new crown pneumonia is a contagious disease, many areas, whether in urban or rural areas, implement closed management. Even if sellers deliver goods in time, due to a series of restrictions such as transportation, shortage of delivery personnel, and commodity disinfection, many express delivery companies can only After reaching the urban distribution point, it cannot be further delivered to the township express delivery point, and the delivery time is relatively delayed. The "hot" and "cold" aspects of the express delivery industry during the Double Eleven and Spring Festival travel period have overwhelmed many express service personnel and affected consumers' shopping experience to a certain extent.
Since the "Internet +" plan was put forward, O2O and other online and offline business models have entered a stage of rapid development; Li Jiaqi, Wei Ya and other powerful anchors with goods have also caused a wave of live broadcast boom, and many township government officials have personally participated in the battle to help the live broadcast sales of agricultural products At the same time, online shopping platforms are also emerging one after another, especially Pinduoduo, which has the slogan of low prices and helping farmers. In recent years, it has also emerged, making more and more farmers have the awareness of selling agricultural products online. At the same time, the development of E-commerce has also driven the development of corresponding supporting logistics and distribution services, and the logistics and distribution services in western and rural areas have also been continuously extended. In recent years, the state has put forward a series of policies to build rural areas better and faster, such as "rural revitalization", which has attracted more and more people to pay attention to the development of rural areas. Rural areas have unique natural and human resources, and rural areas have larger Market potential and development space is relatively broad. In recent years, with the development and upgrading of the modernization of agricultural villages, the commercialization of farmers, and the new development of rural areas, the continuous improvement of E-commerce systems and the continuous expansion of rural logistics networks are required. However, there are still many problems in rural logistics and distribution. Shi Li [1] pointed out that the three-level logistics system in most areas of my country has been basically perfected, that is, the development model from county, township to village has been continuously improved. However, there are still shortcomings in logistics management and delivery timeliness, and the setting of logistics outlets still needs to be strengthened. In the past two years, the sudden outbreak of COVID-19 has blocked the roads from Huaibei rural areas to and from towns, as well as the sales channels of farmers’ agricultural products. People in towns and cities are in desperate need of fresh agricultural products, but farmers are more than enough.

2. Analysis of the Status Quo of Rural E-commerce Logistics and Distribution

All departments are committed to creating a logistics development environment and improving the construction of logistics infrastructure to provide support and guarantee for the development of my country's logistics industry, especially modern enterprises focus on the logistics market in my country's rural areas, and constantly promote E-commerce and logistics distribution towards high-quality, high-speed, more convenient development, in order to better adapt to the development status of rural logistics, to solve the problems of rural E-commerce and logistics development. However, the problems existing in my country's rural logistics at this stage are mainly due to insufficient development of the rural logistics market, relatively high implementation costs, and failure to achieve effective operations. The shortcomings of rural logistics and distribution are particularly prominent. Taking Huaibei City, Anhui Province as an example, this paper analyzes the current situation of the existing logistics model in Huaibei City, explores the difficulties and pain points that hinder development, and combines the current situation of regional development in Huaibei City to better cultivate a logistics development model suitable for local residents.

2.1. The Huge Rural E-commerce Market in China

Due to the emergence of platforms and sales models such as Pinduoduo and webcasting, and the continuous emergence of activities such as helping farmers and public welfare, they have attracted great attention from the government and the industry. As a result, the online retail sales of agricultural products across the country has doubled year by year, and the volume of express delivery in rural areas has also increased. It has doubled in the past few years.
Therefore, the national government policies are also gradually tilting towards rural areas, and the State Council has also issued policies to include enterprises and regions that have made outstanding contributions to rural and logistics development into the scope of typical incentives. The resident population of Anhui Province exceeds 60 million, and the urbanization rate is 65.88%. Among them, the resident population of Huaihai City is 2.27 million, and the urbanization rate is 54.9%. It can be seen that the rural population in Anhui Province accounts for nearly half of the market, and rural areas can be regarded as a treasure area for E-commerce logistics development. It is particularly important to develop rural logistics in the context of E-commerce. Li Hongmei [2] analyzed the geographical location of Huaihai City and highlighted the geographic importance of Huaihai City. It is located at the center of the three provinces of Jiangsu, Henan and Anhui, and is located in an important position in the Huaihai Economic Zone. It provides a good foundation for the future development of modernization.

