Chapter 3

RESEARCH METHODOLOGY
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Search of fact is the aim of every science. For this purpose a scientist adopts statutory method. This statutory method is divided into various levels, means one can say that, research is a process and for this process there is need to collect the facts.

Many scientists expressed their views about ‘Research’. The opinion of these scientists are as follows -

“In practice a theory is an elaborate hypothesis which deals with more type of facts than thus the simple hypothesis..... the distinction.....is not clearly defined.” - Good W.J., Hatt P.K.¹

According to F.N. Kerlinger², “Scientific research is systematic, controlled, empirical and critical investigation of hypothetical propositions about the presumed relations among natural phenomenon.”

Definition in Webstor’s New International Dictionary - “Careful or critical enquiry or examination in seeking facts or principles, diligent investigation in order to ascertain something.” - C.R.Reddy³

According to G.A. Lundburg⁴, “Scientific method consists of systematic ‘observation’, ‘classification’ and ‘interpretation’ of data..... scientific generalizations are characterised by their degree of formality, rigorousness, verifiability and general validity.”

From the above definitions researcher conclude that research is well disciplined and controlled and critical investigation of hypothetical propositions. It is a careful or critical enquiry. It is an examination in seeking facts. It is an investigation to ascertain something. It deals with more type of facts than does the simple hypothesis. It consists with rigorousness, verifiability and general validity.

3.1 Aim of Research Work

Researcher points out that any kind of research has its meaning, basic purpose as well as aim of research work.

The primary aims of research work are -

a) To acquaint with any kind of event and acquire a new view about that event.
b) To study that, how many times that event has happened and upto what extent this event is related to any other event?

c) To test the relationship of the event which is hypothesized with various alternatives.

3.2 Motives of Research Work

Researcher knows that, every work is done with some motives. Beside any kind of motive behind any work, the aim of that work is not going to be successful. Motivation is an important factor in research work. The motives behind the present study are -

1) To study the genuine problem such as fundamental need of the society.
2) Contribution to social service.
3) To accept the challenge of unsolved problems and assist in solving these problems.
4) Acquisition of degree to do a research work.
5) For knowledge and mental happiness.

Food, Clothing and Shelter are the basic need of the human being. Shelter provides protection against rain, cold, heat, wild animals, thefts and provide physical and mental relaxation. House serve the common purposes like feeding the members, working, sleeping, entertaining, like and many more activities. Good housing helps people to interact within the family and with the outside world. Proper housing exercises a profound influence on people's health and develops character among them.

The house should be reasonably comfortable and with proper facilities of sanitation which ensure hygienic and healthy living and should have the essential amenities of community life. Another important need is adequate water supply, improvement in communication and the proper disposal of sewage and waste products.

The overall progress for raising the nation to the sky, it must provide all its citizen with at least minimum housing. The cultural history of humanity look towards house as a place of safety from both non human and human threats. Almost every person is affected in this day to day living
by the kind of houses in which he lives. The availability of social, medical facilities, jobs, shopping and transportation facilities, educational facilities influence housing.

Housing condition then design the individuals place in the society and the country’s progress at large. In this sense, the housing conditions should consists of both the physical and social contents which would naturally reflect the living conditions of the people. Housing conditions both in Urban and Rural India are extremely unsatisfactory. Besides, there is acute shortage of houses and much of the available accommodation in urban areas is sub standard. The reasons are rapid growth of population, continuous migration from rural area, limited land, haphazard growth of cities and towns, increasing number of urban poor, steep rise in cost of construction material and land have all contributed to the present problem of housing. It is found that the chronic shortage of housing is seen mainly among the lower income group and among the poor people.

The Indian constitution lays down certain principles to provide basic socio-economic necessities like food, clothing and shelter. The Indian government have come to recognize the magnitude of the problems and is adopting different strategies for housing and building policy.

