# THE INTERNATIONAL JOURNAL OF BUSINESS & MANAGEMENT

# Marketing Effectiveness of Customer Satisfaction on Dairy Industry (with Reference to Sangam Dairy Vadlamudi of Guntur (D.T), A.P., India)

# S. Ayyappa Naik Nenavath

Department of Commerce and Business Administration Acharya Nagarjuna University, Guntur, A.P.,India

#### Abstract:

Dairying a historical and mythological focus. Majority of rural population are dependent on agriculture and allied activities. The first mention of milk trading occurred during Mahabharata time (nearly 2500 BC) when butter (milk fat) is taken out of milk to ease movement from Gokul to Mathura. Lord Sri Krishna has been considered as a true cow savior. Milch animals like cattle and buffalo are a symbol of purity and motherhood in the Hindu religion and domesticated as an integral part of the Indian social system. If the genesis of organized dairying in India is traced, it was rooted only in the early part of 20<sup>th</sup> Century, during the pre-independent era, with the establishment of military farms, by the British government. They established these farms to ensure supply of milk for their arm. There was no integration between milk procurement, processing and marketing. In the rural market, generally people buy during festival seasons or after harvesting are over. Whereas, in urban markets, consumers normally buy at the beginning of the month, more so the salaried classes. Marketer's key task is to determine who the decision-maker is in a purchase situation.

Key words: FAO, NDDB, AMUL, APDDCE, MT, Dairy and India

#### 1. Introduction

Dairying a historical and mythological focus. The majority of the rural population is dependent on agriculture and allied activities. Dairying and animal husbandry are very closely connected with agriculture in the country constituting over 26 per cent of agricultural output. Dairy sector alone accounts for about two third of the animal husbandry output. India is probably the only cow worshipping country in the world. Milk and milk products are the integral part of our rituals and we have the largest liquid milk consuming population of the world. The first mention of milk trading occurred during a Mahabharata time (nearly 2500 BC) when butter (milk fat) is taken out of milk to ease movement from Gokul to Mathura. Lord Sri Krishna has been considered as a true cow saviour. In the mythological India in Krishna Era if 'Dwepar' it is said that rivers of milk were flowing into India and it was free of cost. Ever house hold has cows and surplus milk production. Indian dairy industry has shown an unprecedented growth in milk production from about 51.4 million tons in 1990 to about 115 million tones in 2010 -11. India has emerged as the largest milk producer in the world, but could only expect to reach about 160 million tons by 2020. The overall growth rate of the dairy industry in India is around 4 per cent, which is almost 3 times the average growth rate of the dairy in the world. The milk production grew by 3 million MT per annum from 1992 to 2007 and now we need it to grow at 5 Million Mt per annum in the next fifteen years, so as to meet the ambitious target of around 183 million MT in 2022. Believe it or not, it looks impossible as of now until the whole system and policies are geared for some radical changes in the areas of breeding, fodder, health and CMP. Dairy till date has not been considered as a full time business by the farmers. Around 70 per cent of milk production is carried out by small and marginal farmers and organized dairy farms with more than 500 animals can still be counted on the fingers. Dairying in India is as old as the Indian civilization itself. Milch animals like cattle and buffalo are a symbol of purity and

motherhood in the Hindu religion and domesticated as an integral part of the Indian social system. If the genesis of organized dairying in India is traced, it was rooted only in the early part of the 20th Century, during the pre-independence era, with the establishment of military farms, by the British government. They established these farms to ensure supply of milk for their arm. Consequent to the establishment of organized dairying, in India, milk procurement from rural areas and its processing and marketing in urban areas continued to be a major problem for the growth of the sector. There was no integration between milk procurement, processing and marketing.

# 2. White Revolution

The success of the dairy industry lies in the availability of liquid milk. In India, the production of milk has been increasing steadily. From 31.6 million tones in 1980-81, it increased to 58.6 million tonnes in 1992-94 However, since production has peaked and the demand has saturated, it is now threatening to depress prices. According to Dr. Kurien, unlike in 1970 when India faced the problem of scarcity, India today faces the problem of plenty. The future of the industry, according to him depends

on finding new markets. Unless this is done, the industry would stagnate as supply would swamp demand. Amrut Milk Products, the first private dairy set up after the delicensing, is doing well. The unit was set up in October 1992. For the period April 1993 to March 1994, 13 companies tapped the capital market, aggregating Rs. 99.43 crore. Ravilleela Dairy Products started a dairy project in March 1994. The total public issue was for Rs. 5.19 crore. Thapar Milk products started a dairy project in March 1994, with a capacity to process 300,000 litres of raw milk a day. The cost of the project was Rs. 21.04 crore. It collected Rs. 13.95 crore. Roadmaster Foods of the Roadmaster group expanded its capacity in Punjab by setting up a second unit with a capacity of 450,000 litres a day. There has been a flood of new companies entering the market even this year. Vadilal Dairy International, diversified from ice cream into milk products such as butter, cheese, cheese spreads, flavoured cheese and ghee. Its fully integrated Rs.25 crore project is to be located at Sonnar, Maharashtra.

