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KA Tadavi

M.Sc. agri. (Animal Husbandry), College of agriculture Pune, MPKV Rahuri, Maharashtra, India.

Dr. FR Tadavi

Subject Matter Specialist, Department of Animal Husbandry, KVK Badnapur, Maharashtra, India

Studies on housing management practices adopted by murrah buffalo owners in vicinity of Pune

KA Tadavi and Dr. FR Tadavi

Abstract

The investigation entitled, "Studies on housing management practices adopted by Murrah buffalo owners in vicinity of Pune" was undertaken to ascertain the various management practices followed by buffalo owners in vicinity of Pune. Total 100 Murrah buffalo dairy farms in and around 30 km radius of Pune city were studied. The data was collected through pretested questionnaire. The buffalo owners were distributed in four groups on the basis of buffaloes possessed by them as group-I were having up to 10 buffaloes, group-II possessed 11 to 25 buffaloes, group-III had 26 to 50 buffaloes and group IV were having above 51 buffaloes. It is feeding and housing which play a pivotal role in exploiting the genetic potential of animal.

Animal housing is required to protect the animals from inclement weather, provide clean, comfortable stay for good health of animals and for efficient management. Inadequate and improper planning results in additional labour charges and increased costs in maintenance of shed. Housing facilities such as type of feed manger, drainage standard, dung channels, flooring material, height of roof and roofing material plays an important role to maintain the micro-climate. Cost effective and comfortable housing is essential for maintaining optimum production and health of animal. Defective flooring system leads to unhygienic conditions which also lead to health problems. Mastitis is one of them amongst many health anomalies which can be controlled simply by hygienic microclimate in dairy houses. Besides, providing proper housing to dairy animals it is also equally important in order to achieve maximum return from the animals.

Keywords: Murrah buffaloes, housing practices of farmers, housing management

Introduction

Among all the buffaloes available in the world, the Murrah buffalo holds the greatest promise and potential for milk production. The success of Indian dairy industry is much dependent on productivity and efficient reproduction performance of Murrah buffaloes (Kumar, 2015) ^[5]. Murrah is one of the superior breeds of Indian buffaloes and it has a share of 44.39 percent in total buffalo population of the country. Out of the buffalo breeds in India, Animal housing is required to protect the animals from inclement weather, provide clean, comfortable stay for good health of animals and for efficient management. Inadequate and improper planning results in additional labour charges and increased costs in maintenance of shed. Housing facilities such as type of feed manger, drainage standard, dung channels, flooring material, height of roof and roofing material plays an important role to maintain the micro-climate. Cost effective and comfortable housing is essential for maintaining optimum production and health of animal. Defective flooring system leads to unhygienic conditions which also lead to health problems. Mastitis is one of them amongst many health anomalies which can be controlled simply by hygienic microclimate in dairy houses. Besides, providing proper housing to dairy animals it is also equally important in order to achieve maximum return from the animals.

Materials and Methods

In all, 100 Murrah buffalo owners were selected randomly in and around the Pune city. These buffalo owners were grouped in to four groups according to the total number of buffaloes they possessed as under

Corresponding Author: KA Tadavi

M.Sc. agri. (Animal Husbandry), College of agriculture Pune, MPKV Rahuri, Maharashtra, India.

Group	Number of buffaloes
I	Less than 10 buffaloes
II	11 to 25 buffaloes
III	26 to 50 buffaloes
IV	More than 51 buffaloes

The 100 buffalo farms were surveyed without the restriction on the number of farm for each group as Group-I-, Group-II-, Group-III- and Group-IV. The detail information as per the questionnaire were collected from each farm owner by interview method.

Compilation of data

The information collected through interview was transferred from the interview schedule to the primary tables and then to the secondary tables wherever necessary. The quantified data (numerical figures data) were used to find out the nature of relationship between independent and dependent variables.

Statistical analysis Percentage

It was the simplest analysis used for simple comparisons. It's calculation was done by dividing frequency of particular cell by the total number of buffalo farmers belonging to the category and multiplied by 100.

Mean

It is defined as a single value which describes the whole data

$$X = \frac{X_1 + X_2 + \dots + X_n}{n}$$

Table 1: Response of farmers towards housing management practices in different groups

Sr. No.	Practice	Response	Group-I		Group-II		Group-III		Group-IV		Overall	
			No	%	No	%	No	%	No	%	No	%
1.	Separate house for buffaloes	Yes	12	31.58	09	31.03	10	45.45	09	81.82	40	40.00
		No	26	68.42	20	68.97	12	54.55	02	18.18	60	60.00
2.	Type of house	Improved	15	39.47	12	41.38	13	69.09	07	63.64	47	47.00
		Traditional	23	60.53	17	58.62	09	40.91	04	36.36	53	53.00
3.	Sufficient space for buffalo	Yes	16	42.11	18	62.07	15	68.18	10	90.91	59	59.00
		No	22	57.89	11	37.93	07	31.82	01	09.09	41	41.00
4.	Type of floor	Kaccha	20	52.53	08	27.59	02	9.09	-	-	30	30.00
		Cement coba	05	13.16	14	48.27	16	72.73	10	90.91	45	45.00
		Stone	13	34.21	07	21.14	04	18.18	01	09.09	25	25.00
5.	Slope in floor	Yes	27	71.05	21	72.41	19	86.36	06	54.54	73	73.00
		No	11	28.95	08	27.59	03	13.64	05	45.46	27	27.00
6.	Drainage pit/channel	Yes	17	44.74	15	51.72	18	81.82	09	81.82	59	59.00
		No	21	55.26	14	48.28	04	18.18	02	18.18	41	41.00
7.	Sufficient light and ventilation	Yes	28	73.68	23	79.31	19	86.36	09	81.82	79	79.00
		No	10	26.32	06	20.69	03	13.64	02	18.18	21	21.00
8.	Disinfection of barn	Yes	17	44.74	14	48.27	17	77.27	07	63.64	55	55.00
		No	21	55.26	15	51.73	05	22.73	04	36.36	45	45.00
9.	Loose housing system	Yes	-	-	-		-	-	-	-	-	-
		No	38	100	29	100	22	100	11	100	100	100

