**PIGGERY**

**Terms used**

**Sow,** this is a female pig which has ever farrowed

**Boar,** it’s a mature male pig

**Gilt,** a young female pig that has never farrowed

**Piglet**, a young one of a pig (newly born pig)

**Farrowing,** the act of giving birth

**Runt,** the small, weakest piglet among the litter

**Farrowing pen,** special place where pigs farrow from

**BENEFITS OF REARING PIG**

* Produce large litter
* Requires a small area to raise and yield highly compared to cattle
* Financial rewards within a short period of time as pigs reach slaughtering weight earlier
* Short gestation period of about 110-120 days so two litters can be got in a year
* They are efficient converters of feeds into pork if well managed
* Omnivorous and can feed on anything like residues of alcohol, leftovers from kitchen
* Low initial costs to establish a pig farm as capital involved is lower than in other enterprises
* Provide excellent manure, which is used to improve the productivity of soil
* Have a shorter maturity period as they reach slaughtering age faster than cattle
* Most of the parts are used when the pig is slaughtered for example hair is used to make brushes, hooves for glue, and bones for bone meal. Etc.
* Grown up pigs can tolerate a wide range of climates that’s why they are reared in different parts of the world.

**Limitations/challenges of pig rearing**

* Compete with man for food since pigs cannot handle roughages, they are fed on cereal grains which is staple food in many areas.
* Pork is not accepted internationally as food by some cultures and religions
* Pollute the environment as the bad smell from pig sties necessitates siting pig houses far away from living quarters.
* Destroy crops especially root crops if left to scavenge for them selves
* Risk to public health as they Can spread jiggers and internal parasites to man
* Highly susceptible to diseases such as swine fever which can wipe out farms.
* Heat stroke can easily kill pigs especially strong heat.
* Poor marketability of the pig products as there are no marketing boards directly concerned with pig products
* Scarcity of good quality breeding stock.
* Inadequate extension services, farmers lack advice concerning breeding, feeding etc.

**Suggest solutions to the problems facing the pig industry**

**Factors to consider before starting a pig enterprise**

* Type of breed, the breed chosen should be the one needed in the market
* Food supply, you need a constant supply of feeds
* Capital, a farmer should have capital to buy breeding stock
* Labour, skilled labour is needed in operating the farm
* Housing, good housing is required for high yields
* Transport facilities, there should be a reliable transport system from breeding centers to the market
* Market, there should be ready market for pig products
* Economy of production, large scale production requires a lot of capital therefore a farmer must be ready to meet it.
* Parasites and diseases, the history of parasites and diseases should be considered in an area since some diseases like swine fever can cause a lot of losses

**Breeds of pigs**

1. Land race
2. Hampshire
3. Yorkshire
4. Duroc-jersey
5. Saddle back

**SELECTION OF BREEDING PIGS**

**Selection of boars for breeding/qualities of a good boar**

* Should have sound feet to enable it mount
* It should have 12 well placed rudimentary teats
* Its age should be between 4-5 months
* It should be vigorous and healthy
* It should be free from defects that can be transmitted to off springs
* It should have a good temperament
* It should have a weight of about 70-90 kgs at the age of 5 months

**Selection of a sow or gilt for breeding purpose/qualities of a good sow or gilt**

* It should have good mothering quality
* Should be healthy
* It should have at least 12 well developed teats
* It should be able to farrow without any problem
* It should have a good feed conversion rate
* It should produce a large litter

**In general, the following are factors considered when selecting a pig for breeding purposes**

* Age, they should be selected at the age of 4-5 months
* Litter size and liveability, liveability refers to the number of piglets that can survive up to the weaning stage. Gilts and boars from families that give large litters, and out of which the majority are weaned should be selected.
* Growth rate, they should have a high growth rate
* Health of the pig
* Physical appearance of the pig, they should be free from any deformity
* Number of teats, select those with 12-14 prominent teats
* Carcass conformation, good carcass conformation is a sign of high performance, and it should be considered during selection
* Feed conversion efficiency, select only those with a good feed conversion rate

**Housing in pigs**

**Advantages of housing pigs**

* Improves feed efficiency as pigs have no choice
* Efficient disease and pest control
* Easy to collect manure
* Pigs are protected from harsh weather
* Lower production costs in terms of labour and time is saved on feeding and watering

**Qualities of a good pig sty (pig house)**

* Should have feed and water troughs
* Should be well ventilated to allow free air circulation
* Good drainage to allow easy flow of urine and water
* Slanting rough floor to prevent skidding and ease cleaning
* Rain proof roof covered with grass to reduce heat
* Strong well-built walls
* Adequate floor space

**MANAGEMENT OF PIGS**

**Care/management of a pregnant sow/gilt**

* Isolate pregnant sows or gilts from the rest to avoid bullying which may lead to miscarriages
* Fed the pregnant sow regularly on nutritious and adequate feeds.
* Sows and gilts need little exercise during gestation and this can be achieved by leaving them on a good pasture.
* Transfer expectant sows or gilts to the farrowing units or pens
* Clean the pens and equipment thoroughly and sterilize them to ensure that they are free from pathogens
* Cover a portion of the floor with clean bedding or litter e.g dry grass to enable the sow build a nest.
* Construct guard rails in the pen to protect the piglets from being crushed by their mother
* Deworm the pig to eliminate internal parasites
* Scrub the pig with soap and water containing antiseptic to remove parasites and their eggs that could be hiding in the hairs.
* Reduce the amount of feed given to the pig a week before and after farrowing to avoid over feeding
* Provide a warm and well ventilated farrow pen
* Provide clean adequate drinking water to the sow/gilt

