

## **Problems faced by the dairy farmers in Palakkad District of Kerala**

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### **ABSTRACT**

**Aims:** The dairy industry in India is instrumental in providing cheap and nutritional food to the vast population of India and also generates huge employment opportunities for people in rural areas. Milk is the largest product from the agriculture and allied sector in India in terms of value at Rs.6.5 lakh crore. It is contributing around 26 per cent of total agriculture Gross Domestic Product (GDP). The Kerala currently represents twelfth largest dairy market in India. Livestock population in Kerala was 38.36 lakh in the year of 2019. Dairying is a major subsidiary occupation for the farmers of Kerala. But the present-day dairying is faced with a number of challenges. The study was conducted to explore various constraints associated with dairy farming as perceived by the farmers. **Methodology:** For the purpose of this study, the primary data were collected from 200 active dairy farmer respondents of four selected dairy co-operatives in the Palakkad district by using structured interview schedule. **Results:** The climatic issues were the major problems in milk production. The climatic variation was the major factor behind the milk production problems. *The temperature in Kerala was always highest in the Palakkad district but none of the dairy farmers were facing difficulties in milk procurement.* All of them were satisfied with the procurement facilities and arrangements. Low accessibility to veterinary services and lack of sufficient labor were the main problems faced by the selected dairy farmers. Out of 200 dairy farmers, none of them were affected by the flood of 2018 and 2019. The quantity of milk procured by the dairy co-operative society, transportation, profit from the sale of milk, and labor services was mainly affected due to COVID 19 pandemic. The lack of availability of schemes and support is one of the main problems faced by the respondents. Lack of knowledge about banking services and functions related to subsidies was also one of the problems that exist among them. **Conclusion:** From the study, it became evident that dairy farming activities in Kerala, though growing are crippled with a range of problems. The appointment of a trained Artificial Insemination, Veterinary First Aid worker, creation of labour groups and continuous monitoring of the progress of schemes and services can solve the problems faced by dairy farmers up to a limit. Finally, this will result in the widening of our country's dairy sector.

**Keywords:** Dairy co-operatives, Milk procurement, Milk production, Schemes and support

### **1. INTRODUCTION**

India is an agriculture-based economy with majority of working population in the country still being engaged in agriculture and related activities directly or indirectly. In India, 54.6 per cent of the population is engaged in agriculture and allied activities (Ministry of Agriculture & Farmers Welfare, 2021). The share of agriculture & allied sectors in Gross Value Added (GVA) of total economy is 17.8 per cent. The government allocated 2.83 lakh crore rupees for agriculture and allied activities and

irrigation in the 2020-21 **budgets** (Economic Survey Report, 2019-20). Thus, the progress in the agriculture plays a significant role in the development of country's economy. The dairy industry in India is instrumental in providing cheap and nutritional food to the vast population of India and also generates huge employment opportunities for people in rural areas. Milk is the largest product from the agriculture and allied sector in India in terms of value at Rs.6.5 lakh crore. It is contributing around 26 per cent of total agriculture Gross Domestic Product (GDP). India's milk production was 187.7 million tonnes in 2018-19 registering a growth rate of 6.5 per cent over the previous year. **The precipitate** availability of milk has reached a level of 394 grams per day during 2018-19 (Economic Survey Report, 2019-20). Kerala currently represents the twelfth largest dairy market in India. The share of livestock in Gross State Value Added (GSVA) from agriculture sector in Kerala is above 27 per cent. Livestock population in Kerala was 38.36 lakh in the year of 2019 (Economic Review Report, 2019). Kerala has 13 milk processing plants and it now produces more than 12.50 lakh litres of milk per day (KCMMF, 2021).

