

The Impact of Promoting Agricultural Products in Rural areas Through Live Streaming on the Economic Growth and Rural Revitalization

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ABSTRACT

Because of the single sales channel, information asymmetry, and other reasons, the sale of agricultural products is facing a huge dilemma. As a novel marketing approach, live-streaming agricultural products in rural areas is critical for rural revitalization and economic development. Live-streaming to promote agricultural products has opened a new window for rural economic development. This paper shows the current condition of promoting agricultural products in rural areas through live streaming. By analyzing the path of live-streaming of selling goods to promote rural economic development, this paper expounds on the economic impact of rural economic development, and all aspects brought about by it.

Keywords: Live-streaming, Rural revitalization, Agricultural products, E-commerce, Digital economy

1. INTRODUCTION

1.1. Research background

"Sales on live streaming" may successfully combine the e-commerce economy with traditional industry as a new retail model with the expansion of the e-commerce economy, which is important for the promotion of economic innovation. E-commerce live streaming provides significant advantages over traditional forms of e-commerce in expanding the consumer market, attracting new customers, and aiding in the rediscovery of a product's true place of origin. In rural e-commerce mode, the new model of live streaming to aid farmers is a study of rural vitality and online poverty alleviation. One of the objectives of rural revitalization in China is to increase farmers' income. Farmers were able to enhance their income following the onset of COVID-19 by selling agricultural products using live streaming sales platforms. So that the remaining poverty alleviation work can be completed, rural revitalization can thrive, the rural network driving industrial development can be improved. All of this can be gathered together. To gain more attention, it is necessary to thoroughly and comprehensively analyze the new mode of direct broadcast assistance for rural areas and its impact on economic growth and rural revitalization.

On the other hand, China's rural e-commerce has gained steam in recent years, and the potential of this sector cannot be overlooked. Due to the penetration and growth of e-commerce in counties, the systems of relevant policy support, standard setting, brand creation, and industry cultivation have developed. Agriculture products have increased in popularity, and county e-commerce has progressively advanced to a stage of high-quality development [1]. According to Oteou's monitoring data, the total retail sales of the country's county networks reached 3,096.16 billion yuan in 2019, representing a 23.5 percent rise year on year compared to the previous year. According to the Fifth China Rural E-commerce Conference's "Report on China's Rural E-commerce Development (2019-2020)," the extent of China's rural e-commerce has continuously increased. Rural internet retail is predicted to reach 766.85 billion yuan in the first half of 2020, accounting for 14.9% of all online retail sales in the country. Retail sales risen by 5.0 percent over the same period last year, according to the National Bureau of Statistics. Agribusiness items accounted for 4.6 percent of total national online retail sales in 2017, totaling 193.77 billion yuan, a 39.7 percent year-on-year increase.

