

2022
WORLD
MEGA
PRODUCER





www.genesus.com | +1 204-267-2813 | info@genesus.com



The 2022 World Mega Producer continues to show the general trend of the big getting bigger. The one exception is the significant decline of some of the publicly traded China producers. A combined 1,100 million sow decline year over year in Wens, Zhengbang and New Hope companies; a reflection, in our opinion, of the financial losses China's swine industry faced in the second half of 2021 and continues in the first part of 2022.

In total the Genesus World Mega Producer list for 2022 of producers with over 100,000 sows shows little change from 2021. The main difference is the addition of four new companies with over 100,000 sows.

There are approximately 80 million sows in the world. 2022 World Mega Producers are at 16,072,164 sows. Farmer arithmetic, 20% of world's sows are with Mega Producers, still 80% of all sows are not.

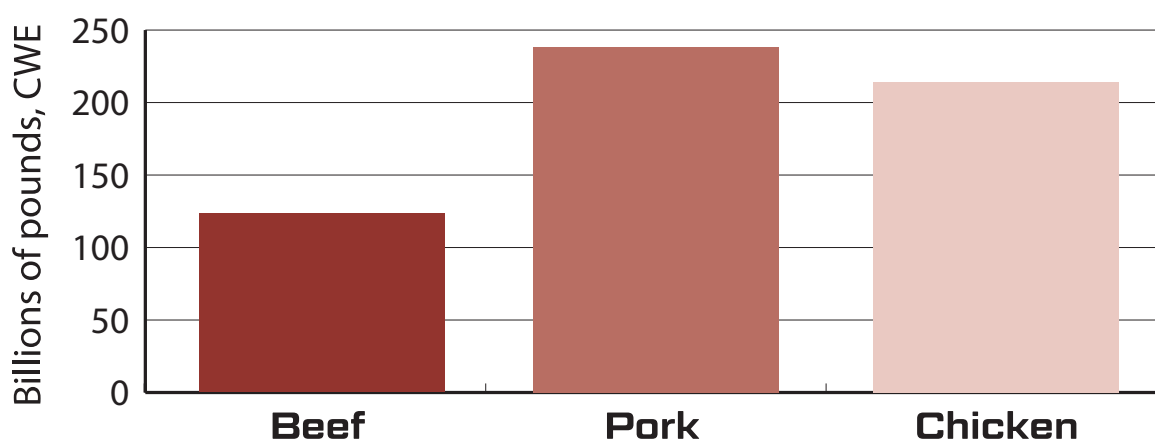
Pork continues as the world's most eaten protein. We are in an industry that as demand grows will continue to move forward.



	MEGA Producer	Headquarter	# Sows 2021	# Sows 2020	Difference 2021 vs 2020
1	Muyuan Foodstuff Co., Ltd.	China	2,831,000	2,624,000	207,000
2	Smithfield Foods/WH Group ¹ includes 930,000 sows in USA and aprox 100,000 sows in Poland; 53,000 sow in Romania and 100,000 in Mexico	USA	1,171,000 ¹	1,225,000	-54,000
3	Charoen Pokphand Foods ² includes 380,000 in China; 260,000 in Thailand; 350,000 in Vietnam; 30,000 in Philippines; 132,000 in Canada	China	1,152,000 ²	1,180,000	-28,000
4	Wens Food Group Co., Ltd.	China	1,100,000	1,800,000	-700,000
5	Zhengbang Group	China	1,000,000	1,200,000	-200,000
6	New Hope Group	China	1,000,000	1,200,000	-200,000
7	Sichuan Dekon Group	China	450,000	400,000	50,000
8	Pipestone System ³ 288,000 In USA; 93,000 In China; 59,000 In Mexico	USA	440,000 ³	384,000	56,000
9	Triumph Foods ⁴ Christensen Farms 143,000 sows The Hanor Family of Companies 87,500 sows Allied Producers' Cooperative 76,640 sows Eichelberger Farms 62,500 sows New Fashion Pork 57,000 sows	USA	426,640 ⁴	443,200	-16,560
10	BRF S.A.	Brazil	391,825	388,500	3,325
11	Techbank Food Co., Ltd.	China	380,000	500,000	-120,000
12	Twins Group	China	380,000	250,000	130,000
13	Fujian Aonong Biotechnology Group Co., Ltd.	China	360,000	200,000	160,000
14	Seaboard Foods	USA	335,000	340,000	-5,000
15	Guangxi Yangxiang Co., Ltd.	China	300,000	250,000	50,000
16	Aurora Alimentos COOP	Brazil	261,033	180,000	81,033
17	COFCO Group	China	250,000	220,000	30,000
18	Iowa Select Farms	USA	242,500	242,500	0
19	Seara Foods (JBS)	Brazil	240,047	213,000	27,047
20	DaBeiNong Agricultural Group	China	230,000	230,000	0
21	Miratorg	Russia	220,000	180,000	40,000
22	Vall Companys Group	Spain	209,805	213,000	-3,195
23	Carthage System	USA	178,600	165,600	13,000
24	Prestage Farms	USA	178,000	178,000	0
25	The Maschoffs	USA	176,000	187,000	-11,000
26	Cooperative EVEL'UP	France	171,000	new entry	na
27	JBS USA	USA	170,000	169,000	1,000
28	Shanxi Elephant Agriculture and Animal Husbandry Group Co., Ltd.	China	170,000	100,000	70,000

