INDEPENDENT MARKET RESEARCH CHINA'S PIG AND YELLOW-FEATHERED BROILERS BREEDING AND FARMING MARKET STUDY

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Frost & Sullivan
November 2023



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27 November 2023

For and on behalf of

Frost & Sullivan (Beijing) Inc., Shanghai Branch Co.

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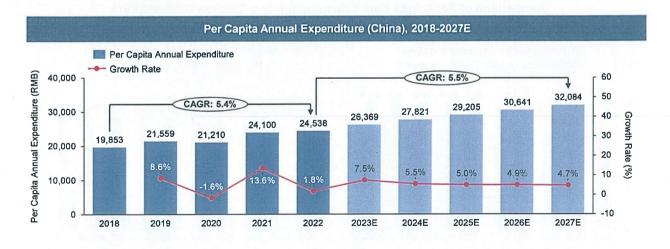
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China's Macro Economy Overview

Per Capita Annual Expenditure



- Associating with the increasing annual disposable income, Chinese per capita annual expenditure increased from RMB19,853 in 2018 to RMB24,538 in 2022. As impacted by the COVID-19, the per capita annual expenditure in China declined slightly by 1.6% in 2020, yet still represented a CAGR of 5.4% from 2018 to 2022.
- As supported by the growing per capita disposable income in the forecast period, the per capita annual expenditure is expected to reach RMB32,084 in 2027, with a CAGR of 5.5% from 2022.

Source: National Bureau of Statistics, IMF (April 2023), Frost & Sullivan

China's Macro Economy Overview

Comparison of Meat Consumption Per Capita



- China has enjoyed rapid economic growth over the past five years. One of the significant changes has been the sustained growth in meat consumption. Along with the improvement of living standard and the increase in meat consumption, Chinese consumers' demand for animal-based protein continues to grow. Despite the impact of the COVID-19 pandemic and African swine fever, China's appetite for overall meat consumption is growing steadily, and the meat consumption momentum is expected to continue as disposable incomes increase
- According to the Organization for Economic Co-operation Development and the Food and Agriculture Organization (OECD-FAO), the major categories of meat consumption in China refers to pig meat (pork), poultry meat (poultry), beef and veal (beef), and sheep meat (multon). Pork and chicken being the two primary sources of animal protein for people in China and having long dominated the meat consumption market. Pork is currently the most consumed meat in China, with approximately 28.5 kilograms per capita in 2022, accounting for 55.7% of total major meat consumption per capita. Poultry is the second most commonly consumed meat, with approximately 15.2 kilograms per capita, occupying 29.7% of total major meat consumption per capita in the same year. The beef consumption per capita expanded with a CAGR of 3.9% from 2018 to 2022, reaching 4.2 kilograms in 2022, with market share increasing from 7.3% in 2018 to 8.2% in 2022. In the future, pork consumption per capita in China is expected to maintain a steady pace, representing a CAGR of 1.6% from 2022 to 2027. By the end of 2027, pork consumption per capita is till expected to account for the largest proportion of 57.7% in terms of meat consumption per capita in China. For the per capita consumption of poultry, beef, and mutton, the figures are expected to reach 14.9, 4.2, and 3.4 kilograms per capita in 2027, respectively, showing a CAGR of -0.4%, Consumption of pounty, beet, and muton, the figures are expected to reach 14.9, 4.2, and 3.4 kilograms per capita in 2027, respectively, showing a CAGR of -0.4% 0.0%, and 0.6% from 2022, respectively.

 Source: National Bureau of Statistics, Organization for Economic Co-operation and Development-Food and Agriculture Organization ("OECD-FAO"). Frost & Sullivan

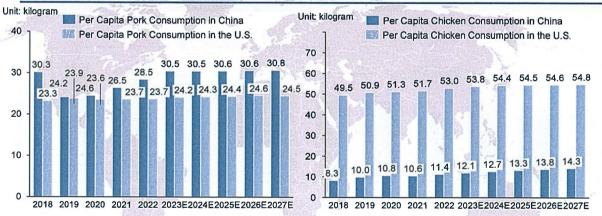
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China's Macro Economy Overview

Comparison of Per Capita Pork Consumption and Chicken Consumption

Comparison of Per Capita Pork Consumption and Chicken Consumption (U.S., China), 2018-2027E



- · Pork has traditionally been the primary meal for Chinese consumers. As one of the most important parts of Chinese meat consumption, per capita pork consumption has maintained relatively stable growth in the past five years. Due to the African Swine Fever, the pork consumption in China temporarily declined in 2019 and gradually recovered in 2020. China's per capita pork consumption has decreased from 30.3 kilograms in 2018 to 28.5 kilograms in 2022, with a CAGR of -1.5%. The CAGR is expected to reach 1.6% in the next five years, with per capita pork consumption of 30.8 kilograms in 2027, mainly as a result of pork being the primary protein source for Chinese consumers and the gradual recovery of pig breeding and farming industry from African Swine Fever. Per capita pork consumption in the U.S. has been increasing steadily from 2018 to 2022, increasing from 23.3 kilograms to 23.7 kilograms.
- Per capita chicken consumption in China reached only 11.4 kilograms in 2022, far less than that of the U.S. However, the per capita chicken consumption in China is expected to have a faster growth, at a CAGR of 4.6% from 2022 to 2027, compared to that of 0.7% in the U.S.

Source: National Bureau of Statistics, OECD-FAO, Frost & Sullivan

China's Macro Economy Overview

Comparison of Per Capita Pork Consumption and Chicken Consumption (Cont.)

• Demand for pork, which is the preferred meat choice among Chinese consumers, shows remarkable resilience in the face of broader economic factors. Pork has enormous significance in Chinese cuisine and culture, which serves as a stabilizing force that mitigates fluctuations in demand due to economic pressures. Furthermore, changes in Chinese consumers' dietary preferences for protein and safe pork products will continue to strengthen the pork industry, which will not only boost demand for pork products but also stabilize pig prices. Looking forward, given that the demand of pigs in the PRC is expected to remain resilient in the future and the supply of pigs is expected to stabilize at a normal level as the impact from African Swine Fever decreases, the average market price of pigs is expected to be steadier compared to that of previous years, with a modest overall increase from 2023 to 2027. This resilience and growth are deeply rooted in the enduring importance of pork in Chinese traditions and the growing consumer preference for protein and safe pork products.

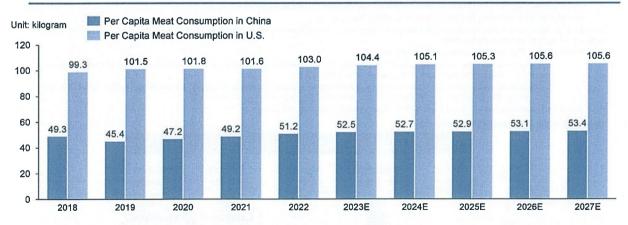
Source: National Bureau of Statistics, OECD-FAO, Frost & Sullivan

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China's Macro Economy Overview Comparison of Per Capita Meat Consumption

Comparison of Per Capita Meat Consumption (China v.s. U.S.), 2018-2027E



- The per capita meat consumption in China maintained a steady growth from 2018 to 2022, increasing from 49.3 kilograms per capita in 2018 to 51.2 kilograms per capita in 2022. The per capita meat consumption in the U.S. represented a CAGR of 0.9% during the same period, rising from 99.3 kilograms per capita in 2018 to 103.0 kilograms per capita in 2022. Compared with the per capita meat consumption in the U.S., the per capita meat consumption in China have relatively lower per capita meat consumption and far less than that of the U.S., which shows great potential in the future.
- From 2022 to 2027, the per capita meat consumption in China is expected to increase from 51.2 kilograms per capita to 53.4 kilograms per capita, showing a CAGR of 0.8%. While, the per capita meat consumption in the U.S. is predicted to increase at a CAGR of 0.5%, reaching 105.6 kilograms per capita by the end of 2027.

Source: OECD-FAO, Frost & Sullivan

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China's Pig Breeding Market Analysis and Competitive Landscape Definition and Classification of Pig Breeding (1/2)

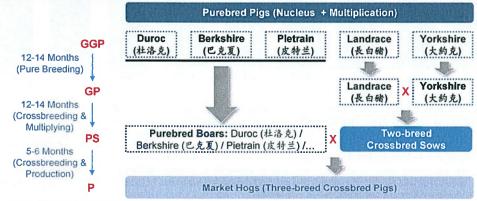
The specialized synthetic pig breeding system includes three main layers, which are GGP, GP and PS.

- Great Grandparent (GGP): the first layer purebred mating pigs in specialized synthetic pig breeding system. GGP can be further divided into Nucleus and Multiplication Groups according to their function in the breeding system.
- · Grand Parent (GP): the second layer purebred mating pigs in specialized synthetic pig breeding system.
- Parent (PS): the third layer in specialized synthetic pig breeding system.

Breeding pigs mainly include purebred pigs and two-breed crossbred sows. Breeding pig resources, also referred to as the "chip" of the pig breeding industry, is the most important aspect for pig breeding.

- Purebred pigs: Pigs bred from parents of the same breed.
 - Nucleus: Pigs with premium specific genetic traits to determine the quality of generations. Nucleus are used for farming and testing in the pig industry to determine the quality of breeding pigs in the breeding system.
 - Multiplication Group: Group of purebred pigs selected from nucleus and responsible for supplying purebred stocks to the downstream, with scale enlarged to support the downstream production of two-breed crossbred sows and market hogs.
- Two-breed crossbred sows: Sows produced by mating or hybridizing two different breeds.

Hybrid Breeding Model of Pig Breeding



Note: Commercial Generation(CG): pigs or chicken bred by parent stocks and used mainly for sale

China's Pig Breeding Market Analysis and Competitive Landscape

Definition and Classification of Pig Breeding (2/2)

- Pig breeding companies focus on finding high-quality genes through introducing high quality GGP and growing GP and Parent-generation pigs. Compared with local breeding pigs, imported purebred pigs have better performance in reproductive ability, feed conversion ratio and growth speed, Species of breeding pigs imported by China mainly contain Yorkshire (大约克), Duroc (社洛克), Landrace (长白猪), Berkshire (巴克夏), Pietrain (皮特兰), etc.
- · It is most popular and commercially valuable to adopt crossbred sows in China's pig breeding market.

99	S EN			
Landrace (長白豬)	Duroc (杜洛克)	Yorkshire (大約克)	Berkshire (巴克夏)	Pietrain (皮特兰)
58%-63%	~62%	60%-65%	~55%	65%-67%
~10	~9	11-15	10.2	~10
1.4-1.5	1.8	1.5	1.3	1.3
	(長白豬)	(長白豬) (杜洛克)	(長白豬) (杜洛克) 58%-63% ~62% 60%-65% ~10 ~9 11-15	(長白豬) (社洛克) (大約克) (巴克夏) 58%-63% ~62% 60%-65% ~55% ~10 ~9 11-15 10.2

Source: Frost & Sullivan

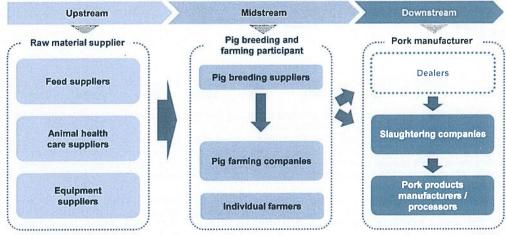
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China's Pig Breeding Market Analysis and Competitive Landscape Industry Value Chain

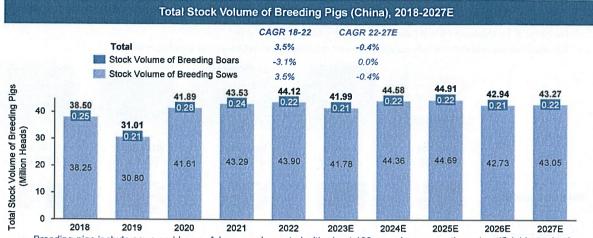
- The upstream of the pig industry consists of raw material suppliers, such as feed suppliers, animal health care suppliers, and equipment suppliers, etc.
- The midstream of pig industry consists of pig breeding suppliers and pig farming participants.
- The downstream of pig industry mainly includes slaughtering companies, dealers and pork products manufacturers / processors. Pig dealers are generally self-employed individuals, intermediaries between breeding enterprises and farmers and butchers. It is the industry norm that breeding enterprises and farmers sell most of their market hogs and market piglets to pig dealers.
- For pig breeding and farming companies, entering slaughtering and pork product manufacturing industry can help them decrease part
 of the risks caused by price fluctuations and food quality, since these companies have strong command of raw materials. Secondly, it
 can help them save part of raw material costs as well as transportation costs of live pigs. Thirdly, it can expand the influence of these
 companies, and then expand their market shares.