3.3 Hypothesis

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

Research work depends on certain assumptions. For any action or investigation there should be a basis. Hypothesis becomes a base for any kind of research work. It is a tentative generalization, and assumption, the validity of which remains to be tested. It may be guessing or imagining some ideas. To prove certain assumptions, is the base of research study. Hence hypothesis is important to the large extent in the research study.

According to the Universal Declaration of Human Rights, article 25 indicates that everyone has the right to a standard of living adequate for the health and well being of himself and of his family including food, clothing, housing and medical care and necessary social services and the
right to security in the event of unemployment, sickness, disability, widowhood, old age or other lack of livelihood in circumstances beyond his control.*

**Hypothesis Tested**

The present research study has been based on the following assumptions.

1. There is no satisfactory condition of housing in the Amravati region including urban as well as rural areas.
2. The rapid population growth of rural population shift to cities in search of work and housing problem become more acute.
3. There is no satisfactory improvement in the basic amenities of the urban or rural areas and slum areas.
4. The chronic shortage of housing is seen mainly among the lower income group and among the poor people.
5. Maharashtra Housing and Area Development Authority has performed a vital role in solving the housing problem in Amravati region.
6. The housing condition where the slum improvement program was implemented is improved.

### 3.4 Objectives of the Study

1. To evaluate the existing housing conditions of Amravati region and the progress made in this direction.
2. To study the availability of various facilities just as drinking water, public latrines, roads and lanes, sewage, electricity, communication facility etc.
3. To search the differences in the housing conditions of MHADA’s tenements and the housing condition of other financing agencies.
4. To find out the effect of degree of education and area of residence on the housing conditions of people.

* Ref. - Amnesty International Indian Section - New Delhi.
5. To study the effect of bad housing on health.
6. To study the satisfaction level of people regarding their houses.
7. To study the present Government Housing Policy.

3.5 Selection of the Research Area

The subject chosen for the research work has wide scope, because housing problem has not arose only in Amravati or Maharashtra or India. At present whole world is facing the problem of acute shortage of housing. But to study the worldwide housing problem or state wise housing problem is really a difficult and time consuming task. At the same time, according to different Acts, rules and regulations, different cultures, traditions the scope of research study would be differ from each other.

By thinking so much about this task the researcher has to prefer the study of housing problem belongs to Amravati region. Amravati region includes five districts i.e. Amravati, Akola, Yavatmal, Buldhana and Washim.

In the present study the focus has been given on urban as well as rural housing problem, role of Maharashtra Housing and Area Development Authority in solving the housing problems and the workings of parallel agencies in this region.

3.6 Collection of Data and Sampling

Collection of facts really a difficult task. In this process many obstacles arise. There are two sources in broad sense.

1) Primary Facts or Source

2) Secondary Facts or Source.

Primary source means collection of facts which combines from observations or from first attempts or from study.

This is the first contact of researcher. He goes in research area, reaches at the root of the problems, collects data or information by asking question, by taking interviews, or by observa-
tion. If personal contact is not possible the data is collected by questionnaire and scheduling table.

Secondary source means data collected by published or unpublished document reports, letters, journals etc. In this research study these two sources are adopted.

A good number of research studies have already been undertaken on the subject. This study has attempted to analyse housing problem and MHADA's attempt to give a sigh of relief to needy people from every angle.

The present study is therefore, mainly concentrated on the survey of literature. For this purpose the use of different libraries, books, journals, reports have been extensively made.

All the data collected from different sources have been used. For this purpose both retrospective and comparative, primary and secondary data have been used. Comparative method has been used in drawing a reasonable inference through proper assortment and tabulation of the data obtained for the purpose of conclusion.

Before starting the interview the importance of study was conveyed to the interviewee and all the possible attempts were made to form the rapport. As the questionnaire including necessary information about the family and the house it took about 20 - 25 minutes to complete it.

