



ISSN (E): 2277-7695
ISSN (P): 2349-8242
NAAS Rating: 5.23
TPI 2022; SP-11(6): 2578-2582
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www.thepharmajournal.com
Received: 17-04-2022
Accepted: 20-05-2022

Kalpita Borar

Student, Department of School of Agriculture, Lovely Professional University, Punjab, India

Dr. Rajeev

Assistant Professor, Department of Agronomy, school of agriculture, Lovely Professional University, Punjab, India

Management practices followed by dairy farmers in Kanarpura village of Rajasthan

Kalpita Borar and Dr. Rajeev

Abstract

The study was conducted in the village of Kanarpura in Rajasthan. The study was performed to get on information on living breeding, feeding and accommodation managing methods for dairy cattle. Dairy farmers were chosen aimlessly to learn about the methods they pursue. During the period of my visit, I was able to speak to the growers at incredible heights and was capable to ask queries regarding the numeral of cattle they possessed, their chosen species of cattle and the reasoning after selecting the distinct species, the total milk creation by their dairy farm, the type of meal they feed to their creatures, their maintenance and managing, etc. It was seen that 85.00% of the respondents reported honest assistance while 15.00% of the cattle caretakers depended on synthetic insemination. Regarding feeding methods, the majority of the farmers (89.00%) observed cluster feeding and fed in fallow or harvested areas. Home-prepared concentrate mix was overall (70.00%) in the area. All the cattle caretakers (100.00%) had a kutchra bed in the hut and half of the dairy growers (40.00%) kept their cattle roughly the home. A double-sloped roof along with a double-row accommodation system was observed (20.00%) in the study area. Very few of the respondents observed grooming (30.00%) procedures. The outcomes demonstrated that knuckling was the main form of milking (100.00%). All the respondents (100.00%) washed the udder and teats and washed their hands before milking. More additional half of the respondents (65.00%) provided colostrum to a recently born calf within 2 hours. All the respondents (100.00%) attended to the calf at the time of calving and the majority of the cattle protectors cut and disinfected the navel line of the calf. Only a few respondents (10.00%) dehorned and castrated the calf. Regarding suffering animal treatment, the majority of the cattle caretakers (70.00%) selected first charlatans then veterinary physicians/stockmen. The majority of the respondents (60.00%) observed vaccination and deworming practice. The majority of the cattle caretakers (75.00%) also separated their unhealthy animals from fit animals. The water trough and manger were cleaned at the weekly interval by all the respondents (100.00%), while the animal shed was cleaned daily by the majority (60.00%) of the cattle keepers. I also acquired practical knowledge about the concerns and issues encountered by the farmers in my region. I was capable to collect data about the spoilage of milk due to the absence of depository structures for hold in the area. Corruption at milk co-operative enterprises and unavailability of veterinary physicians at the clinics. The farmers also encountered problems with silage availability due to excessive warmth and drought. India's rustic family owns cattle and has lived growing them since a long time ago. If our policymakers can cause an actual difference in the environment and be capable to donate credit to the rural farmers, the milk system of our nation will change melodramatically. We have come to a lengthy method in periods of milk production from being a nation containing a lack of milk to the most elevated producer of milk in the globe. The dairy farmers of advanced nations have evolved very currently in spans of technology and thus we ought to resume to save our rural dairy farmers by delivering subsidies and setting big import tariffs on milk exports and milk derivatives.

Keywords: Milk, farmers, high, production, feed, management

Introduction

A dairy is a company which has been specified for processing or harvesting (or both) animal milk mostly from buffaloes or cows or both, while even camels, sheep, and goats for the human food. A dairy is typically found on a dairy ranch or in a mixed farmstead that is indulged in the harvesting of milk. The dairy enterprise is a kind of agribusiness that concentrates solely on the making of milk. This is completely separate from growing animals that are to be slaughtered for eating and other products. The dairy farmstead sector even recreates an important role in attaining nutrition safety, decreasing deprivation, and even aids in developing career options for women, and delivering a consistent steady basis of revenue for agrarian families. According to the FAO 2018 report, more than 400 million needy individuals rely on livestock, and many of them are short and borderline dairy farmers. In the era of 1950s, India was a milk shortage nation and it hung completely on its imports.