Note: Scaled pla farms (# # 4 MA) refer to those with an annual output of over 500 heads

China's Pig Breeding Market Analysis and Competitive Landscape

Total Stock Volume of Breeding Pigs

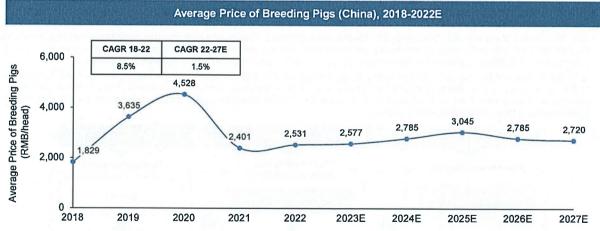


- Breeding pigs include sows and boars. A boar can be mated with about 180 sows in average through artificial insemination; therefore, breeding sows make up the vast majority of breeding pigs, accounting for more than 99%.
- From 2018 to 2019, the total stock volume of breeding pigs in China experienced decline due to the outbreak of African Swine Fever (the "ASF") in China over the period from August 2018 to July 2019. The figure bounced to 44.12 million heads in 2022, with a CAGR of 3.5% from 2018 to 2022. In 2020, due to strong demand of pigs from downstream industries and lack of purebred and two-breed crossbred breeding pig supply, some producers used three-breed crossbred sows with low breeding efficiency for breeding, resulting in high feed conversion and low PSY. In 2021, the lack of breeding pigs has been notably mitigated.
- In the future, it is estimated that the total stock volume of breeding pigs will experience mild fluctuation and reach 43.27 million heads in 2027, representing a CAGR of -0.4% from 2022 to 2027. Source: Ministry of Agriculture and Rural Affairs of the PRC, Frost & Sullivan

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China's Pig Breeding Market Analysis and Competitive Landscape Average Price of Breeding Pigs



- The "Pig Cycle" refers to the cyclical pork price change affected by the mismatch of demand and supply of pigs. A full pig cycle
 usually lasts for around four to five years in China historically.
- The price of breeding pigs mainly depends on the pigs' breed, weight and the supply and demand, and it can be affected by the pig cycle as well. In 2019 and 2020, the supply of breeding pigs declined sharply because of the outbreak of African Swine Fever (the "ASF"); therefore, the average price of breeding pigs increased dramatically from RMB1,829 per head in 2018 to RMB4,528 per head in 2020. After the supply of breeding pigs recovered in 2021, the price fell to RMB2,401 per head, remained stable and reached RMB2,531 per head in 2022.
- In the future, as the scaled pig farming and breeding is further developed, the pig cycle is expected to become smoother, resulting
 in a more moderate pig price fluctuations. It is estimated that the average price of breeding pigs has reached the periodic peak
 point in 2020, and it is expected to reach approximately RMB2,720 per head in 2027, with a CAGR of approximately 1.5% from
 2022 to 2027.

China's Pig Breeding Market Analysis and Competitive Landscape

Ranking and Market Share of Breeding Pig Providers in the PRC

Top Ten Breeding Pig Providers in terms of Sales Volume of Breeding Pigs (China), 2022

Ranking	Breeding pig providers	Sales volume of breeding pigs (thousand)	Market share (%)
1	Muyuan Foods Co. Ltd.	346.0	5.6%
2	Company K	104.0	1.7%
3	Company F	100.0	1.6%
4	Company E	97.3	1.6%
5	Company L	80.0	1.3%
6	Company J	64.0	1.0%
7	Company M	60,0	1.0%
8	Company N	54.7	0,9%
9	Company I	52.0	0.8%
10	The Group	32.6	0.5%
	Top ten	990.6	16.0%
	Total	6,176.7	100.0%

- Company K is a Hong Kong listed company headquartered in Beijing. It mainly provides breeding pigs, market hogs, pork, and feeds.

 Company F is a private company headquartered in Beijing. It mainly provides
- breeding pigs, market hogs, poultry, and feeds.
 Company E is a private company headquartered in Guangxi, It mainly raising and providing breeding pigs and market hogs.

- and providing breeding pigs and market hogs.

 Company L is an A-share listed company headquartered in Sichuan. It mainly provides breeding pigs, market hogs, and feeds.

 Company J is an A-share listed company headquartered in Fujian. It mainly provides breeding pigs, market hogs, pork, and feeds.

 Company M is a private company headquartered in Sichuan. It mainly raising and providing breeding pigs and market hogs.
- Company N is a private company headquartered in Sichuan, It mainly provides breeding pigs, market hogs, poultry, and feeds.

 Company I is an A-share listed company headquartered in Beijing, It mainly
- providing feeds, breeding pigs and market hogs.
- It's an industry norm that some large-scaled pig breeding companies adopt "Company-Farming Mode", which means some breeding pigs are only used internally and can not be calculated as a part of sales volume. For leading breeding pig providers, the majority of breeding stock is used internally so as to maintain the cultivation of market hogs. Therefore, China's pig breeding market is highly fragmented in terms of sales volume for external sales.
- In 2022, the Group was one of the leading breeding pig providers in China and ranked tenth, with a sales volume of 32.6 thousand breeding pigs.
- The Group is a leading pig supplier in terms of stock of great grandparent nucleus herd and genetic material in the PRC

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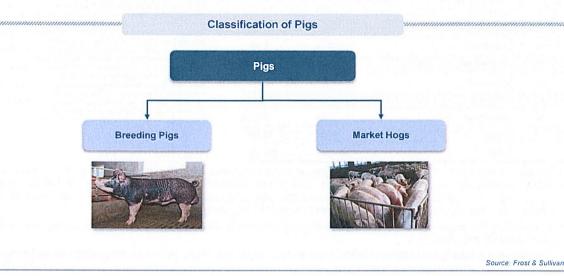
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China's Pig Farming Market Analysis and Competitive Landscape Definition and Classification of Pigs

Pigs can be divided into two main categories by purpose: breeding pigs and market hogs.

- Breeding pig refers to male (breeding boar) and female (breeding sow) pigs exclusively for breeding purposes. Breeding pig candidates that are not later sold as breeding pigs will be sold as market hogs.
- Market hogs (including market piglets) are pigs primarily held for trading and production of pork products, with market piglets being small market hogs weighing between six to 25 kilograms.



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China's Pig Farming Market Analysis and Competitive Landscape Major Pig Farming Patterns

China's pig farming pattern mainly includes individual farming (紫芹椒茶) and scaled farming (线紧茶油) which can be further divided into "Company Farming" and "Company + Farmers". At present, China is still dominated by individual farming, while scaled farming is expected to gradually become the mainstream in the long run. Compared with individual farming, scaled farming is easier to get through the whole industrial chain of farming and has stronger bargaining power over the upstream and downstream. Meanwhile, it is easier to apply high-end technology and scientific management system, so as to obtain scale effect. In 2022, the output volume of scaled farms with an annual output of over 500 heads accounted for approximately 60.8% of the total output volume. The scale rate is expected to increase further to approximately 67.0% in 2027. As the market share of scaled farms increases, Frost & Sullivan expects potentially milder pig cycles ahead,

Comparison of Major Pig Farming Patterns

Company Farming (公司自答) Company + Farmers (公司+家庭夏場) Individual Farming (展戶散基) Company provides piglets, feed, vaccines, etc., while farmers raise Company builds farming base and Individual farmers use their own labor employs labor force to carry out and production areas to carry out Definition small-scale farming and are responsible for all aspects of the scaled farming, and is responsible for pigs and ensure required standard of breeding, fattening and other related farming. The finished plgs or finishers (有成績) are uniformly recycled and farming process sold by the company Strong upstream cost control ability Easy to scale up Relatively low capital requirements Scientific management system and Scientific management system and Advantage prevention unified epidemic unified epidemic standards standards Relatively low capital requirements Relatively high capital requirements Require a scientific and accurate Low cost control ability cooperative model with farmers and Low epidemic prevention level Disadvantage management system

China's Pig Farming Market Analysis and Competitive Landscape

Major Model of "Company + Farmers"

- The scaled farming model of "Company + Farmers" can be further divided into "Company + Piglet Fattening Farm" and "Company + Sow Breeding and Fattening Farm" according to the type of pigs the Company provides to farmers
- "Company + Sow Breeding and Fattening Farm" model is the unique model pioneered and successfully promoted on a large scale by the Group in the domestic pig farming industry

Comparison of Major Model of "Company + Farmers"

Company + Piglet Fattening Farm (The No.1 Family Farm Model)

Company + Sow Breeding and Fattening Farm (The No.2 Family Farm Model)

Definition

- Company provide farmers with weaned piglets that cannot be cultivated as breeding stock, feed, vaccines and drugs. The farmers fatten the pigs and return the finished pigs to the company for an agreed fee.
- Company provide farmers with sows, feed, vaccines and drugs when the farmer reaches the standard of the company.
- Farmers are responsible for raising the sows they receive from the company, as well as producing weaned piglets that are fattened either in the No. 2 Family Farm or nearby No. 1 Family

- Advantage
- Scientific management system and unified epidemic prevention standards
- Relatively low capital requirements
- Less capital intensive and more scalable
- Stronger profitability
- More conducive to the prevention and control of animal diseases and the protection of the biological assets of crossbred sows Higher entry barriers with a more comprehensive training
- program for farm owners, which enables farm owners to master more professional farming technologies
- Generate higher and more stable income for farm owners and therefore providing stronger incentives with qualified farmers

Disadvantage

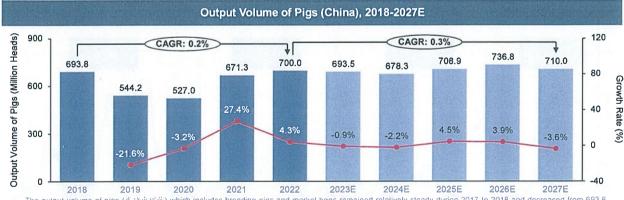
- Higher production cost including land, labor, and electricity costs compared to "Company + Sow Breeding Farm" model
- Require a more scientific and accurate cooperative model with farmers and management system

Source: Frost & Sullivan

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China's Pig Farming Market Analysis and Competitive Landscape **Output Volume of Pigs**



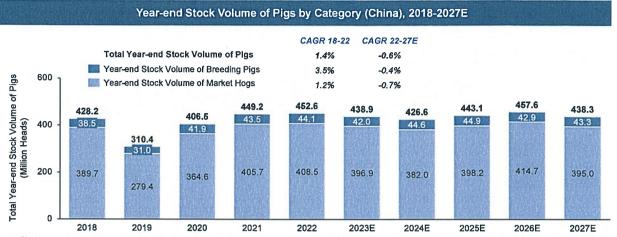
- The output volume of pigs (生態電影) which includes breeding pigs and market hogs remained relatively steady during 2017 to 2018 and decreased from 693.8 million heads in 2018 to 527.0 million heads in 2020, mainly due to the outbreak of the ASF in the PRC since late 2018. As the consumer demand for pigs is strong in China, the output volume of pigs strongly recovered in 2021 as the impact of African Swine Fever gradually faded and more pig farming companies expanded on a larger scale. The output volume of pigs is anticipated to increase to 710.0 million heads in 2027, representing a CAGR of 0.3% from 2022.
- The total sales volume of hogs is closely related to the number of breeding pigs, especially sows. Considering the breeding cycle of pigs which is approximately six months, the total sales volume of market hogs can be roughly predicted from the volume of sows six months prior.

 The pig farming market in China is highly fragmented, where the output volume of scaled farms with an annual output of over 500 heads only accounted for
- approximately 60,8% of the total output volume in 2022, as compared with over 97.0% in the United States. Looking into the future, the market consolidation is expected to accelerate, as the PRC government has made food safety and quality policies a top priority and had continued to adopt and enforce more stringent industry standards for pig production. This will benefit large-scale enterprises with strong core competitiveness. The output volume of scaled farms with an annual output of over 500 heads is expected to account for approximately 67,0% of the total output volume in 2027
- Furthermore, the government imposed restrictions on the transport of pigs to prevent and control the African Swine Fever, resulting in an imbalance between the Furthermore, the government imposed restrictions on the transport of pigs to prevent and control the African Swine Fever, resulting in an imbalance between the supply and demand of pigs among regions. The major pig producing provinces in China include Sichuan, Hunan, Henan, Yunnan and Shandong, of which the total output volume of pigs was 56.1 million heads, 46.6 million heads, 43.1 million heads, 34.5 million heads, and 33.4 million heads, respectively, in 2020, Comparatively, the major pork consumption provinces in China include Chongqing, Sichuan, Guangdong, Jiangxi and Yunnan, of which the per capita pork consumption was 29.9 kilograms, 28.0 kilograms, 26.0 kilograms, 24.9 kilograms, and 24.7 kilograms, respectively, in 2020.

