CHAPTER-2

RESEARCH METHODOLOGY

This chapter has been further divided into following sections.

2.1 Research design
2.2 Universe of the study
2.3 Survey sample
2.4 Data collection
2.5 Limitations of the study
2.6 Organization of the study

The methodology adopted in the research cannot be ranked first or the best for the study, but it can perhaps said to be the best possible one under the circumstances.

2.1 RESEARCH DESIGN

Research designs which are used in this research can broadly be classified into two categories:\n
1. Descriptive
2. Causal/Experimental

2.1.1) Descriptive research design- this study is descriptive in nature, as the name shows. Descriptive research is concerned with describing market characteristics because it proposes to describe the trends and current role of packaging, the current practices and customer response towards packaging in food processing industry. This type of study involves the description of the extent of association between variables. If the relationship between the two is fairly stable then this descriptive information may be sufficient for the purpose of prediction. The focus of descriptive research is to provide an accurate description for

---

1 Wilkinson & Bhandarkar (2003), Methodology and techniques of social research, Himalaya publishing house, New Delhi, p.102
2 Wilkinson & Bhandarkar (2003), Methodology and techniques of social research, Himalaya publishing house, New Delhi, p.110.
something that is occurring\textsuperscript{1}. This type of research is by far the most popular form of market research. It is used extensively when the research purpose is to explain, monitor and test hypothesis, and can also be used in a lesser extent to help in making predictions and discovery\textsuperscript{2}.

2.1.2) **Causal research design**- In this form of research the marketer tries to determine whether the manipulation of independent variable, affects dependent variable\textsuperscript{3}. This study is causal in nature, as it proposes to find out the reasons for shift in Packaging trends and to know the reasons why companies adopt a particular strategy. Causal research deals with the "why" question. In marketing, causal research is used for many types of research including testing marketing scenario, for example, what might happen to product sales if product’s design is changed. If causal research is performed well, marketers will be able to use results for forecasting.

2.2 **UNIVERSE OF THE STUDY**

The universe of this study is consists of the following:

Country: - India

Product: - Processed food

Subjects: - Food processing companies

- Middlemen (wholesalers & retailers)
- Customers

2.3 **SURVEY SAMPLE**

Area: Delhi, NCR (Faridabad, Gurgaon and Noida)

Products:

1. Dairy
2. Fruits & vegetables
3. Grains & cereals
4. Fisheries
5. Meat & poultry
6. Consumer food

\textsuperscript{1} Wilkinson & Bhandarkar (2003), *Methodology and techniques of social research*, Himalaya publishing house, New Delhi, p.112

\textsuperscript{2} http://wiki.answers.com/Q/What_is_descriptive_research

\textsuperscript{3} Wilkinson & Bhandarkar (2003), *Methodology and techniques of social research*, Himalaya publishing house, New Delhi, p.115
Companies: 1. Dabur India Ltd. 7. ITC Ltd.
2. Godrej Industries Ltd. 8. Agro Tech Foods
3. Nestle India Pvt Ltd. 9. MTR Foods Ltd.
4. Britannia Industries Ltd. 10. Cadbury India Ltd.
5. Parle Agro Private Ltd. 11. Mother Dairy Pvt. Ltd.
6. Haldiram Marketing Pvt Ltd. 12. Pepsico India Holdings

Table-2.1
Classification of respondents on the basis of region

<table>
<thead>
<tr>
<th>Region</th>
<th>No. of wholesaler</th>
<th>No. of retailer</th>
<th>No. of customers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delhi</td>
<td>15</td>
<td>105</td>
<td>500</td>
</tr>
<tr>
<td>Gurgaon</td>
<td>15</td>
<td>45</td>
<td>250</td>
</tr>
<tr>
<td>Faridabad</td>
<td>10</td>
<td>60</td>
<td>250</td>
</tr>
<tr>
<td></td>
<td>40</td>
<td>210</td>
<td>1000</td>
</tr>
</tbody>
</table>

So, Total no of middlemen: 250
Total no. of customers: 1000
Total no. of company’s executives: 30

Figure- 2.a
Classification of respondents on the basis of age-group, income and occupation

