

Feeding Practices of Cattle Adopted by the Farmers in Four Mandals of Chittoor District of Andhrapradesh.



Veterinary

KEYWORDS : Feeding practices, Paddy Straw, Green Fodder, Concentrate Mixture.

Dr. D. Suresh Babu

Principal i/c, Animal Husbandry Polytechnic, VRGudem, West Godavari Dis-trict.534101, Andhra Pradesh

Dr. K. Sarjan Rao

Professor and University Head, Dept. of Livestock Production and Management, College of Veterinary Science, Rajendranagar, Hyderabad.

ABSTRACT

A survey was conducted in four mandals of Chittoor district to findout the feeding practices adopted by the farmers. Information was extracted from 100 farmers by a pretested questionnaire. 36-48 % of the respondent farmers were feeding Paddy straw and 12-32 % were feeding Sugarcane tops and leaves, Paddy straw and Groundnut haulms. 40-52 % were feeding premixed cattle feed and 48-60 % feed ingredients. Further, 53-60 % were feeding 3 kg or less and 40-47 % more than 3 kg per day per animal. 48-60 % of the farmers were feeding grains in combination with other ingredients mostly Rice bran and Groundnut cake. 62-75 % of the respondent farmers were feeding 3 kg and 25-38 % more than 3 kg. All the farmers (100%) were feeding Green fodder to their animals. 80-92 % of the respondents were feeding upto 20 kg per day per animal.

INTRODUCTION

Majority of Indian farmers are small and marginal farmers and a great number are land less labour working in the agricultural fields. Feeding of dairy animals was one of the important component influencing the milk production. The feeding of dairy animals generally depends upon several factors like economic conditions of the farmers, herd size, marketing facilities and environment of the place, etc. Small holders generally manage the dairy animals under extensive system with low inputs and low production. The quality of the animals were mostly non-descript and crossbreds were very few. The crossbred animals require balanced ration in required quantities for meeting the nutritional requirements for high milk production. Taking these facts into account, a study had been carried out in four Mandals of Chittoor district to find out the feeding practices of cattle adopted by the farmers.

MATERIALS AND METHODS

Selection of Study area: A Stratified Random Sampling Technique was used to select the study area. Four mandals namely Nagari, Putalapattu, Vayalpadu and Yerpedu of Chittoor district, Andhra Pradesh, were selected considering four Animal Husbandry divisions which were spread over to different directions of the district. The nearest mandal was Yerpedu which was about 20 km and the farthest was Vayalpadu which was over 100 km from Tirupati. Five villages in each mandal were selected based upon the cropping pattern, type of cattle reared, milk production and utilization etc. Five farmers from each village were selected based on possessing cattle and buffaloes, extent of land etc. Thus the sample size had become 100 (4 mandals x 5 villages x 5 farmers = 100). A pretested Questionnaire was prepared to collect information from the farmers about the cropping pattern, rearing of cattle and buffaloes, animal husbandry practices, feeding pattern, etc., The farming community includes small and marginal farmers and agricultural labour rearing the livestock mostly 2-3 number under extensive system. Though small in number, the large and progressive farmers had taken up livestock rearing as a fulltime occupation under intensive production with feeding, breeding and health care management on scientific lines.

RESULTS AND DISCUSSION

Feeding pattern of crop residues in study area: The data on feeding of crop residues were shown in table 1. It revealed that all of them were feeding crop residues to their animals. The leftovers of paddy, ground nut, sugarcane, jowar, bajra, green gram and black gram were serving as source of dry fodder to the animals. Most (36-48 %) of the farmers were feeding paddy straw only and a few (12-32 %) were feeding sugarcane tops and leaves along with paddy straw and groundnut haulms. All (100%) had replied that they were feeding them continuously and it was understood that the animals were getting sufficient quantity of

dry fodder. However, a few farmers were feeding more quantity (more than 10 kg) of crop residues. This might be for the high yielding crossbred cows being maintained in organized dairy farms. These results were similar to Obi Reddy and Prasad (2009) and Kelly et al. (1991). The small and marginal farmers used to conserve the leftover of crops to feed their animals throughout the year. This was in agreement with the findings of Parasuram Singh et al. (2004) and Rajiv Deoras et al. (2004) but contrary to the findings of Wani et al. (2009).