	MEGA Producer	Country	# Sows 2021	# Sows 2020	Difference 2021 vs 2020
29	AMVC Management Services	USA	150,500	152,000	-1,500
30	Costa Food Group	Spain	150,000	150,000	0
31	Agrosuper	Chile	135,000	140,000	-5,000
32	Olymel	Canada	134,000	134,000	0
33	Betagro	Thailand	130,000	130,000	0
34	Tecon Biology	China	120,000	135,000	-15,000
35	Tang Ren Shen (TSR) Group	China	120,000	100,000	20,000
36	Rusagro	Russia	107,000	125,000	-18,000
37	Frimesa Cooperativa Central	Brazil	106,214	120,000	-13,786
38	Clemens Country View Family Farms	USA	105,000	111,000	-6,000
39	Guangdong Haida Group Co., Ltd.	China	100,000	new entry	na
40	Sichuan TechLex Group	China	100,000	new entry	na
41	Guangxi Gui Ken Animal Husbandry Co., Ltd.	China	100,000	new entry	na
42	Shenzhen Kingsino Technology Co., Ltd	China	100,000	new entry	na
	Total		16,072,164	15,959,800	

Fact: In 2021, Pork Was The Most Widely Consumed Protein Across The Globe.



Data source: USDA Foreign Agricultural Service

Muyuan Foodstuff Co., Ltd.

2,831,000 sows



牧原食品股份有限公司
MUYUAN FOODSTUFF CO., LTD

Founded in 1992, the main business of Muyuan Group covers hog production, breeding, and slaughtering as well as feed processing.

After 29 years of development its total assets exceed \$29 billion. The Group has more than 150,000 employees and more than 300 subsidiaries. The Group's hog breeding business is set up in 215 counties and 103 cities of 24 provinces. Muyuan Foods Co., Ltd. was listed in 2014 with 40.26 million hogs marketed in 2021. Muyuan Group believes "science and technology creates healthy pork".

Smithfield Foods/WH Group

1,171,000 sows

Smithfield.

Good food. Responsibly.®

Smithfield traces its history back to 1936, when Joseph W. Luter Sr. and his son, Joseph W. Luter Jr., opened the Smithfield Packing Company in Smithfield, Virginia.

Now Smithfield is a global food company with more than 63,000 employees working across 35 U.S. states and seven countries.

The company ships meat exports to 40 countries around the globe. Smithfield is a subsidiary of WH Group, and these sow numbers are in addition to WH Group's other company sow production numbers.

Company's U.S. facilities are recognized for outstanding environmental stewardship, and workplace safety achievements.

Charoen Pokphand Foods

1,152,000 sows



Founded in 1921, CP Foods Group is a diversified multinational group of companies with its core businesses in agriculture and food, retail and telecommunications, and television. It is also involved in more than 10 industries including finance, real

estate, pharmaceuticals and machinery processing, with operations in more than 100 countries and regions and over 450,000 employees with global sales of US \$84 billion in 2021

CP Group has established a CP pig breeding base in Gansu, and has built the integrated production chain project of 1 million pigs in Hubei, Henan and Jiangsu respectively. Another similar project of 1 million hogs in Inner Mongolia is under construction. 8 million pigs were marketed in China in 2021.

Wens Group

1,100,000 sows



Founded in 1983, Wens Group has developed into a modern agriculture and animal husbandry enterprise, with livestock and

poultry breeding as the main business. It has supportive slaughtering operation, feed processing, modern farming equipment manufacturing, veterinary medicine production, fresh food distribution and other related businesses across regions.

Currently Wens Group has 399 holding companies, 48,000 cooperative family farms and about 52,800 employees across the country. In 2021, Wens marketed 13.22 million slaughter pigs and 1.101 billion chickens. The number of marketed hogs is expected to reach 20 million heads in 2022.

Zhengbang Group

1,000,000 sows



Founded in 1996, Zhengbang Group is divided into four industries: animal husbandry, plant protection, food, and financial control. Currently, it has more than 700 branches and subsidiaries in 29 provinces, cities and autonomous regions, with more than 70 thousand

employees. Zhengbang Group marketed 14.93 million hogs in 2021 and realized a total output value of \$18 billion.

New Hope Group

1,000,000 sows



Founded in 1982, New Hope Group has over 600 branches and subsidiaries in more than 30 countries and regions around the world, employing over 135,000 people. It has total assets \$46 billion.

The Group's subsidiary company, New Hope Liuhe Co.,Ltd. went public in 1998. Its business covers the whole industrial chain including feed, breeding, meat products and financial investment, with operations all over China and 16 other countries in Southeast Asia, Africa, Europe and North and South America, and it set up an overseas operation center in Singapore.

