CHAPTER II

RESEARCH METHODOLOGY

"DESIGNING THE RESEARCH ENSURES AGAINST ITS FAILURES."

by – Wilkinson & Bhandarkar.
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1. INTRODUCTION.

As pointed out in the earlier chapter the general purpose of this study is to make some methodological as well as theoretical contribution in the field of research of Co-operative Housing Movement. In view of this fact, the topic of research methodology has been separately dealt with in this chapter.

2. RESEARCH DESIGN.

"Designing the research ensures against its failures".* Research design decides the fate of the proposal and its outcome. If the design is defective, the whole out come and report will be faulty and undependable. It is upon the design that nature of data to be collected will very much depend. It is therefore, desirable that research design should be methodologically prepared.

Designing is a preliminary step in every activity, because it is at the designing stage that the purpose for which design is being made is to be decided. Designing provides a picture for the whole, before starting of the work. The design helps the investigator to obtain answers to the questions of research and also helps him to control the experimental, extraneous and error variances of the particular research problem under study.**

*Methodology & Techniques of social research by Wilkinson & Bhandarkar  P-46.

since, each research problem is prepared with a view to solving some problem, therefore, the purpose of research design is to control variance. Then another purpose of research design is that the researcher should find answer to research questions validly, objectively, accurately as well as economically. A carefully finalised research design is sure to yield dependable and valid answers to the research questions epitomized by hypothesis. “Without strong stress, on research questions and on use of design to help provide answer to these question, the study of design can degenerate into an interesting but sterile technical exercise”.

“In a narrow sense, research design refers to the procedures for the collection of data and its analysis. In its broader sense, a research process involves identification and selection of research problem, choice of the theoretical framework (conceptual model) for research problem and its relationship with previous research, formulation of research problem, specification of its objectives, its scope and hypothesis to be tested, design of experiment or inquiry, definition and measurement of variables, sampling procedure, tools and techniques for gathering data, coding, editing and processing of data, analysis of data selected and use of

* * _Ibid p - 301._
appropriate statistical procedure for summarising data and for statistical inference, reporting research – description for research process, presentation, discussion and interpretation of data, generalisations of research findings and their limitations and suggestions for further research.” *

2.1 TYPES OF RESEARCH DESIGN.

The research design differs according to the research purpose. The research purpose may be grouped under four broad categories; viz. 1) Exploration 2) Description 3) Diagnosis 4) Experimentation.**

The main purpose of an exploratory study is to formulate a problem for more precise investigation or for developing hypothesis. Such a study can have other functions as well, namely more structured investigation, phenomenon, which an investigator wishes to study in the subsequent etc. Such a study helps in clarifying concepts, establishing priorities for further research etc. In the words of Kantz “Exploratories studies represent the earlier stage of a science”. It is from the findings of these studies that a new research problem may be formulated or new hypothesis developed or existing one tested more scientifically.

The **descriptive** research designs enable researcher to describe or present picture of a phenomenon or phenomenon under investigation. The methodology involve in such design is mostly qualitative in nature producing descriptive data i.e., people's own written or spoken words and observable behavior.

**Diagnostics** refers to scientific differentiation among various conditions or phenomena for the purpose of accurately classifying these conditions. In broadest sense, diagnosis corresponds to the fact-finding aspect of clinical practice. Its objective include screening and classification, personality description, prediction of outcome and attainment of insight by the client.

An **experiment** in the social sciences is not only different form but also more difficult than an experiment in the natural sciences. Experimental studies by nature are those which are concerned with the testing of casual hypothesis.

### 2.2 RESEARCH DESIGN USED FOR THE STUDY.

Research designs differ, depending on research purpose. As far as this research work is concerned exploratory design is used to gain familiarity with a phenomenon and to achieve new insight into it, in order to formulate a more precise research problem and to develop hypothesis.
3. RESEARCH METHODS.

In this research, some methods have been used, as without the methods, no research can be carried out. But at the same time, it has been kept in mind that the methods are meant to an end and not end in themselves. Therefore, stress on methods is laid only to a limited extent. If there is over-stressing on methods then it is possible that the very results may be distorted. Similarly, if more stress is laid on methods and techniques, then in actual practice, what would happen is that the researcher will have to pickup a social problem only for which methods, techniques and tools are available. In other words it will mean that technician will decide what type of social problems ought or ought not to be investigated.

