Abstract

The study was on consumer satisfaction towards KMF NANDINI MILK has been carried out with special references to Dharwad Milk Union. The study taught us consumer satisfaction and how it gets change in each consumer expectations and KMF Nandini got huge market share, more number of loyal consumers with lot of competition and KMF Nandini maintained that consistency with its quality since 1974. 14 milk union under KMF and its largest Co-operative Dairy Federation. KMF Nandini has over 2.25 million milk producers in over 12334 dairy co-operative societies and it produce milk and milk products with this it is expected to emerge as a strong force in the global milk dairy market in coming days. The present scenario of KMF milk industry facing challenge due to COVID-19 pandemic where KMF Nandini trying to provide effective service and during COVID-19 (LOCKDOWN) it was big challenge to reach each and every consumer without any mistake KMF opening its parlour in more number and KMF built its trust with its consumers was not an easy thing. The objective in the present study was to know consumer satisfaction and expectations towards KMF Nandini Milk. A survey was conducted using structured questionnaire with 200 respondents through GOOGLE forms. The data collected from the respondents was examined properly and represented using SPSS. The survey questions are about like safety measures adopted by KMF in this COVID-19 and about quality of milk, price, quantity, distribution, service, taste, availability. With this study we come to know that maximum consumers are highly satisfied with all this parameter’s and the study explained what strategy must be adopted to get the new consumers and to face the tough competition. During the study it was found that in this COVID-19 challenge was big like in terms of transportation, shortage of labour, maintaining hygiene and sourcing of packaging materials and 14 milk associate milk union started into immediate challenge of not just chilling milk from farmers in 2,54,000 villages, but supplying to over 10million consumers within Karnataka and across the border. The strategy was very helpful to industry that was Government of Karnataka purchased milk from KMF and supplied to hospitals and to the poor people and doubled salary to employees attending work during the lockdown. As KMF struggles to come back to normalcy and Milk is FMCG (FAST MOVING CONSUMER GOOD) So, Nandini KMF trying its best in every
parameter to be in consistent manner in every condition and best service for every consumer money.

**Keywords:** Challenge, Service, Satisfaction and Trust, Consistency.

**Introduction:**

Dairy farming is a class of agriculture for long term production of milk, which is processed (Either on the farm or at a dairy plant, either of which may be called a dairy) for eventual sale of a dairy product. While cattle were domesticated as early as 12,000 years ago as a food source and as beasts of burden, the earliest evidence of using domesticated cows for dairy production is the seventh millennium BC – early Neolithic era-in north western Anatolia. Dairy farming developed elsewhere in the world subsequent centuries: the sixth millennium BC in eastern Europe, the fifth millennium BC in Africa, and the fourth millennium BC in Britain and Northern Europe. In the last century or so larger farms specialising in dairy alone have emerged. Large scale dairy farming is only viable where either a large amount of milk is required for production of more durable dairy products such as cheese, butter, etc. or there is a substantial market of people with money to buy milk, but no cows of their own. In the 1800s VON THUNEN argued that there was about 100-mile radius surrounding a city were such fresh milk supply was economically viable.

**Traditional way of dairy industry those days:**

- Hand Milking
- Vacuum Bucket Milking
- Milking Pipeline
- Automatic Milker Take-Off
- Fully Automatic Robotic Milking

Indian dairy industry has imported some milk powder and butter oils as aid between 1970 and 1990, exports from India were insignificantly small and it was until 2000 onwards, when Indian dairy products started having more presence in global markets. Starting in organized milk handling was made in India with establishment of military dairy farms. Handling of milk in Co-operative Milk unions established all over country on a small scale in the early stages. Long distance refrigerated rail-transport of milk from Anand to Bombay since 1945. Pasteurization and bottling of milk on a large scale for organized distribution was started at AAREY (1950), Calcutta (Haringhata, 1959). Delhi (1959), World (1961), Madras (1963).

After this thought of establishment of milk plants under the five-year plans for dairy development all over India. These were taken up with the dual object of increasing the national level of milk consumption and ensuing better returns to the primary milk producer.

