Link-up between Farmers and Supermarket based on China’s Fresh Agricultural Products

YANG Jian-ying*, TANG Bu-long
School of Economics and Management, Huaiyin Normal University, Huai’an 223001, China

Abstract  Link-up between farmers and supermarket is a new move adopted actively by the current government, conducive to consumers, farmers and circulation enterprises. At present, link-up between farmers and supermarket is launched in China’s 15 provinces and cities, which will set off the revolution in the field of agricultural circulation. Based on the current situation of link-up between farmers and supermarket and the existing problems, we put forth the following recommendations; promoting the quality of farmers’ cooperative organizations; establishing the logistics center of fresh agricultural products; using economies of scale to reduce the fresh logistics costs; improving the operation and management level of fresh agricultural products in supermarket.

Key words  Fresh agricultural products, Link-up between farmers and supermarket, Problems

In the second half of 2008, the Ministry of Commerce of the People’s Republic of China and the Ministry of Agriculture of the People’s Republic of China, jointly issued a document, to promote the agricultural product supply chain model of "supermarket + base". In 2009, Central Document No. 1 stressed that we should support the large supermarket chains and agricultural product circulation enterprises to carry out link-up between farmers and supermarket[1]. In June 2009, the Ministry of Commerce of the People’s Republic of China, the Ministry of Finance of the People’s Republic of China, and the Ministry of Agriculture of the People’s Republic of China, issued a notice to decide to carry out the pilot project of "link-up between farmers and supermarket" in Hebei Province and other 14 provinces (municipalities) in 2009[2]. Link-up between farmers and supermarket, as a new measure conducive to the country, people, agriculture and commerce, will lead the modern pattern of distribution to the vast rural areas, to promote the link-up between small-scale production and the ever-changing market. By order production and procurement, several intermediate trading links are omitted, which can not only greatly reduce logistics costs and the loss of fresh products, increase farmers’ income, and reduce the prices of the terminal fresh agricultural products, but also conduce to promoting standardized, high-efficiency and non-pollution production of fresh agricultural products in the long run.

1  The current situation of link-up between farmers and supermarket in China

At present, there are some problems in the link-up between farmers and supermarket to be resolved, which have been prominent in the early practice of link-up between farmers and supermarket.

1.1  The organizational degree of production subject of agricultural products is still low at present, having a certain impact on supermarket purchases  Link-up between farmers and supermarket means that the supermarket distribution centers directly purchase fresh agricultural products from production base, and the production base must meet the needs of supermarket in terms of the production quantity, quality, varieties, specifications, and non-pollution. This will require a large number of decentralized farmers in the production base to rely on certain intermediary organizations, namely the farmers’ professional economic cooperation organizations, to enter the circulation market, in order to save transaction costs and enhance transaction efficiency, but the organizational degree of the current agricultural producers in China is not high.

According to statistics, in Jiangsu Province with good development of agricultural cooperative organizations, the proportion of farmers who participate in the cooperative organizations is less than 30%, and the proportion of these farmers who can provide integrated comprehensive service of production, processing and marketing is only 30%. Low organizational degree of farmers will inevitably affect the production scale of fresh agricultural products and producers’ control over varieties of agricultural products, quality and safety of agricultural products, and standardization of agricultural products, finally affecting supermarket’s purchase of agricultural products in the production base.

1.2  The stability in the cooperation relations between supermarket and production base is poor  As to the fresh agricultural products with the characteristics of periodic output, the output has great uncertainty, due to the impact of climate, soil, technology and many other factors. And the quantity, quality and specification of agricultural products provided may not be fully in line with the supermarket’s procurement requirements, so the base may worry about whether the supermarket procurement contract is fulfilled on schedule; at the same time,
the supermarket is also faced with the risk of insufficient supply of goods.

This so-called trust game, to some extent affects the stability in the cooperative relations between supermarket and production base. Experts have pointed out that this unstable cooperation may make the relationship between supermarkets and base mired in the vicious cycle "short-term order – farmers’ confidence of investment is not enough – the quality of agricultural products cannot be guaranteed-the supermarket lacks confidence of long-term procurement".