Several methods are being adopted in the field of social research. Each method, of course, has its utility as well as limitations and as such helps and assistance of each method will have to be sought to find out correct and dependable results.

Before we start, it is essential to differentiate between method and technique. The method is a systematic system whereas technique is a procedure. A method is therefore common to all social sciences, it is definite and underived. Inspite of the fact, it must be clearly understood that methods and techniques are not contradictory, but are only
complimentary to each other. The following important methods and techniques have been used in this research work.

<table>
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<th>Methods</th>
<th>Techniques</th>
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<td>5. Public opinion poll method</td>
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4. COLLECTION OF DATA.

Success of any research proposal very much depends on the results that it produces. The result can be socially useful only when the data fed by the investigator is dependable and reliable. Not only this, but it is equally essential that investigator should not depend on any single source of data for his findings, but he should use various methods and techniques for feeding his research with appropriate data.
METHODS OF DATA COLLECTION USED.

The following methods of data collection are used for feeding the present research work.

4.1 LIBRARY METHOD.

No research can be completed without using the library method of data collection. In the words of Goode and Hatt “It is important because all research inevitably involves the use of books, pamphlets, periodicals and documentary materials in the libraries.” * in this research work library method has been used for –

1. obtaining necessary background material for the problem under investigation.
2. finding out the information on previous work, already done, in this field.
3. eliminating the possibility of unnecessary duplication of work.
4. getting the information in respect of techniques already used.

4.2 QUESTIONNAIRE METHOD.

Questionnaire method is a method in social research, in which information is obtained with the help of questionnaire,

which is prepared exclusively for that purpose. In other words, with the help of a set of questions all the required data is collected. In the words of Goode and Hatt “In general the word questionnaire refers to a device for securing answers to questions by using a form which respondent fills in himself”. *

APPLICATION OF QUESTIONNAIRE METHOD IN THIS RESEARCH.

In a research project where the informants are spread over a vast or inaccessible areas, the information is sought with the help of questionnaire. In this research work, the use of questionnaire is made for obtaining the information from members of the Co-operative Housing Societies in Yavatmal Tahasil. There are 192 co-operative housing societies in Yavatmal tahasil and the total number of members of all these CHS is about 6900. ** Since it was not possible to have a personal contact with these members, the use of questionnaire is done to obtain the information.

4.3 SCHEDULE.

A schedule is like a questionnaire, which contains a set of questions. These questions are required to be replied by the respondent with the help of an investigator. In the words of Thomas Carson Macormic, “The schedule is nothing more

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* - "Methods on Social Research" by Goode and Hatt, 1952 p - 103.
** - Information sought from the office of the Assistant Registrar of co-operative societies, Yavatmal.
than a list of questions which it seems necessary to test the Hypothesis and hypotheses. *

APPLICATION OF SCHEDULE IN THIS RESEARCH WORK.

In this research work the schedules have been used to obtain the information from office bearers of the Co-operative Housing Societies and office bearer of the co-operative department in Yavatmal tahasil.

4.4 INTERVIEW METHOD.

In social research, interview method is becoming increasingly popular. In this method the interviewer himself approaches the respondent, puts questions to him and himself records the replies, usually not bringing to the notice of the respondents. In this system there is a direct contact between the respondent and informant.

Interview has been defined differently by different scientists. The definitions as given by Fred N. Kerlinger is seems to be more appropriate from the point of view of the social research. In his words “The interview is face to face interpersonal situation in which one person, the interviewer asks a person, being interviewed, the respondent, questions designed to obtain answers pertinent to research problem.” **

APPLICATION OF INTERVIEW METHOD IN THIS RESEARCH.

