



# SOCIO-PERSONAL PROFILE OF BUFFALO KEEPERS OF KOLE LANDS OF THRISSUR DISTRICT, KERALA

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## Abstract

*The present study was conducted among milch and meat buffalo keepers of the Thrissur kole lands, Kerala. Snow ball sampling was used to select 100 respondents, 50 each from North and South koles. The data collected were analyzed using descriptive statistics- frequencies and percentages. The results showed that over sixty per cent milch buffalo keepers from both koles and the meat buffalo keepers of the South kole were above 50 years of age. Half of the milch buffalo keepers of both koles were high school educated while slightly less than half of the meat buffalo keepers of the South kole and fewer numbers of the North kole were observed in this category. Except for the milch buffalo keepers of the North kole, over eighty per cent of the buffalo keepers of the Thrissur kole lands had not attended trainings on animal husbandry. Over seventy per cent of the meat buffalo keepers of both koles and the milch buffalo keepers of the North kole, had land holdings of size up to 100 cents. Larger land holdings of between 100 to 300 cents were observed among just over forty per cent of milch buffalo keepers of the South kole. Over seventy per cent of milch buffalo*

*keepers of both koles had more than ten years of experience in this vocation. Most of the meat buffalo keepers of the North kole (45.45 per cent) were relatively new entrants to the buffalo rearing sector with between one and five years of experience.*

**Keywords:** *Buffalo, Thrissur kole, socio-personal profile*

The kole wetlands of Kerala cover an area of about 13,632 hectares and extend through Thrissur and Malapuram districts. Its boundaries include the Chalakudy River in South and the Bharathapuzha in the North. The Thrissur kole wetlands perform very important ecosystem functions and services which include serving as a natural drain system for the district and contributing to around 40 per cent of the rice requirement of the district. The Thrissur kole lands have their origins at Velukkara towards the South of the district and pass through Mullassery and the Tholur-Kaiparamb areas of Thrissur taluk (Johnkutty and Venugopal, 1993). The Karuvannur river

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divides the Thrissur *kole* into two, the North *kole* encompassing an area of 8072 ha which includes Peramangalam, Kechery, Chemmen, Puzhakkal, Naduthodu, Chiyaram, Kokkalai, Puthnthodu, Herbert Canal and Chirakkal basins and the South *kole* extending over an area of 2115 ha and comprising the Karalam fields and the Chemmunda and Muriyad kayals (Johnkutty and Venugopal, 1993).

Buffalo farming plays an important role in the livestock sector of India. The water buffalo is naturally endowed with qualities that make it very suitable for the *kole* farming systems. Besides various products, these animals are also highly suited for work in the deep mud of the *kole* paddy fields because of the anatomical peculiarities of their hooves and foot joints. To strengthen the buffalo rearing system, effective delivery of information regarding different areas related to the buffalo farming need to be transferred to the farmers engaged to it. An understanding of the socio-personal profile of buffalo keepers is crucial to designing client oriented information delivery systems so as to optimize the functioning of these systems. It was with this objective in mind that the present study was undertaken.

## Materials and Methods

Snowball sampling was used to select 50 buffalo keepers each from the North and South *koles*. The socio-personal characteristics were assessed by personal interviews using pre-tested structured interview schedule. Of the 50 buffalo keepers from North *kole*, 28 were milch buffalo keepers while 22 were meat buffalo keepers. From the South *kole*, 22 milch buffalo keepers and 28 meat buffalo keepers constituted the sample for study. Socio-personal variables selected for this study included age, gender, educational status, trainings attended main occupation, subsidiary occupation, land holding and years of experience in buffalo keeping.

## Results and discussion

### 1. Age

It was evident from Table 1 that

majority of milch buffalo keepers of the North (60.71) and South *koles* (63.64 per cent) as well as meat keepers of South *kole* (50 per cent) were above 50 years old. This is slightly higher than the observations of Shinde (2011) who observed that 50 per cent of farmers from the irrigated and non-irrigated talukas of Solapur district of Maharashtra were in the age group of 40 years and above. North *kole* meat buffalo keepers were however relatively younger and over half of them fell in the age group 41 to 50 years of age.

