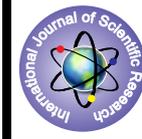


Consumers' Preference on Various Brands of Cement in Gobichettipalayam Taluk of Erode District



Management

KEYWORDS :

Mr. M. Murugan

Assistant Professor in Commerce, Shanmuga Industries Arts and Science College Tiruvannamalai. Tamil Nadu State.

Dr. R. Ganapathi

Assistant Professor in Commerce, Directorate of Distance Education, Alagappa University, Karaikudi. Tamil Nadu State

ABSTRACT

The study on consumers' preference on the various brands of Cement is quite interesting in the sense that it brings out useful findings and suggestions. The study was conducted in Gobichettipalayam Taluk of Erode District as the researcher is closely associated with the study area. The respondents are only 100 in number and hence it cannot be extended to all consumers. Various statistical measures and tests were used to analyze and interpret the information and data collected from the primary sources. On the whole the study was quite useful and beneficial to future scholars.

INTRODUCTION

Cement Industry is one of the key industries of India. It plays a dominant role in the national economy. From the point of view of economic development of the country, Cement Industry ranks second immediately after the Iron and Steel Industry. Cement is indispensable in building and construction works and the production and consumption of cement, to a large extent, indicate a country's progress. In a developing country like India, the need for a well established cement industry is of paramount importance. India is the seventh largest cement producing country in the world, surpassed by the U.S.S.R, Japan, the U.S.A., Italy, West Germany and France. About 90,000 workers are employed in this industry. It contributes about Rs.50 crores per annum to the national exchequer by way of taxes and more than Rs.30 crores to Indian Railways by way of freight. If due attention is given, the industry may contribute good amount of foreign exchange by brightening export possibilities and containing huge amounts of cement imports.

ORIGIN AND GROWTH

Manufacturing cement as we understand today was first tried in India in the year 1870 by using chalk imported from England and blue clay found near Calcutta. The first Indian cement plant was established in 1904 by South India Industries Limited, Madras. The first modern cement factory was started in 1914 in Porbunder and was owned by India cements company Limited.

The Government referred the problem of the industry to the Tariff Board, which recommended tariff protection. The cement Manufacturers' Association and the cement Marketing Company of India came into being with the chief objective of popularizing indigenous cement and coordinating the marketing and pricing functions relating to cement.

In 1936, all the three existing cement companies with the exception of the some valley Portland cement Company Limited merged to form the Associated Cement Companies Limited. This move facilitated cost reduction as well as uniformity in quality. 1940, there were 20 cement plants in India. On the eve of Indian independence in 1947 there were 23 cement plants in the sub-continent. After partition, five of the cement producing units went to Pakistan and the installed capacity of the 18 units that remained in India was 1.5 million tonnes per annum.

There were 22 cement plants in 1950, with an installed capacity of 3.17 million tonnes and 33 plants in 1960, with 8.17 million tonnes capacity. The next decade saw the establishment of 13 more cement plants which reported working in 1977, with a total installed capacity of about 21.7 million tonnes. The structure of the cement industry has undergone a significant change with respect to plant size and technical process employed since 1989. Cement industry was under price and distribution controls of the Government until February 1989. During the control regime, 67.7% of the output was under levy and the prices were administered i.e. fixed by the Government from time to time. The cement producers were free to sell the 33.3% non - levy

portion of their output in the open market, at the price determined by the market forces.

CEMENT INDUSTRY IN TAMIL NADU

Tamil Nadu has more per cent of lime stone reserves. So, the first mini cements plant commissioned at Madurathur in Tamil Nadu. The mini cement plants have capacity ranging between 50 tonnes to 100 tonnes per day. The cumulative cost increasing of power, coal, wagon causes to serious increasing of the price of cement. Modernization programmes of cement industries in Tamil Nadu include conversion measures, adoption of latest technologies such as pre-heaters and pre-calcinators, installation of pollution control device, setting up of captive power units and the like. Tamil Nadu Government has been encouraging the cement industry to set up modernization programmes.

The cement industry has grown rapidly in the southern and western regions of the country due to the availability of large quantities of the basic raw material, viz. limestone in these regions. The cement industry has also made rapid strides in Tamil Nadu. Thus the production capacity in our state accounts for about 47 per cent of the capacity in the South Zone and for more than 17 per cent of the total production capacity in the country. Thus it would seem that there is a lot of scope for improvement in the per capita consumption of cement in a developed state like Tamil Nadu.

A large proportion of the cement produced in the state is at present being utilized to meet the demand in other states of the zone and also to meet the demand in other deficit areas in the North and East Zone. In fact the whole of the South Zone is a surplus Zone with the surplus being siphoned off to meet the unsatisfied demand in other areas of the country. Thus in 1970 factories situated in the South Zone dispatched 12.56 lakh tonnes of cement to the west, 2.99 lakh tonnes of cement to the East and 3.28 lakh tonnes of cement to areas in the North of the country. The most important centers of cement industry in Tamil Nadu are Talachiyuthu, Dalmiapuram, Tulukappati, Madhukari, Thiruvattiyur, Sankari drug, Srivilliputhur, Sankarnagar and Thazaiyuthu.

STATEMENT OF THE PROBLEM

There are various cement manufacturers producing various brands of cement in our country and they are playing an important role in fulfilling the needs of the consumers. At present, the consumers are more dynamic. Their taste, needs and preference are changing as per the current scenario. The consumer has certain expectation from branded cement in terms of its quality, instant drying, price, packing and door delivery. Now-a-days different brands of cement available in the market. Each one is having its own features and consumers give more importance to select any one of particular brand.