There are two methods to conduct the survey. Normally they are -
1. Census method
2. Sampling method

When the whole area or population of persons is contacted the method is known as census method. But for studying the 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 undertaken. It is therefore convenient to select sample out of the universe proposed to be covered by the study. While selecting a sample care is taken to see that it is representative and it represents the universe as a whole. In the words of P.V. Young⁶ “Statistical sample is miniature picture or cross section of entire group or aggregate from which the sample is taken. The entire group for which a sample is chosen is known as “The population”, “Universe” or “Supply”. When a small group is
selected as representative of whole masses it is known as sampling method”.

**Sampling method is used due to following reasons.**

1. Sampling method of survey saves time, money and energy of the researcher.
2. A small group represent whole mass.
3. Researcher can pay more attention to the problem to be studied.
4. More coverage is possible within a short time.
5. It enables to scrutinize available information.
6. It becomes possible to concentrate on the study of few items in all respect.
7. Since the sample is the part of universe, it becomes easy to establish rapport with the informants and collect information from 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 its own advantages as well as limitations. Sampling method can broadly be divided into three types:-

a) **Probability Samples.**

b) **Non-probability Samples**

c) **Other Sampling Plans.**

**a) Probability Samples :-** Following methods of sampling can be grouped under probability sampling.

   i) Simple random sampling.
   ii) Stratified random sampling
   iii) Cluster sampling
   iv) Multistage sample.

**b) Non-probability Samples :-** The types of non-probability samples are-

   i) Representative sample
   ii) Judgement sample
   iii) Purposive sample
iv) Accidental sample
v) Quota sample.

c) Other Sampling Plans:
   i) Snowball sampling
   ii) Spatial sampling
   iii) Saturation sampling

3.7 Application of Sampling Method

Sampling demands an exercise of great care for obtaining correct results. In this research work, due care has been taken to observe that the sample selected are of representative nature and it represents the universe as a whole taking in view the level of aspiration for accuracy and confidence in the findings. Simple random sampling is, in a sense the basic theme of all scientific sampling. But this method of sampling requires all the units in the universe homogeneous.

In the research study of housing problem in Amravati region, an analytical study of MHADA in solving these housing problems is undertaken. Maharashtra Housing and Area Development Authority i.e. MHADA performs its activity for Economically Weaker Section, Low Income Group, Middle Income Group and High Income Group, it also exercise the Slum Improvement Programme. Random sampling method is adopted for the different schemes implemented by MHADA they are EWS, LIG, MIG, HIG, Slum Improvement Schemes.

In Amravati region responses to the HIG scheme implemented by MHADA are very poor as compare to schemes of the private builder’s flats/Bungalow schemes etc. Therefore, HIG schemes are very few in numbers. The samples are taken at wide range. On the other hand, the response for the other schemes of MHADA are very high. Therefore, the random sampling is taken at short range. The personalities dealing with the office of MHADA are of different nature, therefore, the stratified sampling method has been used. The members of the housing scheme have been classified into four categories. After classifying them into four strata, the samples from each strata have been selected on simple random sample basis with the help of random
3.8 Tools and Techniques

For collecting research data, the researcher adopts some well disciplined, systematic de­
vices and procedures which is in fact are the research tools. Among the various tools of re­
search, the researcher had selected appropriate tools necessary for the purpose of the data col­
lection in this present study.

They are as follows :-

1. Questionnaire
2. Interview
3. Observation

1. Questionnaire

The questionnaire tool has some definite advantages over the other tools. It is capable of 
reaching a large number of diverse people relatively speedily and at negligible cost incurred on 
conducting personal interviews with the respondent. Therefore questionnaire tool was selected 
and looking to the nature of the problem, two different questionnaires have been used. One 
questionnaire prepared for MHADA occupants in which people belongs to economically weaker 
sections, low income group, middle income group and high income group are included. Another 
questionnaire is prepared for office staff and officers of MHADA. A single family unit has been 
adopted as ‘Sample’.

