



## Introduction to Commercial Pig Farming

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Pig farming in India is one of the lucrative and profitable livestock business. Commercial pig farming is beneficial due to the fact that pigs are prolific breeders can deliver 10 to 14 piglets in a single birth. Pig meat (pork) has an excellent demand since this red meat is a good source of protein, tasty and has good demand in the export market as well. As pigs are prolific breeders, the animals on the farm can be doubled within a short period of time and pigs have fast growth rate. Apart from meat, there are other products such as pig fat, skin, hair, pork, and bones are used to make some luxury items. To be successful in the commercial piggery business, you must have a proper pig farming business plan based on your budget. Nowadays there are many pig farming training centers and pig breeding centers established in India. Before entering into the commercial piggery business, you must know the facts about different breeds of pigs and their management. You can attend any pig training courses to know more about the commercial pig farming business. You can also visit nearby pig farms for learning about problems in the commercial pig farming business. Let us discuss more on how to raise pigs for meat in the commercial livestock business.

### Advantages of pig rearing

- Pigs have an excellent feed conversion ratio. They feed on various inedible feeds, forage crops, byproducts of grains from mills, byproducts of meat, damaged feeds, and garbage. Pigs convert this useless stuff into nutritious meat.
- Commercial pig farming in India can create employment and help the financially weaker sections/communities
- Pig farming can also contribute to the local as well as the national economy.
- The pig growth rate is faster than other animals and they are prolific breeders and produce 10 to 14 piglets in a single birth. They can also produce 2 litters/year under ideal pig management practices.
- Pigs do not require expensive housing hence commercial pig farming does not require a huge investment.
- Dressing percentage is almost 70 of meat of body weight of pig (carcass return)
- Pig meat has excellent demand both in domestic and export markets.
- Apart from pig fat being used as feed for poultry, the byproducts of pigs such as ham, bacon, sausages, lard, pork (meat) have a good market worldwide.

### How to start a commercial pig farming business

In order to be a successful pig farmer, you must have basic ideas about pigs and their management. This includes a selection of quality pig breeds, a good pig farming site, building a secured and safe shelter, pig feeding management, pig breeding management and protecting

pigs from various diseases. Prepare pig rearing business plan which should include all the financial aspects of purchasing pig breeds to marketing the pigs.

### **Points to be considered to obtain maximum profits from commercial pig farming**

1. A proper schedule of feeding
2. Secured and safe housing/shed
- 3 Proper estrus (heat) detection and mating
4. Proper care for pregnant sows
5. Make sure hygienic farrowing pens
- 6 Proper care and management of newborn piglets
7. Ensure early weaning
- 8 Ensure early postpartum mating
9. The animals must have proper health coverage

### **How to choose perfect location for commercial pig farming**

- Choose a location free from pollution
- The selected site should be elevated to prevent any water from rains
- It is better to choose a location with a good road/transport facility and electricity
- The location should be closer to any veterinary aid
- Select a pig farming location in areas where enough laborers are available
- It is better to be close to any town which can make marketing of pigs easy

### **Housing / Shelter requirement for commercial pig farming**

- You must make sure that proper housing and related equipment for raising pigs commercially are in place before getting the animals
- Construct a shelter that can protect pigs from adverse climatic conditions, prevent diseases, control parasites, and protect them from external predators
- The pig house should have good cross-ventilation and airflow. You can build separate pens for boar, farrowing, dry sow, and weaner
- House flooring can be covered with straw or paddy husk to keep the pigs warmer in winters
- You can also heat a lamp in extremely cold winters. In summer times, sprinkle the water on the roof and cover it with any cooling material
- Keep the pig house always clean and dry
- The house floor should be built with a rough surface
- Make proper draining channels to dispose of any effluents
- You can build 3-meter x 3-meter pen under village conditions
- Housing walls should be 4 feet to 5 feet high from the ground
- Any gourd rails should be provided with GI pipes
- In addition to guard rails, creep space should be provided for the piglets in any corner of the house
- Provide shade in prolonged sunshine conditions as pigs can be overheated
- Ensure availability of clean water in the house.
- Disinfect the pens especially when keeping the pregnant pigs

### **Breeds for commercial pig farming**

There are many local types available, however, they are not suitable for good weight gain in the commercial pig farming business. Hence, one should go for exotic imported breeds of pigs. Here are some of the popular pig breeds

- Large White Yorkshire
- Hampshire

- Landrace
- Berkshire
- Poland China
- Duroc
- Chester White
- Ghungroo
- Ghungroo pig (Indigenous pig for the rural farmers with a litter size of 6 to 12 piglets).

The best pig breeds for commercial pig farming are Large White Yorkshire, Hampshire, Landrace, and Ghungroo. The large white Yorkshire is the top breed for meat production. An adult boar (male) can weigh up to 350 to 400 kg where an adult sow can weigh up to 250 to 300 kg. They are excellent for cross-breeding.