**Preparation for farrowing**

* Clean and disinfect the farrowing pen
* Wash and disinfect the pregnant sow
* Move the sow into the farrowing unit
* Provide a heat source in the farrowing unit
* Secure animal feeds a day before farrowing
* Provide clean beddings

**Signs of heat in pigs**

* Restlessness
* Grunting/making noise
* Vulva turns red and swollen
* Mucus discharge from the vulva
* Slight raise in body temperature
* Frequent urination
* Loss of appetite
* Tendency to mount and be mounted by others
* Twitching the tail frequently

**Signs of farrowing in a sow/gilt**

* Restlessness
* Fore milk (colostrum) is secreted
* Teats enlarge
* Swollen, enlarged, flabby vulva
* Continuous heavy breathing
* Sow lying down
* Watery discharge seen at the vulva
* Pelvic muscles slacken
* Loss of appetite
* Sow prepares a nest from dry beddings

**Care/management during farrowing**

* The stockman should be present at birth to keep watching the pig and assist it where necessary
* Clean the piglets by removing fetal membranes that block their respiratory system
* Do not break the umbilical cords except when they entangle the piglets
* Disinfect the navel cords with iodine tincture to prevent infections
* When all the piglets are born, the afterbirth is expelled. Dispose it off and do not allow the pig to eat it since it will delay milk secretion.
* Remove the weak piglets (runts) from the rest and kill them straight away to avoid wastage of resources such as feeds.
* Help the piglets suckle their mother

**Care and management of piglets from birth up to weaning**

* Remove the foetal mucus from the snout to enable it breath easily
* Disinfect the umbilical cord with iodine to prevent entry of germs that would cause infections
* Inject piglets with iron to prevent piglet anaemia
* Remove the needle teeth to prevent damage of the sows’ teats
* Provide warmth to prevent chilling of the piglets since they are born naked (without fur)
* Weigh piglets to determine birth weight
* Provide creep feeds that is rich in proteins after one week of exclusively feeding on milk. This enables early weaning
* If the sow fails to produce milk or dies, put the piglets on a foster mother that is about at the same stage of lactation to avoid rejection of piglets by the foster mother, mix all piglets and spray them with creosol disinfectant to mask the smell differences between piglets.
* Castrate male piglets that are not needed for breeding purpose when they are 2-3 weeks of age before weaning them
* Carry out identification by ear notching or ear tagging. Ear notching is the commonly used method in pigs.
* Deworm piglets at weaning time and at an interval of 1 and half months
* Control external parasites by spraying or smearing old engine oil on their bodies
* Vaccinate them regularly against hog cholera
* Ensure general hygiene in the pen
* Carry out weaning when piglets are 5-8 weeks old. Separate the sow from the litter on the day of weaning

**Care and management of the sow/gilt from farrowing to weaning**

* Make a record of the sows identification number or name, date of delivery, litter size, number of runts discarded, death and number of still births if any etc.
* Sows that fail to produce milk during the first 24 hours should be given an intravenous injection of oxytocin hormone
* Increase the sows ration gradually from the second week after farrowing. This depends on the number of piglets a sow has.
* Vaccinate the sow against killer diseases
* Ensure proper feeding of the sow/gilt
* Provide clean drinking water adlib
* Control external parasites by spraying
* Treat sick gilts/sows immediately to avoid loss
* Keep the sow in a clean well ventilated pen

**WEANING**

Weaning is the practice of separating/removing the sow or foster mother from the piglets so that suckling stops completely. Weaning should be gradual. Weaning age varies from 5-8 weeks depending on piglet weight. The average live weight is at least 5kgs.

**Advantages of early weaning**

* There are fewer or no runts since all the piglets are given sufficient amounts of creep feeds. During suckling, weaker piglets become runts because they are bullied and end up not suckling enough.
* Pigs grow and gain weight very fast
* Early weaning reduces chances of piglet mortality since there are low chances of being crushed by the mother
* It makes the sow to come on heat earlier
* It enables the sow to gain weight due to reduced nutrient loss
* It reduces chances of parasite and disease transmission from the sow to the piglets

**Disadvantages of early weaning**

* It’s expensive to feed weaned piglets since feeding equipment and feeds are expensive
* High level of management is needed to avoid mortality of piglets
* There are increased labour requirements

**Management of boars**

* Provide plenty of good pasture and supplement it with supplements
* Provide plenty of clean water adlib
* Deworm the boar regularly
* Ensure high hygiene in the pen to avoid disease outbreaks
* Control external parasites by spraying
* Treat sick boars immediately

**Routine/management operations carried out in pigs**

* Castration
* Identification by ear notching
* Teeth clipping, to removal needle teeth in piglets
* Weighing, it’s done to find out whether piglets are growing
* Feeding
* Parasite and disease control
* Nose ringing, this is done to prevent uprooting of crops and burrowing into the soil surrounding the pig sty

**Signs of diseases/ill health in pigs**

* Watery faeces with a foul smell
* Loss of appetite
* Dry, pale standing hair coat
* Watery eyes
* Coughing
* Discharge from the nose
* Dullness and the pig lies down all the time
* Groaning, grunting and grinding its teeth
* Rapid breathing

**Systems of pig rearing/ pig production systems**

1. Traditional/subsistence system, in this system pigs are housed in simple structures constructed from local materials and sometimes they are left roam around looking for food.
2. Intensive system, this is an indoor system. Pigs are kept entirely indoors
3. Semi intensive system, in this system, pigs are grazed in paddocks for part of the day and then housed for the rest of the day.