

CHAPTER III-METHODOLOGY

Research Methodology: An Overview

Methodology is a detailed plan used by a researcher and constitutes various methods and techniques used to address the objectives of the research. It's a logical, systematic plan to resolve a research problem. It helps keep researchers on track by limiting the scope of the research.

The present study titled “**Sustenance of Zardozi Embroidery of Bhopal through Documentation, Training and Product Development**” was primarily qualitative in nature though quantitative data was also collected for some parts of the research to lend it objectivity. There was very little existing literature about *zardozi* of Bhopal and the craft has escaped the required scholarly attention as compared to other handicrafts from the state namely *chanderi*, *maheshwari* weaves, *bagh* printing and *gond* painting. Therefore the research explored various aspects of the craft such as its history, present status, local craft community and prevalent craft practices. The chapter is divided into following sections:

3.1 Operational Definitions

3.2 Pilot Study

3.3 Research Design

3.4 Conceptual Framework

3.5 Phase I:

3.5.1 Documentation of the origin, history and development of the *zardozi* embroidery of Bhopal

3.5.2 Documentation of the traditional motifs, material and techniques of the *zardozi* embroidery of Bhopal

3.6 Phase II

3.6.1 Present status and changes in the craft

3.6.2 Design catalogue

3.7 Phase III-

3.7.1 Study of the issues and challenges of the artisans and existing handicraft training programmes

3.7.2 Design and development of training programme

3.8 Phase IV-

3.8.1 Implementation of training programme

3.8.2 Testing the effectiveness of the training programme

3.1 Operational Definitions:

Begums or Begums of Bhopal: Between 1819 CE and 1926 CE, the erstwhile princely state of Bhopal was consecutively ruled over by four brave women rulers. These were *Qudsia Begum, Sikander Begum, Shah Jahan Begum and Sultan Jahan Begum*. The *Begums* were efficient and progressive administrators and despite opposition from powerful male claimants, stood firm and developed the state making it a cultural haven.

Batua or Bhopali Batua: A *bhopali batua*, also spelt as *batwa*, is essentially a small semicircular purse made of fabric. It can have three or four compartments thus accordingly known as a *teen khana* or *char khanabatua*. Its opening and closing is done with the help of strings. The ends of the strings are very decorative and known as *surahi*. It was used for keeping *chalia* (areca nut) and *paan* (betel leaves). Its use was popularized by the *Begums*.

Bhopal zardozi embroidery: Bhopal is one of the prominent *zari* centres of India where the craft has been practiced for about 200 years now. The *zardozi* embroidery practiced in Bhopal has been referred to as Bhopal *zardozi* embroidery in the study.

Feminization of the Craft: Also reported in few other studies, the term feminization of craft has been used to indicate increasing number of women artisans especially in handicrafts which were a male bastion earlier. The feminization of craft has been especially reported in the traditional embroidery sector of India.

Full-time artisans or waged artisans: These are the *zardozi* artisans who work for fixed monthly remuneration in *zari* centers or workshops, design studios or boutiques. They put in eight hours to ten hours daily for their employer.

Gold and Silver Embroidery: The popular umbrella term for embroideries done with metallic wires but more so for the heavier *zardozi* embroidery.

Home-based artisans: These are artisans who work from the confinement of their homes and don't go and work in any commercial establishment such as a *zari* centre or design house. They mostly get paid on a piece rate basis.

Zari-Zardozi: The term used for *zardozi* or the heavier gold and silver embroidery in Bhopal.

Zari Centre: The commercial workshops in Bhopal specialising in traditional *zardozi* embroidery.

3.1 Pilot Study:

A pilot study was conducted prior to the research to gather information about the *zardozi* craft ecosystem and its various stakeholders. The preliminary review of literature had suggested a gap in terms of specific study of the *zardozi* embroidery craft of Bhopal (hereafter called Bhopal *zardozi* embroidery) despite the city being a prominent and historic *zardozi* center. It also confirmed a lack of comprehensive studies that cover various aspects of Bhopal *zardozi* embroidery and its artisan community. Thus, it was deemed fit to conduct a study titled “**Sustenance of Zardozi Embroidery of Bhopal through Documentation, Training and Product Development**”.

An extensive desk research was conducted to generate information about the Bhopal *zardozi* embroidery which revealed the limited presence of data in the research domain despite the presence of a vast pool of talented *zardozi* artisans in the city even in present times . The primary data was also collected during the pilot study from various resource persons which included archivists, historians, scholars, master craftsmen and government officials through unstructured interviews (**appendix no.**) which included both telephonic as well as face to face interviews. Snowball sampling technique was used to select the respondents.

The data from the pilot study helped in identifying various issues pertaining to the Bhopal *zardozi* embroidery that needed scholarly attention. Several field visits were also conducted during this phase to gather secondary information about the craft and included following organizations of Bhopal:

