CHAPTER - III

RESEARCH METHODOLOGY

1. Sample Design
2. Instrument
3. Questions
4. Procedure
5. Tabulation & Classification
6. Analytical Tools
7. The Content Analysis
8. Mata Analysis
Research is concerned with the systematic gathering of information to reach the reality and truth through a well-designed "modus operandi." Research methodology is a well-knit procedure consisting from the introduction of the problem to the results of the study. It can be said that without adopting a proper research technique, the researcher is unable to reach the reality. This chapter presents a complete account of the modus-operandi of the present study. First of all, the introduction of the problem is taken up (given in Chapter-I). Thereafter, an exhaustive review of literature pertaining to "Inflation-Accounting" is given in the preceding chapter. A depth-oriented study is possible only when a vast range of literature is reviewed. The review facilitated to reach the final statement of the objectives of the present study (given in Chapter-II). To achieve those objectives, the methodology adopted is given in the following pages:

1. **Sample Design**:

   The researcher has taken up the samples of C.As, Professionals & Academicians from all over the country. So, whole India is the field of this present study. Definitely, the researcher has sought to control the area wherever it was possible because at one side good
research designs need a comprehensive and vast study area and on the other hand, an individual researcher faces a number of problems (like financial, physical, travelling, co-operation, non-research orientation of the respondents etc.) which bring the work to narrow limits and sometimes even a standstill. It was decided that the some executive of accounts should be interviewed at Delhi because almost every big company of the country has either its head-office or branch office at Delhi. However, visits were performed to many other places (like Bombay, Ahmedabad, Jaipur, Kurukshetra, Ghaziabad, Bangalore, Faridabad, Bhiwani, Alwar, Ajmer, Kota, Jodhpur) to get some response from academicians and executives.

From the area point of view, the present study is the field-study "because the field survey provides an efficient way to find how people think about issues or what they say - about Inflation-Accounting.

The total sample was 150. The respondents belong to three distinct categories having 50 cases in each (sample chart is given in Exhibit-A). The purposive random samples were taken for all types of respondents (i.e. company organisations, professionals/auditors and academicians). The respondents from the companies were of
the level of "executives of accounts/finance area. These respondents would be kept under the name of professionals in the chapter of results. Only those professionals were chosen who were having the indepth knowledge of accounting. The Chartered Accountants were chosen as respondents because they audit the accounts. So, they may also be helpful in telling about things and factors in the field of "Inflation-Accounting." In case of the

Exhibit - A

<table>
<thead>
<tr>
<th>1. Position &amp; Number</th>
<th>Academicians (50)</th>
<th>Chartered Accountants (50)</th>
<th>Executives (50)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Sex</td>
<td>All Male</td>
<td>All Male</td>
<td>All Male</td>
</tr>
<tr>
<td>3. Age</td>
<td>28-56 Years</td>
<td>26-51 Years</td>
<td>31-57 Years</td>
</tr>
<tr>
<td>4. Educational Qualifications</td>
<td>All M.Com.</td>
<td>All ICAI</td>
<td>B.Com. - 09</td>
</tr>
<tr>
<td></td>
<td>Ph.D.</td>
<td></td>
<td>C.A. - 24</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>M.Com. - 10</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>ICWA - 03</td>
</tr>
<tr>
<td>5. Experience</td>
<td>All widely experienced</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. At present working</td>
<td>Professors - 38</td>
<td>Practising Finance</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Readers - 09</td>
<td>Executives/Accounts</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Lecturers - 03</td>
<td>Officer</td>
<td></td>
</tr>
</tbody>
</table>
sample of academicians, only those professors, readers and lecturers were selected who were having the knowledge and teaching experience of the Inflation-Accounting; because a teacher knows the reality of the subject taught by him.

2. **Instrument for the Collection of Information:**

As already has been said that this study is the field study comprising three types of respondents of the categories of professionals, academicians and accounts-executives. To collect the information from these respondents, a structured questionnaire was prepared. This questionnaire starts with an appeal and request to the respondent to fill up all the terms truly and to the best of his/her knowledge. The first part of the questionnaire is regarding the personal characteristics of the respondents and the second part consists of the questions regarding Inflation-Accounting (the format of the questionnaire is given in Appendix No. 1). For the purpose of easiness only one questionnaire was prepared for all types of respondents, keeping into consideration that any question not applicable for the respondent would be struck off by himself.

**Personal information:** This part comprises the information of the respondents like their Designation,
Income, Educational Qualification, Experience, Age and field of specialisation. The personal information is taken for the purpose to see that what is thought of inflation-accounting by the respondent having different personal-characteristics.

