



Department of Animal Husbandry and Dairying
Ministry of Fisheries, Animal Husbandry and Dairying
Government of India

SCIENTIFIC MANAGEMENT OF SHEEP



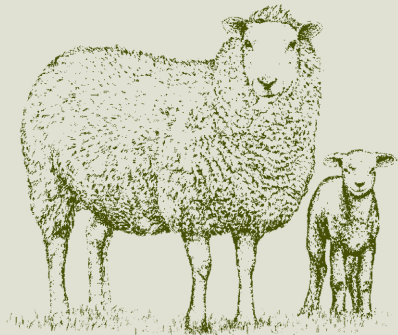
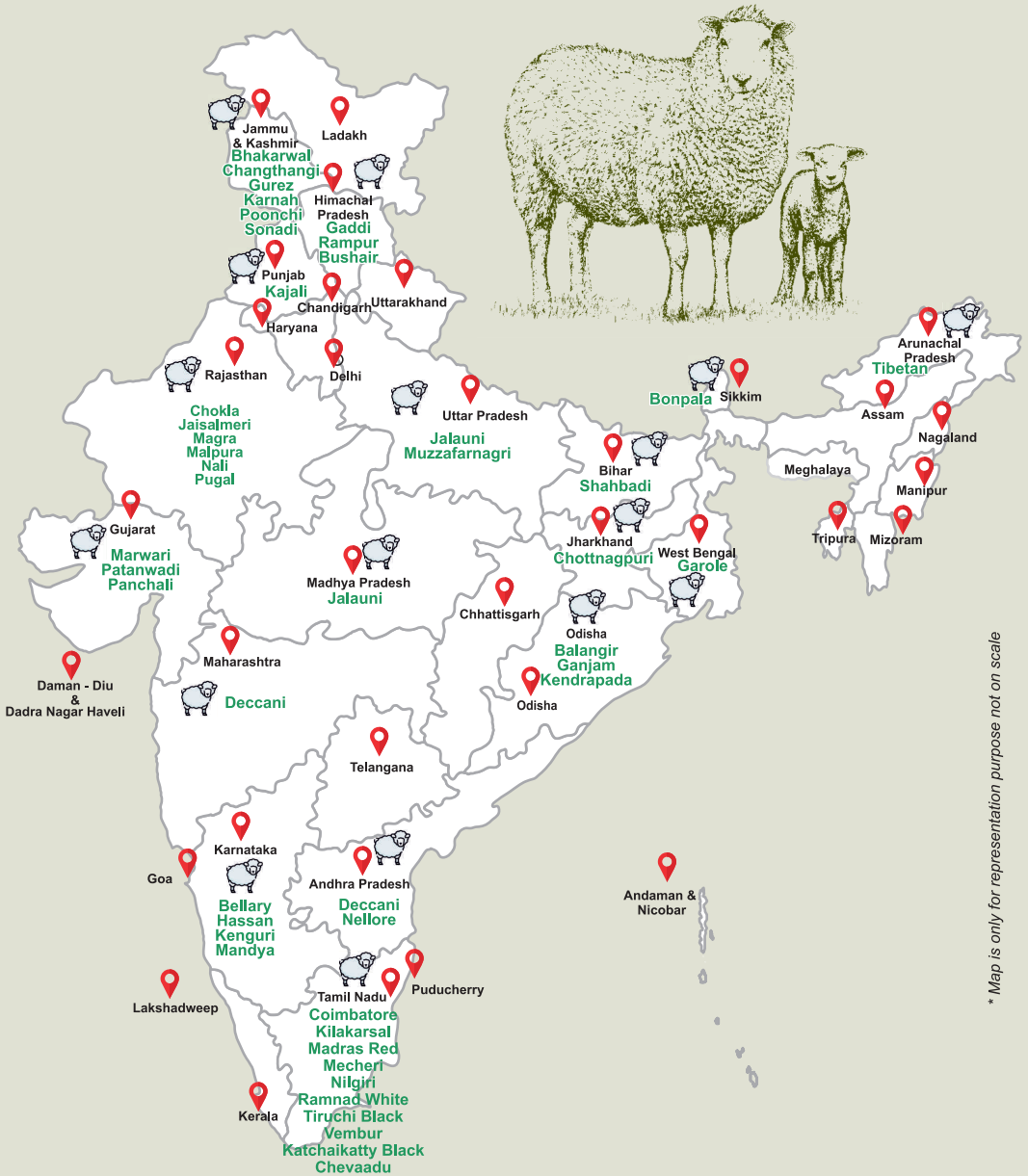
Sheep Management for Healthier & Happier Sheep Farming

Sheep play a crucial role in the economy of many regions. They are prolific breeders with a short generation interval, and their products, including meat, wool, are highly marketable. Sheep farming is particularly beneficial for small and marginal farmers.

Sheep farming offers wool, manure, mutton and meat. Wool from indigenous sheep is valuable for various textile products, contributing to the economic viability of sheep farming. Additionally, sheep manure serves as an excellent organic fertilizer, promoting sustainable agricultural practices.