1.3 If the supermarket chain in the region does not reach a certain scale, it will greatly increase the distribution costs of fresh agricultural products and affect the benefit of supermarket

Fresh agricultural product is the soul of the supermarket business, and also a magic weapon for the supermarket to attract consumers, but if the supermarket chain of fresh agricultural products fails to form scale effect, the distribution center of fresh agricultural products cannot be established, which will inevitably affect the profit of the supermarket.

According to analysis, only when the number of community supermarkets providing fresh agricultural products is more than 35 within an urban area, may one distribution center be established for unified distribution, namely using the scale effect to offset the cost of logistics and procurement, so that the high cost has no impact on the efficiency and competitiveness of the supermarket. At present, there are few supermarket chain stores selling fresh agricultural products, which will inevitably bring about the instability in the base relations, and high costs of procurement and logistics, making it difficult to establish their own fresh logistics and distribution center.

1.4 The human resources needed by the link-up between farmers and supermarket are still scarce at present

Usually supermarkets have high requirements on the production bases of fresh products. They need to determine the base, determine the species, determine the standards (environment, planting, inspection, packaging standards, etc.), organize technical training, and participate in planting management. When picking and inspecting the fresh products, it is necessary to test the physical and chemical indicators of agricultural products, thus requiring the base procurement staff to have complex knowledge structure, that is, understanding the relevant agricultural technology, the operation and management, but there are not many such talents, mainly relying on the supermarket’s cultivation and external recruitment.

In addition, some large supermarket chains developing rapidly in recent years, have huge demand for management personnel, sales personnel, and logistics personnel of fresh agricultural products, but the insufficient supply and lack of talents make it difficult for the current fresh agricultural products in China to achieve standardized and institutionalized operation and management, and efficient logistics management.

1.5 The level of supermarket’s operation and management of fresh agricultural products remains to be improved

First, the operation of fresh agricultural products by the current domestic supermarkets, especially the local supermarkets, still lags behind; most of them have not yet established efficient operation and management system of fresh agricultural products. Only part of the foreign invested enterprises and a handful of large domestic chain stores, have established the operation and management system of fresh agricultural products, including management standard system of fresh agricultural products, management system of fresh agricultural products, and management training system.

Second, the awareness and management level of most domestic chains of fresh agricultural products is low. There are flaws in the combination and matching of different seasons of fresh products, and the marketing strategy use of fresh agricultural products.

Third, due to the lack of logistics planning of fresh agricultural products, the proportion of cold chain logistics of fresh products realized in the local supermarket chains is very low; currently, the number of fresh distribution centers of the local supermarket chains is small, with small scale and few facilities, resulting in great transport loss of fresh agricultural products, and high logistics costs.

2 Scheme of link-up between farmers and supermarket based on domestic fresh agricultural products

2.1 Strengthening the construction and quality improvement of farmers’ cooperative organizations in production base of fresh agricultural products

In order to achieve link-up between farmers and supermarket, we must strengthen the building of fresh agricultural product bases and farmers’ cooperative organizations. Large-scale production of the order bases with the farmers’ cooperative organizations as main body, can reduce the risk of agricultural production, decrease transaction costs, and increase continuous supply of high-quality fresh agricultural products for supermarket, which can not only meet consumer demand, but also increase farmers’ income; the link-up between farmers and supermarket can also reversely promote the organizational level of farmers’ cooperation.

