Establishment of Agricultural Logistics Warehouse Receipt Pledge System in New Rural Construction

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Abstract New rural construction needs a strong financial support. However, agriculture is a high-risk industry; one big obstacle restricting Chinese rural economic development is financing difficulty in the agricultural products producing and processing enterprises. This paper, on the foundation of analyzing the current situation of Chinese agricultural products market, with the theory of modern logistics finance, puts forward the approach of establishing Chinese agricultural products logistics pledge system, and illustrates the function of agricultural products logistics warehouse receipt pledge system in the new rural construction.

Key words Agricultural products logistics, New rural construction, Warehouse receipt pledge, System establishment

1 Introduction

In the process of promoting the construction of new socialist countryside, an important work is to develop the rural economy. New rural construction needs a strong financial support. However, influenced by many factors such as natural conditions, agriculture is a high-risk industry; one big obstacle restricting Chinese rural economic development is financing difficulty in the agricultural products producing and processing enterprises. Modern rural logistics, as a branch of logistics, plays a huge role in promoting rural economic development.

In recent years, with the deepening research of the concept of modern logistics finance, logistics warehouse receipt pledge, as a new financing mode, has become an important means of financing between enterprises and banks in foreign countries. In order to guarantee the capital needs of new rural construction, how to according to the operating conditions and developing requirements of agricultural products producing and processing enterprises, allow agricultural products producing and processing enterprises to take movable property as collateral for financing, through the warehouse receipt pledge loan business, to solve the agricultural products producing and processing enterprises financing problems and realize value transferring and value adding, has become the focus of common concern in current business circles and academia.

Beginning with analysis of the current situation of Chinese agricultural products market, this paper studies the construction of agricultural products logistics warehouse receipt pledge system, is aimed at finding the combining site which is acceptable to both financial institutions and the agricultural industry, namely building normative agricultural products logistics warehouse receipt pledge system which can be easily applied to rural economy, to reduce the risk of agricultural operation and effectively change the situation of rural financing, thus improving rural people’s living standard and exploring a new socialist countryside construction road with Chinese characteristics.

2 The function of modern agricultural logistics in new socialist countryside construction

In the process of promoting the construction of new socialist countryside, an important work is to develop the rural economy. Modern rural logistics, as a branch of logistics, plays a huge role in promoting rural economic development.

Modern agricultural logistics refers to, with the goal of meeting customer demands, by modern means of logistics, integrating regional agricultural logistics resources, organizing, controlling and managing agricultural materials, agricultural products and other entities, related services and information from the supplying source to the consuming source. The function of modern agricultural logistics in new socialist countryside construction will be as follows:

(i) To the benefit of reducing the cost of agricultural production and circulation. By reducing intermediate links in circulation, providing specialized agricultural logistics services, reducing the blindness in agricultural production and circulation, improving the velocity of agricultural products circulation, and reducing the cost of agricultural logistics. (ii) To the benefit of adding the value of agricultural products. By providing value-added services, such as agricultural production materials and agricultural products classification and packaging, distribution, transportation, storage and management, agricultural products processing, agricultural products information service, etc, to achieve the goal of increasing the added value of agricultural products. (iii) To the benefit of promoting the adjustment of agriculture and rural economic structure. By establishing of modern logistics system adaptable to agricultural production processing and rural economic development, reorganizing resources of independent rural enterprises with logistics characteristics, thus realizing the strategic adjustment within the agricultural industry including agricultural products regional
layout structure, variety structure and industry structure. (iv) To the benefit of increasing the income of farmers. Agricultural logistics competition and circulation intermediate links reduction could reduce the price of both production materials and livelihood materials. To a great extent, the expansion of employment is bound to increase farmers’ income. The increasing capital turnover velocity which accompanies logistics reduces farmers’ cost of capital taking up. From the two perspectives of costs and benefits, developing modern agricultural logistics will increase farmers’ income.

