

Research on Competitiveness of the Developmental Pattern of "Enterprise + Cooperative" —A case of Lamb Fattening Cooperatives in Hainan Sub-prefecture of Qinghai Province

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Abstract The empirical analyses on agricultural industrialization pattern and local animal husbandry in northwestern areas show that the industrialization development of husbandry in northwestern areas faces international and national competitive pressures. The survival ability and competitive ability are the key points of husbandry industrialization. The paper, having a lamb fattening professional cooperatives in Hainan sub-prefecture of Qinghai Province as the example, introduces the general conditions of the establishment and development of cooperatives and points out the advantages and disadvantages of husbandry in Qinghai Province. The paper analyzes the competitive advantages of Hongyuan Lamb Fattening Cooperatives through five forces mode of Michael Port, putting forward countermeasures and upgrading the competitiveness of Hongyuan Lamb Fattening Cooperative.

Key words Enterprises + cooperatives, Lamb fattening, Competitiveness, Five forces mode, China

Cooperative is the autonomous organization, in which people get together voluntarily and through the enterprises people owned and managed mutually to satisfy the common economic and social demand. According to the division of pattern, the cooperative can be divided into the able man-motivates pattern, the whole village-promoted pattern, the enterprise + cooperative, etc. As for the connotation of enterprise + cooperative pattern, there are two different understandings. The first one is that the "enterprise + cooperative" is a special area, which refers to the operation mode of fixed supply and demand signed between the company and rural households. The essence of the pattern connects rural households by contracts and forges the producers, processors, sales and operators into the mutual body to share the risks and enjoy the interests. The other thinks that "enterprises + cooperative" is the general area, which refers to not only the supply and demand relation with mutual benefits established by the form of contract between enterprises and rural households, but also includes the close pattern of joint venture and shareholder and the loose cooperation without the restriction of contract.

In the upsurge of "agricultural industrialization", as a new thing, "enterprise + cooperative" attracts more and more attention and agreement. Therefore, the paper takes the investigation on Hongyuan Lamb Fattening Cooperative in Hainan Sub-prefecture of Qinghai Province as the subject to expound the process of establishing cooperative and analyze the competitiveness of the competitive. It aims to solving the conflicts between the small households' production and the big market existed in the rural cooperative under the background of industrial-

ization; facilitating the industrialized operation and providing relevant evidence to promote the all-around and harmonious development of rural social economy.

1 Literature review

Although there are still disputes on the definition and connotation of Chinese agricultural industrialization in domestic academic circle, they have reached agreement on the developmental pattern of agricultural industrialization. ZHANG Xiaoshan thinks that there are three types of agricultural industrialization pattern, covering "enterprises + rural households", "cooperatives + rural households" and "pillar industry + cooperative + rural households"^[1]. YING Rui-yao *et al* think that the agricultural industrialization pattern can be divided into three types from the perspective of investment in production and processing sections: rural household-dominated type ("cooperative + rural households", "professional association + rural households"), processor (companies)-dominated type (the companies undertake agriculture) and individual-dominated type ("company + rural households")^[2]. HUANG Zhu-hui *et al* think that according to the motivation function of pillar industry, the agricultural industrialization can be divided into pillar industry-motivated type, market-motivated type, cooperative economy-motivated type, pillar industry-motivated type and comprehensive development-motivated^[3]. The investigation of Yuanpeng shows that the top agricultural industrialization pattern is "enterprise + cooperative" pattern^[4].

As for the further analysis on the pattern of "enterprise + cooperative", the domestic researches pay much attention to the controllability of enterprises to cooperatives, the relations between enterprises and cooperatives, the benefit distribution between enterprises and rural households and some other problems. Due to the different progress stages of cooperative and different environments faced by the cooperatives, the re-

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searches of European countries, America and some other developed countries on agricultural cooperative pay much attention to the competitiveness of cooperative. As a result of the increased competitiveness of company-based enterprise, in 1990s, there were new agricultural cooperatives in North America area. Those new cooperatives strengthened their competitiveness through enlarging scale, elongating industrial chain and rationalizing the internal organization, so as to win over the survival and developmental space for cooperative. Under such circumstance, some researchers analyzed how to improve the competitiveness of cooperative in terms of marketing, investment and the internal management. For example, Sexton^[5] developed the spatial competitive model in the aspect of agricultural marketing by using the neo-classic theory; in order to study the investment strategy of agricultural marketing cooperative, Albaek and Schultz^[6] developed investment model by using micro-economics and voting theory; Eilers and Hanf put forward the problems concerning the optimized contract design of agricultural cooperative^[7].