In this context the present study is undertaken to determine the awareness level of buyers of cement and to identify the attributes which motive the buyers to purchase cement and to meas-

ure the satisfaction level of buyers of cement. Hence, the study entitled "A study on consumers' preference on various brands of cement in Gobichettipalayam Taluk". On a general analysis of the present day market, it is seen that all the brands of cement introduced in the market do succeed. Some brands have a well established market, while some brands even struggle to thrive in the market.

OBJECTIVES OF THE STUDY

The main objectives of the present study are:

1. To determine the awareness level of buyers of cement.
2. To identify the attributes which motivate the buyers to purchase cement and to measure the satisfaction level of buyers of cement.

SCOPE OF THE STUDY

The scope of this study is restricted to consumers' preference in three brands of cement alone. The study intends to analyze the awareness level of buyers of cement and to identify the attributes which motivate the buyers to purchase cement and to measure the satisfaction level of buyers of Arasu cement, Sankar cement and ACC cement.

METHODOLOGY

The study is intended to cover only three brands viz., Arasu cement, Sankar cement and ACC cement in Gobichettipalayam taluk. Data for this investigation were collected from primary source. In Gobichettipalayam town there are nine dealers dealing with seven brands of cement. Among these seven brands of cement, users of only Arasu cement, Sankar cement and ACC cement were considered for this study. This was made on the basis of turnover affected by dealers during the year 2001. The highest turnover was made by ACC cement followed by Sankar cement and Arasu cement in Gobichettipalayam. From the dealers, a list of the name and address of users who bought atleast 150 bags of cement during the two months period from 1st April 2010 to 30th June 2011 was obtained. As per the list given by the dealers, there are 56, 75 and 90 persons bought Arasu cement, Sankar cement and ACC cement respectively. By using simple random sampling technique, 50 users from each category were selected. Owing to non - response, the required information were collected from 20 users of Arasu cement, 36 users of Sankar cement and 44 users of ACC cement for this study and they are interviewed by using interview schedule method.

TECHNIQUES OF ANALYSIS

The data collected from the primary source were analyzed and various statistical measures with the help of such as percentage and arithmetic mean were computed. To test the hypothesis various test, viz., chi-square test, 'z' test and students 't' test were used. The use of all these techniques different places is made on the basis of data available and requirement of analysis.

LIMITATIONS OF THE STUDY

1. This study is based on the opinions and views of 100 sample respondents of consumer only. So, the findings and suggestions of this study can not be extended to all consumers.
2. This study is based on the prevailing consumer preference. The consumer preference may change according to time, fashion, technology, and development etc. Therefore the findings may not be useful in the future period.

AWARENESS LEVEL OF THREE BRANDS OF CEMENT

It is proposed to test the hypothesis that the awareness levels of buyers of three brands of cement are same. The awareness level is not related to the brands of cement used. The following table explains the awareness level of buyers about the three brands of cement.

**TABLE 1
DISTRIBUTION OF SAMPLE RESPONDENTS IN RELATION TO THEIR AWARENESS LEVEL**

Awareness Level	Number of Respondents			Total
	Arasu Cement	Sankar Cement	ACC Cement	
High	12	24	26	62

Low	8	12	18	38
Total	20	36	44	100

The calculated value of χ^2 (0.4278) is less than the table value of χ^2 (5.99) at 5% level of significance. Therefore, the above hypothesis is accepted. It is concluded that the awareness level of buyers of three brands of cement are same.

PROPORTION OF RESPONDENTS OF ARASU CEMENT AND SANKAR CEMENT: 'Z' TEST

The details about the proportion of respondents of Arasu cement and Sankar Cement who possessed high level awareness about their brands are given below:

Proportion of respondents of Arasu cement
Who possessed high level awareness (P1) : 60 %

Proportion of respondents of Sankar cement
Who possessed high level awareness (P2) : 67 %

It is proposed to test the hypothesis that, there is no significant difference in the proportion of respondents possessing high level awareness in the two sample groups. 'Z' test was applied.

**TABLE 2
PROPORTION OF SAMPLE RESPONDENTS IN RELATION TO THEIR AWARENESS LEVEL: 'Z' test**

P ₁ (1)	P ₂ (2)	Difference (3)	Standard Error (4)	Calculated 'Z' Value (3 / 4)
0.60	0.67	0.07	0.1337	0.5235

The calculated value of 'Z' (0.5235) is less than the 1.96 at 5% level of significance. Therefore, the above hypothesis is accepted. It is concluded that, there is no significant difference between the proportions of respondents possessing high level awareness in the two sample groups are same.

PROPORTION OF RESPONDENTS OF SANKAR CEMENT AND ACC CEMENT: 'Z' TEST

The following particulars show that the proportion of respondents of Sankar cement and ACC cement who possessed high level awareness about their brands are given below:

Proportion of respondents of Sankar cement
Who possessed high - level awareness (P1) : 67%

Proportion of respondents of ACC cement
Who possessed high-level awareness (P2) : 59%

It is proposed to test the hypothesis that, there is no significant difference in the proportion of respondents possessing high awareness in the two sample groups, 'Z' test was applied.

**TABLE 3
PROPORTION OF SAMPLE RESPONDENTS IN RELATION TO THEIR AWARENESS LEVEL: 'Z' Test**

P ₁ (1)	P ₂ (2)	Difference (3)	Standard Error (4)	Calculated 'Z' Value (3 / 4)
0.67	0.59	0.08	0.110	0.727

The calculated value of 'Z' (0.727) is less than 1.96 at 5% level of significance. Therefore, the above hypothesis is accepted. It is concluded that, the proportion of respondents possessing high level awareness in the two sample groups are same.

Proportion of respondents of Arasu cement and ACC cement: 'Z' test

Table 4 shows that the proportion of respondents of Arasu cement and ACC cement that possessed high level awareness about their brand are given below:

Proportion of respondent of Arasu cement
Who possessed high level awareness (P1) : 60%

Proportion of respondents of ACC cement

Who possessed high level awareness (P₂) : 59%

It is proposed to test the hypothesis that there is no significant difference in the proportion of respondents possessing high awareness in the two sample groups. 'Z' test was applied.