3 Agricultural products logistics and agricultural products logistics warehouse receipt pledge

3.1 The concept and features of agricultural products logistics

Agricultural products logistics refers to the entity moving process of agricultural products from the supplying place to the receiving place. In the moving process of agricultural products, according to actual needs, implementing the organic combination of agricultural products transportation, storage, loading and unloading, handling, packaging, distribution, circulation processing, information processing and other basic functions, and realizing agricultural products’ value keeping and value adding in this process.

Agricultural products logistics in the process of production is influenced by factors such as natural conditions and crop individual life, making agricultural products logistics, compared to other logistics, have unique characteristics.

(i) Agricultural products logistics is of asymmetry. Agricultural products producing places are mostly concentrated in the rural and suburban areas, with the feature of seasonality; but agricultural products consuming places are widely distributed in various areas, with the characteristics of continuity, usualness. (ii) Agricultural products logistics has high requirements for timeliness and cost controlling. Seasonality of agricultural products producing leads to rather high requirements for agricultural products logistics’ timeliness, and requires agricultural products logistics to achieve "green logistics" during the whole process; meanwhile, the value of agricultural products is relatively low, so only by reasonably controlling logistics cost, can higher values be achieved. (iii) Agricultural products logistics has wide varieties and a large scale. Agricultural product, with wide varieties, has a huge circulation. Its logistics includes the whole moving process of economic crops, food crops, livestock, aquatic products and forest products from producing place to consuming place namely from field to table. (iv) Agricultural products logistics is of dispersion. The contradiction between thousands of households of small-scale production and ever-changing big markets makes it difficult to let agricultural products produced by thousands of households of small-scale production enter the logistics system, and reach the market according to the requirements of consumers to form agricultural products logistics system.

3.2 The concept and significance of agricultural products logistics warehouse receipt pledge

Warehouse receipt pledge is a kind of pledge right which takes warehouse receipt as subject matter. The core of warehouse receipt pledge business lies in that the client (the commodity owner) uses movable property in stock (including raw materials, finished products, etc.) as collateral to apply for a loan from the bank; after audited and authorized by the bank, the logistics enterprise, entrusted by the bank, takes supervision and management responsibility for stored collateral as the third party.

Agricultural products logistics warehouse receipt pledge refers to, in the operation process of agricultural products logistics, the agricultural products processing enterprise (the commodity owner) using movable property in stock (including raw materials, finished products, etc.) as collateral to apply for a loan from the bank; after audited and authorized by the bank, the logistics enterprise, entrusted by the bank, taking supervision and management responsibility for stored collateral as the third party.

Agricultural products logistics warehouse receipt pledge business is a logistics extended service based on the custody of the goods, a value-added service in the service of both agricultural products processing enterprises and banks; different from the single custody business, it effectively integrates modern agricultural products logistics and fund flow, and provides comprehensive business services for the development of modern agricultural products industry, such as financing, settlement, risk diversification, etc.

In terms of its practical significance, agricultural products logistics warehouse receipt pledge business is a kind of emerging business with characteristics of multilateral win-win, which is embodied in the following three aspects.

Firstly, allowing agricultural products processing enterprises (the commodity owners) to use commodities which run in the market as collateral for getting a loan from banks, which can solve the financing problem of enterprise operation, and strive for more liquidity, to achieve the goal of realizing scale operation and improving economic benefit.

Secondly, logistics enterprises cooperate with banks, supervise and manage agricultural products processing enterprises’ pledge loan products in the banks, which, on the one hand, strengthens the function of supporting service, attracts more agricultural products processing enterprises (the commodity owners) to join in, increases the additional value of warehousing and improves logistics enterprises’ comprehensive value and competitiveness; on the other hand, logistics enterprises, as the third parties in banks and agricultural products processing enterprises (the commodity owners) both trust in, can be better integrated into the commodity production and marketing supply chain of agricultural products processing enterprises (the commodity owners), which is advantageous to business integration of logistics enterprises, at the same time also strengthens their alliance relationships with banks.