### 2. Gender

A strong gender bias favoring men in both vocations under study in both *koles* was evident from the study. A very low female participation rate of 13 per cent was observed in buffalo keeping in the area under study. This was slightly lower than the observations of Sachan *et. al* (2015) who observed that 15 per cent of buffalo farmers in Unnao district of Uttar Pradesh were female.

### 3. Educational status

It can be inferred from data in Table 1 that educational levels of half of the milch buffalo keepers of both *koles* and the meat buffalo keepers of the South *kole* was in the range of high school. Mali *et. al* (2014) also observed that majority of dairy farmers studied in Belgium district, Karnataka had high school education. However, fewer meat buffalo keepers of North *kole* meat farmers were observed in this category (27.27 per cent). Generally, lower levels of education were observed among meat farmers of both *koles* as evidenced from data in Table 1. This was in consonance with Lambertz *et. al.* (2012), who observed a lower educational status among beef cattle farmers of Northeastern Thailand. Further, it could also be observed that while there were no milch buffalo keepers in the illiterate category, 4.55 and 3 per cent of meat buffalo keepers of the North and South *koles* respectively fell in this category.

### 4. Trainings attended

Table 1 indicates that majority of the

farmers from both the *koles* had not attended any trainings related to animal husbandry. With regard to the participation of buffalo keepers in trainings, data in Table 1 reflects the findings of the study indicating a very low training attendance rate. Milch buffalo keepers (36.36 per cent) of the South *kole* were better off in this regard when compared to all four groups of farmers, while milch buffalo keepers of the North *kole* (14.29 per cent) had the least attendance in trainings. This was in contrast to the findings of Sarkar *et al.* (2013) who reported that none of the studied buffalo farmers in the selected area of Bangladesh had attended trainings on animal husbandry.

### 5. Main occupation

Sharp contrasts with regard to the main occupation of milch and meat buffalo keepers could be observed from the data in the table. Quite a large number of milch keepers in the North *kole* (82.14 per cent) reported dairying as their main occupation when compared to just 63.64 per cent of milch buffalo keepers of the South *kole*. Sarkar *et al.* (2013) observed that the major occupation of buffalo farmers in Bagerhat district, Bangladesh was buffalo rearing.

On the contrary, North *kole* meat keepers reporting dairying as the main occupation was just 36.36 per cent. Among South *kole* buffalo meat keepers, a majority (42.86 per cent) were engaged in other occupations while dairying was the major occupation for just 39.29 per cent.

### 6. Subsidiary occupation

From the data in the table it is clear that majority of the meat buffalo keepers from the South (60.71 per cent) as well as the North *kole* (63.64 per cent) reported dairying as their subsidiary occupation. Sachan *et al.* (2015) also reported that 79 per cent of buffalo farmers of Unnao district of Uttar Pradesh were involved in dairying as a secondary occupation.

### 7. Land holding

Most of the meat buffalo keepers

from the North (72.73 per cent) and South *kole* (78.57 per cent) had small land holdings of size up to 100 cents. Nearly half (40.91 per cent) of milch buffalo farmers had medium holdings of size 100 to 300 cents. Bhanotra *et al.* (2016) observed that 48.33 per cent of respondents were marginal land holders (less than 1 ha).

### 8. Years of experience in rearing buffaloes

Quite a sizeable number of milch buffalo keepers of both *koles* (North 71.43 per cent and South 77.27 per cent) had more than ten years of experience in this vocation. Bashir (2010) also observed that majority of Attappady dairy tribes had between 10 to 37 years of experience in dairy farming.

Most of the meat buffalo keepers of the North *kole* (45.45 per cent) on the contrary were relatively new entrants to the buffalo rearing sector with between one and five years of experience. In the South *kole* however, though most of the meat buffalo keepers (57.14 per cent) had more than 10 years of experiences, this was quite lower when compared to milch buffalo keepers of both *koles* who had similar years of experience. The results were corroborated with Lambertz *et al.* (2012) who observed a longer experience in livestock farming among large-scale beef farmers in Northeast Thailand.

