

KNOWLEDGE LEVEL OF DAIRY FARMERS IN BREEDING MANAGEMENT OF DAIRY ANIMALS

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ABSTRACT

A study was carried out in Virudhunagar district of Tamil Nadu in India to evaluate the knowledge level among the dairy farmers about the breeding practices. In this study, the knowledge index was derived on various parameters related to breeding of dairy animals. From the results of this study, the farmer's knowledge level about the breed of their own animals, estrus cycle, time of pregnancy diagnosis, symptoms of parturition and gestation period were in an appreciable level. The farmers with more animals (more than 10 animals) followed the scientific principles in the management of dairy animals and their knowledge about the breeding parameters was good.

Key words: Dairy farming, Breeding, Knowledge level.

Global Milk production has tremendously increased over the last fifty years due to improved breeding, feeding and managerial practices adopted in the livestock industry. During 1967, the world total milk production was 381.81 million tones and it reached the level of 680.66 million tones in 2007. Research accomplishment in the livestock sector has been a stepping stone for the above success, but there is a large difference regarding self sufficiency in livestock products between the developed and the developing regions. The reason behind this fact might be due to the poor native breeds of animals, traditional methods of livestock farming and low profit from the animal husbandry sector in the developing regions which tends to keep the people away from this segment.

Even though, India is in 1st rank in buffalo milk production that is 62.40 million tones and it is about 67.45 % of the world milk production from buffaloes in 2010. In cattle milk production, India produce 50.3 million tones in 2010 which ranks first and it contribute 8.4 % of the world total cattle milk production. The Contribution of livestock sector to the GDP 2011-12 was estimated as 3.37% which is 27.28% GDP from agriculture. When compare with the total cattle and buffalo population, the quantum of milk production of India is not in a proportionate manner. This may be due to the large number of native cattle and buffalo population with poor production performance, poor managerial practices adopted by the farmers towards the cross bred animals and lack of knowledge about the good managerial practices in dairy farming. Keeping the above realism in mind, the present study was carried out to appraise the knowledge level of farmers about the breeding management of dairy animals.

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Knowledge level of dairy farmers

MATERIALS AND METHOD

The study was conducted among the dairy farmers in Virudhunagar District of Tamil Nadu, India. The selected farmers were grouped into three categories namely; large farm (having more than 20 animals), medium sized (between 10-20 animals) and small farm (less than 10 animals). Ten farmers from each category were selected and the desired informations were collected about their farm with a questionnaire. The questionnaire covers most of the breeding practices and managerial aspects pertaining to breeding. The responses were obtained in a four point continuum, i.e. precise answer, answer near to correct, somewhat correct and incorrect answer and the score 3, 2, 1 and 0 were allotted accordingly. Knowledge index was arrived by summation of scores by using the following formula

Knowledge index = (Score obtained by the respondent x100)/ Maximum obtainable score

RESULTS AND DISCUSSION

The knowledge index calculated for every parameters were listed in the table-1. From this study it is observed that the farmers who are having more than 10 animals are usually following the correct managerial practices in breeding of dairy animals. The farmers having more than 20 animals are well versed with the time for

pregnancy diagnosis, calving interval, symptoms of estrus cycle, drying off animals, symptoms of parturition and gestation period. The knowledge index for the above supposed facts are 97, 90, 83, 83, 83 and 80 % respectively. The above findings have found substantial support from the findings of earlier workers¹ where in the knowledge index about the optimum time of pregnancy diagnosis got 1st rank with 88% and estrus period got 85% of knowledge index and ranked 2nd. Most of the farmers were acquainted with the heat period in cattle and his findings also simulate the present study.

Only half of the respondents having the Knowledge about coloustrum feeding got 57% knowledge index. Due to the lack of awareness about the coloustrum feeding to calves, the farmers having one or two animals are facing the calf mortality. Similar study carried out by earlier workers² who reported that only 20 percent had knowledge about quantity of coloustrum to be fed to new born calf.

The knowledge level about the drying of pregnant animals was followed by most of the large farmers and it got 83% knowledge index among them, but the same got only 33 % knowledge index among the small farmers and this same kind of study was conducted and recorded as 86% knowledge index among large farmers³.

Table.1 Knowledge level of dairy farmers on breeding management with different animal holding capacity

Sl.No	Parameters	Large farmer (More than 20 animals) n=10		Medium farmer (10-20 animals) n=10		Small farmer (Less than 10 animals) n=10		Pooled	
		Total	Knowledge index (%)	Total	Knowledge index (%)	Total	Knowledge index (%)	Total	Knowledge index (%)
1	Knowledge about Breed	31	78	23	77	12	40	66	73.33
2	Optimum age at 1st service	23	77	20	67	15	50	58	64.44
3	Estrous cycle and symptom	25	83	20	67	22	73	67	74.44
4	Importance of AI	21	70	22	73	13	43	56	62.22
5	Time of PD	29	97	24	80	12	40	65	72.22
6	Drying off of pregnant animal	25	83	14	47	10	33	49	54.44
7	Symptoms of parturition	25	83	22	73	22	73	69	76.67
8	Gestation period	24	80	25	83	17	57	66	73.33
9	Knowledge about care of new born calf	20	67	22	73	11	37	53	58.89
10	Importance of coloustrum feeding	23	77	24	80	10	33	57	63.33
11	Calving interval	27	90	20	67	8	27	55	61.11
12	Diseases affecting breeding performance	18	60	19	63	5	17	42	46.67

CONCLUSION

From the above findings, it is concluded that the farmers with less than 5 animals are having less acquaintance about the breeding parameters of their animals. The unawareness about the breeding practices leads to an indirect economical loss. The farmers with more than 10 animals were

acquired sufficient knowledge about most of the breeding parameters and they follow the same in their farm. Therefore, transfer of scientific technology to the farming community and providing technical training to the needy farmers will be helpful to improve the knowledge level about the dairy farming.

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