



# GOAT PRODUCTION AND MANAGEMENT

 Similipal Landscape, Odisha

# Goat Rearing

Goat rearing in Simlipal landscape encompassing various economic, nutritional, cultural, and environmental benefits that provide livelihoods for millions of rural households, offers a source of protein, and holds cultural and religious significance.

It also promotes economic independence, resource efficiency, and entrepreneurship. Goat farming improves rural conditions, reduces urban migration, and offers quick returns on investment due to its shorter reproduction cycle. Successful goat rearing requires proper care & management practices, feeding, breeding, and veterinary care.

## Significance of Goat Rearing

- Nutritional sustenance
- Cultural heritage
- Environmental Benefit
- Protein source
- Livelihood for rural households
- Cultural and religious significance
- Economic independence
- Resource efficiency
- Entrepreneurship opportunities
- Rural Development
- Quick returns on investment
- Short reproduction cycle

## Housing System for Goats









In Odisha, goat housing systems depends on its number, few goats (2-3) are reared on shared house with the human owner. The large number of goats are reared with other animals in loose-walled, mixed, and pucca structures made from locally available materials such as grass, wood, bamboo, and tiles. These sheds provide security from the predators, theft, and harmful effect of harsh seasons.

The goats like dry floor made up of muram (hard soil rocks), concrete, paver block tiles. The floor must be non-slippery for heavy or pregnant goats, easy to clean, absorb the urine. The roofs of should be durable, insulative, and the walls must have windows for proper

air circulation. The doors and walls must be plane or free from pointed projections to prevent wounding to animals. During summers, covering tin with hay reduces heat inside the shed.

Although making heightened floor (Machan) has many advantages but it's hard to clean and maintain. There is also disease transmission due dirt adhering to the wood.

## Advantages of Housing

-  Cost Effectiveness
-  Effective Observation
-  Controlled Activities
-  Suitable for Small Livestock Farms
-  Strategic Location for Drainage
-  Separation of Watering and Feeding Areas
-  Easy for maintenance
-  Ventilation and Lighting

## Breeding, Reproduction and Management for Goats

- Proper goat breeding is required to improve the disease resistance (immunity), birth weight and quantity of kids, and feed utilisation efficiency.
- Good parents can give birth to healthy kids.
- Select the mother of high quality while also selecting the buck from other distant herd on above parameters. Since, using same bucks in the same herd cause inbreeding and affect the entire herd of the village.
- A good farmer can invest on rearing quality bucks as the returns are very high.



# Care and Management for Goats

- Pregnant goats should be well-fed (with 5-7 kg of green fodder daily) along with other care.
- New goat mothers must be fed at shed to have sufficient milk production.
- New-born kids must get the colostrum within one hours of birth, and application of iodine on its naval cord.
- Growing kids must be deformed at one-month age, and vaccinated after 4 months.

## Feeding Management

Goats are curious social animals raised for meat, milk, and other products. They are browsers, and selective

feeders. The goats are best converters of inedible grasses and leaves into meat. Overgrazing by goats and inadequate pasture management can lead to environmental degradation. Feeding protocols in Simlipal should include the sufficient grazing supplemented by balanced ration, fodder, vitamins, minerals, salt licks, clean water.

Slowly there is scarcity of good nutritious fodder trees in the forest area, so the goats are undernourished on grazing. So, its required to develop fodder trees around the borders of backyard kitchen garden. The preferred trees can be moringa, jackfruit, Guava, Sesbania etc.

The farmers also need to develop azolla pits for good nourishment of goats. The azolla provide good quantity of protein at very cheap effort as compared to other trees.

## Goat Related Diseases

Simlipal landscape has many goat diseases that can spread rapidly causing high morbidity and mortality. The diseases also give advantage to the traders to purchase the animals on very low price.

