CHAPTER -8

CONSUMER BEHAVIOUR TOWARDS PROCESSED FOOD-AN EMPIRICAL TEST.

- DEFINITION OF CONSUMER BEHAVIOUR

- DETERMINANTS OF CONSUMER BEHAVIOUR.

- CONSUMER BEHAVIOUR IN THE INDIAN SOCIETY.

- CONSUMER BEHAVIOUR TOWARDS FRUIT AND VEGETABLE PROCESSED PRODUCTS OF ASSAM.
Behaviour is a mirror in which every one displays his image.

Goethe.

DEFINITION OF CONSUMER BEHAVIOUR:

In the present times the consumer is well recognised as the king. He is the centre around which the marketing management revolves. Therefore it is as much necessary to know who are the people that consume products or use services so as to ascertain why they do so. Though human mind is the most abstruse thing in the World yet the growth of psychology and the behavioural sciences have made possible to have some sort of X ray of the human mind. One cannot observe the mind but one can see and scrutinize behaviour.

The Chief aim of consumer research is to study the behaviour of consumer in order to find out the principal reasons or factors behind it and then to influence the behaviour with the help of this information.

Consumer behaviour can be defined as, 'All psychological, social and physical behaviour of all potential consumers as they become aware of evaluate, purchase, consume and tell others about products and services.'

'Consumer behaviour refers to those acts of individuals directly

involved in obtaining and using economic goods and services including the decision processes that precede and determine these acts (ENGEL, BLACKWELL AND KOLLAT 1978). 72

The post liberalisation period has resulted in many companies entering the markets with offering of their goods and services. This has made each marketer to realise that he has to constantly upgrade the consumers knowledge about his products by finding new dimensions. This is because there has been a change in the physical behaviour of the consumer. The consumer of the yesteryears was a silent person who without complaining purchased the goods from the market place. There is a new consumer emerging today. In the present times the consumer is the choice empowered one who will be the decider as which products to buy and which to reject. So therefore in such a situation it is utmost necessary for the producers and marketers to make a constant study of the consumer behaviour in order to build a strong base of his products in the market.

DETERMINANTS OF CONSUMER BEHAVIOUR:


Earlier economics was regarded as marketing's mother discipline. This was because it was seen that consumer purchase decision is governed by their economic and mental forces. Mental forces like fear, pride, fashion, possession, sex or romance, vanity etc. create desires and wants in the minds of the consumers but economic forces such as purchasing power may come in the way of satisfying those wants hence the consumer has to choose between those wants and select the products according to the priority of consumption. However the rapid changes taking place in the external environment has also had a bearing on the consumer behaviour and is seen to have complicated the manner in which a consumer behaves. Researches in this field have shown that the light has been shed on the human behaviour on in general and the study of behavioural sciences be extended to the behaviour exhibited by individuals in their roles as buyers/consumers. So consumer behaviour can be said to be mending of all those bodies of knowledge concerning with human behaviour- Behavioural sciences. To facilitate better understanding of the inter disciplinary dimension of consumer behaviour, concept has been borrowed from other disciplines having a bearing on consumer behaviour.
1. ECONOMIC MODEL:

Economic model of consumer behaviour is unidimensional. This model lays emphasis on only one aspect of the individual buyers that is income. According to this model, lower the price of the product the bigger the quantity that will be bought. Again the higher the purchasing power the higher the quantity that will be bought. Moreover, the lower the price of a substitute the lower the quantity that will be bought of the original product and the higher promotional expenditure the higher will be the sales. The economic model ignores many other aspects such as perception, motivation, learning, process, attitudes, personality, culture and social class. Therefore a model dealing only with price and income influences on buyer behaviour and ignoring many other individual (psychological, social, cultural) and marketing variables (product variations and innovations, distribution system, marketing communications) cannot be considered adequate in modern customer oriented marketing philosophy.