According to industry source, there is room for at least another 100 more corporate. Mr. T.R. Vardarjan, Chairman, Indian Dairy. Says cooperatives handle only 15 percent of the total milk production, the rest coming from the unorganized sector. With the concept of food stores becoming popular, branded goods are gaining acceptance. Soon milk also will be accepted by the customer as a branded product. This augurs well for the future of the companies in the dairy industry

#### 3. Importance of the Dairy Industry

As stated earlier, the number of operational holdings in India is increasing and average size of holding (about 1.68) is going down. There are about 96 million small and marginal holdings, owning on an average less than two half of land. In addition, about 30 per cent of the rural households are landless. There is extreme inequality in the present distribution of land in India, which emphasizes the basic cause of the problem of small Landholders. In contrast, significantly, the distribution of milk animals in rural areas is less skewed, as compared to land and the productivity of animals kept by small farmers doesn't compare unfavourably with that of large farmers.

Increasing milk production is one way by which we can solve the problem of marginal and small farmers or even the landless. But to make this venture a worthwhile proposition, provision of a remunerative market outlet is a must. The rural poor are mostly powerless. They do not have assets, they are illiterate and unorganized and do not have sufficient skills.

The National Dairy Development Board (NDDB) made much needed interventions and successfully. Conceptualized, designed, organized and implemented operation flood ensuring a remunerative market outlet to milk producers round the year through the organization of Anand pattern milk producers co-operatives and providing regular supplies of milk to urban customers at reasonable price.

#### 4. Objectives and Methodology

# 4.1. Need for the Study

Today dairying industry has become permanent phenomenon along with the manufacturing industry. Revolutionary changes have taken place in the dairy Industry right from the procurement at the gross root level from the farmer, processing and preservation and distribution of the same unto the ultimate customers, taking the unprecedented experiment of Anand, Gujarat as a model. In the process, lot of problems have to be faced by the farmer, collection centers, issues involved at the factory regarding strategies related to customer preferences and satisfaction. Against this back ground, an attempt is made in this study to make an in depth enquiry in to all the identified issues of Dairy marketing in a scientific manner.

# 4.2. Hypotheses

 It is hypothesized that customer preferences and satisfaction about Sangam dairy Milk Products based on the opinions of the customers.

#### 4.3. Objectives of the Study

The broader objectives of the study are to evaluate the effectiveness of the strategies of the Sangam Dairy regarding customer preference and satisfaction of the products.

• to analyze customer preferences and satisfaction about Sangam dairy Milk Products based on opinions of the customers;

#### 4.4. Methodology:

Survey method is adopted for the study and both secondary and primary sources of data are used. The secondary data sources include Dairy India, Indian Dairyman, Yozana, kurukshera, National Journal of Rural Development, Indian journal Agricultural Economics, Kisan world etc., Primary data are collected from respondents on preferences and satisfaction about the Sangam dairy customer preference and satisfaction for the product in selected municipalities of Guntur and Ponnuru Towns.

#### 4.5. Tools for Data Collection

The schedules are constructed to collect the primary information from the sample respondents in Guntur district, A.P, India. Data are collected by employing stratified random sampling method.

#### 4.6. Scope of the Study

Guntur district of Andhra Pradesh state has been purposively selected for the present study. Moreover, Guntur district has been found to be on par with the other leading district of the state, so far as the coverage of dairy products used by the respondents of

Sangam dairy. The Guntur district has one municipal corporation at Guntur and ten other municipalities which include Tenali, Vinukonda, Sathenapally, Macherla, Narsaraopet, Ponnuru, Repalle, Mangalagiri, Bapatla and Chilakaluripet.

#### 4.7. Size of the Sample

The present study has employed stratified Random sampling technique for the selection of the sample town's respondents. The study has selected two municipalities at random accounting for 10 per cent of the total municipalities. One is Guntur Municipal Corporation and other is Ponnuru municipality. Among the municipalities, required numbers of 2 wards each have been selected at random. From these wards sample customers to the extent of 10 per cent have been selected.