TABLE 4
PROPORTION OF SAMPLE RESPONDENTS IN RELATION TO THEIR AWARENESS LEVEL: 'Z' test

P ₁ (1)	P ₂ (2)	Difference (3)	Standard Error (4)	Calculated 'Z' Value (3/4)
0.60	0.59	0.01	0.1328	0.0753

The calculated value of 'Z' (0.0753) is less than 1.96 at 5% level of significance. Therefore, the above hypothesis is accepted. It is concluded that, the proportion of respondents possessing high level awareness in the two sample groups are same.

FACTORS AND THEIR DEGREE OF IMPORTANCE: ARASU CEMENT

The following table gives the details about degree of importance given to the various attributes by the buyers of Arasu cement. It is clear from the table 5 quality is the most important factor which motivates the buyers to purchase the Arasu cement followed by price, weight package and instant drying.

TABLE 5
FACTORS AND THEIR DEGREE OF IMPORTANCE ARASU CEMENT

Sl. No.	Attributes	Number of Respondents					Total Score Value	Rank
		Extremely Important	Important	Does not make Difference	Unimportant	Extremely Unimportant		
1.	Price	5	10	5	-	-	80	2
2.	Quality	5	14	-	-	1	82	1
3.	Instant Drying	2	12	1	4	1	70	5
4.	Availability	2	6	5	4	3	60	8
5.	Weight	7	9	1	-	3	77	3
6.	Package	2	12	3	3	-	73	4
7.	Credit Facility	-	5	4	6	5	45	9
8.	Door Delivery	2	8	4	4	2	64	6
9.	Nearness	-	6	10	3	1	61	7

FACTORS AND THEIR DEGREE OF IMPORTANCE: SANKAR CEMENT

The following table gives the details about factors and their degree of importance given by buyers of Sankar cement.

TABLE 6
FACTORS AND THEIR DEGREE OF IMPORTANCE: SANKAR CEMENT

Sl. No.	Attributes	Number of Respondents					Total Score Value	Rank
		Extremely Important	Important	Does not make Difference	Un important	Extremely Unimportant		
1.	Price	9	19	3	5	-	140	3
2.	Quality	12	21	1	2	-	151	2
3.	Instant Drying	13	19	3	1	-	152	1
4.	Availability	2	13	7	9	5	106	7
5.	Weight	1	15	8	9	3	110	6
6.	Package	3	28	2	2	1	138	4
7.	Credit Facility	-	7	9	12	8	87	9

8.	Door Delivery	4	23	3	5	1	132	5
9.	Nearness	1	15	5	9	6	104	8

It is inferred from the table 6 instant drying is the most important factor which make the buyer to purchase the Sankar cement followed by quality, price, package, door delivery and other factors.

FACTORS AND THEIR DEGREE OF IMPORTANCE: ACC CEMENT

The following table gives the details about their degree of importance given by users of ACC cement to various factors.

TABLE 7
FACTORS AND THEIR DEGREE OF IMPORTANCE: ACC CEMENT

Sl. No.	Attributes	Number of Respondents					Total Score Value	Rank
		Extremely Important	Important	Does not make Difference	Un-Important	Extremely Un-Important		
1.	Price	16	22	3	3	-	183	1
2.	Quality	7	29	5	3	-	172	3
3.	Instant Drying	12	25	2	4	1	175	2
4.	Availability	-	18	16	6	4	136	7
5.	Weight	4	17	5	17	1	138	6
6.	Package	6	17	8	9	4	144	5
7.	Credit Facility	1	12	13	13	5	123	8
8.	Door Delivery	6	24	5	9	-	159	4
9.	Nearness	2	9	10	18	5	117	9

It is clear from table 7, price is the most important factor which motivates the buyers to purchase the ACC cement followed by instant drying, quality, Door delivery and package.

TABLE 8
DISTRIBUTION OF SAMPLE RESPONDENTS OF ARASU CEMENT BY PLACE OF RESIDENCE AND THEIR SATISFACTION LEVEL

Place of Residence	Satisfaction Level		Total
	High	Low	
Rural (A)	3	1	4
Urban (B)	12	4	16
Total	15	5	20

The above table reveals that the 75% of satisfaction level of buyers of Arasu cement in rural and urban area are same.

The average satisfaction score of buyers of Arasu cement and place of residence are given the following table.

TABLE 9
DISTRIBUTION OF BUYERS OF ARASU CEMENT IN RELATION TO PLACE OF RESIDENCE AND THEIR SATISFACTION SCORES

Place of Residence	Number of Sample Respondents	Average Satisfaction Score
A	4	17.25
B	16	15.00
Total	20	15.45

It is clear from the above table that the average satisfaction score of A group buyers of Arasu cement is higher than the B group of buyers.

It is proposed to test the hypothesis that there is no difference in the average score of two groups of buyers 't' test was applied.

The calculated value of 't' (0.834) is less than the table value of 't' (2.10) at 5% level of significance. Therefore, the hypothesis

is accepted. It is concluded that the satisfaction score of two groups of buyers are same.

SANKAR CEMENT

The places of residence and satisfaction level of buyers of Sankar cement are given below.

TABLE 10
DISTRIBUTION OF SAMPLE RESPONDENTS OF SANKAR CEMENT BY PLACE OF RESIDENCE AND THEIR SATISFACTION LEVEL

Place of Residence	Satisfaction Level		Total
	High	Low	
Rural (A)	6 (75)	2 (25)	8 (100)
Urban (B)	18 (64)	10 (36)	28 (100)
Total	24	12	36

(Figures in Parentheses are Percentages)

The table 10 shows that 75% of the sample respondents belonging to rural area and 64% belonging to urban area are highly satisfied about Sankar cement.