2. PSYCHOLOGICAL MODEL:

Psychology is referred to as a science, a study of minds and its processes (study of minds). Thus psychology as a branch of behavioural sciences tries to understand how.
an individual's mind works while taking decisions. Here psychology tries to understand the role played by needs and motivation, personality, perception, learning, level of involvement and attitude in influencing the consumer's decision making process.

a. **Motivation**:

Motivation is the desire to act, to move, to obtain a goal or an objective. It is a mental phenomenon. It is affected by perceptions, attitudes, personality traits and by outside influences such as culture and marketing efforts. Needs may be physiological, social and psychological. Any urge moving or prompting a person a purchase decision is called a buying motive. Motivation research as a part of marketing research tries to answer the 'why' of consumer behaviour. It also contributes to product development and advertising creativity.

b. **Perception**:

Perception has been defined by social psychologist as the complex process by which people select, organise and interpret sensory stimulation into a meaningful and coherent picture of the world. It determines what is seen and felt by the consumers when numerous stimuli are directed to them.
everyday by messages broadcast by the marketers through their promotional devices. Motivation provides a basic influence upon buyer behaviour while perception is operationally critical. It causes the behaviour in a certain way.

c. Learning:

Learning is the central topic in the study of human behaviour that result from previous experience and behaviour in similar situations. Learning is the product of reasoning, thinking, information processing and of course perception. Buyer behaviour is critically affected by the learning experiences of buyers.

d. Attitude and Beliefs:

A. belief is a description thought that a person holds about something. Attitude is defined as an emotionalised predisposition (inclination) to respond positively or negatively to an object or class of objects. The concept of predisposition includes our familiar concepts of attitudes, beliefs, goals and values. Attitudes affect both perception and behaviour. In general an attitude is a state of mind or feeling. It induces a pre-disposition to behave in some way. It is very important in explaining buyer behaviour. Attitudes eventually
influence buying decision which people make and therefore marketers are deeply interested in buyer's attitudes, beliefs, values and goals i.e buyers pre-disposition. Attitude research offers a useful device for explaining and predicting buyer behaviour. Knowledge of consumer attitudes can provide a good basis for improving products, re-designing packages and developing and evaluating promotional programmes. Consumers resist a change in their attitudes. But a change in the attitude leads to a change in buying behaviour. Promotional devices are essential to change purchasing attitudes and modify buyer behaviour.

e. Personality :

Personality is a complex psychological concept. Its primary features are self concept roles and levels of consciousness. The self concept refers to how a person sees himself and how he believes others to see him at a particular time. Each individual plays many different roles - father, mother, wife, friend, co-worker executive etc. The consumer behaviour is influenced by the particular role upon which a buyer is concentrating at a given time.
3. SOCIAL AND CULTURAL INFLUENCE:

(a) Family:

Most consumers belong to a family group. The family can exert considerable influence in shaping the pattern of consumption and indicating the decision making roles. Personal values, attitudes and buying habits have been shaped by family influence. The members of the family play different roles such as influencer, decider, purchaser and user in the buying process. Marketing policies regarding product promotion and channels of distribution are influenced by the family members making actual purchases.

(b) Reference group:

Buyer behaviour is influenced by the small groups to which the buyer belongs. Reference group are the social economic or professional group and a buyer uses to evaluate his or her opinions and beliefs. Buyer can get advice or guidance in his or her over thoughts and actions from such small groups. Consumers accept information provided by their peer groups on the quality of a product, on its performance, style etc which is hard to evaluate objectively. Group members provide relevant and additional information which cannot be
provided by mass media. A satisfied customer becomes the salesman of the product.

c. Social class :

Consumer buying behaviour is determined by the social class to which they aspire rather than by their income alone. Social classes may act as one criterion for market segmentation.

d. Culture :

Culture represents an overall heritage, a distinctive form of environmental adaptation by a whole society of people. It includes a set of learned beliefs, values, attitudes, morals, customs, habits and forms of behaviour that are shared by a society and transmitted from generation to generation within that society. Cultural influence is a force shaping both patterns of decision making from infancy. Our cultural institutions provide guidelines to marketers. Technological changes, education and travel have considerable influence on culture. The behaviour of the consumers vary according to the culture to which they belong.
CONSUMER BEHAVIOUR IN THE INDIAN SOCIETY:

Understanding of market and its wide dimension is very important to a marketing decision maker. Consumers differ widely in terms of space, time, perception, value and ownership.