Concentrate feeding : The survey on Concentrate feeding was presented in table 1 and it indicated that among the respondent farmers 40-52 % were feeding premixed cattle feed and 48-60 % feeding feed ingredients. Further, 53-60 % were feeding 3 kg or less and 40-47 % more than 3 kg per day per animal. The selected farmers (67-82%) in the study were feeding premixed cattle feed procured from outside and only small proportion (18-33%) were making it within the study area. Feeding of concentrates was required to obtain more quantity of milk from the good quality crossbred animals. The quantity fed per day was also sufficient to sustain milk production of more than 10 kg per day per animal. This was in agreement with the results of Mahendra Singh & Chauhan (2009) and Wani et al (2009). The results of grain feeding in the study area showed that 48-60 % of the farmers were feeding grains to their animals in combination with other ingredients mostly rice bran and groundnut cake. The respondent farmers revealed that 62-75 % were feeding 3 kg and 25-38 % more than 3 kgs and most of the farmers were procuring the ingredients from their own fields and only a few (13-40%) procuring them outside the study area. This was on par with findings of Rajiv Deoras et al. (2004)

Feeding of green fodder: The data on Feeding of green fodder and grazing of dairy animals were presented in table 3 and revealed that all the farmers (100%) in survey were feeding green fodder to their animals. 80-92 per cent of the respondents were feeding upto 20 kg per day per animal. This was contrary to the findings of Mahendra Singh and Anil Chauhan (2009) and Rajiv Deoras et al. (2004). In their study the farmers were feeding less than 10kg. Which was mainly due to inadequate availability of green fodder in the rural area on account of limited irrigation facilities, stocking more number of animals than sufficient number. Majority of the respondents in the study area (60-72%) were feeding green grass rather than legumes since availability of legumes was only limited while some farmers (16-28%) were feeding both grasses and legumes whenever legumes were available. All (100%) of them replied that the green fodder was being raised from their own fields itself. Apart from feeding green fodder all (100%) the respondents were allowing their animals for grazing in uncultivated waste lands and forest areas as there was non-availability of well managed pasturelands. This was similar to findings of Rajiv Deoras et al. (2004), Dhimman et al. (1990), Walli (2004) and Radotra et al. (1996) but

differs with the findings of Mallik and Nagpal (1998) and Wani et al. (2009). These differences were due to differences in Agro-climatic conditions of the study area.

ACKNOWLEDGEMENTS

The author acknowledges the University and ICAR for extending permissions and allotment of funds to carry out the investigation.

Sl. No.	Parameter	Mandals				Overall Mean±SE
		Nagari	Putalapattu	Vayalpadu	Yerpedu	
1.	Type of crop residues fed					
	a) Paddy straw	09 (36)	12 (48)	10 (40)	10 (40)	10.25±0.62
	b) Groundnut haulms	03 (12)	05 (20)	05 (20)	05 (20)	4.50±0.50
	c) Paddy straw + Groundnut haulms	05 (20)	05 (20)	06 (24)	07 (28)	5.75±0.47
	c) Paddy straw + Groundnut haulms + Sugarcane tops	08 (32)	03 (12)	04 (16)	03 (12)	4.50±1.19
2.	Quantity fed per day per animal					
	a) Upto 10 kg.	15 (60)	18 (72)	22 (88)	20 (80)	18.75±1.40
	b) More than 10kg.	10 (40)	07 (28)	03 (12)	05 (20)	6.25±1.49
3.	Type of concentrate fed					
	1) Premixed Cattle Feed	10 (40)	12 (48)	13 (52)	10 (40)	11.25±0.75