In 2021, New Hope Liuhe marketed 9.98 million hogs.

Sichuan Dekon Group

450,000 sows



Sichuan Dekon Group was founded in 2014, and its main businesses include hog and chicken production and food processing with more than 100 subsidiaries and businesses in 13 provinces, cities and autonomous regions.

The main operation model of hog production is "company + family farm".

5.6 million pigs were marketed in 2021.

Pipestone System

440,000 sows



The world-class sow management company, Pipestone Management, was formed in 1990 and today proudly manages over 70 sow farms for 450 family farmers across the Midwest. PIPESTONE is proudly helping over 1,500 pig farmers by providing resources and expertise in the areas you see below.

In addition to 288,000 sows managed in the United States, Pipestone Veterinary Services also has ownership of 93,000 sows in China and 59,000 sows in Mexico. Pipestone System shareholders are farmers in the U.S. Midwest.

Triumph Foods, LLC

426,640 sows



Triumph Foods, LLC was organized in 2003 by a group of the largest U.S. independent pork producers whose goal was to create a pork processing operation capable of recognizing the benefits of an integrated business model.

With a workforce of over 2,800 today, Triumph Foods processes in excess of 6 million hogs each year generating over \$1.6 billion in annual revenues.

There are 5 producers/shareholders under the Triumph Foods umbrella:

- Christensen Farms 143,000 sows
- The Hanor Family of Companies 87,500 sows
- Allied Producers' Cooperative 76,640 sows
- Eichelberger Farms 62,500 sows
- New Fashion Pork 57,000 sows

In partnership with Seaboard Foods, another World Mega Producer on our list, Seaboard Triumph Foods (STF) was built in 2017, that produces top quality pork for Prairie Fresh and Daily's Premium Meats.

BRF S.A.

391,825 sows



Founded in 1934, from the association between Sadia and Perdigao, two giants of food market, BRF S.A. is a multinational Brazilian company that owns a diverse portfolio of food products. The Company's sale segments include Brazil, Latin America (LATAM), Middle East and North of Africa (MENA), and others.

In 2021, the company reached a net profit of \$184.39 million, a 3.3% rise from 2020. The pork and other operations involve the production and sale of in-nature cuts. The processed operations include the production and sale of processed foods, frozen and processed products derived from poultry, pork and beef, margarine, vegetable and soybean-based products.

BRF produces 160,000 metric tons of pork annually and 10,600 metric tons of feed.



Techbank Food Co., Ltd

380,000 sows



Founded in 1996, now Techbank Food Co., Ltd. has three main business segments: swine genetics, hog farming and food processing. Techbank was listed in 2007, and its hog breeding business, Hanswine Group, is committed to strengthening production management, strictly controlling bio-security, improving breeding efficiency and reducing costs. In 2021, 4.28 million pigs were marketed.

Twins Group

380,000 sows



Founded in 1998, Twins Group is a large national agricultural and animal husbandry enterprise specializing in hog production and processing, feed production and sales. The group has more than 300 branches and nearly 20,000 employees.

In 2021, the group's feed sales exceeded 11 million tons, 11.65 million pigs were marketed, and the output value was \$13.6 billion.

Aonong Group

360,000 sows



Founded in 2011, Fujian Aonong Biotechnology Group Co., Ltd. has main businesses including feed production, pig production, food, trade and others, with "feed processing and pig production" as the main businesses while "bio-pharmaceutical, raw material trade, and agricultural innovation" as the supporting business.

The Group was listed in September 2017, and its market covers most provinces and cities in China. It has over 300 subsidiaries and nearly 12,000 employees.

In 2021, 3.25 million pigs were marketed.

Seaboard Foods

335,000 sows



Seaboard Foods is an integrated food company producing and marketing pork both domestically and internationally.

Seaboard has processing facilities in Guymon, Okla., and Sioux City, Iowa, as well as further processing at its co-owned facility with Triumph Foods. Their products reach customers in 35 countries.

Seaboard has over 5,400 employees across 5 US states and markets more than 7.1 million market pigs per year. Their 8 feed mills produce 2.4 million tons of animal feed per year.

Guangxi Yangxiang Co., Ltd.

300,000 sows



Guangxi Yangxiang Co., Ltd. was established in 1998. Its main businesses include feed production, swine farming and food processing. It has 70 branches and subsidiaries with more than 5,000 employees.

The company is committed to run the business through scientific and technological innovation.

In 2021, 4 million pigs were marketed.

Aurora Alimentos COOP

261,033 sows



Aurora Alimentos is Brazil's third largest industrial conglomerate in the meat sector. With 52 years of existence, Aurora Coop is made up of more than 100,000 families spread across 600 Brazilian municipalities.

With a slaughtering capacity of 25 thousand pigs/day, 1.2 million chicken/day and a processing of 1.6 million liters of milk/day, the cooperative has been growing and bringing its more than 800 products to the table of thousands of Brazilians and for more than 80 countries.

The cooperative grew its gross operating revenue in 2021 fiscal year to \$3.9 billion US.