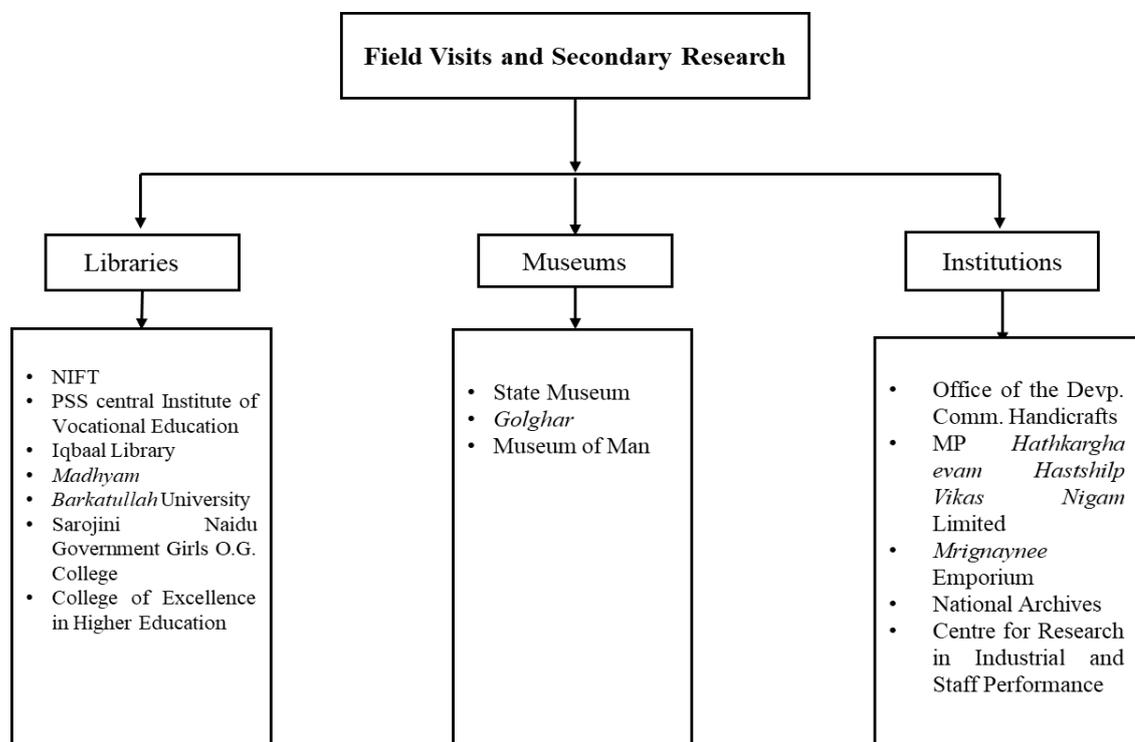


Figure 3.1 Organisations visited during the pilot study

The information from the pilot study gave the base for the research and further course of action for the study.

3.2 Research Design:

The pilot study was valuable in the formation of the research design. A descriptive cum exploratory research design with a mixed methods approach was used for the present study as there was a lack of disaggregate data on the topic. As defined by **Tashakkori and Creswell (2007)** and cited by **Dalal, A., Bhattacharya, S. and Chattopadhyay, S. (2023)** the mixed-method research makes use of qualitative and quantitative methodologies to collect and analyze data to make conclusions.

The study was carried out in four phases. For better reliability of results different approaches were used in the different phases of the research and which are as follows:

Phase I: Historical cum Descriptive Research

Phase II: Exploratory cum Ethnographic Research

Phase III: Ethnographic Research

Phase IV: Participatory Action Research

Table 3.1 Phase wise details of methodology, data collection tools and data analysis

PHASE	METHODOLOGY	DATA COLLECTION TOOLS	TYPE OF DATA
I	Historical cum Descriptive Research	<ul style="list-style-type: none">● Unstructured Interviews● Observation● Content Analysis● Visual Analysis● Photo Elicitation● Field Notes	Qualitative
II	Exploratory cum Ethnographic Research	<ul style="list-style-type: none">● Market Survey● Interview Schedule● Cultural Immersion (Participatory Observation)● Field Notes● Videography	Quantitative and Qualitative
III	Ethnographic Research	<ul style="list-style-type: none">● Interviews● Observation● Focus Group Discussions	Qualitative
IV	Participatory Action Research	<ul style="list-style-type: none">● Participant Observation● Field Notes / Reflective Notes● Questionnaire● Focus Groups	Quantitative and Qualitative

The use of multiple data sources and data collection methods not only helped in achieving a comprehensive understanding of the craft but also aided in achievement of data triangulation. The research design formulated to achieve the objectives of the study is thus as follows:

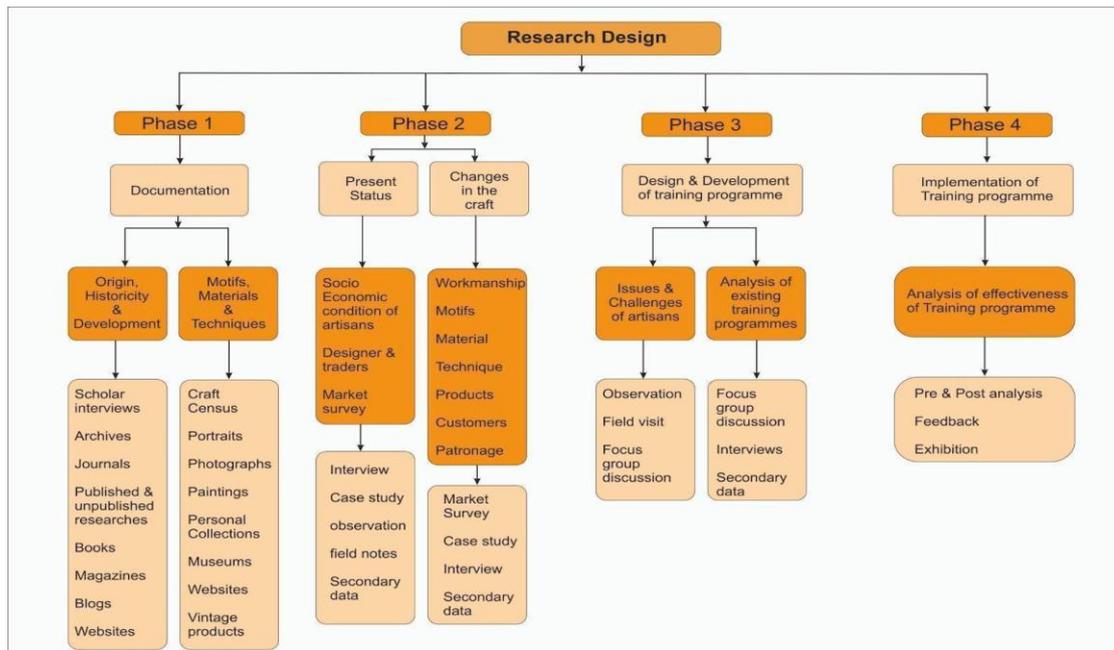


Figure 3.2 Research Design for the Study

3.3 Locale of the Study:

The study was primarily conducted in the old city. *Khanugaon, Qaji camp, Peergate, Jahangirabad, Chowkbazar, Karond* in the old city of Bhopal are the areas where artisans, zari centers and shops selling zardozi items are situated. The government records and websites also mentioned these areas to be the hub of the zardozi embroidery since olden times and till date.

