

PREVAILING STATUS OF KATHIAWAR HAND EMBROIDERY  
AND ITS ARTISANS IN BHAVNAGAR: SUSTAINABILITY  
THROUGH PRODUCT DEVELOPMENT

April 2023

Aastha Shah  
B.Sc. (F.C.Sc.)  
Fashion Designing

PREVAILING STATUS OF KATHIAWAR HAND EMBROIDERY  
AND ITS ARTISANS IN BHAVNAGAR: SUSTAINABILITY  
THROUGH PRODUCT DEVELOPMENT

A Dissertation Submitted in Partial Fulfillment of the Requirements for  
the Degree of Master of Family and Community Sciences

By

Aastha Shah

Department of Clothing and Textiles  
Faculty of Family and Community Sciences  
The Maharaja Sayajirao University of Baroda  
Vadodara  
April 2023

**DEDICATED TO MY  
PARENTS AND  
FAMILY**

**This work is surely a mark of their  
Love, Care and Support !**

## Table of contents

Chapter No.	Title	Page No.
	Acknowledgment	i
	Department Certificate	iii
	IECHR certificate	iv
	Plagiarism report	v
	Abstract	vii
	List of Figures	viii
	List of Graphs	ix
	List of Plates	x
	List of Table	xii
I	Introduction	1
II	Review of Literature	5
III	Methodology	22
IV	Results and Discussion	38
V	Summary and Conclusion	84
	Bibliography	
	Appendices	
	Annexures	



## ACKNOWLEDGEMENT

An endeavour is difficult to initiate without the help of many souls who are always there by the grace of God.

First and foremost, I am extremely grateful to my guide, Dr. Reena Bhatia, Assistant Professor, Department of Clothing and Textiles, Faculty of Family and Community Sciences, The Maharaja Sayajirao University of Baroda, Vadodara for her valuable advice, continuous support, and patience during my study. Her immense knowledge and plentiful experience have encouraged me in all the time of my academic research and daily life. Her dynamism, vision, sincerity and motivation have deeply inspired me. She has taught me the methodology to carry out the research and to present the research works as clearly as possible. It was a great privilege and honour to work and study under her guidance. I am extremely grateful for her consistent notation in my writing, for careful revision of the document and her expert advice which has been valuable throughout all stages of the work.

I would like to extend my sincere gratitude to my co-guide Mr. Sankhadip Bhattacharyya, Temporary Teaching Assistant, PGDFRM, Institute of Fashion Technology, Faculty of Family and Community Sciences, The Maharaja Sayajirao University of Baroda, Vadodara for his able guidance, motivation, keen interest throughout my research work. I thank sir for his generous help and moral support.

I gratefully acknowledge Prof. (Dr.) I/c Uma Iyer, Dean Faculty of Family and Community Sciences, The Maharaja Sayajirao University of Baroda, Vadodara for her constructive suggestion.

I convey my heartfelt thanks to Prof (Dr.) Anjali Karolia, Former Dean and Prof (Dr.) Madhu Sharan, Former Head of the Department, Clothing and Textiles, Faculty of Family and Community Sciences, The Maharaja Sayajirao University of Baroda, Vadodara for suggestions, comprehensive and precise comments and valuable advice throughout this work.

I would like to express my special appreciation and thanks to Ms. Naina Batra, for being constant supporter and being there in every problem throughout the study.

I am grateful to all the respondents who spared their valuable time and willingly offered their co-operation in collection of data. Special thanks to Ms. Sangeetaben Patel owner of Devanshi handicrafts and Ms. Milauni Shah, owner of NGO, Shree Shatrunjay Yuvak Mandal, Palitana, Bhavnagar for being supportive throughout the study.

My deepest gratitude goes to my beloved parents, Mr. Pratik Shah and Mrs. Rashmi Shah for their love, prayers, care and sacrifices for my education and preparing me for my future. I am very much thankful to my brother Mr. Naitik Shah, my grandfather Mr. Jitendra Shah, my uncle Mr. Daxesh Shah and aunt Mrs. Parul Shah for their endless love, prayers and encouragement. A special word of thanks to my brothers Yash, Jay, and Shrey for always being there for me.

A special word of thanks to Mr. Krutarth Shah for being such a constant and generous supporter. I would also like to extend my gratitude towards Mr. Param Kamdar and his family. I will forever appreciate the tender, selfless care and compassion you all have shown to me.

Special thanks to my all friends especially Ms. Yena Patel for her support and encouragement. Its worth is more than I can express on paper. I wish to express my special thanks to my school friends Vaidehi, Riya, Kanan and Aastha for putting their valuable efforts to make me joyous and keep me motivated. A big thank you to my dear classmates Janvi, Krishna, Hitiksha, Shagun and Dolly for always being there with words of encouragement or listening ear.

**-Aastha Shah**

## **CERTIFICATE**

This is to certify that the research work presented in this dissertation entitled **“Prevailing status of Kathiawar hand embroidery and its artisans in Bhavnagar: Sustainability through product development.”** In pursuit of a Masters’ Degree in **The Department of Clothing and Textiles** is her original bonafide work.

Guide

**Dr. Reena Bhatia**

Assistant Professor

Student

**Ms. Aastha Shah**

**Co-Guide**

**Mr. Sankhadip Bhattacharyya**

Temporary Teaching Assistant

**Prof. (Dr.) Uma Iyer**

**I/c Head and Dean**

Department of Clothing and Textiles,

Faculty of Family and Community Sciences,

The Maharaja Sayajirao University of Baroda, Vadodara



Accredited Grade "A+" by NAAC

Institutional Ethics  
Committee for Human  
Research  
(IECHR)

**FACULTY OF FAMILY AND COMMUNITY SCIENCES  
THE MAHARAJA SAYAJIRAO UNIVERSITY OF BARODA**

**Ethical Compliance Certificate 2022-23**

This is to certify that the study titled, **"Prevailing status of Kathiawar hand embroidery and its artisans in Bhavnagar: Sustainability through product development"** by Ms. Aastha Shah from the Department of Clothing and Textiles has been approved by the Institutional Ethics Committee for Human Research (IECHR), Faculty of Family and Community Sciences, The Maharaja Sayajirao University of Baroda. The study has been allotted the ethical approval number **IECHR/FCSc/M.Sc./2022/26.**

Prof. Mini Sheth  
Member Secretary  
IECHR

Prof. Shagufa Kapadia  
Chairperson  
IECHR












**Chair Person  
IECHR**

**Faculty of Family & Community Sciences  
The Maharaja Sayajirao University of Baroda**

## Document Information

Analyzed document	M.Sc. CT - Dissertation AASTHA SHAH.pdf (D164934958)
Submitted	4/24/2023 8:36:00 PM
Submitted by	Reena
Submitter email	reenabhatia-ct@msubaroda.ac.in
Similarity	19%
Analysis address	reenabhataict.msub@analysis.urkund.com

## Sources included in the report

<b>SA</b>	<b>M.S.University of Baroda, Vadodara / M.Sc. CT - Dissertation NAINA BATRA.pdf</b> Document M.Sc. CT - Dissertation NAINA BATRA.pdf (D164934963) Submitted by: reenabhatia-ct@msubaroda.ac.in Receiver: reenabhataict.msub@analysis.urkund.com		79
<b>SA</b>	<b>M.S.University of Baroda, Vadodara / CT 09 Vaishnavi Vaja.pdf</b> Document CT 09 Vaishnavi Vaja.pdf (D135494741) Submitted by: reenabhatia-ct@msubaroda.ac.in Receiver: reenabhataict.msub@analysis.urkund.com		5
<b>SA</b>	<b>ARTICLE.pdf</b> Document ARTICLE.pdf (D164414325)		1
<b>W</b>	URL: <a href="https://www.investopedia.com/terms/m/marketsegmentation.asp">https://www.investopedia.com/terms/m/marketsegmentation.asp</a> Fetched: 4/24/2023 8:42:00 PM		3
<b>W</b>	URL: <a href="https://livingwithart.blog/2015/12/25/indian-embroidery-the-kathipo-style-of-saurashtra/">https://livingwithart.blog/2015/12/25/indian-embroidery-the-kathipo-style-of-saurashtra/</a> Fetched: 4/24/2023 8:42:00 PM		3
<b>W</b>	URL: <a href="https://www.knowledgehut.com/blog/agile/best-development-process">https://www.knowledgehut.com/blog/agile/best-development-process</a> Fetched: 4/24/2023 8:43:00 PM		10
<b>W</b>	URL: <a href="https://www.productplan.com/glossary/product-development-process/">https://www.productplan.com/glossary/product-development-process/</a> Fetched: 4/24/2023 8:42:00 PM		2
<b>W</b>	URL: <a href="https://www.productplan.com/glossary/design-thinking/">https://www.productplan.com/glossary/design-thinking/</a> Fetched: 4/24/2023 8:43:00 PM		12
<b>W</b>	URL: <a href="https://www.ijsr.net/archive/v6i4/ART20173102.pdf">https://www.ijsr.net/archive/v6i4/ART20173102.pdf</a> Fetched: 2/25/2021 9:59:33 AM		2
<b>W</b>	URL: <a href="http://iaeme.com/MasterAdmin/Journal_uploads/IJM/VOLUME_11_ISSUE_12/IJM_11_12_284.pdf">http://iaeme.com/MasterAdmin/Journal_uploads/IJM/VOLUME_11_ISSUE_12/IJM_11_12_284.pdf</a> Fetched: 4/24/2023 8:42:00 PM		1
<b>SA</b>	<b>M.S.University of Baroda, Vadodara / Jiteksha-Thesis (1).doc</b> Document Jiteksha-Thesis (1).doc (D134398973) Submitted by: jigisha.gala-hdfs@msubaroda.ac.in Receiver: jigisha.galahdfs.msub@analysis.urkund.com		4

