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MANAGEMENT PRACTICES OF THE FARMERS REARING JERSEY X SAHIWAL COWS IN CHITTOOR DISTRICT OF ANDHRA PRADESH

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ABSTRACT

The study on the managerial practices followed by the farmers rearing Jersey x Sahiwal cows revealed that 25.8 and 56.3 per cent of the farmers were feeding green fodder *ad libitum* and in limited quantity, respectively. Majority of the farmers *i.e.* 77.4 per cent were feeding dry fodder *ad libitum*. Only 5.3 per cent farmers were feeding optimum level of concentrate feed while majority of the farmers (81 per cent) were feeding restricted concentrate feed. Regular feeding of mineral mixture was practiced by 63.7 per cent of the farmers. All the farmers were aware of heat detection in cows and Artificial Insemination. Present study revealed that on an average, 2.43 inseminations were required for each conception. Most of thefarmers (91.68) provided kutcha housing to animals while 27.9 per cent farmers had manure disposal pits. Average hygiene levels were observed in most of the cases. All the dairy farmers allowed suckling by their calves before and after milking and followed full hand milking twice a day regularly. Weaning of calves was not followed. Mastitis was the major health problem faced by the farmers followed by theileriasis and FMD. Prevalent reproductive problems were repeat breeding, anoestrus and retained placenta. Most of the farmers (89%) were vaccinating the animals by the vaccines provided by Animal
Husbandry Department and none of the farmers was following recommended vaccination and deworming schedule.

Key words : Jersey x Sahiwal cows, Managerial practices, Farmers, Chittoor, Andhra Pradesh

Chittoor District of Andhra Pradesh has 1.10 million cattle, out of which 0.56 million are Jersey X Sahiwal crosses[10]. Progeny Testing Programme (PTP) was started in the year 1987 in Chittoor district and at present most of the cattle are stabilized at 50% Jersey X Sahiwal inheritance levels. This breed is considered to be drought and disease resistant, average milk yielder and well adopted to the Chittoor district. In the present study an attempt has been made to find out the management practices followed by the farmers rearing Jersey X Sahiwal cows.

MATERIALS AND METHODS

A total of 190 farmers from 8 mandals in and around Chittoor where the Progeny Testing Programme is going on since two decadeswere interviewed, for collection of data on the management practices followed by the farmers in rearing Jersey X Sahiwal cattle. Twenty three villages are selected for the study according to the services offered by the Animal Husbandry

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department. 63.2, 26.3 and 10.5 per cent of the farmers in the selected mandals are covered by Veterinary Dispensary, Rural Livestock Unit and gopalamitras (lay inseminators in Andhra Pradesh) respectively.

RESULTS AND DISCUSSION

Most of the farmers are feeding concentrates (86.32) with supplementation of mineral mixture (63.68)in the daily ration.Though the district is drought prone and there is difference in the level of feeding green fodder, the farmers are maintaining good milch to dry ratio indicating the dependence of farmers on income from sale of milk.In the present investigation,it wasobserved that 25.79 per cent farmers are feeding green fodder *ad libitum*, 56.32 per cent farmers are feeding restricted green fodder and remaining 17.89 per cent are not feeding green fodder at all. This may be due to lack of sufficient irrigation facilities to the farmers in Chittoor. Lack of green fodder is mostly substituted by grazing. It was observed that all the farmers are feeding dry fodder to their cattle and landless farmers purchasing paddy straw to feed their cattle. It was further observed that no farmer is providing additional allowance of feed and fodder during pregnancy. It was also reported that majority (95.62 percent) of the farmers are not providing additional feed and fodders during pregnancy in general and during advanced pregnancy in particular. Only 5.3 per cent of farmers are feeding optimum concentrates, majority of the farmers i.e. 81 per cent are feeding concentrate at restricted level and 13.7 per cent are not feeding concentrate at all[4]. Among the farmers 63.68 percent are providing mineral mixture daily and remaining 36.32 per cent are not providing mineral mixture. In agreement with the present findings, other workers[7&14] reported that farmers were not feeding or feeding minimum amount of concentrate feed to their cattle. Earlier workers[3&4] reported that 62.5 per cent of farmers are not feeding mineral mixture to their dairy animals. However, in the present study it was observed that both the concentrate feeding and mineral mixture supplementation are practiced by most of the farmers.

