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Problems perceived by the livestock owner regarding rearing of Kankrej cow

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ABSTRACT

Dairy farming has been part of agriculture for thousands of years. Historically, it has been one part of small, diverse farms. Gujarat is the leading state in milk production and its AMUL pattern of cooperative was adopted in the world. The unique characteristics of kankrej cow like resistant to tick fever, heat stress, very little incidence of contagious abortion and tuberculosis madea very popular one among these countries. Three talukas of Banaskantha District viz,.Deesa, Lakhani and Deoder and three talukas of Patan District viz.; Radhanpur, Sami and Harij were selected purposively having highest population of Kankrej cow and breed is popular in the study area. Three villages from each taluka were selected randomly. Further ten farmers having kankrej cow from each village were selected randomly, consist a sample of 180 farmers for the study. Maximum number of livestock owner were middle to old aged, literate, having more than 5 members in family, small to medium land holding, small to medium herd size, having milking Kankrej cow, agriculture as a primary occupation, sources of information for Animal Husbandry practices were milk cooperative society as a formal source, friends/relatives/neighbor/progressive farmers as an informal sources and television/ newspaper/krushimahotsav as a mass media. More than ninety per cent livestock owner were members in milk cooperative society, having medium milk yield (3.01 to 39.15 liter/day) of herd kept by him, had less than 0.50 hectare land under forage crops.The major problem perceived by the livestock owner in rearing of kankrej cow were; non availability of high pedigree bull, lack of knowledge about clean milk production, low conception rate through A.I, lack of scientific management practices and more problem related to mastitis.

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Dairy farming has been part of agriculture for thousands of years. Historically, Dairy farming has been one part of small, diverse farms. Kankrej, famously known as Guzerat in Brazil, is being maintained in large numbers as a pure breed in the country. The Guzerat was the most important breed in the formation of American Brahman. The unique characteristics like resistant to tick fever, heat stress, very little incidence of contagious abortion and tuberculosis made kankrej a very popular one among these countries. The cows are good milkers and bullocks are used for agricultural operation and road transport. Kankrej is the local breed famous for its dual purpose. It takes its name from the name of geographical area i.e. Kankrejtaluka of Banaskantha district in Gujarat. The total cowmilk yield on an average 2750 kilo grams and a maximum of 6200 kilo grams per lactation. Selected cows have produced around 1750 Kg at village condition. (Anonymous, 2016). SDAU started the Kankrej breed improvement programme since last decade and very good results have been received as milking animals. Hence, it is advisable for the farmers to keep cows instead of crossbred cow.

OBJECTIVES

1). To know the profiles of the farmers

2). To identify problems perceived by the farmers regarding rearing of Kankrej cow

METHODOLOGY

This study was conducted in Banaskantha and Patan District of Gujarat State. Three talukas of Banaskantha district viz,. Deesa, Lakhani and Deoder and three talukas of Patan district viz.; Radhanpur, Sami and Harij were selected purposively having highest population of Kankrej cow and breed is popular in the study area. Three villages from each taluka were selected randomly. Further ten farmers having kankrej cow from each village were selected randomly. Thus sample size of the present study was 180 livestock owner. The data were collected through the use of structured interview schedule. The farmers were interviewed personally and their responses were recorded. The data were tabulated and interpreted on the basis of frequency, percent, mean and standard deviation.

RESULTS AND DISCUSSION

PROFILE OF THE FARMERS

The personal, social, economic and situational characteristics of Kankrej cow owners were calculated on the basis of frequency and percent and depicted in Table 1.

Table 1 Distribution of the livestock owner according to their characteristics (N= 180)

Sr. No	Character	Frequency	Percentage (%)
01	Age		
	Young (Up to 35 years)	18	10.00
	Middle (36 to 50 years)	117	65.00
	Old (Above 50 years)	45	25.00
02	Level of education		
	Illiterate	05	02.78
	Primary (up to VIII)	48	26.67
	Secondary (IX to X)	92	51.11
	Higher Secondary (XI to XII)	27	15.00
	College	08	04.44
03	Family size		
	Up to 4 member in Family	36	20.00
	5 to 6 member in Family	94	52.22
	Above 7 member in Family	50	27.78
04	Land holding		
	Marginal (Below 1.0 ha)	26	14.44
	Small (1.01 to 2.0 ha)	57	31.66
	Medium (2.01 to 4.0 ha)	67	37.22
	Big (Above 4.0 ha)	30	16.66
05	Herd size		
	Small size herd (up to 5 animals)	67	37.22
	Medium size herd (5 to 10 animals)	87	50.00
	Large size herd (above 10 animals)	26	12.78
06	Occupation		
	Primary: Agriculture and Secondary: Dairy farming	160	88.89
	Primary: Dairy farming and Secondary: Agriculture	20	11.11

