

HOW TO

**reduce mortality in
Goats through
Volunteer Networks &
Ethnovet practices**



What problem does the playbook serve?

01

With little or no training and awareness, goat herders face relatively high mortality of goats due to preventive diseases.



02

They resort to treatment with antibiotics, which has led to severe over-use of drugs that can have long-term consequences



03

The over-use of drugs increases antimicrobial drug resistance in the animals



04

This impacts animal health and growth in the long-term due to improper prescription of drugs.



TCL has focussed on **herbal medicine/home remedies** to reduce chances of disease & infection among goats.

Without these interventions and early disease identification, mortality can be as high as 40%. With intervention and disease management, **mortality can be reduced by 5%.**

This solution can be adopted if:



01

You are a goat rearer



02

You are a development practitioner working on designing a programme in the domain of animal rearing and healthcare management



03

You want to learn about how volunteer networks can be strengthened in rural India for animal rearing and management

Who can use this Playbook: **Goat rearers, Trainers, Community Resource Persons**

This playbook is designed using the expertise of Trust Community Livelihood (TCL), which works on augmenting incomes among socio-economically disadvantaged communities and landless/marginal farmers in the Barabanki and Bahraich districts of Uttar Pradesh.

What are the benefits to Goat Rearers?



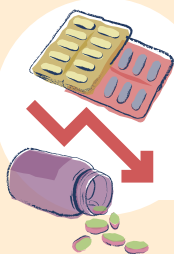
01

Increased incomes through the reduction of goat mortalities



02

Healthier goats and better muscle mass



03

Reduction in the use of antibiotics & other medicines



04

Creation of livestock micro-entrepreneurs

Training of Livestock Sakhis or community volunteers



Sakhis are given training in the basic treatment of animals. This includes castration of goats, deworming, vaccination schedules and herbal medicines for common ailments among goats.

Sakhis are not trained to treat serious illnesses or perform invasive procedures like operation.

I am a Pashu Sakhi! **I handle 2-3 villages in the region.** I am a community volunteer who has been trained to work with goat herders in the region. I can guide you better in the rearing of animals.

Training given on



Castration of goats



Vaccination schedule & deworming



Herbal medicines/home remedies



Creating Rural Entrepreneurs

By training Sakhis to be **primary health workers for goats**, a **rural entrepreneurship model** can be developed. Sakhis can improve the livelihoods of goat herders by consulting on ailments and disbursing herbal medicines.



Earning for delivery
of one vaccine:

₹ 10-15



Earning for delivery of
deworming tables:

₹ 10-12



Earning for delivery of
foot & mouth disease
vaccine:

₹ 25-30



Earning for first aid:

₹ 30-50

On average, each Sakhi can attend to **250-300 goats (60 households)** goats in her region.



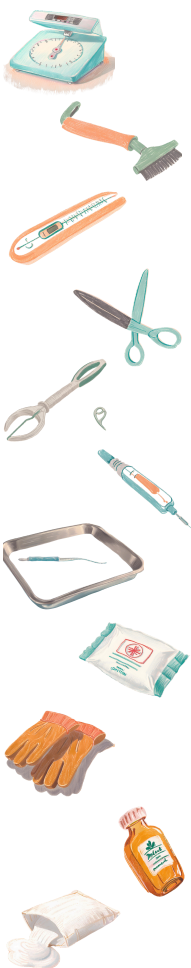
Potential earnings per month:

₹ 3,000-3,500/-

**All costs are for the region in Uttar Pradesh where TCL operates, with medicines being procured by TCL and distributed to Sakhis.*



Pashu Sakhi Kit 01

	Sl.No.	Particulars	Quantity/ Kit
	1	Weighing machine	1
	2	Hoof Trimmer	1
	3	Digital thermometer	1
	4	Scissor 6"	1
	5	Castrator 9"	1
	6	Syringe 3ml.	50
	7	16 Gauze Needle	10
	8	Cotton (50gm)	5
	9	Examination Gloves (100pcs Packet)	2
	10	Liquid – Bovituss 300ml	3
	11	Diaroak powder (30gm)	10



Pashu Sakhi Kit 02

	Sl.No.	Particulars	Quantity/ Kit
	12	Boric Acid Powder 10 gm	10
	13	Hitek Suspended liquid 1000ml	1
	14	Bandage 4-inch 1 packet	1
	15	Needle 20" gauge	50
	16	Appetonic forte powder (15 gm)	10
	17	Appetonic vet bolus (45")	3
	18	Direx Bolus	5
	19	Galactine vet 4s*	2
	20	Potassium Permanganate (KMnO4/Laal dawa) 10g	5
	21	Medicine Kit Bag	1
	22	Himbloat Liq 100ml	3
	23	A bag to carry all the equipment.	1

The approximate cost of each kit and hand holding support.