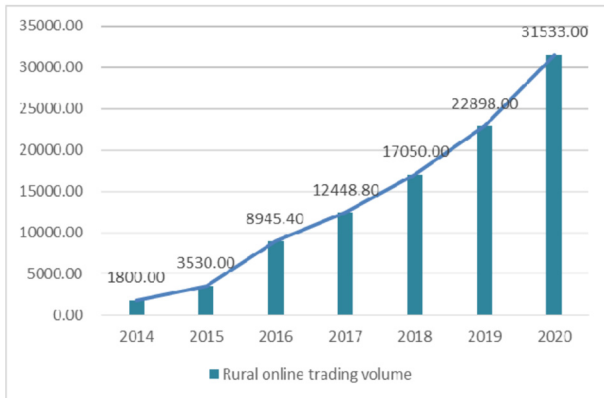


Figure 1. Rural online trading volume in China from 2014 to 2020

1.2. Literature review

Many previous papers have examined the importance of promoting agricultural products for rural areas. According to Jiang, one of the aims of rural revitalization in China is to increase farmer income." Live streaming has exploded in popularity and has experienced extraordinary growth on a global scale [2]. Farmers raised their income by selling agricultural products via live streaming sales platforms, which became particularly popular following the COVID-19 epidemic. It leads us to highlight the high correlation between increasing farmers' income and rural revitalization. The key to rural revitalization is industrial revitalization, and live streaming has helped farmers get rid of poverty and promoted industrial upgrading in rural areas, Lv said. At present, the development of the mode is still in the initial stage. It is urgent to realize the upgrading path of the mode to realize the sustainable development of the mode and inject strong momentum into the rural revitalization. Wang argued that poverty alleviation via e-commerce should be a long-term endeavor. As a result, it is critical to strengthen the rural e-commerce live streaming system and to develop a targeted poverty alleviation e-commerce live streaming platform system fit for farmers, particularly poor farmers [3]. A targeted poverty reduction e-commerce platform benefits disadvantaged farmers. and agricultural production firms to tackle the problem of unsalable characteristic agricultural products with Internet aid. Agriculture Internet of Things (IoT) technology allows consumers to reserve agricultural items and trace their progress through the whole supply chain, enhancing their confidence in the product's quality and safety and meeting the communication needs of rural households. Poor farmers can use the platform to assist them in handling sales issues and reawaken their passion for production and operation.

1.3. Research gap

Promoting agricultural products in rural areas through live streaming has become a popular topic of discussion.

From the start of the last two years to the present, everyone witnessed the swift and massive expansion of live-streaming with rural products to assist farmers. Numerous researchers have examined the factors that contributed to the rise and quick expansion of live-streaming with agricultural products to aid farmers, including the emergence of distinct groups, the convenience and accessibility of platforms, context and conditions to prevail, and the emergence and persistence of the global COVID-19 epidemic. Many studies have extensively researched marketing strategies for utilizing live-streaming to promote agricultural products in rural areas to assist rural revitalization. All of these factors contribute to long-term development. However, the economic impact of live streaming to promote agricultural products in rural area has received scant attention and need to be investigated thoroughly. Apart from the apparent benefits to farmers, it has to be researched further to stimulate and develop many other fields and related enterprises. For instance, increasing farmer contentment and lowering unsold commodities also raise employment rates and the exposure and popularity of individuals in the live streaming industry. This research is required for governments, businesses, and corporations to understand better the chances of this method provided to various industries to move forward and establish long-term sustainable assistance programs.

1.4. Research framework

First of all, this study will analyze the tendency of live-streaming utilization and data from farmers to show the basic background of the current situation. Then this paper will examine the different fields that promote agricultural products in rural areas through live streaming and how those impacts took effect in those fields in detail. Secondly, this study will combine my data and variables with the research design. Thirdly, this study adopts the method of using the cross-sectional and Tobit regression model to analyze statistical and numerical influences and changes brought to the rural revitalization and the whole economic growth.

2. METHOD

This paper thoroughly analyzed all fields that would be influenced by promoting agricultural products in rural areas through live streaming, thus stimulating economic growth and rural revitalization. This study combines the cross-sectional and Tobit regression model to evaluate the e-commerce effectiveness in China.

The first stage is to define the efficiency KPIs for e-commerce. The investment indicators are then constructed using three kinds of factors: information technology investment, logistical service investment, and infrastructure investment.

The cross-sectional model then assesses the relative e-commerce efficiency and its impact on various fields. The Tobit regression model is used to analyze the effect of inputs on the generated e-commerce efficiency score. This paper will compare people's feedback and product sales changes before and after the live streaming sales channel, judge whether the economic benefits meet the expectations, and make further judgment effects and satisfactions brought to people.

Finally, this paper constructs the evaluation indicator system and theoretical model. Because the rural revitalization system is a nonlinear and complex system influenced by numerous elements, this research employs a thorough evaluation technique based on multiple indicators. To develop an evaluation index system, we used scientific principles, practicality, multi-level, independence, and data feasibility, in combination with the system's connotation and coupling characteristics, with "people-oriented" as the central theme and maximizing the advantages of rural areas [4]. This article assesses agriculture on four fronts: rural economic capability, rural social status, rural standard of life, rural ecological environment, and industrial modernization level[5].

