



Original Research Article

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Calf Rearing Management Practices Followed in Rural Areas of Western Haryana, India

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The present investigation was conducted in two districts (Bhiwani, Sirsa) of Western Haryana. Further two tehsil were selected from each district and two villages from each tehsil were selected randomly. Twenty five buffalo rearers from each of village were selected thus making a sample of 200 buffalo rearers. Results of this study revealed that, most of respondents attended buffaloes at time of calving and trimmed hooves of the calf after birth. Majority 92.50 per cent of the respondents did not cut naval cord of calf. About 35.50 per cent owners disposed off placenta by throw off in open area. It was found that 53.00 per cent of the owners allowed suckling calf up to 6 month. More than half (55.00 and 23.50 per cent) of buffalo keepers did not perform deworming and tick\lice eradication measures in calves. So in addition to the traditional knowledge scientific knowledge for this aspect is also important. For this we can organize trainings to farmers by Krishi Vigyan Kendra and Krishi Gyan Kendra on all aspect of buffalo calf management. So that as a result we can get superior animals for future.

Introduction

Buffalo rearing in Haryana is an important sector for providing a stable source of income to rural farmers. As far as western Haryana is concerned Due to lack of detailed information on existing breeding, feeding, housing and other managerial practices adopted for different categories of livestock, it has not been possible to give full attention to these important aspects of buffalo production. The reason for this is mainly due to poor production potential of dairy animals, inadequate management practices including calf rearing practices (Ahirwar *et al.*, 2011). Considering these facts there is a vast scope for increased productivity through improved

management practices including calf rearing practices in order to get maximum profits (Singh *et al.*, 2012). Proper management and constant attention is required for calves, as they form the future dairy herd and are the basis for maintaining the production level of any dairy farm. Good calf rearing practices provide better scope for better future dairy animals. So an effort is done to gain knowledge of existing calf management practices prevalent in western Haryana. Further findings of this study will provide a feasible and relevant package of buffalo calf management practices adopted by the buffalo keepers of western Haryana.

Materials and Methods

The present study conducted in Bhiwani and Sirsa districts of western Haryana. Two tehsils from each selected district were identified, which were Loharu, Dadri, Sirsa and Rania (Table 1). Further two villages were selected from each tehsil. The 25 respondents were selected randomly from each village. Thus, the entire sample consists of 200 respondents from selected eight villages. While selecting respondents due care was taken to ensure that they were evenly distributed in the village and truly represented animal management practices prevailing in the area. The selected farmers were interviewed and the information was collected with help of predesigned questionnaire. For collecting information pertaining calf rearing management practices adopted by farmers, questions were included were attending calving and taking care of the calves after it, colostrums feeding to the new born calf, quantity of colostrums, age of weaning of calves, feeding of calf starter and age at which fodder was given to the calves, deworming of calves and lice/ticks eradication etc.

Statistical analysis of data

To analysis the collected information, basic statistical tools and methods were used. The statistical tools were used for interpretation of data are 1) Frequency Distribution for the total numbers of respondents in the survey and 2) percentage for simple comparisons were made on the basis of percentage.

Results and Discussion

The results of the study regarding calf management practices adopted by farmers for their dairy animals are presented in Table 2. It was observed that only 69.00 the respondents attended the buffaloes as well as calf at the

time of calving. More than half 67.00 per cent of the respondents were following the practices of cleaning the calf immediately after birth as well as trim hooves and allowed the dam to lick her calf immediately. Present findings are similar to the findings of Meena *et al.*, (2008). However, Malik and Nagpal (1999), Khadda *et al.*, (2010), Kumar and Mishra (2011a) reported that all of the respondent attended calving and took care of calves after parturition. It was observed that 92.50 per cent buffalo keepers did not follow the practice to cut and disinfect the naval cord. Very few buffalo keepers cut the naval cord with new blade or knife and tied it with thread. It is due to lack of knowledge and awareness about the importance of these practices.

