

## SOCIO ECONOMIC PROFILE AND CONSTRAINTS FACED BY GOAT KEEPERS

M. N. Jegoda<sup>1</sup>, S. J. Jadav<sup>2</sup> and J. H. Patel<sup>3</sup>

1 Assistant Professor, College of Agriculture, AAU, Vaso-387380

2 Assistant Professor, DVK, AAU, Anand- 388110

3 Assistant Professor, Livestock Research Station, AAU, Anand- 388110

Email: drmnjegoda@gmail.com

### ABSTRACT

A study was conducted in selected areas of Dahod and Kheda districts of middle Gujarat to study the socio-economic profile and constraints faced by goat keepers in goat rearing and the data was collected from randomly selected 240 goat keepers through personal interview with the help of pre-tested structured schedule. The present study revealed that majority of the goat keepers (64.58%) belonged to middle age having primary level of education. It is found that majority of the goat keepers belonged to other backward class (42.92%) followed by schedule caste (30.0%) and schedule tribe (27.08%). About 50.83 per cent of the goat keepers lived with up to 5 family members followed by more than 5 family members (49.17%). Majority of the goat keepers engaged in agriculture and labor work with goat rearing as subsidiary occupation for their livelihood. More than three fifth (62.0%) of the goat keepers had 11 to 20 years of experience in goat farming. Maximum goat keepers found marginal land holders and landless type. Majority of the goat keepers maintained 6-15 no. of goats and had annual income between Rs. 25001-50000. Most of the goat keepers (92.50%) had no membership in any organization, having poor extension contact and very low level of mass media exposure. Major managerial constraints faced by the goat keepers in the study area were the non-availability of quality breeding buck (ranked I), farmers did not allow harvest fields for grazing (ranked II) and lack of technical guidance (ranked III). Whereas the non-availability of proper established goat market channel (ranked I), over-exploitation by middlemen or agents (ranked II), high transport cost (ranked III) due to far away market (ranked IV) were found the major marketing related constraints faced by goat keepers in goat rearing. Moreover, the predators' problem during night time (ranked I), low literacy rate (ranked II), money crisis (ranked III) and theft losses during night time due to interior remote area (ranked IV) were found the major constraints related to socio-economic conditions perceived by the goat keepers in goat rearing.

**Keywords:** constraints, goat keepers, goat rearing, occupation, middlemen, socio economic

### INTRODUCTION

Goat rearing is an important source of livelihood for landless peoples and marginal farmers throughout the country. The goat rearing has become very popular in recent years as a pathway out of poverty and good source of meat and milk to the rural population (Ahuya *et al.*, 2004). Goats have been economically important to people living in arid, semiarid, hilly and remote tribal areas. They have high prolificacy, short gestation period, high rate of growth and instant marketability (Deo and Hegde, 2013). Goat population in India steadily increased to 137.321 million in 2010 and as per the latest 20<sup>th</sup> livestock census, the goat population in India in 2019 was 148.9 million showing an increase of about 10.1% over the previous census (2012) and about 27.8% of the total livestock is contributed by goats, there by claiming first rank in the world. The goat numbers in Gujarat state are about 4.86 million, where Dahod and Kheda district had occupied

0.50 and 0.19 million numbers of goats (Anonymous, 2019). The vast majority of the poorer section of the rural population depends on the goat rearing for subsistence and to meet the house-hold occasional needs for meat and milk (Acharya and Sharma, 1980). It is necessary to focus on goat development programmes by providing necessary technical know-how and making available emergency veterinary services at farmers' doorstep and high genetic merit bucks (Poornima *et al.*, 2015). Production potential of livestock depends mostly on the management practices under which they are reared and these rearing practices differ across various agro-ecological regions due to many factors and constraints faced by the farmers.