In India, consumer behaviour is governed by many factors. India is a sub-continent in terms of size. The regional and climate variations have a great impact in the clothing and food habits of the Indian consumers. The variations in consumer behaviour also occurs due to the difference in the income level and life of the consumers. India is one of the world's highly populated country. The population pattern of the country also to a great extent influence the behaviour of the consumers. Moreover, consumer behaviour in India to a large extent is influenced by the sex composition. Today the urban housewife is an active partner and plays a major role in the purchase decision of her family along with her husband. Another important factor which influences the behaviour of the Indian consumer is their literacy level. Depending upon the level of literacy amongst the target consumers the marketers will have to design a suitable communication mix for promoting a particular product or service. Further the income level also has a great impact on the purchase decisions of the
consumers. Income level can be divided into two, namely, the disposable income (income minus taxes) and discretionary income i.e., income left after paying taxes and meeting expenses related to food, clothing, shelter and the other necessary items.

Income credit and assets are objective elements of the purchasing power of Indian consumers. However, economic ability must be combined with the willingness to buy. Moreover, purchasing power also depends upon the per capita income of its largest market.

India is a land of various religions. In addition to this, there are various sects, sub-sects, caste and sub-caste. Each religion has its own set of custom rituals and practices which are being followed from generations altogether. There are some religious constraints which influence the consumption and buying behaviour of individuals. Moreover, the style of dressing varies among the states and the religious communities of India. Festivals are also an important aspect of Indian culture. The dressing style, food habits and celebration of festivals by the consumers greatly depend on the religious practices followed. Thus, the consumption pattern of the Indian consumer is based on the values, beliefs and customs inculcated right from the time of birth.

An understanding of the consumer behaviour is
extremely important in the new environment of competition and consumer awareness especially in the food product markets. Regarding the food products the consumer is quite conscious about his health while purchasing it. They are also quite aware of the quality standards like Agmark, ISO 9000, FPO and so on. Moreover, the consumer today are interested in the freebies which in recent years are very often offered in the food products like gifts, discounts etc.

CONSUMER BEHAVIOUR TOWARDS THE FRUIT AND VEGETABLE PRODUCTS OF ASSAM.

To have an idea about the consumer behaviour towards the fruit and vegetable processed products of Assam an extensive empirical survey among the consumers was conducted throughout the state of Assam by the distribution of questionnaire among the consumers of different income level. Altogether 150 consumers were surveyed all over Assam belonging to different income level.

The income of the consumers were divided into 3 categories viz, below 5000, 5000 to 10,000 and above 10,000. 50 consumers belonging to each income group were surveyed. Table 8.1, 8.2 and 8.3 shows the results of the particular survey.
Table 8.1

Table showing opinion of the consumers towards processed food products.
(Number of Consumers surveyed = 150, Number of consumers in each income level = 50)

<table>
<thead>
<tr>
<th>Monthly Consumption of processed food</th>
<th>Purchase of Jam, Jelly Pickles from the market</th>
<th>Must item in your daily food</th>
<th>Preference Given to Home Made/Outside Prepared Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>No</td>
<td>%</td>
<td>No</td>
<td>%</td>
</tr>
</tbody>
</table>

Below

- Below 5000: 50 100% x x 50 100% x x 20 40% 50 100% x x
- Below 10000: 50 100% x x 40 80% 50 100% x x 20 40% 33 66% 20 40% 33 66%
- Above 10000: 10 20% 40 80% 50 100% x x

Source: Field survey among the consumers

Table 8.2

Table showing opinion of the consumers towards processed food products.
(Number of Consumers surveyed = 150, Number of consumers in each income level = 50)

<table>
<thead>
<tr>
<th>Income Standard of local products in terms of quality</th>
<th>Preference given to a particular brand</th>
<th>Preference given to local/ outside products</th>
<th>Price of local products compared to outside products</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adequate</td>
<td>Inadequate</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
</tr>
</tbody>
</table>