Corresponding Author

Kalpita Borar

Student, Department of School of Agriculture, Lovely Professional University, Punjab, India

In 1965, the nation of India launched the National Dairy Development Board to lead India's dairy sector development. In 1970, the government established Operation Flood (OF) which was the planet's largest dairy product agenda whose purpose was to improve the milk production of our nation. The dairy sector in our nation is one of the numerous important sectors in the Indian economy that not only just supplies work to lakhs of rural families but also assists in donating to the frugality. Among the livestock yields, milk by-products consist of the most elevated speed and stake, and they accounted for 70.2 per cent of the livestock sector in 2017. India is fine in milk production because almost 70 million dairy agriculturalists are employed in the dairy sector. About 60% of the customer cost from the milk runs straight to the farmers which is the highest among main milk-producing nations.

Material and Methodology

The present study was undertaken in the Kanarpura village of Rajasthan. Kanarpura is a village in Chomu Tehsil in the Jaipur district of Rajasthan state. The village is administered by a Sarpanch who is an elected representative of the village as per the Constitution of India and Panchayati Raj (India). Five dairy growers were chosen unsystematically. The information was collected via individual interrogation processes via a consultation schedule.

[Table]

Results and Discussions

During this entire working course, I have performed on the practice of my student project in which I satisfied a total of five visits to distinct dairy growers in my nearby town, Kanarpura, Jaipur. The only objective of these field visits existed to get some applicable understanding along with some

exchange with the farmer. I shortly interacted with the farmers and the bits of data that I gathered during the exchange were placed into a presentation which was subsequently presented by me in the class each week. The gathered data was interpreted and assembled into a tabular format to correspond among themselves to study which farmer was better tolerable and functioning well in comparison to any others. The management practices of milking, housing, feeding, calf rearing and health care management followed by all the farmers were studied and personal practice has been described in the next sections.

Breeding management practices existed

An extremely higher ratio of the cattle caretakers resorted to natural benefits and only a rare of them embraced Artificial Insemination (AI). Concerning the grade of breeding bulls, the majority of the respondents operated thoroughbred indigenous bulls observed by vanilla, crossbred and exotic bulls for insemination/ natural benefit of their cows. Therefore, it was quite clear from the emerging consequences of different breeding methods pursued by the cattle caretakers in the analysis zone that the majority of the cattle caretakers were not embracing the suggested breeding methods. There existed a vast hole in the adoption of certain procedures, like AI. The comparison data includes the name of the farmer, his academic credentials, the size of land possessed by the farmer for his yield cultivation as well as the amount of the land inhabited for the location of the dairy ranch. The information also reaches the numeral of buffaloes and cows present on individually dairy ranch and the species to which they belong along with the number of calves they hold. The first keeper farmer had the largest ranch among the remains and also had the greatest numeral of calves and buffaloes.

Table 1: Introduction about farmers

	Farmer 1	Farmer 2	Farmer 3	Farmer 4	Farmer 5
Name	Mr Rajender Singh	Mr. Pushpender Rana	Prakash Jhangir	Rajender Singh	Rama Devi
Education	10 th	9 th	10 th	12 th	6 th
Area Owned for Dairy	1 acre	1 acre	1 acre	1 acre	1 acre
Buffaloes	0	2	4	6	4
Cows	1	0	0	1	0
Calves	0	1	1	2	0
Milk production	10 litres	50 litres	100 litres	150 litres	40 litres
Milk selling price	55/- per litre	35-45/- per litre	45-50/- per litre	40-45/- per litre	30-35/- per litre
Housing System	Double Row housing system	Double Row housing system	Double Row housing system	Loose Housing system	Single Row housing system
Location of Shed	Near Dwelling House	Near Dwelling House	Near Dwelling House	Inside Dwelling House	Near Dwelling House
Type of Floor	Pucca Floor	Kaccha Floor	Pucca floor	Pucca floor	Kaccha Floor
Waste management	Used in farm	100% applied	100% sold in market	100% sold in market	100% applied to farm

Feeding management practices existed

All the cattle caretakers stall-fed their animals. Stall feeding was not acceptable, then grazing was rehearsed. During stall feeding, all of the farmers provided their animals in bunches. About one-fourth of the farmer kept a small part of their land as a field for feeding their animals for an occasional year. Behind periodic years, the pasture land was used for crop

sowing and another part of the land was kept for pasture without any seeding of enhanced hay and other methods. My survey results showed that the majority of the cattle caretakers fed home-prepared concentrate blend to their animals observed by readymade varieties and an assortment of home-prepared and readymade.

