

# HEALTH CARE MANAGEMENT PRACTICES OF GOAT OWNERS IN CHITTORGARH DISTRICT OF RAJASTHAN

Anil Mordia<sup>1</sup>, M.C. Sharma<sup>2</sup>, R.K. Nagda<sup>3</sup> and Lokesh Gautam<sup>2</sup>

Department of Livestock Production Management, College of Veterinary and Animal Science, Navania, Vallabhnagar, Udaipur-313 601, Rajasthan University of Veterinary and Animal Sciences, Bikaner-334 001, Rajasthan, India

## ABSTRACT

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Livestock play a vital role in the agriculture and rural economics of the developing world. Animal husbandry is a major economic activity of the rural peoples, especially in the Chittorgarh district of Southern Rajasthan. A field survey was conducted to study goat health management practices of 120 respondents of 8 villages of Chittorgarh and Kapasan tehsils of Chittorgarh district of Rajasthan were interviewed. Frequencies were worked out for each attribute and percentage were calculated to draw inferences. Majority of goat owners practiced vaccination (55.68%) and deworming (60.97%) two times annually. Controlled ectoparasites by dusting insecticide powder (41.67%), isolated the sick animal from healthy flock (84.17%) during outbreak of diseases and only 44.17 per cent treated the goat by veterinary doctor/LSA. Most of goat owners used the deep burial method for disposal of carcass (59.17%) and placenta (70.00%). About one fourth goat owners disinfected the naval cord of the kids (26.67%) and grooming practices of goats (10.83%). Majority (60.00%) of goat owners used the hair clipping of the goats. About half of the goat owners used the knuckling method of milking (48.50%) and hoof trimming (50.83%).

**Key words:** Goat owners, health care, management, practices, Chittorgarh, Rajasthan

## Introduction

Livestock sector is significantly contributing to the national economy and its growth rate is continuously increasing. Livestock sector constitutes an important component of agricultural economy of developing countries, a contribution that goes beyond direct food production and includes multipurpose products and uses, such as skin, feather, fibre, manure for fertilizer and fuel, power and transportation, as barter product in societies where there is no circulation of currency. Animal husbandry is a major economic activity of the rural peoples, especially in the Chittorgarh district of Southern Rajasthan. Development of livestock sector has a significant beneficial impact in generating employment and reducing poverty in rural areas. More than 80 per cent rural families keep livestock in their households. Contribution of animal husbandry sector to the GDP of the state has been estimated to be around 9.16 per cent. About 35 per cent of the income to small and marginal farmers comes from dairy and animal husbandry. The world population of goat is estimated to be 921 million. More than 95 per cent of the goat population is found in developing countries. In terms of goat population, India possesses 135.17 million goats and contributes around 26.40 per cent of total livestock population in the country, ranking 2<sup>nd</sup> in the goat population of the world AHD (A) 2012. The total livestock population in Rajasthan is about 577.32 lacs. In Rajasthan, the goat's population was 216.66 lac and contributes around 37 per cent of total livestock population in the Rajasthan AHD (B) 2012. Research area Chittorgarh district has total livestock population is 13.77 lakh. In Chittorgarh district total goat population is 4.74 Lac and contributes around 34.47 per cent AHD (B) 012). Hence, the present investigation was undertaken to study the health care management practices among livestock owners in Chittorgarh district of Rajasthan.

## Materials and Methods

The present investigation was conducted to study health management practices of 120 respondents of 8 villages, in Chittorgarh and Kapasan tehsils of Chittorgarh district of Rajasthan were selected using random sampling technique. The interview schedule was pre-tested before applying it to the actual respondents. After getting opinion of the goat owners and expert advice the interview schedule was modified and then finally used for the study. The data were collected through personal interview of the goat owners with the help of well-structured interview schedule. The qualitative data were quantified accordingly and tabulated to draw meaningful inferences. In the present study appropriate statistical tools was applied. Such percentage and frequency mean.

## Results and Discussion

### Existing health care practices

The results obtained on different health care management practices of goats in research area from 120 respondents are summarized in following sub heads and details information are presented in Table 1.

### 1. Vaccination

The overall result indicated that 73.33 per cent respondents followed vaccination practice in their goats for good health and disease prevention. These findings are in line with the findings of Deshpande *et al.* (2009) and Lavania *et al.* (2014). Higher result observed by Soni *et al.* (2011) and lower result observed Sharma *et al.* (2007).

### 2. Frequency of Vaccination in every year

The result revealed that majority (55.68%) of respondent followed two time, while, one time vaccination (30.68%) due to long distance of veterinary hospital and low milk let down after vaccination. However, literature about this practice is not

\* M.V.Sc. Scholar, corresponding author, Email: mcsharmalr@gmail.com, Assistant Professor, Professor (AGB) & PI, AICRP on Goat, CVAS, Navania, Udaipur (RAJUVAS, Bikaner)

available to compare and discuss the result.

### 3. Deworming

The overall result indicated that 68.33 per cent respondents followed Deworming practice in their goats for ecto and endo parasitic control. These findings are in line with the findings of Sharma *et al.* (2007). Higher result observed by Soni *et al.* (2011) and Lower result observed by Rao *et al.* (2008) and Lavania *et al.* (2014).

### 4. Frequency of deworming in every year

These result of the present study revealed that majority (60.97%) of respondent followed two times, while, 24.39 per cent was followed one time Deworming every year. Mainly respondents were feeding Neem leaves containing tannin for Deworming in the study area. The present study observation is lower to the reports of Gurjar (2006).

### 5. Ectoparasitic control

The result observed that all most all respondents followed ectoparasitic control (100%) in study area. These findings are in line with the findings of Sharma *et al.* (2007).