The researcher has taken very much care in preparing the questionnaire. The questions 
framed in the questionnaire were so easy to fill up by all the respondents.

2. Interview

This is a very powerful method to collect the important information. By this method, face to 
face contact is possible and due to this high responses, removal of misunderstanding, creation of 
friendly atmosphere is possible. Wherever necessary supplementary questions were asked and 
in this way, reliable information was gathered by the researcher.

3. Observation

From his birth, a man learns every thing and receives knowledge by observation. When one
see any event with his eyes, that event is absorbed by his mind and he can express real things. For this study, researcher also adopts ‘Observation method.’ She saw the miserable housing conditions of poor people, rural area’s problems and shortage of housing in urban areas also. The researcher studied the non-availability of basic amenities in the research area i.e. Amravati Region.

3.9 Classification, Tabulation and Analysis of the Data

After the collection of data, it was necessary to classify and tabulate the information. All the collected information was classified, tabulated and analyzed considering the objectives of the present study.

After the analysis, conclusions were drawn from the results and on the basis of conclusions, some suggestions and recommendations were given in order to improve the condition.

Appendices have been added at the end, together with bibliography.

3.10 Limitations of the Study

Socio-economic or social sciences and studies in humanities are mostly intensive and time consuming, when the number of variables are large. In fact, every study has to be an intensive one, if the problem is to be understood in detail. However, time and resources forced us to impose upon a few limitations upon the study, which were easily accessible, hence ‘Amravati Region’ is selected for the study. Only relevant important variables are included in the study.

As stated earlier, the researcher has received information from various sources. For this purpose, he took help of questionnaires, interviews and observations. Essence of the research is based on the answers given by the occupant of the tenement which are obtained from them by the structured questionnaire. The researcher has tried to check the correctness of the information by counter questions and some type of observations. The study is to be completed within a specific period. Some time the researcher has to speedup the work therefore, some deficiencies in collection of the data are likely to appear still the researcher has taken maximum precautions to
minimize the mistakes in data collection.

3.11 Review of Literature

Review of literature assists in finalizing the guidelines of methodology and also in framing the assumption of the study. Therefore exhaustive search was made to obtain the relevant literature.

Researcher has gathered the information of research work, that has already been done in the field to provide further orientation to the problem selected for the study and at the same time eliminates the possibility of unnecessary duplication of efforts. In addition, valuable information on research techniques is gained from reports of previous research. It is obvious that all the relevant researches can not be presented and hence a few relevant representative research studies are given here.

Tarachandrika conducted a survey of 100 houses in four villages of Coimbatore district. The investigator then constructed house for rural family using low cost material. The cost of construction per house was Rs. 2160 and 88 paise as per 1965 rates. The constructed house was then evaluated by living there for two weeks by the home-maker. Sanitary conditions and other conveniences like water facility, storages, lights, ventilation, working height etc. were found satisfactory. Modifications such as extending the roof, use of lime mortar finish for flooring and additional storage facilities were suggested to provide desirable living conditions. Time expenditure pattern of the home-maker showed a comparatively less time consumption while working due to its structural features.

Shrivastava and Prasad studied the environmental conditions of a village in Lukhnow which included housing, water supply, waste water disposal and mosquito breeding places in and outside the houses.

Seventeen out of 265 houses (6.40%) had soakage pits, but none were maintained properly and serve as breeding place for mosquitos. In the rest 249 houses (93.6%) the disposal of waste water was through a kutch drain to cesspool or a ditch just close to the walls of the house.
The existing pattern of housing in village Madangarhi was examined by Mishra. It revealed that major components of village houses were an enclosure at the entrance, a courtyard, a varandah or a well ventilated room and dark dingy rooms. About 63.55 percent houses had no specific cooking areas, Latrines and drainage.

Potnis and Kelkar reported that the investigations of National Sample Survey in M.P. showed that in rural areas about 86% houses had mud plinths, 83 had mud walls and 85% had earthen floors with two rooms or less. Only 7% of houses had plinths and walls in brick, lime stone, cement and roof of cast iron sheets and tiles.