Hence, more efforts are required to motivate farmers to follow this practice. These findings are similar with the results recorded by Saharan *et al.*, (2015) Khadda *et al.*, (2010) and Maousami *et al.*, (2013). However, these are contrary to the results of Malik and Nagpal (1999), Pawar *et al.*, (2006), Gill and Saini (2008), Rathore and Kachwaha (2009) and Rathore *et al.*, (2010) who observed that 37.00 to 85.56% of the respondents followed these practices.

It was observed that 26.50, 38.00 and 35.50 per cent of the respondents provided colostrum within two hours of birth, 2 to 4 hours after birth and after fall of placenta, respectively. These finding are in close line to finding of Deshmukh *et al.*, (2009), Rathore and Kachwaha (2009) and Rathore *et al.*, (2010). Quantity of colostrum feeding was *ad lib*, and half quarter by new born calves were followed by 47.00, and 51.00 per cent of the respondents, respectively. Present findings are similar to the result of Kumar and Mishra (2011a).

Table.1 Selection plan of respondents

Districts	Tehsil	Village	No of respondents
Bhiwani	Loharu	Patwan	25
		Chahar Kalan	25
	Dadri	Chappar	25
		Adampur Dadhi	25
Sirsa	Rania	Mammer Khera	25
		Kherawala	25
	Sirsa	Bakriyawali	25
		Jodhkan	25

Table.2 Existing calf rearing management practices in Western Haryana

S.No EXISTING Practices	Frequency	Percentage
1.Attended the buffalo at the time of calving		
a.Yes	138	69.00
b.No	62	31
2.Feeding of colostrum of the calf		
a.Within two hours of birth	53	26.50
b.Two to four of birth	76	38.00
c.After Dropping of Placenta	71	35.50
3.Cut and disinfect the naval cord of calf		
a.Yes	15	07.50
b.No	185	92.50
4. Clean the calf immediately after birth and trim the hooves		
a.Yes	134	67.00
b.No	66	33.00
5.Quantity of colostrum feeding		
a. <i>Adilib</i> sucking	94	47.00
b.One quarter	04	02.00
c.Some milk in all Quarters	102	51.00
d.As per body weight	00	00.00
6.Measures do you apply when the placenta is not expelled in time		
a.Veterinary staff help	71	35.50
b.Quack help	74	37.00
c.Ethno Veterinary medicine	55	27.50
7.Disposal of the placenta		
a.Throw off	71	35.50
b.Deep Buried	129	64.50
8.Duration of suckling of calf		
a.Weaning (just after birth)	00	00
b.Up to six months	106	53.00
c.Less than four month	90	45.00
d.More than six month	04	2.00
9.Deworming of clave		
a.Yes	110	55.00
b.No	90	45.00
10.Lice/ticks eradication measures followed		
a.Yes	153	76.50
b.No	47	23.50

Buffalo keepers disposed of placenta by deep buried 64.50 per cent and throw in out skirt common land about 35.50 per cent. The majority 53.00 per cent of the respondents allowed suckling to their calves up to six months of age, whereas, 45.00 and 2.00 per cent of the respondents allowed suckling less than four months and above 6 months of age, respectively.

Majority of the respondents (76.50 per cent) took control measures of lice and ticks eradication, but the practice of calf deworming was followed by only 55 per cent buffalo keepers. The result of calf deworming practice observed in this study was in line to the finding of Malik *et al.*, (2005), Gupta *et al.*, (2008) and Rathore *et al.*, (2010). These results indicate that deworming practice is commonly followed by most of respondents.

By studying the results of this investigation it can be concluded that calf management is very necessary for better future of a dairy herd or farm. It is necessary that farmers should have proper knowledge about caring of a calf just after the birth and later on. So in addition to the traditional knowledge scientific knowledge for this aspect is also important. For this we can organize trainings to farmers by Krishi Vigyan Kendra and Krishi Gyan Kendra on all aspect of buffalo calf management. So that as a result we can get superior animals for future.

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