The sample wards and respondents selected are distributed as follow:

Guntur Municipal Corporation		Ponnuru Municipality		
Selected No of wards (52 wards)  No of Respondents		Selected No of wards (31 wards)	No of Respondents	
11	40	4	40	
21	40	20	40	
Total	80		80	

Table: Sample Size Of Wards And Respondents Sources: Guntur & Ponnuru Municipality Office

Thus, the present study covers two municipalities of the district and covers 160 respondents or customers both the Guntur Municipal corporation (80 respondents) and the Ponnuru Municipality (80 respondents) representing two sample municipalities.

#### 4.8. Customer Satisfaction

Whether the buyer is satisfied after purchase depends on the upon performance in relation to the buyer's expectation. In general, satisfaction is a persons feeling of pleasure or disappointment resulting from comparing a products perceived performance (a out come) in relation to his or her expectations. If the performance falls short of expectations, the custustomer is dissatisfied. If the performance matches the expectations, the customer is satisfied. If the performance exceeds expectations. The customer is highly satisfied or delighted. The link between customer satisfaction and customer loyalty is not proportional. Suppose customer satisfaction is rated on a scale from one to five. At very low level of customer satisfaction (level one) customers are likely to abandon the company and even bad-mouth it. At levels two to five customer are fairly satisfied but still find it easy to switch when a better offer comes along. At levels five, the customer is very likely to repurchase and ever spread good word of mouth about the company. High satisfactions are delight on emotional bond with the brand or company, not just a rational performance.

#### 4.9. Consumer Buying Process

In the rural market, generally people buy during festival seasons or after harvesting are over. Whereas, in urban markets, consumers normally buy at the beginning of the month, more so the salaried classes. Marketer's key task is to determine who the decision-maker is in a purchase situation. This task involves identifying the locus of family authority and calls for research effort.

Dairy units	Guntur Town		Ponnuru Town	
	No of respondents	Percentage to total	No of respondents	Percentage to total
Sangam	63	78.75	66	82.5
Jercy	8	11.25	9	6.25
Model	9	10	5	11.25
Total	80	100	80	100

Table 1: Indicates The Response Regarding Which Milk Is Purchased. Source: Primary Data

#### 4.10. Brand Milk Purchased

Table 1 indicates the response of the customers regarding the type of dairy milk purchased or preferred by the customers in Guntur and Ponnuru towns respectively. It can be observed from the table that a big majority of respondents 66 out of 80 accounting for 82.5 per cent from Ponnuru town and 63 out of 80 accounting for 78.75 per cent from Guntur town have preferred Sangam Dairy milk as compared to others. Against this tendency, 6.25 per cent customers from Ponnuru town as compared 10 per cent from Guntur town have preferred Jercy and Model Dairy milk respectively.

	Guntur town		Ponnuru Town	
Opinion of quality	No of respondents	Percentage to	No of respondents	Percentage to
		total		total
Excellent	10	12.5	6	7.5
Very good	14	17.5	8	10
Good	32	40	46	57.5
Satisfactory	9	11.25	11	12.5
No idea	15	18.75	11	12.5
Total	80	100	80	100

Table 2: Indicates The Response Regarding The Option About The Quality Of Sangam Dairy By\_ Products.

Source: Primary Data

#### 4.11. Quality of Sangam Dairy By-Products

Table 2 demonstrates the response regarding the option about the quality of Sangam dairy byproducts. It can observed from the table that 46 out of 80 respondents accounting for 57.5 per cent from Ponnuru town as compared to 32 out of 80 respondents accounting for 40 per cent only have stated that quality of the Sangam dairy byproducts is good. Closely followed by, is that 17.5 per cent of respondents of respondents from Guntur town and 10 per cent from Ponnuru town have stated the quality is very good. However, it is surprising to observe that 15 out of 80 accounting for 18.75 per cent from Guntur town in relation to 11 out of 80 accounting for 12.5 per cent have stated that they have no idea about the quality of the by products of the Sangam dairy.

