

HOW TO PREVENT DISEASES IN GOATS



What need does the playbook address?

Goat-rearing can be an important source of income for rural, small and marginalised communities and can be encouraged among women farmers. Profits can be maximised by ensuring good care of goats and taking steps to prevent diseases among stall-fed goats.

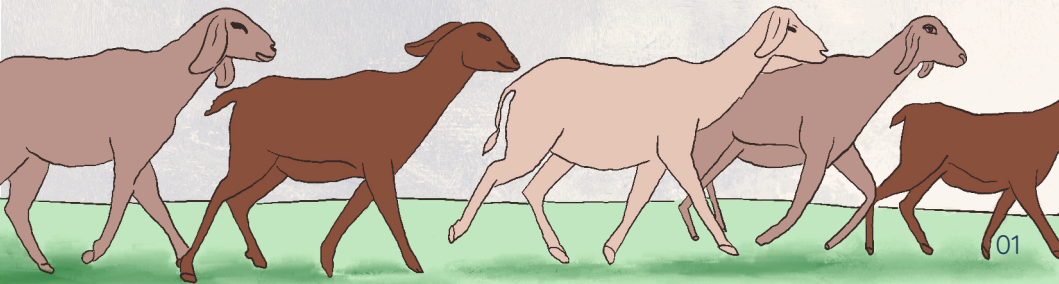
This solution can be adopted if:

- You have small holding or no agricultural land
- You have basic access to water and fodder for goat rearing

Who can use this Playbook:

Goat rearers, Trainer, Practitioner, Community Resource Persons

This playbook, designed using Ibtada's expertise, encourages goat rearing among socio-economically disadvantaged communities and landless/marginal farmers in rural Rajasthan. This playbook also contains a ready-to-print poster that can be hung in Goat stalls to remind goat rearers



What

are the benefits to Goat rearers?

01



Reducing mortality among goats

02



Ensures healthy pregnancy and lower infant mortality

03



Increases muscle mass leading to more incomes when selling the goats

04



Goat milk is a valuable product which is improved by good practices

05



Reproduction cycle improves (*Time period decreases*)



Deworming and Worms in Stomach: Recognise and treat

Worms in the stomach and digestive tracts of goats can lead to lowering of appetite, weight loss.

Ways to Identify

- 01 Foul - smelling Diarrhoea
- 02 Eye Discharge, Watery eyes
- 03 Hair fall
- 04 Loss of weight, sluggishness
- 05 Bloating and weakness

Treatment

Albendazole (administered to non pregnant goats), Fenbendazole (administered to any goat) and others (tablet or liquid form) in the morning on fast