Below

- Below 5000: 33 66% 17 34% 42 84% 8 16% 17 34% 33 66% 33 66% 17 34% x x
- Below 10000: 17 34% 33 66% 20 40% 20 40% 30 60% 15 30% 35 70% 20 40% 20 40%
- Above 10000: 10 20% 40 80% 20 40% 30 60% 15 30% 35 70% 50 100% x x

Source: Field survey among the consumers
Table 8.3  
Table showing opinion of the consumers towards processed food products.  
(Number of Consumers surveyed = 150, Number of consumers in each income level = 50)

<table>
<thead>
<tr>
<th>Income</th>
<th>Awareness of Local fruit &amp; vegetable products</th>
<th>Local products easily available</th>
<th>Preference for change of taste</th>
<th>Use of used bottles</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Below</td>
<td>No</td>
<td>%</td>
<td>No</td>
<td>%</td>
</tr>
<tr>
<td></td>
<td>5000</td>
<td>17</td>
<td>34%</td>
<td>83</td>
</tr>
<tr>
<td>More</td>
<td>5000</td>
<td>12</td>
<td>24%</td>
<td>88</td>
</tr>
<tr>
<td>Above</td>
<td>10000</td>
<td>21</td>
<td>42%</td>
<td>79</td>
</tr>
</tbody>
</table>

Source: Field survey among the consumers.

As per table 8.1 all the people belonging to different income consume processed food and purchase fruit and vegetable processed products from the market. Regarding whether it is a must item in their daily food most of the consumers gave a negative answer. Only a few were of the opinion that it is a must item in their daily food. Out of the 50 consumers belonging to the income level below 5000, 17 of them i.e., 34% was of the opinion that it is must item in their daily food while 33 of them i.e., 66% had given a negative response to the particular query. Similarly among the consumers falling under the income level between 5000-10000, 12 of them i.e., 24% gave a positive answer and 38 of them i.e.,
76% gave a negative answer. Again in the income level above 10,000, 21 of them, i.e. 42% gave a positive response and 29 of them, i.e. 58% gave a negative response.

The same table also shows whether consumers prefer processed home made items in terms of those available in the market. Regarding this all the consumers belonging to the income group below 5,000 and above 10,000 prefer home made items but the opinion of the consumers belonging to the income group between 5,000-10,000 does not tally with the consumers of the other two groups. In this income group out of 50, 44 of them, i.e. 88% prefer home made item and 6 of them, i.e. 12% prefer market items.

Table 8.2 shows consumer behaviour towards processed food items in terms of their preference to any particular brand of the fruit and vegetable products. In the income level below 5,000, 42 out of the total 50 consumers i.e. 84% are brand conscious and like to stick to a particular brand. On the other hand, 8 out of 50 i.e. 16% do not prefer any particular brand.

In the income group between 5,000-10,000, 28 of the total 50 consumers i.e. 56% prefer a particular brand and 22 of them i.e. 44% do not prefer any particular brand. Again
in the income group above 10,000, 20 of the total 50 consumers surveyed i.e., 40% prefer a particular brand and 30 of the total 50 i.e., 60% do not prefer any particular brand.

Along with this, table 8.2 also shows whether preference is given to local fruit and vegetable processed products or those from outside the state. The information collected from the different income groups shows that out of the 50 consumers surveyed in the income group below 5,000, 17 of them i.e, 34% prefer local products and 33 of them i.e, 66% prefer outside products. In the income group between 5,000-10,000, 11 consumers that is 22% out of the total 50 prefer local products and 39 consumers i.e, 78% prefer products from outside the state of Assam. Again in the income group above 10,000 15 of them i.e, 30% prefer local products and 35 of them i.e, 70% prefer products processed outside the state. Therefore majority of the consumers prefer outside products. This is also proved by the hypotheses no.4 which states that the consumer behaviour is not friendly and encouraging to local products (by using \( x^2 \) chi-square test).