The investigation shows that the industrialization development of animal husbandry in Northwestern China faces the domestic and foreign dual competitive pressure. The survival capability and competitiveness of the pattern of "enterprise + cooperative" is the key to the industrialization of animal husbandry, but domestic research on this aspect is weak. The paper takes the Hongyuan Lamb Fattening Cooperative in Hainan sub-prefecture of Qinghai Province as an example, introduces the basic status of the establishment and development of cooperative. By using the Five forces mode of Michael Port, the paper analyzed the competitive environment, competitive advantages and competitive disadvantages of "enterprise + cooperative" and put forward the suggestions on improving its competitiveness to promote the industrialization of animal husbandry in Northwestern China.

2 The fundamental situation of Hongyuan Lamb Fattening Cooperative

2.1 The background for the establishment of cooperative

Hainan sub-prefecture of Qinghai Province operates the combination of agriculture and the priority goes to animal husbandry. Various kinds of sheep produced here are famous in China, especially the Gonghe County, which is famous for its millions of livestock. However, there is not enough available rangeland in meadow steppe and desert structure, what's worse, in recent years; the area is frequently hit by snow damage and drought, which cause the restriction to the increase of yield of farmers and herdsman. The farmers and herdsman suffer great economic losses, which leads to the increase of yield but the value does not increase relevantly. The gap between the traditional animal husbandry and that in the farming and pastoral area with modern technology and scientific breeding, delivery and sale is large. In order to increase the quality of storing livestock on hand; reduce the burden of rangeland; lessen the pressure of farmers and herdsman and increase the economic value of delivered sheep, the Hainan Shengtong Animal Husbandry Com-

pany Limited, as the sole company which integrates ecological protection, rangeland construction, feed processing, livestock fattening, butcher, meat processing, package and marketing together, cooperates heartily with farmers and herdsman in the path of developing animal husbandry. The company often investigates the animal husbandry in developed area and studies the inland meat market, and then it decides to establish the lamb fattening cooperative, which takes the town and village as center, villages as the connection places and actively attracts the farmers and herdsman to participate into the lamb fattening activity and join the cooperative.

2.2 The process of establishing cooperative and the status quo of the cooperative

Hainan Shengtong Animal Husbandry Company Limited is the family-owned enterprise established in 2002. Its main operation item is grassland fence and Caixiu is the legal representative. Till 2006, the company has included the businesses of grassland fence, cattle and sheep breeding, and marketing of beef and mutton. The company owned 300 t reefer equipment, 95 staff and a registered trademark.

On December 18th of 2008, the company registered and established the Hainan Hongyuan Lamb Fattening Cooperative and the legal representative Caixiu undertook the legal representative. Now, the cooperative has 12 staffs. The cooperative is composed by general assembly, council and board of supervisors. The registered capital of the company is 50 000 yuan, 30 000 yuan of it is provided by Hainan Shengtong Animal Husbandry Company Limited, 10 000 yuan it is provided by the legal representative and REN Jia-qing, QI Sheng-zhong and another eight members invest 1 000 respectively. The stockholding purchased by the members of the cooperative belongs to each member. The properties subsidized by the national finance are handled according to the relevant regulations of the government. The cooperative takes the full responsibility for all of its properties and debts. The offices and equipments are provided by the company.

At present, the cooperative is trying to get the financial support from the government. In order to spread the influences of the cooperative, the company and the cooperative lay stress on promotion, but the promotion is restricted in the matchmaking conference and promotional materials, and the website has not been established.