The interview method of data collection is used, in this research work, for obtaining the information from leading and renowned personalities in the different fields. This method has been used with a view to verify the new ideas, whom the researcher is entertaining, about certain persons. These persons can provide him new ideas and views, which might help him in either improving or adhering to his new hypothesis or to reject that hypothesis. It was also one of the aim of the researcher to use this method to collect additional information or views of different persons regarding different problems in different situations, particularly from those who have suggestive capacity and can give real and concrete proposals for the improvement of the study. It was an idea that this method may help to find out the reactions of different persons under different situations, particularly, about those who are intellectuals and are quite aware of the social changes, that are taking place around them.

For this purpose, the stratafied method of random sampling is used. The different lists have been prepared for different categories of persons to be interviewed. The lists were prepared for –

i. Renowned politicians of different political parties.
ii. Members of Nagar Parishad Yavatmal.
iii. Advocates.
iv. Chartered Accountants.
v. Doctors.
vi. Heads of the different Govt. Offices.
vii. Branch Managers and Officers of the Nationalised Banks.
viii. Office bearers of the different co-operative societies.
ix. Leading businessmen in the Yavatmal town and at the Panchayat samitee head quarters.
x. Heads of the educational Institutions.

After preparing the lists, the reasonable number of respondents, considering the number of respondent in each list, have been selected, by applying the random sample method of sampling.

4.5 OBSERVATION METHOD.

Observation method is a method under which data from the field is collected with the help of observation by the observer or by the investigator, personally going to the field. Observation of social behavior can produce values if it includes an adequate description of the character of social atmosphere of the larger unit of activity within which the specific social act occurs. This method had been and continues to be one of the methods for the study of social problems.
APPLICATION OF OBSERVATION METHOD IN THIS RESEARCH.

In this research work the observation method have also been used. The construction work in progress, the working during the meeting, the election of the members of executive committee, and the detailed working of the two CHSs, which were selected on random sample basis have been observed during the course of research.

5 METHODS OF SURVEY.

A survey may be conducted by either of the two methods.
1. Census method
2. Sampling method.

5.1 CENSUS METHOD.

When the whole area or population of persons is contacted, the method is known as census method. But for studying a social problem, it is costly, time consuming and complex, as well as financially not viable, if the study of the whole universe of the problem is to be undertaken.

5.2 SAMPLING METHOD.

The limitations of the census method are mentioned above. It is therefore, convenient to pickup a sample out of the universe proposed to be covered by the study. While picking up a sample, care should be taken to see that it is representative
and it represent the universe as a whole. In the words of P.V. Young "Statistical sample is miniature picture or cross section of the entire group or aggregate from which the sample is taken. The entire group from which a sample is chosen is known as "the population"; "Universe" or "Supply", when a small group is selected as representative of the whole mass, it is known as sampling method.*

* "Scientific Social Survey and research, New Delhi, 1975 P-326

REASONS FOR USE OF SAMPLE METHOD IN THIS STUDY.

Following are the reasons for which the researcher is constrained to use the sampling method for the proposed study.

i. Sampling method of survey saves time, money and energy.

ii. Researcher can pay more attention to the problem to be studied.

iii. More coverage is possible and that too within less time.

iv. It enables to scrutinize the available information.

v. It becomes possible to concentrate on the study of the few items thoroughly and in all respects.

vi. Since the sample is the part of the universe it becomes easy to establish rapport with the informants and collect information form them.
TYPES OF SAMPLING METHOD.

Sampling method has come to stay in social research, but samples can be picked up through different methods. Each method has, of course, its own advantages as well as limitations.

Sampling methods can broadly be divided into three types:

A) Probability Samples.

Following methods of sampling can be grouped under probability sampling.

1. Simple random sampling
2. Stratified random sampling
3. Cluster sampling
4. Multi-stage sample

B) Non-probability sampling.

Following are the types of non-probability sampling.

1. Representative sample
2. Judgement sample
3. Purpose sample
4. Accidental sample
5. Quota sample

C) Other sampling plans.

1. Snow ball sampling
2. Spatial sampling
3. Saturation sampling
APPLICATION OF SAMPLING METHOD IN THIS RESEARCH WORK.

In the present work, the sampling plan is devised largely taking in view the level of aspiration for accuracy and confidence in the findings of the proposed study. Sampling demands an exercise of great care; otherwise the results obtained may be incorrect or misleading.

