

# **COST OF CONSUMABLES: A MAJOR ELEMENT OF COST OF LIVING**

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## **ABSTRACT**

In every field we seen today, man is putting in his entire heart and soul and effort into the task that is ahead of him, it may be related to arts, commerce or science. In this competitive era, man has evolved from being a social animal to a professional. It is this evolution that makes him curious and aware of the activities and changes, which are taking place in society at national or international surroundings. The need to be aware of the market trends is important for any businessman because his prime motive is to earn maximum profit and to cater to his never ending desires.To be conscious of the policies governing one's livelihood and to have knowledge of the domestic expenses are two different things. Is a person aware of the intrinsic details like the- cost of consumables and what factors govern the cost of these, does the cost of these vary due to independent family head?. These questions become the basis of this research work.

# **COST OF CONSUMABLES: A MAJOR ELEMENT OF COST OF LIVING**

## **1. INTRODUCTION**

Today in 21<sup>st</sup> century, every man is engrossed in cherishing the dream of leading a comfortable life and to realize that dream, man has to indulge in a lot of activities from which earning accrues. This income adds to his domestic finance and is spent on him and the family. Hence, two main viewpoints have emerged; (i) to make an earning leading the procurement of domestic finance and (ii) spending that to the fulfillment of the needs of comforts of the him and i.e. the judicious utilization of domestic finance in order to have a certain standard of living. An individual sacrifices the money (Domestic Finance) on various items to increase his living standard. The aggregate of these sacrifices is called cost of living. The cost of living is classified into two broad categories; these are also known as elements of cost of living.

- Cost of Consumables
- Cost of Durables

Those expenses which are incurred by an individual or a family on a regular basis are called cost of consumables whereas those expenses which are incurred on those items whose working life is more than one year by an individual or a family and not regular in nature is called cost of durables. This study focuses only on one element of cost of living that is cost of consumables.

## **2. OBJECT OF THE STUDY**

Research can never be thought of without specifying its objectives. This research is also not an exception. Following are the objectives of this study:

- To estimate the cost of consumables per family per year of different strata.
- To develop a methodology for determining cost of consumables for a family and for individuals.

- To find out the main elements that is involved in the cost of consumables and covers the major part of this.
- To find out is the cost of consumables influenced by an independent variables i.e. nature of the family, income of the family and occupation of the family head.

## 2. METHODOLOGY

In order to achieve the predetermine objectives of the study, it was decided to select a sample of 200 respondents of Jodhpur city. These respondents were selected at random and represent the 200 families of Jodhpur city. There was inconsistency in the information provided by four respondents; therefore these are not taken into consideration for the study. Hence 196 respondents are taken into consideration for the study. The sample are further classified into three strata; nature of the family, income of the family and occupation of the family head. 111, 67 and 18 respondents belong to nuclear, semi-joint and joint families. 18, 88, 68 and 22 respondents belong to families having income below 1 lakh, 1-3 lakhs, 3-5 lakhs and above. 43, 9, 124 and 20 respondents belong to families headed by businessman, professional, employee and other occupation. For the purpose of collecting primary data from 196 respondents; direct personal interview technique was to be used with the help of a questionnaire. This questionnaire has two sections namely, personal profile and expenditure pattern. The Data were analyzed with the help of statistical tools. The study used the following statistical tools: Mean, Percentage, Graphical Presentation, Statistical Parameter Limits and Large Sampling Test (Z Test).The null hypothesis is used to find out that, is cost of consumables influenced by an independent variables i.e. nature of the family, income of the family and occupation of the family head. The following statistical hypotheses were framed:

1. The cost of consumables is not influenced by nature of the family.
2. The cost of consumables is not influenced by income of the family.
3. The cost of consumables is not influenced by occupation of the family head.

### **3. CLASSIFICATION OF COST OF CONSUMABLES**

Those expenses which are incurred by an individual or a family in regular are called cost of consumables. In other words, cost of consumables means all those expenses which are consumed within a year or their services are utilized within a year is called cost of consumables.

