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ADOPTION OF HEALTH CARE MANAGEMENT PRACTICES IN GOAT BY TRIBAL GOAT KEEPERS

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ABSTRACT

Tapi is a tribal dominated district of Gujarat state and their traditional occupation in livestock aspect is to rearing cattl*e, buffaloes, goats and desi fowls. The present study was carried out in Tapi district to find out the adoption of health care management practices in goat followed by tribal in Tapi district. Two blocks of Tapi district namely Songadh and Uchchal had been selected purposively. Total 100 respondents had been selected for this study. Nearly half of the respondents were in the young age, nearly two fifth of the respondents possessed primary level of education and more than two fifth of the respondents having small family size, slightly more than three fifth of the respondents had medium family income, more than three fifth respondents belonged tolow land holding category, more than two fifth of respondents had large goat possession, half of the respondents had large farming experience. Extent of adoption regarding treatment of sick goat ranked first while zero adoption was observed for navel disinfection and dehorning in kid. Major constrain faced by tribal people was lack of availability of veterinary services at door step.*

Keywords: *adoption, constrains, goat keepers, health management*

INTRODUCTION

Goat (*Capra hircus*) plays an important role in the rural economy at national level. In India, more than 70 percent of the landless agricultural labourers and marginal and small farmers are rear them (Singh *et al*., 2020). Goat farming is the best choice for the rural people in developing countries because of the low investment, wide adaptability, high fertility and fecundity, low feed and management needs, high feed conversion efficiency, quick pay-off and low risk factors. Goat therefore has been described as a 'Poor Man's cow' (Patel *et al*., 2018). The population of Goat in Gujarat state is 4.86 million, whereas in Tapi 0.46 million number of goats are present (Anonymous, 2019). A Tapi district has 7 tribal dominating talukas where tribal farmers are rearing goat since generation to generation. The goat is a dwarf and tiny animal which is easily manageable even by poor tribal people. Majority of tribal farmers have marginal and small land holding capacity with dependent on rain for crop production. Goat rearing by these tribal farmers gives considerable return for livelihood security. Adoption of scientific health technologies is one of the important pre-requisites to improve the quality and production performance of the goat husbandry. Though, it has been observed that tribal goat keepers are not strictly followed the health management practices for their goats. Thus, a study on "Adoption of health care management practices in goat by tribal of Tapi district" was carried out.

OBJECTIVES

(1) To study the personal profile of tribal

(2) To measure the extent of adoption about health care management practicesby tribal

(3) To know the constraints faced in adoption of health care management practices by tribal

METHODOLOGY

An *ex-post-facto* research method had been used for this present study. Two blocks of Tapi district namely Songadh and Uchchal had been selected purposively. Five villages from each taluka selected randomly for this study. 10 respondents selected randomly from each village, thus total 100 respondents had been selected for this study. The information was collected through personal interview methods with the help of well-structured schedule. Independent variable *namely* Age, Education, Family Size, Family Income, Size of land holding, Goat possession and Farming experience while dependent variables *namely* adoption regarding health management practices in goat rearing of respondents were studied for the present study. The statistical tools *like* Mean,

Mode, Average and ranking methods were used to interpret the result.

RESULTS AND DISCUSSION

Profit of tribal goat keepers

Table 1: Distribution of personal profile of tribal goat keepers (n=100)

