Consumer Perception Towards Branded Dairy Products in Ludhiana

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Abstract

The purpose of this study was to study the consumer perception towards branded dairy products. A probability sampling technique, purposive sampling method has been used. The factor analysis, and one-way ANOVA was used to test the hypothesis. The results identified two factors of consumer's perception. The findings of the study indicated that there is no significant relationship between annual income, product quality and brand experience. The study suggested that the branded dairy companies should adopt practices to attract people, and provide them knowledge, so that they are willing to buy branded dairy products.

Key Words

Consumer Perception, Branded Dairy Products

INTRODUCTION

The Indian proverb "Health is Wealth" indicates the importance of milk & milk products. A prudent man always gives preference to his/her health. If a human being has a good health, then he/she can serve himself/herself and the nation. India's approximately 60 per cent of population resides in rural areas/villages & semi-rural areas and do agricultural & allied activities for livelihood. India is 'The Oyster' of the global dairy industry, provides opportunities to entrepreneurs worldwide, who wish to take advantage of this

fastest growing market for milk and milk products. The milk production has grown at a high speed during the white revolution (Operation Flood). Prior to this, the milk yield per animal was very low. The main cause for the low yield was inadequate use of scientific practices in mulching, inadequate availability of fodder in all seasons and unavailability of veterinary health services. The Operation Flood programme was launched in 1970 to develop India's dairy industry and make it a powerful chain for procurement and processing of milk and its distribution by the co-operative sector. The objective of Operation Flood programme was to organize dairy cooperatives in the milk shed areas of the villages and to link them to the metro cities. The engagement by National Dairy Development Board was to promote production, improvement in processing methods and development of a strong marketing network. It also led to the development of dairy as an important source of employment and income generation in the rural areas. The total milk production was 155.49 MT in India (Food and Agriculture Organisation, report 2015). The Indian milk production has increased to 165.4 million tonnes in 2016-17.

Table 1
Production of Milk (in MTs)

Years	Production (in Million Tons)
2007-08	107.9
2008-09	112.2
2009-10	116.4
2010-11	121.8
2011-12	127.9
2012-13	132.4
2013-14	137.7
2014-15	146.3
2015-16	155.5
2016-17	165.4
2017-18	176.3

The Table 1 depicted that the production of milk in India has increased every year from 2007-08 to 2017-18 i.e. 107.9 to 176.3 million tons. India was ranked 1st produced approx. 146.3 Million Tons in 2014-15 and rising consumption with better margins in the value-added dairy products (VADPs) driving the dairy players to get into and at higher profitable level. Most private players are

concentrating on value-added products as margins are much higher compared to liquid milk.

The consumer perception is how consumers perceive service, selection/products, prices, location and cleanliness. The theory aims to explain consumer behaviour by analyzing their motivation to buy or not to buy any particular item. There are three areas of consumer perception theory - self perception, price perception, and benefit perception.

Consumers continuously evaluate all the information they have about a company to form a decision about whether that company offers value or not. The more information consumers have about a dairy product, the more comfortable they are at buying it. Consumer risk perception is another factor. Different brands must try to encourage the buying behaviour of consumers, by offering best services. An effective technique to improve the perception of buyer is to create an impression that the organisation cares about its customers' best interests. In return, consumers become loyal to the brand and prefer the desired brand for their buying-decision in future.

India is one of the fastest growing economies in the world. Income level of the consumers is growing, resulting into higher demand of milk products, buying behaviour and improved lifestyles. The milk is processed and marketed by 170 district milk Producers' Co-operative Unions and 22 State Cooperative Dairy Federations in India. The milk production gives employment to more than 72 million dairy farmers. The milk production in 1999-00 was estimated at 78million MT as compared to 74.5million MT in the 1997-98. Indian milk production has increased by 4% and accounts for more than 13% of the total world output and 57% of total Asia's production. India is among the top five (USA, Russia, Germany and France) milk producing nations in the world. The Indian dairy market is highly dominated by the unorganised sector. 80% market is controlled by local vendors and private milkmen and 20% market is under organised sector which includes cooperatives, private companies.