The average satisfaction score of buyers of Sankar cement and place of residence are given in the following table 11.

TABLE 11
DISTRIBUTION OF BUYERS OF SANKAR CEMENT IN RELATION TO PLACE OF RESIDENCE AND THEIR SATISFACTION SCORE

Place of Residence	Number of Sample Respondents	Average Satisfaction Score
A	8	16.63
B	28	15.86
Total	36	16.03

It is clear from the above table that the average satisfaction score of A group of buyers of Sankar cement is higher than the B group of buyers.

ACC CEMENT

The places of residence and satisfaction level of buyers of ACC cement are given below.

TABLE 12
DISTRIBUTION OF SAMPLE RESPONDENTS OF ACC CEMENT BY PLACE OF RESIDENCE AND THEIR SATISFACTION LEVEL

Place of Residence	Satisfaction Level		Total
	High	Low	
Rural (A)	8 (57)	6 (43)	14 (100)
Urban (B)	20 (67)	10 (33)	30 (100)
Total	28	16	44

(Figures in Parentheses are Percentages)

The table 12 shows that 67% of the sample respondents belonging to urban area and 57% belonging to rural area are highly satisfied about ACC cement.

The average satisfaction score of buyers of ACC cement and place of residence are given in the following table 13.

TABLE 13
DISTRIBUTION OF BUYERS OF ACC CEMENT IN RELATION TO PLACE OF RESIDENCE AND THEIR SATISFACTION SCORES

Place of Residence	Number of Sample Respondents	Average Satisfaction Score
A	14	14.64
B	30	15.50
Total	44	15.23

It is clear from the above table that the average satisfaction score of B group buyers of ACC cement is higher than the A group of buyers.

AGE AND SATISFACTION LEVEL

Age is an important factor, which determines the satisfaction level about the brands of cement. The age groups of sample respondents are classified into two categories (A) upto 35 years (B) Above 35 years.

ARASU CEMENT

Age and satisfaction level of buyers of Arasu cement are given below.

TABLE 14
DISTRIBUTION OF SAMPLE RESPONDENTS OF ARASU CEMENT BY AGE AND THEIR SATISFACTION LEVEL

Age Group	Satisfaction Level		Total
	High	Low	
Upto 35 years (A)	7(78)	2(22)	9 (100)
Above 35 years (B)	8(73)	3(27)	11 (100)
Total	15	5	20

(Figures in Parentheses are Percentages)

The table 14 shows that 78% of the sample respondents belonging to upto 35 years of age group and 73% belonging to above 35 years of age group are highly satisfied about Arasu cement.

The average satisfaction score of buyers of Arasu cement under two different age groups are given in the following table 15.

TABLE 15
DISTRIBUTION OF BUYERS OF ARASU CEMENT IN RELATION TO AGE AND THEIR SATISFACTION SCORE

Age Groups	Number of Sample Respondents	Average Satisfaction Scores
A	9	15.00
B	11	15.82
Total	20	15.45

It is clear from the above table that the average satisfaction score of B group buyers of Arasu cement is higher than the A group buyers.

It is proposed to test the hypothesis that there is no difference in the average score of two groups of buyers 't' test was applied.

The calculated value of 't' (0.404) is less than the table value of 't' (2.10) at 5% level of significance. Therefore, the hypothesis is accepted. It is concluded that the satisfaction score of two groups of buyers are same.

SANKAR CEMENT

The age and satisfaction level of buyers of Sankar cement are given below.

TABLE 16
DISTRIBUTION OF SAMPLE RESPONDENTS OF SANKAR CEMENT BY AGE AND THEIR SATISFACTION LEVEL

Age Group	Satisfaction Level		Total
	High	Low	
Upto 35 years (A)	11 (69)	5 (31)	16 (100)
Above 35 years (B)	13 (65)	7 (35)	20 (100)
Total	24	12	36

(Figures in Parentheses are Percentages)

The table 16 shows that 69% of the sample respondents belonging to upto 35 years of age group and 65% belonging to above 35 years of age group are highly satisfied about Sankar cement.

The average satisfaction score of buyers of Sankar cement under two different age groups are given in the following table 17.

TABLE 17
DISTRIBUTION OF BUYERS OF SANKAR CEMENT IN RELATION TO AGE AND THEIR SATISFACTION SCORES

Age Group	Number of Sample Respondents	Average Satisfaction Score
A	16	16.56
B	20	15.60
Total	36	16.03

It is clear from the above table that the average satisfaction score of A group buyers of Sankar cement is higher than the B group buyers.

ACC CEMENT

Age and satisfaction level of buyers of ACC cement are given below.

TABLE 18
DISTRIBUTION OF SAMPLE RESPONDENTS OF ACC CEMENT BY AGE AND THEIR SATISFACTION LEVEL

Age Group	Satisfaction Level		Total
	High	Low	
Upto 35 years (A)	10 (67)	5 (33)	15 (100)
Above 35 years (B)	18 (62)	11 (38)	29 (100)
Total	28	16	44

(Figures in Parentheses are Percentages)

The table 18 reveals that 67% of the sample respondents belonging to upto 35 years of age group and 62% belonging to above 35 years of age group are highly satisfied about ACC cement.

The average satisfaction score of buyers of ACC cement under two different age groups are given in the following table.

TABLE 19
DISTRIBUTION OF BUYERS OF ACC CEMENT IN RELATION TO AGE GROUP AND THEIR SATISFACTION SCORE

Age Group	Number of Sample Respondents	Average Satisfaction Score
A	15	15.33
B	29	15.17
Total	44	15.23

It is clear from the above table 19 that the average satisfaction score of A group buyers of ACC cement is higher than the B group buyers.