**M.S.University of Baroda, Vadodara / Ms. Palak Bhagat MSc Thesis (Dr. Hemangini).pdf**

SA

Document Ms. Palak Bhagat MSc Thesis (Dr. Hemangini).pdf (D164172171)

Submitted by: komal.chauhan-fn@msubaroda.ac.in

Receiver: komal.chauhanfn.msub@analysis.arkund.com

4

**M.S.University of Baroda, Vadodara / Krishna Vala Plagiarism.pdf**

SA

Document Krishna Vala Plagiarism.pdf (D134332121)

Submitted by: komal.chauhan-fn@msubaroda.ac.in

Receiver: komal.chauhanfn.msub@analysis.arkund.com

1

**Entire Document**

( ) PREVAILING STATUS OF KATHIAWAR HAND EMBROIDERY AND ITS ARTISANS IN BHAVNAGAR: SUSTAINABILITY THROUGH PRODUCT DEVELOPMENT April 2023 Aastha Shah B.Sc. (F.C.Sc.) Fashion Designing  
PREVAILING STATUS OF

69%

**MATCHING BLOCK 1/127**

SA

M.Sc. CT - Dissertation NAINA BATRA.pdf (D164934963)

KATHIAWAR HAND EMBROIDERY AND ITS ARTISANS IN BHAVNAGAR: SUSTAINABILITY THROUGH PRODUCT DEVELOPMENT A Dissertation Submitted in Partial Fulfillment of the Requirements for the Degree of Master of Family and Community Sciences By Aastha Shah Department of Clothing and Textiles Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda Vadodara April 2023

DEDICATED TO MY PARENTS AND FAMILY This work is surely a mark of their Love, Care and Support !

77%

**MATCHING BLOCK 2/127**

SA

M.Sc. CT - Dissertation NAINA BATRA.pdf (D164934963)

Table of contents Chapter No. Title Page No. Acknowledgment i Department Certificate iii IECHR certificate iv Plagiarism report v Abstract vii List of Figures viii List of Graphs ix List of Plates x List of Table xii I Introduction 1 II Review of Literature 5 III Methodology 22 IV Results and Discussion 38 V Summary and Conclusion 84 Bibliography Appendices Annexures ( )  
ACKNOWLEDGEMENT

An endeavour is difficult to initiate without the help of many souls who are always there by the grace of God. First and foremost, I am extremely grateful

98%

**MATCHING BLOCK 3/127**

SA

M.Sc. CT - Dissertation NAINA BATRA.pdf (D164934963)

to my guide, Dr. Reena Bhatia, Assistant Professor, Department of Clothing and Textiles, Faculty of Family and Community Sciences, The Maharaja Sayajirao University of Baroda,

Vadodara

for her

valuable advice, continuous support, and patience during my study. Her immense knowledge and plentiful experience have encouraged me in all the time of my academic research and daily life. Her dynamism, vision, sincerity and motivation have deeply inspired me. She has taught me the methodology to carry out the research and to present the research works as clearly as possible.

76%

**MATCHING BLOCK 10/127**

SA

ARTICLE.pdf (D164414325)

It was a great privilege and honour to work and study under her guidance.

I am extremely grateful for her consistent notation in my writing, for careful revision of the document and her expert advice which has been valuable throughout all stages of the work. I

## ABSTRACT

Hand embroidery and Indian cultural tradition are intricately connected, with embroidery being an essential part of India's cultural fabric. Indian hand embroideries are diverse and practiced throughout the country, with each style having its own history and cultural importance. Indian hand embroidery is frequently connected with particular communities and places. The present study is carried out in Palitana taluka of Bhavnagar district, Gujarat, where the artisans practiced Kathiawar embroidery.

The Kathiawar embroidery artisans were not practicing craft as commercially, they were just developing product for their domestic use only. Due to inflation the artisan and their family started occupying themselves in other businesses and they were supposed to travel due to which they stopped practicing the craft. The researcher took this study to preserve the craft and to provide the scope for employment from their own cultural heritage for sustainable livelihood.

The current research, was conducted to study and document the present status of the Kathiawar embroidery in terms of craft specifics, the socioeconomic circumstances of the artisans, and exploring the market possibilities for craft preservation and product development. The researcher collected data through multiple field visits. Interview and observation method was used to collect relevant data. The market survey was carried out to identify the potential buyer from different market segments and their requirements for the Kathiawar embroidered products, following a random purposive sampling method for sample selection.

Product development was done following the concept of sustainability. Therefore, the researcher developed products using Khadi fabric and the embroidery bands integrated in products to fit the layout with no or minimal wastage. The researcher studied market trends for the colour combination to be developed for the embroidered bands to know the customer preference towards traditional, contemporary and monochromatic colour schemes. The developed products were exhibited for test marketing. Consumer feedback on its aesthetics, purchase and cost preference.

Analysis of responses revealed that the products would gain good market value and they would be better preferred in both traditional and contemporary colour schemes. Appreciation of Kathiawar embroidery by the consumer from various market segments merits the possibilities of its sustenance through product development.

## LIST OF FIGURES

Table No.	Title	Page No.
3.1	Research design adopted for the present study	24



## LIST OF GRAPHS

Table No.	Title	Page No.
4.1	Age group distribution of the artisans	53
4.2	Distribution of the artisans as per their literacy rate	54
4.3	Distribution of marital status	55
4.4	Distribution of artisans as per their house hold type	55
4.5	Distribution of artisans as per their family type	56
4.6	Distribution of artisans as per their economic status	57
4.7	Average price preferred by the respondents	82
4.8	Rank given by the respondents to the retailer segment products	82
4.9	Rank given by the respondents to the interior designer segment products	83
4.10	Rank given by the respondents to the corporate segment products	83
4.11	Rank given by the respondents to the NGO segment products	84
4.12	Rank given by the respondents to the academic institution segment product	84

## LIST OF PLATES

Table No.	Title	Page No.
2.1	Saurashtra kingdom marked in the map of pre-independent India	6
2.2	Map of Gujarat highlighting districts of Saurashtra region	6
3.1	Directory format	28
3.2	Embroidery band layout for single design	30
3.3	Colour Palette	30
3.4	Invite for the exhibition	34
3.5	Layout of embroidery bands	35
3.6	Layout of base fabric for product	36
3.7	Layout of lining for product	37
4.1	Butt Mogro	40
4.2	Goti	40
4.3	Vel	41
4.4	Limbodi	41
4.5	Traditional Mythological, animal and bird	42
4.6	Hathi Goti	42
4.7	Adadhiya	43
4.8	Pandi	43
4.9	Sikal kevda	43
4.10	Kodiphul	44
4.11	Kachh bavadiyo	44
4.12	Warka-vel	45
4.13	Sarvadiya tako	45
4.14	Jhavla tako	45
4.15	Different types of threads	46
4.16	Kachh (plastic mirrors)	47
4.17	Laces used to finish the product	47
4.18	Needle	47
4.19	Tracing design on Butter paper	48
4.20	White Powder	48
4.21	Pin	48
4.22	Solution	48
4.23	Traced design	48
4.24	Oshika (Unstitched Cushion cover)	49
4.25	Parda (Door decor)	49

4.26	Choli (Blouse)	49
4.27	Coin Batwa	50
4.28	Cushion cover	50
4.29	Khes (Cloth wrap around the body)	50
4.30	Borders	51
4.31	Geometric	51
4.32	Floral Motifs	51
4.33	Front page of embroidery catalog	52
4.34	End page of embroidery catalog	52
4.35	Artisan's living	58
4.36	Product preference by retailers	61
4.37	Product preference by interior designers	61
4.38	Selected embroidery designs	63
4.39	Basket (flat)	72
4.40	Basket	72
4.41	Batwa	73
4.42	Chandelier	73
4.43	Lampshade	74
4.44	Pen stand	75
4.45	Travel pouch	75
4.46	Pot cover	75
4.47	Tote bag	76
4.48	Clutch	76
4.49	Sling bag	76
4.50	Bookmark	77
4.51	File Folder	77
4.52	Collection of products	78
4.53	Front page of product catalog	78
4.54	End page of product catalog	79
4.55	Feedback board	80

## LIST OF TABLES

Table No.	Title	Page No.
2.1	Difference between the prototype and the final product	15
3.1	Preliminary field visits in Bhavnagar city	25
3.2	Selection of sample from different segments as potential buyers	27
3.3	Selection of products	29
3.4	Colour code name	30
3.5	Product Illustrations	31
3.6	Product Dimensions	33
3.7	Sheet Showing the design details of the product construction	34
4.1	Artisans and NGO collaboration	57
4.2	Product and price demand by potential buyers	59
4.3	Selected product for the market segments	61
4.4	Design selected for each category (N=31)	63
4.5	Images of the designs for the category	64
4.6	Specification sheet of Utility Basket	65
4.7	Specification sheet of Batwa	66
4.8	Specification sheet of Lampshade	66
4.9	Specification sheet of Chandelier	67
4.10	Specification sheet of Pen stand	67
4.11	Specification sheet of Travel pouch	68
4.12	Specification sheet of Pot cover	68
4.13	Specification sheet of Tote bag	69
4.14	Specification sheet of Clutch	69
4.15	Specification sheet of Sling bag	70
4.16	Specification sheet of Bookmark	70
4.17	Specification sheet of File Folder	71
4.18	Respondent's qualitative analysis	80

# INTRODUCTION

## **CHAPTER I**

### **INTRODUCTION**

Traditional Indian handicrafts have withstood the test of time and are still recognized as one of the world's most exquisite art forms. Indian handicrafts have changed over time in response to people's needs, shifting fashions, and religious ideals. Numerous local artisans put in long hours, day and night, to produce beautiful works of art. These handicrafts have a beautiful appearance, and people prefer to use them to decorate their homes or give them as gifts to their loved ones.

