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Breeding and Feeding constraints experienced by the Tribal Dairy Farmers in Namakkal District of Tamil Nadu

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Abstract

The present study was conducted to analyse the constraints faced by the dairy farmers in Namakkal district of Tamil Nadu. This study was conducted in five villages of one block of Namakkal district by personally interviewing 300 dairy farmers. Here as regards the dairy enterprises majority of respondents states their constraints as Lack of knowledge and awareness about appropriate heat symptoms, Lack of knowledge and awareness about repeat breeding problems, Inadequate knowledge towards A 1 (time and Precaution) High cost of concentrate, mineral mixture and vitamin supplements and Non-availability of green fodder throughout the year.

Key words : Breeding & Feeding constraints, Tribal dairy farmers, Namakkal District.

In recent decades, the world has undergone a shift towards modern agriculture due to the growing need to address food security issues in an expanding global population. Modern agricultural techniques and associated technologies have been approached from a fresh perspective, often overlooked by tribal communities adhering to traditional indigenous farming practices. These practices, honed and field-tested by their ancestors, form the foundation of indigenous agriculture—a knowledge base shaped by adapting farming methods to local resources and the surrounding environment. It is imperative that these time-tested practices align with and complement contemporary agricultural and technological innovations.

Leveraging technology, humanity has progressed from the Stone Age to the Steel Age and ultimately to the Space Age. Driven by practical experience, logic, and judgment, humans have consistently developed technology to meet their evolving needs. The roots of both

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human civilization and agriculture trace back to the fundamental necessities of cultivating various food crops and domesticating animals. However, in recent times, investments in agriculture have become costlier, and the inputs involved, such as fertilizers and insecticides, have become intricate. These complexities have paved the way for the discovery of higher yields in modern agricultural systems.

The adoption of increased mechanization, utilization of chemical inputs, and the establishment of large-scale, specialized farm production units have collectively propelled the evolution of modern agricultural and allied activities India has the biggest population of tribal people worldwide when the total population of all people is taken into account. A huge, multiracial, and multicultural nation like India has 67.76 million tribal people, or 8.08 % of the nation's overall population (Government of India Annual Report, Ministry of Welfare, 1996). According to the 2011 census report the overall population of scheduled tribes in India is 104.30 million, of which account 93.80. Millions of tribal live in rural regions and 10.50 million tribal live in urban areas. (Planning Commission, Government of India Report 2011).

The Tamil Nadu Malayali tribes, who largely inhabit the forest-covered Kolli Hills in Namakkal District, have a rich cultural and agricultural history. Malayali is one of the scheduled tribes in Tamil Nadu, and it accounts for 54% of all scheduled tribes in the Kolli Hills. These tribes moved from the Tamil Nadu plains around Kancheepuram in the 1960s and settled on the eastern Ghat Hills (Vaidyanathan *et al.* 2013).

The incidences of poverty by social groupings show that there is a greater ratio of Malayali tribal people in Tamil Nadu as well as their settlements due to the lack of resources, low socio-economic and political status, lack of literacy, lack of relative access to facilities available developmental initiatives, and inadequate involvement in institutions. Dairy farming has been an important part of the agricultural scenario for thousands of years. India being a predominantly agrarian economy has about 70 per cent of its population living in villages, where livestock plays a crucial role in the socio-economic life. Livestock provide energetic sources such as milk, cheese, butter, ghee, etc. India is not only one of the top producers of milk in the world but also the largest consumer of milk and milk products in the world. Due to the shortfall in supply, we have to import significant amounts of milk products to meet the demand of growing population.

Agriculture and animal husbandry have a symbiotic relationship, in which the agricultural sector provides feed and fodder for the livestock and animals provide milk, manure and draught power for various agricultural operations. The dairy sector is instrumental in bringing socio-economic transformation in India. It has created a lot of employment opportunities and also provides improved nutritional benefits.

Animal husbandry is a major sub-sector of agriculture and contributes about 28.6 per cent to the agricultural value output (Annual Report 2017–18, Department of Animal Husbandry, Dairying and Fisheries, Government of India).

Good Agricultural Practice for dairy farmers is about implementing sound practices

on dairy farms – collectively called Good Dairy Farming Practice. These practices must ensure that the milk and milk products produced are safe and suitable for their intended use, and also that the dairy farm enterprise is viable in the future, from economic, social and environmental perspectives. Most importantly, dairy farmers are in the business of producing food for human consumption so they must be confident in the safety and quality of the milk they produce. Good dairy farming practice underpins the production of milk that satisfies the highest expectations of the food industry and consumers.

India is the top milk producer globally and it is also a country where traditional and modern farming practices are very much intertwined. Milk consumption is still challenging task for dairy farmers.

The challenges for dairy farmers in India are dealing with vary from low market prices and poor extension services impact shows low milk production. In terms of low milk production – animal health, nutrition and breeding issues are cited as the main causes. India's low milk production was a major issue we needed to look at and try to solve." Milk production per cow is quite low and below the European par for example. As in the Netherlands for instance on average production is 30 litter – 40 litter per cow/day, in India, it's on average about 4 litter per cow/day.

