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Existing management practices followed by the cattle keepers of Sri Mayapur goshala in Nadia district of West Bengal

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Abstract

The study was conducted in Sri Mayapur Goshala, situated inside the ISCON temple in Nadia district of West Bengal to gain first-hand information on existing breeding, feeding, and housing management practices for dairy cattle. It was observed that, on this farm, the respondents inseminate their cows at an early heat stage. 100% of breeding is done by artificial insemination method and the cows and bullocks are kept separate in different houses to avoid natural breeding. Pregnancy diagnosis is also done by the labourers of the farm. Regarding feeding practices, along with the stalked foods the animals are also allowed to graze in the field to consume green grasses. A balanced and concentrated diet chart is also maintained for the cattle daily. This dairy farm had a pukka floor with a corrugated sheet. All the cattle have to go through regular grooming practice. The results indicated that knuckling method is executed for the milking purpose. The calves are fed colostrum up to three weeks after birth. The calf delivery process is done by a veterinary team. Regarding sick animal treatment, they are kept separate from the healthy cattle and they are kept in regular check-ups by the veterinary team itself. All the houses of the cattle are regularly washed and disinfected by the labourers by spraying waters and disinfectants.

Keywords: ISCON, management practices, knuckling, colostrum

1. Introduction

India is a country of 138 crore people and it is increasing continuously. It's becoming increasingly difficult for the entire growing population to meet their food needs by cultivating on this limited area of land. Unemployment is also rising for a larger population. Milk production and dairy farming is acting as supplements both by providing dairy products as food and also generating employment for the countrymen. Dairy products also increase our diet value by adding lots of healthy elements to them. From the Dairy industry our fuel, manure/and fertilizer needs are also being met. Milk is the highest agricultural produces in India. The Indian dairy industry contributes 5.3% of agricultural Gross Domestic Product (GDP). West Bengal is a very integral state of India. 73% of its population belongs to the rural area. So, besides having agriculture as the main source of income they are evolving themselves in animal husbandry. It produces them to feed and as an extra source of income also. Production of milk is a great source of profit.



Sri Mayapur Goshala

Sri Mayapur Goshala is one of the largest dairy farms in the Nadia district in terms of both the number of animals and the size of the farm. This farm was visited on 15th march of 2022. It Was owned by ISCON (International Society for Krishna Consciousness) committee. It was maintained by 20 labourers and a veterinary team. This firm was located in Village-Mayapur (beside Jalangi River), P.O.-Mayapur, District-Nadia, and State-West Bengal. It was almost 27 kilometres far from my home. Milk is sold to the residents of Mayapur and is also used in the Deity and devotee kitchens. This article is all about this Sri Mayapur Goshala, its dairying method, constraints etc.

2. Method and Methodology

The present study was commenced in Mayapur blocks of Nadia district in West Bengal. Sri Mayapur Goshala, one of the biggest dairy farms in Nadia was selected for this study. 10 members of that farm was selected randomly as respondents.

After arriving in the farm, the data were collected by personal interview techniques through an interview schedule. Various types of questions were asked to the dairy farmers regarding the farm and all the questions were related to this particular study. Questions like number of animals, breed of those animal, feeding of the animals, amount of milk production, calf rearing and health care management, labour requirements, net return form the farm, input cost, etc. were asked. Some other things like housing system of the farm,

housing type of the farm, infrastructure, boundary of the farm was also observed. All the answers from the care dairy farmer regarding my survey were noted down properly.

Sri Mayapur Goshala is maintaining an extraordinary thing by filling their farm with all indigenous breeds. Among all 457 cattle, there were no exogenous and crossbreed cattle present over there. Those existing cattle belong to Gir, Sahiwal, and Kankrej. Among them, around 220 cattle belong to Sahiwal breed i.e., 48.1%. Around 170 cattle belong to Gir breed i.e., 37.1%. The rest of the cattle belong to the Kankrej breed.

3. Result and Discussion

A. Existing Animal Recourses

Sri Mayapur Goshala is one of the largest dairy farms in the Nadia district of West Bengal. It contains a total of 457 animals. Among them 355 i.e., 77% of female cattle, 48 i.e., 10.5% of the bullock, and 54 i.e., 11.8% of calves. Now among the all 355 female cattle 37 (which is 10.4% of female cattle and 8% of the farm) are heifers and 318 (which is 89.6% of female cattle and 69.5% of the farm) are milking cows. There are around 54 bullocks, who go every day for grazing. These bulls are about 5 to 6 years old and have huge horns and strong bodies. There are about 10 bulls that are presently being used for pulling carts and the rest are being used to plot the field.