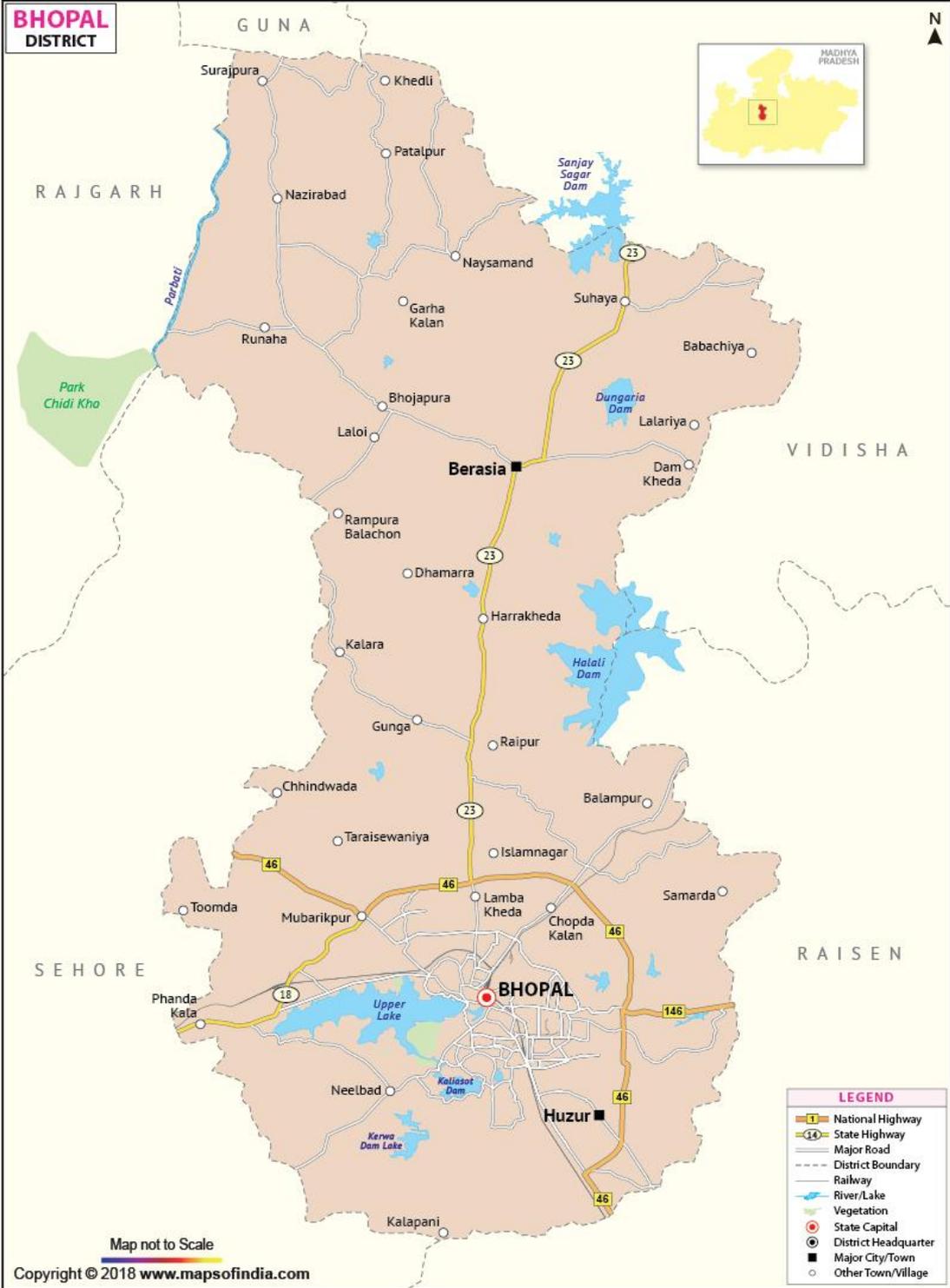


Figure 3.3 Locale of the Study

3.4 Conceptual Framework for the Study:

Conceptual framework gives a general idea about the various aspects of research and their relation to each other. The pilot study and extensive review of literature for the present study assisted in conceptualizing the framework for the present study. The broad framework on the basis of the objectives of is given below:

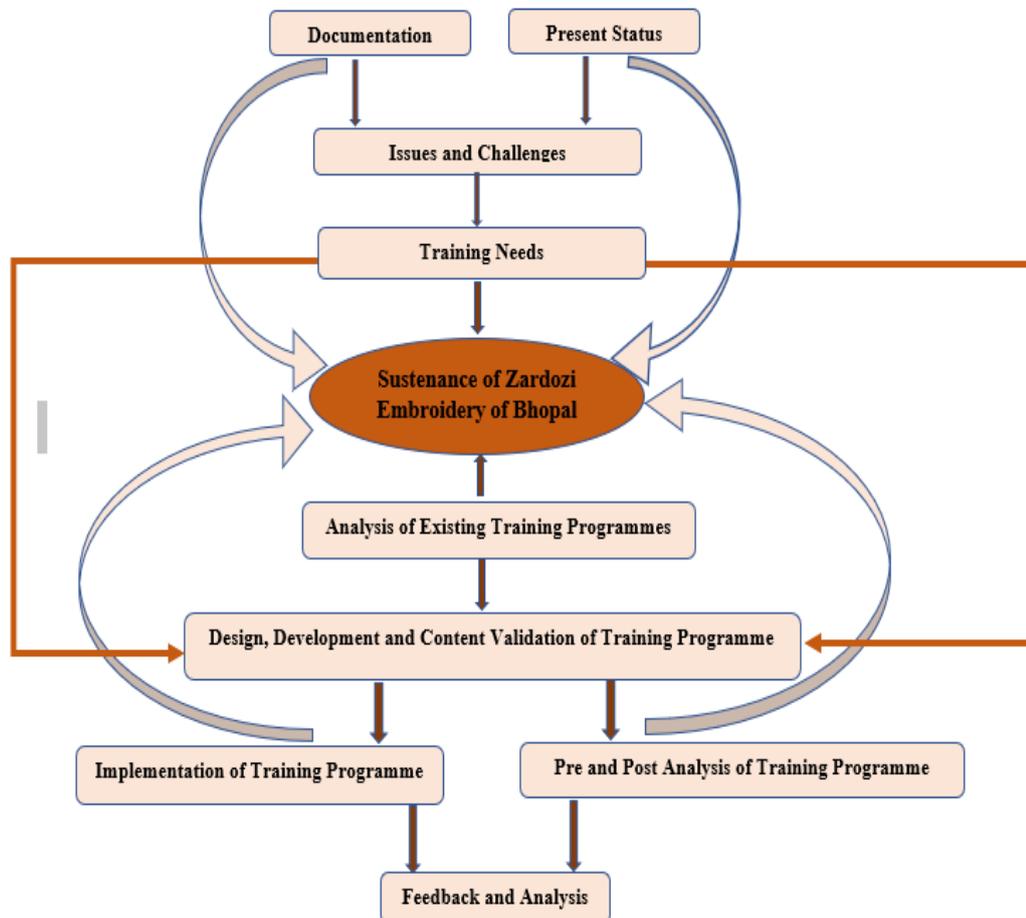


Figure 3.4 Conceptual Framework for the study “Sustenance of the Zardozi Embroidery of Bhopal through Documentation, Training and Product Development”.

Table 3.2 Phase wise details of Sampling Techniques

Phase	Objective	Data	Sampling Technique	Tool
I	History and Origin	Qualitative	Snowball and Purposive	Unstructured Interview (Review of Literature)
I	Documentation of Traditional Designs	Pictures and Photographs, Actual Objects	Convenience	Photography, Visual Analysis
II	Present Status	Quantitative and Qualitative	Purposive for Socio Economic Profiling Convenience for Market Survey	Interview Schedule, Cultural Immersion
II	Market Survey	Qualitative	Snowball	Observation, Photography, Field Notes, Interviews
II	Documentation of Contemporary Designs	Qualitative	Purposive	Photography, Visual Analysis, Field Notes
III	Issues and Challenges of Artisans	Qualitative and Quantitative	Purposive	Focus Group Discussion, Observation, Interviews
III	Study of Training Programs	Qualitative	Purposive	Unstructured Interviews, Desk Research, Content analysis
IV	Effectiveness of Training Program	Quantitative	As per the Inclusion Criteria (Pg. No. 162-163)	Questionnaire

3.5 Phase I- Documentation of the Origin, Historicity and Development of the BhopalZardozi Embroidery:

Since the data on Bhopal *zardozi* embroidery was disaggregated in nature, the first step was to collate the data from various sources and provide a base for its presence in the city. This would also help in building a connection with the cultural heritage and aid in any further research.

3.5.1 Documentation of the Origin, History and Development of the Bhopal Zardozi Embroidery:

The range and diversity of India's textile techniques and traditions is almost overpowering, and many are often left out of the general volume on Indian textiles. Simultaneously, since so many craftspeople leave the sector for other occupations, many skills are also either in the danger of dying or of being lost forever, unless we seriously record and document them (**Laila Tyabji2019**). Documentation is one of the crucial aspects in preserving and promoting crafts and also helps in safeguarding the purity of the handicrafts. The present study was undertaken to draw a comprehensive picture of the *zardozi* embroidery as practiced in Bhopal for its sustenance and thus the first step was to document the origin of the craft in Bhopal. A variety of sources both primary as well as secondary sources were used to gain a deeper understanding of the factors that resulted in the development of *zardozi* at Bhopal.

3.5.2 Documentation of the Traditional Motifs, Material and Techniques of the Bhopal Zardozi Embroidery:

Documentation of the traditional motifs was also undertaken in the first phase as while documenting the historical aspects the investigator would come across many original motifs some of which have not been documented earlier. This was done as a collection of traditional motifs not only serves as a valuable resource for designers, artisan and academicians but it also is an important tool for preserving the craft.

Interviews with the master craftsmen regarding products and occasions for which *zardozi* was used was also conducted in this phase. Photographic evidence was used to document the gathered data.

3.5.3 Secondary Research:

The secondary literature survey included a comprehensive analysis of the history, origin, traditional designs and motifs with the help of historical records, archives, journals, books, published and unpublished research, biographies, photographs, portraits and royal paraphernalia housed in various libraries, museums and government departments. Websites of Victoria and Albert Museums, international

auction agencies, blogs on Bhopal were also carefully studied. A detailed visual analysis of old photographs, portraits, personal collections, memorabilia and royal paraphernalia was conducted for the collection of traditional motifs as well as the material and techniques employed in making traditional *zardozi* products. The images were examined for workmanship, aesthetics, and quality and finer design details and also to establish the contexts of time and *zardozi* embroidery traditions of Bhopal.

This brought forward in-depth information about the historical conditions, primarily the socio-cultural, political contexts under which the craft originated in Bhopal as well as its association with the city's cultural heritage. This was studied in detail as this information would be crucial for the preservation of the craft.

The researcher visited the libraries of National Institute of Fashion Technology, Bhopal, *Rashtriya Manav Sangrahalaya*, *Barkatullah* University, *Pandit Sushil Sharma* Central Institute of Vocational Education, Centre for research in industrial and staff performance, *Iqbaal* library for data collection.

In order to facilitate comprehensive information, data was also collected from the development commissioner handicrafts, State Museum, National as well as state archives, Madhya Pradesh *Hathkarkgha evam Hastshilp VikasNigam* Limited. However the researcher could get only limited data regarding the origin of Bhopal *zardozi* embroidery.

The records and documents kept at the National Archives were also studied in this phase. These were in Persian so there was a requirement of translation from Persian to English. This was done with the help of a translator.

3.5.4 Primary Research:

The data for the primary research was collected from academicians, historians, museum curators and master craftsmen. Twelve respondents were selected by snowball and purposive sampling for the primary data collection. Respondents with a minimum of ten years of experience of design education, research, writing and association with the craft were chosen for this. The respondents were first contacted telephonically and made familiar with the research and only those who consented were then interviewed personally and included in the study.

A self-administered, open-ended questionnaire was used for the same. (**Appendix I**) In depth interviews with resource persons revealed valuable information about the evolution of Bhopal *zardozi* embroidery . It also gave information about the patronage of the craft and its role in the development and promotion of this craft.

3.5.5 Analysis of Data:

The information collected from various primary and secondary sources was subjected to detailed qualitative analysis. The same was then methodically arranged into themes and linked to the literature reviewed.