Research Methodology :

Tamil Nadu is one of the prominent states in India's southern region, which is inhabited by significant tribal populations. The study was carried out in Namakkal District in Tami Nadu. The following criteria were used to select Namakkal District According to the primary census abstract of the 2011 census of India, Namakkal District was ranked fifth out of the 32 districts in Tamil Nadu in terms of the percentage of scheduled tribal people to the state's overall population, behind the Nilgiris, Dharmapuri, Thiruvannamalai, and Salem Districts. The Namakkal District is divided into seven Taluks, including Namakkal, Rasipuram, Tiruchengode, Paramathivelur, Kolli Hills, Sendamangalam, and Komarapalayam, as well as fifteen blocks, including Namakkal, Rasipuram, Tiruchengode, Paramathivelur, Kolli hills, Sendamangalam, Vennandur, Mohanur, Kabilarmalai, Kolli hills has greatest proportion of Malayali tribal people among the seven taluks and fifteen blocks. As a result, the Kolli Hills, a mountain range that is a component of the Eastern Ghats, was specifically chosen for this study. A sample size of three hundred was fixed for the study considering the limitations of time and other resources. From the list of tribal farmers in the selected five villages, farmers who had practiced high proportion of both agriculture and dairy practices were identified for the study. A proportionate random sampling method was used to select the 300 respondents from the selected five villages. The interview was conducted personally and data were collected by using pre prepared queries related to constraint of dairy farmers . All together eight constraints were identified and responses were scored as yes-1 and No-0.

Findings :

Constraints are the problems that come in the way of adoption of technology. Here constraints are studied under two categories *i.e.* breeding constraints and feeding constraints.

Table-1. Breeding Constraints Experienced by Tribal Dairy Farmers

Sl. no.	Breeding Constraints	Number	Percentage	Rank
1.	Lack of knowledge and awareness about appropriate heat symptoms	210	70.00	I
2.	Inadequate knowledge towards A 1 (time and Precaution)	152	5.66	III
3.	Lack of knowledge and awareness about repeat breeding problems	198	66.00	II
4.	High cost of cross breeding milk animals	150	50.00	IV

Breeding constraints :

Table-1 reports that seventy per cent of the respondents reported that lack of knowledge and awareness about appropriate heat symptoms rank first among the breeding constraints, followed by 66.00 per cent reported the lack of knowledge and awareness about breeding problems and only fifty (50.00 per cent) of the tribal farmers perceived the high cost of cross breed milk animals. The results depict that tribal dairy farmers have low to medium level of adoption towards good breeding practices, but they are very much interested in adopting in the future. This finding is supported by Mooventhan *et al.*[3]. The farmers should be encouraged to breed through artificial insemination to improve the productivity of the existing livestock resources Dropati Saran *et al.*[1] reported that there is an immediate need to impart quality practical training and periodical assessments of the performance of dairy practices.

Feeding constraints :

Sl. no.	Feeding Constraints	Number	Percentage Rank	Rank
1.	Inadequate knowledge about balance feeding	150	50.00	IV
2.	Non-availability of green fodder throughout the year	210	70.00	II
3.	High cost of concentrate, mineral mixture and vitamin supplements	240	80.00	I
4.	Less availability of grazing ?pasture land	180	60.00	III

Four fifth (80.00 per cent) of the respondents expressed the high cost of concentrate, mineral mixture and vitamin supplements are the main constraint and it ranks first in the good feeding constraints list followed by70.00 per cent feels a non availability of green fodder throughout the year, 60.00 per cent experienced less availability of grazing/pasture land and fifty per cent (50.00%) of the tribal farmers indicate the

inadequate knowledge about balance feeding as important constraints among the tribals for good feeding practices. Meena *et al.*[2] supported that in order to improve the productivity of animals proper nutritional management is essential. These results conform with the findings of Princejot Singh *et al.*[4]. There is a need to educate the farmers about the enrichment of fodder as well as balanced and economical feed preparation.

The study conclusively revealed that there is need to encourage the farmers for scientific breeding and feeding management by their trainings, FLD, and other extension activities.

References :

1. Dropathi Saran, Madhu Shrma and Vikram Yogi. (2020). *International Journal of Current Microbiology and Applied Science*, SP *11*-3057-3063.
2. Meena K.L, H.R Meena, T.R. Chauhan Manoj Kumar and P Chowdhury (2017). Constraints faced by Liv.
3. Mooventhan. P, K.S Kadian, R Senthil Kumar., A Manimaran and C. Karpagam (2017). *Journal of Applied and Natural Science. 9*(1): 533-538.
4. Princejot singh, J.S Bhatti, J.S Hundal and S.K Kansal (2015). *Haryana Vet. 54*(1) : 67-69.