

A Detailed Study on Impact of Milk Marketing: Modern Constrictions and Prospects of Milk Productions Status in India

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Abstract

India is the second highest milk producer in the world. Generally, milk is sold loose or in bottles or in polythene sachets. The present study was aimed to understand the relationship between consequences of milk packaging and consumer predilections. In brief, the present study deals with the recent trends in sale of milk, satisfaction of respondents toward quality, price, after-sales service and study about the customer satisfaction with regard to price fixing factor of local vendor. To achieve the above goal, different types of surveys were undertaken from different kinds of people. These surveys were compiled from random samples of 150 consumers in the summer 2015. A total of 100 questionnaires were analyzed from 50 household sectors. Fluid milk consumption is also related to consumer attitudes. They were very much cognizant about price and health effects of different kinds of milk and its products. In order to achieve the goal of this present study, the data were collected and further analyzed using different types of statistical tools like chi-square test, f-test, t-test, etc. The present study revealed the preference and esteem of consumer physiognomies toward the approaches of consumption of milk.

Keywords: Milk, consumer predilection, marketing function, trends in sale of milk, future aspects

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INTRODUCTION

India is the largest producer of milk, producing more than 100 million tons of milk per annum [1]. India has a population of more than 1 billion with diverse food habits, cultures, traditions and religions.

The country has a long tradition of milk production and consumption. India is one of the world's largest and fastest growing markets for milk and milk production. The demand for value-added milk products such as cheese, dashy and probity drinks is increasing at a double digit rate in India.

Milk is the major product of livestock sector and has long been recognized as a complete natural food. It is good for growth and maintenance of health. Nearly the liquid milk contribution ranges from 60 to 80% in the case of cooperatives. Any increase in milk production is dependent on the farm gate price

received by the producer. In three years, farm gate prices have increased by more than 50%.

Milk processing in India is around 35% (with the organized dairy industry accounting for 13% of the milk produced) while the rest of the milk is either consumed at farm level or sold as fresh [2, 3]. There are about 1.22 billion people in India, with around 120 million cows and buffalos. Based on small units, fresh milk production and consumption, and selling milk over the counter have long traditions in general. When compared to major cities, majority of people (about 70%) live in the countryside [4-6].

A recent surveys shows that the cattle feed price has been increased from Rs. 1450 to 2000 per 60 kg bag. Thus, based on the above strategy, the government should take necessary steps to increase the price at least to Rs. 10/L for buffalo milk and Rs. 5/L for cow

milk in order to minimize the burden to milk producers. According to the Indian government, the cost of cow and buffalo milk is now Rs. 20 and Rs. 26/L, respectively while the farmer spends about Rs. 34.89 to procure one liter of milk. Accordingly, to minimize the consequences to farmer entrepreneurship, the government should hike the procurement rate [7].

In the states of India, the milk production has increased from 22 lac to 26 lac liters. This higher production of milk is not because of an increased cattle inhabitants, nevertheless relatively because of immobility of huge capacities of milk to Andhra Pradesh, Kerala, and Karnataka stopped procuring milk from the border districts of Tamil Nadu. Prior to this, these states used to procure 80% of the total milk production from villages bordering the state [8].

SCOPE OF THE STUDY

Currently, India seems to be self-sufficient in meeting the requirements of milk and milk products; however, with the trend of urbanization this is changing. The dairy market is very much disorganized and the government involvement is limited.

In the near future, as a result of all the changes the dairy chain itself will change. The government rules, regulations and their implementation have mainly influenced the dairy chain.

In India, the food safety and its security concerns are the important programs and this will continue to approach as food and feeding this huge population is crucial for sustainable growth of this ancient culture. Therefore, as the demand is growing faster than supply, there would be serious issue with respect to self-sufficiency in the near future [9].

OBJECTIVES OF THE STUDY

- to measure the recent trend in sale of milk.
- to measure the satisfaction of respondents towards quality, price, and after-sales service.
- to study the customer satisfaction with regard to price fixing factor of local vendor.

METHODOLOGY

This study dwells on primary data and it is proposed that a questionnaire and interview schedule will be used to collect primary data. To strengthen review of literature and in addition to primary data, secondary data will be also collected from relevant books, journals, articles and websites.

HYPOTHESIS

- There is a significant association between levels of satisfaction of consumer with regard to loose milk and consumer expectation with regard to price fixation of local vendor.

LIMITATIONS OF THE STUDY

- Time and cost are the major limitations of the study.
- Most of the people do not have recall memory regarding details on milk.
- In spite of the above limitations, the researchers have taken an effective work to complete the study objectives.

REVIEW OF LITERATURE

The mammary glands of mammals produce a white liquid with several nutrition and other components for young mammals, which is primarily called milk. Colostrums are produced by the time of early lactation, which has a major role in the transfer of mother antibody to the baby. From this process, the baby can prevent/reduce the risk of several diseases [10]. The main compositions of milk are carbohydrates including lactose, glucose, galactose and other oligosaccharides. Among the carbohydrates, the lactose occupies approximately 40% of whole milk and also gives sweet taste to the milk [11].