## 2. MATERIALS AND METHODS

The first Four dairy co-operatives with highest quantity of milk procurement during 2019-2020 in Palakkad district were selected by the researcher. This study is based on both primary and secondary data. The primary data was collected by using a structured interview schedule and the secondary data were collected from the published books, reports, articles, and annual reports. The primary data were collected from 200 active dairy farmer respondents from four selected dairy co-operatives in the Palakkad district using a simple random sampling method. The collected data were analysed by using index methods. The formula is as follows: 
$$\text{Index} = \frac{\sum_{i=1}^n \sum_{j=1}^m S_{ij}}{\sum \text{Max} S_j}$$
  
 $i$  = Respondents,  $j$  = Problems/constrain,  $S_j$  = Score of  $j^{\text{th}}$  factor,  $S_{ij}$  = Total score of  $j^{\text{th}}$  factor of the  $i^{\text{th}}$  respondent and  $\text{Max}.S_{ij}$  = Maximum score for the  $j^{\text{th}}$  factor

Based on the index obtained, the results were compared to a standard derived as following: Scores obtained values were 0-33.3, 33.3-66.6 and 66.6-100, the problems categories were high, moderate and nil, respectively.

## 3. RESULTS AND DISCUSSION

### 3.1 Problems related to milk production

Milk production is an important factor in dairy farming. Due to the profitability of dairy farming is decided based on milk production.

The **Table (1)** specifies the problems faced by the farmers in milk production. The climatic issues were the major problems in milk production. The climatic variation was the major factor behind the milk production problems. Due to the highest temperature in Kerala was always marked in the Palakkad district.

### 3.2 Problems related to milk procurement

Milk procurement is an important function of the dairy co-operative societies.

The **Table (2)** specifies the problems that are faced by dairy farmers in milk procurement. But none of the dairy farmers were facing difficulties in milk procurement. All of them were satisfied with the procurement facilities and arrangements.

### 3.3 Other problems

The table 3 lays down the other basic problems faced by the dairy farmers. This includes non-availability of **labor**, delayed payments from DCS, low productivity of cattle, lack of crossbreed

animals, lack of sufficient veterinary services. Out of these, low accessibility to veterinary services and lack of sufficient labor were the main problems faced by the selected dairy farmers. All payments for dairy-related dealings were up to date and, they have not faced difficulties in the availability of crossbreed cattle. So, it was a benefit for the dairy farmer to manage the financial and farm requirements (Table 3).

**Table 1 Problems related to milk production**

| Problems  | Index | Opinion  |
|---|-------|----------|
| The climatic variation highly affected the quantity of milk production.   | 100   | High     |
| The cattle diseases highly affected milk production.                      | 49    | Moderate |
| The lack of nutrition leads to a decrease in the level of milk production | 33    | Nil      |
| The irregular milking frequency negatively affected milk production.      | 33    | Nil      |
| Genetic problems are the main reason for reducing milk production.        | 33    | Nil      |

**Table 2 Problems related to milk procurement**

| Problems   | Index | Opinion |
|--|-------|---------|
| The dairy farmers faced a Lack of hygienic and sanitization measures in the dairy co-operatives. | 33    | Nil     |
| The milk procurement was reduced due to a lack of transportation facility                        | 33    | Nil     |
| The staffs are not properly recording the milk supply details                                    | 33    | Nil     |
| The DCS doesn't have any milk storage facilities   | 33    | Nil     |
| The societies don't have a proper milk testing mechanism   | 33    | Nil     |

**Table 3 Other problems**

| Problems  | Index | Opinion |
|---|-------|---------|
| The non-availability of labour is the major problem faced by dairy farmers.       | 69    | High    |
| The delayed payments from dairy co-operatives affect the investments in dairying. | 33    | Nil     |
| The non-availability of crossbreed animals affects the productivity of dairying.  | 33    | Nil     |
| The Lack of sufficient veterinary services affected the health of cattle.         | 75    | High    |

### 3.4 Pre and post-flood effect in milk production and procurement

Out of 200 dairy farmers, none of them were affected by the flood of 2018 and 2019.

### 3.5 Impact of COVID 19 in dairy farmers

The COVID 19 affected all the respondents.