2.2. Status Quo of Rural Logistics and Distribution in Huaihai City

Wang Ning [3] pointed out that the terminal service of rural logistics is very important to the development of the overall logistics in rural areas, and grasping the distribution service of products and the after-sales service of products are the key steps to complete the whole chain logistics system. However, there are still problems in Huaihai City, such as low population concentration, backward consumption concept, and weak supporting infrastructure, which lead to the characteristics of relatively scattered logistics distribution terminals. In addition, due to the relatively lagging development of rural logistics, the relative cost of logistics distribution is relatively high. Although the cost of express storage has a relative advantage, in general, the volume of rural logistics business is relatively small, which has resulted in an increase in transportation costs and human resource costs. This is not conducive to the layout of logistics enterprises in rural areas of Huaihai City, and to a certain extent limits the improvement of the overall quality of rural logistics services in Huaihai City.

2.3. The Dispersion, Seasonality, Imbalance and Diversity of Rural Logistics in Huaihai City

The difference between the off-peak seasons of the express delivery industry is relatively small. Basically, the shortage of manpower occurs only during the shopping carnival, and the express delivery industry suspends services during the Spring Festival. However, there is great uncertainty in the logistics and distribution of agricultural products in rural areas of Huaihai. The current logistics development situation in Huaihai City is still relatively backward. For the sales of agricultural products, the scale effect has not been formed. Each farmer is only a separate production and operation unit, and most agricultural product sellers can only achieve small-scale retail sales. The output of agricultural products is greatly affected by the season and belongs to seasonal production. During peak production and sales seasons, it may be necessary to distribute more agricultural products, making agricultural logistics unbalanced, especially in small farm households or enterprises.

2.4. Pain Points and Difficulties of Logistics and Distribution in Huaihai City

In general, the repeated distribution of "agricultural products into the city" and "industrial and commercial products to the countryside" is serious. The rural express delivery method is single, and the delivery time is long; the storage time of agricultural products is short, the cost of entering the city is high, and there are few channels for entering the city. The development gap between rural logistics and urban logistics is large, and there are corresponding obstacles to the sales of major rural agricultural products in cities.
3. Analysis of the Logistics and Distribution Problems of Rural E-commerce in Huaibei City

3.1. Express Logistics Companies have High Operating Costs and Low Timeliness

The rental price of shops in rural express delivery points in Huaibei City is lower, and the cost of hiring employees is also lower than that of urban areas. However, the rural area is relatively vast, and there are not only a series of branches such as counties, townships, and villages, which in turn need to increase the distribution cost of each link. Distributed distribution links are diverse, the cost of collecting parts is relatively high, and the human resource requirements are more diverse. Rural pickup facilities have a low degree of automation and relatively low pickup efficiency; improving the time efficiency of express delivery will bring more costs. Therefore, township agents usually reduce the delivery frequency to improve the load rate. To a certain extent, this kind of practice can reduce the operating cost of logistics, but the speed of express delivery will be delayed by a day or two compared to the town, and customer satisfaction will be reduced.

3.2. The Single Distribution Mode of “Express to the Countryside”

Urban residents live more closely, with a large number of online shoppers and a relatively large number of express delivery points. At the same time, express delivery can also achieve door-to-door delivery when it is convenient for customers to pick up the goods; however, the rural areas of Huaibei City are empty, and residents live in relatively scattered; rural areas It is difficult for some middle-aged and elderly people to accept online shopping in a short time, and the number of online shoppers is greatly limited. At the same time, in order to save the cost of delivery points, only a few villages in rural areas can have one pickup point, and it is basically impossible to achieve door-to-door delivery. The express delivery is delivered to fixed express delivery points by region, and online shoppers are notified by SMS to pick them up; at present, rural express delivery companies in Huaibei City are basically the same as other rural express delivery points across the country. Most of them have set up a unified processing center, which is responsible for the distribution in the area. At the same time, the township agent is responsible for the delivery and collection work in their own area. Although the two-level structure of the county and township has accelerated the process of "express delivery to the countryside", the operation cost of the link from the township to the village is high, and there are no agents in some areas, forming a short board of rural logistics and distribution. Sun Gonghui [4] The distribution business of rural E-commerce logistics is more concentrated at the express delivery level. Under this model, the logistics management is chaotic and the empty load rate is relatively high.