Thirdly, banks offer pledge loans, logistics enterprises in charge of stored collateral, which not only cultivates new economic growth point, but also greatly reduces the risk of loans and avoids
some risk. Agricultural products processing enterprises (the commodity owners) hope that logistics enterprises will complete logistics functions, at the same time also can provide the corresponding fund flow and information flow services; this is not only beneficial to the development of agricultural products processing enterprises, but also opens up a broad value-added service space for logistics enterprises.

Agricultural products logistics warehouse receipt pledge business process and business relationships are shown as follows.

![Agricultural products logistics warehouse receipt pledge business process and relationships diagram](image)

Fig. 1 Agricultural products logistics warehouse receipt pledge business process and relationships diagram

4 The path to establishing Chinese agricultural products logistics warehouse receipt pledge system

4.1 Establishing agricultural products logistics warehouse receipt pledge supervision mechanism Lack of perfect supervision mechanism leads to that Chinese existing agricultural products warehouse receipt pledge service can not fully developing its potential in new rural construction. Reference to logistics warehouse receipt pledge business in the United States, its warehouse receipt pledge supervision system is constructed under the organization of American Warehouse Method which is enacted in 1916; this system plays an important role in collecting fund and the development of the rural family, and is enforced by the federal government and state governments. Perfect agricultural products warehouse receipt pledge supervision mechanism is the cornerstone of establishing Chinese agricultural products warehouse receipt pledge system.

Firstly, guaranteeing the integrity of system and the authority of credibility.

Secondly, effectively eliminating agricultural products producers', the third-party logistics enterprises' and financial institutions bankers' concerns.

Thirdly, ensuring that a small amount of surplus products individual peasant households produce can get yield from this system, and not affect their sustainable financing.

4.2 Improving agricultural products logistics warehouse receipt pledge certification testing system First, improving third-party logistics enterprises' credit certification testing system. Second, improving agricultural products producers' credit certification testing system. Third, improving agricultural products pledge goods' certification testing system. For example, third party logistics enterprises engaged in agricultural products warehouse receipt pledge business must provide relevant credit certification and supporting hardware facilities certification, etc; agricultural products producers must accord with the solvency standard, provide the proof of financial status, show their professional ability and level, and can accept frequent surprise inspection; agricultural products pledge goods must have strict commodity grading and quality standards, and only commodities conforming to the regulated quality and grading standards can be received and so on.

Agricultural product, as a commodity, has its own characteristics, obviously different from general industrial products. In the process of establishing market access framework, fully considering the characteristics of agricultural products, using some testing methods which are quick, highly precise, have small demand for quantity and can meet the measuring needs of different agricultural products.

In the agricultural products market, agricultural products are divided into three different types, that is, search goods, experience goods and credence products, with different information provision modes and government regulation ways; in Chinese market, most of agricultural products are experience goods.

In order to reduce the cost of obtaining information, the government should by establishing and perfecting the corresponding system, such as agricultural products market access system, products traceability system, packaging identification system, regular information announcement system, etc, transform experience goods into credence goods or search goods, and standardize the credence goods market.

4.3 Constructing agricultural products logistics warehouse receipt pledge service network and electronic warehouse receipt transferring system Through the warehouses the third party logistics enterprises manage, building the vast agricultural products logistics warehouse receipt pledge service network; the use of Internet of Things technology can make this service network track different sizes of the stock of agricultural products producers,
processors and traders. Through highly efficient electronic warehouse transferring system, bringing greater security to agricultural products warehouse receipt pledge service, providing real-time auditing & tracking function to prevent forgery and reduce transaction costs.

4.4 Strengthening the fostering of agricultural products logistics warehouse receipt pledge service talents Professional logistics financial talent is the key to improving the efficiency of agricultural products logistics warehouse receipt pledge service. With the rapid development of logistics industry, agricultural products logistics warehouse receipt pledge service, as an occupation which provides specialized logistics financial service to the society, has caused the wide attention of the society, so the demand for agricultural products logistics warehouse receipt pledge service talents is over-growing.

