Research paper

Calf Management practices followed by dairy farmers in Kopargoan Taluka of Ahmednagar district of Maharashtra

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ABSTRACT

A study was conducted to understand and get an idea about the calf management practices followed by dairy farmers in Kopargoan taluka of Ahmednagar district in Maharashtra. A survey format was designed to collect the data by using telephonic interview method of the farmers through BAIF farmers call center "Sanvadini". A total of 713 farmers from 15 villages were selected for survey, out of which 309 randomly selected farmers were interviewed by using formal questionnaire. Criterion of farmer's selection was farmers having an average herd size of 3–4 milking cows. Data on deworming, vaccination, dehorning and colostrum feeding was recorded. To assess consistency in management, farmer's perception was recorded to indicate whether they followed scientific approaches for effective calf management. Results indicate that 65.70, 67.64 and 70.55 percent farmers were practicing dehorning, vaccination and deworming respectively. Total 87.06 percent farmers were feeding the colostrum to the calves with an average 2.9 days. There is inconsistency in calf management practices as colostrum feeding is very common in the studied areas. As in modern milk production system, calves are often overlooked, it was also found that veterinary advices or services are seldom used for calves; treatments are performed primarily by calf raisers especially by women. This requires attention of extension workers, veterinary field practicenor to create awareness among farmers about importance of these practices. Increased knowledge about calf rearing is important to maintain good health of calf and to milk production.

Keywords: Calf management practices, dairy farmers, vaccination, colostrum feeding

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INTRODUCTION

Livestock sector in India has emerged as an important sector for employment generation and providing a stable source of income to rural as well as urban farmers. Though India is first in milk production with annual production of over 133 million tons during 2012-2013 (BAHFS 2013), but still the average locational milk production per animal is very low of 1,284 kg per animal, as compared to European Union and US 6,212 kg and 9,117 kg respectively. The reason for this is mainly due to poor production potential of dairy animals, inadequate nutrition as well as management practices including breeding and calf rearing practices (Ahirwar et al., 2011). In modern milk production, calves are often overlooked. Calves are the future stock of a dairy enterprise. Given the high stakes they hold for the farm; it is important for every farmer to implement best calf management practices to bring up a healthy replacement stock. Calves can be very vulnerable to external conditions, which increases their chances of mortality. It is necessary to implement the calf management practices to reduce chances of mortality and grow faster and healthier.

Considering the above facts there is a vast scope for increased productivity through improved management practices including breeding and 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. Management throughout the rearing period influences the longevity of the dairy cow and thereby the total herd economy. It is important to know which routines practices are used for management of replacement heifers on that farm. Thus, keeping these things in view, the present study was designed to gather information on different aspects of calf rearing management practices under field condition of Kopargoan taluka of Ahmednagar district located in western Maharashtra.

MATERIALS AND METHODS

The study was conducted in 15 villages of Kopargoan taluka of Ahmednagar districts of western Maharashtra during 2017-18. Criteria of farmer's selection was farmers having an average herd size of 3–4 milking cows and in BAIF cattle breeding center area. A survey format was designed to collect the data by using telephonic interview method of the farmers through BAIF farmers call center "Sanvadini". A total of 713 farmers from 15 villages were selected for survey, out of which 309 randomly selected farmers were interviewed by using formal questionnaire. The data were collected by telephonic interview through BAIF call center (Sanvadini) from the respondents (Mooventhan et al., 2016). Responses from individual dairy farmer were elicited on qualitative parameters regularly, in yes or no format. The data pertaining to housing type, colostrum feeding, health care practices such as vaccination, deworming and dehorning were collected.

RESULTS AND DISCUSSION

The following five practices viz. status of housing type, practicing feeding colostrum, number of days feeding colostrum, practicing vaccination and deworming as well as dehorning for adoption in cattle management have been considered for finding out calf management practices followed by dairy farmers in the areas. It was observed that out of 309 farmers only 147 (47.57%) farmers were having kuccha housing shed for their animals where in 162 (52.43%) farmers have been adopted pucca concrete shed. It was found that 269 (87.06%) farmers adopted feeding colostrum to calves for an average 2.9 days whereas 40 (12.94%) farmers were not following this practice regularly for raising the calves. It indicates need to create awareness among non-adopting farmers about the importance of colostrum for calves in increasing immunity.

The study (Table 1) reveals that in Kopargaon taluka out of 309 farmers, 209 (67.64) farmers adopted a practice of vaccinating their animals regularly against the contagious and infectious diseases like Hemorrhagic Septicemia (HS), Black Quarter (BQ), Foot & Mouth Disease (FMD) etc. whereas 100 (32.36) farmers were not vaccinating their animals regularly. They were vaccinating the animals when there is outbreak or adding new animal in the herd. In present study (Table 3) indicates that out of 309 farmers, 203 (65.7%) farmers adopted a practice of deworming their animals regularly against the ecto and endo parasites whereas 105 (34.3%) farmers were not following the practice.

It was found from the study that 218 (70.55%) farmers were dehorning the animals at early age whereas 91 (29.45%) farmers were not preferring dehorning. The observations were very high as reported by Yadav et al. (2016) only 38% respondents were performing dehorning of their calves, while remaining majority of the farmers preferred not to dehorn. And also findings reported by Sabapara et al. (2010) and Rathore et al. (2010)



Table 1: Status of practicing Deworming, Vaccination and Dehorning

No. of village	Total number of farmers	Farmers practicing Deworming No (%)	Farmers practicing Vaccination No (%)	Farmers practicing Dehorning No (%)
		Yes	No	YesNoYesNo
15 (29.45)	309	203 (65.7)	105 (34.3)	209 (67.64)100 (32.36)218 (70.55)91

who reported 10 and 9.5% dehorning, respectively.

CONCLUSION

From the present study it can be concluded that majority of the farmers were following scientific management practices but still due to lack of knowledge and awareness a percentage of farmers were not practicing scientific management therefore there is need to increase awareness through various extension programme. There is need to make the farmers aware about importance of scientific breeding and calf rearing management practices through extension education programme and make available necessary essential veterinary services and other input facilities at their door step to improve their animal's genetic makeup, health and productivity and thereby improve their socioeconomic condition and living standard.

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