KNOWLEDGE OF DAIRY FARMERS REGARDING BREEDING PRACTICES IN DAIRY FARMING

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ABSTRACT

The present study was conducted in operational area of Pashu Vigyan Kendra, Limkheda. Out of eight talukas of Dahod district, two talukas namely Devagadh Baria and Limkheda were selected. From each taluka, 5 villages were randomly selected and from each village, 10 dairy farmers were randomly selected thus, making the total sample size of 100. The data were collected through personal interview method. The schedule was designed with relevant questions by referring available literature. The statistical tools like frequency, mean, standard deviation and percentages were used for tabulation of the data. The study indicated that a majority of the dairy farmers had correct knowledge on gestation period in cross breed cows (95.00 %), ideal age for pregnancy diagnosis (78.00 %), normal time taken for falling of placenta (65.00 %), oestrus cycle of cross breed cows (65.00 per cent) and minimum body weight when the cross breed cows attains puberty (48.00 per cent) right time for Artificial Insemination when animals comes to heat (46.00 %), oestrus cycle of cross bred cows and ideal age for pregnancy diagnosis (78.00 %).

Keywords : dairy farming, dairy farmers, breeding practices

INTRODUCTION

Gujarat has valuable genetic recourses of Cattle (Gir, Kankrej & Dangi), Buffalo (Mehsani Jafarabadi, Surti and Banni), Sheep (Patanwadi, Marwadi & Duma) and Goat (Kachchhi, Surti, Zalawadi, Mehsani & Gohilwadi). During the second half of 20th century, the population of dairy animals shown increasing rate.

Dahod is a tribal dominated district of Gujarat state. Animal husbandry plays important role in socioeconomic development of the tribal people and their traditional occupation of rearing cattle, buffaloes, goats, and sheep, pig and desi fowls is the best insurance against the vagaries of nature like drought, famine and other natural calamities. Even though there is rapid advancement in the animal husbandry technologies however the productivity of this sector still is very low in this district. This may be due to various reasons like poor adoption and diffusion of new technologies. Knowledge of livestock farmer about various husbandry practices such as breeding (51.00 per cent, Prajapati et al. 2017) feeding and managements of animals determines largely the success or failure of a livestock enterprise. Pashu Vigyan Kendra-Limkheda is in establishment phase, hence the study was undertaken with the following objective.

OBJECTIVE

To study knowledge of dairy farmers about breeding management practices in dairy farming.

METHODOLOGY

The present study was conducted in operational area of PashuVigyan Kendra, Limkheda. Out of eight talukas of Dahod district, two talukas namely Devagadh Baria and Limkheda were selected. From each taluka 5 villages were randomly selected and from each village, 10 dairy farmers were randomly selected making the total sample of 100.. The data were collected through personal interview method. The teacher made test was developed to measures the knowledge of dairy farmers about improved diary management practices.

RESULTS AND DISCUSSION

Knowledge of dairy farmer regarding special characteristics of cross breed cows

Table 1, highlights that, majority of the respondents had correct knowledge about salient features of cross breed cows like, produces calf every year (92.00 %), faster growth rate (78.00 %), longer lactation period (300 days (73.00 %),

Table 1: Knowledge of dairy farmer regarding special characteristics of cross breed cows   n=100

Sr. No.	Special characteristics of cross breed cows		Frequency	Percent
1	A	More birth weight	43	43.00
	B	Faster growth rate	78	78.00
	C	Comes to heat/oestrus early (12-14 months)	47	47.00
	D	Produce first calf within two years	67	67.00
	E	Produces calf every years	92	92.00
	F	Peak milk production days	63	63.00
	G	In a life time produces eight calves on an average	44	44.00
	H	Longer lactation Period (300 days)	73	73.00
	I	Comes to heat within 45-90 days after calving	60	60.00
	J	Maximum milk production capacity (2-14 years)	53	53.00
	K	Better feed conversation ratio	55	55.00
2	Names of common cross breed cows		94	94.00
3	Names of Desi breed cows		97	97.00
4	The average milk production of a cross breed cow		53	53.00
5	Per cent of fat content in cross breed cow's milk		57	57.00

produce first calf within two years (67.00 %), peak milk production days (63.00 %) and comes to heat within 45-90 days after calving (60.00 %). Further, majority of the respondents had correct knowledge on the names of common cross breed cows (97.00 %) followed by names of desi breed cows (94.00 %) and per cent of fat content in cross breed cow's milk (57.00 %). Dhayal and Mehata (2018) reported that dairy farmers possessed less knowledge about improved breeds of animals.

