



Research on the strategy of improving the core competence of feed industry under the background of industrial convergence

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Abstract

Under the background of industrial integration, if any industry wants to develop steadily, it must focus on improving its core competence to better adapt to and cope with industrial integration. Feed industry, as the main bridge between the supply of agricultural raw materials and the supply of animal husbandry market, is an important part of the industrial chain of agriculture and animal husbandry, and its industrial development directly affects the development of agriculture and animal husbandry in China. Based on the background of industrial integration, this paper discusses the strategy of the core competence of the feed industry, hoping that the relevant suggestions and strategies can further help the development of China's feed industry and enhance its core competence.

Keywords: industrial integration, feed industry, core competence

Introduction

At present, China's agricultural economic system is gradually improving. With the continuous advancement of industrialized towns, the importance of food is getting higher and higher, and the feed industry is facing enormous challenges under this background. Feed industry plays an important role in agriculture, and it can promote the development of agricultural products, farmers' income and farmers' employment rate. In the process of continuous development of feed industry, many new industries and feed industry have undergone industrial integration. Industrial integration has led to the emergence of many new products and new services, created new demands, opened up new markets for feed industry and opened up a new pattern of feed market, thus stimulating the competitive consciousness of various enterprises.

Under the development trend of industrial integration, China's feed industry is facing new opportunities and corresponding challenges. Feed industry is a vital part of China's agriculture. Under the original system, the competitiveness of feed industry should be improved. Under the environment of industrial integration, laws and policies should be observed. At the same time, regulatory authorities should strictly supervise the environment of industrial integration, clarify the development route of enterprises, enhance the competitiveness of enterprises and better develop feed industry.

Necessity of improving the core competence of feed industry under the background of industrial integration

Industry convergence has different understandings among scholars from all walks of life. Although scholars have different understandings of this concept, comprehensive scholars' research and expression summarized the following four points: dynamic factors, premise factors, actual situation and results. Industrial integration refers to the industrial form and economic development mode in which agriculture, industry, service industry, information industry and knowledge industry at different levels in time and structure are mutually integrated and mutually promoted in the same industry, industrial chain and industrial network. This is a business model that invisibly drives tangible, high-end drives low-end and advanced drives backward, which can greatly help low-end industries to upgrade. There are two main ways of industrial integration, namely, the substitution and integration of emerging industries for traditional industries and the extension and integration of two different industries. Whether it is the first or the second way of integration, it will have an immeasurable impact on each original industry. Based on this, under the background of industrial integration, the industry needs to be constantly adjusted, and the core competence needs to be improved to better cope with the changes and development of the industry and the competition of the industry.

The inevitable choice to deal with industrial integration

Industrial integration will not only change the market structure, but also affect the economic development of a country or region and promote the development of a country or region. Industrial integration promotes technological progress, thus producing many new products and increasing consumers' choices. In the process of industrial integration, it is not necessary to develop new technologies for enterprises through inter-industry

reorganization, which directly leads to the emergence of new businesses and new products (Guo Xinzhu, 2020). Under such circumstances, the feed industry can effectively cope with the market risks brought about by industrial integration only by continuously improving its core competence, and then develop steadily under the background of industrial integration.

Main means to deal with market competition

Integration among different industries can not only promote the new development of industries by integrating new products and improving traditional products, but also break the traditional market structure of industry opposition, endow new relationships among industries, increase healthy market competition and greatly stimulate the vitality of the market. In the converged market, enterprises not only have to face the competition of the original competitors, but also meet the challenges of new industries. Under such circumstances, the feed industry must effectively improve its core competence, strengthen the supervision of product quality and enhance its ability to cope with risks. Only in this way can it better cope with the market competition brought by industrial integration, maintain its own advantages in the competition and achieve sustainable development.