The list of 23 items of cost was identified for ascertaining the cost of consumables. On the basis of simple observation, it was decided to club some items of cost for further detail, analysis and interpretation. 23 items of cost of consumables were short listed into 12 items, looking to their relative importance. These items are known as classification of cost of consumables. The classification of cost of consumables is as follows: Expenses incurred on Food; Clothing; Residence; Cosmetics; Conveyance; Communication; Health; Education; Social; Entertainment; Pocket money and Miscellaneous.

### **4. PROCESS OF ASCERTAINING THE COST OF CONSUMABLES**

In order to achieve predetermined objectives, this study collected the data regarding cost of consumables from 196 families of Jodhpur and ascertains the total cost of consumables per year. After getting total cost of consumables per year we calculated the cost of consumables per family per year. The following formula was used for fulfilling above objective:

Cost of consumable per family per year =

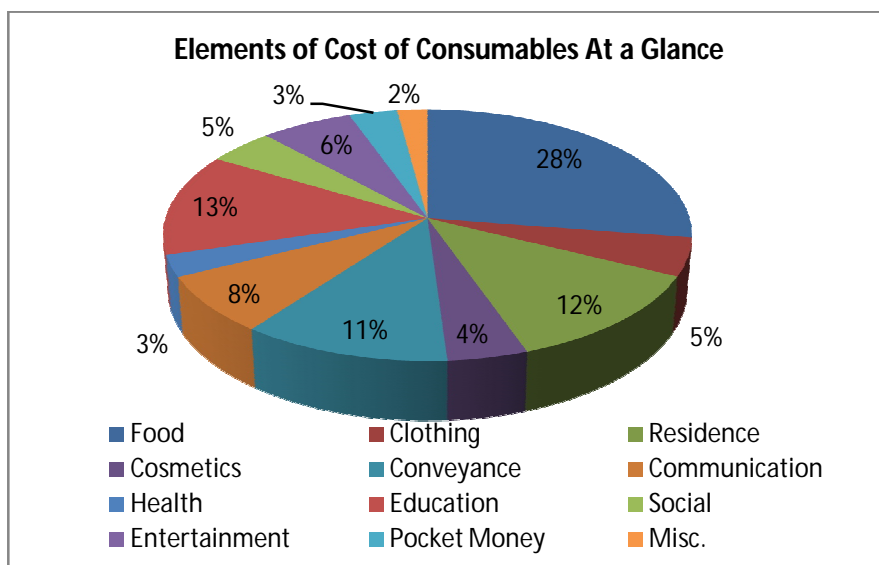
Total cost of consumables per year / No. of families (196)

The information about the cost of consumables is based on sample data, and the samples are valid for the universe under study. These "Sample Statistics" were converted into "parameters" by using appropriate statistical tools for drawing conclusion about the universe.

**Table 1**  
**Cost of consumables per family per year (in Rs.)**

	Cost of consumables per family per year	Statistical Limits	
		Lower Limits	Upper Limits
<b>(A) An Overall</b>	189969.39	175252.67	204686.11
<b>(B) Nature of the Family</b>			
Nuclear Families	163707.74	147184.32	180231.15
Semi-Joint Families	204124.12	184738.98	223509.26
Joint Families	299229.22	216165.12	382293.32
<b>(C) Income of the Family</b>			
Below 1 Lakh	72092.11	60297.02	83887.19
1-3 Lakhs	149336.69	137135.56	161537.82
3-5 Lakhs	231306.94	212106.63	250507.25
5 Lakhs and above	321174.64	255451.75	386897.53
<b>(D) Occupation of the Family Head</b>			
Businessman	195528.88	164605.35	226452.42
Professional	226292.22	152646.67	299937.78
Employee	183955.26	168692.87	199217.65
Other Occupation	198958.85	117310.21	280607.49

