Journal of Entomology and Zoology Studies

Available online at www.entomoljournal.com

Journal of Entomology and Zoology Studies

E-ISSN: 2320-7078
P-ISSN: 2349-6800
www.entomoljournal.com
JEZS 2020; 8(6): 446-448

Received: 10-09-2020
Accepted: 30-10-2020

NM More
Department of Animal Husbandry and Dairy Science, College of Agriculture, Latur, VNMKV, Parbhani, Maharashtra, India

BM Thombre
Associate Dean and Principal, College of Agriculture, Ambajogai, VNMKV, Parbhani, Maharashtra, India

RA Patil
Assistant Professor, Department of Animal Husbandry and Dairy Science, College of Agriculture, Parbhani, Maharashtra, India

Corresponding Author:
NM More
Department of Animal Husbandry and Dairy Science, College of Agriculture, Latur, VNMKV, Parbhani, Maharashtra, India

Feeding practices of dairy animals in Latur district of Marathwada region

NM More, BM Thombre and RA Patil

Abstract
The present investigation entitled "Feeding Practices of Dairy Animals in Latur Tahsil of Latur District" was undertaken to study different package of practices for feeding cattle and buffaloes with dry roughages, green roughages and concentrates with identify and to suggest recommended feeding practices. The 120 farmers of 9 villages were selected to study in Latur tahsil of Latur district in Marathwada region. The study revealed that all the farmers provide feed and fodder as decided by state government i.e. large animals were fed with 14 kg green fodder, 8 kg dry fodder and 0.500 gm concentrates whereas small animals were fed with 8 kg green fodder, 3 kg dry fodder and 0.250 gm concentrates, respectively. Hence, it may be concluded that there is need to demonstrate scientific feeding and management practices, also management of fodder and water for summer season which is need for exploiting optimum production and proper management of livestock.

Keywords: Feeding practices, respondents, dairy animal, Latur

Introduction
Livestock plays an important role in national economy. Next to agriculture animal husbandry sector is most important economic activity in rural area and about 73.00 percent of all rural households depends upon livestock farming as the major source of supplementary income [4].
The Animal census (2017) have revealed that the total livestock population of India have reached up to 536 million rank first in livestock production and ranks first in total milk production. India, the largest producer of milk in the world, is set to produce over 187.00 million metric tonnes (MMT) milk during 2018-29. India has vast resource of livestock, which play a vital role in improving the socio-economic conditions of rural masses. There are about 302 million bovines, 74 million sheep, 148 million goat and about 9.6 million pigs as per 20th Livestock Census in the country [1].
Feeding constitutes the largest item of cost in milk production. It is therefore, important that feed costs are to be at lowest possible level in order to make production profitable. Selection of proper feed using right combination of feeds, feeding the adequate quantity with other related practices are some of the ways which will enable the farmer to feed his cows and buffaloes more economically, increase their efficiency and make the dairy more paying. Low productivity in livestock is due to many reasons. Several studies revealed that lack of proper information on the part of livestock production and management also a major problem of farmers in general, and small farmers in particulars. It has been also observed that farmers are not fully aware of improved practices of livestock production and management.

Materials and Methods
The data for present investigation entitled "Feeding Practices of Dairy Animals in Latur Tahsil of Latur District" was collected from different farmers especially who are rearing the cattle and buffaloes in a Latur tahsil of Latur District in Maharashtra State. A Comprehensive Questionnaire was prepared to collect the information by personal interview with individual farmers.

Methods of sampling and size of sample: The data obtained for the study was collected by multistage random sampling technique from Latur tahsil of Latur district.
Selection of villages: Random selection of nine villages from Latur tahsil was made.
Selection of farmers: The farmers were selected randomly from each village and the total sample size is comprised of 120 farmers from Latur tahsil of Latur district.

The collection of above information of each dairy farmer, by method of 'Personal Interview' through questionnaire was followed. For these questionnaires, a standard Profarma of questionnaire as adopted by National Bureau of Animal Genetic Resources (NBAGR), Karnal was prepared and taken for survey.

Results and Discussion

Feeding status

It is need to emphasis the importance of feed and fodder for production and body maintenance. Apart from the genetic capabilities of the animals, the milk production in cattle and buffalo goes in response with nature and the quantities of the feeds and fodder allowed to them, So the evaluation of the present status of feeding practices adopted by the farmer. The present investigation was therefore under taken to assess the feeding status of dairy animals in term of grazing, green roughages, dry roughages, concentrates and mineral mixture supplied.

i. Grazing

Feeding system is based on grazing of animals on native pasture. Ruminants receive part or most of the feed requirement through grazing on natural grassland. Large ruminant receive about 50-60 percent of dry matter from crop residues.