07	Sources of information		
	Formal sources		
	Village level workers/Agricultural Extension Officer	36	20.00
	Milk cooperative society	168	93.33
	Agriculture University Officer/ Scientist	73	40.55
	Private Dealers	14	07.77
	Others	06	03.33
	Informal sources		
	Friends	152	84.44
	Neighbors/Relatives	168	93.33
	Progressive Farmers	162	90.00
	Others	11	06.11
	Mass media		
	Television	156	86.66
	Radio	40	22.22
	News paper	142	78.88
	KrishiMahotsav/Agriculture Fair	134	74.44
	Magazine	48	26.66
	Internet	25	13.88
08	Social participation		
	No membership	12	06.66
	Membership in one organization	148	82.23
	Membership in more than one organization	20	11.11
	Holding position	28	15.55
09.	Total Milk Production (Liter/ day)		
	Low milk yield (< 3.01)	03	01.66
	Medium milk yield (3.01 to 39.15)	165	91.67
	High milk yield (> 39.15)	12	06.67
	Mean=21.08	SD=18.07	
10.	Area under forage crop		
	Less than 0.50 hectare	102	56.67
	Between 0.50 to 01.00 hectare	56	31.11
	More than 01.00 hectare	22	12.22

Ha = hectare, N= number of observation, SD = Standard Deviation

The data regarding selected characteristics of livestock owner are presented in Table 1 indicate that 90.00 per cent of them were middle and old aged, almost all (97.22 per cent) were literate i.e. educated up to primary to college level and 80.00 percent farmers had more than five (5) member in the family.

Further, more than two third (68.88 per cent) of them had small to medium size of land holding, possess small to medium size of herd (87.22 per cent) and having primary occupation agriculture and secondary occupation dairying (88.89 per cent). The main formal sources of information was milk cooperative society (93.33 per cent), informal sources were Neighbours/Relatives (93.33 per cent), Progressive farmers (90.00 per cent) and Friends (84.44 per cent), whereas, in mass media Television (86.66 per cent), Newspaper (78.88 per cent) and Krishimahotsav/Agriculture fair (74.44 per cent) were important sources of information. Whereas, 82.23 per cent farmers were member in one organization, produced medium milk per day i.e.; 3.01 to 39.15 litre (91.67 per cent) and 87.78 per cent farmers having less than 1.00 hectare area under forage crops.

The finding is in line with findings of Parag (2015) and Pakhmode *et al.* (2017)

PROBLEMS PERCEIVED BY THE LIVESTOCK OWNERS REGARDING REARING OF KANKREJ COW

The data in Table 2 show that most important problem perceived by the farmers in rearing of kankrej were; non availability of high pedigree bull (91.66 per cent), lack of knowledge about clean milk production (84.44 per cent), low conception rate through A.I (81.11 per cent) and lack of scientific management practices of kankrej cow (80.00 per cent) were ranked first, second, third and fourth. Whereas, important problems were; more problem related to mastitis (62.22 per cent), poor economic condition (53.88 per cent) and tedious process of availing credit (52.77 per cent) were ranked fifth, sixth and seventh. While least important problems were; high cost of veterinary services (25.00 per cent), inadequate veterinary services (16.11 per cent) and low milk yield (06.66 per cent) were ranked eighth, ninth and tenth.

Table 2 Problems perceived by the farmers regarding rearing of kankrej (n=180)

Sr. No	Problems	Frequency	Per cent	Rank
1	Non availability of high pedigree bull	165	91.66	I
2	Lack of knowledge about clean milk production	152	84.44	II
3	Low conception rate through A.I	146	81.11	III
4	Lack of scientific management practices	144	80.00	IV
5	More problem related to mastitis	112	62.22	V
6	Poor economic condition	97	53.88	VI
7	Tedious process of availing credit	95	52.77	VII
8	High cost of veterinary services	45	25.00	VIII
9	Inadequate veterinary services	29	16.11	IX
10	Low milk yield	12	06.66	X

It can be concluded that major problem perceived by the farmers in rearing of kankrej were; non availability of high pedigree bull, lack of knowledge about clean milk production, low conception rate through A.I, lack of scientific management practices of kankrej cow and more problem related to mastitis.

CONCLUSION

1. Maximum number of livestock owners were middle to old aged, literate, having more than 5 members in family, small to medium land holding, small to medium herd size, having milking Kankrej cow, agriculture as a primary occupation, sources of information were milk cooperative society, informal sources were friends /relatives/ neighbor/ progressive farmers) and television/ newspaper/ krushimahotsav as a mass media. More than ninety per cent farmers were members in milk cooperative society, having medium milk yield of herd kept by him,had less than 0.50 hectare land under forage crops.
2. The major problem perceived by the farmers in rearing of kankrej were; non availability of high pedigree bull, lack of knowledge about clean milk production, low conception rate through A.I, lack of scientific management practices and more problem related to mastitis.

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