COFCO

250,000 sows



By the end of 2020, the group's assets totaled at \$105 billion, with a net profit of \$3.2 billion. COFCO Jia Jia Kang Food Co., Ltd., a subsidiary of COFCO, was listed in Hong Kong in 2016. The company's main businesses include feed production, hog breeding, slaughtering, processing, sales, and international trade of meat products.

It has set up nearly 100 high-standard hog breeding operations, 2 slaughter and processing plants, and 4 meat products processing plants in China.

Iowa Select Farms

242,500 sows



Founded and privately-owned by Iowa Falls natives Jeff and Deb Hansen, Iowa Select Farms has grown to be the largest family-owned pork production company in the U.S.

With 1,200 employees and 650 contractors the company markets more than 5.5 million hogs annually.

Iowa Select Farms has 800 farms in 50 counties and is one of the leading economic engines to Iowa's rural communities.

The Deb and Jeff Hansen Foundation was established in 2006 by the owners of Iowa Select Farms and operates unique programs and projects that provide food to struggling Iowa families and children, shows gratitude to members of the Armed Forces and strengthens efforts to find a cure for childhood cancers while improving the quality of life for impacted families.

Seara Foods

240,047 sows



Seara Foods is a Brazilian food producing and processing specialized in production, development and distribution of meat products. The company was founded in 1956.

Since 2016 its parent organization is JBS. Seara's net revenue is \$148 million.

In 2000 became number one pork exporter in Brazil. The company operates through three business segments namely: Beef, Chicken, and Pork. The company is also engaged in leather tanning, aluminum can production, industrial waste management, producing soap, glycerin, and bio-diesel, and transportation, among others.

DaBeiNong Group

230,000 sows



Founded in 1993, DaBeiNong Group's main businesses includes feed and animal production, hog breeding, crop technology, etc.

It has nearly 20,000 employees, a core R&D team of more than 1,500 personnel, 220 production bases and nearly 300 subsidiaries. The Group went public in 2010.

In 2021, 4.31 million pigs were marketed.

Miratorg

220,000 sows

МИРАТОРГ

Miratorg was formed in Moscow, Russia in 1995. Now is Russia's largest fully integrated, farm to plate agroholding, trading globally.

Miratorg is currently in the last year of a 4 year project to grow its pig production to 240,000 sows. It is expanding its slaughter capacity with the construction of what is said to be the biggest slaughter plant in Europe in Kursk, Russia. It also continues to expand and invest in other associated areas of its business, from a genomics laboratory to a new tannery. A sheep production system was started in 2018 is now in full production.

Miratorg's key business activities are: crop farming, pork and beef production, poultry production, feed manufacture (1.5 million tonnes/year), meat processing, production of convenience and ready meals, logistics and distribution as well as retail sales.

Miratorg has invested over \$2 billion and employs over 30,000 people on its multiple farms, factories and retail shops located in many parts of Russia.



Vall Companys Group

209,805 sows



Vall Companys
G R U P O

The Vall Companys Group is a family-owned business Group in business since 1956 with activities to include: feed manufacturing, animal production (swine, poultry and beef), flour milling, veterinary medicaments, merchandising and transportation. They are in all food production chain. Key figures for 2021:

- Total sales - 2,188 million €
- Production of pigs - over 5 million heads
- Production of poultry - 83 million heads
- Production of feed - 2.06 million MT
- Flour - 490 thousand MT
- Associated farms - 2,300
- Collaborators - 9.500

Carthage System

178,600 sows



Established in 2000, the Carthage System is managed by Professional Swine Management in Carthage, IL.

With a long-standing history of successfully partnering with family farms across the Midwest looking to invest or expand their pork production, the company is committed to helping these families remain an important part of USA food supply.

Prestage Farms

178,000 sows



Prestage Farms

Prestage Farms was founded in 1983 by Bill and Marsha Prestage, and it is a leader in both pork and turkey production. In March 2019, the company opened its newest processing facility near Eagle Grove, Iowa.

Prestage produces nearly 1 billion pounds of pork annually with operating divisions across five states in USA.

The Maschhoffs

176,000 sows



The Maschhoffs family farm dates back to 1851 in Carlyle, IL. Today, more than 4 million pigs are raised each year, combining company farms and independent production teams within a 9-state footprint. The Maschhoffs is one of the largest family-owned pork production networks in North America.

Cooperative EVEL'UP

171,000 sows



Evel'Up is an agricultural cooperative born in 2018 of a very strong collective commitment. It brings together nearly 1,000 pig farmers in from western France. Its mission is to promote and market the production of its members. It also provides expert advice in the fields of breeding for the benefit of its members.

Each year, Evel'Up sells approximately 4 million market pigs.

JBS USA

170,000 sows



JBS USA Holdings, Inc. is an American food processing company and a wholly owned subsidiary of the Brazilian company JBS S.A., a world leading animal protein processor with more than 240,000 team members worldwide, and over 300 production units.

Its pork production operations extend in the United States, Brazil, the United Kingdom and Australia.