EDUCATION AND SATISFACTION LEVEL

Education is one of the main factors, which influence the satisfaction level of cement users of about brands of cement. The education status of the sample respondents are classified into two categories (A) School level (B) College level.

ARASU CEMENT

The education and satisfaction level of buyers of Arasu cement are given below.

TABLE 20
DISTRIBUTION OF SAMPLE RESPONDENTS OF ARASU CEMENT BY EDUCATION AND THEIR SATISFACTION LEVEL

Education Level	Satisfaction Level		Total
	High	Low	
School Level (A)	3 (43)	4 (57)	7 (100)
College Level (B)	12 (92)	1 (8)	13 (100)
Total	15	5	20

(Figures in parentheses are percentages)

The table 20 shows that 92% of the sample respondents belonging to college level education are highly satisfied about Arasu cement. In case of school level education 57% of buyers are low satisfied about their brand.

The average satisfaction score of buyers of Arasu cement under two different education groups are given in the following table 21.

TABLE 21
DISTRIBUTION OF BUYERS OF ARASU CEMENT IN RELATION TO EDUCATION AND THEIR SATISFACTION SCORES

Education	Number of Sample Respondents	Average Satisfaction Score
A	7	14.43
B	13	16.00
Total	20	15.45

It is clear from the above table that the average satisfaction score of B group buyers of Arasu cement is higher than the A group buyers. It is proposed to test the hypothesis that there is no difference in the average score of two groups of buyers 't' test was applied.

The calculated value of 't' (0.151) is less than the table value of 't' (2.10) at 5% level of significance. Therefore, the hypothesis is accepted. It is concluded that the satisfaction score of two groups of buyers are same.

SANKAR CEMENT

The education and satisfaction level of buyers of Sankar cement are given below.

TABLE 22
DISTRIBUTION OF SAMPLE RESPONDENTS OF SANKAR CEMENT BY EDUCATION AND THEIR SATISFACTION LEVEL

Education Level	Satisfaction Level		Total
	High	Low	
School Level (A)	7 (54)	6 (46)	13 (100)
College Level (B)	17 (74)	6 (26)	23 (100)
Total	24	12	36

(Figures in Parentheses are Percentages)

The table 22 shows that the satisfaction level of 74% of the sample respondents belonging to college level education and 54% belonging to school level education are highly satisfied about Sankar cement.

The average satisfaction score of buyers of Sankar cement under two different education groups are given in the following table 23.

TABLE 23
DISTRIBUTION OF BUYERS OF SANKAR CEMENT IN RELATION TO EDUCATION AND THEIR SATISFACTION SCORES

Education	Number of Sample Respondents	Average Satisfaction Score
A	13	15.15
B	23	16.52
Total	36	16.03

It is clear from the above table that the average satisfaction score of B group buyers of Sankar cement is higher than the A group buyers.

ACC CEMENT

Education and satisfaction level of buyers of ACC cement are given below.

TABLE 24
DISTRIBUTION OF SAMPLE RESPONDENTS OF ACC CEMENT BY EDUCATION AND THEIR SATISFACTION LEVEL

Education Level	Satisfaction Level		Total
	High	Low	
School Level (A)	12 (63)	7 (37)	19 (100)
College Level (B)	16 (64)	9 (36)	25 (100)
Total	28	16	44

(Figures in Parentheses are Percentages)

The table 24 shows that 64% of the sample respondents belonging to college level education and 63% belonging to school level education are highly satisfied about ACC cement.

The average satisfaction score of buyers of ACC cement under two different education groups are given in the following table 25.

TABLE 25
DISTRIBUTION OF BUYERS OF ACC CEMENT IN RELATION TO EDUCATION AND THEIR SATISFACTION SCORES

Education	Number of Sample Respondents	Average Satisfaction Score
A	19	15.11
B	25	15.32
Total	44	15.23

It is clear from the above table that the average satisfaction score of B group buyers of ACC cement is higher than the A group buyers.

OCCUPATION AND SATISFACTION LEVEL

The occupation of the buyers plays a vital role in the satisfaction level about brands of cement. The occupations of buyers of cement are classified into two categories (A) Government & Private Service (B) Business & Agriculture.

ARASU CEMENT

The occupation and satisfaction level of cement users about the brands of cement are given below.

TABLE 26
DISTRIBUTION OF SAMPLE RESPONDENTS OF ARASU CEMENT BY OCCUPATION AND THEIR SATISFACTION LEVEL

Occupation	Satisfaction Level		Total
	High	Low	
Government & Private Service (A)	9 (69)	4 (31)	13
Business & Agriculture (B)	6 (86)	1 (14)	7
Total	15	5	20

(Figures in Parentheses are Percentages)

The table 26 shows that 86% of the sample respondents belongs to Business & agriculture and 69% belonging to Government & private service are highly satisfied about Arasu cement.

The average satisfaction score of buyers of Arasu cement under of two different occupation categories are given in the following table 27.

TABLE 27
DISTRIBUTION OF BUYERS OF ARASU CEMENT IN RELATION TO OCCUPATION AND THEIR SATISFACTION SCORES

Occupation	Number of Sample Respondents	Average Satisfaction Score
A	13	15.38
B	7	15.57
Total	20	15.45

It is clear from the above table that the average satisfaction score of B group of buyers of Arasu cement is higher than the A group buyers.

SANKAR CEMENT

The occupation and satisfaction level of cement users about the brands of Sankar cement are given below:

TABLE 28
DISTRIBUTION OF SAMPLE RESPONDENTS OF SANKAR CEMENT BY OCCUPATION AND THEIR SATISFACTION LEVEL

Occupation	Satisfaction Level		Total
	High	Low	
Government & Private Service (A)	11 (61)	7 (39)	18
Business & Agriculture (B)	13 (72)	5 (28)	18
Total	24	12	36

(Figures in Parentheses are Percentages)

The table 28 shows that 72% of the sample respondents belonging to Business & agricultural and 61% belonging to Government & private service group are highly satisfied about Sankar cement.