**HYPOTHESIS -4**

Table showing consumer preference towards the local products using \( x^2 \) (chi square test)
Table 8.4

<table>
<thead>
<tr>
<th>Income level of the consumers.</th>
<th>Below 5000</th>
<th>5000-10000</th>
<th>Above 10000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local Products</td>
<td>17</td>
<td>11</td>
<td>15</td>
</tr>
<tr>
<td>Outside products</td>
<td>33</td>
<td>39</td>
<td>35</td>
</tr>
</tbody>
</table>

Let us take the hypothesis that consumer behaviour is not friendly to local products.

\[
\begin{align*}
E_{11} &= \frac{(A \times B)}{N} = \frac{(50 \times 43)}{140} = 14.3 \\
E_{12} &= \frac{(A \times B)}{N} = \frac{(50 \times 107)}{150} = 35.6
\end{align*}
\]
Applying $x^2$ test

<table>
<thead>
<tr>
<th></th>
<th>E</th>
<th>$(0-E)^2$</th>
<th>$(0-E)^2/E$</th>
</tr>
</thead>
<tbody>
<tr>
<td>17</td>
<td>14</td>
<td>9</td>
<td>0.64</td>
</tr>
<tr>
<td>33</td>
<td>36</td>
<td>9</td>
<td>0.25</td>
</tr>
<tr>
<td>11</td>
<td>14</td>
<td>9</td>
<td>0.64</td>
</tr>
<tr>
<td>39</td>
<td>36</td>
<td>9</td>
<td>0.25</td>
</tr>
<tr>
<td>15</td>
<td>15</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>35</td>
<td>35</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

For $r = 2$

$x^2 0.05 = 5.99$

The calculated value of $x^2$ is smaller than the value of $x^2$ at 5% level of significance for 2 d.f.

The null hypothesis is accepted and we can conclude that consumer behaviour is not friendly to local products.

Moreover regarding the price of the local products in comparison with the outside products none of the consumers belonging to either group is of the opinion that the price of the local products are low. Most of the consumers of all the income group are of the opinion that the prices of the local products are high.

In the income group below 5,000, 33 consumers i.e., 66% out of the total 50 surveyed are of the opinion that the
prices of the local products are high. Similarly, 28 consumers i.e., 56% belonging to the income level between 5,000-10,000 income level are also of the opinion that the prices of the local products are high.

In the income group above 10,000 all of the 50 consumers surveyed i.e., 100% are of the opinion that the prices of the local products are high. Similarly in the income group below 5,000, 17 consumers i.e., 34% are of the opinion that the local products have an average price. Again in the income group between 5,000-10,000, 22 consumers i.e., 44% are of the opinion that the locally produced products have an average price. Further, the same table also shows the standard of the local products in terms of quality. In this context 33 consumers i.e., 66% in the income level below 5,000 are of the opinion that the quality of the local products are adequate while 17 consumers i.e., 34% opines that the quality of the local products are not adequate.

Again coming to the income group between 5,000-10,000, 17 consumers i.e., 34% are of the opinion that the quality of the products are adequate while 33 consumers out of the total 50 i.e., 66% are of the opinion that the quality of the products are inadequate. In the income level above 10,000, 10, consumers i.e., 20% are of the opinion that the quality of
the products are adequate while 40% are of the opinion that the products are inadequate in terms of quality. This is shown and proved in the hypothesis no. 3, which states that the local products are not competitive in terms of quality and costs to edge out the products from outside the state (through the field study carried among the consumers by distributing questionnaire).

**HYPOTHESIS 3**

That the local products are not competitive in terms of quality and costs to edge out the products from outside the state.

Opinion of the consumers regarding the quality and cost of the local fruit and vegetable based products.

<table>
<thead>
<tr>
<th>Opinion of the consumers regarding the quality of the Local products.</th>
<th>Quality of the products</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consumers having income below 5000</td>
<td>Adequate</td>
</tr>
<tr>
<td>(66%)</td>
<td>33</td>
</tr>
<tr>
<td>(34%)</td>
<td></td>
</tr>
</tbody>
</table>
As per the table No 8.5 out of the total 150 consumers surveyed, 60 of them are of the opinion that the quality of the local products are adequate but majority of them i.e., out of 150, 90 of the consumers are of the opinion that the quality of the products are not adequate. Therefore 40% of the consumers are of the opinion that the quality of the products are adequate while 60% of them are of the opinion that the quality of the products are not adequate. Hence a conclusion can be drawn that the local products are not competitive in terms of quality to edge out the products from outside the state.