2.3 The goal and services of the cooperative

Hongyuan Lamb Fattening Cooperative is in line with the principles of "mutual benefits, shared risks and common interests"; follows the principle of "established by the people, run by the people and benefit the people"; follows the goal of seeking the mutual benefits for all the members and implements the independent management and democratic involvement.

The company provides free information on breeding and skill training for cooperative and supplies a series of services covering transportation, lamb fattening, butchering, cold preservation, packaging and marketing to farmers.

The meat production rate of local tup lambs in Hainan Sub-prefecture can grow more than 10 kg if they are fattened on the basis of pasture breeding. An ewe can give birth to a lamb and

three lambs in three years, the meat production can achieve more than 30 kg, the benefits are greater than breeding a three years' wether. The male lamb can be slaughtered in the very year, which is conducive to reducing the demands of feed in winter and spring and decreasing the losses from the death of lambs in winter and spring. Meanwhile, the proportion of ewe in the group of lambs can be increased. The Hongyuan Lamb Fattening Cooperative breeds the male lambs that can be slaughtered at the very year, which can not only curtail the time of feeding male lambs; light the burden of grassland, but also can increase the output of mutton and increase the income of herdsman households.

The company makes advantage of its advanced breeding technology; trains the dispersed farmers; improves farmers' skills on breeding and ensures the quality and quantity of meat. The brokers take the responsibility of purchasing and transporting the lambs to the company to slaughter, freeze and package, and then sell them to the market, comprehensive supermarket and deep processing enterprises of meat which have established long-term purchasing and sale relations with the company.

3 The advantages and disadvantages of developing animal husbandry in Qinghai Province

3.1 Advantages on developing animal husbandry in Qinghai Province As a main base for producing beef and mutton in Western China, Qinghai Province boasts a series of advantages in terms of quality and price bought by natural situation and geographic location.

The natural grass land in Qinghai Province has achieved 3 644.9 km², accounting for 50.5%; among which the available grassland is 3 161.0 km², accounting for 86.7% of the total grassland; and the annual yield of grass is more than 7 980.0 t. The grazing district of Qinghai Province locates 3 000.0 m above sea level. Comparing with the other pastures, its environment is clean and the pollution of the soil, grass, water and livestock is low. The mutton produced in Qinghai Province is natural green food with prominent quality. At the same time, as a result of the long distance from the center of national market, the construction costs of transaction cost are low. What's more, due to the scale advantages caused by the scale production, the price of mutton in this area is 25% lower than that of the national average level^[8].

In recent years, driven by the growth of demand on beef and mutton in international and national markets, the price of mutton in China has been increasing. The counties and cities of Qinghai Province, especially, the places around the Qinghai Lake, introduce a lot of new species and the output of mutton has increase greatly and the industrialization level of mutton has been formed primarily.

3.2 The disadvantages of developing animal husbandry in Qinghai Province On one hand, the natural conditions and geographic location bring advantage for the development of animal husbandry; on the other hand, restricted by the natural

conditions, farmers and herdsman live dispersedly in the vast plateau, that is why the weaknesses of family dispersed breeding and small average scale still exists in the mutton industry of Qinghai Province.

4 The competitiveness and strategy of Hongyuan Lamb Fattening Cooperative

4.1 Analysis on the competitiveness The model adopted for analyzing the competitiveness is the industrial analysis model put forward by Michael Port in his classic work *Competitive Strategy*^[9], that is the Five Forces Model. The model thinks that status and comprehensive strength of the five competitive forces, including the bargain ability of suppliers, bargain ability of purchaser, the competitiveness among the current enterprises, the threats of possible substitutes and the threats of the potential entrant, determine the degree of competition among the industries; determine the potential to get benefits in the end and the flow of the capital to the very industry; in the end, all of these determine the capability of an enterprise to obtain high interests and the five forces are the basic factors for driving the industrial competition. Port pointed out that the essence of an enterprise relies on choosing the right industries and the most attractive competitive place in the industry. In view of the reality, the paper analyzed the competitive advantages and disadvantages of Hongyuan Lamb Fattening Cooperative in terms of the competition of the processing industry of mutton, the supply of raw material and the bargain abilities of the supplier and purchasers.