Embroidery is the skill of using needles to decorate cloth or other materials with thread or yarn which has undoubtedly been around since 300 B.C. The embroidering involves embellishing stitches to a piece of fabric to enhance its beauty. Over the years, embroiderers have experimented with the materials at their reach, adopted and improved their skills, and drawn inspiration from their surroundings or the artwork and ornaments of earlier eras and other cultures. One of the more intricate traditions that are firmly rooted in the lives of the artists who produce it is embroidery, which is more often known as thread work or needlework with an Indian influence.

Gujarat was the world's most important center for beautiful commercial needlework throughout the seventeenth century. Today, the area stretching from Kutch and Saurashtra in Gujarat to western Rajasthan and the Thar Parkar province of Sind in Pakistan is the world's richest source of folk needlework. Embroidery, appliqué, beadwork, mirrors, sequins, buttons, and shells are used to decorate wedding gowns, wall hangings, quilts, cradle cloths, and animal trappings. Each caste passes down its designs, colours, and a variety of stitches, from generation to generation which, along with their specific style of clothing form the significant visual aspect of a caste's cultural identity.

In Gujarat, one of the important regions of embroidery work is Saurashtra called the peninsular region of Gujarat, situated on the Arabian Sea coast which comprises of 10 districts such as Amreli, Bhavnagar, Botad, Devbhoomi Dwarka, Gir Somnath, Junagadh, Jamnagar, Porbandar, Rajkot, Morbi. Saurashtra is the Kathi community's hub for Kathi needlework due to which Saurashtra is also called Kathiawar. Kathiawar embroidery shares some similarities with Sindh embroidery but has its distinctive style.

This needlework primarily uses colourful threads and mirrors sewn together to create the appearance of patchwork. Previously, the canvas used in Kathi embroidery was mostly satin and hand-spun fabric, but currently, the embroidery is done on any woven fabric. In this type of needlework, the most commonly used stitch is herringbone. However, the chain stitch is the primary base stitch. The extensive use of mirrors is a characteristic of Kathiawar needlework. While discovering the depth of Kathi embroidery in its items, your eyes will be drawn to the stunning designs of elephants, tigers, flora, and fauna, embroidered on the materials' symbols of elegance and loveliness. This form of embroidery emphasizes ornamentation with various sorts of very brilliant colours utilized to stitch up the shape of Kathi needlework and plenty of applique work. The art is mostly used to embellish the chaniya and choli, two main Gujarati women's clothing. The Kathiawar women prepare household items like toran, chakla, and rumal in addition to embellishing their traditional clothing with vibrant embroidery.

In Saurashtra as well as in Kutch, the peasant woman is seen embroidering a trousseau and a set of house furnishings for her daughter in her spare time. Since her childhood, the small girl has been learning the craft from her mother. These items reflected her mother's love while also showcasing her abilities, which earned her in-laws' respect and warmth. Aside from riches, embroidery is a clear display of culture that should be preserved. Embroidery is more than just a work of art; it connects hearts and develops bonds with society for artisans, and it introduces a girl's identity to her in-laws. The fall of hand embroidery in India is due to several factors, including:

Machine-made embroidery pose a threat: The development of technology has reduced the cost and sped up the production of machine-made embroideries. As a result, demand for hand embroidery has decreased as more individuals switch to machine-made embroideries. Poor pay for craftsmen who create hand embroidery: Low pay for craftsmen in the traditional embroidery business frequently characterizes the sector, which may discourage them from continuing to practice their skills. Shifting interests and preferences: Traditional hand embroidery has lost popularity as contemporary fashion styles have taken hold. Nowadays, many individuals like modern looks over those that call for traditional hand embroidery. Lastly absence of training and skill development programs: When traditional crafts lose popularity, there is a lack of support for training and skill development initiatives, which can make it challenging

for craftsmen to pass on their knowledge to future generations. Besides these difficulties, there are initiatives to support and promote India's traditional hand embroidery. The preservation and promotion of traditional crafts like hand embroidery as well as the creation of sustainable livelihoods for artisans are the goals of initiatives like craft fairs, skill development programs, and assistance for artisan cooperatives.

In order to address the research issues surrounding the Kathiawar embroidery craft and its community, the study was carried out in Bhavnagar. It was a component of the research that was being undertaken concurrently by a pair of researchers, who were simultaneously pursuing various goals related to the same craft and community problems. This involves, using embroidery to create new and contemporary products that appeal to a wider audience, such as fashion accessories, home decor items, and even art pieces. Collaborating with designers and artisans to create new designs and incorporating modern technology in the production process could also help in creating a sustainable market for Kathiawar embroidery products. Furthermore, training and support local artisans and promoting their work through exhibitions, fairs, and online platforms can also help in sustaining the craft. Encouraging and creating a demand for sustainable and ethically made products can also lead to a wider market for Kathiawar embroidery.

In addition of this, the probable outcomes for Kathiawar embroidery as practiced in Bhavnagar depend on various factors such as the willingness of artisans to adapt to changing markets, the availability of resources, and support from the government and other stakeholders. With the right measures in place, Kathiawar embroidery can continue to thrive and provide sustainable livelihoods for artisans while preserving a rich cultural heritage.



## **1.1 Purpose of Study**

Cultural value, as shown in traditional crafts, is an essential component of any nation that reflects the culture and tradition of a certain location. Hand embroidering skill is passed down from generation to generation in India. However, as time passes, technology and knowledge become more accessible, and very fewer people choose to enter this sector. One of the major districts of Saurashtra is Bhavnagar, where Kathi embroidery once flourished. The goal of a research to revive Kathiawar hand embroidery and to analyze its cultural value and the decrease of its popularity and practice in modern times, as well as to investigate alternative techniques for reviving and sustaining product development for the current market. A study could include investigating the present state of Kathiawar hand embroidery techniques and styles, examining the social and economic factors of the artisans, and investigating the current state of the Kathiawar embroidery market and the challenges that artisans who practice hand embroidery face today.

## **1.2 Objectives of the Study**

- 1.2.1 To study the prevailing status of Kathiawar embroidery in Bhavnagar
- 1.2.2 To study the socio-economic status of the artisans
- 1.2.3 To identify commercial opportunities for the sustainability of Kathiawar embroidery
- 1.2.4 To design and develop prototypes for market segments

## **1.3 Delimitations**

- The study is limited to Palitana taluka and Bhavnagar city of the Bhavnagar district.

# **REVIEW OF LITERATURE**

## **CHAPTER II**

### **REVIEW OF LITERATURE**

The investigator read related literature to gain a profound knowledge, a distinct vision, and a deeper understanding of the proposed study while considering the current situation's reality and necessity.

#### **2.1. Theoretical Review**

2.1.1. Demographic details of Adapur village in Palitana

2.1.2. Kathiawar embroidery

2.1.3 Artisan and craftsmen

2.1.4. What is Sustain, Sustainable and Sustainability?

2.1.5. Market Segmentation

2.1.6. Product development process

2.1.7. Type of prototypes

#### **2.2. Research Review**

2.2.1. Existence of Kathiawar embroidery

2.2.2. Socio-economic studies in the handicraft sector

2.2.3. Sustainability and handicraft sector

#### **2.1. Theoretical Review**

##### **2.1.1 Demographic details of Adapur village in Palitana**

A peninsular region of Gujarat, India, situated on the Arabian Sea coast is called Saurashtra (Plate 2.1). Following India's independence in 1947, 217 princely states of Kathiawar, including the old Junagadh State, combined to establish the state of Saurashtra on February 15, 1948. The United State of Kathiawar was its original name; in November 1948, it changed to Saurashtra State. Sardar Vallabhbhai Patel spent a lot of time trying to persuade the local kings and *subas* (totalling 222 in Saurashtra alone). Bhavnagar became the nation's first state to join India's union when Maharaja Krishnakumar Sinhji of Bhavnagar State willingly volunteered to offer Sardar Vallabhbhai Patel his vast and royal empire of Bhavnagar / Gohilwar. Bhavnagar is a

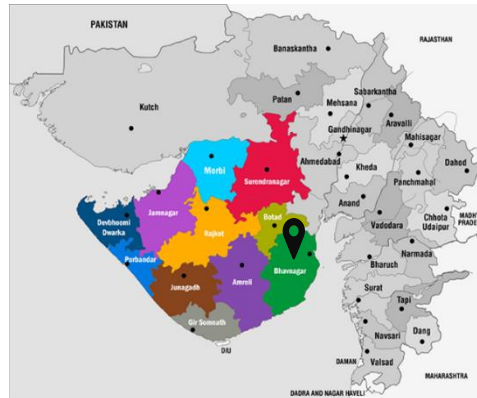
city in the Saurashtra region of Gujarat, India. Bhavsinhji Takhtsinhji Gohil established it in 1724 (1703–1764). It is also known as Gohilwar because the Gohil Rajputs ruled over a large portion of the Bhavnagar district. Bhavnagar, Botad, Gadhada, Gariadar, Ghogha, Mahuva, Palitana, Talaja, Sihor, Umralla, and Vallabhipur are the eleven Talukas in Gujarat's Bhavnagar District (Plate 2.2) (19).