	Symptoms Observed	Possible Disease	Possible Treatment and Preventions
a	High fever (104-108°F or 40-42°C), Nasal discharge, head dropping, low feeding and rumination.	Fever or viral infection	Meet and inform your veterinary doctor at block
b	Large number of Abortion in goats should be notified to Veterinary hospitals.		Meet and inform your veterinary doctor at block
c	Loss of appetite, Abdominal discomfort, Profuse and/or watery diarrhoea that may be bloody. Sudden death of large number of healthy kids.	Enterotoxaemia	Vaccine is available which is done before rainy season. Meet and inform your veterinary doctor at block
d	Lock jaw, Loss of mobility, Trojan horse appearance, lack of appetite.	Tetanus	
<b>Viral diseases</b>			
a	Fever, vesicles and ulcers on tongue, lameness, drooling of saliva, reduced appetite, weight loss, and decreased milk production etc.	Foot & Mouth disease	Vaccine is available which is done before rainy season.
b	Fever, nasal and oral discharge, coughing, Oral necrotic lesions noticed in lips, buccal mucosae, gums, dental palate, pneumonia with diarrhoea, lameness, and reproductive problems.	PPR	Meet and inform your veterinary doctor at block
<b>Others disease conditions</b>			
a	Intermittent diarrhoea, weakness, low muscles	Worms or indigestions	Deworm the goats. Meet and inform your veterinary doctor at block
b	Swelling and accumulation of gas in left side of stomach.	Bloat, Acidity	Use anti gas medicine and meet the paravets.
c	Dog bite	Dog bite/Rabies	Very dangerous disease Vaccine need to be done.

**Note** - a. Any unusual disease should be informed to veterinary hospital.

# Vaccination

Vaccination is a pivotal step in preventing animal diseases, reducing morbidity and mortality, and safeguarding production. It elicits an immune response, providing resistance and preventing disease transmission. It is cost-effective, safe, and efficient.

Proper precautions need to be taken prior to vaccinations:

- Goats should be in good health,
- Goats are dewormed at least 14 days prior to vaccination, and Proper maintenance of cold chain of vaccine.



## Importance of vaccination

### Disease Prevention

Vaccination crucial for disease prevention, reducing illness and death, and safeguarding production

### Immune Response Activation

Triggers immune response, building resistance and preventing disease spread

### Cost-Effective and Safe

Vaccination is cost-effective, safe, and efficient in ensuring animal health

### Strategic Precautions

Precautions include avoiding vaccination during poor health, ensuring well-being during vaccination, maintaining gap with deworming, and preserving cold chains for storage



## VACCINATION SCHEDULE FOR GOAT/SHEEP

#	Disease	Disease (Local Name)	Minimum Age	Vaccination Time
1	FMD - foot and mouth disease	Phatua	3 months and above	March and September - biannually
2	PPR - <i>pestit de petit ruminants</i>	ChheliMadaka	4 months and above	March or September (once in year)
3	Goat pox	ChheliBasanta	4 months and above	Annually (December)
4	Enterotoxaemia	Antra JwaraBishanu	4 months and above	Before monsoon, repeat after 15 days
5	Hemorrhagic septicemia	Galaphula, Sahanaa	6 months	Before monsoon
6	Anthrax	Plihaajwaa	6 months	Once yearly (if affected area/endemic)
7	Tetanus	Dhanustankaar	1 month prior to kidding	Once in a year (in endemic area)

**Note** - The vaccination is done based on prevalence of disease in the area.



## Parasitic Infestations and Associated Deworming

- Goats have different types of parasitic worms inside their body, which feed upon the blood and body organs. They reduce the growth of goats, cause diarrhoea and make them susceptible to many diseases. So, deworming is crucial for controlling parasites.
- The goat's kids must be first dewormed at 25-30 days and repeated every month for up to 3 months.
- The adult goats must be dewormed every 3-4 months. The deworming before and after rainy season is very important.

- Ectoparasite such as Ticks, Fleas, Lice, and mites suck the blood on the skin. They cause irritation and itching and prevent the animals in feeding. The ectoparasites need to be killed with the help of para-vets and veterinary doctors.

**Note** - The use of deworming drugs gives high impact on growth and reduce mortality of goats. The effect of deworming can be seen within few days.

## Goat Value Chain and FPO

- In the present scenario any goat is sold and slaughtered for meat sale. But now the consumers are demanding good quality meat, tasty meat, organic meat, and disease-free meat. The consumers are also ready to pay good price for better products. The goat rearing need to strengthen from production to marketing to have better healthy disease-free goats for sale.
- The VIC can play a pivotal role in establishing production, breed improvement, feeding practices and marketing to enhance the income of farmers.
- The VIC can also play role in establishing linkages with the line departments and input supply partners for the benefit of the farmers.

# GLIMPSES OF GOAT REARING



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