Rs. 10,000

This can be given on subsidy or for free to Sakhis during training.

Deworming

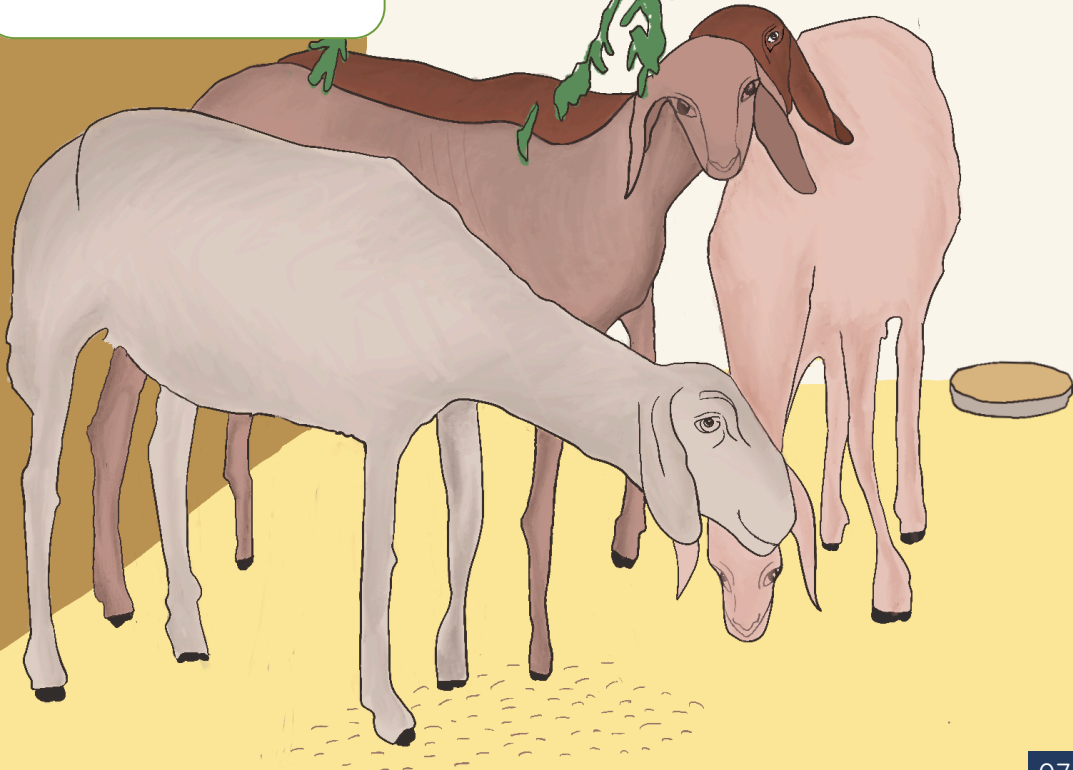
Worms in the stomach and digestive tracts of goats can lead to a lowering of appetite & weight loss.

Some ways to Identify:

- 01** *Foul Smelling Diarrhoea*
- 02** *Loss of Appetite*
- 03** *Watery eyes and eye discharge*
- 04** *Hair fall*
- 05** *Loss of weight, sluggishness*
- 06** *Bloating and weakness*

Treatment for Deworming

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



Vaccinations

Vaccination Calendar



Name of disease	Symptoms	Age of Goat to start vaccination	Dosage (ml)	Vaccination schedule
PPR (Peste des petits ruminants)	Dullness, fever, discharge from eyes and nose sores in the mouth. Disturbed breathing, cough, foul-smelling diarrhoea	Above 3 months	1	Once in three year
Pox (Mata rog in Hindi)	Fever, Red spots/blisters on muzzle, eyelids, ears, udder Breathing difficulties, Lethargy, Depression, Loss of appetite, Eye and nose discharge, Swollen eyelids.	Above 3 months	1	Once a year - December
FMD (Foot and Mouth Disease)	Blisters on the nose, tongue or lips, inside mouth, Blisters between toes, above the hooves, Blisters on teats/pressure points on the skin, Loss of appetite, Sluggishness	Above 3 months	1	Twice a year (September and March) Booster after one month
Enterotoxaemia (ETV)	Diarrhea, Depression, Lack of coordination, Vomiting/Upset stomach	Above 3 months	2	Once a year
Tetanus	Every 6 months		0.5	Every six months

Things to remember



The vaccination needs to be administered only in the morning or evening.



Don't administer the vaccine in direct sunlight.



Don't take the goat for grazing or any other purpose in the heat.



Don't give vaccination to goats that are unwell or pregnant.



The vaccine should be between 2 & 8 degree Celcius.

Each disease has a **different vaccine cycle**. It is impossible to track every goat. So, vaccinations are done for all goats in a region within **a week**, depending on **the disease cycle**.