### Conclusion

It can be concluded that majority of the buffalo farmers under the study were males above 50 years of age. Buffalo keeping was a main source of livelihood for more of the milch farmers of both *koles* whereas meat buffalo keeping was more of a subsidiary occupation. Further, though over seventy per cent of milch buffalo keepers were well seasoned players in this sector it was unfortunate to note that they have very limited training exposure. Training and participatory discussions with buffalo keepers could be designed based on the specific socio-personal characteristics of the buffalo keepers of the *kole* lands so as to ensure the sustainability of vocations contiguous to the *kole* landscapes of Thrissur.

**Table 1.** Socio-personal profile of milch and meat buffalo keepers of the North and South *koles*

Parameter	North <i>kole</i>				South <i>kole</i>			
	Milch n=28		Meat n=22		Milch n=22		Meat n=28	
	f	%	f	%	f	%	f	%
<b>Age</b>								
Below 30 years	0	0.00	0	0.00	1	4.55	0	0.00
30- 40 years	1	3.57	2	9.09	2	9.09	4	14.29
41- 50 years	10	35.71	12	54.55	5	22.73	10	35.71
Above 50 years	17	60.71	8	36.36	14	63.64	14	50.00
<b>Gender</b>								
Male	23	82.14	20	90.91	20	90.91	24	85.71
Female	5	17.86	2	9.09	2	9.09	4	14.29
<b>Educational status</b>								
Illiterate	0	0.00	1	4.55	0	0.00	1	3.57
Primary school	3	10.71	4	18.18	2	9.09	2	7.14
Middle school	8	28.57	7	31.82	6	27.27	5	17.86
High school	14	50.00	6	27.27	11	50.00	13	46.43
SSLC passed	2	7.14	4	18.18	2	9.09	3	10.71
Plus two/equivalent	1	3.57	0	0.00	1	4.55	3	10.71
Graduate	0	0.00	0	0.00	0	0.00	1	3.57
Professional	0	0.00	0	0.00	0	0.00	0	0.00
<b>Trainings attended</b>								
Attended	4	14.29	4	18.18	8	36.36	5	17.86
Not attended	24	85.71	18	81.82	14	63.64	23	82.14
<b>Main occupation</b>								
Agriculture	1	3.57	3	13.64	2	9.09	1	3.57
Dairying	23	82.15	8	36.36	14	63.64	11	39.29
Business	2	7.14	6	27.27	1	4.55	1	3.57
Services	2	7.14	1	4.55	2	9.09	0	0.00
Agricultural labour	0	0.00	2	9.09	0	0.00	3	10.71
Other	0	0.00	2	9.09	3	13.64	12	42.86
<b>Subsidiary occupation</b>								
No subsidiary occupation	10	35.71	1	4.55	6	27.27	5	17.86
Petty Jobs	3	10.71	0	0.00	1	4.55	0	0.00
Agriculture	7	25.00	6	27.27	6	27.27	3	10.71
Dairying	5	17.86	14	63.64	8	36.36	17	60.71
Business	2	7.14	0	0.00	1	4.55	2	7.14
Services	1	3.57	1	4.55	0	0.00	1	3.57
<b>Land holding</b>								
Below 100 cents	20	71.43	16	72.73	12	54.54	22	78.57
100-300 cents	7	25.00	4	18.18	9	40.91	6	21.43
Above 300 cents	1	3.57	2	9.09	1	4.54	0	0.00
<b>Years of experience in buffalo rearing</b>								
Up to 1 year	0	0.00	2	9.09	0	0.00	3	10.71
1 - 5 years	5	17.86	10	45.45	2	9.09	3	10.71
5 - 10 years	3	10.71	2	9.09	3	13.64	6	21.43
Above 10 years	20	71.43	8	36.36	17	77.27	16	57.14

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