Headquartered in Greeley, Colo., JBS USA has 100,000 team members who provide more than 280 million daily meals to consumers across the globe.



Shanxi Elephant Agriculture and Animal Husbandry Group Co., Ltd.

170,000 sows



大象农牧

Founded in 1998, Shanxi Elephant Agriculture and Animal Husbandry Group Co., Ltd. has businesses including hogs, poultry, feed, food etc. Its subsidiary company, Shanxi Elephant Breeding Co., Ltd., focuses on exploring the pig industrial chain model, fully promoting pig standardization and establishing a comprehensive breeding service system.

In 2021, 2.63 million pigs were marketed.

- Over 850 own and integrated pig farms and 400 poultry farms;
- 3 million fattening pigs/year in 5 plants
- 200 million kilos of pork processed/year in 3 meat processing centers (Costa Food Meat)
- Over 1,250,000 hams/year;
- Exporting to 107 countries.

Agrosuper (Chile)

135,000 sows



Founded in 1955, Agrosuper S.A. is one of the largest animal protein producers and manufacturing in Latin America and the biggest in Chile. In 1983 the company entered the swine business producing pork mostly for international markets.

During the last decade Agrosuper has opened offices in Italy (2002), the United States (2003), Japan (2004), Mexico (2005), China (2009), Brazil and Shanghai (2012). Finally, Agrosuper in 2011 assumed majority control of the turkey production company Sopraval.

Agrosuper S.A. has 18,863 total employees across all its locations and generates \$3.36 billion in sale.

Olymel

134,000 sows



Founded in 1991 by La Coop Fédéré, Olymel is the largest hog producer in Canada. Olymel celebrated its 30th anniversary in 2021.

Olymel has 30 meat processing plants in five Canadian provinces and has offices in Japan, Australia and South Korea; employs 15,000 people and exports to more than 65 countries.

Today Olymel has a capacity of 185,000 hogs per week and 2.4 million birds per week, with a revenue of \$4.5 billion.

Costa Food Group

150,000 sows



Costa Food Group, the meat producing holding of Grupo Empresarial Costa, is a leader in the Spanish and European agribusiness sectors.

Costa Food Group key numbers 2022:

- 1,750 million Euros (US\$1.9 billion) aggregate turnover in 2020;
- 5,000 permanent employees;

Betagro 130,000 sows



Betagro Group was founded in 1967 under the name of Betagro Company Limited to produce and distribute animal feed in Thailand.

The Group has grown substantially ever since, by establishing a livestock production facility in Pak Chong, Nakhon Ratchasima Province, and then expanding further into the integrated agricultural sector with a complete production base in Lop Buri Province, which includes everything from manufacture and livestock farming to animal breeding, and distributing animal health products.

Betagro Group has extended its animal feed manufacturing base, livestock farms, and food product distribution stores to cover and respond to greater demands, of the neighboring countries, including Cambodia, Lao PDR, and Myanmar, in strict compliance with applicable laws enforced in each country.

Tecon (China) 120,000 sows



Tecon Animal Science Bio-Technology Co., Ltd. is a large agricultural and animal husbandry enterprise with integrating veterinary biological products and animal disease control, modern hog breeding, feed

R&D and production, pig slaughtering, processing and distribution.

Tecon was listed in 2006. Now it has more than 100 wholly-owned companies, holding companies, joint-stock companies and branches, which are distributed all over China.

Xinjiang Tecon animal husbandry technology Co., Ltd., a subsidiary of Tecon Biology specializes in the production, technical consultation and service of breeding pigs and commercial piglets. 1.6 million pigs were marketed in 2021.

Tang Ren Shen Group Co. (TRS) 120,000 sows



Tang Ren Shen Group was founded in 1988 and listed in 2011. Its businesses covers livestock genetic improvement, animal feed, market hog production, and meat processing.

It has established more than 100 branches and subsidiaries in more than 20 provinces across China and cultivated many brands such as “Camel”, “TRS” and “Meishen”. In 2020, the revenue was \$2.9 billion.

The group marketed 1.54 million pigs in 2021.

Rusagro 107,000 sows



Rusagro is Russia's second largest pig producer in terms of number of sows with farms located in 3 regions in Russia,

Tambov, Belgorod, both in Western Russia, and Primoria which is in the Far East of Russia.

Rusagro business is divided into 5 main areas of activity.

1. Crop Farming – with 675,000 Ha land.
2. Pig production – fully integrated with feed mills, farm and slaughter processing. Number 2 in Russia based upon sow herd size.
3. Sugar – Number 2 in Russia.
4. Oils and Fats – producing vegetable oils, margarine and mayonnaise.
5. Milk – manufacturing cheese, butter and dried milk products.

With annual sales of \$1.35 billion and assets worth \$2.4 billion, Rusagro employs over 14,000 people. and sells products to 80 regions of Russia and to 35 countries world-wide.

Frimesa Cooperativa Central 106,214 sows



Frimesa Cooperativa Central is a Brazilian company in the food industry, founded on December 1977, headquartered in the state of Paraná. Frimesa has 106,217 sows.