Knowledge of dairy farmer regarding selection of cows

Table 2 indicates that majority of the respondents had correct knowledge about the criteria for selection of cows viz., cow should be mild (92.00 %), milk yield should be calculated by taking three consecutive milking (85.00 %), uniform fat deposition (72.00 %), and uniform long teats with prominent milk veins (67.00 %).

Table 2: Knowledge of dairy farmers regarding selection of cows   n=100

Sr. No.	Selection of cows		Frequency	Percent
1	**Points to be considered in selection of cows**			
	A	Cow should be mild	92	92.00
	B	Should have smooth hair coat	64	64.00
	C	Should have strong teeth	46	46.00
	D	Should have bright eyes and wider muzzle	63	63.00
	E	Should have small and elongated neck	40	40.00
	F	Should have broader brisket and chest region	53	53.00
	G	Uniform fat deposition	72	72.00
	H	Should have short legs with a stronger back legs and rounded hooves	35	35.00
	I	Uniform distance between legs	60	60.00
	J	Uniform long teats with prominent milk veins	67	67.00
	K	Milk yield should be calculated by taking three consecutive milking	85	85.00
2	The ideal lactation period to purchase a cow		94	94.00
3	The ideal dentition to estimate the approximate age to purchase a cow		90	90.00
4	The ideal time to purchase a cow immediately after calving		92	92.00
5	Price fixing of the cow based on milk production		95	95.00

In addition, majority of them had correct knowledge on price fixing of the cow based on milk production (95.00 %), ideal lactation period to purchase a cow (94.00 %) and the ideal time to purchase a cow immediately after calving (92.00 %).

Knowledge of dairy farmer regarding breeding of cows

The results in Table 3, indicates that a majority of the dairy farmers had correct knowledge on gestation period in cross breed cows (95.00 %), ideal age for pregnancy diagnosis (78.00 %), norma l time taken for falling of

placenta (65.00 %), oestrus cycle of cross breed cows (65.00 per cent) and minimum body weight when the cross breed cows attains puberty right time for Artificial Insemination when animals comes to heat (46.00 %), oestrus cycle of cross breed cows and ideal age for pregnancy diagnosis (92.59 %) and minimum body weight when the cross breed cows attains puberty (48.00 per cent). Upadhyay et al. (2015) and Vaidya et al. (2016) reported in his study that nearly half of the respondents had knowledge regarding the breeding management.

Table 3: Knowledge of dairy farmer regarding breeding of cows   **n=100**

Sr. No.	Breeding of cows		Frequency	Percentage
1	Minimum body weight when the cross breed cows attains puberty		48	48.00
2	Oestrus cycle of cross breed cows		65	65.00
3	Symptoms of heat			
	A	Off-fed	88	88.00
	B	Mucous discharge from vagina	92	92.00
	C	Mounting on other animals	96	96.00
	D	Frequent bellowing	86	86.00
	E	Loss of appetite and thirst	80	80.00
4	Right time for Artificial Insemination when animals comes to heat		46	46.00
5	Gestation period in cross breed cows		95	95.00
6	Advantages of Artificial Insemination			
	A	Prevention of genital diseases	44	44.00
	B	Single ejaculated semen can be utilized for many cows	76	76.00
	C	Faster development of breed	88	88.00
7	Ideal age for pregnancy diagnosis		78	78.00
8	Normal time taken for falling of placenta		65	65.00

Majority of the dairy farmers have knowledge regarding symptoms of animals comes to heat and with regard to advantages of artificial insemination, majority of them also had correct knowledge on faster development of breed (88.00 %) and single ejaculated semen can be utilized for many cows (78.00%). This finding was supported by Christian and Chauhan (2015) and Kumawat and Verma (2016) reported that knowledge level of farmers in case of breeding of dairy animals regarding Buffalo non-descript/improved was found maximum (88.8 %), Artificial insemination (86.1%), Preganancy diagnosis (66.6%) and castration of the male animals (52.7%)..

CONCLUSION

It can be concluded from the above study that majority of the dairy farmers knowing the cross and desi bred name of cow but failed to know the special characteristics of cross bred while majority of the respondents having knowledge regarding the selection of cow when they purchase. Further, majority of the respondents having knowledge regarding some activities of breeding management practices. The extension functionaries and line department of animal husbandry carried out such kind extension activities through which the breeding knowledge of the dairy farmers utilized properly for maintaining the genetic purity of bred and maximizing the milk production.

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