In this research work, due care has been taken to see that the samples selected are of representative nature and it represents the universe as a whole.

Simple random sampling is, in a sense, the basic them of all scientific sampling. But this method of sampling requires all the units in the universe homogeneous. If the units in the universe are of heterogeneous nature, then this method will fail.

In this study, the units in the universe are of heterogeneous nature. For example, the CHSs in Yavatmal tahasil, can be classified in the following groups.

A) Those CHSs which have taken a loan from MCHFS.
B) Those CHSs which have taken a loan from State Government.
C) Those CHSs which have taken a loan from other financing institutions.
D) Those CHSs which have, only sold out the plots and the construction, is left to the members at their own accord.

Since the nature of the CHSs in Yavatmal tahasil is heterogoneous, the stratified sampling method have been used. For this purpose, all the 192 CHSs in Yavatmal tahasil have been classified into above four categories. After classifing these societies into four strata, the samples from each strata have been selected on simple random sample basis, with the help of random numbers. These numbers help to avoid any bias in selecting samples. This method of sampling is known as stratified sampling method.

After selecting the samples, with the help of stratified random sampling method, it has been observed that some of the important CHSs could not be got selected. But for the purpose of study and to have the results realistic the inclusion of those CHSs was felt of great importance. Therefore the CHSs having the following nature and representation of which is not in the sample have been taken purposefully for the study. This method is known as purposive sampling. Thus in this research mixed sampling method is used i.e. the use of

1. Random sampling
2. Stratified sampling and
3. Purposive sampling.
The nature of CHSs selected on purposive sampling method is as under.

1. Those CHSs of which construction work is excellent and in which repayment of loan by the member is regular.

2. Those societies which could not complete the construction of all houses and in which the repayment of loan by the members is irregular or the repayment is withheld.

For this research work the CHSs selected from each category and the numbers of members selected from that category is given hereunder

**Table No. 2.1.**

Table showing the classification of CHSs and the number of CHss, and number of members selected from each category.

<table>
<thead>
<tr>
<th>Category</th>
<th>Particulars</th>
<th>No. of CHSs Selected</th>
<th>No. of members selected</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>CHSs which have taken loan from MCHFS</td>
<td>12</td>
<td>150</td>
</tr>
<tr>
<td>B</td>
<td>CHSs which have taken loan from State Govt.</td>
<td>12</td>
<td>150</td>
</tr>
<tr>
<td>C</td>
<td>CHSs which have taken loan from other financial institutions.</td>
<td>12</td>
<td>150</td>
</tr>
<tr>
<td>D</td>
<td>CHSs which have only allotted the plots to the members.</td>
<td>12</td>
<td>150</td>
</tr>
<tr>
<td>Total CHSs and members selected for survey</td>
<td>48</td>
<td>600</td>
<td></td>
</tr>
</tbody>
</table>
ANALYSIS AND INTERPRETATION OF DATA.

After the data has been collected, the focus of attention is turned to the analysis and interpretation of data. Analysis of data involves a number of closely related operations that are performed with the purpose of summarizing the collected data and organizing it in such a manner that it will yield answer to the research questions.

The problem of analysis and interpretation vary from study to study. The procedure involved in the analysis of data for this research work is as under –

(1) Classification or establishment of categories for data.
(2) Application of categories to raw data through coding.
(3) The tabulation of data.
(4) Statistical analysis of data.
(5) Inference about casual relations among variables.

Interpretation of data is a very specialised technique and therefore, the whole work has been done very carefully and consciously so that the conclusions drawn are rational and verifiable. Care has also been taken to seek that it is acceptable to the society and don’t look ridiculous.

The first step that has been taken for interpretation is of editing the data. Editing means separating an irrelevant data from the relevant data.
The next stage is to arrange the whole data according to characteristics and attributes so that it is uniform and subjectable for comparative study.

After taking the above steps, the tabulation and interpretation of whole data is done i.e. the conclusions have been drawn from the analysis.

For the purpose of analysis or interpretation of the data the statistical measures have been used such as – averages and ratios etc.