**Plate 2.1:** Saurashtra kingdom marked in the map of pre-independent India

*Image Source:*

<https://upload.wikimedia.org/wikipedia/commons/thumb/e/e4/EpicIndia.jpg/600px-EpicIndia.jpg>



**Plate 2.2:** Map of Gujarat highlighting districts of Saurashtra region

*Image Source:*

<https://sgbrrb.org/images/map-inner.png>

Palitana Taluka is located in the Bhavnagar district of Gujarat state. It is located 247 kilometers from Vadodara and 50 kilometers from Bhavnagar city. The Palitana Jain temples, which are renowned and regarded as the holiest place for Jains to visit, are its most notable sights. The Shatrunjaya hills are home to the Palitana temples, which are renowned for their beautiful architecture and intricate carving.

Adapur is a big hamlet in the Palitana Taluka in the Bhavnagar district of Gujarat, which covers an area of 5.5033 sq. km. It is located 60 kilometers from the district headquarters in Bhavnagar and 5 km from the sub-district headquarters in Palitana. According to the Population Census of 2021, there are 3353 people living in the Adapur village, with 1724 men and 1629 women. In comparison to Gujarat, Adapur village has a lower literacy rate. In 2011, the literacy rate in Adapur village was 67.63 per cent, compared to 78.03 per cent throughout Gujarat. The literacy rate for men in Adapur is 80.03 per cent, compared to 54.34 per cent for women (21).

### **2.1.2. Kathiawar embroidery**

**Dongerker K. (1951), Nanavati J., Vora M. & Dhaky M. (1966), Gillow J. & Barnard N. (2008), and Tyagi A. (2016),** mentioned Kathis' works reflect by far the oldest and most important tradition. In the 14th century, their three Shakhat (royal) clans — Wala, Khuman, and Khachar — relocated from Kutch to Saurashtra. The earliest examples of Kathi handiwork, which are almost a century old, generally always feature a black handspun cloth as their background, which contrasts sharply with the coloured floss silks. Throughout the majority of the piece, a preference for deep crimson is evident, followed by a velvety violet, while golden yellow, white, and green are minimally but elegantly slashed to achieve a balanced color scheme. Later, bluish grey cloth replaces black as the background; strident colors such as deep orange, dark blue, and purple in silk fibers, along with taut and unshapely figural art, show a decadence in taste and style. The Kathis appear to have stopped practicing their inherited embroidery tradition just after the turn of the twentieth century. Stitches used in Kathi embroidery were elongated darn, chain stitch and interlacing stitch. Torans (door hangings) and chaklas (festive wall hangings, large or tiny, often in square format) were embroidered with heer (floss silk threads) primarily portraying geometric and figurative motifs.

Kathis, on their way to abandoning their own tradition, may have patronized another school as a substitute. The Mochi embroiderers were now working for the Kathi elite of their time. They were mostly employed in the preparation of embroidered goods for the dowry' of Kathi brides. Mochis used fine silken cloth in a variety of colours for the background, the most common of which were cerise red or steel blue.

By the end of the ninth century, the reigning Rajput aristocracy and affluent Mahajans patronized Mochis, particularly in central Saurashtra and Junagadh. Further, this style of work was also replicated by Mahajans, though their tradition diverged greatly from that of the Mochi also their requirements varied and included items like skirts and trousers for children. The Mahajans favored a machine-made fabric as a basis, which they embroidered with heer (floss silk), primarily in red or violet tones (almost monochromatic with few sprinkles of yellow, white and green). The majority of the embroidery was lengthy herringbone thread (khajuri-no tanko), with a fairly regular geometric arrangement that included chess board and geometric designs. The stitches were done in both horizontal and vertical directions, creating the delightful illusion of two colours (similar to phulkari of Punjab. A typical Mahajan piece will feature an

arched border (kangra) topped by a peacock foot-print (mor-pagala), followed by rectangular and mirror bands. The centre area has chequered borders (daria or adadia, also known as dana bhat), while the final field is divided into four (chokhand) or nine quadrants (nava-khanda)

Today, the Kanbis represent the majority of Saurashtra's peasant communities; both of its two sub-groups, the Kadwas and the Lewas, value embroidery. The Kadwas are found in central Saurashtra and Western Sorath meanwhile, the Gohilvad Lewa Kanbis (also known as Golwadia Kanbis) are found in Bhavnagar and Kundla. Kadwa Kanbis frequently use themes that are inspired by nature; birds such as peacocks and parakeets (suda popat), flowers such as kewadaphuls and mango shoots (ambadal), and a wide range of flower shoots and vegetal creepers. Lewa Kanbis has created many types of motifs as well as a separate language of phrases. Often the same phrases have distinct meanings in separate sub-castes. Angalapopat, undulating wijalwel, watakawel, chokhachali, and other patterns are more widely utilized. Chatkuda, baporla, and bijora are geometric motifs developed using interlacing stitch.

The articles developed by Kadwa Kanbi women were todaliya, ulech, torans, chaklas along with these they prepare embroidered décor for their bullocks such as shingadiyas or shingrotias (covers the horns), mathavati (adorns the forehead), jhul (back cover) and Khobhra (face décor) while Lewa Kanbi embroidered the borders for Chanya and Ghagharas [(2),(3),(9)].

### **2.1.3. Artisan and craftsman**

Craftsmen and artisans are knowledgeable individuals who manufacture items by hand utilizing age-old procedures and skills. Although "artisan" and "craftsman" are frequently used synonymously, there are some minor distinctions between the two.

Artisan : Professionals who have polished their practical creative abilities in a particular sector are known as artisans. To name a few potential products, they may create handcrafted goods, leather goods, pottery, blown glass, or distinctive handwoven textiles. They add finishing touches to their work using fine art techniques, such as painting, drawing, or engraving. Since they may choose their own hours, many artisans work for themselves. To fulfill deadlines, artists may take on more labor or put in extra hours. A craftsperson's duties may include:

- Make extensive use of imagination
- Choosing resources and tools
- Use creative methods such as painting, sculpture, and sketching.
- Design and produce artistic, unique items
- Display and present objects to the public.

Craftsmen: Similar to an artisan, a craftsman is an expert in their field. Craftsmen, on the other hand, attempt to recreate for mass consumption, which is a significant distinction. Craftsmen try to create perfect reproductions of select sorts of practical, utilitarian products rather than many diverse, original ones. While their techniques may occasionally be conventional, the 'craft' is very sophisticated and today frequently employs assembly lines and cutting-edge technology. Tiles, wood crafts, and other materials are all within the reach of artisans. The following are some of a craftsman's duties:

- Build and put together consumer goods
- Follow safety precautions
- Make sure the technical requirements are satisfied.
- Utilize power tools and cutting-edge computing
- Use automated machinery (31)

#### **2.1.4 What is Sustain, Sustainable and Sustainability?**

Sustainability, sustain, and sustainable are all synonyms that are sometimes used interchangeably but have different meanings.

The ability of a system, process, or activity to continue throughout time without harming the environment, society, or economy is referred to as sustainability. It entails figuring out how to fulfil current demands without compromising future generations' ability to meet their own. Sustainability is frequently considered as a multidimensional concept that includes environmental, social, and economic aspects.

Sustain is the act of maintaining or continuing something in a responsible way whereas sustainable refers to something that can be continued over time without causing harm to the environment, society, or economy (32).

### **2.1.5. Market Segmentation**

*What?* Market segmentation is a marketing technique that involves identifying certain consumer groups to provide products or product lines to them in a way that appeals to their preferences.

*Why?* Market segmentation emphasizes that not all customers have the same preferences, means of consumption, or demands. Market segmentation is significant because it aims to make a company's marketing initiatives more strategic and focused, as compared to widely catering to all potential customers. A business may boost its chances of making sales and become more resource-efficient by creating specialized strategies for certain items with target consumers in mind.

**Types of segmentation**, such as homogeneity, which examines a segment's shared demands, distinctiveness, which examines how a certain group differs from others, and response, which examines how specific groups react to the market. Strategies for targeting a group are based on location, demographics (such as age or gender), socioeconomic status or lifestyle, or behaviour (such as use or response) (23,28).

