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Feeding Management and their Constraints in Dairy Bovines

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ABSTRACT

As data were collected from 360 farmers of rural area covering 12 villages of 4 tehsils of two districts. The farmers were equally distributed with respect to Karauli and Sawai Madhopur districts of eastern Rajasthan. The information was collected from respondents on adoption of feeding management practices and their constraints of dairy bovines by a questionnaire. The major feeding constraints in Karauli and Sawai Madhopur districts to the farmers had some important barriers in the adoption of ideal feeding management practices includes high prices of concentrate (2.63MS) followed by unavailability of concentrate and mineral mixture (2.43MS), shortage of feeds & fodders for animals (2.39MS) and lack of knowledge about balance ration (2.32MS). There is a need to provide knowledge of scientific feeding management practices by reducing feeding constraints through efficient livestock feeding management programme.

Keywords: Dairy bovines, feeding management

INTRODUCTION

The scientific feeding practices play a key role in exploiting the potential of nondescript buffaloes and cattle for milk production and improving the energetic efficiency of bullock power for different agricultural operations. About 65% of total expenditure of dairy bovines is on feeding alone. The present study has explored the information regarding existing current feeding management practices adopted by the respondents of Karauli and Sawai Madhopur districts of eastern Rajasthan and their constraints for adopting new scientific ideas of feeding management practices.

Sharma (2011) has reported that the differences in the feeding practices of dairy animals followed by the farmers account for most variation in reproductive performance between herds and among animals within herds. Extension system had played a crucial role in enhancing milk production in the country which needs no further emphasis. However, there still exists a wide gap between the technologies available with the research system and its adaptation at farmers' field particularly in the sphere of livestock feeding (Meena *et al.* 2014). A large number of problems have been identified which are responsible for the low productivity in cattle and buffaloes as reported by the different categories of the dairy farmers (Sharma *et al.* 2013).

METHODOLOGY

As data were collected from 360 farmers of rural area covering twelve villages of four Tehsils of Karauli and Sawai Madhopur districts of eastern Rajasthan to the study. The respondents, villages and tehsils were selected on the basis of maximum number of dairy bovine population and equally distributed in both the

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districts. The information was received from the respondents through the questionnaire. The respondents were interviewed for all current feeding management practices and their constraints and observed personally. The frequencies were obtained for different feeding management practices including involvement of family member in preparation of concentrate mixture, offering of feed to the animals, availability of grazing facilities, production of required dry fodder, type of concentrate feeding, type of dry and green fodder feeding, ratio of feeding (concentrate, DF & GF to milking animals) and feeding of extra concentrate to advance pregnant bovine etc.. The score of individual practice was converted into mean percent score (MPS) for the calculating adoption percentage of the practice. Whereas, the information regarding feeding constraints includes high prices of concentrate, unavailability of concentrate & mineral mixture, shortage of feeds & fodders for animals, lack of knowledge about balance ration and preference to food/cash crops rather than fodder crops etc. The collected data were analyzed statistically as per standard methods.

RESULTS AND DISCUSSION

a) Feeding Practices:

The data incorporated in the Table 1 about current feeding management practices of respondents of Karauli and Sawai Madhopur district, clearly indicates that the respondents had maximum adoption about involvement of family member in preparation of concentrate mixture followed by offering of feed to the animals, availability of grazing facilities with 99.72, 92.36 & 86.94 per cent (MPS) respectively and ranked first, second & third by the respondent of both the districts.

The results indicate for respondents of Karauli district had maximum adoption about involvement of family members in preparation of concentrate mixture with 99.44 MPS and ranked first by the respondents. This was followed by the aspects like offering of feed to the animals, availability of the grazing facility, production of required dry fodder and feeding to pregnant animals. The extents of use of these aspects were 95.83, 92.22, 84.44 and 80.00 per cent (MPS),

Table 1: Adoption percent of different feeding practices by the respondents

Name of Practices	Karauli		Sawai Madhopur		Overall	
	%	Rank	%	Rank	%	Rank
Production of required dry fodder	84.44	4	81.67	3	83.06	4
Availability of grazing facility	92.22	3	81.67	3	86.94	3
Production of required green fodder	18.89	16	36.67	13	27.78	15
Conservation of Surplus green fodder	3.06	18	0.00	18	1.53	19
Type of dry fodder feeding	71.67	8	70.74	5	71.20	8
Type of green fodder feeding	48.33	13	51.85	11	50.09	14
Type of Concentrate feeding	64.44	10	62.50	8	63.47	9
Use of mineral mixture & common salt	31.94	14	22.22	15	27.08	16
Time of feeding of concentrate	58.89	11	60.56	9	59.72	11
Feeding of freshly calved bovine	68.33	9	77.50	4	72.92	6
Age to which milk is fed to young calves	73.70	7	69.44	6	71.57	7
Involvement of family member in preparation of concentrate mixture	99.44	1	100.00	1	99.72	1
Offering of feed to the animals	95.83	2	88.89	2	92.36	2
Sources of water	57.59	12	58.52	10	58.06	12
Offering of water	92.22	3	67.22	7	79.72	5
Ratio of feeding conc. GF & DF to milking animal	13.33	17	10.56	16	11.94	18
Feeding of Pregnant animal	80.00	5	42.22	12	61.11	10
Feeding extra conc. to advance pregnant bovine	75.00	6	32.22	14	53.61	13
Feeding of first feed to newly born calf	30.56	15	8.33	17	19.44	17
Overall 62.19		**57.22**		**59.70**		

respectively. The animal keepers of Karauli district had low use of conservation of surplus green fodder with 3.06 per cent and ranked last in the ranking hierarchy.