Indigenous Breeds of Sheep In India



* Map is only for representation purpose not on scale

Feed Management

Category of Sheep	Approx. Body Weight (kg)	Concentrate (g)	Green Fodder (kg)
Growing (6-12 months)	20-30	300-400	1-2
Adult Sheep	35-45	200-300	2-3
Breeding Rams	45-60	400-500	3-5

For Lambs

Age of Lamb (Days)	Approx. Body Weight (kg)	Milk (g)	Lamb Starter (g)	Green Fodder (g)
Birth to 4 days	2.0-3.0	Colostrum	-	-
5-30 days	3.0-4.0	300-500	Small Quantity	Small Quantity
31-60 days	4.0-6.0	400-600	50-100	Small Quantity
61-90 days	6.0-8.0	500-750	100-200	250-500
90-120 days	8.0-10.0	-	200-250	500-750
5th and 6th month	10.0-15.0	-	250-300	750-1000

Breeding Management

Effective breeding management in sheep involves selecting high-yielding rams and ewes. Cross-breeding with superior breeds can enhance growth rates and wool production.

Selection Criteria

- **Ewes:**

Puberty in sheep is typically reached between 6 to 8 months, but mating is recommended at 10-12 months. The oestrous cycle lasts for about 17 days, with a heat period of 24-48 hours.

- **Rams:**

Rams can be used for breeding from 12 months and are effective for up to 5-6 years.

Signs Of Heat Detection

Frequent Bleating

Frequent Urination

Wagging of Tail

Increased Restlessness

Reduced feed Intake

Swollen vulva

Drop in Milk yield

Clear Vaginal Discharge

Seeking Proximity to rams and allowing Mounting

Pregnancy Diagnosis

- Physical methods such as abdominal palpation and recto-abdominal palpation.
- Biological tests like progesterone testing. Ultrasonography and radiography.



Health Management

Common Diseases and Health Management Practices

- **Peste des Petits Ruminants (PPR):**

A viral disease with high mortality rates. Regular vaccination is crucial.

- **Sheep Pox:**

A contagious viral disease. Vaccination and biosecurity measures are essential.

- **Lungworm Infections:**

Parasitic infections causing respiratory issues. Preventive vaccination and regular deworming are recommended.

- **Enterotoxaemia:**

It is caused by the overgrowth of *Clostridium perfringens* bacteria in the intestines

- **Bluetongue:**

The disease is caused by the bluetongue virus (BTV), which is transmitted by biting midges.

Health Management Practices

- **Vaccination:** Adhere to a regular vaccination schedule.
- **Deworming:** Implement regular deworming protocols.
- **Biosecurity:** Maintain biosecurity measures to prevent disease introduction and spread.
- **Health Monitoring:** Regularly monitor sheep for signs of illness and respond promptly.
- **Footrot:** Regular hoof trimming is necessary to remove affected tissue and help the hoof heal.

Shearing of Wool

- **Timing:** Shear sheep once or twice a year, typically in spring or early summer, to prevent overheating and prepare for the warmer months.
- **Tools and Technique:** Use electric clippers or shearing scissors, and ensure the sheep is calm and restrained to avoid injury during the process.
- **Health and Hygiene:** Regular shearing helps maintain the sheep's skin health, reduces the risk of parasites, and keeps the wool clean and free from dirt.

Oestrus Synchronization

- Oestrus synchronization is management tool for controlled breeding to shorten and manage the breeding and lambing season.

Benefits of Oestrus Synchronization

- Concentrated lambing at a predetermined time as per the market demand.
- Uniform lamb crop at weaning to fetch maximum market price.
- Better health care and management of pregnant ewes and lambs.
- Effective use of labour.
- Maximizing the use of AI on large scale programme.
- Out-off season breeding.
- Breeding infertile anoestrus sheep.
- No need to detect estrus.

Table 1. Sheep Reproductive Cycle

Age of maturity	9-12 months
Estrous cycle length	14-19 days (average 17 days)
Duration of heat	26-30 hours
Time of ovulation	12 hours before the end of heat period
Optimal time to breed (naturally or artificially)	12-18 hr after the onset of estrous cycle
Ram to ewe ratio season	One ram for 30 ewes for complete breeding
Gestation period	142 to 152 days (average 147 days)
Time to expel the fetus and placenta	Within 2-3 hours after the appearance of clear-whitish discharge at the vulva

Housing Management

Specification for Model Sheep Shed (12 Adult Units):

• Length	20 feet
• Breadth	12 feet
• Central Height	13 feet
• Side Height	10 feet
• Height of Slatted Floor from Ground	2.5 feet
• Height from Slat to Roof	5 feet
• Space between Slats	16 mm
• Size of Wooden Planks	2.5 x 2 cm
• Total Floor Area	240 sq. ft.
• Total Slatted Area	120 sq. ft.



Housing Features:

Ventilation:

Ensure good airflow to prevent respiratory diseases.

Space:

Provide adequate space to avoid overcrowding.

Flooring:

Use non-slippery, easy-to-clean materials.

Bedding:

Provide clean, dry bedding to enhance comfort and hygiene.



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