### **2.1.6. Product development process**

The complete process of activities in creating a new product or bringing a redesigned version of an existing one to market is known as the product development process. The process of developing a new product and bringing it to market is referred to as the New Product Development Process (NPD). Anywhere, including the market, client needs, research, or problems with existing products, might inspire the creation of a new product. There are several phases in the generic product development process that must be completed in order to generate such new products, from the concept stage to the point at which they are sold on the market.

#### *The Design Thinking Approach*

Design thinking is a framework for developing new products based on first identifying a problem or need from the user's perspective. The steps involved in the design thinking process are:

Step 1: Empathize with users - for a product (or any solution) to resonate with a user, it is necessary to first empathize with that person; this enables the developer to understand



their needs, wants, goals, fears, and frustrations. The product developer (team) has to set aside its own biases and assumptions to actually see and understand things from its customers' point of view.

Step 2: Define the problem - translate the insights gained from step 1 into a high-level statement which is human-centric and encapsulates the problem the developer wants to solve. The products thus will not be based on abstractions but according to the real needs and goals of real people.

Step 3: Brainstorm potential solutions - generate ideas for products, features, and other elements to help translate the big-picture problem statement that was drafted, into practical solutions that can be developed for the user base.

Welcome as many ideas as possible and later on narrow it according to your broader priorities, budget, and other strategic considerations.

At this stage, though, after you have spent time developing a heightened sense of what your users think and feel, you want to capture as many insights, suggestions, and potential product ideas as you can. This is the time when your team could strike innovation gold.

Step 4: Build a prototype - take the most promising product ideas and turn them into scaled-down versions. Share these versions with potential users for feedback; since this is the minimum viable product stage of the design thinking process.

This is also the learning phase for the team about the development process itself: which resources are required, how long specific development details take, and what (if any) constraints the team is facing. Upon completion of this stage, one or more simple versions of the product can be tested with users.

Step 5: Test your solution – this is the stage to learn just how much empathy is gained for your target users, and how well the given solution is resonating with those people.

The results that are gleaned from this Test stage could help the team to fine-tune several aspects of this non-linear process. Also, the user feedback might force one to re-define the problem because perhaps one may realize based on how your users respond to your prototype that you did not accurately capture the challenges they are facing.

This Test stage might also help go back and build a better prototype, come up with more ideas for the created product's next iteration, or even help one gain more empathy for the target customers.

### *The New Product Development (NPD) Framework*

This is a standard, composite approach that businesses often use to develop physical products. There are many variations to the NPD framework ranging from five to eight step approach. A common approach divides the process into following steps -

#### Stage 1: Ideation or Idea Generating

The first step in the new product development process is ideation or idea generation. Customer needs serve as the foundation for developing ideas. Companies or enterprises do market research on client requirements, technological adaptability, competitive products, new designs, and problems with existing items. Ideation progresses through several stages, beginning with innovation and ending with actualization.

There are various popular approaches to idea generation.

#### Brainstorming

When a group of individuals or a single team brainstorms, they produce many ideas without evaluating the outcomes. Everyone will have an opportunity to express themselves here, and there is a possibility to come up with innovative ideas. The complete list of ideas will be examined to see which ones are the finest.

#### Body storming

Body storming is a method for coming up with several solutions to a single issue that involves simulating numerous movements with the body. Role-playing and mind maps are utilized in conjunction with body-storming.

#### Reverse Brainstorming

It is a special ideation approach because, as the name implies, it generates ideas for a problem in the opposite direction. Every team will plan or come up with ideas to get over obstacles when creating a product, but using reverse brainstorming, one may find the issue at its core and determine why the risk was raised in the first place.

### Idea mapping

The ideas developed during the brainstorming phase are transformed into maps using graphical designs, diagrams, and drawings throughout this procedure. Everyone can understand the concept better thanks to this process, which also aids in its development by incorporating additional concepts and necessary data.

### SCAMPER

SCAMPER is made up of seven concepts such as "Substitute," "Combine," "Adapt," "Modify," "Put to other users," "Eliminate," and "Reverse," which are connected by the first letter of each word. It is possible to create new methods for producing a product or finding a solution to a problem by taking into account all the components of SCAMPER.

### Five “Why”s concepts

The "Five Whys" method, which involves asking "why" five times and writing down your responses for each, can help you identify the problem's fundamental cause and provide appropriate remedies. It is frequently used in conjunction with the "fishbone diagram," a very popular tool.

There are a few additional tools used in ideation; the most popular ones globally are TRIZ, Lateral thinking process, Six Thinking Hats and Herrmann brain dominance instrument.

### Stage 2: Research

Researching is the second stage of product development phase. After you have decided on a product concept, it is crucial to carry out market research to comprehend consumer behaviour and the target markets. Additionally, it entails receiving feedback from customers, conducting surveys, and learning about their needs and issues with reference to a certain product that is being produced.

In order to plan the product design appropriately, market research is used in new product development research primarily to understand customer needs, requirements, and beliefs. As the primary goal of developing a new product is to increase profits, it is crucial that firms take this process into account because it reveals potential marketing strategies.

By this stage, a business or industry will be able to determine whether investing in the creation of a new product is worthwhile. Several elements are involved in the research stage of new product development; the following are the primary ones:

Product Research: It is a procedure to assess the concept of your product in terms of how well it sells in the market, which aids in determining how best it is to develop.

Risk Analysis: Analysing previous hazards experienced with the same sort of product or process can help identify risk factors in the development and marketing of a product.

Customer Analysis: Recognizing the target audience and understanding what motivates them to fulfill their needs.

Competitor Analysis: It is a tactic to evaluate the market share, cost, cons, benefits, flaws, strengths, and customer reviews of competing products.

Audience research: It involves choosing a group of individuals and conducting a poll to see how many of the participants will become potential customers.

Market research also plays a significant part in this process during the product development stages. Some elements of market research are –

SWOT Analysis: SWOT analysis aids in identifying a product's strengths, weaknesses, opportunities, and threats in the market.

Marketplace data: Using this technique, one may view the retail pricing of the product in the market and its supply in relation to demand.

Market Trends: Studying the ups and downs of the stock market could be extremely beneficial for knowing about the market demand for existing products.

PEST Analysis: PEST, an acronym for political, economic, social, and technical considerations, refers to those elements that affect how long things will remain on the market.

### Stage 3. Planning

After deciding on our concept via ideation and conducting research into its market viability, it is crucial to outline the product's development process before moving forward with manufacturing a prototype. Planning entails considering and visualizing the resources needed to create the product. Planning entails a business strategy, a

budget, the choice of materials, the team, the design, and advertisements, among other things.

Without having the necessary measurements, raw materials, equipment, and funding, one cannot build a prototype. In this procedure, all these variables must be planned, and designs must be created in accordance with the plan.

#### Stage 4. Prototyping

The process of prototyping involves testing a product on a sample basis. A prototype is a model or a sample product that is made to be tested before being produced in large quantities. It prevents the loss of time and money. For things like software, hardware, and electronics, prototypes are employed.

Before receiving a final sample product, it usually takes multiple prototypes to be produced. Every prototype that is produced will be tested thereafter to see if the final specifications have been met.

Sometimes there will be important changes between the prototype and the finished product which can be understood from the **Table 2.1** below:

**Table 2.1:** Difference between the prototype and the final product

About	Prototype	Final product
Process	The process will be straightforward with portable or tiny equipment because each product will be produced separately	Because it will be mass produced, the manufacturing process may be intricate and include large machinery that differs from the prototype.
Material	The materials used will be less expensive because it is a sample product and does not reach the buyer.	The materials used will be less expensive because it is a sample product and does not reach the buyer. As it gets to the buyer, the material will be pricey and of high quality.
Verification	The finished prototype product will require some rework and will be excluded from inspections because the buyer will not get it.	Before reaching the consumer, the finished product must pass all quality inspections and meet all criteria.

#### Stage 5. Sourcing

You have all the knowledge necessary to make the finished product in big quantities and sell it to customers after the prototype stage. Thus, the business will be able to coordinate the necessary resources throughout this stage, including raw supplies, machinery, investors, and employees.

A product manager will compare prices and, if possible, request bids in order to find the proper quality materials and use contract labour or outsourcing companies to complete some time-consuming tasks. It also entails putting up equipment that is appropriate for the process needed to get the desired outcome.

#### Stage 6. Costing

The most important aspect is the cost of the developed product. We will have clear data on expenditures incurred in each phase, including a future phase of marketing, since we have traversed ideation, planning, research, prototyping, and sourcing.

Costing includes expenditures of materials, manufacturing costs, rentals, advertisements, shipping prices, salaries, etc., Adding together entire manufacturing costs with taxes and calculating profit based on market value will result in the highest retail price that can be offered in the market.

#### Stage 7. Marketing or Commercialization

The final stage in the new product development process is marketing also known as the commercialization of the finished product. We are now at the point where our product has passed all quality inspections and is ready to be released to customers. It is necessary to raise market awareness through marketing tactics such as digital marketing channels: email marketing, social media marketing, Google AdWords, and SEO (30).

#### **2.1.6. Type of prototypes**

Prototypes provide early market feedback on whether a product has the potential to lead a market sector, provide early insight into required design changes, and assist teams in minimizing risk at all stages of the product development lifecycle.

In product design and development, prototypes are essential for testing and refining concepts before finalizing a design.