Thus, phase one gave a detailed perspective of the historicity of *zardozi* embroidery and its advent in Bhopal. The study of traditional motifs was also helpful in developing an understanding of the changes in the craft in terms of aesthetics, workmanship and raw material over a period of time.

3.6 Phase 2: Present Status and Changes in the Craft:

The research aimed to draw a holistic picture of the craft which necessitated the information of not only the past but the present status of the craft as well. Thus, it was imperative to study the present status and craft practices along with the historical aspects. This was necessary for the continuity of the craft. Thus the present status of the craft and its various stakeholders namely artisans, retailers, design houses specialising in *zardozi* was also studied in detail. This was immensely beneficial in identifying the issues faced by various stakeholders associated directly with the craft. Such a comprehensive study would aid in making the craft a sustainable livelihood source for the vast pool of artisan who otherwise would shift to unskilled, manual jobs. This provided much needed impetus for the sustenance of the craft. Both primary and secondary data were collected in this phase.

3.6.1 Present Status of the Craft and Artisans:

The second phase of the study explored the present status of the craft from multiple perspectives, specifically from the lens of current craft practices, products available in the markets, raw material and designs. Socio-economic profiling of the artisans (**Appendix II**) in this phase provided the much needed information on their worklife as they are one of the crucial parts of the *zardozi* craft tradition and heritage of Bhopal.

Detailed information was also elicited from the other valuable stakeholders of the *zardozi* value chain namely traders, retailers, manufacturers and designers regarding various aspects of the craft (*zardozi* embroidery) business and its prospects (**Appendix III**). Primary as well as secondary data were collected.

A mixed method approach where quantitative data was collected along with qualitative data was followed in this phase. This was done to decrease ambiguity and bias as much as possible. The quantitative data was collected for getting reliable and unbiased information which helped in recognizing the present status of the artisans and hence the craft to a great extent.

3.6.2 Documentation of Traditional and Prevalent Motifs, Material and Techniques of Zardozi Embroidery of Bhopal:

In order to promote the craft the contemporary motifs of Bhopal *zardozi* embroidery were documented from the market survey, blogs and e-commerce websites which were then combined with the traditional motifs studied during the first phase from museum collections, books, design studio and personal collectors. These were then converted into a catalogue and utilized for product development during the training program. Photoshop and Coreldraw software was used for the design catalog.



**Plate 3.1 An old traditional *bhopali batua* around sixty five years old and contemporary *zardozi* apparel item available in the local market and
(SOURCE: WRITERS OWN)**

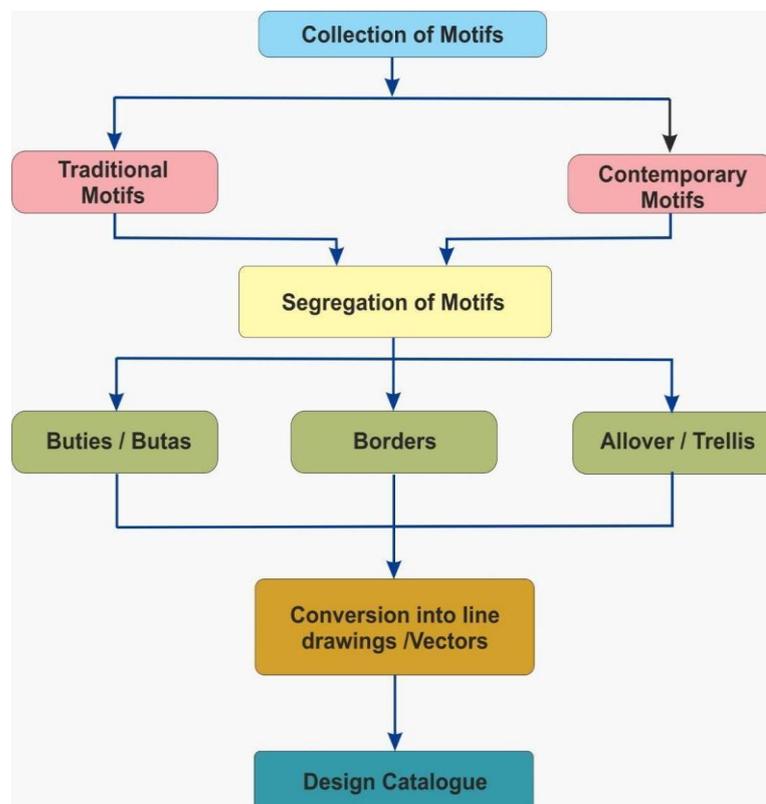


Figure 3.5 Making of Design Catalogue

3.6.3 Secondary Data:

The secondary data was collected from government reports, websites of the government departments, diagnostic studies, research papers, books and blogs. This was correlated with the findings of the interviews, cultural immersion or participatory observation and review of literature to give first-hand information of the present status of the craft as well as artisans. Related Researches, doctoral as well as masters' were also carefully studied and assimilated for generating secondary data.

Informal interviews with training partners from NGOs, government departments during field visits, observation and field notes during primary research helped in confirming the findings of the secondary research.

3.6.4 Primary Data

The primary data were collected from the artisans, retailers and designers. Approaches to sampling for various research problems fall into two broad categories, probability and non -probability sampling **Henry, 2016; Malhotra et al., 2006; Taherdoost, 2016** as cited in **Singh, Neetu, 2021**. For the present study non-probability sampling was used. Purposive and snowball sampling was used for the selection of the respondents for this phase asit assisted in reaching out to respondents who were not only open to interview and sharing information but had requisite exposure and background in *zardozi* embroidery. Also no information on the total population of *zardozi* artisans was available in government records. In the absence of the authentic information on the total number of artisans, probability sampling was overruled and thus an inflated sample size of one hundred and seventeen respondents was taken for the second phase.

3.6.4.1: Interview Schedule

A self-administered, semi-structured interview schedule (**Appendix II**) was used by the researcher to obtain specific and in depth information. This also facilitated maintaining a systematic record of the data collected. It contained both open and close-ended questions covering different aspects of the *zardozi* embroidery craft. The review of literature, objectives and pilot study gave the base for the formulation of questions in the questionnaire.