The only way to maintain industrial development

The integration of different industries has not only brought new development of industries, strengthened market competition, but also greatly promoted social and economic development. With the intensification of industry competition, the industry will inevitably be continuously optimized and upgraded in order to enhance its core competitiveness, which will help the social and economic development to a certain extent. Social progress and development have advantages and disadvantages for industrial development, which will further break the original competitive pattern and form a brand-new industrial system (Zhou Fengzhen, 2019). On the one hand, it has brought opportunities for the development of feed industry, and at the same time, it has to face more cruel challenges. Therefore, it is the only way for the feed industry to continuously improve its core competence under the background of industrial integration, and there is no other way.

Present situation of feed industry development in China

Industrial feed output has steadily picked up.

In recent years, China's aquaculture structure has been deeply adjusted. Under this background, according to the statistics of China's feed industry association, China's industrial feed output is on the rise.

Table 1: Statistics of China's industrial feed output from 2016 to 2020

Year	2020	2019	2018	2017	2016
Concentrated Feed	1453.2	1024.7	856.2	816.3	787.1
Compound Feed	2986.1	2136.2	1872.6	1695.2	1472.9
Add Feed	542.7	324.9	301.8	297.4	214.3

In 2020, China's concentrated feed output was 14.532 million tons, up 31% over the previous year, compound feed output was 29.861 million tons, up 15% over the previous year, and additive feed output was 5.427 million tons, up 48% over the previous year. The annual output of the three types of feed is increasing year by year, with concentrated feed accounting for the highest proportion, compound feed accounting for the second, and additive feed accounting for the least in the total output. This is due to the fact that concentrated feed is generally used in small-scale breeding plants in China. In recent years, the increase of feed raw material prices has led small-scale individual farmers to choose concentrated feed to make their own ingredients in order to reduce costs (Xu Ying, 2020).

The main feed raw materials are imported.

According to the data of China's agricultural network, in 2020, China's grain raw materials was more dependent on imports. Since 2016, the import scale of feed raw materials such as soybean, sorghum, barley and corn has been expanding. In 2020, the cumulative import of feed grain raw materials was 23.584 million tons, an increase of 108.7% over 2019. Among the imported feed raw materials in China, corn accounts for the largest proportion. In 2020, corn imports totaled 11.36 million tons, an increase of 107% over the previous year, barley and sorghum imported 8.56 million tons and 5.14 million tons respectively, an increase of 47% and 201% over the previous year, and soybean imports reached 10.03 million tons, an increase of 24% over the previous year. According to statistics, the number of imported feed raw materials in China has been increasing year by year in recent years, especially in 2019-2020, the import of corn and sorghum in China increased by 107% and 201% compared with the previous year. In 2020, the scale of corn import in China has surpassed that in Japan, becoming the largest country in the world, and the import of soybean and sorghum also ranks among the top three in the world.

According to statistics, in 2020, the concentration of China's import source countries has changed. Crops such as corn and sorghum mainly came to Ukraine, Australia, the United States, France and Canada, accounting for 37.2%, 26.8%, 12.9%, 5.8% and 17.3% respectively.

Domestic feed demand continues to grow

Due to the rapid development of animal husbandry in China, the demand for feed is increasing day by day. Firstly, the demand for pig feed is analyzed. Every year, June and July are the periods for pigs to replenish fences, which determines the demand for feed. According to the data of the Animal Husbandry Statistics Network, the profitability of herbivorous livestock and poultry breeding in China is good in 2020, and the enthusiasm of supplementing fences is very high, which means that the demand for feed is constantly increasing (Zhang Yanmei, 2019). From the analysis of China's breeding feed, corn, wheat and sorghum are the main feed sources, among which corn accounts for the largest proportion of feed sources. With the increase of animal husbandry scale in China, the demand for feed in various provinces and cities is increasing. According to relevant data, in the next five years, the annual growth rate of meat, eggs and dairy products in China will maintain about 3%. Based on this calculation, it can be known that it needs to consume at least 29.731 trillion tons/year, so the demand for feed in China is increasing year by year.