 Source: National Bureau of Statistics, Frost & Sullive

ce: National Bureau of Statistics, Frost & Sullivan

China's Pig Farming Market Analysis and Competitive Landscape Stock Volume of Pigs



- Similar to the output volume of pigs, the stock volume of pigs (生结存概量) in China significantly dropped in 2019 due to the
 outbreak of ASF. Under the promotion of the market demand and favorable policy, the whole industry resumed production actively,
 and the year-end stock volume of pigs rose enormously to 452.6 million heads by the end of 2022.
- Looking into the future, with the improvement of scientific and scaled breeding and farming, the stock volume of pigs is expected to remain stable in line with the output volume of pigs. The stock volume of pigs is anticipated to slightly decrease to 438.3 million heads in 2027, representing a CAGR of -0.6% from 2022.
- From 2019 to 2021, the stocks of pigs in China had gradually recovered from the fall in 2019 as a result of Africa Swine Fever, and the lagging effect of restocking pigs led to a persistent shortage of pigs in the market, as it takes time for restocking pigs to grow up.

Source: National Bureau of Statistics, Ministry of Agriculture and Rural Affairs of the PRC, Frost & Sullivan

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China's Pig Farming Market Analysis and Competitive Landscape Historical Pig Cycle



*The average monthly market prices of pigs from November to December 2023 are estimated

 China has undergone a total of four pig cycles to date: the first cycle lasted from 2006 to 2009, the second cycle spanned from 2009 to 2014, the third cycle covered the years from 2014 to 2018, and we are currently in the midst of the fourth cycle, which began in 2018 and continues to the present.

Source: Chinaswine.com (中国注册序编列), Frost & Sullivan

China's Pig Farming Market Analysis and Competitive Landscape Average Monthly Market Price of Pigs



*The average monthly market prices of pigs from November to December 2023 are estimated

- The pig cycle follows the rule: park price increases number of breeding sows increases market hogs' supply increases park price decreases number of breeding sows decreases market hogs' supply decreases park price increases. Obviously, when park price increases, more farmers are willing to raise more pigs and, accordingly, increases the supply of market hogs, so the increase of market ise pork price to go down
- hogs' supply will cause pork price to go down.
 The price of pork is determined by the price of pigs. Accordingly, in 2019, the monthly average pig price rose rapidly in the face of a sharp decline in pig production due to African Swine Fever, as well as relatively stable downstream demand. In 2019, the average pig price reached RMB21 9 per kilogram. Entering 2020, the average pig price fluctuated at a higher level, with an average price of RMB341 per kilogram. The naverage price of pigs generally decreased in 2021 as compared with that in 2020 due to relatively high average price in 2020 driven by the shortage of pigs in 2020 as a result of the outbreak of African Swine Fever. Starting in 2022, the monthly average pig price recovered and increased to RMB202 per kilogram in December 2022. With the effective prevention and control of African Swine Fever, the output volume of pigs recovered in 2021 and 2022, resulting in lower average market prices of pig of RMB203 per kilogram in 2021 and RMB167. per kilogram in 2022. The decline in pig prices form January to May 2023 can be primarily attributed to the interplay of supply and demand factors, influenced by the cyclical nature of the pig industry and weaker post-Lunar New Year demand. However, as the pig supply gradually stabilizes and the demand of side is strengthened by the growing central fore proving central fore, there is an anticipation of a rebound in pig prices during the second half of 2023. Looking forward, given that the demand of pigs in the PRC is expected to be stable in the future and the impact from African Swine Fever has decreased, the supply of pigs is expected to return to a normal level. In the future, with the further development of scaled pig farming and breeding and the increasing concentration of the industry, the operation of pig farms will become more mature, the level of disease prevention and farm management will be improved, and pig farming companies are expected to be relative to temporary supply and demand fluctuations. Therefore, t nce to go down.

 deby the price of pigs. Accordingly, in 2019, the monthly average pig price rose rapidly in the face of a sharp decline in pig production due to African Swine Fever, as v The price of pork is determine

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China's Pig Farming Market Analysis and Competitive Landscape Average Monthly Market Price of Pigs (Cont.)

- From January 2021 to September 2021, the monthly average pig price declined from RMB35.8 per kilogram to RMB12.8 per kilogram. Starting in 2022, the monthly average pig price recovered and rose to RMB20.2 per kilogram in December 2022. This is because, at the beginning of 2022, the pig market follows the trend of 2021 and pig prices continue to fall. The increase in the demand and the price of pigs (including sows and market hogs) in the second half of 2022 is due to farmers' expectation that pork prices will increase in 2023. As a result, farmers increased the number of sows and market pigs were raised above normal, causing pig prices to rise in the second half of 2022. With too many sows and pigs raised by the end of 2022, pig prices and the number of pigs raised (including sows and market hogs) are expected to enter the downward phase of the pig cycle in 2023. The annual average price of pigs was RMB20.3 per kilogram and RMB18.7 per kilogram in 2021 and 2022, respectively
- Fluctuation in the average market price of pigs is correlated with the pig cycle. With the further development of scaled pig farming and breeding in the future, the pig cycle is expected to gradually smooth out and the output volume and stock volume of pigs will be more stable, resulting in more moderate fluctuations in pig prices. Looking forward, as the demand of pigs in the PRC is expected to be stable in the future, and the decreasing impact from the African Swine Fever impact, the supply of pigs are expected to recover to the normal year level. In the future, with the further development of scaled pig farming and breeding, the pig cycle is expected to become smoother, and the average market price of pigs as well as sales volumes is expected to be more steadily compared to that of the previous years, with a modest overall increase from 2022 to 2026.
- The average selling prices of breeding pigs, market hogs and market piglets generally decreased in 2021 as compared with those in 2020 due to relatively high average selling prices in 2020 driven by (i) the shortage of market hogs and breeding pigs in 2020 caused by the outbreak of African Swine Fever.
- The price of market hogs is influenced by various factors, including regional demand and supply, the quality of the market hogs, the market channels through which they are sold, and can be affected by the pig cycle as well.
- The pork price is highly correlated with the price of pigs. Similarly in 2019, the monthly average pork price rose rapidly in the face of a sharp decline in pig production due to African Swine Fever, as well as relatively stable downstream demand. In 2019, the average pork price reached RMB31.4 per kilogram. Entering 2020, the average pork price fluctuated at a higher level, with the average price of RMB47.9 per kilogram, much higher than the past three pig cycles since 2006. From January 2021 to October 2021, the monthly average pork price declined from RMB51.4 per kilogram to RMB19.7 per kilogram. Starting in 2022, the monthly average pork price recovered and increased to RMB30.2 per kilogram in December 2022.
- Looking forward, as the demand of pork in the PRC is expected to be stable in the future, and the decreasing impact from the African Swine Fever impact, the supply and price of pork are expected to recover to the normal year level.

Source: Chinaswine.com (中居任何景运制), Frost & Sullivan

China's Pig Farming Market Analysis and Competitive Landscape Average Monthly Market Price of Pigs (Cont.)

- Subsequent to 31 May 2023, as the pig supply gradually stabilizes and market confidence is strengthened by the growing central
 frozen pork reserves, there is an anticipation of a rebound in pig prices during the second half of 2023,
- The market prices of pigs and poultry are subject to cyclical fluctuations which are driven by various factors, including supply and demand and the outbreak of animal diseases such as African Swine Fever, according to Frost & Sullivan.
- The Company's average selling prices of pigs fluctuated with the market prices during June, July and first two weeks of August in 2023.
- During the Track Record Period and up to the Latest Practicable Date, the pig and poultry markets had witnessed significant price fluctuations.
- The market price for pigs in June, July, August and September 2023 experienced moderate price fluctuations, and the average pig prices during this period were RMB14.2 per kilogram, RMB14.3 per kilogram, RMB17.3 per kilogram and RMB16.8 per kilogram, respectively, of which the average pig prices for August and September 2023 were higher than the average market price of pigs in the amount of RMB15.0 per kilogram for January to May 2023.
- Subsequently, the fluctuation of the pig cycle and the growing central pork reserves in mid-July 2023 stabilized the market prices, which helped to achieve a more balanced supply-demand relationship in the market. Consequently, the average pig prices have shown an upward trend since the end of July 2023 following the stabilization of the pig supply in the market.
- As the average monthly sales volume of the Company's pigs in June and July of 2023 was relatively stable as compared with the
 average monthly sales volume for the period from January to May 2023 and the market price of pigs was slightly lower in June and
 July 2023 as compared with the period from January to May 2023 and only started to rise at the end of July 2023.
- . The demand for pork will increase during the holiday season in the second half of 2023.
- · June and July 2023 is rainy season in China.
- · Accordingly, the average pig price in September 2023 increased to RMB16.8 per kilogram.
- The average selling prices for the Group's pigs generally fluctuated with the market prices of pigs from January to September in 2023.

Source: Chinaswine.com (中岛世紀 (中岛世紀), Frost & Sullivan

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China's Pig Farming Market Analysis and Competitive Landscape Market Drivers

	Major Drivers	Impact (1-2 years)	Impact (3-5 years)	
Improved operationa	al efficiency	Medium	High	
Stable downstream of	demand	High	Medium	
Supportive governme	ent policy	High	High	MARKET DRIVERS
Major Driver		Description		
Stable downstream demand	consumer of pork. Pork has a long-stand traditional Chinese dishes, Cultural factors one of the most important protein source for meat consumption of Chinese residents r consumption, With the improvement of pec	ing cultural significance in Chinese will thus continue to play a significa or Chinese people, ensuring stable dinainly includes pork, chicken, beef ple's living standard, and the improviouslural atlachment to pork, Chinese cultural atlachment to pork, Chinese	cuisine and fradition int role in dietary cho ownstream demand f and mutton, among rement of dietary stru	to increase steadily. China is world's larges and continues to be a staple meal in mam ices of Chinese consumers. Therefore, pork is or the upstream pig farming industry. The daily which pork is the most important variety or cuture, people's demand for animal-based foor ng awareness of healthy eating habits will lead and the control of the co

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China's Pig Farming Market Analysis and Competitive Landscape Market Trends

Rising market concentration

The market concentration of pig farming industry in China has increased rapidly in the past few years but the concentration level is still quite low. In terms of pig sales value, the CR10 of Chinese pig farming companies has grown rapidly from 8.0% in 2018 to 18.0% in 2022, while the United States has reached about 50.6% in 2022, which indicates that there is still ample room for leading enterprises to increase their market share in China.

In the coming years, with the rise of labor costs and the subsequent influence of African Swine Fever, the gap between the economy of individual farmers and scaled pig farming companies as well as the output efficiency has gradually widened, scaled pig farming companies with advanced technology are expected to rapidly and continuously expand their market share with the relatively low cost and advanced technology.

More scientific operations and management

business operation makes it possible for scaled pig farming companies in China to adopt more scientific operation and to improve the efficiency and profitability. In the meantime, these pig farming companies are investing more resources in research and development on cutting-edge technologies and methods, which will allow pig farming significantly companies to optimize their operations.

The intelligent management of pig farm is expected to provide more comprehensive data and technical support for all participants, such as the government, pig farming companies, and helps to improve operational efficiency from more aspects.

Consumer demand for safe and high quality products

Food safety and quality has become one of the most important factors for Chinese consumers' deciding on food. The pork industry in the PRC has experienced significant issues related to food safety, such as the use of clenbuterol hydrochloride (clenbuterol) in pig production by certain industry participants.

Currently, pig farms are using new technology and applying more reasonable management methods in their daily operation. For example, using traceable ear tags enables consumers to track the growth stages of pigs and better ensure the safety of the meat they purchase. The improved application of technology for food safety will drive the industry to pursue safer products and attain higher margins.

Stricter environment regulation compliance requirement.

In recent years, the PRC Government has stepped up enforcement of environmental laws and regulations such as the Environmental Protection Law, the Administrative Measures on the Prevention and Cure of Pollution Caused by Breeding of Livestock and Poultry, the Regulations on the Prevention and Control of Pollution from Large-scale Breeding of Livestock and Poultry and the Action Plan to Control Water Pollution which have led to either reconstruction or closing down a large number of small-scale market pig farming companies in the country. For example, in 2019, the State Council issued Opinions on Stabilizing Hog Production and Promoting Transformation and Upgrading, which regulated a series of hog production requirements.