The cost of consumables per family per year an overall out to be approximately Rs. 1.90 lakhs. At 95% level of confidence, it can be concluded that the cost of consumables per family per year is expected to vary between Rs.1.75 lakhs to Rs.2.05 lakhs. The aforesaid table also reveals same information with regard to nature of the family, income of the family and occupation of the family head. There are twelve elements of cost of consumables. The proportion of these elements in total cost of consumables as follow:



The aforesaid Graph reveals that each and every item has different share in the total cost of consumables. The total of food (28%), education (13%), residence (12%), conveyance (11%), communication (8%) and entertainment (6%) approximately comes out 78% % of the total cost of consumables per family per year. The elements of cost of consumables were also analyzed for different strata, which are as follow:

**Table 2**  
**Elements of cost of consumables**  
**(According to nature of the family)**

Cost of Consumables per Family per Year ( inRs.)			
Items	Nuclear	Semi-Joint	Joint
<b>Food</b>	42615.96	57889.61	89120
<b>Clothing</b>	7351.53	11165.18	14450
<b>Residence</b>	23809.37	22537.73	23589.33
<b>Cosmetics</b>	7002.61	9083.28	12593.33
<b>Conveyance</b>	17358.12	23698.6	37377.78
<b>Communication</b>	12046.34	15860.9	19901.33
<b>Health</b>	4932.3	5727.61	5650
<b>Education</b>	22499.46	24163.88	44205.22
<b>Social</b>	7276.87	9544.03	14683.33
<b>Entertainment</b>	10527.58	12583.43	20285.56
<b>Pocket Money</b>	5185.59	7164.18	10666.67
<b>Misc.</b>	3102.02	4705.69	6706.67
<b>Total</b>	163707.75	204124.12	299229.22

The aforesaid table reveals that each and every item has different share in the total cost of consumables in these groups but those items which contribute the major share in total cost of consumables in nuclear families, semi joint families and joint families are, food, residence, education, conveyance, communication and entertainment. The sum of these costs comes out to be approximately 79%, 77% and 72% of the total cost of consumables per family per year in nuclear, semi joint and joint families.

**Table 3**  
**Elements of cost of consumables**  
**(According to income of the family)**

<b>Cost of Consumables per Family per Year ( inRs.)</b>				
<b>Items</b>	<b>Below 1 Lakh</b>	<b>1-3 Lakhs</b>	<b>3-5 Lakhs</b>	<b>5 Lakhs and Above</b>
<b>Food</b>	27881.33	44833	61106.71	73214.18
<b>Clothing</b>	3054.44	6567.13	11314.71	19177.27
<b>Residence</b>	11950.22	19287.11	27153.62	37211.82
<b>Cosmetics</b>	3325.56	6586.43	9258.59	15613.64
<b>Conveyance</b>	5205.89	14390.75	25384.49	50050.91
<b>Communication</b>	2784	10459.23	17948	25775.45
<b>Health</b>	2172.83	5163.64	5154.03	8588.64
<b>Education</b>	6312.78	17198.23	35107.94	40804.55
<b>Social</b>	3119.44	7521.71	10040.76	14120.45
<b>Entertainment</b>	2667.83	8586.82	15119.12	24774.09
<b>Pocket Money</b>	2211.11	5450	8917.65	5536.36
<b>Misc.</b>	1406.67	3292.66	4801.34	6307.27
<b>Total</b>	72092.1	149336.71	231306.96	321174.63

The aforesaid table reveals that, those items which contribute the major share in total cost of consumables of families having income below 1 lakh are food, residence, education, conveyance and cosmetics. The sum of these costs comes out to be approximately 76% of the total cost of consumables per family per year. Those items which contribute the major share in total cost of consumables of families having income 1-3 lakhs are food, residence, education, conveyance and entertainment. The sum of these costs comes out to be approximately 71% of the total cost of consumables per family per year. Those items which contribute the major share in total cost of consumables of families having income 3-5 lakhs are food, education, residence, conveyance and communication. The sum of these costs comes out to be approximately 72% of the total cost of consumables per family per year. Those items which contribute the major share in total cost of consumables of families having income 5 lakhs and

above are food, conveyance, education, residence and communication. The sum of these costs comes out to be approximately 70% of the total cost of consumables per family per year.