The average satisfaction score of buyers of Sankar cement under two different occupation categories are given in the following table 29.

TABLE 29
DISTRIBUTION OF BUYERS OF SANKAR CEMENT IN RELATION TO OCCUPATION AND THEIR SATISFACTION SCORES

Occupation	Number of Sample Respondents	Average Satisfaction Score
A	18	16.39
B	18	15.67
Total	36	16.03

It is clear from the above table that the average satisfaction score of A group buyers of Sankar cement is higher than the B group of buyers.

ACC CEMENT

The occupation and satisfaction level of cement users about the brands of ACC cement are given below.

TABLE 30
DISTRIBUTION OF SAMPLE RESPONDENTS OF ACC CEMENT BY OCCUPATION AND THEIR SATISFACTION LEVEL

Occupation	Satisfaction Level		Total
	High	Low	
Government & Private Service (A)	12 (67)	6 (33)	18
Business & Agriculture (B)	16 (62)	10 (38)	26
Total	28	16	44

(Figures in Parentheses are Percentages)

The table 30 shows that, 67% of the sample respondents are belonging to Government and private service and 62% belonging to Business and agricultural group are highly satisfied about ACC cement.

The average satisfaction score of buyers of ACC cement under of two different occupation categories are given in the following table 31.

TABLE 31
DISTRIBUTION OF BUYERS OF ACC CEMENT IN RELATION TO OCCUPATION AND THEIR SATISFACTION SCORES

Occupation	Number of Sample Respondents	Average Satisfaction Score
A	18	15.50
B	26	15.04
Total	44	15.23

It is clear from the above table that the average satisfaction score of A group buyers of ACC cement is higher than B group buyers.

NATURE OF FAMILY AND SATISFACTION LEVEL

Satisfaction level may depend upon the nature of family. The nature of a family is classified into two categories (A) Joint family (B) Individual family.

ARASU CEMENT

The nature of family and the satisfaction level of cement users about the brands of Arasu cement are given below:

TABLE 32
DISTRIBUTION OF SAMPLE RESPONDENTS OF ARASU CEMENT BY NATURE OF FAMILY AND THEIR SATISFACTION LEVEL

Nature of Family	Satisfaction Level		Total
	High	Low	
Joint Family (A)	5 (63)	3 (37)	8
Individual Family (B)	10 (83)	2 (17)	12
Total	15	5	20

(Figures in Parentheses are Percentages)

The table 32 shows that 83% of the sample respondents belonging to individual family and 63% belonging to Joint family are highly satisfied about Arasu cement.

The average satisfaction score of buyers of Arasu cement and Nature of family are given in the following table 33.

TABLE 33
DISTRIBUTION OF BUYERS OF ARASU CEMENT IN RELATION TO NATURE OF FAMILY AND THEIR SATISFACTION SCORES

Nature of Family	Number of Sample Respondents	Average Satisfaction Score
A	8	14.38
B	12	16.17
Total	20	15.45

It is clear from the above table that the average satisfaction score of B group buyers of Arasu cement is higher than the A group buyers.

It is proposed to test the hypothesis that there is no difference in the average score of two groups of buyers. 't' test was applied.

The calculated value of 't' (0.838) is less than the table value of 't' (2.10) at 5% level of significance. Therefore, the hypothesis is accepted. It is concluded that the satisfaction score of two groups of buyers are same.

SANKAR CEMENT

The nature of family and satisfaction level of cement users about brands of Sankar cement are given below.

TABLE 34
DISTRIBUTION OF SAMPLE RESPONDENTS OF SANKAR CEMENT BY NATURE OF FAMILY AND THEIR SATISFACTION LEVEL

Nature of Family	Satisfaction Level		Total
	High	Low	
Joint Family (A)	7 (54)	6 (46)	13
Individual Family (B)	16 (70)	7 (30)	23
Total	23	13	36

(Figures in Parentheses are Percentages)

The table 34 shows that 70% of the sample respondents belonging to individual family and 54% belonging to Joint family are highly satisfied about Sankar cement.

The average satisfaction score of buyers of Sankar cement and

Nature of family are given in the following table 35.

TABLE 35
DISTRIBUTION OF SAMPLE RESPONDENTS OF SANKAR CEMENT BY NATURE OF FAMILY AND THEIR SATISFACTION SCORES

Nature of Family	Number of Sample Respondents	Average Satisfaction Score
A	13	15.62
B	23	16.26
Total	36	16.03

It is clear from the above table that the average satisfaction score of B group buyers of Sankar cement is higher than the A group buyers.

ACC CEMENT

The nature of family and satisfaction level of cement users about brands of ACC cement are given below.

TABLE 36
DISTRIBUTION OF SAMPLE RESPONDENTS OF ACC CEMENT BY NATURE OF FAMILY AND THEIR SATISFACTION LEVEL

Nature of Family	Satisfaction Level		Total
	High	Low	
Joint Family (A)	12 (80)	3 (20)	15
Individual Family (B)	16 (55)	13 (45)	29
Total	28	16	44

(Figures in Parentheses are Percentages)

The table 36 shows that 80% of the sample respondents belonging to Joint family and 55% belonging to individual family are highly satisfied about ACC cement.

The average satisfaction score of buyers of ACC cement and Nature of family are given in the following table 37.

TABLE 37
DISTRIBUTION OF BUYERS OF ACC CEMENT IN RELATION TO NATURE OF FAMILY AND THEIR SATISFACTION SCORES

Nature of Family	Number of Sample Respondents	Average Satisfaction Score
A	15	16.87
B	29	14.38
Total	44	15.23

It is clear from the above table that the average satisfaction score of A group buyers of ACC cement is higher than the B group buyers.

