CHAPTER 4

RESEARCH METHODOLOGY

4.1 INTRODUCTION

A research philosophy is a belief about the way in which data about a phenomenon should be gathered, analyzed and used. The term epistemology (what is known to be true) as opposed to doxology (what is believed to be true) encompasses the various philosophies of research approach. The purpose of science, then, is the process of transforming things believed into things known: doxa to episteme.

The purpose of this phase was to collect qualitative inputs in the form of focus groups and qualitative interviews to determine what the elements are that have a significant influence on women entrepreneurship. The secondary research in this phase was used to identify any historic published reports that provided opinions and inputs to establish the relationship of government policies and women entrepreneurs.

4.2 TYPE OF RESEARCH

The type of research adapted for the present study is exploratory research. The exploratory research is also called as formularize research. It is a preliminary study of the subject matter or investigation of the phenomenon. It is no specific in nature but aims at understanding the broad counters of the subject. It aims to delve into the nuances of the problems. It is usually a preliminary or pilot study and is followed by descriptive experimental research. It is ill structured. It does not have a formal and rigid design. This design is overall flexible design. The sampling used for this design is non probability sampling design (purposive or judgmental). The statistical design used is no–pre-planned design for analysis. Data collection tools used is semi-structured instruments like questionnaire and unstructured instrument like observation based on interviews for collection of primary data.
4.3 OBJECTIVES OF THE STUDY

1. To study the concept of women empowerment vis-à-vis and various policies related to women empowerment.

2. To explain the concept of entrepreneurship specially, women entrepreneurship and her contribution to the Indian economy, to understand the necessary skills of enterprise creation.

3. To review the government policies about “women empowerment.”

4. To know the profile of industries run by women entrepreneur.

5. To analyze the various financial sources with special reference to the state of Maharashtra.

6. To study the problems faced by women entrepreneurship and to suggest the policy to remove these problems if any.

4.4 HYPOTHESES:

Following hypotheses statements are proposed for the above study.

\[ H_0 \quad \text{The government of India has not designed and framed women empowerment policy to encourage the growth of women entrepreneurs.} \]

\[ H_1 \quad \text{The government of India has designed and framed women empowerment policy to encourage the growth of women entrepreneurs.} \]

\[ H_{02} \quad \text{There is no positive and progressive implementation of women empowerment policy and consistent measures are been taken for women development.} \]

\[ H_2 \quad \text{There is a positive and progressive implementation of women empowerment policy and consistent measures are been taken for women development.} \]

In order to prove the hypothesis “The government of India has designed and framed women empowerment policy to encourage the growth of women entrepreneurs.” The supportive statistical hypotheses which contain measureable variables were developed by processing the collected data in SPSS software by the statistician. They are enlisted below.

Supportive statistical Hypotheses:-
1. **Hypothesis**: Lower educated women entrepreneurs are not aware of government policies.

2. **Hypothesis**: Lower educated women entrepreneurs avail only known government policies.

3. **Hypothesis**: Lower educated women entrepreneurs implement only known government policies.

4. **Hypothesis**: Lower educated women entrepreneurs are of the opinion that government policies they know are not useful, useless or tedious.

5. **Hypothesis**: Lower educated women entrepreneurs think that government policies help in expansion of business.

6. **Hypothesis**: Lower educated women entrepreneurs think that reforms in government policies are not required.

7. **Hypothesis**: A Business enterprise of women entrepreneurs with Lower Annual Turnover has less awareness of government policies.

8. **Hypothesis**: Business enterprises of women entrepreneurs with Lower Annual Turnover does not avail the known government policies.

9. **Hypothesis**: A Business enterprises of women entrepreneurs with Lower Annual Turnover denotes non implementation government policies.

10. **Hypothesis**: A Business enterprises of women entrepreneurs with Lower Annual Turnover denotes that government policies which women entrepreneurs know are useful.

11. **Hypothesis**: Business enterprises of women entrepreneurs with Lower Annual Turnover denote that government policies help in expansion.

12. **Hypothesis**: Business enterprises of women entrepreneurs with Lower Annual Turnover demand that reforms in government policies are required.
4.5 SAMPLE DESIGN

The research design for the present study covers both the primary data and secondary data as explained further.

The researcher has used disproportionate stratified random sampling method, since it is a well known fact that no two women entrepreneurs are same in background as well as the way they function, the business, trade, service. And each one’s way of conducting business differs.

Stratified random sampling will generally have more statistical precision than simple random sampling. This will only be true if the strata or groups are homogeneous. If they are, we expect that the variability within-groups are lower than the variability for the population as a whole. Stratified sampling capitalizes on that fact.