4.1.1 Competition of the processing enterprises of mutton. The processing enterprises of mutton not only bear the competition among the existing processing enterprises, but also the threats from the potential entrant and substitutes. The processing enterprises, who have entered the industries of processing mutton, try to get advantages against their counterparts. The phenomenon will definitely lead to the conflicts and strife among the enterprises. This kind of competition often extends through prices, advertising, product introduction and after-sale service. The intensity of competition is related to many factors. For example, when the barriers for entering the industry is low, there will be a large amount of capital and competitors to enter the industry, and then the competition in the industry will be fierce; when the consumption demand is satisfied, the growth of the sale will decrease, and in order to survive and develop, the existing enterprises must fight for the market share, and the enterprise with weak competitiveness will be abandoned gradually; when the barriers for the industry to withdraw from the industry, for example, the speciality of the capital and the restrictions from the government and society, the enterprises may adopt the means of lowering the prices and increasing the investment in advertisement, and then the profits of the industry will shrink sharply. The potential entrant will bring along new productivity and new energy to the processing industry of mutton, and get certain market share from the market occupied by the existing enterprises, therefore, the competition for raw materials and market share with the former enterprises is inevitable, which may leads to the low of profits and even the bankruptcy

of some enterprises.

Hainan Sub-prefecture locates in the distant area, so the competition faced by the Hongyuan Lamb Fattening Cooperative is not so fierce. The main products of Hongyuan Lamb Fattening Cooperative are frozen mutton, which is mainly exported to other places, so it does not have direct competition with the local fresh mutton processing industry, as well as the individual lamb-breeding household. At present, the export of frozen mutton in Hainan Sub-prefecture is in the upward stage; the investment in processing production line and refrigeratory of cooperative is large; the parallel enterprises are rare, so the competition is not so fierce. There are 140 km from Hainan Sub-prefecture to Xining City, and in the process, there is Riyue Mountain with 4 877 m, the remote location and high-cost transportation attract few businessmen from other places and it is hard for the government to attract investment. The industry and commerce in Hainan Sub-prefecture are backward, so it is hard for the operators to accumulate capital. Therefore, the potential threats of the entrance of big manufacture and big capital are not so strong. The leaders of Hongyuan Lamb Fattening Cooperative are all Tibetan, if they can win over the support from the government and obtain the loan and funds and continue update the processing equipments, the cooperative can keep the leading role in the Hainan Sub-prefecture.

4.1.2 The bargain ability of buyers. The buyers can influence the profitability of an enterprise by bringing down the prices and demanding higher quality and services. If the buyers have the following advantages, they will own strong bargain ability. The first one is the imbalanced market structure of buyers and sellers, that means the buyers is large, but the products are small, but the sellers are formed by many small-scale enterprises, so the individual buyer buy a large volume of goods, accounting for a large proportion of the individual seller volume; the second one is the products purchased by the buyers are mainly the standardized products, the buyers can purchase the products from multiplier sellers economically.

The frozen mutton of Hongyuan Lamb Fattening Cooperative sells to Hainan Sub-prefecture and even the big market out of Qinghai Province. The buyers are mainly the enterprises for deep processing of mutton and the export-oriented enterprises of mutton, their scales are far larger than that of the cooperative, so the initiative for bargaining is controlled by the buyers. However, the products of the cooperative have two distinctive features: the first one is the meat of male lamb; the second one is the mutton with skin but hair. In addition, with the geographic advantages of Hainan Sub-prefecture, the mutton produced by the cooperative varies hugely with the common mutton produced by other places. At the same time, after the establishment of cooperative, it provides the services in terms of feeding and disease prevention for farmers, and then the quality of the raw material has been guaranteed. The unified slaughter of lambs further endured the stability of the quality of mutton. From the perspective of the two aspects, the cooperative has improved its position in bargaining to a certain extent.

