

When Sir Walter Raleigh brought sows to the Jamestown colony in 1607, the resulting semi-wild pigs conducted such rampages in Manhattan, that a long solid wall was constructed on the northern edge of the colony to control the roaming herds. This area eventually became known as Wall Street. So, began the lucrative swine production industry in America. Today, the United States is the second-largest pork producer and the largest exporter of “the other white meat”™ in the world.

NOT YOUR GRANDPA'S PIG FARM

This is a story about change. Changes in pork production in Ohio illustrate the fundamental economic question of what to produce, how to produce and for whom to produce.

Mike Barhorst works on a family farm that has been around for 60 years. It is a privately owned business that has grown and improved with changing markets and consumer demands. Technology and education are two factors that have made change possible. The episode #6 video challenges the viewer to consider how and why and what happened when farmers in Ohio traded in pitchforks for college degrees and laptops.

Today's **farmer** has improved the farm operation to be more effective and more productive, resulting in a better bargain for the consumer. Thirty years ago, many farmers kept a few sows and fed the baby pigs until they reached market weight. Pigs were often a second or third source of income for farmers. At that time, most full-time hog farmers owned less than 200 sows. Today more hogs are raised on fewer farms. Economy of scale and specialization have reduced the number of species on a farm from two or three down to one and increased the number of hogs per farm to several hundred or more. Some farmers just raise the crops that feed the animal operations.

Technology makes this possible. Automatic feeders and waterers allow for individualized hog feeding on a large scale. Automatic feeders calculate daily gain and feed efficiency and can monitor individuals from pen to pen. This results in healthier pigs. More animals can be raised on less acreage.

Read stories about growth and change of the swine production industry in the United States.

Consumer demand has changed the quality of the hog that is produced. Producers have listened to consumers and made changes in genetics and nutrition. The result is a leaner pig. Surprisingly, today some cuts of pork have less fat than some cuts of chicken.

The Ohio Soybean Council in partnership with Battelle's Technology Partnership Practice studied the economic impact that animal agriculture has in Ohio. The results showed that Ohio's livestock industry is an important part of the state's economy. Ohio's livestock industry is directly and indirectly responsible for \$3.6 billion in output, creates more than 40,000 Ohio jobs and generates more than \$396 million in personal income every year.

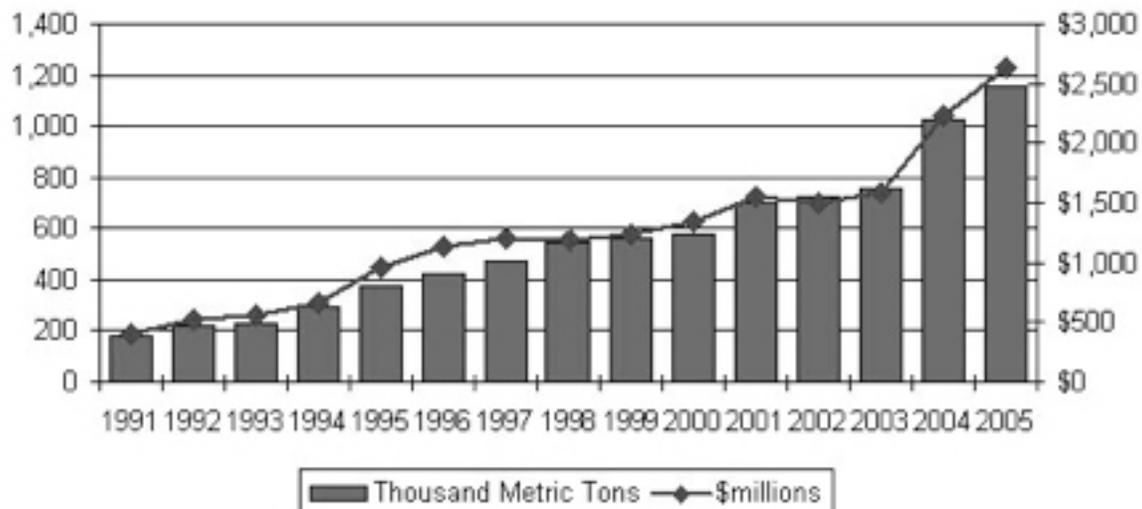
Demand for the product has also grown in global markets. Global exports of pork are expected to continue to rise in countries such as China, Japan, Canada, Mexico, Russia and South Korea as the growth in pork and beef consumption continues to outstrip each country's production capacity. According to the U.S. Meat Export Federation, the U.S. pork industry sold more than 1 million metric tons of pork and pork variety meat products worth more than \$2.5 billion in 2005, making it the 15th consecutive record-breaking year for U.S. pork exports by volume. Use current data found in the following reports to compare industry growth and exports to several global markets.

Pork exports

fas.usda.gov/dlp/circular/2005/05-04LP/porkoverview.pdf

Study this bar graph: What does it show about the connection between production/supply (metric tons) and demand (price)? Check out the links for other graphs.

**15 Record-Breaking Years Of
U.S. Pork (including variety meat) Exports**



GRAPHIC ORGANIZERS

Graphic organizers are effective tools which provide a visual representation of facts and concepts. Graphic organizers exist in a variety of forms; perhaps the most widely known is the web. Other types of graphic organizers include the concept map, sequence chain, story map, main idea table, flowchart, matrix, and venn diagram. Graphic organizers can be used before, during or after instructional activities.

Use this graphic organizer as a guide for viewing the video to activate prior knowledge and provide a framework for new information. Graphic organizers help students process and reorganize information, summarize learning, encourage elaboration, organize ideas for writing, and assess the degree of student understanding.