**Milk Industry Scenario**

The demand of milk and milk products in INDIA is projected to increase to 142.9 million tonnes in 2015 and further to 191.3 million tonnes in 2020. At the existing rate of growth in milk production, in next ten years, supply will fall short of the demand. Indian dairy sector contributes the large share in agricultural
GDP. Presently there are around 70,000 village dairy cooperatives across the country. The cooperative societies are federated into 170 district milk producers unions, which in turn have 22 state cooperative dairy federations. The Government of India has introduced various schemes and initiatives aimed at the development of the dairy sector in the country. On the other hand, the private participation in the Indian dairy sector has also increased over the past few years. Both national and international players are entering the dairy industry, attracted by the size and potential of the Indian market. Looking forward the market is expected to reach a value of INR 25,491 billion by 2025, exhibiting a Compounded Annual Growth Rate of 16% during 2020–2025.

**Literature Review**

**Sundaram Satya (2013)** through his market survey has reported that while India has the largest bovine population in the World, its cattle are the least productive, yielding almost five times less than the global average. Milk yield in India is 800-1000 litres an animal, per year, against the global average of 7000-8000 litres a year. The report assumes that things are going to change with the launch of the National Livestock Mission to attract investment and to enhance productivity. It informs that the central budget 2013-14 has made a provision of Rs. 3070 million for the mission. There is also a provision for increasing the availability of feed and fodder.

**Shahi Sudhir Kumar (2012)** takes a review of strategies for sustainable dairy farming in India. Sustainable dairy farming is an interaction of many factors that influence production and reproduction, environment, longevity of live and input management. The paper suggests that it is important to plan for dairy development specific to each micro level, viz., a block, a village, a taluka and a district. This planning not only would result in optimum utilization of local resources, but will also ensure better visibility of the programs and higher cost benefits ratio. The paper suggests that sustainable development requires technologies, which demand less capital, less time and minimum operations; requires loans at the lowest interest rates; need for improvement of existing indigenous breeds of animals; Need for Government role in improving the supply of inputs with minimum cost; Need contribution from various nongovernmental agencies to ease the problems of farmers federations like, milk producers cooperative societies at village and district levels, federations, boards and corporations; Need for simultaneous development of cold chain storage and marketing facilities especially for milk and milk products; Need for extensions services from the Government, Agriculture Universities, R&D institutions, federations and corporation, besides mobilization of various input services from various agencies.

**In his market survey, P. Chennakrishnan (2011)** studied the practice of dairy farming in India. It also throws light on milk processing, domestic consumption and national importance of dairy farming. The study further analyses production and scope of dairy farming in India. The study also highlights certain matters of concern for dairy in India such as increasing demand for processed milk and milk products, low productivity of milk cattle, ineffective breeding programmes, inadequate feed and fodder, inadequate research in the subject etc. Also, recent increase in prices of dairy products is a major concern.

**Gupta Meenakshi and Sharma Vikas (2009)** in their work threw light on the issues of performance of Indian dairy sector over the years, emerging global scenario as compared with Indian dairy scenario and challenges and policy options related to these issues. Some of the reforms suggested in their work are linking import tariff to world prices, enhancing milk productivity by efficient delivery of inputs, negotiation for reduction of subsidies in dairy sector by developed countries, modernizing supply chain
from producer to consumers and development of dairy export zone in the pattern of free trade zones and special economic zones.

Karmakar K. G. and Banerjee G.D (2006) studied different Opportunities and Challenges in the Indian Dairy Industry. The study concludes that the Globalization and Liberalization are the Mantras of the new economy today, which is now on the fast track. Industrial production is rapidly moving forward. The dairy industry is no exception. With the World Trade Organisation (WTO) coming into effect, from 01 April 2001 and the imports and exports getting liberalized in the global economy, the dairy industry, which includes dairy products, faces both an opportunity for growth as well as a threat for its growth.

Products at KMF
- MILK
- ULTRA -HIGH TEMPERATURE MILK
- CURDS AND OTHER
- FERMENTED PRODUCTS
- GHEE AND BUTTER

Pasteurized toned milk
States top vending and most well-known milk with minimum 3.0% fat and min 8.5% SOLID NOT FAT content make this milk the finest choice for all purpose and all for kinds of people. Obtainable in 200ml, 250ml, 500ml, ETC.

Double toned milk:
This is different from pasteurized milk tones it is toned double milk, homogenized with 1.5% fat and SOLID NOT FAT minimum.9% minimum. Ideal it is best suitable for the health aware people and seniors. Obtainable in 200ml, 250ml, 500ml, and 1lIT packs.
Special toned milk by Nandini
Nutritious homogenized milk with 4.0% fat and 9.0% SOLID NOT FAT with added solids. Much thicker and tastier. Good for preparing thick curds. Offered in 200ml/ 250ml, 500ml and 1 liter pouches.