	Quantity fed					
	i) Less than 3 kg / animal / day	06 (60)	06 (50)	07 (53)	06 (47)	6.25±0.25
	ii) More than 3 kg / animal / day	04 (40)	06 (50)	06 (47)	04 (40)	5.0±0.57
	II) Feeding of Grains	15 (60)	13 (52)	12 (48)	15 (60)	13.75±0.75
	Type of grains fed					
	i) Maize + Rice bran	04 (26)	04 (37)	03 (25)	03 (20)	3.50±0.28
	ii) GNC + Rice bran	06 (40)	05 (26)	06 (50)	07 (46)	6.0±0.40
	iii) Maize + GNC + Rice bran	05 (34)	04 (37)	03 (25)	05 (34)	4.25±0.27
	Quantity fed per day per animal					
	i) Less than 3 kg.	10 (66)	09 (62)	09 (75)	10 (66)	9.50±0.28
	ii) More than 3 kg.	05 (34)	04 (38)	03 (25)	05 (34)	4.25±0.47
4.	Type of green fodder fed					
	i) Grasses	17 (68)	15 (60)	18 (72)	16 (64)	16.5±0.64
	ii) Legumes	04 (16)	03 (12)	02 (08)	03 (12)	3.0±0.4
	iii) Grass + legumes	04 (16)	07 (28)	05 (20)	06 (24)	5.5±0.64
5.	Quantity fed per day per animal					
	a) Less than 20kg.	21 (84)	22 (88)	23 (92)	20 (80)	21.5±0.64
	b) More than 20kg.	04 (16)	03 (12)	02 (08)	05 (20)	3.75±0.47

REFERENCE

- [1] Dhiman P C, Singh Narendra & Yadav B L 1990 A study on cattle and buffalo feeding and breeding practices in adopted and non-adopted villages of Hisar district. Indian Journal of Animal Production and Management 6(2): 90-94. | [2] Kelly T G, Rao P P and Walker T S 1991 The relative value of cereal fodder in semi-arid tropics of India : Implications for cereal breeding programmer at ICRISAT, Resource Management Group. Progress Report No.105, ICRISAT, Patancheru, India. | [3] Mahendra Singh and Anil Chauhan 2009 Adoption of Animal Husbandry practices by dairy owners. Indian Journal of Dairy Science 62(2): 119-125. | [4] Malik D S and Nagpal P K 1998 Studies on housing and feeding management practices of murrah buffalo in its home tract of Haryana. Indian Journal of Animal Production and Management 14(3) : 186-188. | [5] Obi Reddy A and Prasad K S 2009 Dairy farming with migrating murrah buffalo : A success story. Indian Dairyman 61(2) : 56-59. | [6] Parasuram Singh, Singh M, Verma M L and Jaiswal R S 2004 Animal Husbandry practices in Tarikhet block of Kumaon hill of Uttaranchal. Indian Journal of Animal Sciences 74(9) : 997-999. | [7] Radotra Sudesh, Upadhyaya V S, Singh A P, Maity S R and Mishra A K 1996 Animal production – A sustainable source of income for farmers of Bundelkhand. Pro-ceedings of National Symposium on Livestock Industry for self / gainful Employment held at Chennai, September 18-20. | [8] Rajiv Deoras, Nema R K, Tiwari S P and Mohan Singh 2004 Feeding and housing management practices of dairy animals in Rajnandrapur of Chattisgarh Plain. Indian Journal of Animal Sciences 74(3) : 303-306. | [9] Walli T K 2004 Straws as important feed resource under sustainable crop dairy production system. Indian Dairyman 56(4) : 35-43. | [10] Wani S A, Mattoo F A and Shaheen F A 2009 Livestock husbandry practices in various Agro-Climatic Zones of Jammu and Kashmir. Indian Journal of Dairy Science 62 : 55-60. |