Seen from the actual situation, on the one hand, the agricultural products logistics warehouse receipt pledge service post requires a lot of logistics financial service personnel; the agricultural products logistics warehouse receipt pledge service post, on the other hand, can’t find the applied and compound talents who are both familiar with logistics operation process and proficient in logistics financial professional knowledge. Such as: the weigher, the sampler, the rater, the warehousing supervisor, as well as the operation management working personnel and so on, who are all engaged in the front line of agricultural products logistics warehouse receipt pledge business.

Strengthening the fostering of agricultural products logistics warehouse receipt pledge service talents is the urgent request of Chinese new rural construction. The approach can be opening the logistics financial major under the logistics management major in colleges and universities, fostering the professional practitioners in agricultural product logistics warehouse receipt pledge service; at the same time, by strengthening the training and certification work of logistics financial professionals, comprehensively improving the professional quality of the practitioners in agricultural products logistics warehouse receipt pledge business.

5 The function of agricultural products logistics warehouse receipt pledge system in new rural construction

The function of agricultural products logistics warehouse receipt pledge system in new rural construction is embodied in facilitating the agricultural products trade, improving the efficiency of the agricultural products market, relieving the rural financing problem, reducing the price risk of agricultural products, and realizing the effective cost management of agricultural products reserves.

5.1 Facilitating the agricultural products trade Agricultural products logistics warehouse receipt pledge system can realize the real-time tracking and transmission of inventory information of different operating scales of agricultural products producers, processors and traders, which, from the objective, will be beneficial to reducing transaction costs and information asymmetry between agricultural products traders.

In the process of developing agricultural products logistics warehouse receipt pledge business, the first is that the third party logistics enterprise can provide timely inventory information and major agricultural products demander information to agricultural products producers and processors; second, providing effective guarantee for the implementation of the contract between agricultural products traders; the third is that the construction of agricultural products logistics warehouse receipt pledge system will effectively encourage agricultural products producers and processors to abide by the commodity grade standard, reduce the fraud on weight and quality, improve the production enthusiasm of agricultural products producers and processors, and make agricultural products producers and processors further integrated into the sales links of large traders, processors, regional markets, increase the economic benefit of agricultural products producers and processors.

5.2 Improving the efficiency of the agricultural products market In the process of developing agricultural products logistics warehouse receipt pledge business, the use of the third party logistics enterprise supervision warehouses, as the designated place of delivery in the contract between agricultural products traders, can improve transparency degree of agricultural products trade between agricultural products producers and large traders, agricultural products processors, shorten the agricultural products sales link, reduce the distribution cost of agricultural products. Agricultural products producers and processors can also use inventory to obtain credit, in order to meet the real-time consuming demand, delay the sales products, which will effectively improve agricultural products producers’ and processors’ ability to cope with fluctuations in the price of agricultural products market, alleviate seasonal price fluctuations, and reduce the transaction cost between agricultural products producers, processors and consumers.

5.3 Relieving the rural financing problem The establishment of agricultural products logistics warehouse receipt pledge system will be conducive to effectively and openly developing the rural financial system. The development of agricultural products logistics warehouse receipt pledge business, the bank issuing the pledge loans, the logistics enterprise in charge of supervising the pledge goods, not only cultivate new economic growth point, but also greatly reduce the risk of loans, avoid the risk of financial business.

In this way, the bank can make loans to individual peasant households and agricultural products producers and processors without any worries, the participation of third party logistics enterprises reduces the controllable risks related to the movable property pledge; banks no longer need to supervise large amounts of microfinance borrowers (individual peasant households, agricultural products producers and processors), but a small amount of warehouse managers (third party logistics enterprises), to ensure the value of the loans. This will reduce the supervision cost of banks;
5.4 Reducing the price risk of agricultural products Individual peasant households, agricultural products producers and processors lack the means of reducing the price risk, which affects their economic income and the ability to repay the loan. The prerequisite for agricultural products trade success is the transaction place, and if taking the bonded warehouse as the delivery place of agricultural products trade, the transaction will be more likely successful.

The establishment of agricultural products logistics warehouse receipt pledge system makes it possible for individual peasant households, agricultural products producers and processors and lenders, to use more complex price insurance tools such as exchange trading forward contracts or futures and options. Agricultural products producers and processors, banks and traders can be locked in a fixed future price in order to guarantee the bottom line price, which will be conductive to agricultural products traders delivering goods and payment in accordance with the relevant provisions, and reducing the default risk.