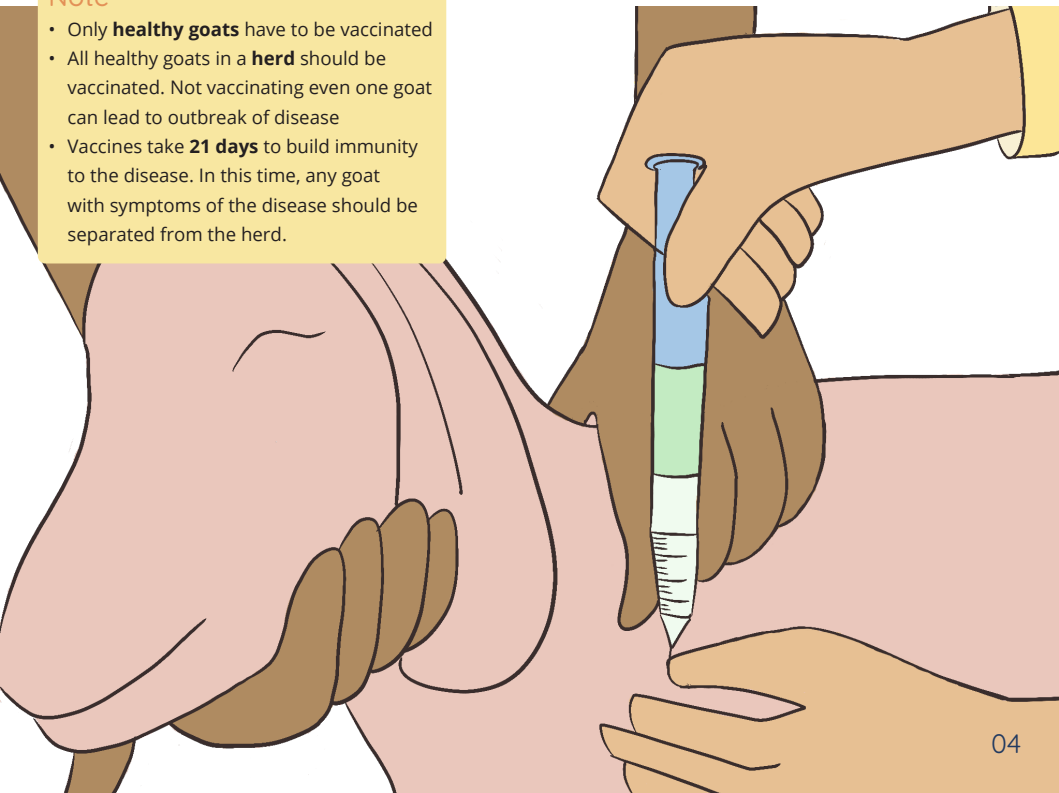
Deworming is needed every **3 months.**

Vaccination Cycle

Each disease has a different vaccine cycle. Since, it is impossible to track the susceptibility of every goat in a herd, vaccinations are done for all goats at specific times.

Note

- Only **healthy goats** have to be vaccinated
- All healthy goats in a **herd** should be vaccinated. Not vaccinating even one goat can lead to outbreak of disease
- Vaccines take **21 days** to build immunity to the disease. In this time, any goat with symptoms of the disease should be separated from the herd.



PPR (Peste des petits ruminants)



Symptoms

01 Dullness and Loss of appetite

02 Fever

03 Discharge from eyes and nose

04 Sores in the mouth

05 Disturbed breathing Cough

06 Foul-smelling Diarrhoea



Age of goat to start vaccination

Above **3** months



Vaccination Schedule

Once in
3 years (per goat)

January	April	July	October
February	May	August	November
March	June	September	December



Vaccination period



Diseases most likely to occur



Symptoms

- 01** High Fever
- 02** Red spots/Blisters all over the body
- 03** Breathing difficulties
- 04** Lethargy
- 05** Depression
- 06** Loss of appetite
- 07** Abortion of pregnant goats
- 08** Swollen eyelids



Age of goat to start vaccination

Above **3** months



Vaccination Schedule

Once a year

January	April	July	October
February	May	August	November
March	June	September	December

- Vaccination period
- Diseases most likely to occur

FMD (Foot and Mouth Disease)



Symptoms

- 01 Blisters on the tongue or lips, inside mouth
- 02 Blisters between toes, above the hooves
- 03 Loss of appetite
- 04 Fever
- 05 Sluggishness
- 06 Difficulty in movement
- 07 Excess drooling



Age of goat to start vaccination

Above 3 months



Vaccination Schedule

Twice a year

January	April	July	October
February	May	August	November
March	June	September	December

- Vaccination period
- Diseases most likely to occur

Enterotoxaemia (ETV)



Symptoms

- 01 Foul smelling Diarrhoea
- 02 Lethargy and Breathlessness
- 03 Stomach ache and Bloating
- 04 Kicking legs



Age of goat to start vaccination

3+

Above 3 months



Vaccination Schedule

Once a year

January	April	July	October
February	May	August	November
March	June	September	December



Vaccination period



Diseases most likely to occur

Stall-fed goat shed

01. Roof

- Tin-shed or thatched leaves and straw.
- Can be made by the house or under a tree to reduce direct sunlight

02. Walls

- Iron wire fence should cover two sides or more for ventilation and passage of clean air.
- If there is a brick/house wall, apply chuna (lime powder) - once in 2-3 months - on the sides to a height of 3-feet or more. Reduces chance of mold on walls.