3. **Questions regarding Inflation-Accounting**

It has been tried to include all necessary questions in the questionnaire pertaining to inflation-accounting. This part of the instrument has as many as thirty-nine questions. These questions are of heterogeneous types consisting of knowledge, conversion, usefulness and applicability of inflation-accounting. Some questions were based on yes/no responses, some were based on objective type questions with alternative answers and some were open ended for the comments of the respondents.

**Procedure of Information Collection**

The above mentioned questionnaires were got filled in through the following three ways:

(i) By personal visits and sitting with the respondents while they were completing the information.

(ii) By distributing the questionnaires in the first visit and collecting the same from the respondents as per the given by them.
Some questionnaires were sent by post and were received back from the respondents in the same way. Moreover, the researcher got some questionnaires filled in during the visit at Bangalore to attend the All India Commerce Conference held in May, 1992. Many well experienced respondents were contacted during that visit.

Some questionnaires, from professionals (C.A.'s, and executives), were collected in complete form in a seminar of Chartered Accountants held at Delhi in July, 1992. Efforts were made to collect the information and the responses from a wide range of experienced and qualified respondents.

4. Procedure:

The researcher tried to make contact with the Accounts Executives or Accounts Officers of Public Limited Companies from different places. The logic behind the selection of Public Limited Companies was that the published Annual Reports are disclosed for public only by such companies. The places from where these 50 companies were chosen on the basis of approach and distance. The states/cities from where these companies were selected: Rajasthan (Ajmer, Jaipur, Jodhpur, Alwar, Kota & Bhiwadi) Haryana (Rewari, Faridabad, Gurgaon) U.P. (Ghaziabad, Shahibabad)
New Okhla Industrial Area), Maharashtra (Bombay, Silvasa),
West Bengal (Calcutta), Gujrat (Ahmedabad), and the Union
Territory of Delhi. The executives/officers of the
field, as given above, were initially contacted personally
to spare some time to fill in the questionnaires.
Thereafter, they were administered to the same instrument.
In some cases the questionnaires were collected by hand on
the next day while some respondents sent the filled in
instruments by post. At the same time, the Annual Reports
of the companies were also collected personally for the
purpose of analysing the financial statements, after
adjusting the price-level changes. The purpose of such
conversion was to tell the concerned company that what
would be the impact of adjusted items on the overall
financial and solvency position of the company. These
analyses were made with the help of price-index numbers
taken from Reserve Bank of India's Bulletin. The names
of the companies have not been given because the managers
of many companies of sample, showed their unwillingness to
disclose the names.

Academicians, here, mean the Professors, Readers
and Lecturers who have been teaching post-graduate and
M.Phil. classes in Universities or in P.G. Colleges.
Further, only those academicians were selected to respond who had been teaching the subject of Accounting Theory/Contemporary-Accounting/Accounting including the topic of Inflation-Accounting. The Universities where personal visits were made include Banglore University, Banglore; Bombay University, Bombay; and the Universities of Meerut, Jaipur, Ajmer, Jodhpur and Calcutta. Some academicians were contacted through correspondence and their responses were quite satisfactory. Many academicians were requested to fill in the questionnaire during the 'Conferences' held at Banglore (June, 1992) and M.D.U., Rohtak (December-January, 1992-93) under the auspices of 'All India Commerce Association.'

The third category of respondents was that of practising Chartered Accountants in the field of auditing and taxation. This category is deemed to be the elite strata of the accounting society as they (C.As.) have indepth knowledge of accounting. And largest number of Chartered Accountants, our respondents, were from Delhi, Bombay, Calcutta, Jaipur and Ajmer. They were also contacted personally, in maximum cases, and through correspondence in some cases. Their co-operation was really excellent during the process of filling in the questionnaires.
5. **Tabulation and Classification**: 

After collecting the information from the three categories of respondents, it was tabulated on the basis of classified respondents and responses. The aim behind doing so was to analyse the collected information to find out various results regarding the "Inflation-Accounting." A main Table (or Master Table) was prepared first and thereafter, some auxiliary tables were made to further analyse the data. The analysis of the data was made on the basis of the tools given on the next page.

6. **Analytical Tools**: 

The response in yes and no form was analysed on the basis of percentage. The percentage of yes and no answers was calculated and then the results were explained and discussed. Where the questions were open ended and wherever suggestions and views were required regarding some points, the method of content analysis was adopted denoting the number of percentage of responses like A (for Academicians) = ..., P (for Professionals) = ..., and C (for Chartered Accountants) = ....