Mother Kid Management



Mother Care

- 01** At the time of **pregnancy**, feed the mother **4-5 drops of mustard oil** to clean the stomach.



4-5

*Drops of
mustard oil*

- 02** Do not over-exert the mother during pregnancy through long walks for grazing. Immediately after birth, don't allow mother to lick the placenta. This may lead to infections

- 03** Include **Masoor dal and Jaggery in meals** after delivery to build up immunity for mother.



Jaggery



Massor dal

- 04** After delivery, **ensure mother and kid are close to each other.**



Kid Care

- 01** When the baby is born, **tie up the navel & clean** it. The navel should be **prevented** from **touching the ground** when the kid sits. This can lead to infections.



- 02** Clean the under of the mother goat before and after feeding: there is **no chance of infection** while **feeding**

- 03** For **three months** after birth, **avoid** taking the **kid out to the forest** or large, open land for grazing. Ensure mother & kid are close to each other.

03
Months

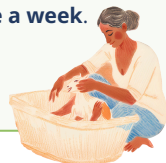


- 04** For a **minimum of 25 days**, ensure the **kid drinks their mother's milk** from the udder. 45 days is ideal.

- 05** To **prevent ticks** or to remove tick **infection**, **soak tobacco leaves or neem leaves in water**. Use this to bathe the kid.



- 06** Bath the **kid once a week.**



















Ethno-vet practices 01



(This can act like a tear away poster)

Herbal treatments for Goats **can reduce dependency on antibiotics, prevent diseases, train CRPs or goat herders in using available resources** for goat management, and save cost.






Issue in the goat	Herbal Treatment procedure/Making process.	Ingredients
Gas or flatulence	Betel leaf - 1 Ginger - 10 gm Grind both separately Mix and feed within 2 hours. Feed at an interval of 2 hours until you Goat gets relief.	<div> Betel Leaf  01 </div> <div> Ginger  10 gm </div>
Diarrhea	Mix 20 grams of Harra powder with 1 bowl of curd and feed.	<div> Harra Powder  20 gm </div> <div> Curd  1 bowl </div>
Loss of appetite	Make a Herbal Laddu: Cumin: 10 grams Ginger: 10 grams turmeric: 10 grams Two handfuls of bitter gourd leaves black pepper: 10 grams Jaggery: 20 grams Mix in mixer/blender use within 24 hours	<div> Cumin  10 gm </div> <div> Ginger  10 gm </div> <div> Turmeric  10 gm </div> <div> Bitter Gourd Leaves  2 handful </div> <div> Jaggery  20 gm </div> <div> Black Pepper  10 gm </div>
Constipation	Castor oil: 50 grams milk: 50 grams Mix oil with lukewarm milk.	<div> Castor oil  50gm </div> <div> Milk  50gm </div>
Goat is not coming to Heat	Mix nutmeg powder with jaggery. Feed for 3 days	<div> Nutmeg Powder  10gm </div> <div> Jaggery  10gm </div>



Ethno-vet practices 02



(This can act like a tear away poster)

Issue in the goat	Herbal Treatment procedure/Making process.	Ingredients
Cold, Cough and runny nose	<p>Make an oil: Mustard Oil: 500ml Garlic: 50 grams Nigella Seeds (Kalonji) – 50 grams Fry garlic and jeera in mustard oil until the color of mixture becomes chocolate. Cool it, seal it in a glass bottle. This can be used for 6 months. Use: 5 ml twice a day</p>	<p><i>Mustard Oil</i> + <i>Garlic</i> + <i>Nigella Seeds</i></p>  <p>500 ml 50 gm 50 gm</p>
Itchy throat	<p>Betel leaf – 3 Castor oil: 20 grams Grind betel leaves and add castor oil. Use: Feed 3 parts of mixture to Goat; and apply 1 part on its throat.</p>	<p><i>Betel Leaf</i> + <i>Castor oil</i></p>  <p>03 20 gm</p>
High Fever	<p>Holy Basil leaves (Tulsi) – 20 grams Black pepper- 10 grains Onion – 20 grams Grind the three separately and mix them. Use: Feed it to the Goat in the morning and evening for 3 days.</p>	<p><i>Tulsi</i> + <i>Onion</i> + <i>Black Pepper</i></p>  <p>20 gm 20 gm 10 grains</p>
If placenta does not fall out after delivery	<p>Rajma 100 grams Jaggery 25 grams Boil Rajma in half litre of water and grind it till it becomes a juice. Mix it with jaggery Use: Drink given to the mother once.</p>	<p><i>Rajma</i> + <i>Jaggery</i></p>  <p>100 gm 25 gm</p>
After miscarriage/abortion	<p>1 cup aloe vera juice for 5 days.</p>	<p><i>Aloe vera</i></p>  <p>01</p>



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