The questionnaire was prepared in consultation with the research supervisor and experts. It was validated by a statistician and necessary corrections were made on the expert advice. After the corrections it was first pre-tested by administering on selected respondents (fifteen respondents). The pilot testing of the questionnaire revealed that some questions were repeated while some were not required. Thus pilot testing of the questionnaire brought more relevance and accuracy to it. The questionnaire was divided into sections such as background information, demography, information about the craft, raw material, products, designs, production, marketing, packaging, issues and challenges and prospects. Separate questionnaires were designed for artisans and retailers as their background, issues and needs were found to be different during the pilot study which posed the need of different questions. The questionnaire was framed in English and then translated into Hindi with the help of a professional translator.

Sample	Sample Size	Sampling Technique	Data Collection Tool	Data Analysis	Mode of Contact / Data Collection
Artisans	93	Snowball	Interview Schedule, Observation	Quantitative	Face to Face
Retailers/Traders / entrepreneurs	24	Purposive	Interview Schedule, Observation, Market Survey	Quantitative	Face to Face

Table 3.3 Sample Selection for Phase II

Face to face interviews of artisans, retailers, designers were conducted by the researcher by visiting the *zari* centers, design studios and boutiques as well as to homes of artisans working in the zardozi embroidery sector of Bhopal. The identities of the respondents were kept anonymous and informed consent (**Appendix IV**) was taken from the respondents prior to initiating the interviews. Only those respondents who were practicing the craft in Bhopal for a minimum of 5 years and willingly consented for the interview were considered for the study. The data was collected over a period of 8 months (June 2022-January 2023).

3.6.4.2 Observation:

This approach was utilized to delve deeply into ground situations. The researcher verified the validity of the data at the time of information collection from the

respondents by monitoring their facial expressions, speech patterns, emotions, and attitudes. Besides, the researcher could also acquire untold information by studying the condition of the surroundings, available amenities in- house/workplace, environment and lifestyle. Thus the researcher was able to gain crucial information and factual facts through careful and intentional observation that could not have been obtained in any other way. This type of observation where the researcher gets familiar with the respondents and participates in their day to day activities is called participatory observation. Another word for participant observation is cultural immersion which refers to intermingling into another culture and interacting with any particular community or locals with a view to understand their ways of living. Sociologists and anthropologists make use of cultural immersion, also called participant observation in ethnographic research and studies. These types of studies involve a researcher interacting with the subject of his/her study, living with them, cooking and even sharing meals with them and participating in the day to day activities of the lives of the respondents while simultaneously collecting the required information. **(Crossman, 2018)**. Such an observation gives crucial information which the respondents might have hidden during the interviews.



Plate 3.2 Observation of Tools, techniques, material and working of the Bhopal *zardozi* artisans

Thus the researcher participated in the day to day working at various *zari* workshops and training centers, contributing in the embroidery process, working and indulging in general conversation over repeated rounds of tea and snacks in the various *zari* centers and homes of artisans during field visits. This was done in the embroiderers' natural environment and sampling was done based on access and availability of embroiderers. The purpose of this was to closely understand the lives, issues and community living of the artisans. This also gave a much needed glimpse into the skills, their knowledge of the designs/motifs, and their views on the continuity and progress of the craft.

The researcher worked with the artisans learning the basic tenets of the craft and community in the process. Field notes served as an important tool for recording the observations. These were either written simultaneously during the course of the observation or sometimes to avoid creeping up of impersonal behavior during deeply engrossing interactions, these were written immediately after returning from the field so as to carefully record all relevant details.

The participant observation in this phase also helped the researcher in building a rapport with the local craft community which also aided in data collection for the third phase of the study.

3.6.4.3 Market Survey:

A market survey was performed to investigate the different products, raw material and designs available in the market and to elicit information on contemporary products and craft practices. This was compared with the traditional products, review of literature and results of the secondary research of the first phase in order to get the change in the workmanship, quality and influences on designs and craft practices. Different retail stores, boutiques and design studios, *zari* centers, local gift and souvenir shops, emporiums specializing in *zardozi* embroidery were also visited in Old Bhopal as well as New Bhopal. The key points surveyed were:

- type of products available in the local market
- fabric types used for making the products

- decorative material for embroidery on the product
- embroidery stitches
- workmanship in terms of finishing, neatness, stitch quality
- if any special packaging done for the product
- any care label provided
- price points

3.6.5 Data Analysis:

The primary and secondary data collected was subjected to detailed quantitative and qualitative analysis. For quantitative data statistical tools such as percentage and frequency tables were used and the results were presented in the forms of tables, graphs and charts for effective presentation. The qualitative data on the other hand was systematically studied, coded and organized into themes which were linked to the review of literature in order to obtain a comprehensive perspective of the current craft practices and changes in the traditional practices.

3.7 Phase III-Design and Development of Training Program For Sustenance of Bhopal Zardozi Embroidery of Bhopal:

The quantitative and qualitative data obtained during the second phase were analysed and studied in detail which gave the information about the present status of the craft, changes in the patronage, artisans' status and issues with the sustenance of the craft. The data were then used for a deeper study of the issues, challenges and unmet needs specific to the Bhopal *zardozi* artisans. Subsequently to this the designing and development of the training programme was done.

3.7 Phase III-Design and Development of Training Program For Sustenance of Bhopal Zardozi Embroidery:

"You cannot understand a system until you try to change it" (Lewin, 1946)

With this thought and findings of the field studies an in depth study of the issues and challenges faced by the artisans as well as various training programmes for the artisans was undertaken in the third phase of the study. This provided the unmet needs of the artisans and were the key considerations for the designing and development of the training program.

3.7.1 Study of the Issues and Challenges of the Artisans :

Both primary and secondary data were collected for analysing the issues and challenges faced by the artisans in the sustenance of their craft practices and its effect on various aspects of their lives. This paved the way for the development of the training programme.