About 40 per cent of the total crossbred population of Andhra Pradesh was present in this district. The findings of the present study indicated that all the farmers are aware of heat detection and Artificial Insemination. Integrated sample survey (2008-09) of Animal Husbandry Department, Government of Andhra Pradesh reported the number of Artificial Inseminations conducted was 5.91 lakhs which was the highest in Andhra Pradesh. It was also observed that on an average 2.43 inseminations were required per animal for each conception. Lower levels of awareness about Artificial Insemination among the people were reprted[1,2&9].

Among selected farmers 91.6 per cent farmers provided housing and the remaining 8.4 per cent did not provide sheds.Among livestock sheds, 55.8 per cent were covered with thatched roof, 33.63 percent were with asbestos roof and the remaining 3.2 per cent were pucca sheds. With regard to flooring, 12.1 per cent sheds were with cement flooring and the remaining 87.9 per cent houses were with kutcha flooring only. Similar type of houses for animals with majority of farmers were reported[13,15&16]. On the contrary reported in their study that large number of dairy farmers had pucca sheds for their animals as they were commercial dairy farmers and the results of present study differed with the findings of the said authors as this study was taken up in rural areas[18]. On observation, the floor is dry in 26.8 per cent and wet in 73.2 per cent of sheds. Regarding manure disposal, only 27.9 per cent farmers were having manure disposal pits, 68.4 per cent farmers were heaping the dung on the land surface without

dumping into any pit and the remaining 3.7 per cent were not following proper management in manure disposal. Similarly, 27.4 per cent animals were maintained hygienically, 69.0 per cent had average hygiene levels and remaining 3.6 per cent are maintained under poor hygienic conditions.

It is observed that 100 per cent farmers were following regular milking intervals and milk their animals twice daily. The weaning of calves which is an important management practice is not being followed by the farmers in the study area. Majority of the farmers followed full hand milking (82.1 per cent) while a few farmers (17.9 per cent) followed knuckling. Milking machines were not found to be used by any farmer in the present study. It was observed that a majority of the farmers follow full hand milking[9]. It was observed that the mean milking time ranged from 5 to 15 minutes with an average of 9.03 minutes for complete milking of one animal.

An attempt was made to study the incidence of important diseases affecting dairy cows. Mastitis was a major affliction in dairy cows as expressed by 50.3 per cent farmers followed by theileriasis (31.9) and foot and mouth disease (11.6). The incidence of theilerisasis might be due to the fact that crossbreds but not indigenous cattle are more prone for tick born diseases. Though vaccine is available for theileriasis prevention, maintenance of cold chain and cost make its wide spread use prohibitive. Similar reports of incidence of theilerosis were reported[19&20]. On the reproductive problems faced by the animals in the study area, 45.3 per cent farmers expressed the problem of repeat breeding, 41.6 per cent anoestrus and remaining 13.1 per cent farmers expressed the problem of retained placenta in the livestock they owned. Among the selected farmers 89.0 per cent were vaccinating the animals by the vaccines provided by the State Department of Animal Husbandry while the remaining 11.0 per cent farmers were not vaccinating their animals. None of the farmers was following the complete recommended vaccination schedule to protect their animals. Similar level of adaptation in vaccination of cows was repoted[8&9]. Some of the elite farmers (8.42 per cent) are following deworming schedule for dairy animals, 66.8 per cent farmers follow need based deworming and 24.7 per cent were not aware of deworming in large animals. This is due to lack of awareness of the farmers about the vaccinations and deworming. It was observed that 63.2 per cent farmers were provided with the services of a graduate veterinarian, 26.3 per cent farmers with a para veterinarian and remaining 10.5 per cent with Gopalamitras (lay inseminators in Andhra Pradesh) under the supervision of a graduate veterinarian.

CONCLUSION

The study revealed that 25.8 and 77.4 per cent of the farmers were feeding green and dry fodder *ad libitum,* respectively. Only 5.3 per cent farmers were feeding optimum level of concentrate feed. Regular feeding of mineral mixture was practiced by 63.7 per cent of the farmers only. All the farmers were aware of heat detection in cows and Artificial Insemination. Present study revealed that on an average, 2.43 inseminations were required for each conception. Most of the farmers (91.6) provided kutcha housing to animals. Only 27.9 per cent farmers had manure disposal pits. All the dairy farmers allowed suckling by their calves before and after milking and followed regular twice a day full hand milking. Mastitis was the major health problem faced by farmers followed by theileriasis and FMD. Prevalent reproductive problems were repeat breeding, anoestrus and retained placenta. Most of the farmers (89.0%) were vaccinating the animals by the vaccines provided by Animal Husbandry Department.

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