<table>
<thead>
<tr>
<th>Age-group</th>
<th>Income</th>
<th>Occupation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Below 20</td>
<td>0-20000</td>
<td>Student</td>
</tr>
<tr>
<td>20-30</td>
<td>20000-50000</td>
<td>Housewife</td>
</tr>
<tr>
<td>30-40</td>
<td>Above 50000</td>
<td>Serviceman</td>
</tr>
<tr>
<td>40-50</td>
<td></td>
<td>Businessmen</td>
</tr>
<tr>
<td>Above 50</td>
<td></td>
<td>Working women</td>
</tr>
</tbody>
</table>
Table-2.2

Middlemen wintage in business

<table>
<thead>
<tr>
<th>Sr. no.</th>
<th>Years</th>
<th>No. of respondents</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>&lt;1</td>
<td>20</td>
<td>8</td>
</tr>
<tr>
<td>2</td>
<td>1-3</td>
<td>88</td>
<td>35.2</td>
</tr>
<tr>
<td>3</td>
<td>3-5</td>
<td>94</td>
<td>37.6</td>
</tr>
<tr>
<td>4</td>
<td>&gt;5</td>
<td>48</td>
<td>19.2</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>250</td>
<td>100</td>
</tr>
</tbody>
</table>

Table-2.3

Turnover of business (middlemen)

<table>
<thead>
<tr>
<th>Sr. no.</th>
<th>Turnover (Rs.)</th>
<th>No. of respondents</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>&lt;25 lakhs</td>
<td>67</td>
<td>26.8</td>
</tr>
<tr>
<td>2</td>
<td>25-50 lakhs</td>
<td>76</td>
<td>30.4</td>
</tr>
<tr>
<td>3</td>
<td>50 lakhs-1 crore</td>
<td>102</td>
<td>40.8</td>
</tr>
<tr>
<td>4</td>
<td>&gt;1 crore</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>250</td>
<td>100</td>
</tr>
</tbody>
</table>

SAMPLE DESIGN

Sample was restricted only to Delhi and NCR (Gurgaon, Faridabad and Noida). A sample of 1000 consumers, 250 middleman and 30 company’s executives were chosen.

2.4 DATA COLLECTION METHOD

Sources of data collection- The information obtained for this study required both Primary as well as Secondary sources.

a.) Primary data collected using Questionnaire, formal and informal talk with concerned manager or officials, observation, interview and discussion on various aspects with company’s executive, middlemen and customers.

The first method used to collect the primary data was through questionnaire. Following three sets of questionnaire were designed and prepared to collect the relevant information:
1) For customers
2) For company executive
3) For middlemen – wholesalers/ retailers

The questions asked were both open and close-ended. Sufficient care was taken to make the questions more communicable and understandable to convey the same meaning from the researcher to the respondents.

Second method to collect the primary data was through extensive interview. The purpose of the interview was explained to them before their interview. Interview can be classified into structured and unstructured interview\(^1\). The method of data collection of this research was based on *structured questionnaire*, so researcher resorted to structured interview i.e. interviews conducted with the help of pre-determined questionnaire. Interview can be further sub-divided into as disguised and non-disguised\(^2\). In disguised interview the objective of the study is unknown to the respondents. Researcher had selected non-disguised. Interview can also be categorized according to the method of administration i.e. face to face, telephone, and mail, and researcher collected the data through face-to-face interview. In observation questionnaire is not used. The subject was observed in the natural surroundings and the relevant information was drawn.

So, the technique employed in this study for data collection was interview method through a pre drafted, structured and non disguised type of questionnaire. The questionnaire was divided into following three parts\(^3\):

1) Information part
2) Basic part
3) Classification part

---

\(^1\) Wilkinson & Bhandarkar (2003), *Methodology and techniques of social research*, Himalaya publishing house, New Delhi, p.201

\(^2\) Wilkinson & Bhandarkar (2003), *Methodology and techniques of social research*, Himalaya publishing house, New Delhi, p.201

\(^3\) Wilkinson & Bhandarkar (2003), *Methodology and techniques of social research*, Himalaya publishing house, New Delhi, p.214
• In information part researcher introduced himself and the objective of the study was cleared, so as to remove any kind of hesitation on the part of respondents to answer the questionnaire. Further respondents were assured that the information provided by them will be kept confidential.