4.1.3 The bargain ability of suppliers. The suppliers influence

the profitability of the existing enterprises and the competitiveness of the products by lifting the price of input factors and lowering the quality of the unit value. The strong or weak power of the suppliers is determined by the input factors they provided to the buyers. When the input factors provided by the suppliers account for a large proportion of the total costs of the buyers, the factors pay an important role in the production process of the buyers or the factors greatly affect the quality of the buyers' products, the potential bargain of the suppliers will be greatly increased. Generally speaking, if the following situations are satisfied, the suppliers will have strong power for bargaining: the industry of the supplier has solid market place that it may not be controlled by the fierce competition. It has many buyers, so the single buyer can not be the important client of the supplier. The products provided by the supplier are distinctive, so it is hard for the buyers to buy them from other suppliers or it will cost the buyers more to buy the same products from other suppliers or it is hard to find the substitutes. The suppliers can implement forward joint or integration easily, but it is hard for the buyers to implement downward joint or integration.

Before the establishment of cooperative, as a processing enterprise, the Hainan Shengtong Animal Husbandry Company Limited, which mainly sold the frozen mutton, needed a large amount of mutton and the dispersed farmers were their suppliers. From the nature of the raw material, it can be regarded as the consumable goods in a complete competitive market. The enterprises had many choices, and then the bargain power of the farmers was weak, as well as their position in negotiation. But as for the enterprises, although they had advantage in term of the purchasing price, purchasing lambs from the dispersed farmers demanded large transaction costs, the supply source was unstable and the quality varied hugely, so the normal operation of the enterprises and the competitiveness of the enterprises might be affected. The establishment of the cooperative is tantamount to the extending the raw materials and the forward integration. The cooperative organizes the external dispersed farmers to the stable raw material production unit and internalizes the external problems, which has lowered the transaction costs effectively. For one thing, the enterprises have the stable supply of raw materials; for another thing, the farmers can avoid the market risks caused by blind production.

4.2 Analysis on the competitive strategies According to the analysis of five forces, the competitiveness of Hongyuan Lamb Fattening Cooperative can be improved from the following three aspects^[10].

4.2.1 Implementing the competitive strategy of overall cost leadership. The overall cost leadership refers to the enterprises obtain greater profitable space than their counterparts under the same situation by lowering costs. The slaughter and processing of livestock in Qinghai Province take the rough processing as the principal business. Due to the supply of high-quality mutton and cheap labor forces, the Qinghai Province has the advantage of low cost. The Hongyuan Lamb Fattening Cooperative needs to enlarge the scale of it; digs the potential on lowering the price of mutton and stabilizing the quality; maintains and

further intensifies the advantages of good quality and cheap prices.

4.2.2 Optimizing the value of industrial chain. In the first place, the value chain between the cooperative and the farmers (suppliers) should be optimized and the interest coupling mechanism of orders should be perfected. The value chain includes the breeding value chain of raw material for processing the lamb and the purchasing value chain. In the second place, the value chain in the processing enterprise of slaughtering and processing lambs should be optimized. The chain includes the reasonable production and arrangement of lamb processing; improving the non-value added activity; increasing the flexibility of production; enhancing the efficiency of logistics and reducing the costs of activities. In the third place, the processing technology of lambs and the value chain of buyers should be optimized, which include intensifying the cooperation between the two parties, settling the price of the products reasonably and choosing high efficient distribution channels.

4.2.3 Developing new products. As a famous rural cooperative, Hongyuan Lamb Fattening Cooperative in Hainan Sub-prefecture of Qinghai Province should try to get the support from the government. It should develop new products according to the developmental trend of meat products in the international market, for example, the meat products for health, meat products of low temperature and western meat products and so on that cater to the needs of modern consumers. Besides, it should forge its distinctive products; extend the product chain gradually; forging brand to increase their added value and increase the competitiveness of enterprises.

5 Conclusion

The cooperative model of "enterprise + cooperative" mainly refers to the primary processing of agricultural raw material. Generally, the cooperative is characterized by small investment; backward technology; small scale in the primary stage of development and insignificant differences between the products are. Therefore, comparing with the deep processing enterprises and distribution firms in the external market, the cooperative is in the disadvantaged position. Close connection to the production base of raw material is the biggest advantage of this kind of cooperative. The cooperative can get stable quality and quantity of raw materials and enhance its capabilities to get profits by changing the external suppliers to the internal members and saving the transaction costs. However, with the increasingly open market, the threats from the modern and large scale breeding industries and processing industries in the international market will become more and more serious, so the coop-

erative still needs to establish a stronger core competence through the competitive strategy of overall cost, and through optimizing the industrial value chain and developing new products.