5.5 Realizing the effective cost management of agricultural products reserves The establishment of agricultural products logistics warehouse receipt pledge system improves the ability of efficient storage and the level of supply management, making individual peasant households, agricultural products producers and processors benefit from a more stable products price. The management of reserve inventory in agricultural products logistics warehouse receipt pledge system will be more cost-effective, widen the financing channels in the agricultural products supply chain; by delaying sales or doing sales along the sales chain, peasants can get better prices, making consumption balanced as much as possible.

Agricultural products logistics warehouse receipt pledge system will get the government to obtain more reliable operating data of individual peasant households, agricultural products producers and processors, and more realistically predict the shortage problem; a more transparent government inventory purchase and sales system will also be constructed to reduce corruption.

6 Conclusions

The problem that agricultural modernization in our country lags behind industrialization and urbanization is quite prominent; rural development lagging behind, urban and rural development disharmony are more and more becoming the key constraints to Chinese modernization construction. Developing modern agricultural logistics is an effective approach to constructing Chinese new socialist countryside at present stage; agricultural products logistics is an important part of modern agricultural logistics, an important force which drives the development of China’s rural economy, an important measure of constructing new socialist countryside.

New rural construction in our country needs strong financial support. Agricultural products logistics warehouse receipt pledge, as a new type of business form, is the innovative integration of modern agricultural products logistics and financial service, which effectively reduces the risk of agricultural economy, solves the financing problem of the agricultural products processing enterprises, and realizes the tripartite win-win of third party logistics enterprises, agricultural products processing enterprises, financial institutions (banks).

The advantage of agricultural products logistics warehouse receipt pledge system is that it helps to improve the agricultural product trade, reduce market instability and other relevant risks; protecting individual peasant households who are in the weak position from suffering a deception in the agricultural products markets, reducing inventory loss in agricultural production and sales; Reducing the effects that seasonal price fluctuations of agricultural products have on (producers’, processors’ and traders’) profits; broadening the financing channels of agricultural products enterprises (producers, processors and traders).

In the process of constructing agricultural products logistics warehouse receipt pledge system, inevitably different sorts of challenges will be encountered, including the improvement of system and industry environment, the setting of business standards, the improvement of risk control level and the developing of innovative products applicable to rural economic development, etc. With enough courage to face these challenges, using the "multi-win" characteristic of agricultural products logistics and supply chain finance, fully arousing the enthusiasm of the government, financial institutions, logistics enterprises, research institutions and enterprises in the supply chain; the construction of agricultural products logistics warehouse receipt pledge system will play a great role in promoting the construction of new countryside and the development of rural economy in China.

References


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City and Jingjiang City, this paper finds a practical case for differences in the fitting effects of mathematical models caused by differences in the economic development model, and believes that for the regions laying great emphasis on agricultural development, since ensuring the cultivated land area is important, using the logistic curve with upper limit to fit the reduction process of cultivated land area is appropriate; the extensive expansion-based industrial development model and continuously improved level of intensive land use correspond to the logarithmic curve. Kuznets model and multivariate linear model make poor performance in the study area, but in view of their characteristics, Kuznets model should be similar to logistic model, more applicable to the regions with the reduction of cultivated land area approaching the upper limit. The multivariate linear model is complicated, and the specific effects depend on the number and nature of the selected independent variables.

Meanwhile, compared with other models, due to different dependent variables, Kuznets model often has a too small coefficient of determination, but it does not necessarily mean that the overall forecast effect is poor, which should be noted when selecting the model in the future. In addition, for some areas, the differences in the economic development model in different periods can lead to multi-stage characteristics of changes in cultivated land resources, and this phenomenon is also reflected in other scholars' study, for example, using the idea of segmented simulation can better solve the problems that the scatter plot of logistic model presents wave-shape and the scatter plot of Kuznets model presents "M"-shape, in order to improve the applicability of mathematical models.

References


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