NUMBER OF MEMBERS AND SATISFACTION LEVEL

The number of members in a family may influence the satisfaction level of brands of cement. According to the number of members in a family, the sample respondents are classified into two categories (A) upto 4 members (B) Above 4 members.

ARASU CEMENT

The number of members in a family and the satisfaction level of users of Arasu cement are given below.

TABLE 38
DISTRIBUTION OF SAMPLE RESPONDENTS OF ARASU CEMENT BY NUMBER OF MEMBERS AND THEIR SATISFACTION LEVEL

Number of Members	Satisfaction Level		Total
	High	Low	
Upto 4 Members (A)	11 (85)	2 (15)	13
Above 4 Members (B)	4 (57)	3 (43)	7
Total	15	5	20

(Figures in Parentheses are Percentages)

The table 38 shows that the 85% of the sample respondents belonging to upto 4 members in a family and 57% belonging to above 4 members in a family are highly satisfied about the Arasu cement. The average satisfaction score of buyers of Arasu cement and Number of members in their family are given in the following table.

TABLE 39
BUYERS OF ARASU CEMENT IN RELATION TO NUMBER OF MEMBERS IN THEIR FAMILY AND THEIR SATISFACTION SCORES

Number of Members	Number of Sample Respondents	Average Satisfaction Score
A	13	16.77
B	7	13.00
Total	20	15.45

It is clear from the above table that the average satisfaction score of A group buyers of Arasu cement is higher than the B group buyers. It is proposed to test the hypothesis that there is no difference in the average score of two groups of buyers. 't' test was applied. The calculated value of 't' (1.836) is less than the table value of 't' (2.10) at 5% level of significance. Therefore, the hypothesis is accepted. It is concluded that the satisfaction score of two groups of buyers are same.

SANKAR CEMENT

The number of members in a family and the satisfaction level of users of Sankar cement are given below.

TABLE 40
SAMPLE RESPONDENTS OF SANKAR CEMENT BY NUMBER OF MEMBERS AND THEIR SATISFACTION LEVEL

Number of Members	Satisfaction Level		Total
	High	Low	
Upto 4 members (A)	16 (76)	5 (24)	21
Above 4 members (B)	8 (53)	7 (47)	15
Total	24	12	36

(Figures in Parentheses are Percentages)

The table 40 shows that 76% of the sample respondents belonging to upto 4 members in a family and 53% belonging to above 4 members in a family are highly satisfied about Sankar cement. The average satisfaction score of buyers of Sankar cement and Number of members in family are given in the following table 41.

TABLE 41
BUYERS OF SANKAR CEMENT IN RELATION TO NUMBER OF MEMBERS IN THEIR FAMILY AND THEIR SATISFACTION SCORES

Number of Members	Number of Sample Respondents	Average Satisfaction Score
A	21	16.00
B	15	16.07
Total	36	16.03

It is clear from the above table that there is a little difference in the average satisfaction score of A group (upto 4 members) and B group (above 4 members) buyers.

ACC CEMENT

The number of members in a family and the satisfaction level of users of ACC cement are given below.

The table 42 shows that 67% of the sample respondents belonging to above 4 members in a family and 63% belonging to upto 4 members in a family are highly satisfied about ACC cement.

TABLE 42
SAMPLE RESPONDENTS OF ACC CEMENT BY NUMBER OF MEMBERS AND THEIR SATISFACTION LEVEL

Number of Members	Satisfaction Level		Total
	High	Low	
Upto 4 members (A)	20 (63)	12 (37)	32
Above 4 members (B)	8 (67)	4 (33)	12
Total	28	16	44

(Figures in Parentheses are Percentages)

The average satisfaction score of buyers of ACC cement and number of members in a family are given in the following table 43.

TABLE 43
BUYERS OF ACC CEMENT IN RELATION TO NUMBER OF MEMBERS IN THEIR FAMILY AND THEIR SATISFACTION SCORE

Number of Members	Number of Sample Respondents	Average Satisfaction Score
A	32	15.16
B	12	15.42
Total	44	15.23

It is clear from the above table that, there is a little difference in the average satisfaction score of A group (upto 4 members) and B group (above 4 members) buyers.

ANNUAL INCOME AND SATISFACTION LEVEL

Income of a person may influence the satisfaction level of brands of cement. The annual incomes of the sample respondents are classified into two categories i.e. (A) Below Rs.2,00,000 (B) Above Rs.2,00,000.

ARASU CEMENT

The annual income and satisfaction level of buyers of Arasu cement are given below.

TABLE 44
SAMPLE RESPONDENTS OF ARASU CEMENT BY ANNUAL INCOME AND THEIR SATISFACTION LEVEL

Annual Income	Satisfaction Level		Total
	High	Low	
Below Rs.2,00,000 (A)	5 (63)	3 (37)	8
Above Rs.2,00,000 (B)	10 (83)	2 (17)	12
Total	15	5	20

(Figures in Parentheses are Percentages)

The table 44 shows that 83% of the sample respondents belonging to Above Rs.2,00,000 annual income group and 63% belonging to below Rs.2,00,000 annual income group are highly satisfied about Arasu cement. The average satisfaction score of buyers of Arasu cement and Annual income of their family are given in the following table 45.

TABLE 45
BUYERS OF ARASU CEMENT IN RELATION TO ANNUAL INCOME AND THEIR SATISFACTION SCORES

Annual Income	Number of Sample Respondents	Average Satisfaction Score
A	8	14.37
B	12	16.17
Total	20	15.45

It is clear from the above table that the average satisfaction score of B group buyers of Arasu cement is higher than the A group buyers. It is proposed to test the hypothesis that there is no difference in the average score of two groups of buyers. 't' test was applied. The calculated value of 't' (0.43) is less than the table value of 't' (2.10) at 5% level of significance. Therefore,

the hypothesis is accepted. It is concluded that the satisfaction score of two groups of buyers are same.