Future Outlook

Source: Frost & Sullivan

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China's Pig Farming Market Analysis and Competitive Landscape Entry Barriers

Entry Barriers

Technical barriers

Sales channel

Talent barriers

Initial capital investment

Feeding Environmental

- With the development of pig farming industry from traditional and scattered mode to modern and scaled mode, the level of profitability has gradually become more important in competing with other pig providers. The economic benefit depends on the efficiency of breeding and farming management, animal nutrition, biological health, production management piggery construction, etc. Building a scaled pig farming can efficiently minimize costs and resist market risks, while it requires a high and strict technical level.
- A stable sales channel is an important force for the development of an enterprise. The
 comprehensive strength of an enterprise in the breadth and depth of sales channels, the efficiency
 and strength of sales channels, the service ability of sales channels and other aspects directly
 determines the development and competitiveness of scaled pig farming companies.
- Scaled farming needs to utilize many professional technology in the process such as the breeding, feeding, epidemic prevention, etc., therefore, scaled farming especially needs a large number of experienced technical personnel and management personnel who are specialized in breeding and disease prevention. A scaled pig farming company can only function well through systematic coordination and collaboration of various talents. The cultivation of technical personnel and the accumulation of experience need a long time, so there are certain talent barriers for new entrants.
- It is crucial for new entrants to have sufficient capital for the construction of production sites, the
 purchase of production equipment and the establishment of epidemic prevention system, etc. For
 players who want to achieve sizable scales in pig farming market, sufficient set-up capital is
 necessary, which sets a barrier for new entrants.
- Epidemic prevention is a key part of pig farming, and scaled pig farming companies have higher requirements on the feeding environment. The pig farming location is generally required to be an area with high terrain, good isolation conditions, minimal surrounding personnel activities and minimal pollution sources. For scaled pig farming companies, it is required that the pig farming site has a large environment that can bear the load.

China's Pig Farming Market Analysis and Competitive Landscape

Ranking and Market Share of China's Pig Providers (IO)

Top Ten Pig Providers in Terms of Sales Value (China), 2022

Ranking	Pig providers	Sales value of pigs (RMB billion)	Market share (%)
1	Muyuan Foods Co., Ltd.	119.7	9.1%
2	Company B	42.6	3.2%
3	Company C	22.4	1.7%
4	Company D	21.0	1.6%
5	Company E	12.5	1.0%
6	The Group	11.7	0.9%
7	Company F	11.1	0.8%
8	Jiangxi Zhengbang Technology Co., Ltd.	8.6	0.7%
9	Tech-Bank Food Co., Ltd.	6.9	0.5%
10	Company I	5.5	0.4%
	Top ten	262.0	19.9%
	Total	1,311.1	100.0%

- Proceedings of the Group's data is provided by the Group

 The Group's data is provided by the Group

 Company B is an A-share listed company headquartered in Guangdong. It focuses on livestock raising and food processing.

 Company C is an A-share listed company headquartered in Sichuan, It mainly provides breeding pigs, market hogs, poultry, and feeds.

 Company D is a private company headquartered in Jiangxi. It mainly focusing on feeds, live pig breeding and raising.

 Company E is a private company headquartered in Guangxi. It mainly raising and providing breeding pigs and market hogs.

 Company F is a subsidiary of a Hong Kong-listed company headquartered in Thailand. It mainly provides breeding pigs, market hogs and feeds.

 Company I is an A-share listed company headquartered in Beijing. It mainly provides breeding pigs, market hogs and feeds.
- China's pig farming market is highly fragmented. The top ten players accounted for aggregate market share of 19,9% in terms of the sales value of pigs in 2022.
- The Group ranked sixth among all pig suppliers in China in terms of sales volume of pigs in 2022.

Source: Frost & Sullivan

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China's Pig Farming Market Analysis and Competitive Landscape

Ranking and Market Share of China's Pig Providers (IO)

Top Ten Pig Providers in Terms of Sales Volume (China), 2022

Ranking	Pig providers	Sales volume of pigs (million heads)	Market share (%)	CAGR 20-22 (%)
1	Muyuan Foods Co., Ltd.	53.8	7.7%	72.4%
2	Company B	17.9	2.6%	37.0%
3	Company C	12.2	1.7%	32.8%
4	Company D	9,3	1.3%	33,9%
5	Jiangxi Zhengbang Technology Co., Ltd.	8.4	1.2%	-6.0%
6	The Group	5.4	0.8%	99.1%
7	Company J	5.2	0.7%	96.3%
8	Company F	5,1	0.7%	31.0%
9	Company E	4.8	0.7%	49.9%
10	Tech-Bank Food Co., Ltd.	4.4	0.6%	19.9%
	Top ten	126.5	18.0%	
	Total	700.0	100.0%	

- The Group's data is provided by the Group
- headquartered in Fujian. It mainly provides breeding pigs, market hogs, pork, and feeds
- China's pig farming market is highly fragmented. The top ten players accounted for aggregate market share of 18.0% in terms of the sales volume of pigs in 2022.
- · The Group ranked sixth among all pig suppliers in China in terms of sales volume of pigs in 2022.
- · The Group ranked first in terms of CAGR 2020 to 2022 of sales volume of pigs among the top ten enterprises.

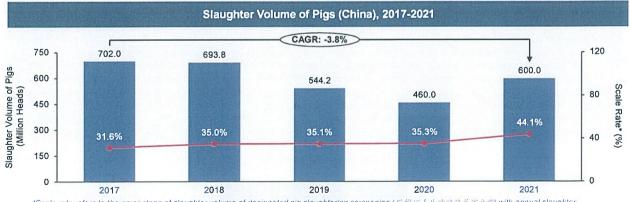
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China's Pig Slaughtering and Pork Processing Market Analysis Slaughter Volume of Pigs



*Scale rate refers to the percentage of slaughter volume of designated pig slaughtering companies (形長塚玉美鈴文為海季企業) with annual slaughter volume above 20,000 to the total pig slaughter volume.

- Highly correlated to the output volume of pigs, the slaughter volume of pigs (生緒海等堂) in China was also negatively impacted by the ASF and environmental protection restriction since 2019. Under the promotion of the market demand and favorable policy, the whole industry resumed production actively, and the slaughter volume of pigs rose enormously from 460.0 million heads in 2020 to 600.0 million heads in 2021.
- The scale rate of pig slaughtering market has also grown continuously and increased from 31.6% in 2017 to 44.1% in 2021. Looking into the future, with the improvement of production technology and scale efficiency, the scale rate of the pig slaughtering market is anticipated to further increase to approximately 56.0% in 2026.
- China's pig slaughtering market is highly fragmented. The top three players accounted for an aggregate market share of approximately 5.0% in terms of slaughter volume of pigs in 2021.

Source: United States Department of Agriculture ("USDA"), Ministry of Agriculture and Rural Affairs of the People's Republic of China

China's Pig Slaughtering and Pork Processing Market Analysis Business Coverage of Pig Providers

Business Coverage of the Top Ten Pig Providers in Terms of Pig Sales Value (China), first three quarters of 2022

Ranking	Pig providers	Feed Processing	Pig Breeding	Pig Farming	Pig Slaughtering	Pork Processing
1	Muyuan Foods Co., Ltd.	•	•	•	•	•
2	Wens Foodstuff Group Co., Ltd.	•	•	•	•	•
3	The Twins (Group) Co., Ltd.	•	•	•	•	•
4	NEW Hope Liuhe Co., Ltd	•	•	•	•	•
5	Jiangxi Zhengbang Technology Co., Ltd.	•	•	•	0	0
6	The Group	•	•	•	0	0
7	Fujian Aonong Biological Technology Group Incorporation Limited	•	•	•	o	0
8	Tech-Bank Food Co., Ltd.	•	•	•	•	•
9	GUANG XI YANG XIANG CO.,LTD	•	•	•	0	O
10	Tecon Biology Co., Ltd	•	•	•	0	•

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- represents that the company has the corresponding businesses, while O represents that the company doesn't have the corresponding business.
- In 2022, six out of ten top pig providers in terms of pig sales volume have business coverage in upper, middle
 and lower reaches of the value chain including feed processing, pig breeding, pig farming, pig slaughtering and
 pork processing.
- Such business model of the value chain integration can put all production under control and help the company
 gather competitive advantages in food safety, epidemic prevention and control, environmental protection
 operation, quality control, large-scale operation, cost control, etc., as well as achieve higher margins via industrial
 chain extension to pork deep processing.

Source: Frost & Sullivan

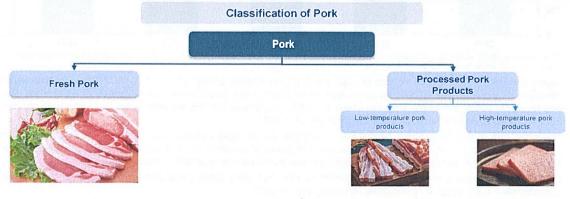
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China's Pig Slaughtering and Pork Processing Market Analysis Definition and Classification of Pork

- Pork is the culinary name for the meat of pig and is the most commonly consumed meat in China. Pork can be processed into fresh pork (生 維佛内) and processed pork products (维内双品).
- Fresh pork consists of uncured pork in three main categories according to the storage temperature after slaughtering, namely warm fresh pork, chilled fresh pork and frozen pork.
 - Warm fresh pork: raw pork that is sold directly to the market without undergoing a cooling process after being slaughtered.
 - Chilled fresh pork: raw pork that has undergone cooling process and is stored at temperatures of approximately 0°C to 4°C.
 - ✓ Frozen pork: raw pork that has undergone processing and been frozen to -30°C, and is stored at temperatures of approximately -18°C.
- Processed pork products are processed pork with additives and have different texture from fresh pork. Processed pork products can be
 divided into high temperature pork products and low temperature pork products.
 - √ High temperature pork products: semi-finished pork products whose center temperature reaches 115°C-121°C when being processed.
 - ✓ Low temperature pork products: cooked pork products whose center temperature reaches 72°C-85°C when being processed



China's Pig Slaughtering and Pork Processing Market Analysis Supply and Demand of Pork





- Pork has traditionally been the primary meat for Chinese consumers. As of 2022, China was the world's largest pork production and consumption country, accounting for 48,4% and 51.0% of world's pork production and consumption.
- In late 2018, the ASF outbroke in China, and the pork production declined sharply by 21,3% to 42.6 million tonnes in 2019, and hit record low to 41.1 million tonnes in 2020. In the heat of the ASF, local governments in certain regions implemented policies to regulate prices and guarantee supply. In 2021, as the ASF was well controlled, the production volume of pork recovered to 53.0 million tonnes and increased slightly to 55.4 million tonnes in 2022, with a CAGR of 0.6% from 2018 to 2022, In the future, due to the robust slaughter and consumption stimulation, pork production volume is expected to increase to 56.8 million tonnes in 2027, with a CAGR of 0.5% from 2022.
- The apparent consumption volume of pork equals to domestic pork production volume add imported pork volume and minus exported
 pork volume. In China, pork is hardly exported to other countries, so the exported volume is very limited, resulting in that the gap between
 production volume and apparent consumption volume of pork is very close to the imported volume.
- From demand side, the trend of apparent consumption volume of pork is very similar to the production volume. The pork consumption is influenced by the supply of pigs, with a CAGR of 0,9% from 2018 to 2022. In the future, the figure is expected to increase to 58,4 million tonnes in 2027, with a CAGR of 0,4% from 2022.

Source; National Bureau of Statistics, USDA, Frost & Sullivan

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China's Pig Slaughtering and Pork Processing Market Analysis

Pork Consumption by Major Provinces

Pork Consumption in Guangdong, Guangxi, Zhejiang and Jiangsu Provinces, 2017-2026E

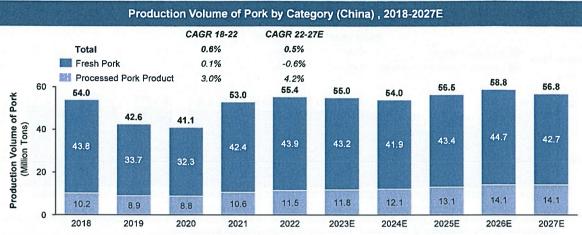


- Guangdong, Guangxi, Zhejiang and Jiangsu provinces are four major pork consumption provinces. Pork consumption in these four provinces increased from 7.9 million tonnes in 2017 to 9.3 million tonnes in 2021, with a CAGR of 4.3%, and accounted for 26.2% of the total pork consumption in China.
- In 2026, the pork consumption in these four provinces is expected to reach 10.5 million tonnes, accounting for 28.6% of total
 pork consumption in China, with the CAGR of 2.3% from 2021 to 2026.