**Table 4**  
**Elements of cost of consumables**  
**(According to occupation of the family head)**

<b>Cost of Consumables per Family per Year ( inRs.)</b>				
<b>Items</b>	<b>Businessman</b>	<b>Professional</b>	<b>Employee</b>	<b>Other Occupation</b>
<b>Food</b>	54594.05	53400	50961.77	53286.6
<b>Clothing</b>	8951.63	12077.78	8986.23	10813.75
<b>Residence</b>	23290.84	31140	23362.06	19940.7
<b>Cosmetics</b>	8790.88	9773.33	7717.79	9478.8
<b>Conveyance</b>	20768.14	29444.44	19555.73	30220.8
<b>Communication</b>	14969.86	21635.56	13140.65	14509.2
<b>Health</b>	4979.3	5627.78	4897.78	8042.5
<b>Education</b>	23839.77	30704.44	25573.26	21979
<b>Social</b>	9174.42	9100	8217.19	10807.5
<b>Entertainment</b>	13891.16	16700	10988.07	13332.5
<b>Pocket Money</b>	7981.4	4533.33	6553.23	2550
<b>Misc.</b>	4297.44	2155.56	4001.49	3997.5
<b>Total</b>	195528.89	226292.22	183955.25	198958.85

The aforesaid table and graphs reveals that each and every item has different share in the total cost of consumables in these groups but, those items which contribute to the major share in total cost of consumables of families headed by businessman are, food, education, residence, conveyance and communication. The sum of these costs comes out to be approximately 71% of the total cost of consumables per family per year. Those items which contribute the major share in total cost of consumables of families, headed by professional are food, residence, education, conveyance and communication. The sum of these costs comes out to be approximately 75% of the total cost of consumables per family per year. Those items which contribute the major share in total cost of consumables of families headed by employee are food, education, residence, conveyance and communication. The sum of these costs comes out to be approximately 73% of the total cost of consumables per family per year. Those items which contribute the major share in total cost of consumables of families headed by other



occupation are food, conveyance, education, residence and communication. The sum of these costs comes out to be approximately 70% of the total cost of consumables per family per year.

## 5. TESTING OF HYPOTHESIS

This study used the large (Z-Test) sampling test at 95% level of confidence for finding out an answer to the question that- is the cost of consumables influenced by independent variables, namely, income of the family, nature of the family and occupation of the family head?.

The Null Hypothesis was used to retain objectivity and avoid ambiguity in results. Following statistical hypotheses were tested:

	<b>Nature of the Family</b>	<b>Income of the Family</b>	<b>Occupation of the Family Head</b>
<b>n 1</b>	Nuclear Families	Below 1 lakh	Businessman
<b>n 2</b>	Semi Joint Families	1-3 Lakhs	Professional
<b>n 3</b>	Joint Families	3-5 Lakhs	Employee
<b>n 4</b>	-	5 Lakhs and above	Other Occupation

### I. **The cost of Consumables is not influenced by the nature of the family.**

**Hypothesis 1.** The cost of consumables per family per year of nuclear families is equal to semi joint families.

**Hypothesis 2.** The cost of consumables per family per year of nuclear families is equal to joint families.

**Hypothesis 3.** The cost of consumables per family per year of semi joint families is equal to joint families.

**Table 5**  
**Hypothesis testing of cost of consumables**  
**(According to nature of the family)**

	<b>Hypothesis 1</b>	<b>Hypothesis 2</b>	<b>Hypothesis 3</b>
<b>Size</b>	n1 = 111	n1 = 111	n2 = 67
	n2 = 67	n3 = 18	n3 = 18
<b>Mean</b>	X <sub>1</sub> = 163707.74	X <sub>1</sub> = 163707.74	X <sub>2</sub> = 204124.12
	X <sub>2</sub> = 204124.12	X <sub>3</sub> = 299229.22	X <sub>3</sub> = 299229.22
<b>Standard Error</b>	12995.76	43210	43518.43
<b>Z Value</b>	3.11	3.14	2.19
<b>Critical Value</b>	2.57	2.57	2.57
<b>Decision</b>	significant	significant	Insignificant