Homogenized pure milk
Rich in Nutrient Homogenized milk which contains minimum 3.50% fat and minimum 8.50% SOLID NOT FAT. One can enjoy the thickness of the milk along, thus preparing more cups of tea, coffee.

Shubham pasteurized standardized milk:
Pure pasteurized standardized milk having 4.50% fat and 8.50% (SOLID NOT FAT), treated with various ingredients of healthy milk for healthy growth especially in growing children. Obtainable through 200ml, 250ml, 500ml and one liter.

Samrudi pasteurized cream milk:
Pure purified complete cream mix with 6% fat and 9% (SOLID NOT FAT). High in cream along with taste. This milk perfect for making household sweets and offered 200ml/ 250ml, 500ml and one Lt.
Goodlife:

Nandini good life from cow’s milk- toned milk is Ultra -high temperature processed milk with min.3.0 % fat 8.50% Solids Not fat (SNF) levels and suitable for entire generation. Available in 100ml, 200ml and 500ml packs and it also available in 1 and 10 lit tetra pouches.

Objectives of the study:

✓ To understand Consumer perception on various parameters of Nandini Milk.
✓ To understand the overall satisfaction with respect to Nandini Milk.
✓ To Study problems faced by consumers during COVID-19 Lockdown regard availability and service of Nandini Milk.

Scope of the study:

The result of the survey conducted at Dharwad-Hubli region, helps to develop various marketing strategy like Product, Price, Advertisement, Service to provide better service and this same study which also helps to other regions unions to carry and adopt the changes which helps to meet the consumers expectation.

Need and importance of the study:

Consumer satisfaction towards Nandini milk in order to get data which provide them a result of their product in market how is performing; also study helps to have some changes to adopt to make it more effective. By studying this small mistakes and small errors from organization behaviour or from processing will be corrected, so each step is very important for industry then only the consumer will be satisfied with Nandini milk and that helps to get more loyal consumers in increasing level and in competitive market everything should be perfect for our product and service. This will help them to get what consumers are expecting and what about their opinion for our product what development should be taken in each activity will be helped by this study.

Limitations of the study:

✓ Study which we carried on secondary data base because of COVID-19 is one kind of limitation.
✓ As we know the study carried in DHARWAD-HUBBALLI region, so one kind of region limitation.
✓ Replies from respondents assumes true and fair.
✓ Next limitation is assuming that respondents are unbiased while answering the questions which are sent.
✓ Next is to assuming that they are cleared about questions.
Assumption next is to they answered with full interest.
✓ As per survey the questions are not in detail form to understand by respondents.
✓ Sometime the respondents are not co-operative for given questions.
✓ Sometime respondents ignore the survey question.

Research Methodology:

Research Methodology is a way to study a problem systematically and scientifically. In it we study the various factors causing the problem along with the logic behind them. It is necessary for the researcher know not only the research method and technique but also the methodology. This learning is evocative in the environment. The evocate examine describes the demographics of the customers and help to get clarity on the research. Also principle and derivative data being used to collect a data. Crucial data is the raw data which is been collected from one on one interview, observation, structured questionnaire. So this is how it plays a major role in the research.

Type of research:

Descriptive Research is adopted for the study.

Type of Data

Both Primary and Secondary data are used for the purpose of research.

Data collection method

Primary data:

Primary data was collected with the assistance of 200 respondents with the structured questionnaire in google forms through online mode.

Secondary data:

Secondary data were collected from various websites, books, previous year reports, magazine, brochures.

Sampling method employed:

Sample size: 200 respondents.
Data collection method: Online survey.
Sampling method; Non-probabilistic convenience sampling
Research Instrument: Structured questionnaire framed with the help of google from.
Data analysis: By using SPSS graphs.
Data Analysis and Interpretation

1. From how long you are consuming Nandini milk?

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>From past 6 months</td>
<td>26</td>
<td>13.0</td>
<td>13.0</td>
<td>13.0</td>
</tr>
<tr>
<td>From past 1 year</td>
<td>26</td>
<td>13.0</td>
<td>13.0</td>
<td>26.0</td>
</tr>
<tr>
<td>From past 2 year</td>
<td>21</td>
<td>10.5</td>
<td>10.5</td>
<td>36.5</td>
</tr>
<tr>
<td>From more than 2 year</td>
<td>127</td>
<td>63.5</td>
<td>63.5</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>200</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

