

Introduction to the Swine Industry

The swine industry has a major economic impact on agriculture in Missouri. This unit will focus on swine production and the important issues facing the industry.

Economic Implications

The swine industry has experienced tremendous change. In 2005, more than 105 million hogs were processed into more than 21 billion pounds of pork. In 1995, more than 200,000 swine producers operated nationwide. The industry has seen a dramatic drop with around 67,000 swine producers operating today. The swine industry generally ranks either fourth or fifth annually among all production agriculture industries in terms of farm cash receipts. Each year, producers sell more than \$11 billion worth of hogs, which have a retail value of \$30 billion.

In 2005, Missouri had approximately three percent of hog operations nationwide. The state ranks seventh in the number of hogs and pigs produced. The top three counties in the state are Mercer, Sullivan, and Putnam, with close to one million head of hogs between them. Hog numbers in Missouri are illustrated in Figure I.1.

Swine Terms

The swine industry uses many unique terms. Anyone involved in the swine industry should know and understand these terms.

Farrow - To give birth

Gilt - A young female pig that has not yet farrowed

Barrow - A castrated male pig

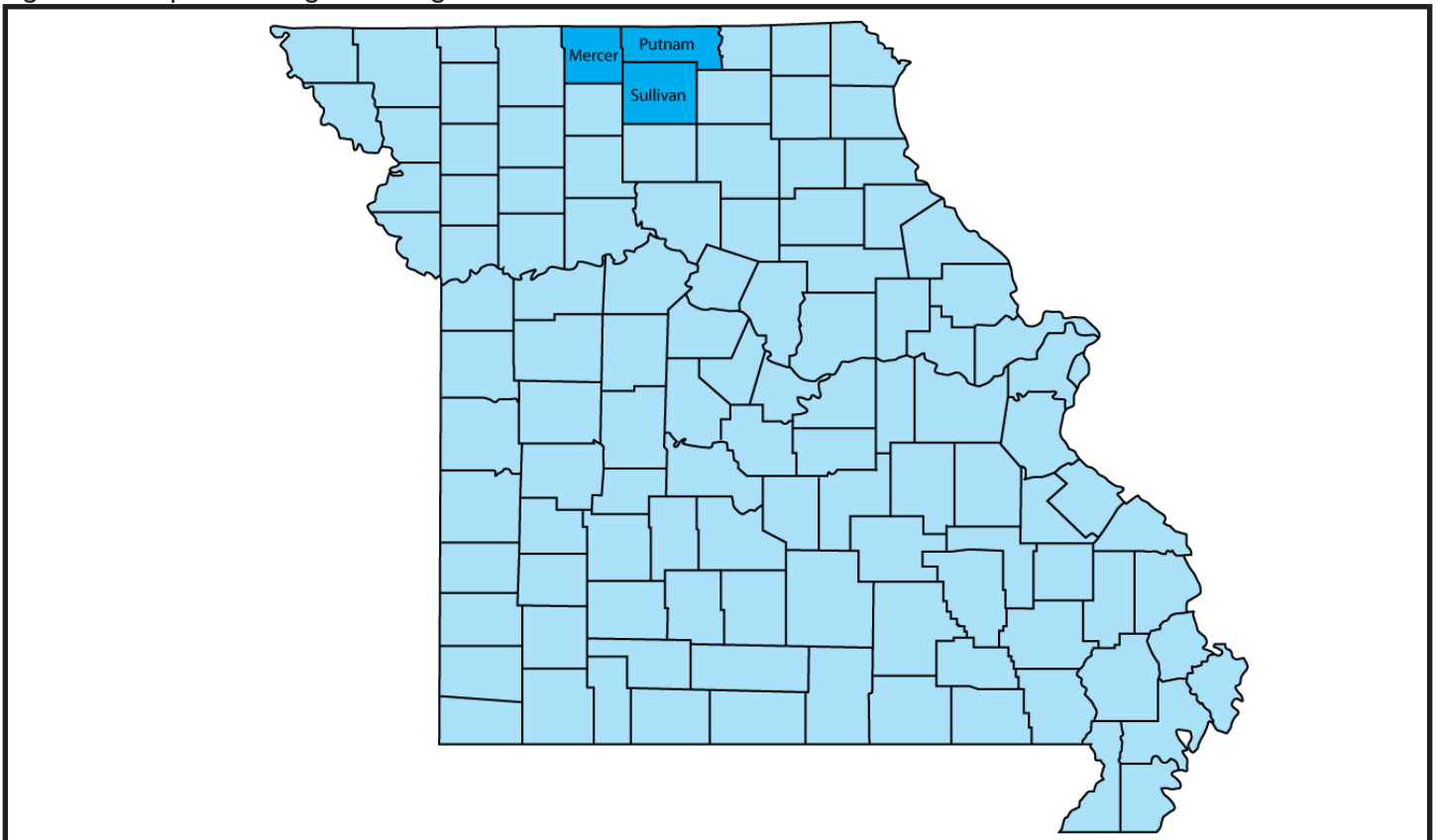
Boar - A male pig used for breeding

Sow - A mature female hog

Feeder pig - A gilt or barrow between weaning and finishing

Market hog - A gilt or barrow weighing between 240 and 270 pounds and ready for processing

Figure I.1 - Top Three Hog-Producing Counties in Missouri



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Swine Facts

Body Temperature - 102.5°F

Market weight - 253 lbs.