B. Existing Housing System



Existing Housing System

The dairy farm has a proper housing system. It has a tail-to-tail housing system with a pukka structure i.e., made of bricks. In those houses facilities of lights and fans are also there. The feeding channel is also attached to the housing where the dairy farmer provides feed to the cattle. Not all cows are kept together. Milking cows, heifers, bullocks, and calves are kept in separate rooms. There was a total of 20 different houses for the cattle. Out of those 20 houses, 5 houses are for bullocks, 2 houses are for calves, 2 are for heifers, and the rest of the houses are used to keep the other milking cows. There was a well-decorated boundary present to protect these animals. Inside that boundary grazing field and housing of the animals, were present. There are other rooms on the second floor where the dry straws are stored.

C. Existing Feeding Management System

The food which is provided to the cattle is made manually. In a single area, the laborers processed this food by mixing various types of food materials. For making the feed of 457 cattle for a single day, they use 300 bundles of rice straw, 2 trolleys of green grass, 605 bags of wheat brans, 3 bags of

maize dust, 2 bags of pulses dust, 70 kg of oil cake, 15 kg of salt, 2 tin of jaggery, 700 pcs of banana. They mixed this thing properly and provided it to the cattle regularly. Sometimes they provide Napier grass instead of the green grass for them. There are around 54 bullocks who go every day for grazing in the field where they can also eat the green grasses. Except for the heifers all the cows go every day for grazing in the field. It helps the animals to keep healthy and active. This process allows to improve the digestion of the animals and increases milk production also.

D. Existing Milking Management Practices

Though the farm contains so many animals, they don't use any kind of milking machine to milk the cows. Instead, milking is done by knuckling method. Not all milk is milked from the cows. When the amount of milk reaches the target, milking is stopped. Separate workers have been hired for milking. They are milked at the same place as their housing. It saves time and labour also. For some cows, a certain person is appointed who milked those same cows every day. In this way, the worker becomes known to the cow and the cow is no

longer afraid of the worker and allows him to milk. All the cows belong to the Indigenous breed and the average milk production of the animals per day is 10-12 litres.

E. Existing Breeding Management Practices

According to the respondents, to maintain the heritage of the farm they don't allow the cattle to do natural breeding as it could lead to a mixed breed variety. So, to avoid this kind of thing all the breeding i.e., 100% of breeding is done by artificial insemination method. These operations are totally carried out by the veterinary surgeons of the farm. All the undesirable bullocks are castrated to restrict the natural breeding process. This operation is also done by the veterinary surgeons present inside the farm. According to my observation, three bullocks, which were castrated 20 days before, were facing some problems in walking.

F. Existing calf rearing management practices

Separate housings have been arranged for the calves. They are not taken to graze in the field to eat grass. Instead, they are walking and playing in a place next to their housing which is also protected by a gate. The calf is fed colostrum up to 3 weeks after birth. From 3rd week to 10-12th weeks age, calves are fed 2 litres of milk in the morning and 2 litres in the afternoon, along with half a kg of granular feed and 1 kg of green grass. No dehorning is done in this place as they don't want to deviate from their heritage.

G. Existing health Care Management

Workers bathe the cows every day just outside the animal shed with clear freshwater. Cattle keep cleaning the animal shades regularly. Arrangements for smog are made to keep the cows in the house to protect them from mosquitoes, flies, and other insects. To protect cows from the heat in summer, the arrangements for the fan are made inside the cattle shade. Cows that are sick are kept differently. In this process, they protect against the spread of disease and keep other cows healthy. The cows are vaccinated on time to protect them against those diseases like FMD, HS, Anthrax, HS, Brucellosis, Black quarter, etc. Besides, various vitamin medicines are given to the cattle. The animals are kept in a regular surveillance by veterinary surgeons. Veterinary medical facilities are available inside of the dairy farm itself.

4. Conclusion

It can be concluded that Sri Mayapur Goshala is a very good dairy farm in terms of almost each and every aspect like infrastructure, feeding of animals, breeding, calf management, health management, etc. To maintain the purity of Indian breed inside the farm, they performed 100 percent artificial insemination breeding. For health care management and to maintain the timely vaccination schedule, facilities of the veterinary surgeon and the medical room are made inside the dairy farm itself. The feeding schedule is also excellent and it maintains a proper ratio of essential foods. Along with the stalked foods the animals are also allowed to graze in the field. This process not only saves food expenses but also provides different types of foods. In this process, the animals are engaged in a walk, where the movement of all the body parts is done by animals. As a result, it improves the digestion of the animals and increases milk production also. So, without a doubt, we can confidently call it a good dairy farm. Lastly, if you are a Sri Krishna devotee, then it's the best place for you to visit.

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