

INFORMATION NEEDS OF GOAT REARING FARMERS IN MATHURA DISTRICT

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ABSTRACT

An ex-post-facto study was conducted to assess the information needs of goat rearing farmers as perceived by them, with a sample size of 160 respondents in Mathura district of Uttar Pradesh. Information needs were assessed in total 34 aspects of goat rearing practices; five each from health care and marketing-finance and eight each from breeding, feeding and housing-management. The investigation revealed that goat health care was the first area for information need as perceived by the farmers followed by marketing-finance, feeding, housing-management and breeding. Among specific sub areas; information regarding 'common goat diseases with their preventive measures', 'vaccination', 'local market', 'banking finance for goat farm', 'preparation of economic and balanced ration', 'care of does' and 'breed selection' were perceived with higher intensity of need.

KEY WORDS : Information needs, goat farmers, Mathura.

INTRODUCTION

An access to right information at the right time in the right format and from the right source is essential to improve the knowledge level of farmer. Further information is said to be right only when it is based on the local situation meeting the basic needs of livestock owners. Among all the farmers rearing various species of livestock, goat farmers are in real need of timely, accurate and relevant information about improved goat rearing practices. Since, majority of the goat farmers belong to small and marginal categories, average meat yield of a goat in India is only 10 kg against about 20 kg in Sri Lanka, 14 kg in China and 17 kg in Pakistan mainly because of under feeding and faulty management practices (Singhal, 1999). Also, Kumar (2007) reported that, high mortality in goats in the initial phase was mainly due to lack of knowledge about scientific goat farming, poor management and poor access to veterinary services. So, improving accessibility of accurate, relevant and need based information will help goat owners to make timely decision about various aspects to improve the production of their animals. Hence, keeping the above facts in view, the present study was undertaken to assess the information needs of goat rearing farmers in Mathura district, as perceived by them.

METHODOLOGY

The present study was conducted in Mathura district of Uttar Pradesh. Out of the 10 blocks of Mathura district, Pharah, Baldeo, Mathura and Gowardhan were selected on the basis of high goat population. Further, 2 villages were selected from each of the selected block in the same fashion making a total 8 villages for the study. From each selected village an exhaustive list of households owning at least five goats were prepared and 10 households were selected randomly from each list. Thus, 80 households were selected for the study. From each selected household, one female family member along with one male family member were interviewed directly to get relevant data and thus making the total sample size to 160.

Information needs of goat rearing farmers were assessed in five sub areas viz., feeding, housing-management, health care, breeding and marketing- finance and the parameters to assess the same have been chosen from available reviews (Tekale *et al.*, 2013 and Mohan *et al.*, 2006). The respondents were asked to identify the different aspects of these sub-areas of goat rearing in which they felt there was need for information. Responses were taken on three point continuum *i.e.* 'most needed', 'needed' and 'least needed' with respective scores as 3, 2 and 1 respectively. Frequency and percentage for each informational-area were calculated and ranking was done for each category based on the total weighted mean score. Summation of scores given to particular activity by all respondents formed the total score (TS) and dividing the total score by total number of respondents shaped the total weighted mean score (TWMS).

RESULTS AND DISCUSSION

Out of the five assessed areas of information on goat husbandry, health care was perceived as top ranked followed by marketing-finance, feeding and housing-management while; information on goat breeding management was last ranked by goat farmers.

Table 1: Perceived Information Needs of Goat Rearing Farmers (N=160)

