



SHORT COMMUNICATION

Feeding Practices in Plain Rural Areas of Jammu Region

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ABSTRACT

This study was conducted to know the existing feeding practices in rural areas of Northern India. A survey was conducted in Jammu district including 152 farmers who had 360 buffaloes in different age group. Data was collected on feeding practices adopted by farmers through common questionnaire and visiting to the farmers. Average daily feed intake mainly wheat bhoosa of each animal was calculated for three consecutive days. Amount of concentrate fed was measured on weekly basis. Survey studies indicated that most of the farmers were feeding wheat straw *ad lib* to the animals in Jammu district. The feeding status of the animals was much below the ICAR requirement. The concentrate was given only in limited quantity which was not sufficient to satisfy the requirement of the animals in most of the cases. Thus, the milk production and productivity of the animals in general was very poor. Hence, it was concluded that there is urgent need of extension education to the farmers for improving the nutritional status of the animals by scientific feeding and management.

HIGHLIGHTS

- Concentrate was given only in limited quantity which was not sufficient to satisfy the requirement of the animals in most of the cases.
- Milk production and productivity of the animals in general was very poor.
- There is urgent need of extension education to the farmers for improving the nutritional status of the animals by scientific feeding and management.

Keywords: Concentrate, wheat straw, buffalo

Livestock production systems are shifting worldwide due to a number of reasons. In our country, among different states and UTs there is quite a large variation in the productivity and production potential of animals. The major contribution of milk from cattle in UT of J & K is from non-descript animals. Although our UT is blessed with vast natural resources of land and vegetative cover but the milk production is relatively poor than other state. There are various agro-climatic zones in J&K with varying number of animal population. The nutritional status of the animals in urban as well as rural areas is very poor. The average production of animals in the state is comparatively much lower as compared to national average. It was mainly because of poor nutritional status of the animals

attributed to poor availability of feed and fodder (Baghel *et al.*, 2004; Sharma *et al.*, 2012a; Sharma *et al.*, 2012b). Hence, it was decided to have a critical analysis of feeding practices of animals prevailing in different districts and consequently shortcomings should be pointed out by which improvement can be made in the feeding practices of animals and on their production performance (IFPRI, 2005). The present research was therefore undertaken to study the impact of different feeding practices.

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The survey was conducted in the districts of Jammu regarding the feeding practices of buffaloes and feed resources available. A survey was conducted and information/data was generated by personal visit, personal interview of the farmers and through common questionnaire. Average daily feed intake mainly wheat bhoosa of each animal was calculated. Amount of concentrate fed was measured on weekly basis.

Study was conducted to know the existing feeding practices in Jammu district. The data collected was compiled and are presented in Table 1. All the data collected was pooled into 6 clusters according to existing common feeding practices.

The feed of the animals mainly included the straw, seasonal grasses and concentrate mixture. Green grasses were offered during rainy season mainly through grazing and harvesting during 4 months (July to October). It was fed as an additional amount to lactating animals only by few farmers. The preference was given to high yielding animals. The straw was available as a dry fodder by most of the farmers but quantity was restricted owing to harvesting of wheat crop by harvesting machine and high cost of labour resulting in retaining bhoosa in the field. It was used for the feeding of lactating animals as additional quantity of fodder during night hours mostly. The results of this study are in concurrence with Choudhary (2006); Akbar *et al.* (2006); Singh *et al.* (2006) and Sharma *et al.*, (2021).

As a part of roughage mainly wheat straw was used. The paddy straw was also used as an agriculture crop residue for feeding of animals only in the relevant season. These fodder crops were harvested by most of the farmers and were mixed with the green grasses or weeds before feeding to animals. Usually straw was stored by the farmers as per its availability and maize was stored as whole and before feeding to animals they were chaffed by few farmers.

The common ingredients used for formulating concentrate mixture include mustard cake, bran, legumes husk as well as chuni and cereal grains. The arhar chuni was the main chuni used in the concentrate mixture. Decorticated groundnut cake was also used for feeding as part of the concentrate mixture. The wheat bran and chuni were the main cereal by products used for the feeding of animals. But most of the small holder farmers are in the favour of using commercially available feed for their animals.

It was being used by a limited number of famers on occasional basis, especially for the lactating animals, only after the advice of the veterinarians. Even farmers were occasionally using salt for feeding of animals. The quantity was comparatively in higher amount to either lactating or working animals. The preference was given to lactating animals. In some places salt along with concentrate mixture was sprinkled while making saani.