Feed prices are constantly increasing

Affected by the epidemic situation, the global feed raw material prices fluctuated greatly in 2020. The inter-regional circulation of corn was not smooth, and the price difference between production and marketing areas became larger, which led to the rapid increase of corn prices. From January to March, corn prices rose due to the epidemic situation. In March, the average price of feed corn reached 2.4 yuan /kg, a year-on-year increase of 5%. The average price of corn in Northeast China is 1.8 yuan /kg, up 4% year-on-year. The yield in Northeast China is high, and the purchase speed is fast. Due to the shortage of surplus grain and corn in the southern part of China, the temporary purchase of large quantities of corn led to a small increase in corn price again. In August, the average price of feed corn was as high as 2.8 yuan /kg, up 7% year-on-year. In 2020, the price of soybean meal also increased slightly, with the annual average price of 3.4 yuan /kg increasing by 3% year-on-year. Influenced by the international economic and trade environment, the prices of all kinds of feed raw materials are on the increase. The production capacity of live pigs has recovered rapidly, and the demand for protein feed has increased, resulting in a sustained increase in prices. In 2020, the prices of feed raw materials are on the rise.

Problems in the development of feed industry under the background of industrial integration**Accelerated integration of industries and insufficient penetration of industrial chain**

Under the background of industrial integration, the development of feed industry is getting better day by day. When people are faced with some problems, such as accelerating industry integration and insufficient penetration of industrial chain. In recent years, the development of feed industry has been restricted by various factors, such as weather, political environment, international economic environment and so on, which has brought many challenges. The domestic feed industry has made major adjustments to face this challenge, re-integrating the industrial chain within the industry, standardizing production and expanding production scale (Du Kai, 2020). According to China Feed Industry Association, although the output of industrial feed continues to increase in recent years, the number of feed factories is unstable or even declining. Nowadays, the feed industry is in a period of integration, and enterprises with weak viability will be eliminated. Only enterprises with strong operational capability can survive in the industry competition.

At present, the competition in the feed industry is very severe, and the concentration in the industry is constantly increasing under the condition of survival of the fittest. At the same time, in order to cope with the changes in the industrial situation, feed enterprises begin to speed up the adjustment of industrial structure and optimize the layout of industrial chain, so that their development trend will develop in the direction of penetrating the aquaculture industry chain and adopt a win-win development model of multi-enterprise cooperation. However, under such circumstances, there still exists the phenomenon of insufficient industrial chain penetration, and some small and medium-sized enterprises will not be able to survive.

Corn structural shortage, tight supply and demand.

Under the background of industrial integration, many industries have changed, which has a negative impact on the raw material reserves of feed such as corn. The structural shortage of corn is also an important problem for the development of feed enterprises. The decrease of production efficiency caused by tight supply and demand seriously affects the normal development of enterprises. According to the data provided by the Information Center of China's Ministry of Agriculture and Rural Affairs and the National Grain and Oil Information Center, in 2021, China's corn output will be about 265 million tons, a significant increase compared with the previous year. The yield of corn in North China has also increased significantly, but almost all of them belong to colloidal corn, which is mostly used as poultry feed. The powder corn produced in Northeast China is mostly used as pig feed, but the output is not ideal due to the weather, so that the demand exceeds supply.

According to the past practice, the purchase and auction schedule of temporary storage directly determines the market supply.

Feed enterprises purchase according to the cycle but do not hoard a lot, and the price of corn is relatively stable. In recent years, the policy of temporary storage of corn has been reformed, and the market price is directly determined by supply and demand. In order to reduce investment, enterprises generally buy corn on an annual basis, thus increasing the corn inventory.