7. HYPOTHESIS.

In a scientific research it is expected that the new discoveries are made, but one cannot proceed in complete ignorance. There must be some idea as to the new aspect that is likely to be discovered, or new deductions likely to be arrived at. Then of course, we proceed to find out whether the ideas conceived were true. They may be totally correct, or partially or may be altogether false, but they do help us to get going. These primary ideas, which guide us in our study are termed as hypothesis.

In the words of George A Lundberg, “A hypothesis is a tentative generalisation, the validity of which remains to be tested. In its most elementary stage the hypothesis may be any hunch, guess, imaginative idea, which becomes the basis for
action or investigation.” *

From the above point of view, it was essential that this research work should have also been carried out by taking into consideration some hypothesis. Accordingly, the present research work is based upon the following hypotheses, which have been taken, keeping in view the importance of study.

**HYPOTHESIS NO – 1.**

The need for providing shelter is one of the basic needs of a human being, which can be fulfilled by having a well-constructed house. It is expected that the CHM may help to solve this problem. But it is experienced that the problem of housing is becoming acute day by day. The growth of CHSs from 01 in 1956–57 to 192 in 1989–90 confirms this contention. Therefore, the first hypothesis of this research work is –

"The CHM in Yavatmal Tahasil have failed to solve the housing problem in Yavatmal tahasil."

**HYPOTHESIS NO. 2.**

It has been observed that the promoters of most of the CHSs belongs to the category of businessman. Such promoters have promoted the CHSs keeping in view their economic

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*Social Research by Lundberg*
interest. To protect their interest they adopt different types of unfair means and earn a large profit. This affects either the quality of construction or the cost of construction or both. Similarly, it do not serve the inherent aim of the CHM. Therefore, the second hypothesis in this research work is -

"The quality and cost of the construction work of the houses constructed by the CHSs is not satisfactory, consequently it do not serve the inherent aim of CHM."

\[ \text{HYPOTHESIS NO. 3} \]

It is observed that the other factor which have affected the working of the CHSs is the interference of the political persons. The CHSs are not free from political influence. It leads to various types of malpractices. Therefore, the third hypothesis of this research work is -

"The interference of the political leaders into the working of CHSs, resulted in the various types of malpractises in the working of CHSs and it has defeated the basic objective of the CHM."

\[ \text{HYPOTHESIS NO. 4} \]

Infinitie are the needs of a human being because of which it becomes difficult for him to make both ends meet. In such circumstances regular saving cannot be think of. The co-operative housing moment has facilitated the construction of
house for an individual, which was not possible for him in an individual capacity because of various constraints. The CHM is the solution to all those constraints. In case of CHSs the houses are constructed by taking a loan from the financial institutions the repayment of which is to be made in regular monthly installments. Because of this provision the member of a CHS is required to keep away a part of his monthly income (equal to the amount of loan instalment) for making payment of the loan installment. This, knowingly or unknowingly, cultivate the habit of saving in the mind of the members of the CHSs. Therefore, the fourth hypothesis in this research work is —

"The CHM in Yavatmal Tahasil has succeeded in cultivating the habit of regular saving among the members of the CHSs in Yavatmal tahasil."

**HYPOTHESIS NO. 5**

The emergence of the CHM in Yavatmal Tahasil resulted in the construction of houses on large scale basis. It has created a demand for skilled and unskilled labours in the housing industry. Similarly, the business activities in the field of construction material also increased. It has resulted in increasing the income of the society, which ultimately leads to better living standard and economic development of the society. Therefore the fifth hypothesis of this research work is -
"The CHM in Yavatmal tahasil have generated additional employment for the various classes of the society in the Yavatmal tahasil and consequently it is instrumental for the economic development of the Yavatmal tahasil."

**HYPOTHESIS NO. 6**

The basic aim in formation of the co-operative societies is the upliftment of the socio-economic status of its members, who belong to the economically weaker section of the society. The Co-operative Housing Movement is also one of the aspect through which the housing problems of the persons, belonging to the weaker section of the society is attempted to be solved. In general observations, it is observed that CHM could not achieve the said objective. Therefore the sixth hypothesis of this research work is –

"The CHM in Yavatmal tahasil has failed to solve the housing problem of economically weaker section of the society."