

PRODUCTION AND MANAGEMENT OF PIG

Pigs are reared solely for meat production. They are efficient converters of feed into meat, quick to multiply and can fit into diverse systems of management. Cost and availability of feed and the price fetched for the animal are the chief factors influencing profitable pig production.

Commonly used term in pig

Sow	: Matured female pig
Boar	: Matured male pig for breeding
Gilt	: Female pig not yet farrowed
Piglet	: Young one of pig
Farrowing	: Act of giving birth
Litter size	: Number of piglet in a farrow
Pen/sty	: House of pig

Housing

Simple low cost houses constructed with locally available materials are preferred in rural areas. The floor and wall of pig sty should be strong to withstand the rooting habits of pig. Feed and water troughs may be placed along the front to facilitate feeding from outside. Uncastrated males and females should not be housed together beyond the age of four months.

Feeding

Pigs are monogastric animals and can utilize fibrous food only to a limited extent. Part of the protein in the diet of pig should come from animal source such as fish, meat etc. Feeding based on swill (kitchen waste including left over human food, vegetables, meat and fish cuttings) is recommended as pig rearing based on commercial feed is not economical. On an average, pig requires 4-8 kg swill per day. All categories of pigs can be given small quantity of green fodder or may be sent to pasture.

Care and management

The dung and leftovers should be removed twice a day, i.e. morning and evening. Inspect all the animals at feeding time and remove sick or off-feed or unthrifty pigs from the lot and provide veterinary aid. Breeding animals may be given provision for wallowing during hot

periods. In fattener pigs habitual wallowing lead to slight reduction in growth rate and feed conversion efficiency and hence wallowing is not essential.

Breeding boars

Breeding boars must be offspring of better producing sows and should belong to litter size of not less than 8. Breeding males and females should be selected from different litters and boars should be changed once in two years for avoiding undesirable effects of inbreeding. Although boars reach sexual maturity at 7 months of age, they must be at least 10- 12 months (100 kg body weight) before being put to regular use. A boar: sow ratio of 1: 25 is maintained for optimum performance. 2-4 numbers of services (Mating) can be performed by a boar in a week depending on age of the boar.

A breeding boar requires 2- 2.5 kg concentrate per 100 kg weight depending on age, condition and breeding demand. Feed allowances should be so adjusted that the pig is neither fatty nor run down. Green leaves should be provided if kept indoors.

Each boar should be housed separately and the pen should have a covered area of 6.25- 7.5 m² and open area of 8.8- 12 m² for exercise. The wall should have a minimum height of 1.5m.

Breeding chart

Item	Male		Female	
	Mean	Range	Mean	Range
Age at puberty (months)	7	6-8	6	5-7
Age at which pigs can be bred (months)	11	10-12	9	5-7
Oestrous cycle (days)	-	-	21	18-24
Oestrous period (days)	-	-	2	2-3
Apt time for mating	24 hours after the onset of heat symptoms. Second mating is advised 8-12 hours after the first mating.			
Gestation period (days)	-	-	114	117
Farrowing time (hours)	-	-	3	2-12
Litter size at birth	-	-	8	6-12
Birth weight (kg)	-	-	1.3	1-2.5
Post weaning heat (days)	-	-	5	3-10

Breeding females

Gilts for breeding are selected from mother pigs having good mothering ability as shown by large litter size and weight at weaning. Gilts should have 12-14 evenly spaced sound teats, good growth rate and femininity.

Sows are usually weaned at 8 weeks after farrowing and come into heat in 3-10 days after weaning. They may be bred on the first post-weaning heat itself as this period is the most fertile. Pregnant sows and gilts/ boars should not be housed together. Avoid overcrowding, mixing of new and old stock, slippery ground and overexciting of pregnant pigs.

Mature sows gain 30-35 kg and gilts 40-45 kg during pregnancy. Feed should be regulated that sows and gilts are never over fat or thin. Flushing, a practice of giving extra feed, to sows and gilts from 1-2 weeks prior to mating and return to normal after mating is recommended to improve performance. 10-15 dry sows and gilts can be housed together in a pen. An area of 2m² per animals may be provided.

Farrowing sow and litter

The pregnant female may be dewormed 2-3 weeks before farrowing. Spray with ectoparasiticide (1% solution of malathion/ cythion, 0.05% butox). Provide light bedding of chopped straw before farrowing. Wipe the piglets with towel/ straw. Disinfect the naval chord with tincture of iodine. Normal healthy piglets suckle teats within 10- 30 minutes. Placenta, dead piglets, soiled bedding etc may be removed and buried in time with least decay. Provide 50mg iron on the second day intramuscularly to prevent piglet anaemia as sow's milk is deficient in iron. A second injection may be given at 5 weeks of age. Artificial heat may be provided by using an infra-red/ ordinary electric bulb during cold and rainy season to avoid death due to chilling.

