Hog operations are represented by those selected in a special survey of hog farms as part of USDA’s 1998 Agricultural Resource Management Survey (ARMS). Hog operations are defined as farms that had a hog inventory of 25 head or more on the acres operated at any time during 1998. This means that hog operations include independent hog producers and growers who produced hogs under contract.

Phase of production refers to one of four commonly used categories that describe stages of the hog production process: 1) breeding and gestation—the breeding of females and their maintenance during the gestation period; 2) farrowing—the birth of baby pigs until weaning; 3) nursery—the care of pigs immediately after weaning until about 30-80 pounds, and; 4) finishing—the feeding of hogs from 30-80 pounds to the slaughter weight of 225-300 pounds.

Type of hog producer is a classification that defines the hog operation according to the phases of production conducted on the operation and the type of product produced. Some operations in the survey could not be classified using the criteria shown below.

- **Farrow-to-finish** operations are those on which pigs are farrowed and then finished to a slaughter weight of 225-300 pounds. Using the survey data, they were defined as farms on which during 1998 more than 75 percent of pigs came from onfarm farrowings and more than 75 percent of the value of hogs and pigs left the operation through market hog sales or contract removals.

- **Farrow-to-feeder pig** operations are those on which pigs are farrowed and then sold or removed under contract at or after weaning at a weight of about 30-80 pounds. Using the survey data, they were defined as farms on which during 1998 more than 75 percent of pigs came from onfarm farrowings and more than 75 percent of the value of hogs and pigs left the operation through market hog sales or contract removals.

- **Feeder pig-to-finish** operations are those on which feeder pigs are obtained from outside the operation, either purchased or placed under contract, and then finished to a slaughter weight of 225-300 pounds. Using the survey data, they were defined as farms on which during 1998 more than 75 percent of pigs came from feeder pig purchases or contract placements and more than 75 percent of the value of hogs and pigs left through market hog sales or contract removals.

- **Weanling-to-feeder pig** operations are those on which weanlings (10-20 pounds) are obtained from outside the operation, either purchased or placed under contract, and then fed to a feeder pig weight of about 30-80 pounds. This type of production is done almost exclusively under production contract arrangements. Using the survey data, they were defined as farms on which during 1998 more than 75 percent of pigs came from weanlings purchased or placed under contract and more than 75 percent of the value of hogs and pigs left through weanling sales or contract removals.

- **Farrow-to-weanling** operations are those on which pigs are farrowed and then sold or removed under contract after an early weaning at a weight of about 10-20 pounds. This type of production is done almost exclusively under production contract arrangements. Using the survey data, they were defined as farms on which during 1998 more than 75 percent of pigs came from weanlings purchased or placed under contract and more than 75 percent of the value of hogs and pigs left through weanling sales or contract removals. A summary of this producer type was not included in the report because of insufficient data from the survey.

Hundredweight gain equals hundredweight (cwt) of hogs sold or removed under contract less cwt of hogs purchased or placed under contract, plus cwt of inventory change during 1998, expressed as:

\[
\text{CWTGAIN} = (\text{CWTSR} - \text{CWTPP}) + (\text{CWTEINV} - \text{CWTBINV})
\]

where CWTGAIN is cwt gain, CWTSR is cwt of sales and contract removals, CWTPP is cwt of purchases and contract placements, CWTEINV is cwt of inventory on December 31, 1998, and CWTBINV is cwt of inventory on January 1, 1998.
Feed efficiency is the total weight (in pounds) of all feed items fed, expressed per cwt of gain added to the animals during the year. Therefore, hog operations with lower values were more feed efficient than hog operations with higher values.

Labor efficiency is the hours of labor used in production, expressed per cwt of gain. Therefore, hog operations with lower values were more labor efficient than hog operations with higher values.

Operating costs are the costs for purchased and farm-raised input items that are consumed during one production period. These include feed; feeder pigs; veterinary and medical services; marketing; custom services and supplies; fuel, lubrication, and electricity; repairs; hired labor; and operating capital.

Ownership costs are the costs associated with the ownership of depreciable assets, such as farm tractors and hog production facilities. These include depreciation, interest, property taxes, and insurance.

Low-cost producers are the 25 percent of hog operations with the lowest total operating and ownership costs.

High-cost producers are the 25 percent of hog operations with the highest total operating and ownership costs.

Farm Typology is a classification that categorizes farms according to a measure of size, operators’ expectations from farming, stage in the life cycle, and dependence on agriculture. The typology measure used in this study is:

- **Retirement** farms are those with sales less than $250,000 whose operators report that they are retired.
- **Residential /lifestyle** farms are those with sales less than $250,000 whose operators report a major occupation other than farming.
- **Farming occupation/lower sales** farms are those with sales less than $100,000 whose operators report farming as their major occupation.
- **Farming occupation/higher sales** farms are those with sales between $100,000 and $249,999 whose operators report farming as their major occupation.
- **Large** farms are those with sales between $250,000 and $499,999.
- **Very large** farms are those with sales of $500,000 or more.

Size of hog operation is defined by the largest number of hogs and pigs on the farm at anytime during 1998, and divided into:

- **Small** operations (1-499 head)
- **Medium** operations (500-1,999 head)
- **Large operations** (2,000-4,999 head)
- **Industrial-scale** operations (5,000 head or more)

Farm Resource Regions portray the geographic distribution of U.S. farm production by identifying areas where similar types of farms intersect with areas of similar physiographic, soil, and climatic traits (Heimlich).

Contract production is an arrangement through which a pig owner (contractor) engages a producer (grower) to take custody of the pigs and care for them in the producer’s facilities with other inputs often furnished by the pigs’ owner. The producer is paid a fee for the service provided.

Integrator is a type of contractor characterized as a large conglomerate or corporate organization that contracts with many growers to produce hogs. The integrator typically furnishes inputs for the growers, provides technical assistance, and assembles the commodity to pass on for final processing or marketing. The integrator typically markets hogs through marketing contracts or other arrangements with slaughter plants.

Vertically integrated firm is a type of contractor whose main business is the production of inputs used in hog production or the processing of hogs. Feed companies are the primary input suppliers who are vertically integrated in hog production, while packers are the primary output processors.

Concentrated animal feeding operation (CAFO) is a category of operations regulated by the Environmental Protection Agency under authority from the Clean Water Act. Swine CAFOs are operations with a capacity of 2,500 head or more, or operations with 750-2,500 head that discharge pollutants directly into navigable waters. An animal feeding operation of any size may also be designated as a CAFO if the permitting authority determines it to be a source of impairment.

Animal units (AU) are a measure of size used for livestock operations where 1 AU equals 1,000 pounds of live animal weight.