### OBJECTIVES

- (1) To study the socio-economic profile of goat keepers
- (2) To identify the constraints faced by goat keepers in

adoption of management practices of goat rearing

**METHODOLOGY**

The present study was conducted in Dahod and Kheda districts of middle Gujarat. From each district, four talukas were chosen and from each selected taluka, five villages were chosen and from each village, six goat keepers were randomly selected for the study. The present districts and villages were chosen for the study due to the dependence of poor people’s mostly on animal husbandry and also the availability of goats is significantly higher when compared with other villages. Thus, the total sample consisted of 240 goat keepers from both districts as respondents with help of random sampling method. The selected goat keepers were

interviewed with the help of a pre-tested structured schedule to collect the relevant information regarding socio-economic profile characteristics of goat keepers and various constraints perceived in goat rearing by goat keepers. The constraints obtained from each respondent were measured in terms of mean value. To know their degree of importance, respondents were asked to give their responses in three-point continuum *i.e.*, very important, important and not important. The scores assigned were three, two and one for very important, important and not important responses, respectively. Finally, the mean score was worked out for each problem for ranking them in terms of their importance. Data was tabulated and analyzed as per standard statistical tools like frequency and percentage to draw meaningful interference (Snedecor and Cochran, 1994).

**RESULTS AND DISCUSSION**

**Profile characteristics of goat keepers**

**Table 1 : Profile characteristics of the goat keepers**

(n=240)

Sr. No.	Profile characteristics of goat keepers	No. of Respondents					
		Dahod district (n=120)		Kheda district (n=120)		Overall (n=240)	
		No.	%	No.	%	No.	%
<b>A</b>	<b>Age of respondents</b>						
1	Young (up to 35 years)	32	26.67	31	25.83	63	26.25
2	Middle (36 to 50 years)	72	60.00	83	69.17	155	64.58
3	Old (Above 50 years)	16	13.33	06	5.00	22	9.17
<b>B</b>	<b>Education level</b>						
1	Illiterate	24	20.00	22	18.33	46	19.17
2	Primary level	42	35.00	84	70.00	126	52.50
3	Secondary level	43	35.83	12	10.00	55	22.92
4	Higher secondary level	09	07.50	02	01.67	11	04.58
5	Graduation & above	02	01.67	0	0.00	02	0.83
<b>C</b>	<b>Caste</b>						
1	General category	0	0.00	0	0.00	0	0.00
2	Other backward caste	76	63.33	27	22.50	103	42.92
3	Schedule caste	04	03.33	68	56.67	72	30.00
4	Schedule tribe	40	33.33	25	20.83	65	27.08
<b>D</b>	<b>Family size</b>						
1	≤ 5 members	41	34.17	81	67.50	122	50.83
2	More than 5 members	79	65.83	39	32.50	118	49.17
<b>E</b>	<b>Land holdings</b>						
1	Landless (00 ha)	0	0.00	88	73.33	88	36.67
2	Marginal (up to 1.0 ha)	104	86.67	30	25.00	134	55.83

3	Small (1.01 to 2.0 ha)	16	13.33	02	01.67	18	7.50
4	Medium (2.01 to 4.0 ha)	0	0.00	0	0.00	0	0.00
5	Large (above 4.0 ha)	0	0.00	0	0.00	0	0.00
<b>F</b>	<b>Flock size (number of goats)</b>						
1	≤ 5	25	20.83	04	03.33	29	12.08
2	6 – 10	86	71.67	50	41.67	136	56.67
3	11 – 15	9	07.50	48	40.00	57	23.75
4	16 - 20	0	0.00	13	10.83	13	05.42
5	> 20	0	0.00	05	04.17	05	02.08
<b>G</b>	<b>Annual income (₹)</b>						
1	Up to ₹ 25000	0	0.00	3	2.50	3	1.25
2	₹ 25001-50000	83	69.17	91	75.83	174	72.50
3	₹ 50001-75000	32	26.67	26	21.67	58	24.17
4	₹ 75001-100000	05	04.17	0	0.00	05	02.08
5	More than ₹ 100000	0	0.00	0	0.00	0	0.00
<b>H</b>	<b>Social participation</b>						
1	No membership	109	90.83	113	94.17	222	92.50
2	Membership in one organization	10	08.33	07	05.83	17	07.08
3	Membership in more than one organization	01	0.83	0	0.00	1	0.42
4	Membership along with position holding	0	0.00	0	0.00	0	0.00
<b>I</b>	<b>Extension contact</b>						
1	Poor (up to 4.5 score)	47	39.17	106	88.33	153	63.75
2	Average (4.6 to 9.0 score)	69	57.50	14	11.67	83	34.58
3	Good (9.1 to 13.5 score)	04	03.33	0	0.00	04	01.67
4	Excellent (13.6 to 18.0 score)	0	0.00	0	0.00	0	0.00
<b>J</b>	<b>Mass media exposure</b>						
1	Very low (up to 3.6 score)	47	39.17	109	90.83	156	65.00
2	Low (3.7 to 7.2 score)	69	57.50	11	9.17	80	33.33
3	Medium (7.3 to 10.8 score)	04	03.33	0	0.00	04	01.67
4	High (10.9 to 14.4 score)	0	0.00	0	0.00	0	0.00
5	Very high (14.5 to 18.0 score)	0	0.00	0	0.00	0	0.00