The researcher has selected the state of Maharashtra for conducting the study. According to the industrial development of the region, the state of Maharashtra is divided into the following A, B, C, D, & D plus. Accordingly **Total seven districts and 66 talukas are selected as a specimen sample for the present study.**

The seven districts (stratas) formulated according to the regions are as follows: Ahmednagar, Aurangabad, Jalgaon, Nashik, Mumbai, Pune and Thane. The present study is conducted on the basis of multi stage sampling where the sample selected comprises of seven hundred women entrepreneurs.

4.5.1 Primary data collection:

The researcher collected the primary data using well structured, close ended questionnaire, which was filled up through personal interview methods. The researcher has used stratified random sampling for the data collection, using multistage stratified sampling.

Secondary data collection:

The researcher collected data from various sources such as books, periodicals, Statbook of the banks, documents, the book Mega state Maharashtra by A.B.Savdhi describing the division of Maharashtra into Zones. Booklets from DIC, MCED, KVIC, Bank Annual reports from onwards and the statistical data there in.
IMBALANCE OF INDUSTRIAL DEVELOPMENT IN MAHARASHTRA

Maharashtra is the most developed state of India, because of its strategic, geographical position. Mumbai is the financial capital of India. Mumbai plays a very crucial role in the process of globalization.

In Maharashtra keeping aside regions like Mumbai, Pune and Nashik a picture is created as there is industrial development but rather slow or negligible in other parts of the state. In comparison the western Maharashtra regions, agro-based industries have been set up but Maharathawada, Vidharbh and Konkan regions have not developed as much.
**TABLE NO. 4.5.1 Area Under Study**

<table>
<thead>
<tr>
<th>District</th>
<th>Talukas</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mumbai</td>
<td>Andheri, Borivali, Kurla</td>
</tr>
<tr>
<td>Thane</td>
<td>Thane, Kalyan, Vasai, Bhivandi, Ulhasnagar, Ambarnath,</td>
</tr>
<tr>
<td></td>
<td>Dahanu, Palghar, Murbad, Shahapur, Jawhwar, Mokhada, Talasari</td>
</tr>
<tr>
<td></td>
<td>Wada, Vikramgad</td>
</tr>
<tr>
<td>Pune</td>
<td>Bhor, Haveli, Vadgaon, (maval), Poud (Mulshi), Ambegao, Ghodegaon.</td>
</tr>
<tr>
<td>Nashik</td>
<td>Nashik, Malegaon, Satara, Niphad, Yeola, Sinnar,</td>
</tr>
<tr>
<td></td>
<td>Nandgaon, Igatpuri, Surgana, Trimbakeshwar, Deola, Chandwad, Dindori,</td>
</tr>
<tr>
<td></td>
<td>Kalwan, Peth.</td>
</tr>
<tr>
<td>Aurangabad</td>
<td>Aurangabad, exp-valunj, Paithan, Soygaon, Vaijapur, Kannad, Silod,</td>
</tr>
<tr>
<td></td>
<td>Kultabad, Gangapur, Fullambri.</td>
</tr>
<tr>
<td>Ahmednagar</td>
<td>Ahmadnagar, Kopargoan, Jamked, Sangamner, Shreempur, Rahata, Nevasa,</td>
</tr>
<tr>
<td></td>
<td>Parner.</td>
</tr>
<tr>
<td>Jalgaon</td>
<td>Arendol, Jamner, Pachora, Parola, Rawer, Yawal, Dharangaon, Amalner,</td>
</tr>
<tr>
<td></td>
<td>Bhadgao, Mukatainagar</td>
</tr>
</tbody>
</table>

(Note: As there is no parity in the number of Talukas in districts of Maharashtra, so the sample selected for talukas varies.)
4.5.2 POLICIES UNDER STUDY

After reviewing the available literature on the government policies the researchers come to know that there are only two policies which have the special provisions for women entrepreneurs. Hence the researcher studied these two policies in details.

The schemes are the means for implementation of the polices and are studied by the researcher to understand the performance of the policies.

It is also observed from the secondary data that from the two policies only two schemes have the provisions for woman entrepreneurs. So only these schemes are studied.

FIG 4.5.2: POLICIES UNDER STUDY
4.6 TESTS APPLIED FOR HYPOTHESIS TESTING: CHI SQUARE TEST

The researcher has taken help of SPSS version 17 for applying the statistical test through expert statistician.

SPSS stands for Statistical Package for the Social Sciences. It was released in its first version in 1968 after being developed by Norman H. Nie and C. Hadlai Hull. Norman Nie. It is used by market researchers, health researchers, survey companies, government, education researchers, marketing organizations and others.

In addition to statistical analysis, data management (case selection, file reshaping, creating derived data) and data documentation (a metadata dictionary is stored in the data file) are features of the base software, which include

- Descriptive statistics: Cross tabulation, Frequencies, Descriptives, Explore, Descriptive Ratio Statistics
- Bivariate statistics: Means, chi-square test, Correlation (bivariate, partial, distances), Nonparametric tests
- Prediction for numerical outcomes: Linear regression
- Prediction for identifying groups: Factor analysis, cluster analysis (two-step, K-means, hierarchical), Discriminant
4.7 CRITICAL PATH METHOD (CPM)

The primary data has been collected from the various women entrepreneurs. This is being collected since January 2010.