Dairy is the one of the booming industries in Punjab. The state is known for agriculture & dairy products. The milk production trend in the state is given in the following Figure :

Figure 1 : Milk Production of Punjab

Source : https://www.nddb.coop/sites/default/files/MP-by-States-090318.pdf
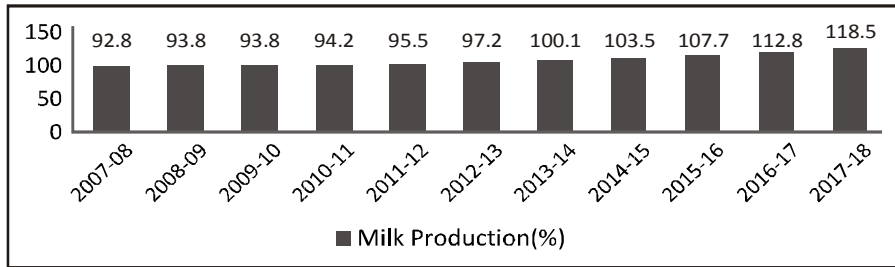
Figure 1 depicted that the milk production of the Punjab State is increasing every financial year from 2007-08 to 2017-18 i.e 92.8% (9,282) thousand tons to 118.5 % (11,855) thousand tons.

According to the Indian Food Industry, growth rate of different sectors is given below :

Figure 2 : Growth Rate of Milk & Dairy Industry
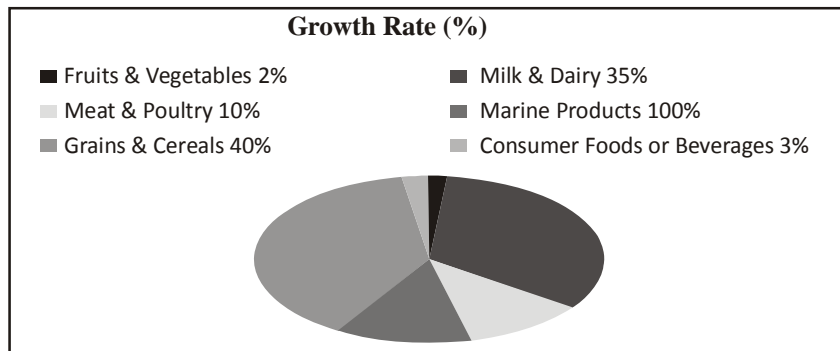
Source : indian-food-processing-sector2016

According to Indian Dairy Market Report & Forecasts 2012–2017 by research agency (IMARC), the market for milk products in India is expected to surpassed Rs.981,586 crore by 2017. Most private players are concentrating on value-added products as margins in such products are much higher as compared to liquid milk. The key weakness of Indian dairy sector is its unorganized character (CRISIL Report 2015). By unorganized, we mean the milk that is sold by small vendors who collect the milk from local producers and sell it directly to the households and sweet shops in both urban and rural areas; whereas

organized dairy sector represents milk that is processed using modern technology and marketed through organized channels under their own brands e.g. AMUL, VERKA, MOTHER DAIRY, etc.

LITERATURE REVIEW

Tandon and Malhan (2017) studied the consumer perception towards soft drinks. The study found that consumers less than 25 yrs of age consume soft drinks more. The factors like price, availability, brand, packaging were considered important while purchase of soft drinks. The study concluded that companies should focus on good packaging to capture major part of the market.

Karthik *et al.* (2016) in their study, conducted in Chittor, examined consumer perception towards organized and unorganised dairy products. The study found that large proportion of dairy products in India is marketed through unorganised sector. The Chittor district was largely dominated by the unorganised sector because of regular supply, easy availability of desired quantity, monthly credit, and door delivery. The organised sector of dairy products was preferred by the consumers considering varieties of milk, based on fat content, quality, and packaging. The study suggested that dairy companies in the district should make efforts to provide products available in the convenience stores and make door to door delivery service to tap the unorganised market. The value-added dairy products should be developed without compromising the quality, freshness, hygiene and packed products to the consumer.