It is evident from data reported in table 1 that majority of the goat keepers belonged to middle age (64.58%) group, the probable reason might be that the middle age person is one of the responsible member in family having more awareness about goat rearing practices and is more experienced. The smaller number of young aged goat keepers might be lack of interest in goat rearing. Similar findings are well supported by Tanwar *et al.* (2008) and Sabapara (2016). It is found that overall majority of goat keepers were literate having primary level of education (52.50%) followed by secondary level of education (22.92%) and illiterate (19.17%). Very few of them had higher level of education, this shows poverty level is very high and they could not afford higher education. Similar findings were reported by Gokhale *et al.* (2002)

and Deshpande *et al.* (2010) that majority of goat keepers were literate having minimum primary level of education. Majority of the goat keepers belonged to other backward class (42.92%) followed by schedule caste (30.0%) and schedule tribe (27.08%), respectively. It was observed that most of the goat keepers belonged to backward class of community because usually most of the down trodden people practice goat rearing as a cash crop during money crisis to meet their household requirement. Similar, findings were reported by Deshpande *et al.* (2010), Khadda *et al.* (2012) and Sabapara (2016). Majority of the goat keepers (50.83%) had family size of up to 5 members whereas 49.17 per cent of the goat keepers belonged to family size of more than 5 members in study area. These variations in results were found, might be

due to social changes and love for keeping individuality of new generation rather than to live together in joint family. Similar finding was reported by Deshpande *et al.* (2010) and Sabapara (2016) reported that majority of the goat keepers had a medium family size of 4 to 6 members. It was cleared that overall majority of the goat keepers were engaged with agriculture and labour work whereas some of them practice animal husbandry along with goat rearing as their subsidiary occupation for livelihood. Similar finding was reported by Sabapara (2016) observed that majority (59.6%) of respondents had goat husbandry with labour followed by goat husbandry with agriculture (28.8%). Overall, there was more than three fifth (62.0%) and 15.83 per cent of the goat keepers had 11 to 20 and more than 20 years of experience in goat farming, respectively. This might be due to the fact that majority of goat keepers belonged to middle age groups and had primary to secondary level of education. Maximum goat keepers (55.83%) had marginal sized land holding while 36.67 per cent were landless and only 7.50 per cent of them had small sized land holding. It can be observed that maximum percentage of the goat keepers (56.67%) were keeping 6 to 10 numbers of goats followed by 23.75 per cent had 11 to 15 numbers of goat as small to medium flock size and very few of them had large flock size. This might be the reason of that inadequacy of land, infrastructure and market facility and may be risk in large flock size. Similar findings were reported by Wadkar *et al.* (2009) and Deshpande *et al.* (2010) that majority of the goat keepers maintained small to medium size flock.

It can be also inferred that large proportion (72.50%) of the goat keepers had annual income between ₹ 25001-