The aforesaid table reveals that at 95% level of confidence the critical value is 2.57. The calculated Z value is 3.11, 3.14 and 2.19 for Hypothesis 1, 2 and 3. Out of these Z values first two values are greater than critical value and third is less than critical value, therefore, hypothesis 1 and 2 are rejected and hypothesis 3 is accepted. Hence, it can be concluded that, the cost of consumables per family per of nuclear families is not equal to semi joint and joint families, but cost of consumables per family per year of semi-joint families is equal to joint families.

## **II. The cost of consumables is not influenced by Income of the family.**

**Hypothesis 1.** The cost of consumables per family per year of families having income below 1 lakh is equal to families having income 1-3 lakhs.

**Hypothesis 2.** The cost of consumables per family per year of families having income below 1 lakh is equal to families having income 3-5 lakhs.

**Hypothesis 3.** The cost of consumables per family per year of families having income below 1 lakh is equal to families having income 5 lakhs and above.

**Hypothesis 4.** The cost of consumables per family per year of families having income 1-3 lakhs is equal to families having income 3-5 lakhs.

**Hypothesis 5.** The cost of consumables per family per year of families having income 1-3 lakhs is equal to families having income 5 lakhs and above.

**Hypothesis 6.** The cost of consumables per family per year of families having income 3-5 lakhs is equal to families having income 5 lakhs and above.

**Table 6**  
**Hypothesis testing of cost of consumables**  
**(According to income of the family)**

	Hypothesis 1	Hypothesis 2	Hypothesis 3	Hypothesis 4	Hypothesis 5	Hypothesis 6
<b>Size</b>	n1= 18	n1= 18	n1= 18	n2 = 88	n2 = 88	n3 = 68
	n2 = 88	n3 = 68	n4 = 22	n3 = 68	n4 = 22	n4 = 22
<b>Mean</b>	X <sub>1</sub> = 72092.11	X <sub>1</sub> = 72092.11	X <sub>1</sub> = 72092.11	X <sub>2</sub> = 149336.69	X <sub>2</sub> = 149336.69	X <sub>3</sub> = 231306.94
	X <sub>2</sub> = 149336.69	X <sub>3</sub> = 231306.94	X <sub>4</sub> = 321174.64	X <sub>3</sub> = 231306.94	X <sub>4</sub> = 321174.64	X <sub>4</sub> = 321174.64
<b>s.e.</b>	8658.32	11496.88	34067.82	11606.66	34105.01	34933.71
<b>Z Value</b>	8.92	13.85	7.31	7.06	5.04	2.58
<b>Critical Value</b>	2.57	2.57	2.57	2.57	2.57	2.57
<b>Decision</b>	<b>Significant</b>	<b>Significant</b>	<b>Significant</b>	<b>Significant</b>	<b>Significant</b>	<b>Significant</b>

The aforesaid table reveals that at 95% level of confidence the critical value is 2.57. The calculated Z value is 8.92, 13.85, 7.31, 7.06, 5.04 and 2.58 for hypothesis 1, 2,3,4,5 and 6. These Z values are greater than critical value therefore, all hypothesis are rejected. Hence, it can be concluded that the cost of consumables is influenced by income of the family.

### **III. The cost of consumables is not influenced by Occupation of the family Head.**

Hypothesis 1. The cost of consumables per family per year of families headed by businessman is equal to families headed by professional.

Hypothesis 2. The cost of consumables per family per year of families headed by businessman is equal to families headed by employee.

Hypothesis 3. The cost of consumables per family per year of families headed by businessman is equal to families headed by other occupation.

Hypothesis 4. The cost of consumables per family per year of families headed by professional is equal to families headed by employee.

Hypothesis 5. The cost of consumables per family per year of families headed by employee is equal to families headed by other occupation.