Results and Discussion

The results of various housing management practices of buffaloes followed by the respondents under study are presented in Table 1.

The perusal of the overall results revealed that majority of farmers (40%) had separate houses for their buffaloes while only 60 percent of the respondents had no separate houses for their buffaloes. Overall 25 percent of the respondents had stone floor, 45 percent respondents had cement coba floor and 30 percent respondents had kaccha floors in buffalo sheds. A considerably 73 percent respondents provided proper slope to the floor and 59 percent respondents had provided drainage for urine in the sheds. Overall 59 percent of respondents provided sufficient space for buffaloes and 79 percent of respondents had sufficient light and ventilation in their sheds. Also, Table 4 clearly indicates that overall 47 percent respondents had improved house for their buffaloes.

None of the buffalo owner was having loose housing system for their buffaloes. More than half of the farmers were not having separate place for buffaloes it might be due to lack of space available for loose housing system due to the urban area.

These finding are in accordance with Tadavi *et al.* (2017) ^[10] reported that 58.21 and 55.34 percent respondents had traditional and separate house to their buffaloes, respectively. Similar results were also observed by Divekar and Saiyed

(2010) [2] worked on housing practices followed by professional Gir cattle owners of Anand district. Patbandha *et al.* (2014) [8] worked on shelter management of dairy bovines in Saurashtra and North Gujarat region.

However the contradictory results were reported by Atakare *et al.* (2016) ^[1] revealed that the kachha flooring of byre was provided by maximum buffalo owners (98.00 %) and pacca flooring of house was adopted by very few buffalo owners (2.00 %) in Gadchiroli tahsil (Maharashtra).

Conclusions

The perusal of the results revealed that overall 47.00 percent respondents had improved house for the buffaloes, while 53.00 percent of respondents had traditional house for their buffaloes. Overall 30.00 percent of respondents had kaccha floors, 45.00 percent had cement concrete floor and 25.00 percent had stone floor in the buffalo byre.

Most of respondents (73.00 %) provided proper slope to the floor and 59.00 percent of respondents had maintained urine channel in the shed. Whereas, 59.00 and 79.00 percent of respondents had provided sufficient space for buffaloes and sufficient light and ventilation in the buffalo shed, respectively. Only 55.00 percent of respondents were following regular practice of disinfection of buffalo sheds

References

- 1. Atkare VG, Khupse SM, Darade R. Feeding and management practices adopted by local milch buffalo owners under field condition of Gadchiroli tahsil. The Asian Journal of Animal Science. 2016;11(2):154-168.
- 2. Divekar BS, Saiyed LH. Housing and breeding practices followed by professional Gir cattle owners of Anand district. The Indian Journal of Field Veterinarians. 2010;5(4):9-12.
- Ghuge SS. Studies on feeding management practices adopted for cattle in Sugarcane pockets of Nanded district. M.Sc. (Agri.) Thesis Submitted to VNMKV, Parbhani, Maharashtra; c2014.
- 4. Godara V, Gulati HK, Singh N, Kumar S, Robin VR. Buffalo housing management practices adopted in western Haryana. International Journal of Agriculture Science. 2018;10(5):5332-5334
- Kumar V. Factors affecting performance of Indian Murrah buffalo. Journal of Buffalo Science. 2015;4(1):1-7
- Mishra RK, Baghel RPS, Sharma R, Sharma S. Housing and feeding practices of buffaloes in Katni district of Madhya Pradesh. Journal of Entomology and Zoology Studies. 2018;6(2):3124-3128.
- 7. Nale GS. Studies on feeding management practices adopted for cattle in sugarcane pockets of Parbhani district. M.Sc. (Agri.) Thesis submitted to VNMKV, Parbhani (Maharashtra), 2014.
- 8. Patbandha TK, Ravikala K, Marandi S, Gadariya MR. A comparative study on shelter management of dairy bovines in Saurashtra and North Gujarat region. International Journal of Pure and Applied Bioscience. 2014;6(1):889-893.
- Singh R, Singh DN, Yadav RS. Growth performance and feed intake of buffalo heifers under different housing system during winter season. International Journal of Science, Environment and Technology. 2014;3(1):314-319.
- Tadavi FR, Gaikwad US, Mali RG, Tawadar AC. Studies on housing management practices fallowed by Jafrabadi buffalo owners under field condition. Trends in Biosciences. 2017;10(38):7987-7990.
- 11. Tewari H, Kumar S, Rath R, Tyagi K. Existing housing and breeding management practices adopted by dairy farmers in Tarai region of Uttarakhand, India. Indian Journal of Animal Research. 2016;7(1):17-20.