The Table (4) described the effect of COVID 19 on dairying. The quantity of milk procured by the dairy co-operative society, transportation, profit from the sale of milk, and labor services was mainly affected due to COVID 19 pandemic. The availability of labor services was very less due to lockdowns and the Milam has stopped the milk procurement for two days. It leads to the wastage of large quantities of milk and a decrease in income from milk sales. The availability of veterinary services and food stock

were moderately affected due to COVID 19 pandemic. The milk production, dairy farm structure, animal strength, and local milk sales were not affected by COVID 19.

### 3.6 Constraints experienced by farmers in availing schemes and support from dairy co-operatives and Government policies

The lack of availability of schemes and support is one of the main problems faced by the respondents. This situation discourages people to enter into dairy farming.

The **Table (5)** defined various constraints faced by dairy farmers in availing schemes and support from the dairy co-operative society and government. The procedural time delay to avail benefits, slow responses, was the major difficulties faced by the dairy farmer. Lack of knowledge about banking services and functions related to subsidies was also one of the problems that exist among them. So, the government and dairy co-operative societies must evaluate the loopholes of all schemes and take necessary actions to solve these problems.

The **Table (6)** reveals the major problems faced by the dairy farmers in dairying. The problems related to milk production and procurement, pre and post-flood effect in milk production and procurement, the impact of covid-19 in dairy farmers, constraints experienced by farmers in availing schemes, and support from dairy co-operatives and government policies are **analysed** through this section.

**Table 4 Level of the effect of COVID 19 on the dairy farming sector**

| Particulars   | Index | Opinion  |
|---|-------|----------|
| The COVID 19 negatively affected milk production from dairying.             | 33    | Nil      |
| The COVID lockdown affected milk transportation to DCS                      | 100   | High     |
| The COVID 19 affects the physical structure of the farm                     | 33    | Nil      |
| It affected the veterinary services for cattle                              | 49    | Moderate |
| It leads to the death of cattle   | 33    | Nil      |
| It affected the local milk sale of dairy farmers.                           | 33    | Nil      |
| It affected the quantity of milk procured by the dairy co-operative society | 100   | High     |
| The Profit from the sale of milk was reduced during COVID 19 period.        | 100   | High     |
| The lack of Food Stock was the main problem faced in the dairying.          | 52    | Moderate |
| The availability of Labour services was reduced during COVID 19.            | 74    | High     |

**Table 5 Constraints experienced by farmers in availing schemes and support from dairy co-operatives and Government policies**

| Statements  | Index | Opinion  |
|---|-------|----------|
| The dairy farmers had to attend many procedures to avail the benefits.  | 100   | High     |
| The respondents received inadequate support from the dairy co-operative society/Government.                         | 54    | Moderate |
| The effectiveness of the schemes was reduced due to the slow responses from the DCS and Government.                 | 81    | High     |
| The lack of knowledge about banking activities was the major problem faced by the dairy farmers to avail subsidies. | 49    | Moderate |
| The fodder seeds supplied were not of good quality.   | 33    | Nil      |

**Table 6 The composite index of problems faced by the dairy farmers**

| Problems                              | Index | Opinion  |
|---------------------------------------|-------|----------|
| Problems related to milk production   | 49.8  | Moderate |
| Problems related to milk procurement  | 33    | Nil      |
| Level of effect of COVID-19           | 60.8  | Moderate |
| Constraints faced in availing schemes | 63    | Moderate |

#### 4. FINDINGS AND CONCLUSION

The present study helped us to derive the conclusion that the climatic variation has highly affected the quantity of milk production. The non-availability of labour and lack of sufficient veterinary services were also faced by dairy farmers. The flood of 2018, 2019 didn't affect the dairy farmers. But COVID-19 lockdown affected milk transportation to dairy co-operatives and it affected the quantity of milk procured by the dairy co-operative society. It finally leads to a decrease in profit from the sale of milk. The appointment of a trained Artificial insemination, Veterinary First Aid worker, creation of labour groups and continuous monitoring of the progress of schemes can solve the problems faced by dairy farmers up to a limit. Finally, this will result in the widening of our country's dairy sector.

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