Whereas the respondents of Sawai Madhopur district had full adoption about involvement of family members in preparation of concentrate mixture with 100.00 per cent (MPS) and ranked first by the respondents, it means Man/ Women only prepare concentrate mixture. Other practices of feeding were found near to similar rank in Karauli district. The Overall adoption of feeding practices in Karauli district was minutely higher (62.19 % & 21.77 MS) as compared to in Sawai Madhopur district (57.22 % & 20.03 MS).

The findings are in the agreement with the findings of Chug (1995), Sihag *et al.* (1996) and Upendra and Yadav (1999). The results were also as per the line as reported by Sharma *et al* (2014) that by imparting training, the adoption of feeding mineral mixture reported by dairy farmers was sometimes (61.7%) and always (38.3%) indicating that lack of awareness was the main reason was non adoption of using mineral mixture in daily feeding schedule of animals. Therefore, lack of awareness emphasizes the findings of Gangil et al (2005) who suggested the need for training the dairy farmers about basic knowledge of the diseases.

b) Feeding Constraints:

As data incorporated in Table 2 reveals that the respondent of Kaurali district in regarding to feeding constraints, the major constraint was lack of knowledge about balanced ration with mean score of 2.66 & ranked first by the respondents followed by high prices of concentrate (2.64), lack of knowledge about advantages of feeding green fodder and mineral mixture (2.49), inadequate feed availability (2.41), unavailability of concentrate and mineral mixture on and around the village (2.36), non-availability of inputs need for green fodder production in the area (2.33), shortage of feed & fodder for animals (2.31) and poor irrigation facilities for growing green fodder (2.23) etc. The very minimum constraint was poor soil condition for green fodder cultivation with mean score of 0.52 a ranked last in the ranking hierarchy.

Whereas, in the feeding constraints of respondent of Sawai Madhopur district had about high prices of concentrate with mean score of 2.63 and ranked first in the ranking order followed by unavailability of concentrate & mineral mixture on and around the village, shortage of feeds & fodder for animals, inadequate feed availability and lack of knowledge about advantages of feeding green fodder & mineral mixture with the mean score of 2.51, 2.47, 2.21 and 2.12 respectively. The lowest constraints in Sawai

Table 2: Feeding Constraints

Constraints	Karauli		Sawai Madhopur		Overall	
	MS	Rank	MS	Rank	MS	Rank
Poor soil condition for green fodder cultivation	0.52	12	0.53	9	0.52	12
Inadequate feed availability	2.41	4	2.21	4	2.31	5
Poor irrigation facilities for growing green fodder	2.23	8	1.95	7	2.09	8
Disinterest Feeding	1.32	11	1.21	8	1.26	9
Non-availability of HYV's fodder seed	1.72	9	0.44	10	1.08	10
Preference to food/cash crops rather than fodder crops	1.65	10	0.43	11	1.04	11
Lack of knowledge about balanced ration	2.66	1	1.99	6	2.32	4
Lack of knowledge about advantages of feeding green fodder & mineral mixture	2.49	3	2.12	5	2.30	6
Shortage of feeds and fodder for animals	2.31	7	2.47	3	2.39	3
Unavailability of concentrate & mineral mixture on & around the village	2.36	5	2.51	2	2.43	2
High prices of concentrate	2.64	2	2.63	1	2.63	1
Non-availability of inputs need for green fodder production in the area	2.33	6	1.99	6	2.16	7

MS = Mean Score

Madhopur district was preference to food/ cash crops rather than fodder crops with mean score of 0.43 and ranked last in the order of ranking.

In the overall study of feeding constraints, the high prices of concentrate was highest in the ranking with mean score 2.63 followed by unavailability of concentrate and mineral mixture on and around the village (2.43), shortage of feeds and fodder for animals (2.39) and lack of knowledge about balanced ration (2.32). The lowest constraint in overall study was poor soil condition for green fodder cultivation with mean score of 0.52 and ranked last in the ranking order.

The above findings are in confirmation with the findings of Sah (1996) and Chaudhary (1998). The feeding constraints are also agreed with the investigations like; in Punjab, a youth does not want to work with his own hands rather seeks that some labourer should work for him and give the earning to him. Thus, it can be said that dignity of labour is missing among the young youth. This observation coincides with that reported by Rathod et al (2011) that majority of the farmers (74 %) opined that youth were not interested in carrying out dairy farming for their livelihood.

CONCLUSION

The respondents had maximum adoption about the involvement of family member in the preparation of concentrate mixture followed by an offering of feed to the animals, availability of grazing facilities, *etc*. In the Kaurali district, the major feeding constraints were lack of knowledge about balanced ration, high prices of concentrate, lack of knowledge about the advantages of feeding green fodder and mineral mixture, *etc*. In Sawai Madhopur district, the major feeding constraints were high prices of concentrate, unavailability of concentrate & mineral mixture on and around the village, shortage of feeds & fodder for animals, *etc*.

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