**Table 7**  
**Hypothesis testing of cost of consumables**  
**(According to income of the family)**

	Hypothesis 1	Hypothesis 2	Hypothesis 3	Hypothesis 4	Hypothesis 5
<b>Size</b>	n1= 43	n1= 43	n1= 43	n2 = 09	n3 = 124
	n2 = 09	n3 = 124	n4 = 20	n3 = 124	n4 = 20
<b>Mean</b>	X <sub>1</sub> = 195528.88	X <sub>1</sub> = 195528.88	X <sub>1</sub> = 195528.88	X <sub>2</sub> = 226292.22	X <sub>3</sub> = 183955.26
	X <sub>2</sub> = 226292.22	X <sub>3</sub> = 183955.26	X <sub>4</sub> = 198958.85	X <sub>3</sub> = 183955.26	X <sub>4</sub> = 198958.85
<b>Standard Error</b>	40752.29	17594.32	44545.13	38372.67	42379.02
<b>Z Value</b>	0.75	0.66	0.08	1.1	0.35
<b>Critical Value</b>	2.57	2.57	2.57	2.57	2.57
<b>Decision</b>	<b>Insignificant</b>	<b>Insignificant</b>	<b>Insignificant</b>	<b>Insignificant</b>	<b>Insignificant</b>

The aforesaid table reveals that at 95% level of confidence the critical value is 2.57. The calculated Z value is .75, .66, .08, 1.1 and .35 for hypothesis 1, 2, 3, 4 and 5. These Z values are less than critical value therefore, all hypothesis are accepted. Hence it can be concluded that the cost of consumables is not influenced by occupation of the family head.

## 6. CONCLUSION AND SUGGESTION

This study found that cost of living has broadly two elements i.e. cost of consumables and cost of durables. Those expenses which are incurred by an individual or a family in regular basis are called cost of consumables whereas those expenses which are incurred on those items whose working life is more than one year by an individual or a family and not regular in nature is called cost of durables. This study focused only on one element of cost of living that is - cost of consumables because cost of consumables has a major share in the cost of living (approximately 93%).

The cost of consumables per family per year an overall comes out to be approximately Rs. 1.90 lakhs. At 95% level of confidence, it can be concluded that the cost of consumables per family per year is expected to vary between Rs. 1.75 lakhs to Rs. 2.05 lakhs.

This study also tested the hypothesis that, is the cost of consumables influenced by nature of the family, income of the family and occupation of the family head?. On the basis of the survey results, it can be concluded that there are insignificant differences between cost of consumables per family per year of families headed by businessman, professional, employee

and other occupation. **It means cost of consumables is not influenced by occupation of the family head.**

This study also conclude that, there is significant difference between cost of consumables per family per year of families having different level of income (below 1 lakh, 1-3 lakhs, 3-5 lakhs and 5 lakhs and above). **It means cost of consumables is influenced by income of the family** and as income increases cost of consumables per family per year also increases.

This study reveals that, there is a significant difference between cost of consumables per family per year of nuclear families and semi- joint families and nuclear and joint families, but there is an insignificant difference between cost of consumables per family per year of semi-joint and joint families.

The analysis of data reveals that, in total cost of consumables, an individual spent highest amount on food approx. (28%), after that education (13%), residence (12%), conveyance (11%), communication (7%) and entertainment (6%) of the total cost of consumables. These percentages cover the approx. 78% of the total cost of consumables.

The significant areas and suggestions are as follows:

- This study suggested that at the time of preparation of budgets, a person should give more attention on cost of food, education, residence, conveyance, communication and entertainment and should try to better forecasting for cost of these items because the survey results reveals that the sum of the percentage of the cost of six items covers the major share in the total cost of consumables i.e. approx. 78%.
- This study suggests that, there should be great thrust to impart knowledge on financial matters separately for the youngsters.
- It is suggested that a separate study be undertaken for domestic financial planning regarding nuclear, semi-joint and joint families.
- A person should use his domestic financial resources optimally because the standard of living depends upon its judicious use. A person can achieve the betterment and standard of life only through best utilization of the resources.

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