Ahila and Boopathi (2015) analyzed consumer perception on Aavin Milk in Pollachi, Tamilnadu. The study found that consumers change their behaviour frequently on the basis of new trend/ fashion and are also affected by the price, quality, taste, and other attributes. The study also depicted that consumers buy the Aavin Milk for its quality and taste.

Khanna (2015) studied the problems faced by consumers in making dairy products like Dahi at home. The study facilitates the marketing of dairy products and the difference in taste and perception of home-made and purchased dahi. The study revealed that perception of packed dahi and home-made dahi, based on parameters like cost, health, consistency, convenience, storage, time etc. varies. The study found that home-made products were less expensive. The packed dairy products were considered as good for health, freshness, consistent in taste than unpacked dairy products by the consumers.

Sumathi (2015) analysed the customer perception towards marketing of different brands of packaged milk at Coimbatore city, Tamil Nadu. The study found that respondents were more aware about Aavin milk brand. The respondents were highly satisfied with quantity, quality and availability of packaged milk. The study suggested that the marketing managers have to create high degree of awareness among the customers regarding milk companies and strengthen their supply chain & logistics to promote and make the product easily available to the end consumers.

Tariq *et al.* (2013) studied consumer perception about branding and purchase intention of FMCG in an emerging market, Pakistan. The hypotheses were made to know the significant and positive relationship of variables of perception with purchase intentions. The brand image, product quality, product knowledge, product involvement, product attributes and brand loyalty had significant and positive relationship with purchase intention.

Talreja and Jain (2013) studied in Udaipur the changing consumer perceptions towards organized retailing from unorganised retailing. The study indicated that consumers like to buy fruits & vegetables from super-markets because of its quality , but they are also more concerned about price also. The organized retailers have great importance because of the store image, product availability & discounts. The study also depicted that consumers preferred to buy some products from organized retailers and some from unorganised retailers.

Ingaval and Thaker (2012) studied consumers' preference for milk & milk products. The study revealed that the consumers preferred packed branded milk products. The consumers' purchase-decision was changed because of availability, advertisement, product quality & price of products. The study also indicated grocery shops, bakers & sweet markets were preferred places of purchase of dairy products, some consumers preferred company outlets for their dairy products purchase.

Yayyar (2012) investigated packed and unpacked fluid milk consumption and preferences among Turkish households. The study found that consumers preferred more packed fluid milk. The household head's, education, with higher income, and households having children less than seven years of age consumed packed milk. The unpacked fluid milk consumption was found comparatively less because of other factors except income and working class households. The study has some implications for milk producers & companies, because milk production is increasing rapidly. The researcher

suggested that Turkish companies design effective pricing & promotional strategies for fluid milk consumption.

Jones *et al.* (2007) studied consumer perception of soya and dairy products in Newzealand and USA. The study describes that there were less cross-cultural differences between US and Newzealand consumers for the products and health benefits of Soya and dairy products. The consumers gave more preference to dairy as compared to soya protein source products.

Hansen (2005) investigated consumer preference for milk & milk products. The study indicated that most consumers said price had positive effect on eating quality. The eating quality positively affected respondents' pleasure feeling. The physical surroundings had positive effect on pleasure feeling. The result implies that food producers & retailers should understand consumers' quality perception.

OBJECTIVES OF THE STUDY

The objective of the study is :
- To analyse the consumer perception towards the branded dairy products.

RESEARCH METHODOLOGY

An empirical research design was selected as appropriate for this study. In this study, a purposive sampling method has been used. The study was conducted in Ludhiana district of Punjab. A total of 120 consumers were included for the study. The study was conducted during May-July, 2018. The data was collected for the study from both Primary as well Secondary sources. The primary data was collected through Structured Questionnaire related to the study to gather responses from the targeted consumers. The secondary data was collected from journals, magazines, website of Indian dairy industry, and other published data. The questionnaire was developed to examine the consumer perception on the five-point Likert scale : 1 - Extremely Unimportant, 2 - Unimportant, 3 - Can't Say, 4 - Important and 5 - Extremely Important. A consumer perception scale was developed on the basis of responses of consumers. The collected data was analyzed with the help of SPSS the Factor Analysis was conducted to identify the most important variables of consumer perception. The one-way ANOVA was used to examine the significant relationship between annual income and consumer perception important variables.