Source: National Bureau of Statistics, Frost & Sullivan

China's Pig Slaughtering and Pork Market Analysis

Market Size of Pork by Category



- · Pork can be processed into fresh pork and processed pork products.
- Due to the outbreak of the ASF in China since late 2018, the production volume of processed pork products declined accordingly by 13.3% to 8.9 million tonnes in 2019 and remained 8.8 million tonnes in 2020. In 2021 and 2022, the production volume of processed pork products increased to 10.6 million tonnes and 11.5 million tonnes respectively as the ASF was well controlled, representing a CAGR of 3.0% from 2018 to 2022. In the future, the production of processed pork products will steadily increase to 14.1 million tonnes in 2027, with a CAGR of 4.2% from 2022.
- Fresh pork has been dominating China's pork consumption market. In 2019, the fresh pork production declined sharply by 23.1% to 33.7 million tonnes due to the outbreak of the ASF, and hit record low to 32,3 million tonnes in 2020. In 2021, as the ASF was well controlled, fresh pork production recovered to 42.4 million tonnes, and it reached 43.9 million tonnes in 2022, with a CAGR of 0.1% from 2018 to 2022. In the future, it is expected to decrease slightly to 42.7 million tonnes in 2027, with a CAGR of -0.6% from 2022.
- In general, the production volume of processed pork products grows at a faster rate than that of fresh pork, In the future, processed pork
 products will account for an increasing share of the total pork production, from 20,8% in 2022 to 24,8% in 2027.

Source: National Bureau of Statistics, USDA, Frost & Sullivan

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China's Pig Slaughtering and Pork Processing Market Analysis Market Drivers

	Major Drivers	Impact (1-2 years)	Impact (3-5 years	
1 Continuous consump	tion upgrade	Medium	High	
2 Product diversity		Medium	Medium	W W
3 Transformation broug	ght by the generation Z	Medium	High	
4 Strengthened govern	ment policies	High	High	MARKET DRIVERS
Major Driver		Description		
Continuous consumption upgrade	With the improvement of living standards in CI meat consumption, the proportion of pork prorapidly with the improvement of living standar major driving force to promote the development	oducts, especially low tem rds and changes to dietan nt of processed pork produ	perature pork p habits in Chin cts.	products will continue to increase a. Such demand will become the
Consumer's demand for product diversity	Traditionally, pork consumption in China is r limited variety of processed pork products. In i products with different flavors in order to meet The difference in consumption demand will expected to drive the consumption of pork products.	recent years, leading partic the diversity of consumpti offer more market oppor	cipants are com on preference a	mitted to developing various pork among different consumer groups.
Transformation brought by the generation Z	The post-80s and post-90s, especially the ger consumption, and their life attitude and diet themselves from tedious cooking. They also p with the characteristics of low-fat, low-salt, a customers a more convenient and healthier life	concept have been very pursue healthy food and co and easy-to-eat-and-cook	different from nvenience for o perfectly cater	the traditional who want to free direct consumption. Pork products is to their preferences and bring
Strengthened government policies	Since 2019, national and local government encouraging the restoration of pig production a "Regulations on the Administration of Pig S better safeguard food safety of pork production importance to food safety. More stringent pig staughter industry to upgrade its production calincrease food safety.	and slaughtering industry. laughter (Revised Draft)* cts. Further, the China g slaughtering regulations re	The State Cour 《生豬管理條例 ovemment has estricting the su	ncil executive meeting passed the (修订草紫) 》 in May 2021 to also been attaching increasing apply of fresh pork will prompt the

China's Pig Slaughtering and Pork Processing Market Analysis Market Trends and Opportunities

Increasing industrial integration rate

- In 2022, six out of ten top pig providers have business coverage in upper, middle and lower reaches of the entire value chain including feed production, pig breeding, pig farming, pig slaughtering and pork processing. Leading companies in the industry standardize production standards and formulate production management through the value chain the ensure the unified quality of products.
- The pig and poultry farming industry and the downstream slaughter and food processing industry is highly fragmented involving various types of market players with different backgrounds and scales. The increasing industrial integration rate can also help the company gather competitive advantages in food safety, epidemic prevention and control, environmental protection operation, quality control, large-scale operation, cost control, etc., as well as achieve higher margins via industrial chain extension to pork deep processing.

Continuously growing processed pork products market

- Chinese consumers, especially the young generation, have become more healthconscious and place greater importance on balanced diet and diversified nutrients. Their evolving consumer preferences and consumption structure present significant market opportunities for participants in processed food market, and drive the processed pork products market growth.
- As such, the demand for processed pork products with high-quality, safety, and nutritional value will be increasingly heightened. For example, health-based high-end low-temperature pork products with low-fat, low-salt, and high nutritional value are expected to be developed and have promising market.
- In the future, the proportion of fresh pork tends to go down and the proportion of processed pork products tend to go up.

Increasing proportion of low temperature pork products

- Low-temperature pork products have the characteristics of fresh, crispy, soft, tasty and good flavor, and the processing technology is advanced, which is obviously better than hightemperature pork products in terms of quality.
- In recent years, low-temperature pork products have gradually become more and more popular with consumers and have developed into a hot spot for processed pork products consumption.
 With the improvement of people's living standards and the strengthening of the concept of healthy diet, low-temperature pork products will occupy an increasing proportion in the processes pork products market in the future, and gradually replace the high-temperature pork products.

Market Trends



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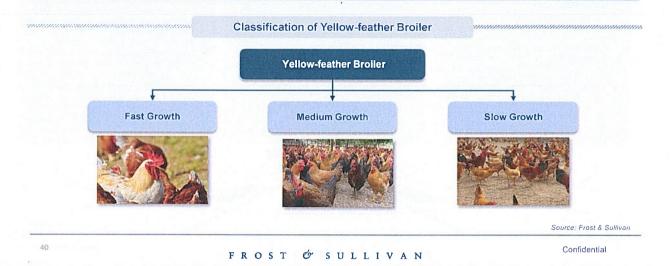
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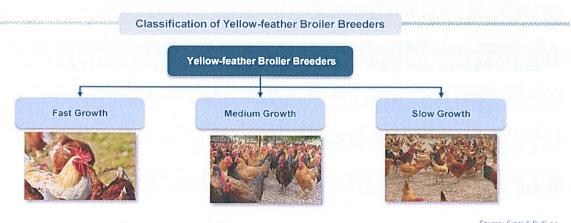
China's Yellow-feathered Broiler Breeding Market Analysis and Competitive Landscape Definition and Classification

- Yellow-feather broiler refers to the Chinese yellow broiler which is known for its yellow-feathered, yellow-skinned, yellow-shank characteristics and is distinguished from white-feathered broilers. All yellow-feather broiler are domestic breeds and do not rely on imported breeds.
- · Yellow-feathered broiler can be divided into three categories according to the time it takes to mature.
 - · Fast growth usually takes 60 to 65 days to mature, accounted for nearly 30% of total yellow-feather broiler breeding market
 - Medium growth usually takes 65 to 95 days to mature, accounted for nearly 25% of total yellow-feather broiler breeding market
 - · Slow growth usually takes over 95 days to mature, accounted for nearly 45% of total yellow-feather broiler breeding market.

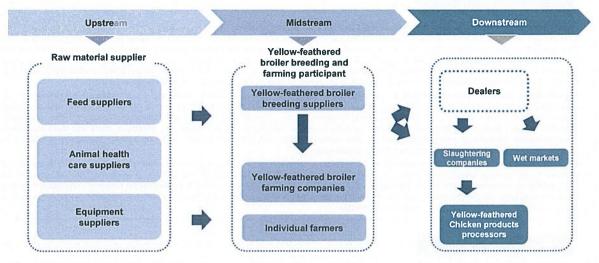


China's Yellow-feathered Broiler Breeding Market Analysis and Competitive Landscape Overview of Yellow-feathered Broiler Breeder

- Yellow-feathered broiler breeders are bred to produce yellow-feathered broilers.
- By the end of 2021, there were 97 yellow-feathered broiler breeds officially identified and registered by the National Livestock and Poultry Genetic Resources Committee. Among them, there were 60 national breeds, 36 local breeds, and 1 breed under cultivation. The 60 national breeds were mainly from Guangdong and Guangxi provinces, which accounted for 63.3% of the national breeds. The remaining 36 local breeds are from various provinces in China showing the long history and rich breeding resources of Chinese yellow-feathered broiler breeding.



China's Yellow-feathered Broiler Breeding Market Analysis and Competitive Landscape Value Chain



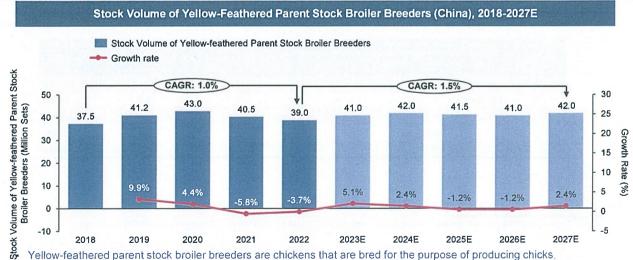
- The yellow-feathered broiler breeding industry value chain in China is usually divided into three major sectors, namely upstream, midstream and downstream.
- The upstream mainly includes feed production and animal health care and equipment suppliers. Though the processed
 broiler meat realized some improvements with the help of cold-chain, the consumption of live yellow-feathered broiler
 still accounted for 85% of the total consumption of yellow-feathered broiler in China.

Source: Frost & Sullivar

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China's Yellow-feathered Broiler Breeding Market Analysis and Competitive Landscape Stock Volume of China's Yellow-feathered Parent Stock Broiler Breeders



- Over the past few years, due to the impact of ASF on the pig breeding industry, the stock volume of yellow-feathered parent stock broiler breeders in China has achieved stable growth as consumers consider chicken as an alternative to pork, increased from 37.5 million sets in 2018 to 43.0 million sets in 2020. After a slow decline in 2021, due to (i) the recovery in year-end stock volume of pigs and pig production volume, and (ii) the continuous increase in the price of poultry feed that year, the stock volume of yellow-feathered parent stock broiler breeders still representing a CAGR of 1.0% from 2018 to 2022.
- Over the next few years, the stock volume of yellow-feathered parent stock broiler breeders is expected to reach 42.0 million sets in 2027, representing a CAGR of 1.5% from 2022.

Source: CAAA, Frost & Sullivan

China's Yellow-feathered Broiler Breeding Market Analysis and Competitive Landscape Impact of COVID-19 on Yellow-feathered Broiler and Pig Farming Industry

Broiler Industry

Improving management system of Yellow-feathered Broiler breeding companies. The Covid-19 epidemic that broke out in early 2020 has caused huge losses to the entire yellow-feathered broiler industry. Under this circumstance, the stock of laying parent yellow-feathered broiler breeders in the reached a record high. This is due to market players increasing the introduction of parent-generation breeders in 2019 affected by the hot market trend in 2019, It is partially because of this irrational and non-scientific production management model that market players lose the ability to resist risks in the face of emergencies. Therefore, affected by the Covid-19 epidemic, the parent-generation yellow-feathered broiler breeder production companies will focus more on improving the scientific level of their own production management models.

Provide more breeder species suitable for industrialized deep-processing. In China, more and more municipal governments have announced the "Measures for the Administration of Live Poultry Trading"(活食支易管理概法) to restrict live poultry trading and encourage yellow-feathered broilers to be sold in the market after slaughter, such as Hangzhou, Shanghai, and Chongqing. Affected by the new crown epidemic, Henan Province and Wuxi City banned live poultry trading in January 2020. As the epidemic continues, more and more consumers have developed the habit of eating broiler products and chilled chicken. This trend will prompt upstream breeder production companies to develop broiler breeds that are more suitable for deep processing.

Capacity adjustment & Online sales growth. In early 2020, a large number of yellow-feathered broiler market participating factories and restaurants for terminal consumption were closed in response to the sudden outbreak of the COVID-19 epidemic. The reduction in the consumption of yellow feather broilers by the main consumption channels has forced the yellow-feathered broiler breeding companies to reduce production capacity. On the other hand, the closure of offline consumption has promoted the shift of consumption of yellow-feathered broilers to online, and has greatly stimulated the growth of online sales.

Pig Farming Industry

- COVID-19 affects hog production and price. During the epidemic period, the transportation of live pigs was blocked and some slaughterhouses were closed, and the short-term supply of pork was insufficient. At the same time, the supply of live pigs was expected to be in a tight state during the epidemic period due to the extension of the pig farming cycle.
- COVID-19 promotes the industry concentration. The large scale company has a greater advantage in the cost effectiveness, management efficiency and epidemic prevention level than the small and medium-sized farms and individual famers. The risk of COVID will further accelerate the concentration of pig breeding industry.

Source: Frost & Sullivar

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China's Yellow-feathered Broiler Breeding Market Analysis and Competitive Landscape Ranking and Market Share of China's Yellow-feathered Parent Stock Broiler Providers

Top Three Yellow-feathered Parent Stock Broiler Breeder Providers in terms of Sales Volume (China), 2022

Ranking	Yellow-feathered parent stock broller breeder providers	Sales volume of yellow- feathered parent stock DOCs (million sets)	Market share (%)
1	Company B	2.9	24.2%
2	The Group	2.3	19.3%
3	Company O	0.9	7.5%
	Top three	6.1	51.0%
	Total	12.0	100.0%

Note

The Group's data is provided by the Company.

