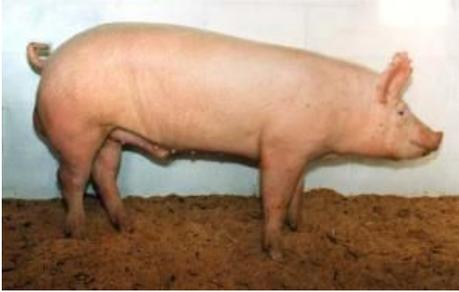


## PIG MANAGEMENT

Kenya has the following main pig breeds;

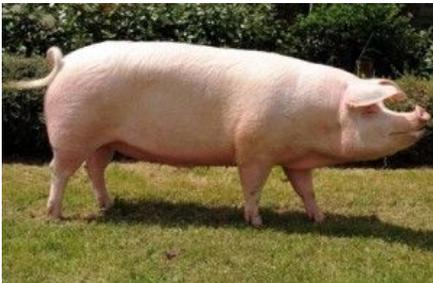
1. **Large white**; its most preferred by most farmers in Kenya because of its unique characters. its robust body, adaptable since they can withstand a wide range of climate and is a high performer the sows are said to produce between 10-12 piglets. Since they have a white skin they are prone to sunburn and therefore not suitable for extensive farming.



2. **Duroc- Jersey**; it has a thick fur, hard skin that is reddish in colour, its has good attributes for both growing and rearing. they survive both extreme cold and wet climates, they produce less litter size than the rest and they produce good bacon and the boars are known to be aggressive.



3. **Landrace pigs**; they have white skin, straight snout and ears that droop forward. They perform well under both confined and outdoor management, the sows produce a large litter size and they are good for production of both pork and bacon since they are weaned at a higher weight compared to the rest. This breed is normally cross bred with others in order to improve their breeds producing high breed gilts. Their skin colour also makes them prone to sunburn.



## **Sources of pigs in Kenya**

Pigs can be sourced from Farmers choice Kenya, from agricultural colleges and small scale breeder farms.

## **Pig housing**

A house is very important when it comes to rearing of pigs since it offers shelter thus protecting them from predators and harsh conditions. This increases their performance and productivity.

Proper house enables easy management, ensures more piglets are reared to market weight and reproduce in a short time frame.

Temperatures are also critical when it comes to pig production, in that piglets need to be protected from low temperatures that might cause pneumonia. Provide heat source.

Growing and reproducing pigs must be protected against high temperatures that might cause heat stress reducing their productivity.

The pigs snouts are very strong and can be used to create holes on the ground (rooting). Therefore the floor of the pig house should be made of hard reinforced concrete floor that has a rough surface to avoid slipping of the pigs. The house should be located 100 m away from residential areas.

## **Pig house requirements**

The house should also be constructed in a well-drained area and the house should be warm and free from cold air. The roof of the pig house should be high enough (10-12 ft) to allow free circulation of air. It should not make the inside of the house be too hot or too cold.

A standard pen should measure 3m by 2.5m. This is enough for;

- One boar
- Three dry sows
- 8-12 weaners

Always ensure that you keep different ages in separate runs i.e short cages as per age group in separate cages for instance the young males, females and castrated.

- This avoids competition for feeds that make the younger ones grow thin.
- Keep boars in separate sections to prevent them from fighting
- Keep lactating sows after farrowing in individual pens  
Piglets of the same age can also be kept in the same pen.

**Pig sty front view**



**Pig pens**



### **Feeding and drinking area**

Pigs should have these areas built in a line within the structure. Every mature pig should have its own feeder but have a common drinking area. The inner side of the feeding trough should measure 12 length x12 width x 6 height in inches. These measurements are standard but for the younger pigs the height of the troughs can be reduced by one or two inches.

Depending on the number of pigs you have per stay, you can have decide the number of feeders and drinkers to install for example; If you have 6 weaners, you can have 6 feeders and one drinker. the partition between a feeder and a drinker can be upto 4-6 inches in thickness. Therefore the total feeding area is about 10ft.

### **Resting area**

This area should be protected from sun, wind and rain. They should also be clean and dry. The space required for a mature pig to rest is 5x2ft since the mature pig measures about 5 to 6ft from the snout to the tip of the tail. This space can keep up to 3-4 weaners.

### **Dunging and exercising area.**

This area should be double the size of the resting area that is 10 x4 ft.

### **Waste disposal area**

This area is made of two rectangular pits that the dung is added one at a time. Once one is filled then proceed to fill the second one. The dung takes between 5-6 months to decompose and then the decomposed manure can be used in the farm. Each pit measures 10'x8'x6' and can be filled by dung from 50-75 fully grown pigs and each pit takes up to 6 months to fill.

### **Note;**

Climatic conditions, production system and purpose determine the type of house to be constructed. Space required is dependant on age, sex, stage of production and number of pigs.

<b>Category of pig</b>	<b>Space requirement (m sq./pig)</b>
Piglet	0.2
Gilt	0.6
Sow	1.2
Boar	2.0
Sow and litter	3.2

## **Feeding pigs**

Feeds account for 60-70% of production cost.

The type and amount of feed given depends on:

- Type of production system
- Age
- Reproductive stage.

The feed given needs to be balanced, they can either be mixed locally by farmer or bought. Proper feeds ensure faster growth and high fertility rates.

Constraints in pig feeding are:

- Poor feed quality.
- High costs of feeds.
- High cost of raw materials.
- Unpredictable weather conditions.