DATA ANALYSIS AND RESULTS

Table 1
Principal Component Analysis Results

Factors and Item	Factor Loadings
KMO = .676	
Product Quality :	
The branded dairy products are better in quality than unbranded dairy products.	.736
The freshness of dairy products is more important.	.876
Initial Eigen Value	
Rotation Sum of Squared Loadings	2.190
Cumulative % Variance	43.8%
Brand Experience :	
My own experience makes to choose the dairy brand.	.870
Using branded dairy products have been a good experience.	.885
The branded dairy products add to my quality of life.	.756
Initial Eigen Value	
Rotation Sum of Squared Loadings	1.432
Cumulative % Variance	72.4%

Interpretation

The result of Principal Component Analysis (PCA) is shown in Table 1, the Varimax Rotation was used to determine the dimensionality of the variables considered. Factors with Eigen Values of above 1.00 were extracted and factors loading above 0.5 were retained. The analysis came out with four factors : Product Quality and Brand Experience. All the four factors had factors loading within the acceptable range of higher than 0.50(0.736-0.885). The Product Quality factor consists of consumers' responses related to the variables influencing quality and freshness of branded/organised dairy products. The Brand experience factor representing the relative importance that consumers place for preferring branded dairy products. The product quality variable explained the 43.8% of variance with the Eigen value of 2.190 and brand experience variable explained the 72.4% of variance with the Eigen value of 1.432.

Table 2
Descriptive Statistics

Annual Income	Frequency	Mean	Standard Deviation
1-5 Lacs	26	**3.81**	**1.252**
5-10 Lacs	29		
More than 10 Lacs	7		
Not Applicable	58		
Total	**120**		

Table 2 describes annual income frequency of consumers of Ludhiana district. The consumers doing jobs, business, or professional works were considered for the study. The housewives and students are under not applicable category of annual income, but they are also taken for the study. The mean is 3.81 and standard deviation is 1.252 of descriptive statistics with regard to annual income.

Hypotheses Testing using One-way ANOVA Analysis

Table 3
One-Way Analysis

ANOVA		
	F	Sig.
Product Quality	.669	.573
Brand Experience	.516	.672

H_1 : There is no significant relationship between annual income and product quality.

Table 3 shows ANOVA values for all two factors. The hypothesis is accepted or rejected on the basis of the value for each factor. As per the Table, for product quality the significance value is 0.573 (i.e., $p = 0.573$), which is greater than 0.05, therefore, there is a no significant relationship between annual income and product quality.

H_2 : There is no significant relationship between annual income and brand experience.

The above Table shows (Brand Experience) the output of the

ANOVA analysis. The significance value is 0.672 (i.e., $p = 0.672$), which is greater than 0.05, therefore, there is a no significant relationship between annual income and brand experience.

FINDINGS OF THE STUDY

- The factor analysis has come out with two important factors Product Quality and Brand Experience of Consumer Perception towards branded dairy products.
- The null hypothesis is accepted. It was found that there is a no significant relationship between annual income and product quality.
- It has been found that there is a no significant relationship between annual income and brand experience.

LIMITATIONS OF THE STUDY

- Due to time constraint and limited resources only one district of Punjab i.e. Ludhiana was included in the study. Therefore, the results cannot be generalized.

CONCLUSION

The study concludes that in the consumer perception towards branded dairy products in Ludhiana, there are two important factors namely product quality and brand experience. The study depicted that there is no significant relationship between annual income and product quality and brand experience. The milk production of the Punjab State is continuously increasing. As per the Indian Food Processing Sector 2016 Report, the growth rate of milk & dairy industry is 35% p.a. 20% market is under organised sector, i.e., cooperatives, and private companies which are making dairy products. The study suggested that the companies should adopt practices to attract people, and provide them knowledge and best quality products at reasonable prices so that they buy branded dairy products.

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