Innovation ability is not strong, lack of raw material supply chain control ability

Under the background of industrial integration, feed enterprises should first be brave in innovation if they want to achieve development. However, at present, the innovation ability of domestic feed enterprises needs to be improved and the raw material supply chain is unstable, so they cannot fully control the raw material supply chain. At present, there is a lack of new product innovation of feed industrialization in China, and the technology is not strong. The serious homogenization in the market also affects the competitive environment, and it is difficult to maintain the sound development of the industry. There are not a few domestic feed enterprises, but their international competitiveness is very weak, and only a few enterprises have certain international influence. The profitability of feed industry is very small, and it is difficult to produce huge profits, which limits its capital turnover, so that there is not much money for innovative research and development. Nowadays, domestic feed enterprises lack economic strength, which leads them to be unable to fully control the market information, and the update speed of information is slow (Ren Lu, 2020). Nowadays, most feed enterprises still adopt the traditional procurement mode in the process of purchasing activities, and the procurement efficiency is not ideal, but it is also easily grasped by the market, which is greatly affected by market fluctuations, which undoubtedly hinders the development of enterprises and even affects the normal operation of enterprises, and the problem of insufficient purchasing capacity of raw materials is imminent.

The feed safety problem is prominent and the supervision system is not perfect.

Feed safety is a problem worthy of attention of feed enterprises, which is related to the future development of feed enterprises. In recent years, the problems of feed quality and safety emerge one after another, such as bodybuilding pigs, instant chickens and other incidents have hit people's confidence in feed enterprises and breeding enterprises. The main reason for the feed safety problem is that the country has not yet set up a sound and perfect supervision system to strengthen the supervision of feed enterprise production. At present, feed safety has not attracted the attention of relevant departments, and the supervision effect on the production process of products is not effective, and the quality control effect is not good. Safety supervision agencies are somewhat in the form of enterprise safety inspection and the inspection method is relatively simple. They should use various means such as spot check, supervision spot check, unannounced visits and other multiple means to supervise, and timely feedback and solve problems. Some production enterprises fail to control raw materials, use unlicensed raw materials, change raw materials without permission, and add additives outside the regulations, etc., which bring great potential safety hazards to feed safety. The state must pay attention to this and improve the relevant supervision system as the fundamental guarantee of feed safety.

**Strategies to promote the core competence of feed industry under the background of industrial integration
Improve data integration ability and form a complete industrial chain.**

Under the background of industrial integration, the adjustment of industries continues to accelerate, which will lead to some industrial chains being broken, or even unable to connect. In order to solve the problems of accelerating industry integration and insufficient industrial chain penetration, the feed industry must form a complete industrial chain as soon as possible to cope with industrial integration. Nowadays, there are many problems in the industrial chain in which the feed industry is located, among which the structure of profit distribution needs attention, and the cost control should be paid attention to when purchasing raw materials to ensure its own profits. The feed industry chain is complex, which consists of many links such as raw material supply, feed processing and product sales. Feed enterprises also need to innovate in the process of industrial integration, and constantly improve their own industrial chain according to market demand. If feed enterprises want to develop, they must speed up the progress and realize the importance of cooperation. The market competition is fierce, so feed enterprises that have the ability to survive must improve their own management system and make preparations for improving the current industrial chain.

In the future development process, the core competence of the feed industry must be promoted as soon as possible to ensure the prosperity of the industry. The feed industry should proceed from reality, perfect the industrial chain, correctly interpret the market and seize every development opportunity.

Improve product R&D ability and enhance product core competitiveness.

Judging from the current actual situation of feed enterprises, most of the products produced by feed enterprises have the problem of homogenization. The product features are not obvious and similar, which can not highlight the unique position and ability of feed enterprises. Product features can't be brought into full play effectively, and customers' choices are limited. In this case, the development of feed enterprises has been greatly affected.

With the development of science and technology and social progress, enterprises can't get better development without product research and development and innovation. Only by providing unique and personalized products can we gain a firm foothold in the fierce competition and realize the sustainable development of enterprises (Yao Minpu, 2018). For the current feed enterprises, we should maximize the financing channels, ensure sufficient funds, increase the proportion of R&D in the cost, and spend a lot of money on product R&D and innovation. Strengthening market investigation, understanding people's needs and producing agricultural products that meet people's needs to the maximum extent are the survival ways of feed enterprises. Based on this, under the strict market research, it is the inevitable choice for feed enterprises to analyze the market demand accurately, increase the investment in product research and development, and enhance the technical ability of enterprises.

