• Pig breeding - A scientific practice which aims at genetic improvement of the pigs through successive generations by virtue of planned reproduction
Systems of breeding

- Inbreeding
  - Line breeding
  - Close breeding
- Out Breeding
  - Out Crossing
  - Cross Breeding
  - Grading up
1. Inbreeding

• The mating of related individuals such as parent to off-spring or between brother and sister

Inbreeding

Close breeding
Eg. Boar to her daughter
young male to his mother
bother and sister

line breeding
Eg. Cousin mating
Half brother and sister
Inbreeding

Advantages

• Increases homozygosity
• Keep pure animals
• Undesirable recessive gene may be eliminated
Inbreeding

Disadvantages

• Decreases litter size
• Decreases weaning weight
• Delay sexual maturity
• Out crossing
• The mating of unrelated individuals of the same breed
Cross breeding

- The mating of unrelated individuals of the same breed
Cross breeding

• Cross breeding is mating of individuals of different breeds
• **Criss crossing** - It is the alternate use of boars of two breeds on the female stock produced in a herd
• **Grading up** - mating of any pure-bred boar gilts or sows of a non-descript
Method of mating

• Hand Mating- Is the practice of bringing the sows to the boar for individual service when they are standing heat. It is the most common method of mating is purebred animals
• Advantages of hand mating
• More efficient use of boar power.
• More accurate farrowing dates.
• Repeat breeders can be detected more easily.
• Breeding defects such as limber penis, weak hind legs are detected.
• Sterile boars are quickly detected.
• Provision can be made for breeding large boars to gilts or small boars to large sows.
• Reduced embryonic mortality, if sows are removed from the boar immediately after breeding.
Pasture mating

• In this system of mating, the boar is permitted to run with sows. An aggressive yearlings or mature boar can actually
• serve 15 to 20 sows in a pasture mating system.
Artificial Insemination

• This method has more advantages. Hand breeding with additional opportunity of exploiting the effective boar performance.

• Normal ejaculate if a boar is 200 ml to 500 ml of semen containing 20 to 50 billion spermatozoa. When suitable

• methods for storage and extenders are developed, 15 to 20 sows could be inseminated / or bred per ejaculate.