According to statistics, the average income of the farmers having not joined the cooperatives is 20% higher than that of the farmers joining the cooperatives in Jiangsu Province. Through the training and guidance for farmers, the cooperatives promote improvement in the varieties of fresh agricultural products, perfect the planting (breeding) technology, and the implementation of agricultural standardization. At the same time, the cooperatives also make the farmers’ market awareness greatly improved. In order to enhance the proportion of farmers joining the farmers’ cooperative organizations, government and relevant departments should actively strengthen publicity and lead the farmers through model demonstration, so that more farmers join the cooperative organizations, to increase income. In addition, by the order, farmers’ cooperative organizations integrate the production bases, making regional fresh agricultural products achieve large scale, standardization and high efficiency, laying good foundation for the development of modern agriculture.
2.2 Trying to make the supermarket and production base form stable and flexible collaborative relationship, and actively cultivating supermarket’s self-owned fresh distribution center and third-party fresh logistics distribution center to ensure the supply of goods for supermarket. In the link-up between farmers and supermarket, the relationship between the production base and the supermarket should be a stable and flexible collaborative relationship. For those large-scale production bases with good natural conditions, high level of production technology and agricultural standardization, the supermarkets can sign longer-term and stable supply contract with them; for those small-scale bases with certain characteristics, the supermarkets can sign short-term or seasonal supply contracts with them according to demand and supply forecast.

Through the inspection and evaluation of the repeated transactions, two sides can choose to form long-term contractual relationship in the future, which can not only guarantee the supply of goods for the supermarket, but also form healthy competition between the production bases. For example, Suguo Supermarket has 100 direct picking bases of fresh agricultural products in Jiangsu Province, Anhui Province and other provinces, not only fully ensuring the supply of goods for Suguo, but also make the farmers’ fresh products in the base marketable. In addition, the local government should vigorously promote the logistics distribution center of fresh agricultural products, making full use of the special national funds for the building of link-up between farmers and supermarket.

2.3 The link-up between farmers and supermarket must rely on the chain supermarket group having a large number of stores within the region, use economies of scale to reduce costs and improve efficiency. In order to make link-up between farmers and supermarket benefit the farmers, supermarket and consumers, it is necessary to achieve economies of scale. The chain supermarket group with a large number of stores can lead many direct picking production bases to achieve standardized and efficient production. At the same time, the two sides are also easy to form a stable and cooperative relation, conducive to the long-term investment and planning development. In addition, large supermarket chains usually have great strength, which can establish their own logistics distribution centers and cold chain logistics system of fresh agricultural products, to reduce transport and storage losses, so that the logistics cost of fresh agricultural products is reduced, and the fresh agricultural products keep good internal quality and appearance, to attract customers to buy. For example, Suguo Supermarket in Jiangsu Province has over a thousand stores, of which more than 200 sell fresh agricultural products, with annual sales of fresh agricultural products as high as 2 billion yuan. One fifth of these fresh agricultural products are the fresh agricultural products from more than 100 direct picking production bases.

2.4 Strengthening the cultivation and training of talents related to link-up between farmers and supermarket. The link-up between farmers and supermarket needs to cultivate and use a large number of agricultural technology, procurement, operation and management human resources, especially those all-around talents who not only understand agricultural production techniques, but also understand operation and management. In this regard, the supermarket and government need to increase input. For example, the government can cultivate the direct picking and management talents of fresh agricultural products for the market in accordance with the “order-style” requirements of joint training plan, by giving subsidies for encouraging supermarket chains to cooperate with the local vocational colleges and some application-based regular colleges. At the same time, given that the theoretical knowledge of some university graduates majoring in agriculture and marketing is complete, but the actual operating capacity is weak, the supermarket can provide practice opportunities for the university students majoring in agriculture and marketing or management, to enhance students’ practical ability.

2.5 Promoting the level of supermarket’s operation and management of fresh agricultural products. First, the supermarket chains are required to establish a set of standardized and efficient operation and management system of fresh agricultural products. The commodity attributes of fresh product, and its position in the supermarket business, are greatly different from the general commodities. The supermarkets need to establish a set of targeted management standards, and management training systems of fresh agricultural products in the supermarket, in order to ensure the effective implementation of business strategy of fresh agricultural products.

Second, the operation of fresh products in the supermarket requires the operators to keenly grasp the market demand and consumer psychology, and have insight into the marketing strategy of fresh products.

Third, it is necessary to pay attention to the logistics problems of fresh agricultural products. When conditions are ripe, the supermarket group should establish its own distribution centers of fresh products, and gradually implement the cold chain logistics, in order to effectively connect the large-scale chain fresh business with production, processing, circulation and other links of fresh agricultural products in the upstream supply chain.