Opinion of	Guntur	town	Ponnuru Town	
price	No of respondents	Percentage to total	No of respondents	Percentage to total
High	14	17.5	8	10
Reasonable	63	78.75	62	77.5
Low	3	3.75	10	12.5
Total	80	100	80	100

Table 3: Indicates the Represents Regarding the Opinion about the Price of Sangam Dairy by Products
Source: Primary Data

#### 4.12. Price

Table 3 indicates the response of the customers regarding the opinion about Sangam dairy byproduct. It is satisfying to observe from the table that a big majority of customers 63 out of 80 accounting for 78.75 per cent from Guntur town in relation to 62 out of 80 respondents accounting for 77.5 per cent from Ponnuru town have stated that the price levied by Sangam dairy on byproducts is reasonable as compared to 17.5 per cent from the Guntur town and 10 per cent from Ponnuru town who stated price is high.

Leakage of	Guntur Town		Ponnuru Town	
packaging	No. of respondents	Percentage to total	No. of respondents	Percentage to total
Yes	28	35	23	28.75
No	52	65	57	71.25
Total	80	100	80	100

Table 4: Indicates the Response Regarding Facing of Leakage Problems in the Packaging of Sangam Dairy Products
Source: Primary Data

#### 4.13. Leakage Problems

Table 4 demonstrates the response of the customers regarding facing of any leakage problem in the packing of Sangam dairy products. It can be observed from the table that about 57 out of 80 accounting for 71.25 per cent from Ponnuru town. Compared to 52 out of 80 accounting 65 per cent from Guntur town have not faced any leakage problems to Sangam dairy by products. Packaging contrast to the above picture, about 35 per cent and 2 8.75 per cent from Guntur and Ponnuru towns respectively had faced leakage problem in the packaging of Sangam dairy products.

Products is which purpose is used	Guntur	town	Ponnuru town	
is useu	No of respondents	Percentage to total	No of respondents	Percentage to total
To your self	8	10	16	20
To offer a friend	6	7.5	14	17.5
To family members	62	77.5	41	51.25
Any other purpose	4	5	9	11.25
Total	80	100	80	100

Table 5: Indicates the Response Regarding the Purpose of Buying the Product Source: Primary Data

### 4.14. Purpose of Purchase

Table 5 demonstrates response regarding the purpose of buying the product. It is satisfying to observe from the table that about majority of respondents of about 62 out of 80 accounting for 77.5 per cent from the Guntur town as compared to 41 out of 80 accounting for 51.25 per cent from Ponnuru town have stated that the purpose of buying the product is for family members. Closely followed is that 16 out of 80 accounting for 20 per cent from Ponnuru town in relation to 8 out of 80 accounting 10 per cent from Guntur town stated that buying the milk product is for self. From the above analysis, it is pertinent to note that milk product is used by majority of family member in both towns for family members. Contrast to this situation, the least no of respondents used milk product accounting for 11.25 per cent from Ponnuru town and 5 per cent from Guntur town respectively for any other purpose.

Facing major	Guntur Town		Ponnuru Town	
problems products	No of respondents	Percentage to total	No of respondents	Percentage to total
Bad smell	2	2.5	4	5
Low life	7	8.75	10	12.5
No idea	3	3.75	1	1.25
Never	68	85	65	81.25
Total	80	100	80	100

Table 6: Indicates the Response Regarding Facing Any Major Problems with Sangam Dairy Products Source: Primary Data

#### 4.15. Major Problems Faced

Table 6 demonstrates the response regarding facing of major problems with Sangam dairy products. It is satisfying observe from the table that about 68 out of 80 accounting for 85 per cent from Guntur town as compared to 65 out of 80 accounting for 81.25 per cent from Ponnuru town have stated that they have not faced any major problems with Sangam dairy products. Closely followed is that 7 out of 80 accounting for 8.75 per cent from Guntur town stated that they have faced the problem lowlife in relation to 10 out of 80 accounting for 12.5 per cent from Ponnuru town who responded the same. From the above analysis, it is pertinent to note that any major problem Sangam Dairy product has not been faced by majority of customers in both the towns.

#### 5. Findings

- It can be observed from the table that a big majority of respondents 66 out of 80 accounting for 82.5 per cent from Ponnuru town and 63 out of 80 accounting for 78.75 per cent from Guntur town have preferred Sangam Dairy milk as compared to others.
- It can observed from the table that 46 out of 80 respondents accounting for 57.5 per cent from Ponnuru town as compared to 32 out of 80 respondents accounting for 40 per cent only have stated that quality of the Sangam dairy byproducts is good.
- It is satisfying to observe from the table that a big majority of customers 63 out of 80 accounting for 78.75 per cent from Guntur town in relation to 62 out of 80 respondents accounting for 77.5 per cent from Ponnuru town have stated that the price levied by Sangam dairy on byproducts is reasonable as compared to 17.5 per cent from the Guntur town and 10 per cent from Ponnuru town who stated price is high.
- It can be observed from the table that about 57 out of 80 accounting for 71.25 per cent from Ponnuru town. Compared to 52 out of 80 accounting 65 per cent from Guntur town have not faced any leakage problems to Sangam dairy by products.