Avg. age at 250 lbs. - 170 days

Pigs per litter - 8.3 weaned nationally

Feed to gain ration - 3 lbs. of feed:1 lb. of gain

Evolution of the Swine Industry

The trend in the swine industry in the United States is toward fewer producers and larger operations. While there are more than 67,000 swine producers operating in the United States today, there were approximately three million producers raising hogs 40 years ago. Thirty years ago, many swine producers operated farms with less than 100 sows. Currently, the industry is moving toward larger operations. These operations may range in size from 1,000 to 80,000 sows.

The location of the swine industry is also shifting. During the 1960s and 1970s, most swine production was centered in the Corn Belt states, such as Iowa, Minnesota, Illinois, Indiana, Nebraska, and Missouri. While these states still contain most of the hogs produced in the United States, North Carolina, Arkansas, Texas, Kansas, and Oklahoma have seen tremendous growth in hog numbers. Large corporate expansions have accounted for much of this recent growth.

Today, a major focus of American swine producers is to expand pork exports. The export market enhances the economic returns of all swine producers. The swine industry slogan, "Pork, the other white meat," is aimed at influencing consumers worldwide to increase consumption of pork and pork products.

Production Systems

The major production systems of the swine industry are farrow-to-finish production, feeder pig production, and feeder pig finishing.

Farrow-to-finish swine production is the most common type of production. It covers the entire production process, from breeding to sales of market hogs. Gilts

and sows are mated to boars or artificially inseminated. Females farrow a litter of pigs. The piglets are weaned, and the sows are bred again. The baby pigs are moved into a nursery until they weigh approximately 50 pounds and then to a finishing barn where they grow until they reach 240 to 270 pounds. The pigs are then sold as market hogs to provide pork for human consumption. Farrow-to-finish production is the most intensive production system and generally has the greatest requirements as to management skills, labor, and facilities.

Feeder pig production involves producing pigs to sell to other producers to be fed for market. Feeder pig producers have a herd of sows for breeding. Pigs are sold when they weigh approximately 50 pounds. The investment required for the operation is less than that for farrow-to-finish production. Most feeder pig producers in Missouri have a contract to produce pigs for a company involved in commercial swine production. The company then buys the pigs and sends them to feeder pig finishers, who are also under contract.

Feeder pig finishers purchase or receive pigs at approximately 50 pounds. They feed the pigs until they reach a market weight of 240 to 270 pounds. After the animal reaches market weight, the pig is processed into saleable pork and pork products. This system requires less labor and managerial ability than the other systems. The investment required is also lower than in farrow-to-finish or feeder pig production.

Business Structures

Before the current increase in corporate production, the vast majority of hogs were produced on privately owned family farms. Many family producers still raise hogs individually.

Some producers are involved in network production. In this type of production, a group of producers cooperates to decrease production costs and improve profits for each operation. Networking can involve collective marketing arrangements, purchasing supplies at a discount for member operations, or cooperative production of swine. For example, one producer might raise feeder pigs to be finished by another producer in the network.

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Some producers operate on a contract basis. The individual producer signs a contract to produce pigs for a company. The company owns the pigs and finances the operation, and the producer provides the facilities, equipment, and labor. The company makes many of the decisions about how the pigs are managed. The producer receives a fixed price per animal.

Many corporate investors have expanded their involvement in the swine industry. The goal of corporate farms is efficient production of a uniform product. Corporate farms are large-scale operations. They may also be vertically-integrated, meaning the company owns and controls all phases of the production process. For example, Company A might own complete farrow-to-finish production facilities, a feed mill that produces feed for its farms, and a processing plant.

Career Opportunities

With the wide scope of the swine industry, career possibilities are extremely diverse. Estimates suggest that over 700,000 jobs in the United States are linked to the swine industry.

Many career opportunities exist in the swine industry besides becoming a producer involved in one of the different production systems. Swine operations need employees to fill positions, such as breeding manager, farrowing manager, and nursery manager. These positions involve overseeing these activities for the operation. A feed mill technician is responsible for producing feed for swine herds. An artificial insemination technician breeds sows and gilts using artificial insemination. Animal geneticists specialize in genetic research to develop more powerful medications and genetically superior animals. Animal health product sales representatives provide swine medications and other products to farm stores, veterinarians, and producers. Veterinarians often specialize in swine where large concentrations of hogs are found. Hog buyers buy market hogs to be processed into pork. USDA inspectors and quality control supervisors work in pork processing plants to help ensure that the food supply is safe and wholesome.

Summary

The swine industry is an important part of agricultural production in the United States, accounting for over \$11 billion in farm receipts annually. Swine are produced in farrow-to-finish, feeder pig, and feeder pig finishing production systems. The swine industry is changing, with hogs being produced on larger farms at diverse locations nationwide. Corporate swine production is becoming more prevalent in the industry. Due to the diversity of the industry, young people interested in working with swine have a variety of career opportunities open to them.

Credits

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