There are three main types of prototypes:

*Low-fidelity prototypes:* These are rough and simple prototypes that are used in the early stages of the design process. They are often made with low-cost materials and don't have all the features of the final product. They are useful for getting feedback on basic concepts and ideas.

*High-fidelity prototypes:* These are more detailed and realistic prototypes that are created later in the design process. They are usually made with higher-quality materials and have more features than low-fidelity prototypes. They are useful for testing how the product will actually work in real-world situations.

*Interactive prototypes:* These are prototypes that allow users to interact with them and get a sense of how the product will work in real life. They can be either low or high-fidelity and can be created using a variety of tools, including software, cardboard, or 3D printing. Interactive prototypes are useful for getting feedback on how users will interact with the product and for identifying any usability issues (30).

## **2.2 Research review**

### **2.2.1. Existence of Kathiawar embroidery**

**Patel N. (1987)**, conducted a research on the Study of Kutch and Kathiawar embroidery gathered data regarding embroideries of Kutch and Kathiawar, which contains information regarding the type of motifs, techniques used, and the prevailing status of the embroideries.

According to the analysis, most girls started embroidering between the ages of 8 and 10 and learned how to do so from their mothers and grandmothers. Herringbone, Buttonhole, Darning, and Sindhi taropa stitches were utilized. Bed linings, apparel, and accessories were among the produced items. Results also revealed that Kathiawar and Kutch embroidery is well known throughout the nation and is not just produced in Gujarat.

**Acharya P. (2015)**, The research study investigates the use of traditional Kathiawar embroidery methods on modern fashion clothes. The study starts with the history and significance of Kathiawar embroidery, which is recognized for its elaborate designs and use of brilliant colors. The researcher then outline the research approach, which included the production of a variety of fashion items employing traditional Kathiawar

embroidery skills. The study's findings imply that using traditional embroidery techniques on modern fashion clothing can result in distinctive and inventive patterns that appeal to a wide spectrum of customers. The researcher also mention the possibility of using sustainable and environmentally friendly materials in the creation of these clothing, which might help to a more sustainable fashion sector. The study sum ups with a discussion of the research's ramifications, notably for encouraging traditional crafts and developing sustainable fashion methods. The researcher claim that combining traditional crafts with current fashion design can help to preserve and promote cultural heritage while also addressing the environmental concerns that the fashion industry faces.

**Gohel P. (2016)** The research article investigates the impact of Raja Ravi Varma's paintings and design elements of Mughal and Persian art on Kathiawar's vintage embroidery. The article begins with an overview of the history of embroidery in Gujarat, India, and then delves into Raja Ravi Varma's work and Mughal and Persian design influences. The article then goes on to discuss the study methods, which included a survey of historical needlework items in the region, interviews with local artists, and embroidery design analysis. The study's findings imply that Raja Ravi Varma's famous imagery, particularly his representations of Indian ladies, had a considerable influence on Kathiawar embroidered patterns. Mughal and Persian design elements are frequently used in needlework, notably floral motifs and geometric patterns. The article finishes with a discussion of the research's ramifications, notably for the preservation of traditional embroidery skills and motifs. According to the writers, knowing the historical and cultural influences on embroidery is critical to conserving and developing this art form.

**Pooja, Singh V. and Arya N. (2019)** The article investigates on revival of traditional embroidery painting is seen as a significant factor in the current situation. A study was carried out to investigate the possibilities of adapting kathiawar embroidered motifs for fabric painting. Seventy kathiawar embroidered motifs were collected and categorized as geometrical, floral, and animal & bird motifs before being filtered into thirty motifs based on their appropriateness for fabric painting on jackets. The chosen motifs were scanned to transfer them from print to digital format and altered using Corel DRAW program. The motifs' proportions were altered to make them acceptable for fabric painting on a jacket. Experts chose twelve motifs, including four top-ranked motifs



from each category (geometrical, floral, and animal & bird motifs), to generate twenty designs for each theme. utilizing the CorelDraw program, sixty designs were generated utilizing a total of twelve selected themes. According to researchers, this may provide opportunities for designers, particularly those who produce Kathiawar-inspired clothes, to exhibit their work on a worldwide scale. This research met the needs of high-end consumers through a variety of patterns and a unique fabric painting process.

### **2.2.2. Socio-economic studies in the handicraft sector**

**Tiwari G. and Kashyap R. (2018)** conducted research in Rajasthan, was a less-explored place where women artists perform exquisite and elaborate embroidery. These women mostly labour in the unorganized and informal sectors, where their jobs are temporary. There were several causes that contributed to their low living conditions. As a result, the researcher was compelled to investigate and document the socioeconomic state of women craftsmen involved in traditional embroidery craft in the Barmer region. The purposive random sample was used to acquire data from 300 women craftsmen ranging in age from 21 to 50 years. An interview schedule was employed to obtain data on the socioeconomic situation of female craftspeople. According to the study's findings, the majority of women artisans live in extremely poor and vulnerable conditions. Their monthly income was modest, so they had to take out loans to meet their basic requirements. Because of the presence of middlemen in the marketing chain, they are exploited. The study concludes that the government should provide financial assistance and education to women craftspeople.

**Dr. Ahamed M, Karim R. (2019)** conducted study focuses on the effects of this handicraft on the socioeconomic conditions of artisans in selected parts of Birbhum district (Nanoor-Labpur-Panrui-Illambazar), analyzes the issues and challenges involved in promoting this handicraft, and emphasizes how tourism promotion in Birbhum can be made through this valuable resource. The research was based on an in-depth interview with 100 craftsmen from 40 homes, the majority of whom were craftswomen. The approach of this study was done by developing standardized questionnaires containing open and closed-end questions, as well as pertinent secondary data, was employed. The finding incorporates the fact that artisans are unaware of market potentials and are thus manipulated by intermediaries; resorting to

primitive methods without using advanced technology leads to slow production; and a lack of financial and skilled training assistance hinders the overall development of rural artisans. The research's recommendations include improving the artisans' existing socioeconomic situation through exhibiting and marketing schemes, developing craft circuits, design and technological advancement, and making it easier for artists to collaborate with government emporiums and outlets.

**Debbarma S. (2019)** carried out an 'a study the majority of artisans labour in the traditional and unorganized sectors, where they are exposed to abuse and low salaries. They were at the bottom of the social and economic ladder. These people are generally employed in domestic or cottage industries, where they work hard but do not earn enough to live on. The term 'Handicraft' refers to a diverse spectrum of objects. The International Labour Organization (ILO) defines the informal sector, which includes handicrafts, as a type of economic activity distinguished by characteristics such as reliance on locally available resources and skills, family ownership, small-scale operations, labour intensity, traditional technology, skills generally acquired outside the formal school system, and unregulated and competitive markets. It was concluded that the artisans are uninformed of the programs and that the quality of the goods cannot suit the tastes of the consumers in towns and cities owing to a lack of training facilities.

### **Sustainability and handicrafts**

**Singh T. (2016)**, carried out an study of Indian Handicrafts sector is not only playing significant role in the country's economy but also providing employment to vast segment of people in rural and semi urban areas. Besides preserving cultural heritage it is also generating valuable foreign exchange as the manufacturing is mainly with the indigenous raw material. The Handicrafts of India through the ages fascinated the world by its creativity, aesthetics and exquisite craftsmanship. Today, the rural and urban crafts continue to make a hefty contribution to the economy of the country as they did in the past. Like in many cases this has been in hidden contribution since these did not necessarily get reflected in the visible part of our economy. For Centuries the rural Artisans have been providing for the needs of local farmers and other rural inhabitants in the form of locally made products and services. With the advent of machine produced

goods, many of our traditional artisans have had to face intense competition from growing industrial sector. However, the inventiveness of the Indian craftsman and the various efforts at development that has been invested over the years in human resource development and in product innovation and promotion, has strengthened their ability to face this competition with a great degree of success.

# METHODOLOGY

## **CHAPTER III**

# **METHODOLOGY**

The current research aimed to determine the sustainability of Kathiawar embroidery and artisans through product development. The objective of the study was to capture the current state of embroidery and its artisans residing in Bhavnagar. By exploring the market for potential opportunities and creating a product catalog, the researcher also attempted to build a sustainable market value chain of Kathiawar embroidery in addition to its preservation through documentation. A qualitative and applied research design was established to accomplish the objectives. To get comprehensive and accurate data, samples were chosen using a purposive sampling method and the snowball technique for preliminary information about the existence of Kathiawar embroidery in Bhavnagar.