ii. Grazing distance

Grazing distance is distance between animal shed and grazing area. Bunds of field and native pasture are common grazing areas utilized in rural area. The grazing distance for dairy animal varied: the animals had to walk for 1 to 3 km to reach the grazing land. There were no reserved grazing lands or common grass lands. The animals are brought in the field and allowed to graze the field boundaries and low lying fields of conventional grasses.

ii. Type of grazing

Generally native pasture and field bunds are utilized as grazing area. Dairy farmers generally use field bunds as grazing area. Nearly 85.00 percent of owners took their animals for grazing on bunds/ boundaries, only 15.00 percent of the farmers took the animal on the common pastures and road sides.

iii. Time of grazing

All dairy farmers take their animals i.e. cows and buffalo for grazing at 10:00 am – 11:00 am in morning and return during evening at 5:00 pm – 6:00 pm. animals were engaged in grazing for about 7-8 hrs. [2]. also find similar results. They reported that nearly 51.00 percent *Gavalis* spent 5 to 8 hours daily in grazing their livestock.

iv. Stall feeding

In general complete stall feeding to milch animals is practiced in urban areas but nowadays as the grazing land was shrinking day by day the farmers are practicing partial and complete stall feeding.

Supply and source of fodder

During, the investigation, it was seen that dairy farmers feed their animals either dry fodder (purchased or homegrown), green fodder as per the availability. Except the landless, all the dairy farmers did offer their animals roughages available either in the form of by product such as jowar and bajra whereas the landless animals owners purchase such fodder in the form of fodder maize, fodder jowar and sometimes green grass from the sugarcane fields were the major fodders and cotton seed cake, arhar / soybean *guli* were the concentrate available for feeding. The large farmers on an average offer large quantity i.e. 14.63 Kg of green fodder when compared with other categories. Similarly, an average of 0.00, 3.46, 6.00 and 17.15 Kg of green fodder is offered to the indigenous cows by landless, marginal, medium and large categories of farmers. The large farmers on an average offer large quantity i.e. 17.15 Kg of green fodder when compared with other categories [5] showed that landless labors met their requirement of green fodder, mainly through grazing, where as medium and large farmers supplied green fodder to animals.

Feeding green roughages

The observed frequencies on the quantity of green roughage fed to milch cow and buffalo by landless, marginal, medium and large farmers were compiled and analyzed for the interpretation of results and are tabulated in table 1.

Table 1: Average green roughages offered to dairy animals by various group of farmers

Type of farmers	Mean daily green roughages offered (Kg/animal)		
	Buffalo	Crossbred	Indigenous
Landless	5.00	3.00	0.00
Marginal	7.10	4.02	3.46
Medium	12.41	10.47	6.00
Large	23.41	14.63	17.15

It reveals that on an average buffalo was offered 5.00, 7.10, 12.41 and 23.41Kg of green roughages by landless, marginal, medium and large farmers, respectively. From the figures, it could be seen that buffalo of landless farmer got least amount of green roughages in comparison to others and buffalo of large farmer got highest amount of green roughages in comparison to others. Similarly, an average of 3.00, 4.02, 10.47 and 14.63 Kg of green fodder is offered to the crossbred cows by landless, marginal, medium and large categories of farmers. The large farmers on an average offer large quantity i.e. 14.63 Kg of green fodder when compared with other categories. Similarly, an average of 0.00, 3.46, 6.00 and 17.15 Kg of green fodder is offered to the indigenous cows by landless, marginal, medium and large categories of farmers. The large farmers on an average offer large quantity i.e. 17.15 Kg of green fodder when compared with other categories [5]. showed that landless labors met their requirement of green fodder, mainly through grazing, where as medium and large farmers supplied green fodder to animals.

Feeding dry roughages

The data on the quantity of dry roughage fed to buffalo, crossbred and indigenous by landless, marginal, medium and large farmers were compiled and analyzed for the interpretation of result and are tabulated in table 2.

Table 2: Average dry roughages offered to dairy animals by various group of farmers

Type of farmers	Mean daily dry roughages offered (Kg/animal)		
	Buffalo	Crossbred	Indigenous
Landless	3.00	2.50	0.00
Marginal	5.38	3.79	2.75
Medium	9.66	10.86	6.75
Large	19.16	12.45	14.25

Table 2, reveals that on an average buffalo was offered 3.00, 5.38, 9.66 and 19.16 Kg of dry roughages by landless, marginal, medium and large farmers, respectively. From the figures, it could be seen that buffalo of landless farmer got least amount of green roughages in comparison to others and buffalo of large farmer got highest amount of green roughages in comparison to others. Similarly, an average of 2.50, 3.79, 10.86 and 12.45 Kg of dry fodder is offered to the crossbred cows by landless, marginal, medium and large categories of farmers, respectively. The large farmers on an average offer large quantity i.e. 12.45 Kg of dry fodder
when compared with other categories. Similarly, an average of 0.00, 2.75, 6.75 and 14.25 Kg of dry fodder is offered to the indigenous cows by landless, marginal, medium and large categories of farmers. The large farmers on an average offer large quantity i.e. 14.25 Kg of green fodder when compared with other categories.