- 2. Company O is an A-share listed agriculture company headquartered in Jiangsu, It principally engaged in breeding and raising of yellow-feathered broilers and pigs.
- China's yellow-feathered parent stock broiler breeding market is highly concentrated. The top three players accounted for aggregate market share of 51.0% in terms of the sales volume of yellow-feathered parent stock broiler breeder in 2022. The Group was the second largest yellow-feathered parent stock broiler breeder provider in terms of the sales volume of yellow-feathered parent stock broiler breeders, with a market share of 19.3% in 2022.

- 1 China's Macro Economy Overview
- 2 China's Pig Breeding Market Analysis and Competitive Landscape
- 3 China's Pig Farming Market Analysis and Competitive Landscape
- 4 China's Pig Slaughtering and Pork Processing Market Analysis
- 5 China's Yellow-feathered Broilers Breeding Market Analysis and Competitive Landscape
- 6 China's Yellow-feathered Broilers Market Analysis and Competitive Landscape
- 7 China's Pig and Poultry Feed Market Analysis
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China's Yellow-feathered Broilers Market Analysis and Competitive Landscape Definition and Classification of Broilers

- · Chicken can be broadly divided into broilers and layers by purpose.
- Broiler is a type of chicken that is raised to produce chicken products. Broiler is cultured in a highly controlled environment. Broilers are usually slaughtered when they reach the required weight. After slaughter, it will be processed into chicken products for sale.
- The broiler industry has three segments including yellow-feathered broilers, white-feathered broilers, and 817 broilers (a smaller type of white-feathered broiler). Historically, white-feathered broilers and yellow-feathered broilers have dominated China's broiler meat production.
- Cost structure under the same type of yellow-feathered broilers, and product richness are the two main measures in yellow-feathered broilers breeding. The two main indexes are companies' internal measurements, which are not suitable for the industry.



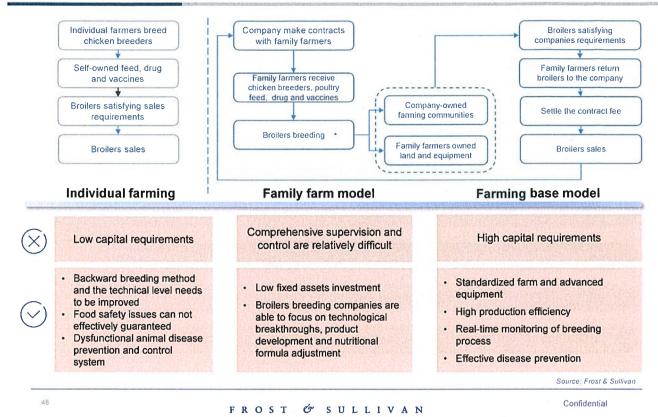
White-feathered Broilers

- White-feathered broilers are closely related to the light meal market due to their characteristics. It has the best development
 opportunity due to its higher protein, lower fat, lower cholesterol, lower calorie content, and more economical and
 environmentally-friendly breeding costs. White-feathered broilers are more suitable for western cooking, and frying is the most
 common cooking method.
- The main varieties are Avian, AA+, Ross 308, Cobb, etc.

Yellow-feathered Broilers

- · Yellow-feathered broilers are indigenous species in China.
- Yellow-feathered broiler meat is preferred by many Chinese consumers based on the perception that it is more flavorful and tasteful than white broiler meat and is more suitable for Chinese cuisine, with various cooking methods.
- Historically, approximately over 80% of yellow-feathered broilers are sold live. The Chinese government aims to gradually
 phase out the slaughter and sale of live poultry at wholesale wet markets and gradually close live poultry markets. As the
 number of live poultry markets is shrinking, increasingly large numbers of yellow-feathered broilers are being slaughtered
 outside of populated areas and brought to market chilled. Under the circumstances, yellow broilers providers are willing to
 develop more chilled or frozen yellow-feathered broiler products to explore the downstream consumption with a higher margin.
- The main varieties include green-footed chicken, yellow-footed chicken, etc.

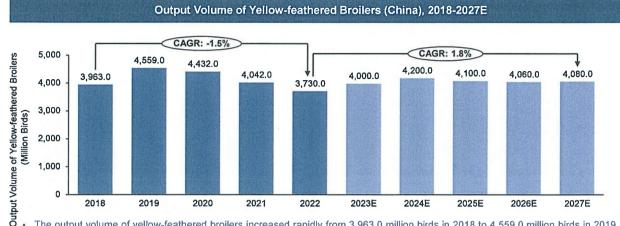
China's Yellow-feathered Broilers Market Analysis and Competitive Landscape Broilers farming models



China's Yellow-feathered Broilers Market Analysis and Competitive Landscape Broilers farming models (Cont.)

- Individual farming is where farmers use their own labor, farming areas, feed, medicines, and vaccines to carry out small-scale farming and are responsible for all aspects of the farming process.
- The family farm model is the model under which family farms provide the land and facilities and raise the yellow-feathered broilers according to company's standards, while company provides chicks, feed, medicines, and technical support.
- The farming base model refers to the model under which company builds the facilities and leases the land and facilities to farmers while the farmers raise the yellow-feathered broilers.
- The farming base model is the same as the family farm model other than the fact that the company owns the farming base.

China's Yellow-feathered Broilers Market Analysis and Competitive Landscape **Output Volume of Yellow-feathered Broilers**



- The output volume of yellow-feathered broilers increased rapidly from 3,963.0 million birds in 2018 to 4,559.0 million birds in 2019 due to the decrease in pork supplies, and subsequent increased demand for poultry drove the expansion of the yellow-feathered
- However, by 2020, this expansion started to slow down due to the recovery of China's swine herd. In addition, the outbreak of COVID-19 also had an impact on the yellow-feathered broilers industry. Live bird markets and wholesale wet markets are the primary sales outlets for yellow-feathered broilers. Since January 2020, many live bird markets have been closed due to COVID-19 concerns, and although most Chinese cities have lifted transportation restrictions, many live bird markets remain closed. As such, the output volume of yellow-feathered broilers declined to 3,730.0 million birds in 2022.
- With COVID-19 gradually easing and consumers' rising demand for high-protein and low-fat meat, the output volume of yellowfeathered broilers is expected to recover gradually, reaching a high output volume of yellow-feathered broilers in 2024. The output volume of yellow-feathered broilers is expected to increase to 4,080.0 million birds, with a CAGR of 1.8% from 2022.

 Source: China Animal Agriculture Association ("CAAA"), Frost & Sullivan



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China's Yellow-feathered Broilers Market Analysis and Competitive Landscape Market Size of Yellow-feathered Broilers

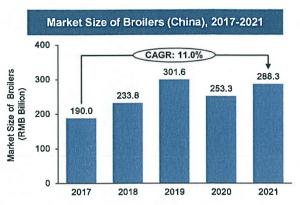
Market Size of Yellow-feathered Broilers (China), 2018-2027E **CAGR: 0.5%** Market Size of Yellow-feathered Broilers (RMB Billion) 144.6 CAGR: 1.7% 150 124.0 121.8 120.6 120.6 120.8 119.5 111.6 114.0 100 50 2023E

- The yellow-feathered broiler is a traditional poultry breed in China that is well known for its unique meat flavor and great taste and is mainly traded in the form of live poultry in the wet markets. The market size of yellow-feathered broilers in terms of revenue has rapidly grown from RMB111.6 billion in 2018 to RMB144.6 billion in 2019, supported by both the sales volume and average market price. However, it dropped to RMB113.3 billion in 2020, primarily attributable to the decline in the market price of yellow-feathered broilers due to the overcapacity, decline in catering service revenue, and COVID-19 restrictions in 2020.
- Thanks to the achievements of COVID-19 prevention and control and economic development, the market size of yellowfeathered broilers is expected to recover by 2021. The market size of yellow-feathered broilers is expected to maintain a steady trend from 2022 to 2027, showing a CAGR of 1.7% from 2022 to 2027.
- The scale of pig and yellow-feathered broiler breeding and farming industry in China in terms of revenue will exceed RMB1.5 trillion by 2027, with a trend of increasing market concentration. Source: CAAA, Frost & Sullivan

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China's Yellow-feathered Broilers Market Analysis and Competitive Landscape Output Volume and Market size of Broilers





- The total output volume of broilers in the PRC remained relatively stable from 2017 to 2018 and rose rapidly to 11.4 billion birds in 2019 due to the decrease in pork supply, and then further increased to 12.5 billion birds in 2021, representing a CAGR of 5.2% from 2017 to 2021. The market size of broilers in terms of revenue has grown rapidly from RMB190.0 billion in 2017 to RMB301.6 billion in 2019, supported by increase in both sales volume and average market price. However, the market size in terms of revenue fell to RMB253.3 billion in 2020, mainly due to lower market prices for broilers as a result of overcapacity, lower revenue from catering services, and COVID-19 restrictions in 2020.
- Attributable to effective COVID-19 prevention and control and economic development, the market size of broilers rebounded to RMB288.3 billion in 2021, representing a CAGR of 11.0% from 2017 to 2021.
- The Company submits that the Chinese pork consumption declined in 2018-2019 due to the lower output volume of pigs, resulting in
 increased consumption of poultry and other animal protein substitutes during the period.
- The relationship between the market price and sales volume of yellow-feathered broilers and market hogs follows the following pattern:
 market hog's supply decreases pork price increases sales volume of yellow-feathered broilers increases as consumers shift to cheaper
 protein substitutes market price of yellow-feathered broilers decreases.

Source: China Animal Agriculture Association ("CAAA"), Frost & Sullivan

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China's Yellow-feathered Broilers Market Analysis and Competitive Landscape Average Wholesale Price of Yellow-feathered Broilers

Average Wholesale Price of Yellow-feathered Broilers (China), 2018-2027E

(RMB per kilogram) 20 16.7 15.7 15.6 15.2 15.3 15.2 15.0 14.8 14.5 15 13.5 2027E 2019 2020 2021 2022 2023E 2024E 2025E

- The average wholesale price of yellow-feathered broilers realized a rapid growth from RMB15.7 per kilogram in 2018 to RMB16.7 per kilogram in 2019, primarily attributable to the shortage of swine herd as affected by the African Swine Fever outbreak in 2018.
- As China's swine herd and pork supply recovered in 2020, poultry prices have weakened. In addition, due to the overcapacity, decline in catering service revenue, and COVID-19 restrictions in 2020, the average wholesale price of yellow-feathered broilers dropped significantly in 2020. Due to the increase in yellow-feathered broilers' breeding costs, the average wholesale price of yellow-feathered broilers rose to RMB15.2 per kilogram in 2021, showing a growth rate of 12.6% from 2020. The average wholesale price of yellow-feathered broilers further increased to RMB15.6 per kilogram in 2022 as compared to the previous year due to the decrease in the output volume of yellow-feathered broilers by farmers and farming companies in 2022. The average wholesale price of yellow-feathered broilers is expected to remain relatively stable and reach RMB15.2 per kilogram by the end of 2027, representing a CAGR of -0.5% from 2022.

Source: China Animal Agriculture Association, Frost & Sullivan

China's Yellow-feathered Broilers Market Analysis and Competitive Landscape Market Drivers of Yellow-feathered Broilers

	Major Drivers	Impact (1-2 years)	Impact (3-5 years)	
1	Economy growth and sustained urbanization	High	Medium	100
2	Thriving new retail models and Chinese cuisine market	Medium	High	
3	Scale development and industry chain extension	Medium	High	



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Major Driver	Description
Economy growth and sustained urbanization	With the steady growth of China's economy and sustained urbanization, the level of consumption has increased, and increasing number of Chinese consumers are willing to consume high-protein and low-fat meat, such as chicken meat. According to the United States Department of Agriculture (the "USDA"), the consumption of chicken meat in the PRC increased from 11.6 million tonnes in 2018 to 16.1 million tonnes in 2022, representing a CAGR of 8.5%, and is expected to increase to 20.1 million tonnes in 2027 at a CAGR of 4.6% from 2022.
Thriving new retail models and Chinese cuisine market	Broilers manufacturers leverage the thriving online retail model and China's fast and convenient delivery network to penetrate into regional markets. The emergence of data-driven new retail models and the efficient supply chain have driven the sales of chilled/frozen chicken products and offered superior customer experience. In addition, Chinese cuisine is one of the major consumption scenarios for yellow-feathered broilers. Chinese cuisine accounts for the largest part in China's catering market, showed a growing trend during the past several years, and is expected to increase from 2023 to 2027. These have transformed the yellow-feathered broilers industry in China and is expected to drive up chicken consumption.
Scale development and industry chain extension	Industrial scale development helps reduce management costs and facilitate the implementation of new technologies. The integration of the broiler industry is expected to improve the product quality and safety and extend the industry chain to downstream deep-processing so as to enhance the value of the products, such as prepared chicken, chicken snacks, etc. Moreover, compared with companies that participate in only part of the value chain, integrated companies engaging in whole value chain business are able to guarantee the supply of upstream raw materials, the stability of raw material prices, and the quality of downstream products.