S. No.	Goat Husbandry Information Areas	MN (%)	N (%)	LN (%)	TS	TWMS	Rank
I. FEEDING MANAGMENT PRACTICES							
1	Feeding according to age, sex, weight	38.12	40.625	21.25	347	2.17	IV
2	Preparation of economical & balanced ration	52.50	41.25	6.25	394	2.46	I
3	Mineral mixture supplementation	40.00	46.25	13.75	362	2.26	III
4	Importance of colostrum feeding	45.62	40.625	13.75	371	2.32	II
5	Importance of clean feeding and watering	23.12	46.25	30.62	308	1.92	VI
6	Fodder production for goat	31.25	46.875	21.87	335	2.09	V
7	Enrichment of poor quality roughage & its storage	9.37	53.75	36.87	276	1.72	VIII
8	Nutritional management of breeding problems	10.00	55.00	35.00	280	1.75	VII
II. HOUSING & MANAGEMENT PRACTICES							
1	Scientific & low cost animal shed preparation	25.00	55.62	19.38	329	2.06	V
2	Care of does (before, during & after kidding)	44.38	49.37	6.25	381	2.38	I
3	Care of new born kid	32.50	58.13	9.37	357	2.23	II
4	Weaning	7.50	56.25	36.25	274	1.71	VI

5	Castration	32.50	53.75	13.75	350	2.19	III
6	Hygiene in the shed	30.00	48.12	21.88	333	2.08	IV
7	Manure management	16.88	36.25	46.87	262	1.64	VII
8	Record keeping	0	33.13	66.87	213	1.33	VIII
III. HEALTH MANAGEMENT PRACTICES							
1	Common goat diseases and preventive measure	85.00	12.50	2.50	452	2.83	I
2	Care of sick animal	52.50	35.63	11.88	385	2.41	IV
3	Control of external and internal parasites	58.75	38.13	3.13	409	2.56	III
4	Vaccination	76.88	19.38	3.75	437	2.73	II
5	First aid/home remedies	38.75	53.13	8.13	369	2.31	V
IV. BREEDING MANAGEMENT ASPECTS							
1	Breed selection	21.25	66.25	12.50	334	2.09	I
2	Selection of parent stock and breeding strategy	7.50	45.00	47.50	256	1.60	VI
3	Care of breeding buck	11.25	52.50	36.25	280	1.75	V
4	Heat detection and correct time of mating	2.50	50.62	46.88	249	1.56	VII
5	Pregnancy diagnosis	25.62	47.50	26.88	318	1.99	III
6	Practice of increasing twinning/triplet and flushing	21.25	56.88	21.87	319	1.99	II
7	A.I. in goats and its importance	0	42.5	57.5	228	1.42	VIII
8	Infertility problems	18.13	45.62	36.25	291	1.82	IV
V. MARKETING & FINANCE ACTIVITIES							
1	Current information of local market	63.75	25.63	10.63	405	2.53	I
2	Marketable age of animal	25.63	53.75	20.63	328	2.05	V
3	Insurance of animal	26.88	53.13	20.00	331	2.07	IV
4	Finance (Banking) for goat farm	53.75	40.63	5.63	397	2.48	II
5	Knowledge about Government scheme	41.88	48.75	9.38	362	2.26	III

(MN -Most Needed, N -Needed, LN-Least Needed, TS- Total Score, TWMS- Total Weighted Mean Score)

Information needs on feeding of goat

Preparation of economic and balanced ration has been ranked first (table 1) because the land availability for grazing was very limited and many farmers were rearing goats by stall feeding for marketing purpose and their perception of need to fatten animal in short period without investing much on feeding. Therefore, the balanced and economic feed preparation with locally available feeding radient was a major solution and they perceived high information need in this sub-area. The importance of colostrum feeding was ranked second because majority of farmers delay in feeding colostrum to the neonates due to ignorance on nutritive and its immunological value. Enrichment of poor quality roughage and its storage was ranked last as these practices were uncommon to goat farmers in study area while nutrition management of breeding problems was ranked 2nd last as goats were good in reproductive performance .