Feeding of concentrates

The data collected regarding the feeding of concentrates to the milch animals is compiled and tabulated in table 3.

Table 3: Average amount concentrates offered to milch animals

Type of farmers	Buffalo	Crossbred	Indigenous
Landless	0.50	0.90	0.00
Marginal	1.38	1.41	1.34
Medium	2.25	2.21	2.13
Large	2.58	4.22	3.50

Table 3, reveals that on an average one milch buffalo was offered 0.50, 1.38, 2.25 and 2.58 kg of concentrates by landless, marginal, medium and large farmers, respectively. From the figures, it could be seen that buffalo of landless farmer got least amount of concentrates in comparison to others and buffalo of large farmer got highest amount of green roughages in comparison to others. Similarly, an average of 0.90, 1.41, 2.21 and 4.22 Kg of concentrates is offered to the crossbred by landless, marginal, small and large categories of farmers. The large farmers on average offer large quantity i.e. 4.22 Kg of concentrates when compared with other categories. In case of indigenous, an average 0.00, 1.34, 2.13 and 3.50 kg of concentrates offered by marginal, medium and large farmer, respectively. The large farmers on average offer large quantity i.e. 3.50 Kg of concentrates when compared with other categories

Feeding pattern of dry fodder

Chaffing and cutting of fodder reduce the wastage and increase the digestibility of animal. It is also beneficial for better storage of fodder. Selectivity of animals for leaves can be removed by chaffing. Majority of the dairy farmers (87.05 percent) practiced to feed roughages without chaff, while (12.95 percent) respondents offered roughages after cutting by hand cutter and chaff cutter (machine). Majority of the dairy farmers were lacking the knowledge and unaware about the importance of using chaffed roughages. It might be due to non-availability of chaff cutter at cheaper rate in hometown, lack of manger facility, inadequate knowledge of efficient utilization of feed and fodders. The findings were supported by the results shown by [6].

Feeding preserved roughages

In the 120 dairy farmers, not a single dairy farmer was aware about the method of preservation of roughages either into silage or hay. In the survey it was seen that the major problem in preservation of such roughages were lack of sufficient surplus green fodder and method of demonstration of preparation of either silage or hay

Supply of mineral mixture

Feeding of mineral mixture is essential for well-being, production and reproduction of animals. It was found that very meager (2.70%) respondents provided mineral supplements to their milch animals. It might be due to lack of awareness about feeding minerals to animals due to illiteracy and least interest in public communication for training and not ready to pay additional cost [3]. reported that the only 11.50 percent respondents provided extra mineral mixture to their milch animals, It might be due to lack of knowledge of dairy animal owners.

Conclusions

It was concluded from the results of this investigation as, Farmers were feeding roughages as compared to concentrates and on average 10-15 kg green roughages in the form of jowar, grasses, bajra was given and 4-6 kg of dry roughages in the form of Kadbi and dry grasses were made available to individual livestock. Farmers also fed their animals with concentrate i.e. average concentrate fed to crossbred cow is 2.35 kg, 2.20 kg concentrate to buffaloes and 2.05 kg concentrate fed to indigenous cow. Preserved roughages i.e. hay and silage fed by farmer to their animals was found negligible. Most of farmers fed their animals with common salt as a source of mineral mixture. The farmers were allowing their livestock to graze in the field and barren land throughout the day.

Reference

1. Anonymous. Livestock Census. Dairying in India, A Statistical Profile. Departmet of Animal Husbandry, Dairying and Fisheries, Ministry of Agriculture, Government of India 2019.
2. Belli RB, Manjula N. Adoption of Dairy Management Practices of Tribal Gavalis. Maharashtra J. Extn. Edn 1997;16:137-142
3. Kumar J Singh, Somnath R, Dayal R, Singh H, Singh S Studies on Feeding & Breeding Practices of Dairy Animal in western Uttar Pradesh, J. of Pharmacognosy and Phytochemistry 2019;3:29-36.
4. Kurup MGP. Milk Production in India, Perspective. Indian Dairyman 2000;52(1):25-38.
5. Pata BA, Odedra MD, Ahlawat AR, Savsani HH, Patbandha TK. Survey on Housing and Feeding Practices of Buffalo Owners in Junagadh and Porbandar District of Gujarat, India. Int. J. Curr. Microb. App. Sci 2018;**7**(08):1195 1202.
6. Sabapara GP, Desai PM, Singh RR, Kharadi VB. Constraints of Tribal Dairy Animal Owners of South Gujarat. Ind. J. Anim. Sci 2012;82(5):538-542.