Finally, the local supermarket group with great strength can try to directly invest in the production base, and complete the conversion and penetration of the commercial capital to the agricultural capital, enhancing the level of agricultural industrialization.

With the rapid development of "link-up between farmers and supermarket", from less to more, this new circulation pattern of agricultural products can benefit many sides and society, but it also poses new challenges to the organizational degree of agricultural production, the supermarket business philosophy, and the services efficiency of local government. It is worthy of further exploration.

References
Organic agricultural products have better quality and flavor than common agricultural products, so some high grade hotels start to choose organic agricultural products. Hotel channel is generally stable, while the price of supply is high, thus the sales volume is not large.

3 Cold chain logistics; bottleneck for development of supply chain of organic agricultural products

Characteristics of organic agricultural products determine that they have special requirements for cold chain logistics. Developing cold chain logistics is the foundation for ensuring quality of organic agricultural products. However, due to small production scale of organic agricultural products and scattered production place, the development of cold chain logistics for organic agricultural products is much harder than common agricultural products. At present, development of cold chain logistics for organic agricultural products mainly has following problems:

(i) Production scale is small and return on refrigeration and precooling equipment is little. Organization of organic agricultural production in China takes the form of "company + farmer household". Organic agriculture is driven by leading enterprises. However, most organic agricultural enterprises are small. In consequence, it is difficult for cold chain input to realize scale merit. In addition, high operation cost and low economic benefit dampen the enthusiasm of enterprises for investment.

(ii) Production areas of organic agricultural products are scattered, while the consumption is concentrated. Logistics size is small and scattered, and transportation cost is high. On the one hand, organic agricultural products are mainly produced in rural areas, especially those remote areas without environmental pollution; on the other hand, the consumption of organic agricultural products is generally in large and medium cities. The separation of production and consumption increases logistics cost. As a result, cold chain logistics of organic agricultural products takes on the characteristic of small scale. In this situation, how to realize its high efficiency is a problem to be urgently solved.

(iii) Organic agricultural products have high timeliness in quality, so the logistics must have rapid speed and high safety. Consumers have high demand for quality of organic agricultural products. This is the root cause for their acceptance and consumption of organic agricultural product, also major reason for sales at premium. In this situation, logistics must have rapid speed, especially for fresh organic agricultural products. However, in the actual cold chain logistics system, both equipment and technology are backward, and processing, storage and transporting capacity and management level are relatively low, so it is difficult to satisfy demand of cold chain logistics for organic agricultural products.

(iv) The development of cold chain logistics industry lags behind in China, and the third-party logistics is underdeveloped and lacks logistics enterprises engaged in organic agricultural product. On the whole, technology and equipment of China's cold chain logistics are backward. Logistics enterprises are small, their transportation efficiency is low, and transportation cost is huge.

(v) Consumption demand of organic agricultural products is diverse, but the market scale is small. Although organic agricultural products are mainly consumed in large and medium cities, especially large cities, the consumption is still very scattered and market scale is small. Logistics enterprises have difficulty in realizing scale merit. Due to lack of professional cold chain logistics enterprises, some organic agricultural enterprises establish cold chain logistics system. Consequently, the equipment utilization efficiency is low, and it is difficult to raise economic benefit.

In sum, cold chain logistics is a bottleneck for development of supply chain of organic agricultural products, and also one of factors limiting further development of organic agricultural product market. Therefore, developing cold chain logistics is a fundamental measure for promoting healthy and sustainable development of organic agricultural products. However, simply depending on any one side, it is difficult to make any progress. It requires close cooperation of government, industrial organizations and enterprises. According to current development situations of cold chain logistics in China, it is proposed to develop various models of cold chain logistics. Firstly, leading agricultural enterprises and large organic agricultural product processing enterprises should bring into play their functions, and gradually establish cold chain safeguarding system. Secondly, on the basis of building green channel of agricultural products, it is proposed to establish trunk network connecting main producing areas of agricultural products and consumption areas, to improve safety guarantee level of logistics of organic agricultural product.

References


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