• The basic part of the questionnaire contained questions relating to the actual study.

• In the third part of the questionnaire, questions relating to the personal information of the respondent were asked for the purpose of classification.

During the field investigation, many difficulties were faced by the researcher. Some of the persons refused politely & firmly, whereas there were others who were rude. This was by no means deterred the researcher in his task. Most of the time, the refusal from respondents was because of the busy schedule. At the same time there were respondents who were willing and enthusiastic about being interviewed. Most of the respondents who agreed to be interviewed initially refuse to give information about the financial aspects of their units. Even those who gave information about financial aspects did not reveal as much as desired by the researcher.

b.) Secondary data required to study the changing trends in packaging in food processing industry. Secondary data was also required in order to assess the impact of packaging strategies on company’s sales and profitability. Data for this study was collected through government publication, books, journals, magazines, reports, newspaper, internet and review of literature.
2.5 LIMITATIONS OF THE STUDY

The focus of this study is on packaging strategies of food processing industry in India. The findings are reliable to the extent the data is reliable. Although in this study, efforts have been made to minimize the limitations as far as possible, but some of the limitations like non-availability of data, which is strictly confidential in nature, cannot be overcome. The main related issues are:

1) In case of primary data, sometimes it was difficult to contact or meet company's executives due to their busy work schedule.
2) Sometimes officials were unable to furnish some of the information due to confidentiality of the same.
3) Some respondents did not exhibit their true attitude and did not respond honestly.
4) Packaging has become part and parcel of daily routine goods and consumer are getting its benefits from long time but after that there were a lot of things, not in their mind.

In spite of all these limitations, a genuine effort has been done in getting facts and figures of packaging for this research work.
2.6 ORGANIZATION OF THE STUDY

Study will have the following chapters in the given sequence:

Preface

CHAPTER-1

1.1. The Problem
1.2. Significance
1.3. Conceptualization
1.4. Review of literature
1.5. Focus of the study
1.6. Objectives of the study

CHAPTER-2 Research Methodology

2.1 Research design
2.2 Universe of the study
2.3 Survey sample
2.4 Data collection
2.5 Limitations of the study
2.6 Organization of the study

CHAPTER-3 Packaging trends in food processing industry

3.1 Historical development
3.2 Food industry: cost, profit and productivity
3.3 Good packaging design increase product sales?
3.4 Key consumer packaging trends and development drivers
3.5 Organized retail format
3.6 Flexible packaging
3.7 Aseptic packaging system
3.8 Life style influence
3.9 Consumer mindset
   3.9.1. Packaging design and consumer
   3.9.2. Consumer attitude and concern
3.9.3. Third dimension
3.9.4. Connecting the package with consumer
3.9.5. Package: opportunity and challenge

3.10 Packaging trends in terms of expenditure on packaging
   3.10.1. Packaged v/s non- packaged foods
   3.10.2 No. of companies offering packaged foods
   3.10.3. Expenses on packaging of processed food
   3.10.4 Market size (value) of packaging materials in processed food
   3.10.5 Co-relation between packaging, sales and profits etc.

CHAPTER-4 Packaging strategies of food processing industry:
   4.1 Objectives of packaging
   4.2 Various aspects of Packaging Strategies
      4.2.1. Protection of the product
      4.2.2. Packaging technology
      4.2.3. Economic (costs)
      4.2.4. Marketing (especially marketing-communication)
      4.2.5. Package properties
      4.2.6 Environmental considerations

CHAPTER-5 Major deficiencies and recommendations
   5.1 Environment friendly
      5.1.1. Municipal solid waste stream
      5.1.2. Material: limitations and opportunities
      5.1.3. Infrastructure: limitations and opportunities
      5.1.4. Key players in environmental arena
   5.2 Government policies: packaging legislation
   5.3 Financial constraints

CHAPTER-6 Conclusion and suggestions
Questionnaire
Bibliography