3.3. The Problem of Agricultural Product Distribution Entering the City

In 2017, Huaibei City was rated as a "National Civilized City". The government focused on optimizing urban development and the living environment of the population, and rectified the phenomenon of farmers selling agricultural products on the roadside, especially due to the impact of the new crown pneumonia epidemic this year. You can only buy agricultural products at designated supermarkets or vegetable markets at prices higher than the market; at the same time, offline fresh food distribution services such as Daily Youxian and Hema Xiansheng have not yet been popularized in rural Huaibei; in addition, Huaibei City has its own unique A special supermarket - Anhui Happy Awesome Supermarket, Anhui Happy Awesome has its own farmer docking market, focusing on the strategy of benefiting the people at low prices, and its branches are located in various areas of Huaibei City, which can basically meet the basic agricultural products needs of urban consumers in Huaibei City. In the case of small-scale agricultural
products, it is difficult to connect with supermarkets, communities, and farmers' markets. It is difficult to connect agricultural products to supermarkets. The cost of primary processing of agricultural products is relatively high, and the prices of agricultural products in Huaibei are relatively low, and the prices of agricultural products directly sold in supermarkets are relatively low. But the cost increases, and many farmers are reluctant to take risks; the connection between farmers and cooperatives, the sales are unstable, the cost of entering the city is high, the cost of fixed-point sales is high, and it is difficult for farmers to maintain long-term contact and cooperation with the community; farmers are connected, and there are differences in sales prices. There may be unreasonable competition among traders, which will damage the interests of farmers. The logistics of agricultural products is different from other products that can be stored for a long time. There is serious waste in logistics and distribution, and the loss rate in logistics is much higher than other daily necessities. Related scholars proposed the important role of logistics in urban economic development. In addition, the rural logistics infrastructure in Huaibei City is relatively backward, and without scientific processing technology and technology, it is difficult for agricultural products to achieve value-added. Therefore, under the background of E-commerce, rural areas The development of logistics is inevitable.

3.4. Part of the Rural Population is Slow to Contact New Things

The economic level of Huaibei City is relatively low, and the salary level is generally lower than that of other developed cities. Therefore, very few people are willing to stay in Huaibei to engage in the logistics and distribution industry. For the younger generation who are willing to take the initiative to stay in the rural areas of Huaibei to set up express delivery points, it is even more rare. The proportion of middle-aged and elderly people and left-behind children in rural Huaibei City is relatively high. Many middle-aged and elderly people have low acceptance of emerging electronic technology products, and it is difficult for the automatic extraction and express delivery mode to be put into use on a large scale. There is a lack of professionals to conduct field research and inspections on E-commerce and logistics in rural areas, and there is no theoretical basis for the launch of new facilities and new technologies.

4. Suggestions for the Development of Rural E-commerce Logistics in Huaibei City

4.1. Change the Distribution Mode to Reduce Operating Costs

Rural E-commerce expands the logistics market. Huaibei City's own rural development needs are small and the areas are scattered, so there are many disadvantages. However, if a circular distribution model is adopted, especially the rise of modern unmanned distribution technology, it can greatly reduce human capital. By integrating the demand for orders of scattered agricultural products around, it can improve transportation efficiency, reduce the no-load rate of distribution, and make logistics enterprises develop efficiently. Cooperate with local offline distribution such as Anhui Happy and Awesome and RT-Mart's “Feiniu.com”, make full use of human and material resources, reduce the empty load rate, and integrate orders in a centralized manner in different areas, which can expand the market of urban supermarkets. Business expansion in rural areas can also reduce waste of resources. Cao Chen [5] introduced the concept of shared logistics. Under the development trend of "sharing economy", more "sharing" platforms have been derived. Especially under the influence of the new crown epidemic, shared employees have gradually entered people's attention. The logistics and distribution industry and local The temporary sharing of employees in the chemical industry can also reduce operating costs and achieve a win-win situation for enterprises.
4.2. **Build a Logistics Platform for Farmers to Share the Express "Ride" and Send Agricultural Products at Low Cost**

Mei Chunyan [6] pointed out that it is necessary to integrate resources and strengthen the construction of logistics infrastructure. Farmers in Huaibei City have little awareness of logistics and distribution, and the logistics industry can take the initiative to contact farmers to reduce logistics costs. At the same time, a distribution information sharing platform will be established, on which information sharing can be achieved in all links, and the express logistics and agricultural product logistics will be "co-distributed" and "circular distribution", and a "hitchhiker" model will be established to "send agricultural products out of the city". The coordinated development of rural E-commerce and express logistics enterprises. On the one hand, it increases the income of the logistics industry and reduces the waste of resources when the delivery vehicles are loaded. Selling agricultural products on a large scale at a reasonable price can solve the problem that has plagued farmers in retailing agricultural products for a long time.