Frimesa is engaged in pork, processed meat and dairy production. The Coop has 680 employees in Parana and generates \$684.57 million in sales (USD).

Frimesa has five industrial units and numerous receiving and distribution stations, located in seven Brazilian states.

In 2017, the construction of the largest packing plant in Latin America began, with 141,000 m², on a 115-hectare (284 acre) area with a slaughtering capacity for 15,000 pigs per day.



Country View Farms / Clemens Food Group 105,000 sows



Clemens Food Group is a family owned, private company with over 125 years of business within the pork industry. It has 4,000 team members.

Its hog operations, Country View Family Farms, is a network of over 250 farms that includes 18 sow farms and over 200 nursery and finishing farms that are owned and operated by independent family farms located throughout Indiana, New York, Ohio, and Pennsylvania.

In addition to hog production, the company has two pork processing facilities harvesting more than 6 million hogs per year: one facility in Hatfield, Pa.; and the newest in Coldwater, Mich. Clemens also operates a value-added facility in Emmaus, Pa., and sells a variety of fresh and value-added pork products to the retail, food service, club, convenience and international marketplaces.

It's pig business arm integrates swine genetics, breeding, farming, slaughtering, processing and brand sales. More than 30 modern pig farming and breeding bases have been built in Sichuan, Jiangxi and Guizhou, which can provide 3 million high-quality market hogs a year.

It has carried out a joint breeding program with the Canadian company Genesus Inc., and also has two new genetic pig lines "Tianfu pig" and "Sichuan Tibet black pig".

In 2021, 1.2 million pigs were marketed.

Guangxi Gui Ken Animal Husbandry Co., Ltd. 100,000 sows



Guangxi Gui Ken Animal Husbandry Co., Ltd. is an integrated wholly-owned subsidiary of Guangxi Nong Ken Group.

It has more than 2200 employees and assets valued at over \$950 million, with operations to include pig production, feed processing, product distribution, and technical services.

Guangxi Gui Ken Animal Husbandry Co., Ltd. has plans to expand by building another 25 pig commercial farms to better support its operation in Guangxi.

1.4 million pigs were marketed in 2021.

Guangdong Haida Group Co., Ltd. 100,000 sows



Guangdong Haida Group Co., Ltd. is a high-tech agricultural and animal husbandry enterprise group covering the whole industrial chain (feed, genetics, bio-pharmaceutical, intelligent farming, food circulation and finance). Haida group was listed in November 2009.

It has more than 600 subsidiaries and branches and more than 35,000 employees at home and abroad.

In 2021, 1.97 million pigs were marketed.

Shenzhen Kingsino Technology Co., Ltd 100,000 sows



Founded in 1999 and listed in 2011, Shenzhen Kingsino Technology Co., Ltd. is a modern company headquartered in Shenzhen, China, principally engaged in the research, development, production

and sale of pigs and livestock feed mainly marketed domestically.

The company currently has total assets of \$377 million and nearly 2,000 employees.

In 2021, 1.07 million pigs were marketed and 1.2 million tons of feed were sold.

Sichuan TechLex Group 100,000 sows



Founded in 1992, Sichuan TechLex Group has developed from a single business of feed processing to a modern agricultural and animal husbandry integrated group, with more than 150 branches and subsidiaries across China.





At the heart of the Genesus genetic program is a globally linked purebred registered nucleus population of more than 20,000 sows

Genesus' uses in-house and collaborators' knowledge and experience to develop genetic, nutrition and management programs that support customers achieving superior performance and maximum profitability.

How do we deliver the best animals ?

- Registered purebred animals only
- The power of heterosis and breed complementarity
- Profitability-based selection indexes
- Continual investment in our R&D Programs

The Government of Canada Animal Pedigree Act is implemented and certified by the Canadian Swine Breeders Association. Government authorized registered swine breeding stock guarantees purity and a pedigree that ensures a breeding animal that has become a world barometer for quality.

Genesus believes in the value of the registered purebred animal. This commitment ensures that Genesus customers receive only certified purebred and true F1 animals.