- It is satisfying to observe from the table that about majority of respondents of about 62 out of 80 accounting for 77.5 per cent from the Guntur town as compared to 41 out of 80 accounting for 51.25 per cent from Ponnuru town have stated that the purpose of buying the product is for family members.
- It is satisfying observe from the table that about 68 out of 80 accounting for 85 per cent from Guntur town as compared to 65 out of 80 accounting for 81.25 per cent from Ponnuru town have stated that they have not faced any major problems with Sangam dairy products.

#### 6. Suggestion

- As the analysis reveals that majority of the customers in both the towns have tend to use skimmed milk as compared to others, the Sangam dairy has to conduct scientific surveys on the extent utilization of other products than skimmed milk so that product segmentation can be made for effective utilization of the products and their positioning in the market.
- The analysis reveals that there is mixed opinion as to the quality of by products as some customer have stated satisfactory, some have given a negative opinion and others have stated even no idea about the quality of product. In view of the mixed scenario that exists, it is always advisable that each Sangam diary booth has to display a sign board with Sangam dairy symbol, a neat execution of the price list, features of the product including percentage or quantum of milk and the cheese component and timing of sale should be made known to the customer.
- The study reveals that in two towns of Guntur and Ponnuru, the majority of respondents stated that the leakage problems are higher in packaging. The management of Sangam dairy organization has to identify well in advance areas where leakage is occurring and has to take corrective steps at the production level, quality control level, transportation side and lastly, at the time of delivery of products to the customer.
- The analysis brings out a fact that there's mixed opinion among the respondents as to the type of quality required. By taking the facts into account the Sangam dairy has to produce and distribute the milk products as per the requirement of respondents such as thickness as well as freshness and even the element of fat content also.

#### 7. References

- 1. Bhalla, G.S. Peter Hazell and John Kerr (1999), "Prospects for India's Cereal Supply and Demand to 2020", Food Agriculture and the Environment Discussion Paper 29, International Food Policy Research Institute, Washington.
- 2. Bhasin M.R, "Exploring ways and means to reduce the cost of production of Milk to encourage Dairy Farming", Indian Dairyman, Vol.XXVII (7), 1975.
- 3. David Avery Vose, Market structure, conduct and performance at the Midwest Dairy Industry ", published PhD thesis, Madison University at Wisconsin, 1966.
- Girdhari D.G, "Dairy Marketing", Indian Journal of Marketing, Vol.XII, No. 11, 1989.
   Gupta Raghuraj, "Optimizing Milk Production, "Indian journal of Rural Development, vol. XXXIII, No. 11, 1975.
- 6. Jayachandra K,"Dairying in Drought- prone Areas A study", Yojana, Vol.34, No.4, March, 1990.
- 7. Mainder Kaur and Gill, G.S," An Economic Analysis of marketing of milk in Ludhiana District (Punjab)", Agricultural Marketing, Vol.XXXI, No.4, January-March 19-21.
- 8. Milk Procurement and Technical Inputs Manual, National Development Board Dairy, Anand, 1985.
- 9. Muranjan, S "Factors Responsible for Increased Procurement of Milk in Maharastra, Artha vijnana, Vol.29, No.4, December, 1977.
- 10. Pratap, S. Birthal, et.al, (1999), "Policy Paper, National Center for Agricultural Economics and Policy Research", New Delhi, March.
- 11. "Production and Utilization Pattern of Milk at the Rural Producer's Level: An Analysis across the States" Monthly Public Opinion Surveys, Vol XLVI no.11, August, 2001.
- 12. Ramesh Kolli and A.C. Kulsestha, (1997) "Contribution of Livestock to National Income", Dairy India.
- 13. Sinha, Ramakanti, "Intensive cattle development programme in Bihar; An economic study with special reference to intensive cattle development Block Barohni, BeguSavar, Patna, 1980.
- 14. The Hindu Survey of Indian Agriculture, (2004).
- 15. World Focus on Indian Dairying", Dairy India, 1997.
- 16. www.indairyasso.org
- 17. www.inidadairy.com
- 18. www.fao.org
- 19. www.milkmagic.com