03. Flooring

- Flooring should be kept *katcha* (no concrete or brick floor)
- Sprinkle *chuna* (lime powder) every 15 days.
- Clean goat droppings and waste every day
- Should be sloped to one side to allow for flow of rainwater and urine (This prevents Foot-and-Mouth Disease)



Stall-fed goat shed



04. Feeding from a hanging wire

- Keep it at 1.5 times the height of the goat. Goats like to stretch and eat - will help them grow taller.
- Can hang branches of Neem, Sehjna, Ardu neem
- Hang mineral bricks on this wire
- Feed will remain fresh and wouldn't get spoiled

05. Food and Manger

- Cut grass (jowar, Gehu straw) to one-inch size (Tooda)
- Additional preparation: Layer grass-salt-grass-salt-grass and cover with a wheat sack for ten minutes. Makes the grass soft and easily to eat.
- Build at a height to ensure food is not spoiled by mud or goat's feces and urine. Reduces chance of getting worms through feeding
- Should be cleaned daily

06. Water Trowel

- Mix 1/2 spoon of turmeric in 15-20 lts of water every 7 days for the goats to drink. This has anti-microbial properties



Growing Azola at home for extra nutrition

Azolla is an aquatic fern that can be grown in water.

Benefits

It is an excellent source of phosphorus, calcium, protein, nitrogen. It can substitute fodder (Gwar, Gehu, Chana and Moongphalli Bhusa) in dry seasons or when availability is low.

01 Good source of nutrition

02 Increase milk production

03 Strengthens bones strength

How to grow Azola at home

Setting up the bed



Can buy a leak-proof, polythene-type bed



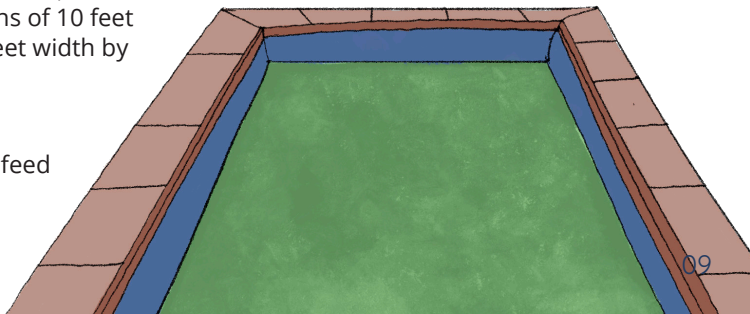
Can be set-up indoors or in a shady, protected space outside. *(Should ensure dogs/stray animals cannot access this bed)*



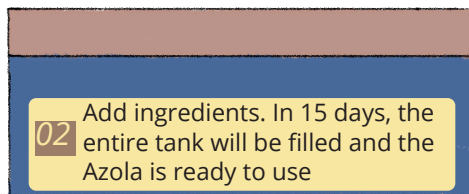
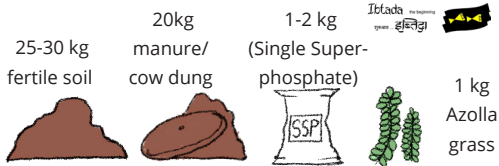
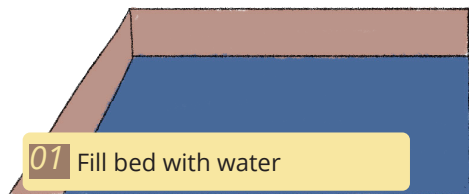
Cost: Around Rs. 1,800 for dimensions of 10 feet length by 4 feet width by 1 feet depth.