This chapter describes the method used to gather data and how the data was processed to reveal the findings of the study. It covers methodological information such as sampling requirements, tools, and materials, data gathering techniques, measuring the relationship, and data analysis. The sections of the chapter were broken into the following subsections:

### **3.1 Collection of Preliminary Information**

### **3.2 Research Design**

### **3.3 Documentation of the present status of Kathiawar embroidery and its artisans**

#### **3.3.1 Selection of Sample**

#### **3.3.2 Preparation of a tool**

#### **3.3.3 Data Collection**

#### **3.3.4 Analysis of data**

### **3.4 Exploring product and market opportunities**

#### **3.4.1 Selection of the Sample**

#### **3.4.2 Market Survey**

3.4.3 Description of the target consumer

3.4.4 Sampling of products

3.4.5 Sampling of embroidery design and its colour scheme

### **3.5 Product design and development**

3.5.1 Concept for product design

3.5.2 Material Sourcing

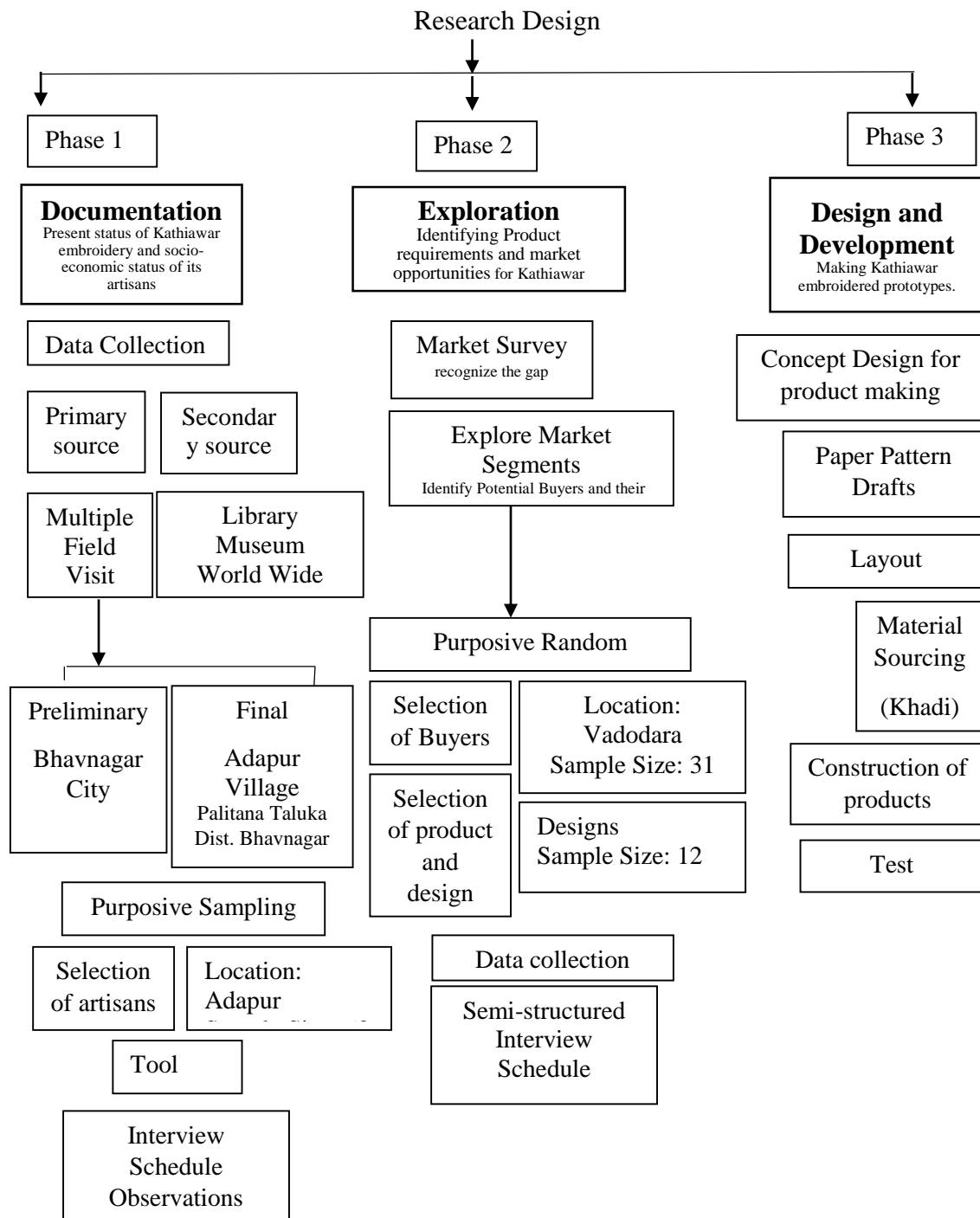
3.5.3 Construction of products

3.5.4 Test Marketing

### **3.1 Collection of Preliminary Information**

Data for this study were gathered from both primary and secondary sources. The Hansa Mehta Library of The Maharaja Sayajirao University of Baroda, Vadodara, the Department of Clothing and Textiles Library of the Faculty of Family and Community Sciences, The Maharaja Sayajirao University of Baroda, Vadodara, Museum of Gandhi Smruti, Bhavnagar, and the information server were used as secondary sources. The information on the embroidery of Bhavnagar as it existed in the present times was collected through a preliminary survey in Bhavnagar city as a primary source. This survey was done by the researchers to know the existence of embroidery along with its association with the artisans' socio-economic condition in the present to plan the further course of action. Before conducting a field investigation, several opinion leaders were contacted; the data they supplied was used as a guide to choose the location for the survey. The researchers visited the corresponding homes, museums, microbusinesses, and government facilities under the guidance of privileged observers. Using the snowball technique, data from the field was gathered through unstructured interviews and observations and documented in the form of field reports, audio notes, and quick videos. The preliminary survey provided the researcher with a better idea of the existing Kathiawar embroidery and its scope.

### 3.2 Research Design



**Figure 3.1:** Research design adopted for the present study

### 3.3 Documentation of the present status of Kathiawar embroidery and its artisans

Bhavnagar district situated in the Saurashtra region produced the Kathiawar needlework. The documentation of Kathiawar embroidery aided in collecting knowledge of the embroidery in relation to its present situation for building a market value chain.

#### 3.3.1 Selection of Sample

During preliminary field trips, a few names of sites were acquired and are included below (Table 3.1). The researcher visited different areas of Bhavnagar city based on stratified random sampling in order to acquire a thorough perspective of hand embroidery from different areas. Only artisans who were comfortable answering questions and eager to participate in this research were interviewed by the researcher.

Through preliminary visits, the researcher found that the artisans residing in the urban areas of Bhavnagar were not fulfilling the inclusion criteria of the study i.e. artisans willing to advance their craft for commercial purposes to sustain their livelihood and culture. Hence considering this, the researcher shifted the study to Adapur village in Palitana taluka of Bhavnagar district and collaborated with Shree Shatrunjay Yuvak Mandal (NGO) which works for women empowerment and had a developed cluster of 150 artisans in which 50 were practicing hand embroidery were taken as a sample considering the need and requirements for the study.

Inclusion criteria of the research: Respondent ready to practice this craft on an employment basis.

Exclusion criteria of the research: Respondent solely practices this craft for personal usage.

**Table 3.1:** Distribution of sample as per residential area in Bhavnagar city

Sr. No.	Name of the Area	Residing Community	Number of Artisans interviewed
1.	Sarita Society	Kanbi	4
2.	Kaliyabid	Kanbi	4
3.	Bortalav	Kanbi	2
4.	Fulsar	Darbar	2



### **3.3.2 Preparation of a tool**

The interview schedule was prepared in order to acquire primary data. According to the specific objectives, questions were formulated for an interview (Appendix 1). The interview was conducted in Gujarati and translated into English when writing report. The major goal of the interview was to gather information on the following categories: demographics, economic conditions, raw materials, design and techniques, as well as to underline how the artists approach the craft personally or commercially.

### **3.3.3 Data Collection**

The data was gathered through multiple field visits by observations, interviews, and experiences gained during field trips to Adapur village, Palitana, Bhavnagar District Gujarat where the embroidery was still being practiced served as primary source. The information gathered included all aspects of the embroidery and its practitioners. The study's data was gathered from both primary and secondary sources. The Gandhi Smriti Museum and library (Bhavnagar), Calico Museum (Ahmedabad), Hansa Mehta Library and Clothing and Textile department library of the Maharaja Sayajirao University of Baroda, and other online resources were used as secondary sources of information.

To get thorough and accurate information, the investigator interviewed the artisans (Appendix 1) in person and closely watched their working procedures to have a deeper grasp of the skill. Photographic evidence and drawings were used to support the documentation. The researcher undertook multiple field visits to locations where the craft was done to establish relationships with artisans and gather accurate information.

The photography was done with the aid of the Vivo X60, a smart camera phone with a triple camera configuration containing 48-megapixel and two 13-megapixel cameras, as well as a resolution of 1080 x 2376 pixels. The audio and video notes were also recorded and captured during data collection to analyse the data also researcher's observations were noted down as field notes.

### **3.3.4 Analysis of data**

The information gathered on craftspeople and their embroidery was qualitative in nature. The present status, tools and procedures, raw materials, colours, and so forth were all subjects of documentation. The collected data were presented descriptively, with figures, tables, and photographic proof to support them.

### 3.4 Exploring market and product possibilities for developing commercial opportunities.

Following the documentation of the present status of Kathiawar embroidery, the researcher explored the market of Vadodara for existence of Kathiawar embroidered products. Vadodara was chosen for the market study because it is a large city with a diverse population and a well-established handicraft sector that offers commercial opportunities that can be explored to build a sustainable market for artisans. The shops around the Palitana pilgrimage too was surveyed to understand the existence of Kathiawar embroidery, since it was in the proximity of the village where artisans were employed as embroiderers by the NGO, Shratrunjay Yuva Mandal.

The researcher gathered product requirements from the decision makers of various agencies such as handicraft retail stores, interior designers, NGOs, academic institutions and corporate offices, which were used to build a product and potential value chain. Product requirements were gathered in the process to explore commercial opportunities to support the sustainability of Kathiawar embroidery and its artisans.