In general, milk is isolated from cattle after delivery of young cattle and used as an agricultural food product for human consumption. Based on a survey in 2011, the milk production around the world was about 730 million tons [12, 13]. Milk and milk products are the major food products which were imported and/or exported by several countries and there are about 6 billion people who consume milk and milk products. Among all countries, the highest import of milk products was achieved by China and Russia.

The dairy farms provide entrepreneurship to about 750 million people around the world. In the natural world, humans are exclusion for drinking milk past infancy, in spite of the fact that most adult humans have some incidence of lactose intolerance [14] (Table 1).

Table 1: Recent Sale Trends of Milk.

Rank	Country	Production (Tons)
1	United states	90,865,000
2	India	54,000,000
3	China	37,419,500
4	Brazil	32,304,421
5	Russia	31,576,047
6	Germany	30,506,929
7	France	23,983,196
8	New Zealand	20,053,000
9	Turkey	15,977,837
10	United kingdom	13,884,000

MAJOR MARKETING FUNCTIONS

Price

It was reported in 2007 that with increased worldwide prosperity and the competition of biofuel production for feed stocks, both the demand for and the price of milk had substantially increased. In 2010, the department of agriculture predicted farmers would receive an average of 1.35 dollar per US gallon of cow's milk (35% per liter) which is down 30% per gallon from 2007.

Grading

In general, the milk is chilled in milk cans by immersing in a cold water bath. The water in this process is typically drawn up from underground instead of using mechanical refrigerators.

Packing

Glass milk bottles are now rare. Most people purchase milk in bags, plastic bottles, or plastic-coated paper cartons. Ultraviolet (UV) light from fluorescent lighting can alter the flavor of milk, so many companies that once distributed milk in transparent or highly translucent containers are now using thicker materials that block the UV light. Milk comes in a variety of containers with local variants. We have some advantages such as:

- Obtaining of superiority of cow and buffalo milk through a strong network of chilling process.
- Resilient influence in local markets and first-hand familiarity of the local traditions.
- Professional brainpower and scientifically skilled.
- High team works and organization management skills.

TYPES OF MILK

A) Cow Milk

It contains approximately 3.6% lactose, 3.4% protein, 0.7% minerals and supplies 66 kcal of energy per 100 g. See also nutritional value further on.

B) Human Milk

It contains, approximately 4.2% fat, 1.1% protein, 7% lactose (a carbohydrate), and supplies 72 kcal of energy per 100 g.

C) Whole milk

Whole milk is 3.5% milk fat and is the close to the way it comes from the cow before processing. Consumers that want to cut calories and fat have multiple options.

D) Reduced-Fat Milk

- It contains 2% milk fat.

E) Low-Fat Milk

- It contains 1% milk fat.

F) Fat-Free milk

- It also called nonfat or skimmed milk and contains no more than 0.2% milk fat.

TESTING OF HYPOTHESIS

Hypothesis

There is a significant association between levels of satisfaction of consumer with regard to loose milk and consumer expectation with regard to price fixation of local vendor.

Null Hypothesis

There is no significant association between levels of satisfaction of consumer with regard to loose milk and consumer expectation with regard to price fixation of local vendor.

Tools Used

Chi-square test (Table 2).

Table 2: Chi-Square Test Table.

O	E	O-E	(O-E) ²	$\frac{\sum (O-E)^2}{E}$
53	69	-16	256	3.71
25	22.5	2.5	6.25	0.27
72	58.5	13.5	182.25	3.11
85	69	16	256	3.71
20	22.5	-2.5	6.25	0.27
45	58.5	-13.5	182.25	3.11
Total				14.18

$$\text{Chi-square test} = \frac{\sum (O - E)^2}{E}$$

Here, O=Observed frequency

E=Expected frequency

Degrees of freedom (V)=(R-1) (C-1)

V=(2-1) (2-1)

V=1

Levels of significance at 5% χ^2 =3.84

Calculated value=14.18

Table value=3.84

Hence, the calculated value of χ^2 is greater than the table value. Therefore, the null hypothesis is accepted.

CONCLUSIONS

- ✓ Milk is one of the healthiest products in the country.
- ✓ It could not be used for single purposes. And also used for multi-purpose like ghee, butter, sweet dishes, milk powder, flavored milk, juice etc.
- ✓ Regards with milk people must have one strongest opinion, i.e., once the people have to drinking, it “gives more growing and nutritional power” to the children. Because of these reasons, the people can be preferred it more.
- ✓ Most importantly, Indian government should take necessary and useful prompt steps/actions in order to improve the current status of milk production and should provide enough awareness to the stock holders, local venders and consumers in order to reach healthier and costeffective milk and its products to all over daily milk consumers.

- ✓ In conclusion, this is the right time to set new revised rules and regulations for several milk products and also milk product-producing commercial industries in the direction of improving milk production in order to avoid shortage of milk in near future and to provide enough milk for nutrition to our forthcoming generation.

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