Interpretation: From the above table that shows 63.5% of the respondents are consuming Nandini milk from more than 2 years and 13% of them are consuming Nandini milk from 6 months and 13% of them also consuming Nandini from 1 year and 10.5% of the respondents are consuming from 2 years.
2. During, Present covid-19 lockdown KMF handled availability of milk at all places/ location

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strongly Agree</td>
<td>58</td>
<td>29.0</td>
<td>29.0</td>
<td>29.0</td>
</tr>
<tr>
<td>Agree</td>
<td>110</td>
<td>55.0</td>
<td>55.0</td>
<td>84.0</td>
</tr>
<tr>
<td>Neutral</td>
<td>26</td>
<td>13.0</td>
<td>13.0</td>
<td>97.0</td>
</tr>
<tr>
<td>Disagree</td>
<td>4</td>
<td>2.0</td>
<td>2.0</td>
<td>99.0</td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td>2</td>
<td>1.0</td>
<td>1.0</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>200</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

During, Present covid-19 lockdown KMF handled availability of milk at all places/ location

![Bar chart showing frequency distribution for KMF's handling of milk availability during the COVID-19 lockdown. The chart has categories for Strongly Agree, Agree, Neutral, Disagree, and Strongly Disagree. The frequency distribution is as follows: Strongly Agree - 58, Agree - 110, Neutral - 26, Disagree - 4, Strongly Disagree - 2. The total frequency is 200, with 100% validity.]
Interpretation:

From the above table and graph that shows 55% of the respondents are agree that KMF handled Availability of milk at all places during lockdown and 29% are Strongly agree and 13% are Neutral and 2% are Disagree and 1% are Strongly disagree

3. KMF Nandini milk maintained, its quality and taste and service consistently

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Agree</td>
<td>53</td>
<td>26.5</td>
<td>26.5</td>
</tr>
<tr>
<td>Agree</td>
<td>116</td>
<td>58.0</td>
<td>58.0</td>
</tr>
<tr>
<td>Neutral</td>
<td>27</td>
<td>13.5</td>
<td>13.5</td>
</tr>
<tr>
<td>Disagree</td>
<td>3</td>
<td>1.5</td>
<td>1.5</td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td>1</td>
<td>.5</td>
<td>.5</td>
</tr>
<tr>
<td>Total</td>
<td>200</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>
Interpretation:

From the above table and graph shows that 58% of the respondents are Agree that KMF Nandini maintained its quality, taste and service consistently and 26.5% of the respondents are strongly agree and 13.5% are Neutral and 1.5% are disagree and 0.5% are strongly disagree.

4. During, Present Covid-19 KMF Nandini milk took all safety measures in milk packaging and distribution service

<table>
<thead>
<tr>
<th>Valid</th>
<th>Strongly Agree</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Agree</td>
<td>46</td>
<td>23.0</td>
<td>23.0</td>
<td>23.0</td>
<td>23.0</td>
</tr>
<tr>
<td>Agree</td>
<td>96</td>
<td>48.0</td>
<td>48.0</td>
<td>71.0</td>
<td></td>
</tr>
<tr>
<td>Neutral</td>
<td>52</td>
<td>26.0</td>
<td>26.0</td>
<td>97.0</td>
<td></td>
</tr>
<tr>
<td>Disagree</td>
<td>2</td>
<td>1.0</td>
<td>1.0</td>
<td>98.0</td>
<td></td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td>4</td>
<td>2.0</td>
<td>2.0</td>
<td>100.0</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>200</td>
<td>100.0</td>
<td>100.0</td>
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<td></td>
</tr>
</tbody>
</table>

During, Present Covid-19 KMF Nandini milk took all safety measures in milk packaging and distribution service
Interpretation:

From the above table and graph that shows 48% of the respondents are agree that KMF Nandini milk took all safety measures with packaging and distribution present covid-19 and 26% are neutral and 23% are strongly disagree and 1% are disagree and 2% are strongly disagree.

5. Overall Satisfaction towards Nandini milk.

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Highly Satisfied</td>
<td>51</td>
<td>25.5</td>
<td>25.5</td>
<td>25.5</td>
</tr>
<tr>
<td>Satisfied</td>
<td>117</td>
<td>58.5</td>
<td>58.5</td>
<td>84.0</td>
</tr>
<tr>
<td>Neutral</td>
<td>29</td>
<td>14.5</td>
<td>14.5</td>
<td>98.5</td>
</tr>
<tr>
<td>Dissatisfied</td>
<td>3</td>
<td>1.5</td>
<td>1.5</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>200</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

Overall Satisfaction towards Nandini milk
Interpretation:

From the above table and graph that shows 58.5% of the respondents are satisfied with overall satisfaction with Nandini milk brand and 25.5% of the respondents are highly satisfied and 14.5% of the respondents are Neutral and 1.5% are dissatisfied with this.