3.7.2 Study of the Existing Training Programmes:

Field studies revealed that in recent years a number of training programmes have been implemented by various government and non-government organizations. The artisans who opted for formal *zardozi* embroidery training mostly enrolled in the government training programs. To get an in-depth and first-hand information of the training programmes the researcher conducted unstructured and open ended interviews with various resource persons associated with the craft namely master artisans, artisans, cluster development executives, trainers and government officials. On the basis of the information generated, a desk research was conducted which entailed investigation of following training programmes:

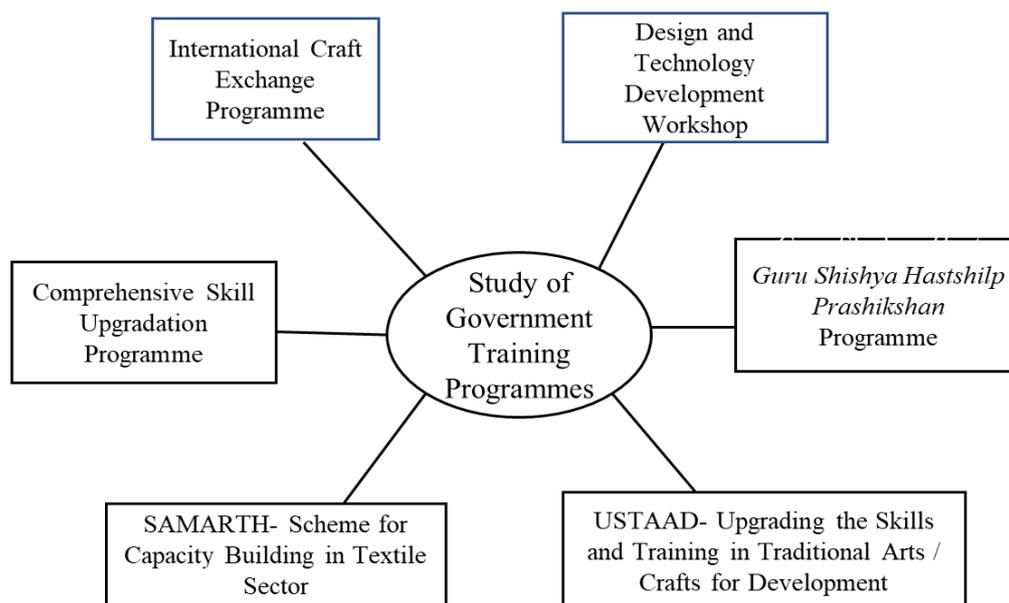


Figure 3.6 Government training programmes for handicraft artisans

3.7.3 Secondary Data:

The secondary data was gathered from Government websites of the office of the Development Commissioner of Handicrafts, compendium of handicraft schemes (govt. of India), documents and pamphlets of NGOs, published and unpublished research reports, research papers, newspapers, government publications and blogs. These were carefully studied to get secondary data pertaining to various training programs, welfare schemes for artisans, incentives etc. The results obtained from secondary data were utilized for collection of primary data and formed the basis of the data collection tool for the primary research on need gap analysis.

3.7.4 Primary Data:

The primary data was collected with the help of following data collection tools:

3.7.4.1 Observation:

The primary data was conducted by visiting the ongoing training programs. Observation of the training procedures, interaction with the artisans and trainers during field visits, and field notes gave valuable data on the issues, challenges and needs of artisans. A self-constructed, semi-structured questionnaire containing questions related to awareness of government schemes, advantages or disadvantages of training, capacity building and skill up gradation, registration under various

government schemes, training programs attended, problems faced despite training, views on changes in training programs was personally administered by the investigator to confirm the findings from the secondary literature and obtain the data on artisan needs (**Appendix V**). Convenience sampling was used to select the respondents.

3.7.4.2 Focus Group Discussion:

Focus group discussions with various stakeholders were conducted to get the perspectives of the esteemed resource persons and members of the local craft community on the current situation of the craft as well as various issues that have acted as barriers for the craft in becoming a sustainable livelihood option.

Three focus group discussions, one informal and two formal, were conducted. The participants for informal focus group discussion were selected through snowball technique whereas the participants for formal group discussions were selected through purposive sampling. The participants consisted of artisans, government officials and social change makers as well as local designers and academicians. This was done as it was important to take the views of both the trainees as well as the training organizers to get a complete picture of the various issues hampering the sustenance of the craft.



Plate 3.3 Formal Focus group discussion with the *zardozi* artisans

The moderator prepared the questions to be asked in advance and guided the respondents by asking questions and conducting the discussion (**Appendix VI**). The discussions were audio-visually recorded by a note taker. The data from the focus group discussion gave valuable insights into the needs of the artisans and helped in formulation of topics to be for the training. Purposive sampling was used to select respondents with requisite experience and knowledge.

Table 3.4 Sampling for Focus Group Discussion

Sample	Sampling Technique	Sample size	Data collection tool	Data type
Artisans	Snowball	10	Focus group Discussion, Observation	Qualitative
Artisans and Training Coordinators	Purposive, convenience	08	Focus group Discussion, Observation	Qualitative
Training Partners	Purposive	05	Focus group Discussion, Observation	Qualitative
Study of the Existing Training Programs	Purposive	05	Content Analysis	Qualitative

3.7.5 Design and Development of Training Program for Bhopal Zardozi Artisans:

The study of the artisans' issues and challenges and the existing training programs were utilized for developing the training program. As such the investigator's interaction with the respondents, field visits and survey gave a preliminary base for the development of the training program. Samples of their existing work were also observed. This clarified the goals for establishing the course content and aided in selecting the delivery methods, duration and teaching aids

3.7.5.1 Formulation of the Objectives of the Training:

The training objectives were formulated based on the results of the field study and provided a much needed direction for the training programme.

3.7.5.2 Training Curriculum:

The training objectives guided the development of the training curriculum which was divided into modules. The training curriculum also consisted of other important details apart from the course.

3.7.5.3 Validation of the Training Program:

The developed training programme was then tested for content validity by three experts (**Appendix VII**). Detailed programme along with an opinionnaire and rating scale (**Appendix VIII**) was sent to the expert to record their suggestions. The suggestions of the experts were incorporated into the programme prior to the final implementation.

3.8 Phase 4: Implementation of the Training Program:

The implementation of the training program was done after making the amendments as per the expert advice during validation. A detailed training implementation guide was made so that:

- implementation could be systematic and smoothly conducted
- last minute glitches could be kept to a minimum.

The training implementation guide covered the following points:

3.8.1 Locale:

The locale of the training program was carefully chosen after considering various factors such as accessibility by the artisans, proximity to boutiques and *zardozi* centers and number of *zardozi* artisans in the vicinity. This was done so that not only the trainees but even the resource persons from boutiques and *zari* centers could visit the training programme conveniently.