SANKAR CEMENT

The annual income and the satisfaction level of cement users of Sankar cement are given below.

**TABLE 46
SAMPLE RESPONDENTS OF SANKAR CEMENT BY ANNUAL INCOME AND THEIR SATISFACTION LEVEL**

Annual Income	Satisfaction Level		Total
	High	Low	
Below Rs.2,00,000 (A)	9 (82)	2 (18)	11
Above Rs.2,00,000 (B)	15 (60)	10 (40)	25
Total	24	12	36

(Figures in Parentheses are Percentages)

The table 46 shows that 82% of the sample respondents belonging to below Rs.2,00,000 and 60% belonging to above Rs.2,00,000 of the annual income group are highly satisfied about Sankar cement.

The average satisfaction score of buyers of Sankar cement and Annual income of their family are given in the following table 47.

**TABLE 47
BUYERS OF SANKAR CEMENT IN RELATION TO ANNUAL INCOME AND THEIR SATISFACTION SCORES**

Annual Income	Number of Sample Respondents	Average Satisfaction Score
A	11	17.00
B	25	15.60
Total	36	16.03

It is clear from the above table that the average satisfaction score of A group buyers of Sankar cement is higher than the B group buyers.

ACC CEMENT

The annual income and the satisfaction level of users of ACC cement are given below.

**TABLE 48
SAMPLE RESPONDENTS OF ACC CEMENT BY ANNUAL INCOME AND THEIR SATISFACTION LEVEL**

Annual Income	Satisfaction Level		Total
	High	Low	
Below Rs.2,00,000 (A)	12 (63)	7 (37)	19
Above Rs.2,00,000 (B)	16 (64)	9 (36)	25
Total	28	16	44

(Figures in Parentheses are Percentages)

The table 48 shows that 64% of the sample respondents belonging to above Rs.2,00,000 annual income group and 63% belong-

ing to below Rs.2,00,000 annual income group are highly satisfied about brands of ACC cement. The average satisfaction score of buyers of ACC cement and Annual income of their family are given in the following table 49.

**TABLE 49
BUYERS OF ACC CEMENT IN RELATION TO ANNUAL INCOME AND THEIR SATISFACTION SCORES**

Annual Income	Number of Sample Respondents	Average Satisfaction Score
A	19	14.89
B	25	15.48
Total	44	15.23

It is clear from the above table that the average satisfaction score of B group buyers of ACC cement is higher than the A group buyers.

MAJOR FINDINGS AND SUGGESTIONS

1. Among the 44 users of ACC cement interviewed, 41% of the respondents are having low awareness. Hence, it is suggested that the manufacturer should take necessary steps to improve the awareness among the people by taking the following measures.

- Giving frequent advertisements in television.
- Establishing branches / appointing sub dealer in many places.
- Appointing representatives who can directly meet the prospective buyers of cement and create awareness among them.

2. It was found that 99%, 92% and 82% of the Arasu cement, Sankar cement and ACC cement users have preferred their brand on the expectation of quality. But only 75%, 64% and 41% of the users are satisfied with this attribute. Hence, it is suggested that the manufacturers should concentrate to improve and maintain the quality of their brand of cement.

3. It was found that 70% of users of Arasu cement, 89% of users of Sankar cement and 84% of users of ACC cement preferred their brand on the expectation of instant drying. But only 50%, 58% and 50% of users are satisfied about instant drying. Hence, it is suggested that the manufacturers should concentrate in this attribute.

4. It was found that 80%, 44% and 48% of the Arasu cement, Sankar cement and ACC cement users preferred their brand for correct weight. But only 55%, 42% and 39% of the users are satisfied about weight. This problem has arose due to improper packing. Hence, it is suggested that the manufacturers should concentrate on packing material to minimize the wastage.

CONCLUSION

Based on the findings it can be safely concluded that the present article is beneficial to the consumers. The study with an indepth delving into the various aspects of consumers' preference regarding the various brands of Cement in the study area is thought provoking. It is a stepping stone in to future study in the chosen field for aspiring scholars.

REFERENCE

Agarwal. V. K., Indian Cement Industry Problems and Products, Indian Journal of Marketing, Vol. XV, No.1. September, 1984. | Anderson Durshon Poole, 1985, Thesis and Assignment writing, (New Delhi), Wiley Eastern Limited, New Delhi. | Boyd, Westfall and Stasch, 1985, Marketing Research, Virender Kumar Aryer, New Delhi. | Donald S Tull Del T Hawkins, Marketing Research Measurement and Method, Prentice -Hall of India Private Limited, New Delhi. | Geogery K. Franciers, Modern Marketing Management, Sulthan Chand Company Limited, New Delhi. | Gilbert A. Churchill Jr, 1987, Marketing Research, The Dryden Press International Edition, United States. | Gupta. S. P., 1997, Statistical Methods, Sultan Chand and Sons, New Delhi. | Kothari .C. R., Research Methodology, Methods and Techniques Wishwa Prakashan, New Delhi. | Mohan B, Marketing of Cement: Some Issues After Decontrol of Cement, Indians Journal of Marketing, Vol. XVI, No. 5, January, 1986. | Memoria C. B and Joshi, R. L. Principles and Practice of Marketing in India, Kitab Mahal, Allahabad, 1981. | Philip Kotler, 1983, Principal of Marketing, Prentice - Hall of India Private Limited, New Delhi. | Pillai R. S. N., and Bagavathi, 1996, Marketing, S. Chand and Company Limited, New Delhi. | Remanuy and Majumdar, Marketing Research, Text Applications and Case Studies, New Age International Private Limited, New Delhi. | Subash C. Mehra, 1978, Indian Consumers, Tata McGraw - Hill Publishing Company Limited, New Delhi.