Source: Frost & Sullivar

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China's Yellow-feathered Broilers Market Analysis and Competitive Landscape Market Drivers of Yellow-feathered Broilers (Cont.)

Major Drivers		Impact (1-2 years)	Impact (3-5 years)	
4	Diversified chicken offerings to meet consumers' various demand	Medium	High	
5	Changes in consumption structure and nutritional structure	High	High	-



MARKET DRIVERS

Major Driver	Description		
Diversified chicken offerings to meet consumers' various demand	The product offering of chicken on the market are becoming more and more diversified in terms of variety, such as green-footed chicken, yellow-footed chicken, etc., as well as in terms of cut, to cater for consumers' various needs and in line with the consumption habits of different regions. Therefore, more consumer groups are expected to be covered in the future.		
Changes in consumption structure and nutritional structure	With changes of consumption habits, consumers pay more and more attention to healthy diet. Lower fat, lower calories, less sugar as well as rich in fiber and nutrition has gradually become a consumer trend. Due to its advantages of low fat and high protein, chicken is expected to have a better development in the future.		

China's Yellow-feathered Broilers Market Analysis and Competitive Landscape Market Trends of China's Yellow-feathered Broilers

Indoor breeding

Indoor breeding is one of the yellow-feathered broilers market trends in the future. Through indoor breeding, the automatic machine improves the efficiency of yellow-feathered broilers breeding, the sanitation of the breeding environment, such as temperature, humidity, air quality, and lighting, is more controllable, and infectious diseases can be better prevented and controlled. Therefore, the indoor breeding trend is expected to reduce yellow-feathered broilers' death rate further. Reflected on the downstream market, food safety can be further guaranteed.

Branding

Since there are only a few well-known chilled products brands, there is still exist a gap in the brand awareness of the yellow-feathered broilers downstream market. Consumers are not familiar with brands of chilled and deep processing foods, so the consumption volume of these products is relatively small. In the future, with the development of chilled products and the establishment of downstream deep processing food brands, it is expected that the consumption of yellow-feathered broilers will gradually increase in the future.

Changes In business model

"Company + farmer" is currently the main production method for companies. However, due to the high cost of supervision, quality control problems, and other issues, the "company + farmer" business model is expected to shift to integrated operation in the future. The integrated operation helps companies strengthen control over the supply of upstream products and better supervise the production process, which can effectively reduce disease occurrence.

Deep processing and chilled products

Traditionally, over 80% of yellow-feathered broilers are sold live. However, the number of live and urban wet markets is shrinking due to the avian influenza outbreak and COVID-19, and an increasingly large number of yellow broilers are being slaughtered outside of populated areas and brought to market chilled. Large poultry producers have increased their new chilled products in key account channels, including pre-cut packages for convenience in home preparation.

Also, as the development of deep processing products, the added value of yellow-feathered broilers continues to increase. Companies have the willingness to develop more products, product richness has been improved, and consumer groups are further expanded. Consumers are becoming increasingly receptive to deep processing products. Therefore, consumption habits are gradually cultivated. Such a trend will continue in the long run.

Source Frost & Sullivan

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China's Yellow-feathered Broilers Market Analysis and Competitive Landscape The Impact of ASF on Broiler and Pig Farming Industry

African Swine Fever is a fatal disease for pigs. In August 2018, China's first African Swine Fever case was discovered in the Northeast China and subsequently spread from north to south. In April 2019, all provinces, municipalities and autonomous regions in the PRC had reported African Swine Fever cases. As African Swine Fever is highly contagious, once an outbreak happens in one pig farm, all pigs on that pig farm would be disposed in extreme cases. In 2020, the African Swine Fever has subsided compared with 2019. Since 2021, only sporadic African Swine Fever cases have occurred in certain provinces in China. Currently, there is no effective vaccine available in the market.

Broiler Industry

African swine fever promotes chicken meat consumption. Driven by the substitution effect of protein sources impact by the African swine fever outbreak in 2018, the consumption of white-feathered broilers increased. Since demand exceeds supply, the price of white-feathered broilers has risen. The substitution effect gradually shift from white-feathered broilers to yellow-feathered broilers, and therefore also drive the price of yellow-feathered broilers increased. Besides, pig and broiler have complementary effects and is expected to hedge market risks.

- African Swine Flue influence chicken cycle. A chicken cycle operates as: chicken price increases number of parent stock breeders increases –
 commercial chicks supply increase broilers supply increases chicken price decreases commercial chicks demand decrease number of
 parent stock breeders decreases commercial chicks supply decrease broilers supply decreases chicken price increases. A full chicken cycle in
 the PRC usually lasts around three years. Due to the influence of external factors in recent years, such as avian influenza and ASF, the chicken
 cycle was disturbed and lengthened to approximately four years.
- African swine fever promotes the cold chain development. Long-distance transportation of live livestock and poultry is an important cause of the
 spread of animal epidemics. The restriction on the long-distance transportation of live livestock and poultry is an important ways to prevent the
 spread of animal diseases. While actively responding to the impact of ASF on the pig industry chain, China has also strengthening defensive
 measures in poultry and pig industries. Actively promote the development of chilled fresh products, and the live poultry market is gradually cancelled.
 Triggered by ASF, consumers pay more attention to food health. Therefore, the development of cold chain technology is further promoted.

Pig Farming Industry

- ASF influence hog production and price. Due to the ASF intensified in the second half of 2018, the stock volume of sow and supply of hogs has dropped sharply. Therefore, the price of hogs witnessed a rapid increase from 2018 to 2019, rising from RMB12.7 per kilogram to RMB21.9 per kilogram. The average price of hogs continues to increase and reached RMB 34.1 per kilogram in 2020. With the effective prevention and control of the African Swine Fever, the output volume of pigs recovered in 2021 and 2022, leading to a decrease in the price of pigs.
- ASF promotes the establishment of a pig epidemic prevention system. According to the "Opinions on the Prevention and Control of African Swine Fever" (《非洲结瘟防粒工作的意见》) issued by the State Council in 2019, it is necessary to strengthen the sharing of departmental information systems, implement "Internet +" supervision of all links in the prevention and control of ASF. Using information, intelligence, and big data to improve the efficiency of supervision. The monitoring of pig epidemic prevention has been further improved to ensure the development of pig farming industry in the future.

China's Yellow-feathered Broilers Market Analysis and Competitive Landscape Ranking and Market Share of China's Yellow-feathered Broilers Providers

Top Five Yellow-feathered Broilers Providers in Terms of Sales Value (China), 2022

Ranking	Yellow-feathered Broilers Providers	Sales Value of Yellow- feathered Broilers (RMB billion)	Market Share (%)
1	Company B	31.9	28.0%
2	Company O	12.8	11.2%
3	The Group	3.1	2.7%
4	Company P	1.5	1.3%
4	Company Q	1.5	1.3%
	Top five	50.8	44.5%
Total		114.0	100.0%

- The Group's data is provided by the Company.
- Company P is a private agriculture company.

 Company P is a private enterprises headquartered in Guangxi. It principally engaged in poultry and pigs breeding and raising, as well as food and feed processing, etc.

 Company Q is a private agriculture company headquartered in Guangxi. It principally engaged in poultry and broiler breeding and raising.
- · China's yellow-feathered broilers market is relatively concentrated. The top five players accounted for aggregate market share of 44.5% in terms of sales value of yellow-feathered broilers in 2022.
- · The Group ranked third among all yellow-feathered broiler suppliers in China in terms of sales value of yellow-feathered broilers, with a market share of 2.7% in 2022.

Source: Frost & Sullivan

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China's Yellow-feathered Broilers Market Analysis and Competitive Landscape Ranking and Market Share of China's Yellow-feathered Broilers Providers

Top Five Yellow-feathered Broilers Providers in Terms of Sales Volume (China), 2022

Ranking	Yellow-feathered Broilers Providers	Sales Volume of Yellow- feathered Broilers (million birds)	Market Share (%)
1	Company B	1,052.4	28.2%
2	Company O	407.0	10.9%
3	The Group	78.6	2.1%
4	Company P	48.0	1.3%
4	Company Q	48.0	1.3%
	Top five	1,634.0	43.8%
Total		3,730.0	100.0%

Note: The Group's data is provided by the Company.

- · China's yellow-feathered broilers market is relatively concentrated. The top five players accounted for aggregate market share of 43.8% in terms of sales volume of yellow-feathered broilers in 2022.
- · The Group ranked third among all yellow-feathered broiler suppliers in China in terms of sales volume of yellowfeathered broilers, with a market share of 2.1% in 2022.

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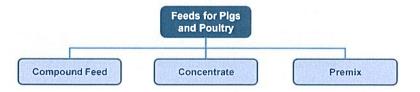
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China's Pig and Poultry Feed Market Analysis

Definition and Classification



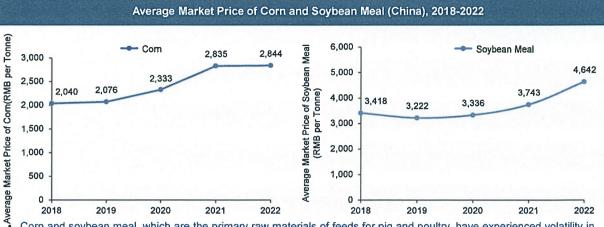




- Feeds for pig and poultry account for the majority of the costs for daily rearing operation, which can be classified into compound feed (配合倒柱), concentrate feed (滾線柱), and premix feed (預溫柱).
- Compound feed is blended from various raw materials and additives. These
 blends are formulated according to the specific requirements of the target
 animal. They are manufactured by feed compounders as meal type, pellets or
 crumbles. The main ingredients used in commercially compound feed are the
 feed grains, which include corn, soybeans, sorghum, oats, and barley.
- Concentrate feed is an incomplete feed which contains premix and protein feed, and used with another to improve the nutritive balance of the total and intended to be further diluted and mixed to produce a supplement or complete feed.
- Premix feed consists of micro-ingredients such as vitamins, minerals, antibiotic
 additives mixed with a carrier in a certain proportion. It is necessary to add
 additional energy feed and protein feed. Premix feed cannot be fed directly to
 livestock and should be mixed with compound feeds.

China's Pig and Poultry Feed Market Analysis

Raw Material Price of Pig and Poultry Feed



Corn and soybean meal, which are the primary raw materials of feeds for pig and poultry, have experienced volatility in selling price due to various factors such as the policies of the PRC government and changes in supply and demand of such commodities in the global markets.

- The average market price of corn realized an increase from RMB2,040 per tonne in 2018 to RMB2,844 per tonne in 2021, with a CAGR of 8.7% from 2018 to 2022.
- The average market price of soybean meal remained relatively stable from 2018 to 2021, and rose rapidly to approximately RMB4,642 per tonne in 2022, with a CAGR of 8.0% from 2022.
- The main drivers for the increase in average selling prices of corn and soybean meal in the PRC from 2018 to 2022 include (i) strong demand for corn and soybean meal from downstream industries, (ii) restrictions on the supply chain and logistics of corn and soybean meal due to the outbreak of COVID-19, and (iii) deteriorating crop conditions due to extreme weather in China.

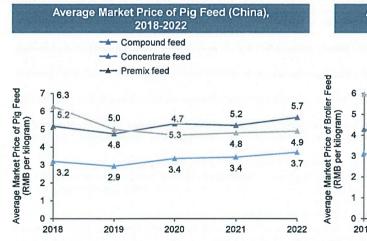
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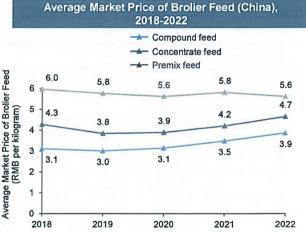
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China's Pig and Poultry Feed Market Analysis

Price of Pig Feed and Broiler Feed in China





- For the past few years, the market prices for both compound feed and concentrate feed for pig and broiler has been relatively stable with a mild uptrend, and it is expected to remain steady or slightly increase from 2023 to 2027.
- The market prices for premix feed for both pig and broiler witnessed a downward trend from 2018 to 2022.