3. RESULTS

3.1. Current development of live streaming on the e-commerce and live streaming platform

Since the e-commerce and live streaming platform launched the live shopping function in 2016, the scale growth rate of the annual average market of live streaming e-commerce has been kept above 200% every year. The industry's rapid growth is inextricably linked to the elimination of users' live viewing habits, the robust promotion of e-commerce platforms, merchants' research of new income channels, the development of KOL network celebrity culture, and other types of vigorous political policy support[5]. Traditionally, e-commerce relies heavily on text and images to convey commodity-related information. Information is presented in a two-dimensional planar form, easy to produce consumer information asymmetry risk and difficult to seize the reduced consumer attention time in this information explosion era [6]. Microsoft researchers recently published a data indicating that people's quasi-attention spans had decreased from 12 seconds at the turn of the century to eight seconds in 2015. Due to the fact that consumers are expected to swiftly absorb complete commodities information, the display of agricultural products must also be more appealing. At the same time, the cultivation of online shopping and live-streaming habits has also laid a solid foundation for the vigorous development of a live-streaming e-commerce user base. According to data from the China Internet Network Information Center, internet purchasing and live viewers

have grown steadily in recent years. By June 2020, the number of live viewers and online shoppers had reached 562 million and 749 million, respectively, with penetration rates of 59.79 percent and 79.68 percent in the netizen population. It is more acceptable to netizens due to the merging of live broadcasting and e-commerce. [7].

3.2. Current development of agricultural products' live streaming on the e-commerce platform

Influenced by the rural revitalization policy, the combination of e-commerce with agriculture and live streaming to help farmers have gradually become one of the new ways to promote the sales of agricultural products. Major platforms have helped farmers in poor counties realize real economic income increases and even promoted poverty alleviation through live broadcast and delivery of goods. Data from research shows that 73.8 percent of users believe that live-streaming may help promote local culture and reduce the unsaleability of agricultural and ancillary products, while 66.4 percent believe that live-streaming can assist improve agricultural product income locally. In 2021, 98.3 percent of China's farmers' live streaming users said they would buy agricultural and sideline products. Only 1.7 percent said they would not make a purchase. It is worth mentioning that, in order to stimulate consumers' consumption desire better, Certain anchors will travel to the source of agricultural products to discuss the origin narrative and demonstrate the agricultural items to netizens on the scene.

On the one hand, it can improve consumers' trust in products and purchase desire, thus increasing the sales of agricultural products. On the other hand, it can also promote the origin of products and local tourism development. The rise of the "live streaming" marketing mode is undoubtedly a pair of wings for developing agricultural products, which will also become the mainstream way of agricultural product sales in the future. According to Research, more than 60% of live stream users purchase agricultural and sideline products due to their high quality, and more than 50% of consumers purchase agricultural and sideline products due to their low cost and the idea of supporting local farmers. It solves consumers' demand for low-price and high-quality products, anchors and platforms' demand for stable traffic and reputation, and governments' and farmers' demand for poverty alleviation and prosperity[8]. It brings purchasing power to poor areas and increases employment opportunities, and achieves a win-win situation for all parties. Over time, using live-streaming to help farmers will grow and become an upward force in China's future e-commerce live-streaming industry.

