FEEDING MANAGEMENT PRACTICES OF DAIRY FARMERS UNDER VILLAGE CONDITIONS OF TAMIL NADU

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ABSTRACT

A survey was conducted in three blocks of Namakkal district by selecting 50 dairy co-operative society farmers per block, totaling 150 farmers. The data on the concentrate feed, green and dry fodder resources, feeding management practices were collected from the selected farmers by personal contact, using pre-tested schedule. The overall average number of cows available per farmer was 3.12. Except one farmer, all the farmers had followed individual feeding system. In general, majority of the farmers followed sorghum fodder feeding either alone or combined with field grass or Co-3 grass. In dry fodder feeding, maximum number of farmers used sorghum stover either singly or in combination with either paddy straw or groundnut hay. Maximum number of farmers had green fodder availability either only during post monsoon period or during rainy season or both. Majority of the farmers derived the green fodder either from cultivation or collected from field. Only about one-fourth of the farmers had green fodder availability throughout the year. Average dry matter intake for milch cattle, pregnant cum dry animal and calves through concentrate, green and dry fodder were 3.04, 2.37, 3.29; 1.06, 1.60, 2.75; and 0.32, 0.39, 0.91 kg, respectively. 91.33 per cent of the farmers had poor knowledge on improvement of fat and SNF content of milk and only 8 per cent had fair knowledge. Only 6.67 per cent farmers attempted either mineral mixture or calcite for improvement of fat and SNF content of milk and experienced positive response.

KEY WORDS: Feeding Practices, Dairy Farmers, Knowledge Level, Fat, SNF Content.

INTRODUCTION

Dairying is an occupation of rural community which not only supplements their income but also fulfils their daily requirements of milk and milk products. Balanced and economical rations in the form of complete feeds are more efficiently utilized by ruminants. To popularize the concept of complete feeds or total mixed ration among farmers, it is necessary to know the feeding practices and the feed resources available with the farmers. Through this information, the gap between the existing feeding practices and scientific requirements of feeding can be identified and filled, especially using locally available feed resources. Hence, the present study was undertaken up to assess the concentrate feed, green and dry fodder resources, feeding management practices and nutrient intake of different classes of dairy cattle in Namakkal district of Tamil Nadu.

MATERIALS AND METHODS

In Namakkal district, three blocks viz., Mohanur, Namakkal and Sendamangalam were randomly selected. Fifty farmers from each selected block, totaling 150 dairy co-operative society farmers were selected for the survey work. The data on the concentrate feed, green and dry fodder resources and feeding management practices were collected from the selected farmers by using a pre-tested schedule. Nutrient intake of cows were worked out in terms of dry matter intake through concentrate feed, green fodder and dry fodder in the existing feeding practices followed by the selected dairy farmers under field conditions. The quantity of the concentrate feed, green and dry

fodder offered during stall feeding was estimated fairly accurately. The composition of the concentrate feed, green fodder and dry fodder were analysed for proximate principles (AOAC, 2000) at Animal Feed Analytical and Quality Control Laboratory, Namakkal. The statistical analysis of the data was carried out as outlined by Snedecor and Cochran (1989).

RESULTS AND DISCUSSION

In the survey area, the overall average number of cows available per farmer was 3.01. Maximum number of cows available per farmer (3.12) was recorded in Namakkal block followed by Sendamangalam (2.98) and Mohanur (2.92) blocks. Except one farmer, all the farmers had followed individual feeding system.

In general, majority of the farmers followed sorghum fodder feeding either alone (34 per cent) or combined with field grass (30 per cent)/Co-3 grass (18 per cent)/ Co-3 and field grass (1.33 per cent). Most of the dairy farmers in the study area are small and medium farmers. They are mostly practicing dry land farming and hence sorghum was considered the best for feeding the animals. Co-3 and other hybrid grasses were used mostly by the medium farmers having irrigation facilities. Similar observation was made by Tomar and Thakur (2002) in Haryana and Sah et al. (2003) in Bihar.

In dry fodder feeding, maximum number of farmers used sorghum stover either singly (39.33 per cent) or in combination with paddy straw (45.33 per cent). Groundnut hay feeding was generally practiced in combination with either sorghum stover (5.33 per cent) or paddy straw (7.33 per cent). The quantity of groundnut hay offered was generally very less compared to paddy straw or sorghum straw. Various workers studied use of dry fodder, paddy straw feeding in Kashmir (Tomar and Lall, 1992), in Hariyana (Tomar and Thakur, 2002), wheat straw along with hay in Uttranchal (Singh et al., 2004), wheat straw, Paddy straw, maize stalks and local hay in Himanchal Pradesh (Pachouri et al., 1975) and wheat straw, soyabean stover and Jowar Kadbi in Rajsthan (Garg et al., 2005)

The green fodder availability was observed only for the post monsoon period (30 per cent) or during rainy season (16.67 per cent) or both during rainy and post monsoon period (23.33 per cent). During summer majority of the farmers reported scarcity of the green fodder. Nearly two-third of the farmers derived the green fodder from cultivation and collected from the field (59.33 per cent) and only 26.67 per cent farmers had green fodder availability throughout the year. Similar findings were also reported by Sah et al. (2003) in Bihar and Dhiman et al. (1990) in Haryana. On the contrary, Tomar and Thakur (2002) reported green fodder availability in most parts of the year in Haryana. Since, most of the farmers were practising dry land farming and the green fodder cultivation was common during monsoon period only. A small number of farmers had facilities for wet land farming. This could be the reason for availability of the green fodder only during monsoon and post monsoon period in all the blocks.

The average feed and fodder intake and dry matter intake (DMI) received through concentrate for milch cattle, pregnant cum dry animal and calves were 3.04, 1.06 and 0.32 kg, respectively. In agreement with the above findings, Tomar and Lall (1992) reported 3.6 kg of DMI through concentrates.

The average DMI fodder for milch, pregnant cum dry animal and calves through green fodder were 2.37, 1.60 and 0.39 kg, respectively and through dry fodder were 3.29, 2.75 and 0.91 kg, respectively. These results were similar to the finding of Tomar and Lall (1992) who reported that the DMI received through total forage were in the range of 1.3 to 6.1 kg in Budgam and 1.1 to 6.5 kg in Srinagar areas in Kashmir valley.

Most of the farmers (86 per cent) had fair knowledge on fat and SNF content of milk and only 14 per cent of the farmers had good knowledge. A fair number of farmers in Mohanur (12 per cent) and in Sendamangalam (8 per cent) blocks had fair knowledge on the methods of improving fat and SNF contents. Among the farmers, only 6.67 per cent attempted with mineral mixture (6 per

cent) and calcite (0.67 per cent) supplementations for improving the milk composition and experienced positive response. The farmers trained on dairy farming from dairy cooperative federation had the awareness on fat and SNF content of milk.

It is concluded that only about one-fourth of the farmers had green fodder availability throughout the year and majority of the farmers (91.33 per cent) had poor knowledge on improvement of fat and SNF content of milk and only 6.67 per cent farmers attempted either mineral mixture (6.00 per cent) or calcite for improving the milk composition.

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