Information needs perceived by goat owners in sub-areas of housing & management

A look at the table 1, would provide us the understanding that, care of does was the most basic and all time concern activity of goat management (rank 1). Although the goat farmers had goat farming since very long time and they knew in their own ways about the care of does; giving first priority to information on care of does indicates that respondents were more attentive in getting scientific knowledge about the improved or scientific goat rearing. Mortality of the neonates was a major problem in goat farming, if mortality rate increases, the profit margin would automatically decrease. If care and management of young one is good, it results in early maturity and good body weight gain on consumption of per unit of feed, so, this might be the reason most respondents (58.13%) for having felt information as needed about the care of new born kid. Most of the respondents were insensitive to the information on castration so, when they were made aware of benefits of castration, they shown a high desire of complete information on that, hence, more than the half (53.75 %) of respondents perceived information on castration as needed and 32.50 per cent of them as most needed. A large number of farmers kept the goat for meat purpose and mostly did not use goat milk for regular consumption, hence majority of respondents were not in favour of weaning. Since, the majority of households (65%) had small sized and unorganized flock hence most of the respondents (66.87%) perceived information on record keeping as least needed followed by manure management (46.87%).

Information needs perceived by goat farmers in sub-areas of goat health care

Respondents were very much concerned about health management of their goats as more than 75 per cent of them perceived information on common goat diseases & preventive measures (85%) and vaccination (76.88%), most needed and these were ranked I and II respectively (table 1). Most of the farmers, especially females, had no sufficient knowledge about common diseases of goats and their prevention strategies so they showed high need regarding the same leading it to first rank. Also more than 50 per cent respondents felt information related to control of external & internal parasites (58.75%) and care of sick animals (52.5%) as most needed. While, information on first aid/home remedies were perceived as needed by 53.13 per cent of goat farmers. The reasons could be that the respondents were aware about vaccination and they knew the fact that most of the disease problems of their goat can be checked by regular practice of vaccination. Results are partially in line with findings of Durggarani and Subhadra (2009) who reported that with respect to knowledge need vaccination ranked first followed by deworming.

Information needs perceived by goat owners in sub-areas of breeding

Witnessing table 1 again suggests that the need for selection of breed was given rank I followed by practice of increasing twinning/triplet (II rank) and pregnancy diagnosis (III rank) Artificial Insemination last ranked (VIII rank) and detection of heat & correct mating time II last (VII rank) in relation to information need assessment of goat farmers. Most of the households (53.75%) were

rearing non-descript goats and respondents were unaware to high producing goat breeds, so majority of them were interested in information related to breed selection leading it to I rank. But, since most of the respondents had unorganized and small sized flock they were not much interested towards the information on breeding strategy (VI rank). In desire of getting quick return and good marginal benefit the goat farmers were seen more attentive toward information on practices of increasing twinning/triplet like flushing. Correct pregnancy diagnosis saves the effort and time of farmer as well as it is essential for healthy reproductive rate of flock, so many of the goat farmers shown interest to information on pregnancy diagnosis by easy methods like abdominal palpation. The Artificial insemination in goats was completely unnoticed in the study area so it has got last rank among the selected breeding aspects of goats. Goat farmers reported that there was very less human intervention required in mating or crossing of goats as most of the time male and female goats were placed together. Hence, majority (46.88%) of goat farmers perceived information on detection of heat and mating as least needed.

Information needs perceived by goat farmers in sub-areas of marketing & finance

The table again, indicates a high desire of information related to marketing & finance among goat farmers. Among five activities related to marketing and finance, information about local market was top ranked followed by financial/banking information (II rank) and information related to Government schemes (III rank). While, information about marketable age of animal was least needed (V rank). Majority of the respondents were not getting regular information on goat marketing, hence, the larger proportion (63.75%) perceived current information of local goat market as most needed. The lion share of respondents was not aware of credit facility and subsidies, as well as, more than half (56.25%) of the households had low total annual income. So 53.75 per cent of respondents perceived finance/banking information as most needed (53.75%) followed by information on Government schemes for goat farming (41.88%). Death of productive animal due to some diseases or accidents is the huge economical loss for resource poor farmer and hence, to avoid heavy economic burden due to death of animal, insurance coverage is essential and this may be the reason for majority (53.13%) had perceived information about insurance as needed. Majority of goat farmers sold their goats to fulfill their immediate needs or to support essential family requirements, so they were not interesting towards information on marketable age of animals. The results are in line partially with findings of Durggarani and Subhadra (2009) who reported that banking and finance ranked first and marketing of livestock ranked second in marketing and finance sub-area of dairy farming.

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