**Table 1. Floor space requirements for pigs based on Bureau of Indian Standards/ISI standards**

Type of animal	Floor space requirement (m <sup>2</sup> )		Maximum number of animals per pen	Height of shed (cm) at eaves
	Covered area	Open paddock		
Boar	6.0-7.0	8.8-12.0	-	-
Farrowing sow	7.0-9.0	8.8-12.0	-	-
Weaner fattening pigs	0.9-1.8	0.9-1.8	30	200-250
Dry sow/gilt	1.8-2.7	1.4-1.8	10	3-10

### Selection of commercial pig breeds

- Breed selection and gain and feed efficiency, and fertility are the most important factors that influence the success rate of commercial pig farming. It is better to take veterinary professionals at the time of breed selection so that healthy and disease-free animals should be selected.
- Purchase the breeds when the animals weigh about 85 to 90 kg. Select gilts (female pigs from sows that have consistently farrowed and weaned large litters)
- Purchase breeds only from certified pig breeding facilities and avoid individuals and markets.
- Select the breeds with high performance in daily weight gain and a good feed conversion ratio.
- When purchasing getting complete records/history of pigs (for both males and females) is extremely important.
- The boar (male breeder pig) should be selected from females which have consistently farrowed and weaned high litters.
- The feed conversion from weaning to 85 to 90 kg weight would be the most desirable factor while choosing the boar.
- Generally, a good boar (male) will gain weight of 85 to 90 kg in 150 to 180 days would be a good type to select.

### The following factors need to be considered while selecting a breeding stock of pigs

- Litter size of pigs
- Strength and vigour of litters
- Milking ability of pigs
- Temperament of pigs

## Feed management in commercial pig farming

- In any livestock business, either meat or milk needs a good nutritious feed. Good feed inputs make quick weight gain in commercial pig farming. You should stick to the feeding schedule of all the animals in the house. The uncontaminated feed should be supplied along with fresh and clean water. Buying feed from the market may incur some expenses. If you have 1 to 2 acres of land, you can grow grain crops like paddy/rice, maize, sorghum, wheat, cats, and millets. Saving on feed cost directly reflects in pig farming profits.
- Apart from regular feed, supplemental feeds like fishmeal, oil cakes, mineral mixtures, salt cubes can be added to the regular pig diet.
- Generally, feed intake in commercial pig farming should be based on pig weight and age

**Table 2. International standards of feed requirements and expected growth in pigs**

Period	Weight(kg)	Days	CP%	DE Kcal Per kg	Amount of feed needed/Pig (kg)	Daily gain Expected (g)
Pre-starter	2-5	1-2	24	3500	1.5-2.0	150
Starter	5-15	22-56	22/20	3500	9.0-11.0	300
Grower	15-35	57-90	18	3300	50-60	580
Growing & finishing	35-90	91- 180	14	3300	140-150	600

**Source:** Livestock Production Management. Sastry and Thomas

## Breeding management in commercial pig farming

- In commercial pig farming, pig breeds will be mature for breeding at the age of 240 to 275 days (8-9 months), usually, they weigh about 90 to 100 kg at the time of breeding

Commercial Pig Breeding Chart:

- Gilts breeding age: 240 to 250 days
- Heat/ estrous period in Pigs breeding: Lasts for 3 days
- Best time for breeding: First day for gilts and second day for sows
- Services per sow: 2 at an interval of 13 to 14 hours
- Period of heat/ estrous cycle: 21 days
- Heat occurrence after weaning: 2 to 9 days
- Gestation period: 114 to 115 days

## The breeding management in commercial pig farming includes:

- Age of breeding stock
- Detection of heat in breeding pigs.
- Flushing in pigs
- Care and management of pregnant pigs
- Management of pigs at farrowing
- Care of pigs during farrowing
- Removal of needle teeth
- Management of pigs during lactation.

The male piglets may be castrated when they are 21 to 25 days old if they are not chosen for the breeding purpose

## Pigs care and management in commercial pig farming

- In any livestock farming, care should be taken throughout their growth period to prevent any unhealthy conditions and diseases.

- Newborn piglets should be vaccinated against swine fever at the age of 60 days. Pigs are more prone to worm infection which can cause them to lose weight drastically. hence frequent deworming should be carried in all the animals.
- Skin infections are also very common in pigs. For the treatment, contact the local veterinary facility.
- In case of any disease, the pen and shelter should be thoroughly cleaned out and washed

### Some of the common diseases in pigs are:

- Infectious diseases: Tuberculosis, anthrax, dysentery, swine plague
- Contagious diseases: Hog cholera, foot and mouth disease etc.
- Parasitic diseases: Ascaris, Tapeworm
- Skin disease: Exanthema, hair loss
- Diseases of reproductive Organs: Metritis, Brucellosis
- Diseases of digestive Tracts: Stomatitis, Diarrhea, Dysentery, constipation
- Miscellaneous Diseases: Rheumatism, Crippling, Ricket

Diseases could be prevented by segregation, quarantine, personal hygiene, keeping the grazing place free of parasites, vaccination and medication for cure.

**Table 3. Vaccination schedules of swine**

Diseases and vaccine	Age	Dose and route	Duration and immunity
Swine fever (Freeze dried vaccine)	3 to 6 weeks	1ml I/M	One year
Swine erysipelas	2 months	1ml S/C	One year
FMD (Tissue culture vaccine)	2 months	2ml S/C	One year
Brucellosis	2 months	2ml S/C	Life long
Swine Influenza	At any stage	1ml S/C	6 weeks

**Source:** Vaccines for veterinary applications. Peter A. R (2006)

Note: For symptoms, control measures, and treatment of the above-said diseases, talk to your veterinary doctor.

### Marketing of Pigs

Once pigs are reached marketable weight, you can sell them to slaughterhouses and wholesale livestock dealers. Commercial pig farming does not require extensive marketing as pork has excellent demand. They can be even sold at the farm gate.