Major Findings of the Study

✓ It was found that More than 2 years Nandini milk is consuming by Most of the consumers it is good sign to industry and 63.5% of the respondents are consuming Nandini milk so with this we got more loyal consumers and 13% are consuming from 6 months and 13% are consuming from 1 year and 10.5% are consuming from 2 year.

✓ The next main finding is about Availability of Nandini Milk in this covid-19 Lockdown and its very important and critical situation to KMF Nandini and to make it available to every consumers it’s very important by this 55.0% of the respondents are agree so it show Nandini made available its milk easy to its consumers and 29.0% of the respondents are strongly agree and 13% are neutral about this and lastly 2% are disagree and 1% are highly disagree.

✓ Here the another most important to Nandini milk is about its milk quality and milk taste and it’s service to the consumers consistently and by this three main aspects 58.0% of the respondents are Agreed and 26.5% of the respondents are strongly agree and 13.5% are Neutral about this and 1.5% are Disagree and 0.5% are strongly disagree with this.

✓ It’s another challenge and important task to KMF Nandini milk during lockdown and present covid-19 situation regard taking all safety measure so that milk should not be affected any impurity and not to have any small mistake with this and packing and distribution of milk here we got that 48.0% of the respondents are agree that KMF Nandini milk took all safety measures and 26% are neutral and 23.0% are Strongly agree and 1% are disagree and lastly 2.0% are strongly disagree.

✓ The main finding it’s about satisfaction as we know each and every product should get satisfaction by its users or consumers here we got to know the overall satisfaction level towards Nandini Milk that 58.5% of the respondents are Satisfied with the Nandini Milk and it’s good thing by getting more satisfied in number and 25.5% of the respondents are Highly satisfied and 14.5% are Neutral about the satisfaction level and 1.5% of the respondents are dissatisfied .So satisfaction level always help the company to have some good changes for future result and also to have more loyal consumers.

Suggestions of the Present Study

✓ Now during, present COVID-19 big challenge to KMF is to make sales to increase as earlier so they can do it by selling bulk milk to Hotels and Hospitals and also to the hostel. This is one kind of strategy which will help KMF to get sales.

✓ KMF should develop personal selling now to handle this COVID-19 situation and to reach every consumer easily and provide service.

✓ KMF should Reward the Retailers and Distributors because of them during present COVID-19, the Nandini Milk is reaching to end Consumers and at all location/places so this will increase consumer relationship.
Present COVID-19 KMF facing less demand and availability of milk is more and sale is less and around 16 lakh litres of additional milk so they can make into milk powder and also develop to produce milk products like Pedha, Ice-creams So this help to reduce wastage of additional milk and perform aggressive marketing.

KMF should make Advertisement and Publicity to create awareness and provide information with regard to more safety measures adopted by them.

Strategy to develop milk products to new segment which will bring new revenue to the KMF industry.

KMF should increase its MILK PARLOUR this helps to provide their products easily at every place.

Conclusion

KMF Nandini Milk is having lot loyal consumers and along with this it’s facing lot of challenges and lot of competition in the market and it should maintain good service so that consumer should not get thought to go for other brand and totally on the base of Factors, service, taste, quality, price, distribution and availability and packing all this should be maintained strongly so that it will be good for company to get more number of consumers. Nandini Brand is well known brand each and every one knows so it’s responsibility and duty to the industry to keep the reputation same in the market and make policies and new changes as per changing market condition and meet every consumer’s expectation. With ever increasing competition in dairy industry it become imperative to understand the preferences and perceptions of customers. Based on the findings, it may be inferred that Nandini dairy has worked well to make people aware about its products in the study area and it is very well proven through the findings. Dairy industry is expected to grow in the coming years as it is growing currently. With the increase in population demand and consumption of milk is also growing. It is clear that there are going to be new emerging markets concentrating on production of milk with long shelf life. With the increasing demand for the dairy products the organization need to upgrade their technology timely so as to meet the demand with proper supply. Nandini is one of the oldest and famous dairy brands. It has loyal member farmer who supply the milk each day. The organization not just strives for the benefit of its members but it also provides various services to keep the cattle of the member farmers healthy. It also provides quality cattle food to its member farmers.

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