Improve product innovation ability and effectively control raw material supply chain.

Under the background of industrial integration, if an enterprise wants to develop, it should first enhance its own ability, strengthen its control over the raw material supply chain, and protect the development of the enterprise. Industrial integration and development will inevitably bring about the adjustment of industrial structure. Many industries, even important and key industries, will undergo great changes, and some industries will get better development under the background of industrial integration, and their scale will continue to expand. Some industries may disappear in the long history with the development and progress of the times. Under such circumstances, it may adversely affect the completeness and consistency of raw material supply chain in feed industry. If feed enterprises want to develop, they must be able to grasp the market trends, improve their ability to obtain information, improve the detection and early warning of feed raw material trade, ensure that they have the ability to predict risks and deal with them, and improve their viability. The most urgent task for feed enterprises is to strengthen the monitoring and early warning research on the production of feed raw materials such as corn and trade policy, and to raise awareness of this problem from many aspects. Domestic and foreign market trends are equally important and should be paid attention to.

Feed enterprises can guarantee the stability of the domestic market only if they fully understand and have the ability to predict policy changes and raw material production rhythm. Based on this, strengthen market monitoring ability, improve their ability to obtain information and the effectiveness of information to stabilize their own development and ensure market share.

Strengthen product safety supervision and ensure feed quality and safety.

Under the background of industrial integration, the competition among various industries is becoming more and more fierce. In the fierce competition, how to gain a firm foothold, or even get better development, quality clearance is an important foundation and key. Only by ensuring the quality of products can we stand firm in the market competition and calmly deal with industrial integration. As for the feed industry, the quality and safety of feed has always been a key concern of the society, and it is also a major issue related to the survival of enterprises. In recent years, feed quality problems emerge one after another, which to a certain extent has hit some customers' confidence in enterprises and affected the development of enterprises, so this problem must be paid attention to in the future development process. The most fundamental way to solve the problem of feed quality and safety is to strengthen safety supervision. The supervision process should not become a mere formality, but should actually use multiple means to supervise the safety of feed production (Guan Wenchao, 2018).

In order to strengthen safety supervision, first of all, the regulatory authorities should regularly carry out demonstration classes of feed quality and safety management norms, so as to force enterprises to popularize relevant knowledge, help production enterprises to purchase raw materials scientifically and control the quality of products in the whole process of operation. Secondly, the regulatory authorities should strengthen the spot check of illegal drugs in feed safety production, ensure that the spot check coverage is wide enough, and at the same time increase the frequency of spot check, and adopt various means to carry out spot check to ensure the scientific results. Finally, from the point of view of feed enterprises, special supervision departments should also be set up to strictly control the quality of products, pay attention to the treatment of unqualified products and eliminate all potential safety hazards as much as possible

Conclusion

Feed industry, as a bridge between agricultural raw material supply industry and animal husbandry, is a vital link in the industrial chain of agriculture and animal husbandry, which directly affects the development prospects of agriculture and animal husbandry in China. At present, feed industry has gradually become an important pillar industry of China's economy, but it still faces many problems to be solved. Under the background of industrial integration, feed industry should form a complete industrial chain as soon as possible, standardize production, expand production scale and speed up industrial integration. At the same time, China should also be inclined to feed industry in terms of policies, help it get corresponding support in the cultivation and planting technology of feed raw materials, and give scientific support and economic subsidies to areas where feed raw materials are planted, so as to increase the output of feed raw materials and alleviate the shortage of feed raw materials in China. With the support of national policies, the feed industry should improve its technology and control the raw material supply chain, so as to effectively integrate industries and bring greater benefits. China's feed industry should grasp the industrial integration mode, do a good job in the industrial integration development strategy, and take scientific and technological innovation as the driving force to move towards the high-quality development path of feed industry.

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