3.8.2 Sampling:

Fifteen artisans were purposely selected for the training. The training group was kept small in order to facilitate an in depth and effective interaction with the artisans as per their individual requirements. This also enabled the researcher not only to interact closely and individually with each artisan but also the trainer so that all the aspects of the training program could be discussed and implemented closely.

Also the time and financial factors limited the number of participants.

3.8.2.1 Inclusion Criteria for Training Programme:

The results of the present status and issues and challenges faced by the artisans were utilized to draw an inclusion criterion for the artisans in the training programme. The inclusion criteria of the training programme (page 162-163) was formulated in the very beginning as it would affect the different aspects of the training programme.

Thus purposive sampling as per the inclusion criteria formed the basis for the selection of the respondents for the training programme.

3.8.3 Training Preparation:

Careful preparations were made much in advance of the commencement of the training programme for a smooth conduct of the same. This included finalizing the venue, resource persons, training material, timings before the actual training.

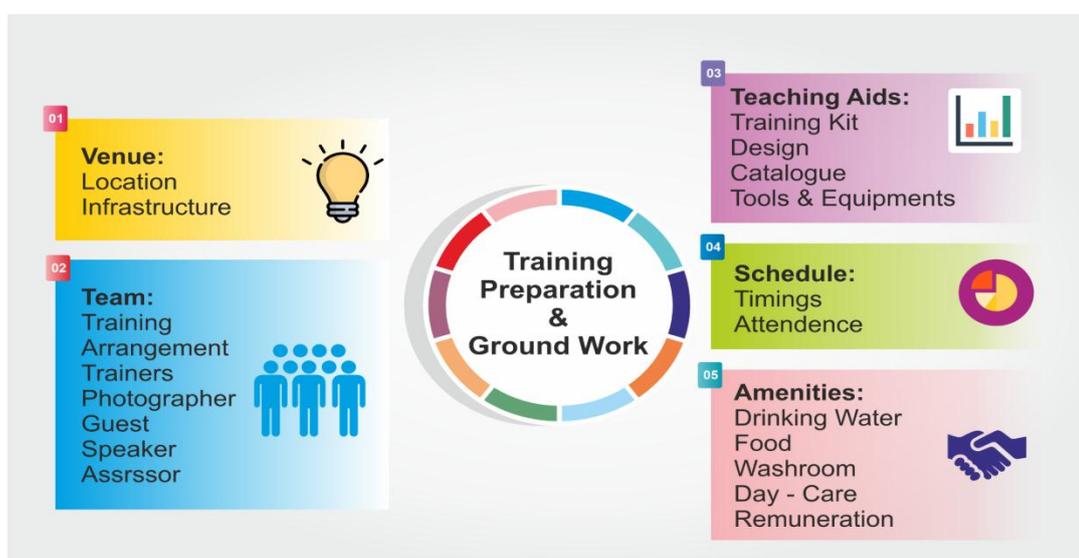


Figure 3.6 Training preparation and groundwork

3.8.3.1 Training Team:

A training team was prepared to take care of the various arrangements and requirements.

3.8.3.2 Training Material:

A list of training material was made a month prior and all the material was procured so that the training would not be hampered. It consisted of training kits, teaching aids,

design catalogue, tools and equipment that would be required by the artisans for training.

3.8.3.2.i Training Kits:

Training kits with all required material were prepared and distributed to each trainee.

3.8.3.2.ii Teaching Aids:

Various teaching aids were used to make the lecture and demonstration more effective. These were planned in advance.

3.8.3.3.iii Design Catalog:

A design catalog was used for making the artisans familiar with the traditional motifs, material and products.

3.8.3.3.iv Training Venue:

The training venue was chosen keeping in mind the convenience of the artisans.

3.8.3.3.v Training Timings:

The training timings were finalized as per the respondents' request and commitments.

3.8.3.3.vi Duty Chart for Training Arrangement Team:

A whatsapp group was made for round the clock discussion on training arrangements for its smooth conduct. Each member of the training arrangement team was given specific duties and these were prepared in the form of a chart before the commencement of the training programme.

3.8.3.3.vii Training Attendance Record:

The attendance was marked daily to keep a check on the trainees' participation.

3.8.4 Pre Analysis of trainees:

The existing knowledge, skill and attitude of the artisans was tested before beginning the training programme. A questionnaire (**Appendix IX**) was used for testing the knowledge of the artisans about history, traditional motifs and material, markets and customers to get an idea about their awareness. The respondents were also asked to

make a *zardozi* sample of five by five inch to test their skill and proficiency in *zardozi* craft.

3.8.5 Analysis of the Effectiveness of the Training Programme:

After the completion of the training modules the artisans were again given a questionnaire (**Appendix X**) with the same questions but framed afresh to test the change in knowledge of the respondents. The products made by the respondents were compared to the samples made by them on the first day of the training. The change in the knowledge and skill would give a fair idea of the difference created by the training programme and hence its effectiveness.

A null hypothesis was formulated for the effectiveness of the developed training programme and is as follows:

Ho: The training module developed for the home based *zardozi* artisans is not effective.

The alternative hypothesis against the null hypothesis is:

H1: The training module developed for the home based *zardozi* artisans is effective.

Criteria for accepting or rejecting null hypothesis is based on the p-value. It is then compared with the value of the level of significance denoted by alpha and is equal to 0.05. If p-value is smaller than alpha then the null hypothesis is rejected but if it is greater than alpha then the null hypothesis is accepted and alternative hypothesis is rejected.

3.8.6 Feedback and Evaluation by the Artisans:

The trainee artisans were asked to give feedback through a feedback form (**Appendix XI**). This feedback and evaluation was studied in detail for enhancing the training programme and making it more relevant. Suggestions by the respondents were incorporated in the training programme.

3.8.7 Exhibition:

Two demonstration cum exhibitions were organized to give artisans a holistic experience as well as to popularize and promote the *zardozi* embroidery of Bhopal.

3.8.8 Data Analysis:

The effectiveness of the training program was analyzed quantitatively. Wilcoxon test was employed to measure parameters related to knowledge, skill and attitude of the respondents. These parameters were measured before initiating the training as well as after the completion of the training. The results were presented graphically.