In some cases, wherever it was needed, the difference of proportions (i.e. percentage), of the respondents of the three categories was tested at 5% and
1% level of significance by using the following formula:

\[(P_1 - P_2) \div S.E.\]

If in two samples of different populations the proportion of items of possessing an attribute is \(P_1\) and \(P_2\) and the number of items in the sample is \(n_1\) and \(n_2\) respectively, the researcher or investigator would like to test whether the difference between \(P_1\) and \(P_2\) is due to fluctuations of random sampling or otherwise. Assuming that there is no difference in the two populations with regard to the proportion of the attribute under study, the proportion of the items in the combined population is found out with the help of the following formula:

\[p = \frac{n_1 P_2 + n_2 P_2}{n_1 + n_2}\]

The standard error (S.E.) of the difference

\[S.E.(P_1 - P_2) = \sqrt{Pq \left(\frac{1}{n_1} + \frac{1}{n_2}\right)}\]

If \((P_1 - P_2)\) S.E. is less than 1.96 (5% level of significance) or 2.58 (1% level of significance), the difference is regarded as due to random sampling fluctuations, i.e. not considered significant.

7. The Content Analysis:

The open ended questions and the responses required with suggestions or arguments were analysed through
content analysis. First of all, the common statements/suggestions were sorted out and thereafter the number of respondents, category-wise, were obtained. Thus, the tabulated contents of such responses have been discussed.

Mata Analysis:

Along with the field study, an effort has also been made through the mata analysis of annual reports of the two companies (company-A and company-B) to find out the effects of Inflation-Accounting on different issues. These two companies are taken on the ground that the Inflation Accounting is being used by them in their annual reports as supplementary statement under the title of Current Cost Accounts. The annual reports of these two companies were collected in 1991 for the year 1988-89. The names have been kept secret on the discretion of companies.

Basis:

The SAIL presents its Current Cost Accounts in summarised form and prepare the same on the principles recommended by the Accounting Standards Committee of U.K. contained in the statement of Standard Accounting Practice on Current Cost Accounting (SSAP-16). The
Chartered guidelines issued by the Institute of Chartered Accountants of India are also considered in preparing same accounts.

Criteria of Revaluation:

(i) The land is revalued by SAIL on the basis of price approved by the Board of Directors for allotments of large areas of land for provision of infrastructural facilities, where internal development has to be undertaken by the allottee.

(ii) Mining rights and patents are not revalued because of involvement of insignificant amount in these items. Therefore, these are taken at historical cost.

(iii) Buildings, Plants & Machinery and all other assets are revalued by SAIL by applying price indices published by the Reserve Bank of India. Rate of depreciation adopted are the same as under Historical Cost Accounts.

(iv) The effect of inflation on investment in different companies is not reflected as Current Cost Accounts of the concerned are not available.
(v) Current assets and liabilities are converted by applying price indices published by the Reserve Bank of India after considering age effect.

(vi) The opening and closing stocks of inventories are brought to a common average price by the averaging method applying price indices published by RBI. The revised cost of sales is compared with the historical cost to arrive at the Cost of Sales Adjustment.

(vii) Current Assets & Liabilities relevant to current business operations are taken by SAIL for Monetary Working Capital Adjustment. Price indices are the same as used for Cost of Sales Adjustment.

(viii) Current Cost operating adjustment are apportioned between Loan Fund and Equity Fund including Current Cost Reserve.

Cement Corporation of India (CCI) also presents the Current Cost Accounts in summarised form like SAIL. The additional point for this corporation is that accounting for the Cement Industry therecommended procedure for reporting financial results issued by the CEMBUREAU (The European Cement Association) Paris, is followed: CCI also writes "Non-Statutory Information" on the top of the accounts.
Ratios for Comparison:

The following ratios have been calculated by using the financial data of Historical Cost Accounts and Current Cost Accounts. Such ratios have been compared so that the impact of Current Cost Adjustments may be shown:

i) Return on Investment (ROI) = \( \frac{\text{Operating Profit}}{\text{Capital Employed}} \times 100 \)

ii) Investments Turnover Ratio = \( \frac{\text{Sales}}{\text{Average Capital Employed}} \)

iii) Fixed Assets Turnover Ratio = \( \frac{\text{Sales}}{\text{Fixed Assets}} \)

iv) Capital Gearing Ratio = \( \frac{\text{L.T.Loans + Debt + Preference Capital}}{\text{Equity Capital + Reserves + Surplus}} \)

v) Proprietory Ratio = \( \frac{\text{Fixed Assets + Current Assets}}{\text{Proprietor's Funds}} \)