Duroc Nucleus ► 7 countries - 4,700 sows

Yorkshire Nucleus ► 9 countries - 12,000 sows

Landrace Nucleus ► 7 countries - 5,700 sows

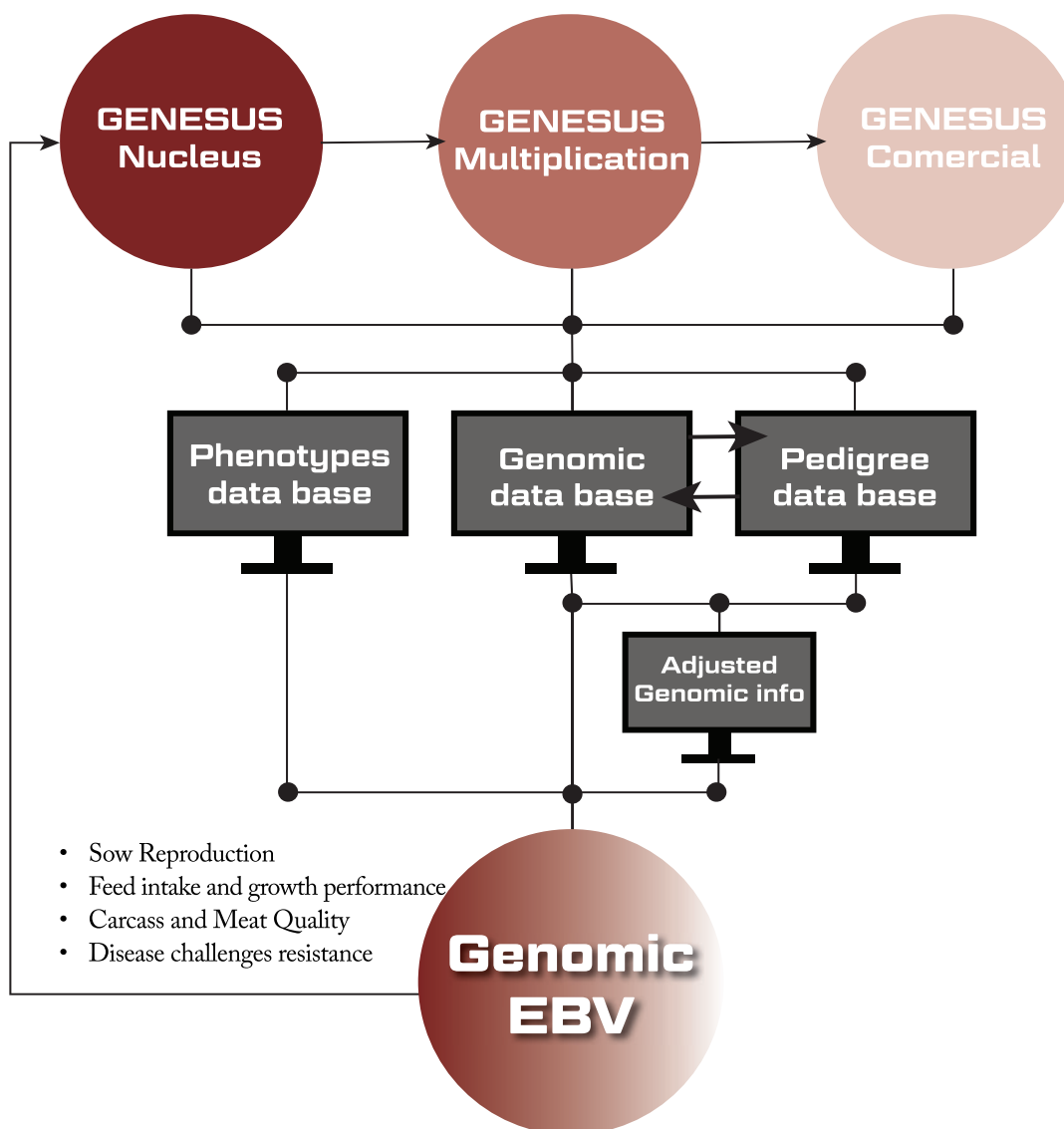
The Genesus genetic program is fully focused to benefit the Genesus commercial pig and thus our customers. Genesus commercial animals are recognized for:

- Outstanding productivity
- Competitive cost of production
- Excellent carcass composition
- Superior pork and eating quality

Genesus focuses on transfer of genetic improvement to the customer in a coordinated and effective program that is implemented with dedicated staff.



GENESUS R&D IMPACT ON THE COMMERCIAL LEVEL



Large genetic nucleus populations are at the base of this program. This ensures that boars selected for customers to produce commercial pigs in the case of Duroc or for making F1 gilts either in multiplier herds or within-system multiplication are mainly litter mates of boars and gilts selected for the nucleus and are of equivalent genetic merit to nucleus replacements.

In addition, the large numbers of boars and gilts tested ensures that volume needs for boars and gilts are achieved.

Also, this program removes a multiplier level required to produce the volume of boars needed and thus greatly shortens the time to move the genetic improvement from the nucleus to the commercial level.

Average Genetic Change Impact on Commercial Pigs

Trait	5 year cumulative
Growth Rate (days to 120kg/265lb)	-7.5
ADFI (kg / lbs)	0.15/ 0.33
FCR	-0.20
Loin Depth (mm at 120kg/265lb)	0.25
Fat Depth (mm at 120kg/265lb)	-0.40
Total Number Born (per Genesis F1 litter)	1.15





At Genesis we know we have unique Genetics. Our pigs have higher appetite, faster growth, better pork quality, lower mortality, and higher income over feed costs. A pig that can make you more profit.

In this time of high feed costs, Genetics that can use a lower cost for a ton of feed is an advantage. Genesis does that, but we were being continually challenged that our recommended rations were very different than all other Genetics. How could Genesis use rations that were so much cheaper per ton? To help rectify that challenge Genesis engaged Kansas State's World recognized Swine Nutrition team to analyze all of Genesis' extensive nutritional research. As you can see from the below Kansas State press release and Lysine calculator, the verification of Genesis Nutrition Specifications. Income over feed costs is what matters.