Source :- Field study.
Table showing the opinion of the consumers regarding the cost of the local products.

Table 8.6

<table>
<thead>
<tr>
<th>Opinion of the consumers regarding the cost of the local products.</th>
<th>Price of the products</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>High</td>
</tr>
<tr>
<td>Consumers having income below 5000</td>
<td>33</td>
</tr>
<tr>
<td></td>
<td>(66%)</td>
</tr>
<tr>
<td>Consumers having income between 5000-10000</td>
<td>28</td>
</tr>
<tr>
<td></td>
<td>(56%)</td>
</tr>
<tr>
<td>Consumers having income above 10000</td>
<td>50</td>
</tr>
<tr>
<td></td>
<td>(100%)</td>
</tr>
<tr>
<td>Total</td>
<td>111</td>
</tr>
<tr>
<td></td>
<td>(74%)</td>
</tr>
</tbody>
</table>

Source: Field study.

As per table 8.6 out of the total 150 consumers surveyed most of the consumers i.e., 111 (74%) are of the opinion that the prices of the local products are high while 39 (26%) of them are of the opinion that the prices of the local products are average compared to the outside products. But none of the consumers are of the opinion that the prices of the local products are low compared to the outside products. Therefore we can draw a conclusion that the local products
are not competitive in terms of quality to edge out the products from outside the state.

Regarding the easy availability of the local fruit and vegetable based products, Table 8.3 shows that all the consumers surveyed belonging to the income level below 5,000 and above 10,000 are of the opinion that the products are not easily available while 11 out of total 50 consumers, i.e., 22% belonging to the income level between 5,000-10,000 are of the opinion that the products are easily available while 39 of them, i.e., 78% are of the opinion that the products are not easily available.

Another important thing the consumers suggested by all the consumers belonging to all the income groups is a change in the taste of the local products that is the entrepreneurs should try to modify their products and give a better taste to their products and switch off to the processing of untapped fruits and vegetables. Regarding the use of used bottles, the consumers of different groups have different opinion. 17 out of 50 consumers that is 34% of the income group below 5,000 in their homes while 33 that is 66% of them throw the used bottles as waste products. 80% of the consumers that is 40 of them in the income group above 10,000 make use of the used bottle in their household work while 20% of them that is 10
consumers throw them as waste products. Regarding the awareness of the existence of any locally produced fruit and vegetable processed products units 33 consumers that is 66% belonging to the income level below 5,000 are aware of the existence of the locally produced fruit and vegetable based products units but 17 consumers that is 34% are not aware of any such products. Again in the income group between 5,000-10,000, 17 consumers that is 34% are aware of the existence of locally produced fruit and vegetable based products units. While 33 of them that is 66% have no idea about any such products. In the income group above 10,000, 21 of them that is 42% are aware of such products while 29 of them that is 58% have no such idea.

Therefore it is found that there is a mixed response on the part of the consumers regarding the acceptance and rejection of the local fruit and vegetable.
Fig. 8.1 Consumers opinion as to whether the fruit and vegetable processed products are a must item in their daily food.
Fig. 8.2 Consumers opinion as to whether local products are easily available or not.
Fig. 8.3 Consumer opinion regarding standard of local product in terms of quality

![Bar chart showing consumer opinion by income level.]

- **Below 5000**: Adequate - 33, Inadequate - 17
- **5000-10000**: Adequate - 33, Inadequate - 17
- **Above 10000**: Adequate - 10, Inadequate - 40

**Income level of the consumers**
Fig. 8.4 Consumers opinion as to whether preference is given to local or outside products.

- Income level of the consumers:
  - Below 5000: 17 Local, 11 Outside
  - 5000-10000: 33 Local, 39 Outside
  - Above 10000: 15 Local, 35 Outside