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Popular Article

## Selection And Culling of Pigs for Profitable Pig Farming

**Nanda Kumar Roy<sup>1\*</sup>, Dulal Chandra Mili<sup>2</sup> & Raj Jyoti Deka<sup>3</sup>**

<sup>1</sup>Assistant Professor, Department of Livestock Production Management,  
Institute of Veterinary Science & Animal Husbandry, Siksha O Anusandhan, Bhubaneswar

<sup>2</sup>Professor & Head, Department of Livestock Farm Complex,

<sup>3</sup>Assistant Professor, Department of Livestock Production and Management,  
College of veterinary Science, Assam Agricultural University, Khanapara, Guwahati

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### Introduction

Selection is the judicious process of selecting the individual animal as parents for the next generation. Selection of proper breed is very important in profitable pig farm. Before farm establishment, selection of breeding stock is the key activity of the farmers. The productivity of any livestock farm depends on both foundation stock as well as on the management. The breeding stock should have the quality of high litter size, strength and vigor of litters, must grow fast and produce quality carcasses, good mothering ability, temperament, grain and feed efficiency of the progeny. Therefore, when buying breeding animals, make sure that pigs come from a farm known to have pigs of good quality. When buying pigs for the first time, it is advisable to take someone along who has the necessary knowledge and experience regarding the proper selection criteria. There are differences among breeds in the economically important traits. When selecting breeds to use in cross-breeding programmes, consider litter size, growth rate, feed efficiency, carcass length, leanness and muscle.

### Selection of Boars

Boar selection is extremely important in making genetic change in a swine herd. Over several generations, selected boars will contribute 80-90 % of the genetic composition of the herd. The boar influences conception rate, litter size, and contribute one half of the genetic makeup of his progeny. Boar selection is very important, because the boar becomes the parent of more offspring's than female as the normal boar: sow ratio is 1:10-15 in pig breeding farm.



### Criteria for selection of breeding boars:

- ❖ Always buy good purebred boars from a reputable farm where records of performance are properly kept.
- ❖ Should be an offspring from superior sows and gilts.
- ❖ They should have sound and strong feet and legs. The boar must be free from physical abnormalities.
- ❖ A boar that produces more chopping noise has higher chance of mating as the noise seems to attract sows.
- ❖ It should be active and alert, have strong legs, back and neck.
- ❖ The boar should be free from any form of diseases.
- ❖ A minimum of 8 months old boar should be use for breeding purpose and not below that 1 to 2 years old is preferred.
- ❖ It shouldn't be overweight or underweight.
- ❖ The boar should be sexually active and should have two equal sized testicles with good testicular development.
- ❖ They should have signs of masculinity with good temperament and docility.
- ❖ It should be preferably one month older than that of the female
- ❖ The boar should be from dam, which has consistently farrowed and weaned large litters with efficiency of weight gain and feed utilization.
- ❖ They should have high average daily gain and high feed conversion efficiency.
- ❖ Boar should possess traits of meaty hog I e body length, depth, height, skeletal size, muscle size and shape.

Boars satisfying above stipulations are subjected to preliminary selection at 5 months of age provided they attain a body weight of at lest less than 60 kg. Final selection of boars should be undertaken at 7 months provided it has attained a body weight of at least 90 kg.

### Selection of Sow/Gilt:

Sow productivity is the foundation of the commercial pork production. The sow also contributes half of the genetic composition to the growing-finishing pigs The sow productivity has improved very much in recent years dur to careful selection and culling pressure. The sow also contributes half od the genetic material to its progeny and the mothering ability of the sow can male difference in raising viable piglets out of the total farrowed.



### **Criteria for selection of breeding sows/gilts:**

- ❖ Gilts/sows must be selected from parent sows having a history of good litter size and healthy piglets, mothering ability, have reached market weight in minimum time and a minimum of 9-10 nos. of piglets at the time of weaning.
- ❖ It should not be overweight or underweight.
- ❖ Should be free from diseases. The physical appearance should be true to its

### **Breed characteristics:**

- ❖ Should be minimum 8 months of age for breeding purpose.
- ❖ Sows/gilts with inverted teats or fat deposition at the base of the teats shouldn't be selected.
- ❖ When buying gilts for the first time make sure that they come from a Breeder with good pigs and accurate records.
- ❖ Wherever possible buy a batch of gilts from the same farm so as to easily report detected anomalies to the source of the stock.
- ❖ The farmer should select the breeding stock from different farms and should gather as much information on the animals as possible.
- ❖ The gilts/Sow should have sound and strong feet and legs have minimum of 12 evenly spread functional teats.
- ❖ The gilts should have adequate length and depth of the body, thick, well-muscled hams and should have a prominent neck.

### **Selection criteria of Piglets for farming:**

- ❖ A minimum of 2 months old piglet is suitable for farming. Do not purchase younger piglets as they require more care and easily susceptible to diseases.
- ❖ A minimum of 6 pairs of teats should be uniformly distributed on both sides of udder in female pigs and in male testicles should be uniformly developed.
- ❖ The hair coat of the piglets should be glossy and not dense. The physical characters should be more or less similar to the preferred breed.
- ❖ The piglets should be active, healthy and bearing a minimum weight of 8 kg. It should be free from any physical deformities or skin diseases.
- ❖ It should be free from disease and physical defects originating from reliable breeders.
- ❖ Selected piglets should be selected from sows which have consistently farrowed and weaned large litters (more than 8) and have reached market weight in minimum time.



## Culling of pigs

Culling is removal of undesirable animals from the herd, for reasons of uneconomic, poor production, or very poor reproductive ability, with sterility problems and breeding, irregularities, very poor conditions, stunted growth, suffering from incurable illness. Culling is one of the important aspects of management. The unproductive and under productive animals in the farm should immediately be culled from the herd.

### *Criteria for culling of Boar:*

- ✓ 20 % of the breeding boars are annually culled and replaced with young stock
- ✓ Boars over 5 years
- ✓ Boars with over fat and too heavy
- ✓ Boars with weak limbs and Cryptorchidism
- ✓ Excess boars may be castrated or culled.

### *Criteria for culling of Sows:*

- ✓ One third of the older sows are annually culled
- ✓ Sows with defective teats like inverted and blind teats and poor milkers
- ✓ Smal external genitalia gilts and sows that don't meet the standards of meaty hogs.
- ✓ Gilts having delayed sexual maturity, failure to conceive, infertile, longer farrowing interval, consistently smaller litter size at birth and at wseaning should be culled.
- ✓ Sows having poor mothering ability, such as biting of piglets, carelessness for young piglets and vices kike savaging should be culled.
- ✓ Sows after 5-6 farrowing's fourth farrowing should be culled by maintaining replacement.
- ✓ Sows suffering from such diseases which is incurable or takes longer time to cure should also be culled.

### *Criteria for culling of piglets:*

- ✓ Piglets having defects like *Artesia ani*, Prolapsed, Hernia, and Blindness etc should be culled.
- ✓ Piglets having poor stunted growth should be culled.

## Conclusion

Proper selection and culling are the two important keys to maintain the productivity in a profitable pig farm. Selection is extremely important in making genetic change in the swine herd.



Culling helps to maintain the productivity of the farm by removing the excess undesirable animals. It aids in increasing productivity and efficiency of the farm by keeping the healthy good animals.

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