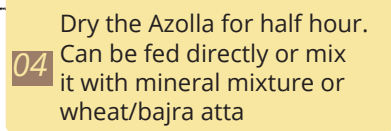
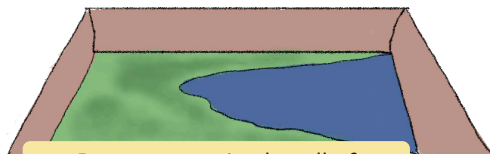
One bed can feed 5-7 goats



Water/ Medium



Using Azolla



Seasonal vigilance

1. Azolla grows best in monsoons.
2. In cold winters, add green net on top to increase heat within the bed.

Requirement

250 gms of Azolla per day (can extract more depending on appetite of goats)

How to make a mineral brick?

Benefits

These bricks have salts, calcium which are needed to improve a goat's health.

01

Improves
goat appetite

02

Improves immunity

03

Improves bone strength
and muscle mass -
makes goats bigger

Ingredients

1
kg each



Clay



Salt

150-200
gms



Wheat Husk/chaff

100
gms



Black salt



Multani Mitti

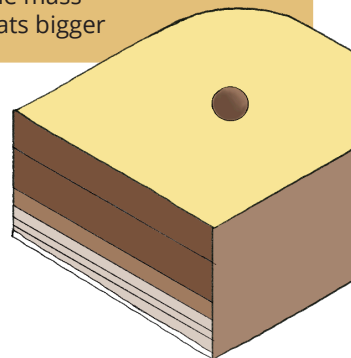


Jaggery (*In winters/cold
conditions only*)

3 gms



Chuna



If a stall has
5-6 goats

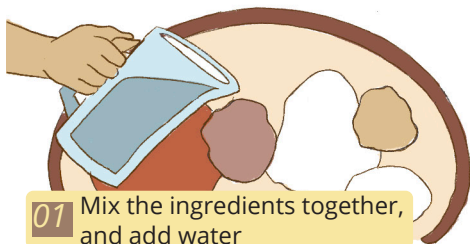


3 bricks needed

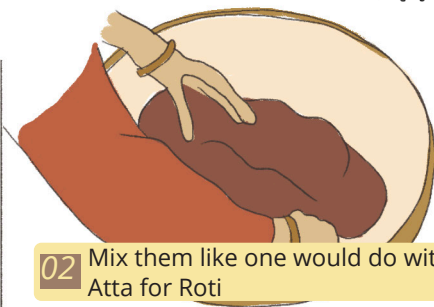


every 15 days.

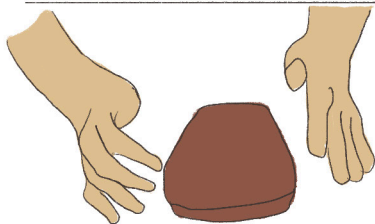
Process



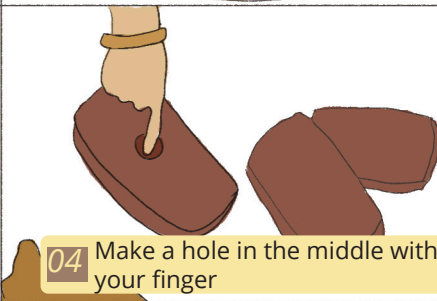
01 Mix the ingredients together, and add water



02 Mix them like one would do with Atta for Roti



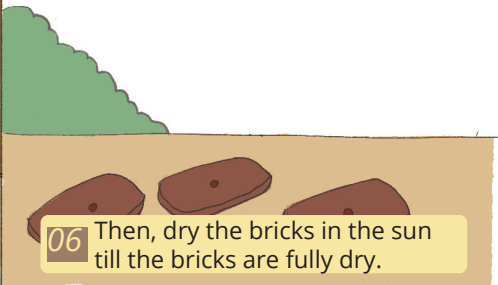
03 Divide it into parts and make a rough brick shape



04 Make a hole in the middle with your finger



05 Dry these bricks in the shade for 10 days



06 Then, dry the bricks in the sun till the bricks are fully dry.



07 The bricks should be hard.
Hang them on the wire



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