4.3. **The Government Vigorously Promotes the Development of Rural Logistics**

The Huaibei Municipal Government gives strong support to the localized urban enterprise Anhui Happy Awesome Supermarket in all aspects. At the same time, it should also give certain material and financial support to the logistics industry to dredge the urban and rural development of Huaibei City to better build logistics infrastructure.; Yan Zhang [7] proposed the impact of logistics center location on logistics development. Invest in automated express delivery equipment, hire professionals for regional research and training, so that the vast rural population of Huaibei City can keep up with the pace of technology, make express delivery more automated, and the high-quality and high-speed development of logistics will definitely improve the shopping experience of consumers. Fan Linlin et al. [8] proposed to set up service stations in rural areas to coordinate urban and rural interactions and help open up the last mile of rural logistics. Feng Tianlu [9] proposed to use laws and regulations to standardize the rural logistics system, so that rural logistics can develop in a more orderly manner. (2020) proposed to combine rural E-commerce and logistics.

The inclusion of the development into the national targeted poverty alleviation project has a positive impact on the development of rural E-commerce logistics, and is conducive to the country's better attention to the development status of rural logistics.

4.4. **Increase the Publicity of Rural Policies, Make Rational Use of Social Resources, Do a Good Job in Rural E-commerce Training, and Increase Farmers’ Income**

To develop rural E-commerce in Huaibei City, it is necessary to increase the popularization of E-commerce knowledge and E-commerce technology training for farmers, improve farmers' familiarity with E-commerce, and then effectively use E-commerce platforms and logistics platforms to expand sales. Now that the information network is relatively developed, Taobao live E-commerce, Douyin's product promotion and agricultural product sales platforms have gradually entered people's field of vision. What the rural areas of Huaibei City lack is not high-quality agricultural products, but the lack of E-commerce sales personnel, and Douyin, Taobao and other anchors, the more orders, the lower the unit cost of delivery services, and the higher the income of the logistics and distribution industry and farmers.

4.5. **Use Big Data to Realize Smart Logistics Construction and Increase the Economic Benefits of Rural Logistics Enterprises**

Wu Yongchun [10] proposed that Internet technology alleviates the problem of rural information asymmetry and realizes rural logistics Informatization development; Internet
technology can realize the optimal allocation of rural logistics resources and solve the "last mile" problem of rural logistics; Luo Xiaofeng et al. [11] put forward the idea of "Internet + Agriculture + Logistics", the accurate positioning and identification functions of the Internet will be more Good applications in logistics and distribution can accelerate the improvement of efficiency and the improvement of consumer shopping experience. Li Yun [12] proposed that under the background of big data, the government should fully realize the importance of E-commerce, actively explore the development channels of Internet logistics, and at the same time realize the income generation of agricultural products. Li Juan (2020) proposed to use Internet big data to link E-commerce and agricultural product sales to realize smart agriculture.

4.6. Vigorously Cultivate Modern Rural Logistics Talents

Wang Wugang [13] pointed out that my country’s rural logistics started late, and there are chaos in management. Schools should combine theory and practice to let larger logistics majors understand the current situation of logistics development in my country as soon as possible, and at the same time encourage college students to actively respond to the call of the state, actively participate in underdeveloped areas, and promote the development of poor areas. The shortage of rural logistics talents in HuaiBei City seriously restricts the development of rural logistics. The economic development level of HuaiBei City is limited. In order to retain talents, it is difficult to expand the professional talents of rural E-commerce and logistics only by economic aspects. Therefore, the development prospects of rural E-commerce and logistics in HuaiBei City should be improved, so that more young people realize The huge potential of rural HuaiBei City fundamentally retains logistics talents.

5. Conclusion and Outlook

The rural logistics of HuaiBei City has its own development law, and the rural population base is large. The government policy is constantly inclined to the rural areas, strengthening the construction of rural logistics and the development of the overall logistics industry. At the same time, HuaiBei City attaches great importance to the productive logistics dominated by agricultural product logistics, promotes the close integration of logistics, production and consumption, and forms a rural supply chain system, which is conducive to stimulating the vitality of the rural market, thereby effectively solving the "three rural" problems and improving the income level of farmers, to achieve leapfrog growth of the economy. In addition, this paper only selects the E-commerce and logistics distribution problems in rural HuaiBei City, Anhui Province, and the investigation is one-sided. A more in-depth zoning study.

References