50000 followed by 24.17 per cent of them had annual income of ₹ 50001-75000 and very few of them had annual income more than ₹75001-100,000. This might be due to the reason that majority of the goat keepers were marginal land holders to landless, without any other major sustainable occupation and they got low price of the goats in local market. Similar findings were reported by Thombre *et al.* (2010), Khadda *et al.* (2012) and Sabapara (2016) that the majority of goat keepers were from medium income groups *i.e.*, less than ₹ 50000, which indicated that the poor people kept goat for their livelihood. It was observed that overall, 92.50 per cent of the goat keepers had no membership in any organization followed by only 7.08 and 0.42 per cent had membership in one organization and in more than one organization, respectively. Therefore, it can be inferred that most of the goat keepers had none to low social participation because of the rural and remote area from where they belong which lack the number of social and economic organization. These findings are also well supported with report of Wadkar *et al.* (2009) and Sabapara (2016). Moreover, overall majority of the goat keepers (63.75%) had poor extension contact and 34.58 per cent had average extension contact. This might be the reason that majority of the goat keepers had low level of higher education and mostly engaged to labours work and low annual income with no contact to social or economic organization. Majority of the goat keepers (65.0%) had very low level of mass media exposure followed by 33.33 and 1.67 per cent of them had low and medium level of mass media exposure, respectively which is also confirmed by Patel and Vinaya (2021), Sondarva *et al.* (2019), Thakkar (2013) and Prajapati (2011).

**Constraints faced by goat keepers**

**Table 2 : Constraints faced by goat keepers in goat rearing**

(n=240)

Sr. No.	Nature of constraints	Mean score (Rank within a group)					
		Dahod (n=120)		Kheda (n=120)		Total (n=240)	
<b>A</b>	<b>Management related constraints</b>						
1	<b>Inadequate availability of grazing</b>	1.39	IX	2.48	I	1.93	IV
2	<b>Higher feed cost</b>	1.78	VII	1.06	VII	1.42	VII
3	<b>Non-availability of quality bucks</b>	2.25	II	2.20	III	2.23	I
4	<b>More illness and mortality</b>	2.01	IV	1.73	IV	1.87	V
5	<b>Inadequate vet. service</b>	2.12	III	1.24	VI	1.68	VI
6	<b>Shortage of experienced workers</b>	1.80	VI	1.03	IX	1.42	VII
7	<b>Lack of local technical guidance</b>	2.48	I	1.66	V	2.07	III
8	<b>Farmers not allow to graze on them harvest fields</b>	1.98	V	2.28	II	2.13	II
9	<b>Shortage of labours</b>	1.63	VIII	1.04	VIII	1.34	VIII

Sr. No.	Nature of constraints	Mean score (Rank within a group)					
		Dahod (n=120)		Kheda (n=120)		Total (n=240)	
<b>B</b>	<b>Marketing related constraints</b>						
1	Inadequate price of goat milk	1.95	V	1.20	VI	1.58	V
2	Not proper goat marketing channel	2.08	I	2.92	I	2.50	I
3	Goat milk is not accepted by dairies	1.72	VI	1.43	V	1.58	V
4	Far away market	2.04	II	1.83	IV	1.93	IV
5	Exploited by middle man or agents	1.97	IV	2.91	II	2.44	II
6	High transport cost	1.98	III	2.27	III	2.13	III
<b>C</b>	<b>Socio-economic related constraints</b>						
1	Theft losses during night time	1.60	VII	2.43	II	2.01	IV
2	Predators' problem during night time	1.78	VI	2.67	I	2.22	I
3	Money crisis	1.98	IV	2.28	IV	2.13	III
4	High wages rate	1.89	V	1.16	IX	1.53	IX
5	No credit facility	1.98	IV	1.17	VIII	1.58	VIII
6	Seasonal fluctuation in meat prices	2.19	I	1.75	VI	1.97	VI
7	Unwillingness among educated youth	2.18	II	1.81	V	2.00	V
8	Poor social status of goat keepers	2.00	III	1.55	VII	1.78	VII
9	Low literacy rate	2.00	III	2.33	III	2.17	II

The constraints perceived in goat rearing by the respondents listed in table 2 are ranked by calculating mean score value on the basis of degree of importance. It was observed from table 2 that lack of local technical knowledge on goat farming was the most important constraint felt by goat keepers which ranked first. The other management related constraints like non-availability of superior breeding bucks, inadequate veterinary services and more illness-mortality in flock faced by goat keepers in Dahod district ranked second, third and fourth, respectively. Non-existence of proper goat marketing channel, far away market, high transport cost and over-exploitation by middleman were main marketing constraints faced by the goat keepers which ranked as first, second, third and fourth, respectively. It was also observed that major socio-economic constraints *viz*; seasonal fluctuation in meat prices and unwillingness for goat rearing among educated youth, felt by the goat keepers in Dahod district ranked first and second, respectively.