### 6. Method of Ectoparasitic control

The result revealed that majority (41.67%) of respondents controlled ectoparasites by dusting insecticides powder while, 36.67 per cent used other method like kerosene and smoke of Neem leaves. Dipping tank method did not used for controlled the ectoparasites due to lack of knowledge. These findings are in line with the findings of Gurjar (2006).

### 7. Isolate the sick animal

The data observed that majority (84.17%) of goat owners isolated their sick animals from the rest of the flock whereas, did not isolate (15.83%). The present observation is comparable to the reports of Chah *et al.* (2013).

### 8. Treatment of sick animal

The results found that fair majority (44.17%) of respondents treatment of sick animal by veterinary doctor/LSA while, local empirical knowledge (35.00%) and calling a quack (20.83%), due to long distance of veterinary hospital and costly veterinary treatment respectively. The present observation is lower to the reports of Singh *et al.* (2010) and higher results observed by Sabapara *et al.* (2014b).

### 9. Disposal of carcass

Deep burial method for disposal of carcasses was practiced by 59.17 per cent respondents however, throwing out the village premises (40.83%). These findings are in higher with the findings of Sorathiya (2015).

### 10. Disposal of placenta

Deep burial method for disposal of placenta was practiced by 70.00 per cent respondents however, throwing out the village premises (30.00%). These findings are in lower with the findings of Debele *et al.* (2013) and higher result observed by Sorathiya (2015).

### 11. Disinfection of naval cord

The results observed that 73.33 per cent respondents did not followed disinfection of naval cord due to lack of knowledge while, followed the disinfection of naval cord (26.67%). The

present observation is lower to the reports of Kumar and Bais (2016).

### 12. Hair clipping

The data revealed that majority (60.00%) of respondents practiced hair-clipping method. They were clipping the hair of their goats by scissor in summer months, the hair were removed to controlled ectoparasites particularly fleas. The present observation is higher to the reports of Sorathiya (2015) and lower results found by Boz (2015).

### 13. Hoof trimming

The data observed that 50.83 per cent respondents practiced hoof-trimming method. They were trimming the hoof of their goats by hoof cutter; the hoofs were removed to controlled lameness. The present observation is comparable to the reports of Boz (2015)

### 14. Grooming of goat

Most of respondents (89.17%) did not groom the goat due to lack of knowledge and grooming of goats (10.83%) due to removal of dust and parasites before milking time. However, literature about this practice is not available to compare and discuss the result.

### 15. Milking method

The results revealed that majority (47.50%) of respondents milking done by knuckling method while, full hand milking (33.33%) and stripping method (19.17%) was used, due to lack of knowledge regarding clean milk production in the study area. These findings are in line with the findings of Tanwar *et al.* (2008).

### 16. Control of house flies/mosquitoes

The results were indicated that 100 per cent respondents practiced to controlled flies /mosquitoes. Sorathiya (2015) reported that control of ecto parasite like ticks, fleas, lice, mosquitoes and flies are very important part of healthcare management.

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Table 1. Existing health-care practices in the study area

S. No.	Health-care practices	Chittorgarh		Kapasana		Total	
		F	%	F	%	F	%
1	Vaccination						
	Yes	42	70.00	46	76.67	88	73.33
	No	18	30.00	14	23.33	32	26.67
2	Frequency of vaccination per year						
	One	14	33.33	13	28.26	27	30.68
	Two	23	54.76	26	56.52	49	55.68
	Three	5	11.90	7	15.22	12	13.64
3	Deworming						
	Yes	40	66.67	42	70.00	82	68.33
	No	20	33.33	18	30.00	38	31.67
4	Frequency of Deworming per year						
	One	9	22.50	11	26.19	20	24.39
	Two	24	60.00	26	61.90	50	60.97
	Three	7	17.50	5	11.90	12	14.63
5	Ectoparasitic control						
	Yes	60	100	60	100	120	100
	No	0	0	0	0	0	0
6	Method of ectoparasitic control						
	By dipping tanks	0	0	0	0	0	0
	By spray method	11	18.33	15	25.00	26	21.67
	By dusting insecticides powder	26	43.33	24	40.00	50	41.67
	Other method	23	38.33	21	35.00	44	36.67
7	Isolate the sick animal						
	Yes	52	86.67	49	81.67	101	84.17
	No	8	13.33	11	18.33	19	15.83
8	Treatment of sick animal						
	Use of local empirical knowledge	20	33.33	22	36.67	42	35.00
	Calling a quack	15	25.00	10	16.67	25	20.83
	By veterinary doctor/LSA	25	41.67	28	46.67	53	44.17
9	Disposal of carcass						
	By throwing out the village premises	28	46.67	21	35.00	49	40.83
	Deep burial	32	53.33	39	65.00	71	59.17
10	Disposal of placenta						
	Deep burial	45	75.00	39	65.00	84	70.00
	thrown anywhere	15	25.00	21	35.00	36	30.00
11	Disinfection of naval cord						
	Yes	15	25.00	17	28.33	32	26.67
	No	45	75.00	43	71.67	88	73.33
12	Hair clipping						
	Yes	32	53.33	40	66.67	72	60.00
	No	28	46.67	20	33.33	48	40.00
13	Regular hoof trimming						
	Yes	31	51.67	30	50.00	61	50.83
	No	29	48.33	30	50.00	59	49.17
14	Grooming of goats						
	Yes	5	8.33	8	13.33	13	10.83
	No	55	91.67	52	86.67	107	89.17
15	Milking method						
	Full hand milking	20	33.33	20	33.33	40	33.33
	Knuckling	27	45.00	30	50.00	57	47.50
	Stripping	13	21.67	10	16.67	23	19.17
16	control of house flies/mosquitoes						
	Yes	60	100	60	100	120	100
	No	0	0	0	0	0	0

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