The WHO Expert Committee on Environmental Sanitation, National Environmental Health Programme and WHO report on Human Environment, found that in many village communities, all the elements of sanitations were missing, vast population live in rudimentary and temporary shelters. WHO experts, Sehgal, Pinoe & Subramanyam and Ballance & Gunni reported that in rural sector nearly 2/3 rd of the population of developing countries resides, an overwhelming 78% had no access to reasonably safe water and almost equal proportion (85%) had no adequate excreta disposal facilities.

Savage reported identical findings as were revealed jointly by WHO and UNICEF the housing which had proper environmental condition had positive effect on health. Thus the housing structures such as animal shelters, grain storage facilities, kitchen and sanitary facilities should be prerequisites for having good health.

National Sample Survey (1973-1982) had produced a report on housing condition in Maharashtra State. The aspects covered for the survey were the type of dwelling size, structure and type of material used, lighting, drinking water and sanitary facilities available etc. The findings revealed that the proportion of house hold living in independent houses was quite high in rural areas than in urban areas. Average area per rented dwelling in rural area was 24.11 Sq.M which was higher than that in urban areas. Majority of households in urban areas were residing in Pucca houses, whereas in rural areas, semi-pucca houses were found in country tiles, corrugated iron sheets, asbestos sheets, cement concrete roofs, G.I. sheets or tiles, roof of mud,
straw, grass etc. This type of material is used for houses both in rural and urban areas. Majority of household both in urban as well as rural area were living in dwellings having only one living room with NBO specifications. Tap water is the source of water to urban area whereas well is main source of water supply in rural areas.

Dhar conducted a study of the existing housing conditions and houseplans as related to the selected household activities or rural household in Jammu & Kashmir. Study revealed existence of inadequate day light, poor ventilation, poor sanitary facilities and prevalence of Kutcha houses in majority of the households.

Saini carried out a survey on “A study of housing values and satisfaction of rural house owners” convenience both external and internal, privacy, economy, aesthetics, social prestige, health and religion were the values considered by respondents regarding houses.

Pathak reported the advancement in housing since 1880 to 1980 in Nagpur city. Study revealed the changes in house plan and use of building material in one century.

Census of India 1981 reveals that in urban areas 65.2 % houses are pucca in nature whereas 76.9% houses in rural areas are either ‘semi-pucca’ or ‘kutcha’ regarding the housing amenities, the report further reveals that 61.62% villages get drinking water from wells, only 10.29 % avail tap water. The remaining get it from tube-wells or lakes. 91.67% households use kerosene for lighting, only 6.55 % households had electric lights. 42.40% rural household were without any kind of latrines (NBO 1987).

In Amravati University the research work had been done on the resembling subject as follows -

Mr. Arun Pachkawade has studied on “Review of Rural Housing Programme in Amravati District” in 1982.

“Evaluation of Slum Improvement and Upgradation Programme in Amravati” is studied by Ms. Shephali S. Nagar.

Mr. Satyanarayan Baheti has studied on “Comparative Study of Co-operative Housing Societies in Akola District” in 1992.
“A Study on Housing Conditions and Problem of Tribals Residing in Melghat Area of Amravati District” is studied by Mrs. Maya V. Shiralkar in 1992.

Though much relevant literature was scanned, almost all the studies carried out on the topic housing had similar nature like the studies quoted earlier. So such a study was observed where the influence of education and socio-economic status on housing conditions was examined. Needless to say, comparative studies of urban and rural housing were done, but they emphasized the building material used for constructing the houses. Probably, hardly there is any study which evaluated the effect of area of residence, education of family, and socio-economic status on the housing conditions. There are a few studies on housing which deal mainly with technical aspects only. In view of these facts the present study might serve as a means of bridging the research gap.
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