Inadequate availability of grazing resources, farmers were not allowing flock to graze in harvest fields and non-availability of superior breeding buck were ranked first, second and third managerial constraints felt by the goat keepers of Kheda district, respectively. Major marketing constraints *viz*; not having proper goat marketing channel, over exploitation through middleman or agents and high transport cost were felt by goat keepers on goat rearing were ranked first, second and third by them, respectively. Moreover, predators' problem and theft losses during night time were socio-economic constraints felt by goat keepers of Kheda district.

Overall, the major constraints faced by the goat keepers observed that the non-availability of quality breeding buck, farmers not allowing goats to graze on harvest fields, lack of technical guidance, inadequate availability of grazing resources and illness mortality in flock due to inadequate veterinary service as the main management constraints in goat rearing while not having proper established goat market channel, being over-exploited by middlemen or agents and high transport cost due to far away market were the major marketing related constraints faced by goat keepers. Similar finding was reported by Kumar (2002) found that as the exploitation by the middlemen is more amongst resource poor farmers, they are often deprived of benefits of their practicing enterprises and hence there is need to create the marketing facilities and ensure remunerative prices to their farm produce by strengthening co-operative network. Moreover, the predators' problem during night time, low literacy rate, money crisis, theft losses during night time due to interior remote area, unwillingness for goat keeping among youth and seasonal changes in meat prices or demand were found the major constraints related to socio-economic conditions faced by goat keepers. Similar results were also reported by Thilakar and Krishnaraj (2007) that serious constraints identified were non-availability of grazing land (95.0%), lack of veterinary aid at farmer's door step (87.50%), high susceptibility to diseases (85.0%), non-remunerative price (54.17%), distance from the market (55.0%), non-existence of organized marketing.

These results are well supported with the finding reported by Sabapara *et al.* (2014) that the main constraints were lack of marketing infrastructure and middleman not

providing remunerative price to male kids, high mortality rate in kids, and non-availability of improved breeding buck in market. Similar findings were reported by Singh *et al.* (2006), Thombre *et al.* (2010), Sathyanarayan *et al.* (2010) and Poornima *et al.* (2015) in accordance with constraints faced by goat keepers.

## CONCLUSION

It can be concluded that majority of the goat keepers belonged to middle age group having primary level education belonged to backward class, schedule tribe and schedule caste, no social participation, poor extension contact, low mass media exposure, marginal and landless type, engaged with agriculture and labour work for their livelihood. Major management constraints faced by the goat keepers were the non-availability of quality breeding buck, lack of technical guidance, inadequate availability of grazing resources and illness & mortality in flock due to inadequate veterinary service. Whereas the non-availability of proper established goat market channel and over-exploitation by middlemen were faced marketing related constraints by goat keepers. Moreover, the predators' problem during night time, low literacy, theft losses during night time due to interior remote area and seasonal changes in meat prices or its demand were found the major socio-economic constraints perceived by the goat keepers in goat rearing. So, in order to overcome the constraints faced by the goat keepers there is utmost need of improvement in some of the management practices to the respondents through organized training programmes, supply of elite breeding germplasm, field demonstrations, workshops and facilitate to set up local goat market.

## IMPLICATIONS

- (1) It was found that majority of the goat keepers were educated up to primary level and had no social participation in any organization and poor extension contact and low mass media exposure. This implies that, the need to orient their training and active participation regarding goat rearing at village level.
- (2) Majority of the goat keepers were faced the problems of obtaining to non-availability of superior breeding buck, not-well marketing facility of goats, over-exploited by middleman and more morality which results into lowering the profit margin to them. It implies for the strengthening and reorganizing an ideal block level goat marketing setup and elite goat rearing unit to supply the superior breeding buck to the goat keepers under the benefit of state government subsidy scheme criteria at lower price.
- (3) Most of the goat keepers were found marginal type

and landless labours who had low annual income. For providing ideal housing and advanced feeding facility to their goat throughout the year, there should be need to start up a credit subsidy scheme by government to assist them.

## CONFLICT OF INTEREST

No conflict of interest among researchers.

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