Research Article

CONSTRAINTS OF BREEDING PRACTICES PERCEIVED BY THE GOAT OWNERS IN CHITTORGARH DISTRICT OF RAJASTHAN

Anil Mordia[1]*., Sharma M.C[2]., Vaishnava C.S[3] and Mitesh Gaur[4]

[1]Teaching Associate, Livestock Research Station, Dag, Jhalawar-326514
[2]Department of Livestock Production Management,
[3]College of Veterinary and Animal Science, Navania, Udaipur-313601
[4]Department of Gynaecology and Obstetrics

ARTICLE INFO	ABSTRACT
	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 adopted scientific goat health care practices of 120 respondents of 8 villages of Chittorgarh and Kapasan tehsils of Chittorgarh district of Rajasthan were interviewed. In case of repeat breeding was most severe constraint among the breeding practices and get first rank (95.56 MPS) was expressed as most important constraint which was in Chittorgarh (100 MPS) and Kapasan tehsil respectively. Delay in puberty, low conception rate and high abortion rate were considered as severe constraints 94.17, 94.16 and 93.89 MPS respectively. Low productivity of local goats was least severe constraint among the scientific breeding practices obtained overall tenth rank with 62.78 MPS and both tehsils obtained same rank with 59.44 MPS and 66.11 MPS in the study area.

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 (Satyanarayan *et al.* 2010).

Very few studies have been carried out which have direct relevance to the problems faced by farmers in adopting goat management practices for improving the productivity (Sharma *et al*. 2007).

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 (Source-Animal Husbandry Department, Rajasthan 2016).

The world population of goat is estimated to be 921 million (UN Food and Agriculture Organization, FAOSTAT-2012). 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 2nd in the goat population of the world (19th Livestock Censes - 2012).

The total livestock population in Rajasthan is about 577.32 lacs. In Rajasthan, the goat's population was 216.66 lacs and contributes around 37 per cent of total livestock population in the Rajasthan (19th Livestock Census Rajasthan-2012).

Research area Chittorgarh district has total livestock population is 13, 77,269 lacs. In Chittorgarh district total goat population

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Corresponding author: **Anil Mordia**
Teaching Associate, Livestock Research Station, Dag, Jhalawar-326514

is 4,74,799 and contributes around 34.47 per cent (19th Livestock Census Rajasthan-2012). In which Chittorgarh tehsil goat population is 70,328 and contributes around 14.81 per cent whereas, Kapasan tehsil goat population is 64,165 and contributes around 13.52 per cent (Farmers portal, Gram war population- 2012). Hence, the present investigation was undertaken to study the scientific feeding management practices among livestock owners in Chittorgarh district of Rajasthan.

MATERIALS AND METHODS

The present investigation was conducted to study goat scientific feeding practices of 120 respondents of 8 villages, VIZ., Keljer, Phusariya, Nalda, Barsingh ka Gurha, Keerion ka Khera, Theparion ka Khera, Moda Khera and Samrathpura 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 response to each of the questions in the interview schedule was coded and tabulated respondent-wise in a master table. The qualitative data were quantified accordingly and tabulated to draw meaningful inferences. In the present study appropriate statistical tools was applied. Tentatively it has been planned to apply percentage and frequency, mean, and mean per cent score, rank and chi-square test. Therefore, significance among the different classes will be tested with chi-squares test (Snedecor and Cochran, 1994).

Measurement of constraints

To find out the constraints that the adoption of scientific management practices, a separate schedule was prepared for study. All possible constraints the adoption of scientific management practices were included in the schedule. The responses obtained from respondents were recorded on a three point continuum viz., most severe, severe and least severe which were assigned 3, 2 and 1 score respectively. The recorded responses were counted and converted into mean per cent score for each statement and then ranked accordingly.

RESULTS AND DISCUSSION

Breeding constraints perceived by the respondents

The data presented in table 4.1 revealed that most severe constraints of the repeat breeding obtained overall first rank (95.56 MPS) was expressed as most important constraint which was in Chittorgarh 100 MPS with first rank and Kapasan tehsil 91.11 MPS with seventh rank respectively. The second most severe constraints of the delay in puberty obtained overall second rank (94.17 MPS). In which constraints Chittorgarh tehsil obtained second rank (98.33 MPS) and Kapasan tehsil obtained eighth rank (90.00 MPS). Third most severe constraints of the low conception rate was obtained overall third rank (94.16 MPS) in which constraints Kapasan tehsil obtained second rank (98.33 MPS) whereas, Chittorgarh tehsil obtained sixth rank (90.00 MPS).

The severe constraints found that high abortion rate, high cost of breeding buck, lack of knowledge regarding selection of breeding buck, indiscriminate breeding, Non-availability of improved breeding buck and lack of knowledge about breeding practices was obtained fourth, fifth, sixth, seventh, eighth and ninth with 93.89 MPS, 93.61 MPS, 92.50 MPS, 91.67 MPS, 85.56 MPS and 74.72 MPS in the study area.

Table 1 Constraints of scientific breeding practices by the goat owners

(n=120)

S.No	Constraints	Chittorgarh		Kapasan		Total	
		MPS	Rank	MPS	Rank	MPS	Rank
1	Indiscriminate breeding	90.56	V	92.78	V	91.67	VII
2	Repeat breeding	100	I	91.11	VII	95.56	I
3	Non-availability of improved breeding buck	76.11	IX	95.00	III	85.56	VIII
4	Low productivity of local goats	59.44	X	66.11	X	62.78	X
5	Delay in puberty	98.33	II	90.00	VIII	94.17	II
6	Low conception rate	90.00	VI	98.33	II	94.16	III
7	Lack of knowledge about breeding practices	82.78	VIII	66.67	IX	74.72	IX
8	High cost of breeding buck	93.33	III	93.89	IV	93.61	V
9	Lack of knowledge regarding selection of breeding buck	92.78	IV	92.22	VI	92.50	VI
10	High abortion rate	88.33	VII	99.44	I	93.89	IV

MPS=mean per cent score

The least severe constraints found that low productivity of local goats was obtained overall tenth rank with 62.78 MPS, in which constraints both tehsils obtained tenth rank with 59.44 MPS and 66.11MPS, due to lack of knowledge and non-availability of production ration respectively.

The major constraint was Repeat breeding while Gurjar and Pathodiya (2008) reported that lack of improved breeding buck was second major constraint perceived by the goat rearers and other constraints was found that inadequate availability of breeding buck, lack of knowledge about breeding practices and indiscriminate breeding practice. Baruwa (2013) stated that difficulty in getting good quality breeding animals was also a major constraint (33.3%). Sabapara *et al.* (2014a) reported that indiscriminate breeding (86.40%), non availability of improved breeding buck in market (80.80%) and repeat breeding in females (64.80%) were major constraints. Rajkumar and Kavithaa (2014) observed that inadequate availability of breeding buck (non-availability of improved breeding bucks) was main constraint. Yadav *et al.* (2014) stated that repeat breeding problem (96.67%) was major constraint.

CONCLUSIONS AND RECOMMENDATIONS

It was concluded from study in the recommended scientific breeding practices revealed that in case of breeding practices, Repeat breeding was the most severe constraint obtained first rank (95.56 MPS). The second most severe constraints delay in puberty obtained second rank (94.17 MPS) and Low productivity of local goats was the least severe constraints obtained tenth rank (62.78 MPS) in the study area. To improve the adoption of recommended goat breeding practices to be organize training camp about scientific goat rearing.

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