Sr. No.	Categories	Frequency	Percent
1	**Age**		
a	Young age (up to 35 years)	48	48.00
b	Middle Age (35 year to 50 year)	37	37.00
c	Old Age (Above 50 years)	15	15.00
2	**Education**		
a	Illiterate	31	31.00
b	Primary (1 to 7 std.)	38	38.00
c	Secondary and Higher Secondary (8 to 12 std.)	31	31.00
d	College and above	0	0.00
3	**Family size**		
a	Small (1 to 4)	44	44.00
b	Medium (5 to 6)	40	40.00
c	Large (Above 6)	16	16.00
4	**Family income**		
a	Low (Below ₹ 50,000)	29	29.00
b	Medium (₹ 50000 to 150000)	61	61.00
c	High (Above ₹ 150000)	10	10.00
5	**Size of Land holding**		
a	Low (0 to 2 acre)	66	66.00
b	Medium (2.1 to 4 acre)	29	29.00
c	High (Above 4 acre)	5	5.00
6	**Goat possession**		
a	Small (1 to 3)	26	26.00
b	Medium (4 to 8)	30	30.00
c	Large (above 8)	44	44.00
7	**Goat rearing Experience**		
a	Low (1 to 2 yrs.)	19	19.00
b	Medium (2 to 5 yrs.)	31	31.00
c	Large (Above 5 yrs.)	50	50.00

It is clear from table 1 that nearly half (48.00 %) of the goat keepers were in the young age group followed by 37.00 per cent and 15.00 per cent belonged to middle and old age groups, respectively. The probable reason might be that there is lack of employment generation facility at nearby area. Nearly two fifth 38.00 per cent of goat keepers had primary level of education followed by 31.00 per cent illiterate and secondary and higher secondary level of education, respectively where no any goat keepers belonged to college and above level of education. This could indicate that the poverty level is so high that they cannot afford their higher education by paying huge amount of fees. Similar finding were supported by Jegoda *et al*. (2022) and Deshpande *et al*. (2010). More than two fifth 44.00 percent of the goat keepers having small family size followed by 40.00 per cent and 16.00 per cent having medium and large family size, respectively. The probable reason might be due to changes of social life from joint family to nucleus family at rural level. The same observation was observed by Sabapara (2016) and Jegoda *et al*. (2022).

More than half (61.00 %) of the goat keepers had medium family income followed by 29.00 and 10.00 per cent had low and high family income, respectively. These indicate that tribal people kept goat for their livelihood. Similar finding was observed by Thombre *et al.* (2010) and Khadda *et al.* (2012). Majority 66.00 per cent of the goat keepers belonged to low land holding category followed by 29.00 per cent and 5.00 per cent belonged to medium and high land holding categories, respectively. More than two fifth 44.00 per cent of goat keepers had large goat possession followed by 26.00 and 30.00 per cent had small and medium goat possession, respectively. This can be indicate that due to small land holding size they got supplementary income through large goat possession. Similar findings were reported by Wadkar *et al*. (2009) and Deshpande *et al.* (2010). Half of (50.00 %) goat keepers had large farming experience followed by 19.00 and 31.00 per cent had low and medium farming experience, respectively. This can be indicated that they adopt goat rearing as traditional profession since long time.

Adoption about health care management in goat

Table 2 : Distribution of respondents according to their extent of adoption about health care management in goat (n=100)

Sr. No.	Adoption about Health care management	Frequency	Percent
1	Treatment of sick goat	79	79.00
2	Protection from harsh climate	75	75.00
3	Sanitary measures in house	69	69.00
4	Isolation of sick goat	51	51.00
5	Control of ecto and endo parasites	42	42.00
6	Vaccination in goat	38	38.00
7	Regular Deworming at 6 months of interval	35	35.00
8	Supplementation of vitamins & minerals	29	29.00
9	Navel disinfection of kid after birth	00	00.00
10	Dehorning of kid	00	00.00

The data presented in Table 3 shows that majority (79.00%) of respondents treats their sick goat by using their traditional knowledge or with the help of veterinary services were followed by (75.00%) protection from harsh climate, (69.00 %) Sanitary measures in house, (51.00%) Isolation of sick goat, (42.00 %) Practice to control ecto and endo parasites, (38.00%) Vaccinations in goat, (35.00 %) regular deworming at 6 months of interval and (29.00 %) Supplementation of vitamins and minerals were ranked second to eighth, respectively. However, none of the respondents adopted goat health care management practices *viz.*, Navel disinfection of kid after birth and Dehorning ofkids.