**TABLE NO.4.5.2 CPM**

<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>DURATION (Months)</th>
<th>EST</th>
<th>LFT</th>
<th>SLACK</th>
</tr>
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<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2-4</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>4-5</td>
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<td>2</td>
<td>3</td>
<td>1</td>
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</tr>
<tr>
<td>5-6</td>
<td>3</td>
<td>4</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>5-7</td>
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<td>4</td>
<td>4</td>
<td>0</td>
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<td>7-8</td>
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<td>5</td>
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</tr>
<tr>
<td>8-9</td>
<td>6</td>
<td>17</td>
<td>17</td>
<td>0</td>
</tr>
<tr>
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<td>10-11</td>
<td>3</td>
<td>25</td>
<td>25</td>
<td>0</td>
</tr>
<tr>
<td>Activity No.</td>
<td>Description</td>
<td></td>
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<td>-------------</td>
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<tr>
<td>1</td>
<td>Begin</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>2</td>
<td>Reading</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>3</td>
<td>Topic Finalization</td>
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<td>4</td>
<td>Pilot Survey</td>
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<tr>
<td>5</td>
<td>Proposal</td>
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<td>6</td>
<td>Literature Review</td>
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<td>Questionnaire Design</td>
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<td>8</td>
<td>Data Collection</td>
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<td>Data Analysis</td>
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<td>10</td>
<td>Hypothesis Testing</td>
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<tr>
<td>11</td>
<td>Result</td>
<td></td>
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</tbody>
</table>
FIG NO 4.5.3 CRITICAL PATH METHOD (CPM)

FIG NO 4.5.4
CRITICAL PATH FOR ENTREPRENEURIAL RESEARCH
- Critical Path
  1-3-5-7-8-9-10-11

- Total Duration (months)
  28 Months.

- Critical Path
  1-3-5-7-8-9-10-11 (Red Color path)

- Total Duration (months):
  2+2+1+12+6+2+3=28
  28 Months.

- Activity- task which has definite beginning & definite end. It is represented by Arrow.

- Event- represents start or finish points of activity. It is represented by Circle.

- Earliest Start Time (EST) - It is possible time at which activity can start.

- Latest Finished Time (LFT) - It is time within which an activity can be completed as per scheduled date.

- Slack: Difference between EST & LST.

- The Critical Path Method (CPM) is a project modeling technique developed in the late 1950s by Morgan R. Walker.

- The essential technique for using CPM is to construct a model of the project that includes the following:
  - A list of all activities required to complete the project (typically categorized within a work breakdown structure)
  - The time (duration) that each activity will take to completion,

The dependencies between the activities.
• Using these values, CPM calculates the longest path of planned activities to the end of the project, and the earliest and latest that each activity can start and finish without making the project longer. This process determines which activities are "critical" (i.e., on the longest path) and which have "total float" (i.e., can be delayed without making the project longer).

• A critical path is the sequence of project network activities which add up to the longest overall duration. This determines the shortest time possible to complete the project. Any delay of an activity on the critical path directly impacts the planned project completion date (i.e. there is no float on the critical path). A project can have several, parallel, near critical paths. An additional parallel path through the network with the total durations shorter than the critical path is called a sub-critical or non-critical path.

These results allow managers to prioritize activities for the effective management of project completion.

4.8 LIMITATIONS OF THE STUDY

The present study is limited up to the women entrepreneurs’ of Maharashtra state only; the inferences and conclusions may or may not match to any other state than Maharashtra. The inadequacy of the relevant secondary data is another limitation. Researcher has studied the data for the period year 2005-2010. The women entrepreneurs are studied in the policy implementation point of view only the other aspects like psychology, behavior of the women entrepreneurship are out of the scope for the present study.

4.9 SCOPE FOR FURTHER RESEARCH

The role of the implementing agencies or organizations like KVIC, DIC, KVIB can be separately studied with respect to women entrepreneurship development.

The role of the government and five year plans as well as constitution related to the policies can also be studied in details. Psychological and behavioral aspects of women entrepreneurs can be studied.
4.10 CONTRIBUTION TO THE FUND OF KNOWLEDGE.

The present study is useful for the government of India for further development of the policies. This study can be used as pedagogy by the student studying the women entrepreneurship in particular; as the researcher has provided the profile of women entrepreneurs. The present study is useful for the study of overall entrepreneurial development of the human society.

References

1) Bank of Maharashtra, (2008-09), state level bankers committee Maharashtra, statistical information booklet.
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8) Gupta, Nirmal K, and Ahmand, Abad, (1994), management research, contemporary issues, Delhi, South Asia Publication.