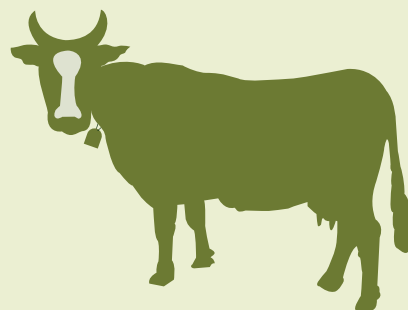
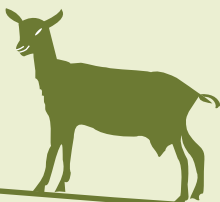


Pig Farming A Promising Enterprise



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**Animal
Husbandry**

Pig Farming: A Promising Enterprise

Importance of Pig Farming

Rearing of Pigs is a suitable option for small and landless farmers, farm women and it can also be carried out as a part time work by the employed persons to get additional income. With a small investment on building and equipments, proper feeding and sound disease control programmes the farmer can profitably utilize his time and labour in this subsidiary occupation.

Pigs convert inedible feeds, forages, certain grain by-products, damaged feeds and garbage into valuable nutritious meat called pork. Pig is a highly prolific breeder which gives 10-12 piglets at a time. Pig has shorter gestation period i.e. 115-118 days hence can be managed to get piglets two times in a years. Pigs grow faster with minimal inputs i.e. having good feed conversion ratio.

Breeds of Pigs and Selection of Stock

Breed of the pig plays major role in the profitability of pig rearing. The selected breed of the Pig should adjust to the prevailing environment and acclimatize with available resources. Breed should have faster growth rate, better adoption and sustain on medium management. Early maturity and good mothering ability is essential to get more number of animals per unit time.

There are many commercial breeds of pigs like Large White Yorkshire, Duroc, Hampshire, Landrace etc. Large White Yorkshire is known to get adopted maximum around the globe, however in every agro-climatic zone local pigs get better adopted and local population has preference to it.

Agonda Goan

This is a Local pig from Goa State and well preferred by farmers for the semi scavenging situation. These pigs are slightly wild in nature. These pigs have good mothering nature and can utilize locally available poor quality food stuffs. This breed is better for crossbreeding with exotic breed so as to get better adaptability and disease resistance.



Large White Yorkshire

The most extensively used exotic breed in India. Body colour is solid white with occasional black – pigmented spots, erect ears, snout of medium length and dished face. Excellent breed for the purpose of cross breeding.

Prolific breeds Mature boar 300-400 k.g Mature sow 230-320.



Crossbred pig

These are the pigs produced by crossing Agonda Goan female pig with Large White Yorkshire male. These crossbred pigs have better growth rate and feed conversion efficiency. They do not require intensive care like pure exotic breeds like Large white Yorkshire.



Agonda Goan X Large White Yorkshire (50%)

Performance of Crossbred pigs

Average Birth weight	600 gms to 700 gms
Weight at weaning	1 to 8 kgs
Average age of puberty	190 days
Average age of sexual maturity	220 days
Age of first farrowing	335 days
Weight at 10 months age	85 to 90 kgs
Dressing percent	87.01%
Back fat thickness	3.36 cms

Housing of Pigs

Housing should be simple and durable. The flooring should have a rough finish and made of cement mortar. Proper drains should be provided so that the effluents are disposed off. Generally under village conditions the housing can be made up of pens measuring 3 m X 2.4 m with an open yard of nearly the same dimension or in some cases slightly longer. Walls should be 1.2-1.5 m high from the floor. For the purposes of farrowing, some of the pens could be converted into farrowing pens by providing guard rails made up of G.I pipes of 5cm diameter, along the walls, 20-25 cm from the ground and the wall. In addition to guard rails, creep space can be provided for the piglets along the wall by making a partition or in one of the corner with separate entrances for the piglets. This space is usually of 0.75 m X 2.4 m area.



Feeding Pigs

Pigs are traditionally fed with kitchen waste or swill feeding. The success of pig farming is dependent upon efficient scientific feeding practices. In India, pigs are usually slaughtered at about 70kg body weight, which is generally achieved in six months of age. To meet the intensified pork production, properly balanced high quality ration must be provided to the pigs. Three types of rations are fed to the pigs before they reach the market weight i.e. creeper/ starter, grower and finisher rations. The creeper/ starter feed is generally fed up to the attainment of 15-20 kg body weight, which is followed by grower feed up to the attainment of 50 kg body weight,

and then followed by finisher feed up to the attainment of 70 kg body weight. However, in India, most farmers feed their pigs with freely available food materials like hotel/kitchen waste, bakery waste, garbage from vegetable market, broiler offal etc. It is suggested that these unconventional feeds should be fed as a partial replacement for the ingredients in standard ration to economize pig production.

For reference of pig farmers, composition of three types of standard pig ration have been provided.

Ingredients	Creepers/ Starter Feed	Grower Feed	Finisher Feed
Maize	50.0	45.0	40.0
Rice polish	22.5	35.0	47.5
Soybean meal	25.0	17.50	10.0
Mineral mixture	02.0	02.0	02.0
Common salt	0.50	0.50	0.50

Breeding Pigs

Gilts should weigh at least 80 to 100 kg before breeding. Ovulation rate increases during successive oestrous period (up to fifth) following puberty. Thus it is advantageous to delay the breeding of gilts until the second or third oestrous. Litter size increases on an average in succeeding pregnancies up to 5th or 6th litter. It is therefore advantageous to cull the sow from a breeding herd after her fifth or sixth litter size goes thereafter.