Feeding

Feed lightly with bulky laxative feed immediately before and after farrowing. Bring the sow to full feeding in 10 days. Feed allowance may be calculated as 2.5-3 kg/ 100 kg body weight plus at the rate of 0.2 kg per piglet with the sow.

Creep feeding

The practice of self feeding concentrates rich in proteins to young piglets in a separate enclosure away from their mother is known as creep feeding. Creep feed should be given when piglets are two weeks old. A creep area should be arranged in a corner of the sty for this purpose.

Care of orphan piglets

When a sow dies or fails to produce milk or does not claim her piglets, the piglets should be promptly shifted to a foster mother. Care should be taken to simulate the conditions including the odour and body size of piglets when admitted to a foster mother. If a suckling sow is not available, hand feeding would be necessary. Cow's milk is the best substitute for sow's milk, Each piglet may consume 300- 500ml milk per day. Best results may be secured by feeding 5-6 times a day for the first few weeks and thereafter the frequency may gradually be reduced to 2-3 times. Any standard vitamin preparation 2 or 3 times the quantity used for infants may be administered to the piglets until they start taking feed. Injectable iron preparation may be given as usual. A 60 watt electric bulb may be provided during the early days of life.

Growing and finishing pigs

This period may be considered from weaning to slaughter. Entire males, castrates and females can be fattened for meat purpose. Castration if required may be done at the age of 3-6 weeks. Growers may be grouped according to sex, size, and weight as uniformly as possible. Up to 15 pigs may be conveniently put together in a pen @2m² per grower/ fatter pig. Deworming may be done two weeks after weaning and may be repeated once in two months if necessary.

Integration

Pigs can be effectively integrated to a bio-gas plant for meeting the cooking/ lighting demand of the farmers. It can also be integrated to agriculture and fish culture thereby increasing the overall efficiency of the system. Pig dung is a good organic manure in dried form or as compost.

IMPORTANCE OF DEWORMING IN PIG

Deworming is the process of getting the body free from worm infestation. The practice of deworming in pig is beneficial in terms of economic return through improvement of growth rate as well as eliminating health concerns of consumers. The beneficial effect of deworming animals stems from the fact that presence of worm in the gastro-intestinal tract utilizes and reduces availability of nutrients to the pig. Secondly, a particular stage of worm, *Taenia solium*, found exclusively in pig has the ability to develop cyst in vital organs such as lungs, liver and brain causing respiratory related problems, liver complications and neurological disorders. It is, therefore, imperative to regularly carry out deworming in pigs, as pork is the most preferred meat to most of the Nagas.

SYMPTOMS

Common symptoms observed in pigs infested with are rough hair coat and alopecia, emaciation and poor growth rate, presence of worm in faeces, anaemia, diarrhea and vomiting. Animals infested with worms are weak and susceptible to other ailments.

DIAGNOSIS

Worm infestation is usually done through symptoms and microscopic examination of faecal materials

TREATMENT

A Veterinarian should be consulted for selecting suitable anthelmintic as several drugs do not eliminate all types of worms. Further, prescription of the right anthelmintic, dose to be administered, route of administration and frequency of deworming can only be decided and authorized by a registered Veterinarian.

HOW TO DEWORM:

- Take the required dose of anthelmintic or grind the medicine in tablet form and mix it with a small quantity of feed.
- Feed the small quantity of feed containing the medicine followed by giving the daily allowance of feed.

PREVENTIVE MEASURES

Clean feed and water trough, provision of clean and dry shed, cleaning and disinfection of farm premises and timely deworming.

DEWORMING SCHEDULE FOR PIG

Pregnant sows should be dewormed about a week or ten days prior to expected date of farrowing. The same is to be given to piglets when they are a month old. Later the frequency can be decided by the Veterinarian on the basis of sty condition and prevalence of worm infestation in a given area.

IMPORTANT POINTS FOR PORK CONSUMERS

- Pork should be inspected for presence of cyst in the meat before purchase.
- Cyst in pork can be identified by presence of white glistening vesicles of rice grain size.
- Insist butchers to make fresh cut, which reveals cyst.
- Infected pork should not be purchase/ consume.
- Fresh and half-cook pork should never be tasted/ eaten.
- Proper medical treatment should be availed for suspected cases of cyst in the body.

- Development of cyst in brain can caused neurological disorder similar to epilepsy.
- Removal of cyst in brain could be costly and risky as it might require opening the skull.