Table 2: Feeding method practices existed

Practises which existed	Percentage
Grazing	100.00
Feeding of animals Stall feeding	100.00
Individual feeding	35.00
Method of feeding Group feeding	60.00
Harvested/fallow field	75.00
Chopping of dry fodder Yes	55.00
Grazing site Common pasture land	80.00
No	00
Chopping of green fodder Yes	60.00
Cultivation of green fodder Yes	95.00
No	00
Readymade	55.00
Type of concentrate mixture Home prepared	60.00
Readymade Pre-treatment of concentrate mixture Soaking	70.00
A mixture of home-prepared	65.00
Feeding of common salt Yes	45.00
Soaking and boiling	40.00
No	00
Feeding of mineral mixture Yes	72.00
No	00

Housing management practices existed

My survey reaches the accommodation units operated on the dairy farmsteads as well as the kind of flooring utilised in the lodging design and whether the housing method has a good drainage plan present or not. Most housing systems which were utilized stood the open accommodation plan where the animals are left in the open on a border. The prevalence of the cattle caretakers rehearsed using a loose housing system while the enormous scale and few of the cattle caretakers, in the meanwhile, operated a dual row accommodation scheme which is better practical and more beneficial for the animals. Only a very few of the cattle caretakers used the pucca foundation for their housing schemes while the remains used the kaccha base for cost-cutting measures. A large portion of the cattle caretakers utilised bedding fabric during the winter seasons. The bedding material consisted of tips of sorghum, parched sand, ash and debris parched grass. Tips of sorghum and bajra were preferred for bedding fabric because of their

good absorptive property. Effects of the survey showed that the majority of the cattle caretakers segregated their cows before calving. There was no different calving package but farmers segregated their cows a rare days before calving from different animals in the identical shed and all of the respondents delivered bedding fabric to expectant cows. The majority of the farmers had good sunlight conditions in their animal shacks. It was largely due to the abundance of electrified homes in pastoral regions of the Kanarpura district. All of the farmers cleaned the cow's rear quarters behind a drop of the placenta. The results of the current survey showed that current housing management methods were not according to the suggested methods. There was some lacuna, particularly in the drainage canal, area of the shed and absence of scientific cattle shed. These existed attributed largely due to inadequate understanding regarding the returns of scientific accommodation.

Table 3: Housing management in the village

Practises which existed	Percentage
Location of shed Inside dwelling house	100.00
Separate from dwelling house	100.00
Near dwelling house	35.00
No	00
Grooming practice of cattle Yes	75.00
Wooden	75.00
Pucca	30.00
Type of manger Kutcha	88.00
No	00
Manger Feeding Yes	95.00
Brick in mud	55.0
Brick and lime/cement	55.00
Material used in walls Thatch	80.00
Bricks and mud	80.00
Asbestos	35.00
Stone slab	35.00
Soaking and boiling	65.00
Roof material of shed Thatch	70.50
Double slope	30.00
Single slope	30.00

Milking management practices existed

The prevalence of the cattle caretakers observed knuckling technique of milking. Solely a rare of them observed the correct manner i.e. full hand milking technique. Concerning the area of milking, the majority of them milked cows at the exact location and the rest were milked at a distinct and arid place. None of the farmers rehearsed stripping at the rear of milking. All of the cattle caretakers swept the udder and teats and scrubbed their hands before milking. All the farmers milked their cows double the daytime. Knuckling is believed the wrong way of milking. The bad way was rehearsed more by milkers in the analysis area. This may direct to persistent disturbance of the teat channel due to pressure of knuckles which in turn, may induce mastitis in numerous issues and thus, it is not recommended. The calf should be permitted to suckle just before milking to control any teat damage. The milking procedure should be performed in a neat and different location for pure milk production. The oxytocin injection should be avoided for milk failure because it is very dangerous to lactating cows as well as calves and human beings and legally, it is forbidden. Moist hand milking should be bypassed for pure milk production as well as to stop any type of teat damage. Sealing of teat channels with proper cream should be performed at the back of lactation, which ensures the precluding of any kind of illness during the arid duration.