Age to breed gilts	7-8 months
Weight at breeding	100-120 kg
Length of heat period	2-3 days
Best time to breed in heat period	Gilts - first day Sows - second day
Number of services per sow	2 services at an interval of 12-14 hours
Period of oestrous cycle	18-24 days (Average 21 days)
Occurrence of heat after weaning	2-10 days
Gestation period	114 days

The average length of oestrous cycle in pigs is 19-21 days. The oestrous symptoms last for three to five days beginning with vulvar swelling and vaginal discharge. In true oestrous, there is frequent urination, reduced appetite, mounting and starting for service detected by the erection of ears and immobility when normal pressure is applied to the back. Best time for breeding is during the latter half of the day or early on the second day of oestrous. In many cases, the gilts and sows continue to exhibit standing heat on the next day. In these cases, the animals should be rebred and the interval in the case of rebreeding should be 12-14 hours. This procedure will ensure a high conception rate in the herd.

Sows may come into heat two to ten days after weaning and may be bred at this time. But better results can be obtained by breeding them in the second post lactational oestrous. The animals which have been bred should be observed for the appearance of subsequent oestrous. If sows have not conceived even after successful mating with a boar in two continuous oestrous cycles, it is desirable to cull them from the herd. It is important not to overfeed sows which have been bred. Over fat sows are apt to produce weak pigs and crush more piglets at farrowing. Sows should gain about 35 kg and gilts about 55 kg from breeding to farrowing.

Artificial Insemination

Generally, farmers follow natural service in pigs in most of the states of India. For this, farmer need to maintain a breeding boar in ratio of at least one per ten females. This increases the cost of production. To overcome this problem and also to improve genetic gain, AI technology has come in existence. This makes it possible to use small size female to breed with large size male or vice versa. In this semen is collected from an elite boar using dummy sow, it is evaluated for all essential quality parameters, extended with buffer and stored at 17^oC temperature so as to use for insemination of oestrus female pigs.



Pregnancy diagnosis

Naturally bred or artificially Inseminated female pigs needs to be tested for pregnancy after 30-40 days for confirming conception, otherwise we have to maintain a nonpregnant female unnecessarily and production cost increases. Ultrasonography is the methos used for this purpose which is easy, safe and a reliable method.

Care and Management of Pregnant Sows

Average gestation period in pig is 114-120 days. Pregnant animals maintained in group should be protected from fighting each other to avoid abortion. Pregnant sows should be provided with rations containing sufficient nutrients to support the growth of the foetus and the need of the mother. Pregnant sows should be kept clean. The sows should be separated and brought to the farrowing shed two weeks before the farrowing so that the sow get familiar with the place. The farrowing room should be disinfected before bringing the sow and should be kept

clean always. The farrowing sow should be fed with laxative ration to avoid constipation by including rice or wheat bran in diet. Guard rails and creep space provision should be made available in the farrowing rooms. The room temperature in the farrowing pen should be maintained at around 30°C and during winter and rainy days, heat lamps can be used for maintaining room temperature to protect the new born young piglets.

Raising orphan piglets

The death of a sow after farrowing and poor lactation capacity of the sow results in orphan piglets. The orphan piglets may be transferred to another sow that has farrowed recently. To ensure acceptance of orphan piglets, the sow should be separated from her own litter for a short time and the orphanage piglets and her own piglets are to be applied with some strong odour giving substance like tincture iodine/ benzoin and brought back altogether to the mother. Orphan piglets can also be raised with milk replacer prepared by mixing one egg yolk to one liter of cow milk.

Weaning

Separation of piglets from their mother is to be carried out at 6 to 8 weeks of age. The sow should be separated from the piglets for a few hours each day to prevent stress of weaning and feed is reduced gradually. The piglets should be dewormed after 2 weeks of weaning. The piglets should be gradually shifted from 18% protein creep feed to 16% grower ration over a period of two weeks. Group 20 piglets of more or less the same age should be housed in each pen.

Health Management

Like other livestock, pigs also become sick due to bacterial infections, viral infection and parasitic infestation. Many times, stresses due to climate change or sudden change of feed or faulty food material causes illness in pigs.

Vaccination: All the newly born piglets should be vaccinated at least against Swine fever at the age of 2 months. Vaccine against Pasturellosis (Haemorrhagic septicaemia HS) and Foot and Mouth Disease vaccine as in cattle is also preferred in pigs.

Deworming: In young pigs, infection with roundworms can cause diarrhea, weight loss, lung problems and death. Hence, the piglets should be dewormed regularly once in three months.

Piglet Anemia

Sow is unable to supply the needed iron through milk to the fast growing piglets, commonly suffering with anaemia. Piglet anaemia can be prevented by injecting the piglets with iron dexton preparation or by smearing the pigs' mammary gland with ferrous sulphate solution.

Skin diseases: Skin infection is a commonly occurring ailment which may be caused by several organisms like bacteria, lice, ticks, mites and fungi. This results in thickening and crusting of the skin. Mange occurs around the head, ears, legs and tail but will spread over the body, if not treated. The lice feed on the skin and irritate the pig, which will scratch and can cause wounds, which become infected. Parasitic infestations can be treated by spraying of medicine or by dipping the animal, While treating the animal, the pig house also should be sprayed with the same medicine.

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