Source: CAAA

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Appendix

About the Group

- The pig future trading market in China matures gradually. Since China's launch of the pig futures trading in January 2021, we have become one of the pioneering Chinese pig breeding companies to introduce the pig futures to hedge the pig prices, and one of the first Chinese delivery houses for pig futures.
- The Group is a leading and rapidly growing livestock and poultry breeding and farming enterprise in China, focusing on the breeding and farming of pigs and yellow-feathered broilers.
- The Group pioneered the asset-light, cost-effective and production-efficient No. 2 Family Farm model in China, which has significant advantages compared to other farming models.
- · The Group is an industry leader among large-scale livestock and poultry breeding and farming enterprises in China in terms of pigs and vellow-feathered broilers scales
- · While better supporting the needs of farm piglets and expansion of the breeding scale, the No. 2 Family Farm model also offers unique advantages in terms of biosecurity, farming costs, expansion capabilities, internal replication, decentralisation, sustainable development, and asset investment.
- The Group has rich pig and yellow-feathered broiler genetic resources and an industry-leading breeding system.
- · The Group has leading R&D capabilities in China, and the Group was the only breeding and farming enterprise in China that had two national key leading enterprises in agricultural industrialisation (農業產業化國家重點競頭企業) and two national-level core pig breeding farms (國家誕生路核心育種場) as at 30 September 2023.
- The Group has an industry leading nucleus breeding herd in terms of stock volume.
- · In the nine months ended 30 September 2022, the Group's national-level core pig breeding farms were consistently ranked as one of the top farms by the Monthly Data Analysis Report of National Core Pig Breeding Farm (《生绪國家核心育種場月度數據分析報告》) issued by the National Pig Genetic Evaluation Center (全國種務遺傳評估中心).
- The Group is among one of the first batch of Chinese pig breeding companies to utilize pig futures to hedge risks of fluctuations in selling prices of pig, and have established one of the first Chinese delivery houses for pig futures.
- Competition for the Group's products in the PRC is primarily based on large-scale batch production capability, brand recognition, quality, genetic traits, price, marketing strategies as well as distribution network.
- For 2022, the average annual income of the Group's farm owners was approximately RMB247,450, which was approximately 3.1 times the disposable income of a four-person household in rural China.
- The Group's employees have higher than average educational attainment than the industry norm.
- The Group is a major and rapidly growing livestock and poultry breeding and farming enterprise in China, focusing on the breeding and farming of pigs and yellow-feathered broilers.

Appendix

Industry Norms

- Market prices for biological assets are highly volatile and susceptible to significant fluctuations from period to period.
- Developments in government regulation have driven consolidation in the Chinese pig and poultry farming industry, with smaller operating enterprises unable to bear the increasing costs of regulatory compliance such as environmental protection regulations.
- The consolidation among industry participants in China may produce stronger domestic competitors as well as competitors
 more specialised in particular segments and geographic markets.
- The PRC government continues to play a significant role in regulating industry development and exercise significant control over China's economic growth through allocation of resources, controlling payment of foreign currencydenominated indebtedness, setting monetary policy, and providing preferential treatment to specific industries or companies.
- · The Company's distributorship business model is an industry norm.
- Currently, China's pig breeding and farming industry still has a relatively low concentration. It continuously increases in scale
- Moderate-scale farms with a stock volume of 500 to 5,000 heads of pigs, which constitute the majority of the Group's farms. Moderate-scale family farms with a stock volume of 500 to 5,000 heads of pigs have the requisite scale and standard to enable a division of labor and benefit sharing mechanism between farming enterprises and farm owners, and are environmentally friendly, efficient and sustainable.
- As a result of China's diversified geographical landscape, uneven economic development and fragmented market demand, there are many constraints on the development of farms with stock volume of over 5,000 heads of pigs.
- Increasing the scale of production is one of the key indicators of development in modern animal husbandry, and that of China's breeding and farming industry is still relatively low.
- Farms that are operated under the cooperation of enterprises and individual farm owners can serve as examples in local
 areas and promote economic development.
- The pig trading market in China will mature gradually in the future.

Source: Frost & Sullivan

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Appendix COVID-19

- An outbreak of a respiratory disease COVID-19 was first reported in December 2019 and continues to expand across the globe.
- The World Health Organisation is closely monitoring and evaluating the situation, and it declared such outbreak as a public health emergency of international concern and a global pandemic on 30 January 2020 and on 11 March 2020, respectively.
- To cope with such outbreak, China was completely locked down at the beginning of 2020, with closure of workplaces and restrictions on the movement and travel of people.
- Since the second quarter of 2020, although many of the measures within China have been relaxed, restrictions had been re-imposed in certain cities from time to time. These measures have been further relaxed since December 2022.
- The outbreak of the COVID-19 has impacted our business in many aspects, As affected by the COVID-19 pandemic, local governments in certain parts of China imposed restrictions on enterprises to resume work. Also, lockdown of cities or road closures were implemented in certain areas. Government authorities subsequently issued policies requiring that, during the prevention and control of the COVID-19 outbreak, the supply of meat and other necessities shall be ensured, and the transportation of agricultural raw materials including livestock, poultry and feeds shall not be intercepted.
- The impact of COVID-19 pandemic includes (i) certain local governments suspended live poultry markets as part of the
 pandemic control measures, (ii) social distancing, travel and traffic restrictions and (iii) the restrictions on the logistics in
 certain abovementioned regions.
- COVID-19 outbreak did not have any material adverse impact on our business operation and financial performance, mainly due to the facts that (i) pork and chicken are the most important protein sources for Chinese people, and the per capita consumption thereof remained stable during the COVID-19 outbreak; (ii) government authorities have implemented policies and measures to ensure the stable supply of pork and other necessities during the COVID-19 outbreak, as well as uninterrupted transportation of agricultural production materials (including livestock, poultry and feeds) across regions;

Appendix

African Swine Fever & Avian Influenza

African Swine Fever

- African Swine Fever is a fatal disease for pigs. In August 2018, China's first African Swine Fever case was discovered in the Northeast China and subsequently spread from north to south. As the African Swine Fever intensified in the second half of 2018, the stock volume of sows and supply of pigs dropped sharply.
- · In April 2019, all provinces, municipalities and autonomous regions in the PRC had reported African Swine Fever cases.
- As African Swine Fever is highly contagious, once an outbreak happens in one pig farm, all pigs on that pig farm would be disposed in extreme cases.
- In 2020, the African Swine Fever has subsided compared with 2019.
- · Since 2021, only sporadic African Swine Fever cases have occurred in certain provinces in China.
- · Currently, there is no vaccine for African Swine Fever available in the market.
- The government imposed restrictions on the transport of pigs to prevent and control the African Swine Fever, resulting in an imbalance between the supply and demand of pigs among regions.

Avian Influenza

- Avian influenza, in particular H5N1 virus, H7N9 virus and H5N6 virus, is a type of disease which spreads through poultry and is capable of killing millions of poultry and may, in some circumstances, be transmitted to humans, causing symptoms such as fever, cough, sore throat, muscle aches and, in severe cases, breathing problems and pneumonia that may be fatal. The outbreak of avian influenza in the past few years, particularly in 2016 and 2017, caused considerable damage to the national and local economies in the PRC and other Asian countries.
- H5N1 virus emerged in 1996 and was first identified in southern China, and human infections with H7N9 virus were first reported in the PRC in 2013. In 2014, the PRC reported its first human infection with H5N6 virus. Avian influenza outbreaks that had spread over the past two decades, particularly in 2004, 2005, 2016 and 2017, are considered a pandemic threat in the PRC and other Asian countries.
- In 2017, Guangzhou officials reported that more than 30 percent of live poultry markets were infected with Avian influenza. In
 addition, the PRC reported an outbreak of avian influenza caused by H5N1 virus in Hunan Province and H5N6 virus in Sichuan
 Province, respectively, in February 2020, and about 20,000 poultry from affected farms were culled at local poultry farms.

 Source: Frost & Sullivan

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Appendix

Abbreviations and Terms

- · CAGR: compound annual growth rate
- · China: if not specified refers to mainland China, excluding Hong Kong, Taiwan and Macau
- PRC: People's Republic of China 中華人民共和國
- CMA: China Meat Association 中國内類協會
- · GDP: gross domestic product
- RMB: Renminbi, the lawful currency of the PRC
- IMF (International Monetary Fund): 國際貨幣基金組織
- OECD: Organisation for Economic Co-operation and Development 經濟合作與發展組織
- · FAO: Food and Agriculture Organization 聯合關稅食及農業組織
- USDA: United States Department of Agriculture 美国農業部
- · CAAA: China Animal Agriculture Association 中国畜牧業協會
- · ASF: African Swine Fever 非洲豬瘟
- GGP: Great Grandparents Generation 曾祖代
- · GP: Grandparents Generation 祖代
- PS: Parent Stock 父母代
- CG: Commercial generation 商品代
- · DOC: Day Old Chick 推新
- POL: Point of Lay 者次下蛋目
- Sow (能聚母鋁): Female pig(s) which have been mated naturally or inseminated artificially once.
- · Gilt (後備母務): Female pig(s) used for breeding and not yet farrowed.
- Boar (種公務): Male pig(s) which can be mated.
- · Farrowing: To give birth to a litter of piglets.
- · Weaning: To separate the piglets and its mother, and made them accustom to feed other than its mother's milk.
- · KA: Kev Account 周鉂客戶
- · Nursery pig(s): Young pig(s) of around 22-73 days old that have been weaned off sow and consuming feed.
- .. Suckling piglet(s): Young piglets between birth and weaning (0-21 days of age)

Limitations in Source of Information

- Interviews with end-users, venders and distributors are conducted to collect information for this report, based on a best-efforts basis.
- Frost & Sullivan will not be responsible for any information gaps where interviewees have refused to divulge confidential data or figures.
- In instances where information is not available, figures based on similar indicators combined with Frost & Sullivan in-house analysis will be deployed to arrive at an estimate.
- Frost & Sullivan will state the information sources at the bottom right-hand corner of each slide for easy reference.

Note to Numeric Calculations

- Value and percentage figures in this report are all rounded. Figures may not add up to the respective totals owing to rounding.
- The base year is 2022. The historic period is from 2018 to 2021. The forecast period is from 2023 to 2027.

Source: Frost & Sullivan

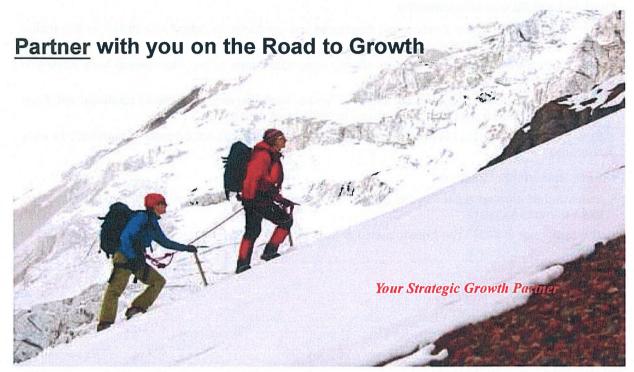
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Appendix Methodology

- Frost & Sullivan is an independent global consulting firm, which was founded in 1961 in New York. It offers industry research and
 market strategies and provides growth consulting and corporate training. Its industry coverage in the PRC includes automotive
 and transportation, chemicals, materials and food, commercial aviation, consumer products, energy and power systems,
 environment and building technologies, healthcare, industrial automation and electronics, industrial and machinery, and
 technology, media and telecom.
- The Frost & Sullivan Report is prepared through extrapolating publicly available data such as information provided by governments, industry associations, annual reports of public companies, industry reports and other available information gathered by non-profit organizations.
- The Frost & Sullivan's report includes information on the China's macro economy overview, pig breeding market analysis, pig farming market analysis, pig slaughtering and pork processing market analysis, yellow-feathered broilers breeding market analysis, yellow-feathered broilers market analysis, pig and poultry feed market analysis, and competitive landscape, etc.
- In preparing for the report, Frost & Sullivan conducted both primary and secondary research and relied on various sources, The
 primary research was conducted via interviews with key industry experts and leading industry participants. The secondary
 research involved analysis of market data obtained from several publicly available data sources, such as National Bureau of
 Statistics of China and other industrial associations.
- Projected total market size was obtained from historical data analysis plotted against macroeconomic data as well as specific related industry drivers.
- The market projections in the Frost & Sullivan Report are based on the following key assumptions:
 - (i) the overall social, economic, and political environment in China are expected to remain stable during the forecast period;
 - (ii) China's economic and industrial development are likely to maintain a steady growth in the forecast period;
 - (iii) related industry key drivers are likely to drive the growth of the pig breeding and farming, pig slaughtering and pork processing, broiler breeding and farming, and pig and poultry feed markets in China in the forecast period, such as rapid growth of consumption upgrade in China, favourable policies, stable demand from downstream industries and rise of scale pig farming; and
 - (iv) there is no extreme force majeure or industry regulation in which the market may be affected dramatically or fundamentally.
- All the data and information regarding the Group is provided by the Group.



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