References

- [1] ZHANG XS. What direction should farmer cooperatives be to? [J]. Rural Development in China, 2009(2): 13–14. (in Chinese).
- [2] YING RY. Farmer cooperatives; standardization and development [J]. Jiangsu Rural Economy, 2009(5): 10–11. (in Chinese).
- [3] HUANG ZH, SHAO K. The essential stipulation and its drift of the cooperatives[J]. Journal of Zhejiang University: Humanities and Social Sciences, 2009(4): 11–16. (in Chinese).
- [4] YUAN P. Peasants specialized cooperative economic organizations: a effective carrier for agricultural enterprises[J]. Management and Administration on Rural Cooperative, 2003(3): 4–7. (in Chinese).
- [5] SEXTPN RJ. Imperfect competition in agricultural markets and the role of cooperatives; a spatial analysis[J]. American Journal of Agricultural Economics, 1990, 72(3): 709–720.
- [6] ALBOEK S. One cow? one vote? [J]. Scandinavian Journal of Economics, 1997, 99(4): 597–615.
- [7] EILERS C, HANF CH. Contracts between farmers and farmers processing cooperatives; a principal-agent approach for the potato starch industry[M]//GALIZZI G, VENTURINI L. Vertical relationship and coordination in the food system. Heidelberg: Physica, 1999: 267–284.
- [8] GUO JJ, MA YH. Some factors that affecting lamb's production in Qinghai Province and some developmental proposals[J]. Agriculture and Animal Husbandry in Qinghai, 2006(1): 32–34. (in Chinese).
- [9] PORTER M. Competitive strategy[M]. Translated by CHEN XY. Beijing: Huaxia Publishing House, 2001. (in Chinese).
- [10] LU YD, CHANG SZ. International marketing[M]. Beijing: Machinery Industry Press, 2007. (in Chinese).
- [11] ZHANG PJ, ZHANG Y, HU JW, *et al.* Developing status of specialized farmers cooperatives—Based on the investigation data of 162 villages in Sichuan Province, China[J]. Asian Agriculture Research, 2009, 1(8):15–19.
- [12] HU TZ, LIU WK. Analysis on the obstacles and countermeasures to the development of farmers professional cooperatives[J]. Journal of Anhui Agricultural Sciences, 2010, 38(34): 19716–19719. (in Chinese).
- [13] XIAO M. Discussion on ways of economic development in rural areas of Anhui Province based on cooperatives[J]. Asian Agricultural Research, 2009, 1(6):16–19, 28.
- [14] XIAO Y, HUO LL, YANG YQ. Study on training of the leaders of specialized farmers cooperatives in Chongqing[J]. Journal of Anhui Agricultural Sciences, 2010, 38(34): 19760–19763. (in Chinese).
- [15] LI GM. Differential marketing of agriculture products dominated by rural cooperative economic organizations [J]. Asian Agricultural Research, 2009, 1(6):20–23, 33.
- [16] ZHANG YX, DING J. A study of non-professional agricultural production villages establishing a new rural cooperative[J]. Journal of Anhui Agricultural Sciences, 2010, 38(34): 19770–19772. (in Chinese).
- [11] DENG JL. Grey control system[M]. Wuhan: Huazhong University of Science and Technology Press, 1993. (in Chinese).
- [12] DONG YB, DUAN ZS. A new determination method for identification coefficient of grey relational grade [J]. Journal of Xi'an University of Architecture & Technology: Natural Science Edition, 2008, 40(4): 589–592. (in Chinese).

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[9] YANG F, MA YH. Analysis on the effects of regular financial support in rural economic growth[J]. Issues in Agricultural Economy, 2009(7): 54–58. (in Chinese).

[10] Sichuan Provincial Bureau of Statistics. Sichuan statistical yearbook 2000–2010 [M]. Beijing: China Statistics Press, 2000–2010. (in Chinese).