Kansas State Develops Lysine Calculator for Genesis Grow-Finish

After reviewing data, swine nutrition team built a lysine response curve and model nutritionists can use when formulating diets.

The Kansas State University Animal Sciences and Industry swine nutrition team has added a new tool to its suite of calculators on the KSUSwine website. The team recently developed and released a KSU lysine calculator for Genesis grow-finish pigs.

"Genesis had conducted a series of experiments to assess the requirements of their pigs," says Mike Tokach, K-State ASI Distinguished Professor and Swine Extension Specialist. "They contacted K-State about independently evaluating their research for us to estimate the lysine requirement of their pigs."

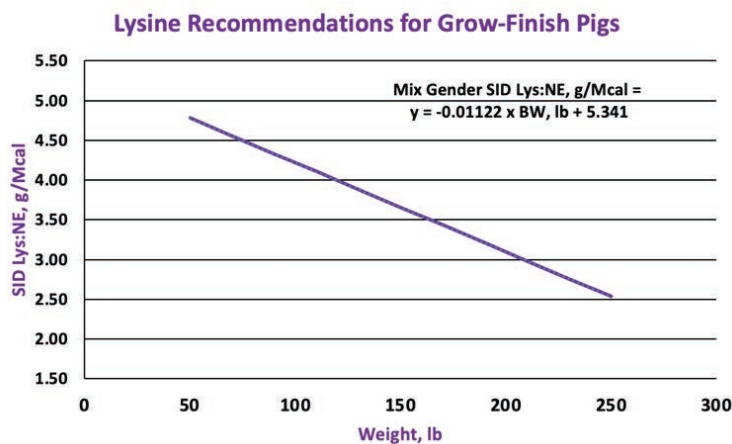
Hilario Cordoba, a KSU ASI master's student in swine nutrition, built a database to review the data provided, evaluated the responses in each dietary phase, and reformulated the diets using NRC ingredient values in each dietary phase with the help of Jamil Faccin, a KSU ASI swine nutrition post doctorate.



“After reviewing the data, we built a lysine response curve and model nutritionists can use when formulating diets for Genesus pigs,” says Cordoba. “The results confirm Genesus recommendations and provide an equation that swine nutritionists can use to estimate the requirement for Genesus genetics at any body weight in the finisher period.”

The **“Calculator and Tools”** page is one of the most visited and resourced pages within the KSUSwine website (www.k-state.edu)

“We are very pleased with our collaboration with the K-State ASI swine nutrition team.” says Bob Kemp, Genesus Vice President of Genetic Programs and Research and Development. “Their expertise and experience directly supported Genesus efforts to provide industry nutritionists and producers the detailed information and tools they require.”



Source: Kansas State University Animal Sciences and Industry Department, which is solely responsible for the information provided, and wholly owns the information.

GENESUS OUTPERFORMS USA PigCHAMP¹ Data

2021 Data ²	Genesus Mean	PigCHAMP USA Mean	Genesus Top 10% Average	PigCHAMP USA Top 10% Average
TB/ Litter	15.00	15.20	16.75	16.37
BA/ Litter	13.69	13.54	15.05	14.58
Pre-Wean Mortality %	11.00	15.70	2.80	10.19
Pigs Weaned / Litter	12.03	11.85	12.71	12.94
Pigs/ Mated Sow /Year	28.86	26.08	31.37	30.91
Female Death Rate %	5.04	14.86	1.87	7.30

¹Pig Champ is a leading database of U.S. swine production data.

²Data is per category, won't necessarily be linear.

It's obvious, a major advantage of Genesus is livability in both preweaning and female death loss. Lower mortality in preweaning and sow death loss leads to an advantage of 2.6 pigs more per mated female a year.

One fact – Dead Sows Don't Give Pigs! No doubt Genesus outperforms the industry average.

If you want excellent overall production: **GENESUS IS THE TOTAL PACKAGE.**



the **TOTAL PACKAGE**



The First Power In Genetics
GENESUS

The production cost of dead sows is becoming a large concern in our industry. According to industry data, sow mortality has nearly doubled in the past 15 years. Recent data really brings this cost into perspective.

2021 Data	Genesis Mean	PigCHAMP USA Mean	Genesis Top 10% Average	PigCHAMP USA Top 10% Average
Female Death Rate %	5.04	14.86	1.87	7.30

¹Pig CHAMP is a leading database of U.S. swine production data.

²Data is per category, won't necessarily be linear.

COST OF A DEAD SOW

Developed Gilt: \$370.00

Feed Cost per Year: 2300 lb. / 2.4 litters = 958 lb. x \$270/ ton = \$129.33

Vaccination Cost per Year: \$5.00 per litter

Cull Value: 450lb. x 98¢ pe lb. = \$440

TOTAL : \$1,494 to \$1,733

DEAD SOWS COST REAL MONEY.

Try Genesis, compare and decide.

Stronger Sow => Productive Sow => More Profit



www.genesus.com