3.3. Agricultural products' live streaming on the e-commerce platform- Alibaba

Alibaba, one of the live streaming giants, sold 840 million items of agricultural products at its 300,000 Taobao merchants during the Festival. At present, there are more than 100,000 farmers' streamers on Taobao, and there are more than 1 million live streams of agricultural products on Taobao during the harvest festival. Rural e-commerce has grown rapidly in recent years as a result of increased Internet coverage in a shrinking market. With the network's penetration of agricultural items increasing, online retail sales of agricultural products and live streaming have accelerated. According to Alibaba, in 2019, the Festival generated 70,000 live streams and 280 million transactions of agricultural products. According to the "2020Q1 China Agricultural e-commerce Market Research Report" released by IMEDIA Consulting, online retail sales of agricultural products in China reached 397.5 billion yuan in 2019, up 72.5% year on year. In addition, with deepening of poverty alleviation, the transformation of agricultural economic momentum has been accelerated, and the agricultural and goods e-commerce market has ushered in a broad blossom prospect. At present, farmers' anchors have spread across 31 provinces and more than 2,000 counties. After learning to live streaming, the average monthly income of the farmer anchors can be increased by two to three times, which can drive two jobs per person and a total of 200,000 people to get employed and become rich. These have become more and more common changes in rural areas. Farmers should be quipped with live streaming training courses, live streaming room on-site actual battle drills, and provide farmer anchors with all-round support from infrastructure support, talent incubation training, regional brand design, live streaming and cargo industry planning support, policy guidance and resource coordination. As China's largest e-commerce platform for agricultural products, one-fourth of the online stores on Taobao are from rural areas. Taobao is attracting more and more young people to return to rural areas and devote themselves to the cause of caring about agriculture and rural areas.

4. DISCUSSION

Nowadays, the e-commerce live-streaming industry has played an important role in facilitating growth of economy and social progress. Digital live-streaming has become an indispensable feature of rural revitalization in China to help farmers. However, in order to achieve the healthy development of live-streaming, live-streaming platforms, streamers, and government regulatory departments should all coordinate and merge to make the utilization of live-streaming to help farmers a sustainable sales model[9].

Statistics show that at the end of 2019, there were

5.51 million people living in poverty in China, and residents' per capita disposable income was 30,733 yuan. This paper believes that to eradicate poverty and build a moderately prosperous society by 2022. The Chinese government will mobilize forces from all walks of life, pool resources, and try every means to fight poverty. Accelerating the reform of traditional agriculture and realizing targeted poverty alleviation by industry will become one of the main directions of poverty alleviation. The contradiction between the supply and demand of high-quality agricultural products and lack of sales has long existed in China. E-commerce platforms for agricultural products represented by Pinduoduo and Taobao have provided new ideas for solving the contradiction between the supply and demand of agricultural products. Various platforms have vigorously expanded the sinking market in recent years and developed the agricultural and e-commerce market from multiple aspects. They include talent, technology, and finance, which has helped alleviate the contradiction between supply and demand of agricultural and goods, accelerate the efficiency of agricultural and goods circulation and increase farmers' income. Rural e-commerce will progress to be a vital path to stimulate the revitalization of rural agriculture and the high-quality development of agriculture in the future. Rural e-commerce will also become the power source to drive the sustainable growth of the e-commerce platform [10].

A series of policies such as poverty alleviation and rural revitalization has brought development dividends to the rural goods e-commerce and live streaming market. On the one hand, rural infrastructure is improving day by day, and the network coverage is expanding, providing solid hardware support for the outbreak of rural live streaming market and e-commerce. On the other hand, e-commerce and live streaming platforms respond to the national call to vigorously develop the rural goods market tap, new growth drivers. The platforms help rural goods rise through policies, resources, technology, services, and other aspects and constantly improve the rural goods e-commerce market [11]. By early September 2020, there were nearly 18 million rural online businesses in China, creating more than 30 million jobs.

According to a 2020 poll conducted by the National Bureau of Statistics' Zhongshan Investigation Team, 38.0 percent of polled customers view "farmer anchor" as the most trustworthy source of information about agricultural products. Following that, 37.0 percent of respondents preferred to believe "government officials' anchors"; only thirteen percent and twelve percent, respectively, preferred to trust "celebrity anchors" and "movie stars." After realizing huge momentum and impacts of live-streaming, government officials should assist in cultivating "farmer anchors" and stimulate more government officials to be anchors to advertise agricultural products. Livestreaming data shows that Taobao's live streaming platform has accumulated

110,000 farmers' anchors in the past three years, with more than 2.3 million times of live streaming to promote and advertise agricultural products. The sales of agricultural products through live streaming have exceeded 5 billion yuan. 86.2 percent and 83.8 percent of polled netizens believe that live-streaming agricultural items can increase their agricultural product consumption. From 2017 to 2021, the annual compound growth rate of online retail sales of agricultural products in China is predicted to reach 46.3 percent, with retail sales reaching 789.3 billion yuan in 2021.