## **Feed sources**

### **Commercial feeds**

Mainly fed to pigs under intensive production and partly semi intensive production.

Some of the companies producing these feeds are

- Unga feeds.
- Sigma feeds
- Chania feeds
- Pembe feeds

### **The main types of feed are**

- Pig creep pellet (0-2 months of age)
- Sow & weaner meal (2- 4 months of age)
- Pig finisher meal (4 months- point of sale)

Other feeds mostly used by pigs under free-range system and partly under semi intensive system include:

- Kitchen swill
- Market by products
- Slaughter blood mixed with ugali
- Napier grass
- Sweet potato vines
- Vegetables and fruits.

There are challenges encountered in amount, safety and quality.

## **Feeding of different categories**

### **Piglets**

Give them colostrum for the first 24 hrs for immunity purposes.

Provide foster mothers to orphaned piglets and those whose mothers have low milk letdown, you can give them goat/cow milk.

### **Creep feeding**

Creep feeds with high protein level are given from day 7 up to weaning (20 kgs live weight), fed at 0.5-1 kg/day/piglet.

### **Weaning**

Weaning is done at 3-5 weeks of age at 11-13 kgs body weight. They should be fed on starter meal till they attain 18kgs body weight at 0.66kgs per piglet per day.

Piglets weaned at 7 -10 weeks of age at 12-15kgs body weight should be switched gradually to sow and weaner diet. The sow and weaner meal should be given at a rate of 1-2 kgs/day/pig till they attain 50-60 kgs live weight.

It is fed to sows, gilts and boars.

### **Finishing**

Done to fatteners to prepare for market.

Feed pig finisher meal to pigs over 60 kgs live weight.

Ration has 14% CP content to avoid over fattening.

Feed from 16-28 weeks (4-7 months).

Give 2.5-3.0 Kgs/day.

### **Breeding gilts**

Give 3 kg/day till service time and 2 weeks to service increase 0.5 kgs /day.

### **Lactating sows**

3 kgs/day plus 0.25 kg per piglet.

### **Breeding Boars**

2.5 kgs/day till service.

### **Puberty in gilts**

Gilts reach puberty at 5-6 months of age and will show signs of heat. If not bred a sow will keep showing heat signs after every 3 weeks throughout the year.

Gilts puberty is affected by the following factors;

**Breed;** some breeds show signs of heat earlier than others for example Landrace shows heat signs earlier than most breeds.

**Length of day;** long days tend to induce puberty in gilts.

**crowding of the gilts;** causes them to induce puberty because the one that come on heat influence the rest to come on heat through hormones produced.

**Boar contact;** gilts that are kept close to the boars come to heat earlier than the rest. The optimum exposure period of gilts to boars is from 150-170 days of age. if done earlier than day 150 then there would be no effects observed.

The estrous cycle in pigs occurs after every 21 days and varies between 18-24 days. The main signs of heat include;

- Sows mounting other sows but not allowing to be mounted this is an early sign of heat.
- swollen red vulva
- Occasional discharge from the vulva
- standing heat. this is the main sign of heat where the sow stands firm to be mounted.

This signs last for 3-4 days and the gilts allow mounting (standing heat) for only 2-3 days.

Ovulation in pigs occurs in the 2nd day after the onset of heat and the egg is fertile for up to 24 hours. Mating therefore should be done in the late stages of estrus.

Artificial Insemination should be done 6-10 hours before ovulation occurs to be effective.

Each sow can give birth to between 7-16 piglets depending on ovulation rates. The litter size increases with increase of the parity in the sow.

The gestation period lasts between 113-115 days

## **Piglet management**

Piglets should consume colostrum the first 24 hours after birth. This is when their digestive tract is open to absorb protein immunoglobulins directly.

after farrowing check the piglets condition if they appear hungry, restless and look dehydrated it means that they haven't been breastfed. This is the first indication of mastitis in the Sow. Call a vet to treat the mastitis infection. Provide piglets whose mothers have low milk letdown or have mastitis with goat/cow milk.

Piglets are born with little or no iron deposits in their body. It's good to supplement them with iron. inject them with 100-200mg of iron in the 2nd or 3rd day of life.

Piglets have 8 small canine teeth also referred to as needle teeth or wolf teeth and they normally hurt the sow's mammary glands as the bestfeed. Therefore it's good practice to clip these teeth at the day of birth.

Piglets should be castrated between 4 -14 days of age past 14 days any castration don to the pigs should be under anaesthesia to manage pain.

Piglets should be weaned at 35 days of age (5weeks).

## **Farrowing sow**

The pregnant sows should be moved to the farrowing pens 5-6 days before farrowing to allow them to get used to the new pens. This also reduces farrowing stress because the pregnant sows normally look for isolation when about to give birth.

3 weeks to farrowing the pregnant sows (3-6 weeks for gilts) should be vaccinated against Atrophic Rhinitis, E.coli and clostridium.

1-2 weeks to farrowing the pregnant sow can be dewormed using NILZAN PLUS.

The pregnant sow should also be washed with warm water before moving her to the clean farrowing pen to ensure that she doesn't carry any worm eggs on her skin which may infect the piglets.

As farrowing approaches the sows normally loses appetite, the pregnant sow should be encouraged to eat but should not be overfed. she needs the energy necessary for giving birth.

## **Note:**

Sows come back to heat 5-7 days after weaning and then every 3 weeks until she is successfully mated.