The feeding of animals was mostly not balanced and farmers have no idea of balance feeding. It was a tendency of the farmers to feed the animals with the feed ingredients available with them. In large number of the farmers only cereals and cereal by products were used. Some of the farmers were using the combination of cereals, cereal by products, oil seed cake and legume by-products but mostly it was unscientific. The quantity of concentrate feeding was also uncontrolled. Mostly it was much below ICAR (2013) requirement of the animals. In all categories of animals it was observed that usually these animals were underfed and that was the main cause of poor productivity and their development (Table 1). The data collected from were compiled and are presented in Table 2.

The feed available for feeding to animals in this region mainly included the wheat straw, seasonal grasses and concentrate mixture. Green grasses were mainly offered during rainy season through grazing. Most farmers were having preference of cutting the grasses for feeding to their animals. Few farmers were also growing the green fodders like maize in Kharif and summer season and berseem in Rabi season. The preference was given to high yielding animals especially crossbred cows and buffaloes. Our findings were in agreement with the study of Choudhary (2006); Akbar *et al.* (2006); Singh *et al.* (2006); Sharma *et al.*, (2020); Sharma *et al.*, (2017).

Pregnant animals only in advanced stages of pregnancy are taken care. Mineral mixture is not being offered. Usually salt is given occasionally @ 100-150 g per adult animal on weekly basis. Conc. Mixture usually includes 90% chuni+bran+husk and 10% mustard cake.

Mostly wheat straw was used for the feeding of the animals. The paddy straw was available in less quantity and also not preferred for the feeding of the animals. The maize stovers were available in plenty. Major quantity of dry fodder available was wheat straw.

Table 1: Feeding practices prevailing in Jammu district of Jammu & Kashmir (per village per buffalo).

Feed	Cluster 1	Cluster 2	Cluster 3	Cluster 4	Cluster 5	Cluster 6
Conc. Mix. (kg)	0.80	0.58	1.40	0.45	0.65	0.25
Feed ingredients (kg)						
Cake	0.40	—	—	—	0.20	0.14
Bran	0.32	—	0.40	0.45	—	0.20
Chuni Husk	0.25	0.5	0.15	—	0.2	—
Grains	—	—	—	—	—	—
Greens (kg)	3.5	3.8	4.5	5.5	3.5	3.8
(Seasonal Grasses)						
Dry fodder	12	12.4	09	10	12	08
Mineral Mixture	—	—	—	—	—	—
Salt- occasionally (g)	20-25	10-15	10-15	20-30	—	10-20

Table 2: Feeding practices prevailing in Jammu district of Jammu & Kashmir UT

Feed	Pregnant	Heifers	Bullocks	Buffaloes	Calves	Milch animal
Conc. Mix. (kg)	0.6-0.9	—	0.2-0.3	0.2-0.6	—	1.0-2.5
Feed ingredients (kg)						
Cake	0.2-0.4	—	—	0.1-0.2	—	0.3-0.6
Bran	0.2-0.4	—	0.2-0.3	0.2-0.3	—	0.2-0.3
Husks	0.1-0.2	—	—	0.2-0.3	—	0.2-0.4
Chuni	0.2-0.3	—	—	0.2-0.4	—	0.4-0.6
Greens(kg)	5-6	2-3	—	—	1-2	8-9
(Seasonal Grasses and weeds)						
Dry fodder (kg)	5-6	5-6	6-7	6-8	1-2	8-10
Mineral Mixture	Nil	Nil	Nil	Nil	Nil	Nil
Salt- occasionally (g)	15-20	5-10	10-15	10-15	—	20-30

As a part of concentrate mainly mustard cake, groundnut cake, chunis as protein supplement and maize and wheat as cereal were used. Wheat bran and husk was used as a main cereal byproduct. Some of the farmers with large number of lactating animals were using concentrate mixture mainly ground maize, wheat bran, chuni, mustard oil seed cake and salt. Mineral mixture was not used in common practice.

Usually mineral mixture was not used for the feeding of animals. The salt was occasionally used and it was only in small quantities. However, it was not a regular practice in most of the farmers. On an average it was used only @ 10-15 g/day in most of the animals except in lactating animals where quantity was bit higher i.e. about 20-30 g daily.

CONCLUSION

Thus study indicated that most of the farmers were feeding wheat straw *ad lib* to the animals in Jammu region of Jammu and Kashmir. The feeding status of the animals was much below the ICAR (2013) requirements. The concentrate was given only in limited quantity which was not sufficient to satisfy the requirement of the animals in most of the cases. Thus, the milk production and persistency of milk production of the animals in general was very poor. Hence, it was concluded that there is urgent need of extension education to the farmers for improving the nutritional status of the animals by scientific feeding and management.



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