Live-streaming by county heads has become the new normal for e-commerce to help farmers. With the lowering of the threshold for live broadcasting, some rural agricultural product suppliers have formed cooperatives to live streaming and cooperate to supply products, which has achieved satisfied results. Sales of agricultural products in rural areas have soared, driving economic growth in counties, especially poor ones. Online retail sales in 2,083 counties reached 3,096.16 billion yuan in 2019, up 23.5 percent year on year. Among them, online retail sales in 832 poverty-stricken counties reached 107.61 billion yuan, up 31.2 percent year on year. In terms of the sales of agricultural products, the report showed that the online retail sales of agricultural products in counties reached 269.31 billion yuan, up 28.5 percent year on year. Among them, the online retail sales of agricultural products in 832 poverty-stricken counties reached 19.08 billion yuan, up 23.9 percent year on year, making an important contribution to China's winning the battle against poverty.

The market advantage of new media can be utilized to speed up the dissemination of information and expand the sales path of agricultural products, which plays a positive role in the upgrading and innovative development of the mode of live streaming assisted agriculture. In the process of using the mode of direct live streaming assistance to agriculture, it is necessary to strengthen the supervision and guidance of direct broadcast assistance to agriculture, which can promote agricultural income increment. At the same time, the innovation and development of the mode of live streaming to help farmers should be continuously explored, and the way and content of live streaming should be optimized, which can promote rural revitalization and economic development under the mode of live streaming to aid farmers

With benefits of increased revenue and poverty alleviation, farmers are satisfied with their higher living quality and sense of contentment and happiness from the live-streaming to sell their products. In China, many rural areas rely on financial aid from the government to live because of unemployment and their lack of employability. However, through this new mode of advertising agricultural products, not only have farmers' incomes been guaranteed, unemployment has fallen, but the

government has also saved a large sum of subsidies. After many migrant workers from rural areas see the considerable income and development, more young people will choose to return to their hometown and devote themselves to the sale and sale of agricultural products. In this way, more people will enter the digital trade industry. More importantly, the elderly and left-behind children at home can also be accompanied by their children and parents.

5. CONCLUSION

Live streaming is the most popular and widespread marketing model. It can increase the interaction and communication between consumers and businesses enhance the user with the brand of viscosity. In addition, it can further promote consumption and production, provide new momentum for economic growth, help farmers pioneer new ways for poverty alleviation, and gradually become the mainstream of more and more agricultural products sales. In comparison with other e-commerce modes, promoting agricultural products through live streaming has the strengths of shorter transmission routes and enhanced efficiency, which will benefit merchants, platforms, anchors, and consumers. The grass-root leading cadres' farmer goods live broadcast mode created a storm, the market response is enthusiastic, stimulating the growing vitality of the sinking market. In the future, with the gradual standardization and branding of agricultural products, the cost of establishing consumer trust will be effectively reduced, and the content and mode of agricultural products live broadcasts will be more diversified. Live-streaming is an important way to break through the dilemma of rural economic development. The adoption of e-commerce live-streaming platforms and channels to sell agricultural products enables consumers to have a close understanding of agricultural products, including the planting, production, processing, packaging, and other links to stimulate the sales of agricultural products. There is no middleman markup link, so the price is lower than other sales forms, so consumers favor it. In the process of live-streaming, consumer demand and information feedback can be quickly captured, optimize the agricultural, industrial structure according to consumer demand, and promote the diversified development of agricultural products. In the process of using live broadcasting to promote agricultural goods, it can also promote rural culture and lay a foundation for developing characteristic rural tourism. Promoting agricultural products through live-streaming stimulates the development potential of characteristic agriculture and is a crucial way to accelerate the sustainable development of the rural economy.

This paper pushes the future development of promoting agricultural products through live-streaming. It enables more people to realize the momentum and

impacts brought by live-streaming. It would express the value to business corporations and government officials to attract more investments and assistance in building this long-term development model.

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