Table 3: Correlation between independent variables and adoption about Scientific health care management practices in Goat (n=100)

Sr. No.	Independent variables	r - Value
X_1	**Age**	-0.0437
X_2	**Education**	-0.0373
X_3	**Family size**	0.2415*
X_4	**Family Income**	-0.0329
X_5	**Size of land holding**	0.0303
X_6	**No. of goat possessed**	0.0983
X_7	**Goat rearing Experience**	0.1705

*Significant at 5 per cent the level of significance

The probable reason for zero adoption is due to they are unaware about the importance of navel disinfection and dehorning in goat kid. Similar findings were reported by Joshi *et al.* (2019) and Mahammad et al. (2021).

Data presented in table 3 revealed that Family size (0.2415*), Size of land holding (0.0303), No. of goat possessed (0.0983) and goat rearing experience (0.0981) found positively correlated with adoption about Scientific health care management practices in Goat, while Age (-0.0437), Education (-0.0373) and Family income (-0.0329) were negatively correlated with adoption about scientific goat rearing practices. This indicates that the adoption about Scientific health care management practices in goat found positive as increasing family size resulting easily health management of goat with sharing responsibilities among family members, due to increasing size of land holding they grow green fodder themselves and aware about goat nutrition and increasing goat rearing experience, they have more knowledge about seasonal health care management in goat. Age is negatively correlated with adoption about scientific health care management practices in Goat due to they are more attached with traditional methods of health care management in goat. This finding was supported by Usadadiya and Prajapati, 2023. Education and Family income were negatively correlated with adoption about scientific health care management practices in goat because educated participants were adopting other profession with traditional goat rearing for more income.

Constraints faced by goat keepers about goat health care management practices in goat

Table 4: Constraints faced by goat keepers about goat health care management practices in goat (n=100)

Sr. No.	Constrains	Frequency	Percent	Rank
1	Door step availability of veterinary services	93	93.00	I
2	High rate of kid mortality	87	87.00	II
3	High cost of treatment	81	81.00	III
4	Awareness related to preventive health management	79	79.00	IV
5	Insurance facilities against death of animal	74	74.00	V
6	Foot rot problem in monsoon season	67	67.00	VI
7	Regular vaccination camp at village level	62	62.00	VII
8	Higher incidence of diseases in goat	59	59.00	VIII
9	Availability of medicines	57	57.00	IX
10	Credit facilities for health services	54	54.00	X

The data depicted in table 4 reflected that 93.00 per cent of goat keepers had constrains about door step availability of veterinary services followed by high rate of kid mortality (87.00%), high cost of treatment (81.00%), awareness related to preventive health management (79.00%), insurance facilities against death of animal (74.00%), foot rot problem in monsoon season (67.00%), regular vaccination camp at village level (62.00%), Higher incidence of diseases in goat (59.00%), availability of medicines (57.00%) and credit facilities for health services (54.00%), respectively. These finding was supported by Kumar *et al*. (2017).

CONCLUSION

It can be concluded that majority of goat keepers were found young age group, possessed primary education,

small family size, medium annual income, small size of land holding, large number of flock size and high years of goat rearing experience. The tribal farmers were having medium level of adoption regarding health management for scientific goat rearing. No single farmers adopted navel disinfection and dehorning in goat kid. Family size, Size of land holding, Goat possession and goat rearing experience were positively correlated with adoption about scientific health care management practices in goat while Age, Education and Family income were negatively correlated with adoption of scientific health care management practices in Goat. Major constraint faced by goat keepers about health care management practice was door step availability of veterinary services.

On the basis of findings line department should manage availability of veterinary services with regular health checkup camp at village level to prevent financial loss due to mortality in goat. Moreover, awareness programme and training programme related to effective health management should be arranged by KVKs and extension departments.

CONFLICT OF INTEREST

All authors declare that they have no conflict of interest

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