Waste management practices existed

My survey also examines the manure administration procedures observed by the farmers. All of the farmers organised a pit for the conversion of cow manure to farm yard manure (FYM). Modification of manure to farm yard manure brings from 6 months to 8 months which exists then either utilised by the grower on his land for cultivation of vegetables or traded in the market for a cost.

Health care management practices existed

The data collected from the cattle caretaker concerning health care management practices were also surveyed. It was observed that the majority of the farmer got feted their suffering animals by imposters rather and if sick animals were not recovered, then just they got veterinary physicians for therapy but at that time the state of ill animals kept becoming extremely grave. Just a rare of the cattle caretakers got feted their ill animals correctly by veterinary physicians. Concerning vaccination against HS, FMD, and BQ, the majority of the farmer got their animals vaccinated. My survey outcomes showed that the majority of the cattle caretakers separated their ill animals from healthful ones. Regarding deworming their animals regularly, the majority of the cattle caretakers cremated the lifeless body of animals throughout the town as such. It was also observed that most of the cattle caretakers swept moisture around and drove it at weekly intervals. Only a few of the farmers tended the tracks and managers on alternate daytimes and day-to-day, respectively. It was inspiring to mention that majority of the cattle caretakers cleaned their animal huts customary. Regarding standards assumed to manage files, the majority of the farmers operate the steam of trash grass/hay to prevent flies/mosquitoes. Only a rare cattle keeper operated electric fans to prevent flies and mosquitoes.

Conclusion

There is an extreme number of weak animals which now

contend with the effective dairy animals in the utilization of known meals and silage. The grazing place's existence decreased markedly every year due to large-scale industrial development resulting in a lack of supply of meals and grass to the entire prerequisite. The ever-increasing void between need and supply in meals and silage determines the implementation of dairy animals. Moreover, the provision of inadequate grade forage to dairy cattle determines the animal production system. The low power of buying meals and grass by the short and frontier cattle caretakers and agricultural labourers employed in dairy product developments in an insufficient feeding of animals. Non-supplementation of mineral combination affects mineral depletion conditions in animals. High-cost feeding is glimpsed to improve presentation but lowers the earnings of the dairy industry. Delinquent maturity, in most Indian cattle breeds, is a typical situation. There is no effective detection of warmth signs during the oestrus cycle by the cattle owners. The calving break is on the increase resulting in a decrease in the efficiency of the animal version. Diseases causing abortion guide to financial failure in the enterprise. Minerals, hormones and different vitamin defects lead to an expansion in fertility issues. Veterinary health care means are located in far-off locations. The balance between the cattle people and veterinary associations is wider, therefore resulting in bad health benefits to animals. No standard and periodical vaccination schedule is followed, and the regular deworming schedule is not done as per schedule, therefore resulting in serious mortality in calves, particularly in buffaloes. No fair exemption is established against different cattle conditions. Numerous cattle landlords do not supply valid safeness to their cattle leaving them uncovered to harsh climatic circumstances. Unsanitary disorders in cattle shed and milking yards, show mastitis conditions. Dirty milk production shows a decrease in storing grade and spoilage of milk and other effects. The main challenges encountered by the dairy sector in India are sourcing and logistics. This is because the procurement of new milk is a considerable important element of this industry. It is not possible to procure milk above a 200-kilometres radius; because of the increased perishability of the product. Another challenge is lower productivity and output. The cold storehouse buildings and supply chain infrastructure blockages are everywhere in the whole dairy farm sector in India. There is a requirement to create these infrastructure skills slightly at tier-3 centres. Despite the exponential development of the dairy enterprise, India is still meeting quite a lot of challenges of insufficient milk rate, inferior yield, absence of infrastructure and fragmented production. Several infrastructure-related blockages are always present in both the back-end as well as front-end supply chain. There exist a ton of options and challenges in The Indian Dairy Industry. Dairy products are a major origin of affordable and healthy meals for millions of individuals in our nation and the only good source of animal protein for a considerable vegetarian part of the Indian population, especially among the landless, little and borderline farmers and women. Dairying has ever been deemed one of the important actions aimed at alleviating deprivation and unemployment, particularly in agrarian regions. In India, almost three-fourths of the people live in agrarian provinces and about 40% of them are inadequate.

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