#### 3.4.1 Selection of the Sample

Using random purposive sampling, the researcher selected retail handicraft stores, interior designers, academic institutions, NGOs, and corporates in Vadodara. The researcher selected respondents who were ready to respond and willing to participate in the research across the purposively selected market segments. The sample size of each category is shown in tabular form (Table 3.2) All 31 respondents were personally interviewed to collect the data and understand the market requirements to identify commercial opportunities for the artisans.

**Table 3.2:** Selection of sample from different segments as potential buyers

Potential buyers	No. of respondent
Handicraft Retailers	10
Interior Designers	10
NGOs	4
Corporates	4
Academic Institutes	3
Total	31

Respondents were interviewed at their respective workplaces. All the respondents were personally interviewed. The data was collected through an interview schedule (Appendix 2) along with visuals provided by the respondent.

### 3.4.2 Market Survey

The researcher met potential buyers from different segments such as retailers, academic institutes, interior designers, NGOs, and corporates situated in the different areas of the Vadodara city. Market insights was gained through structured questionnaire. Evidence about Kathiawar embroidered products available in the market was collected if any, also the client details and requirements in terms of design and colour preference for Kathiawar embroidered products was fetched.

Stratified random sampling was used for the selection of respondents from different market segments. The data was collected in terms of the availability of embroidered products, the client requirements for the product and their contact details to build a buyer's directory to fulfill the third objective of the study.

### 3.4.3 Description of the target consumer

The data was gathered by multiple market visits through an interview schedule and questionnaire which gathers data regarding potential buyers and Kathiawar embroidered products.

- Name of the institution and its contact details: Required to form a directory in which the record of potential buyers would be stored for artisans to connect.
- Product requirements: Kathiawar embroidered product suggestion and its price range.

Logo	Name
	Specification
	Name of the institution
91+	
abc@gmail.com	
address	

FFCS, Department of Clothing and Textiles 22-23, The Maharaja Sayajirao University of Baroda

**Plate 3.1:** Directory format

### 3.4.4 Sampling of the product

Kathiawar hand-embroidered products just on market are limited to apparel, purses, and home furnishings such as pillow coverings, bedsheets, torans, and wall pieces of various sizes. Thereby market was limited due to the restricted products. As a result, it is considered one of the reasons why Kathiawar embroidery did not fetch sustainable income for the artisans. Thus, thought was given in the direction to develop product that was not available in this embroidery and add on to existing categories that can capture the market segments and give handsome profits to those talented artisans. In agreement with advisors, the researcher determined to develop items that were fall in might fulfill the study's objectives based on a market analysis of the available Kathiawar embroidered products. The researcher developed paper models to explore the shapes and look of the product that was shortlisted and would be developed for the market. Selection of products for different market segments based on highly favoured products by a particular segment or consumer was shown in tabular form (Table 3.3)

**Table 3.3:** Selection of products for the market segments

Sr. No	Market segment	Product Category
1.	Handicraft Retailers	Basket and Batwa
2.	Interior Designer	Lampshade and Chandelier
3.	Corporate	Travel pouch and pen stand
4.	NGO	Tote bag, Pot covers, Clutch, and Sling bag
5.	Academic institutions	File folder and bookmark

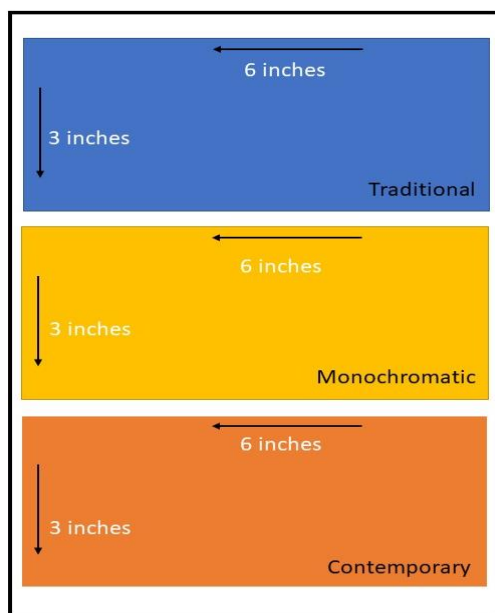
### 3.4.5 Sampling of embroidery design and its colour scheme

*Band Design:* Based on the fundamental information the artisans learned about the Kathiawar hand embroidery, which is classified into floral, geometric, figures, and combinations, the designs were selected, and thirty layouts were created from the preliminary survey acceptance. The designs were selected as bands and arranged as bands themselves/ in Microsoft PowerPoint's 3"x 6" grid along with their colour schemes (Plate). The intended market segment was expected to choose twelve designs for the twelve products with the use of a google form. The highest number of times a particular design was chosen and then pursued by a group formed the basis for the final designs.

*Colour combinations:* Designs were converted into contemporary colours and monochromatic colour schemes to know whether people prefer traditional designs in contemporary colours or not. The wide range of contemporary colour palette was selected from the trend forecasting website of Pantone to replace the traditional colour with contemporary colour (Plate 3.3). The traditional design contains six traditional colours against which closest trending colours of the forecasting agencies were mentioned in the tabular form (Table 3.4).

**Table 3.4:** Selected trend colour and its code against traditional colour

Traditional Colour	Pantone Trend Colour	Colour Code in Hex
Red	Viva magenta	BE3455
Yellow	Spectra Yellow	F7B718
Blue	Blue Atoll	96B3DE
Violet	Sparkling Grape	763374
Green	Shrap green	C6E67A
Orange	Persimmon	F67866



**Plate 3.2 :** Embroidery band layout for single design



**Plate 3.3:** Colour Palette

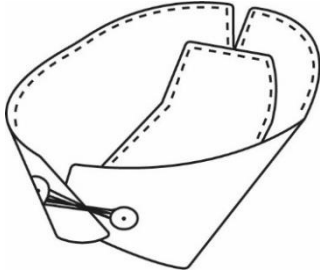
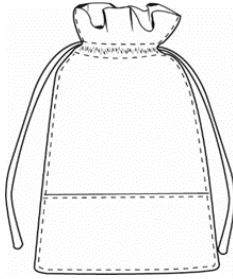
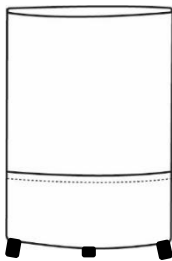
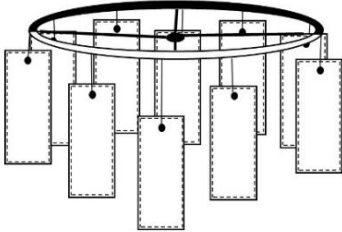
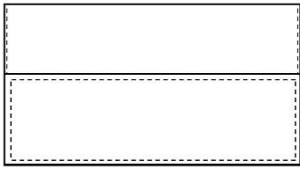
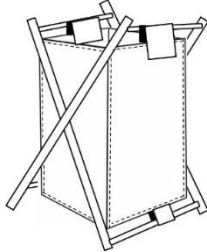
### 3.5. Concept for product design

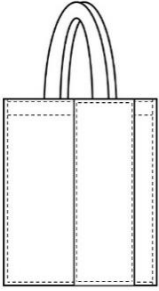
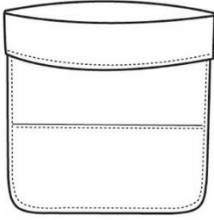
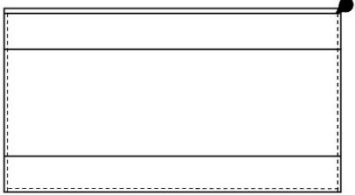
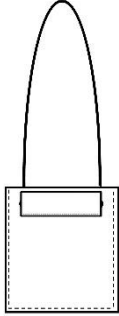

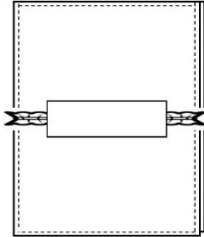
The purpose of product design and development was to give new dimensions to the artisan's traditional skills according to their capacities and will to sustain their own craft

and create scopes for them to preserve their culture to sustain their economy and livelihood. The products were categorized based on the market requirement and were designed accordingly using Kathiawar embroidery in terms of creating embroidered bands of different sizes and preparing their layout using paper patterns. The forecast was referred to develop product colour schemes.

**3.5.1 Product Design:** The layout of each product was made by the researcher in such a way that the fabric wastage would be minimal considering sustainability as a theme, and also considering the artisan's limitations and buyer's requirements.

**Table 3.5 :** Product Illustrations for different market segments

Sr. No.	Kathiawar hand embroidery Designs	
1.	Retailer	
	Basket 	Batwa 
2.	Interior Design	
	Lampshade 	Chandelier 
3.	Corporate	
	Travel Pouch 	Pen stand 

4.	<b>NGO</b>	
	<b>Tote bag</b> 	<b>Pot cover</b> 
	<b>Clutch</b> 	<b>Sling bag</b> 
	<b>Academic Institution</b>	
5.	<b>Bookmark</b> 	<b>File Folder</b> 

### 3.5.2 Material Sourcing

The researcher selected Khadi as a base fabric for the collection of the products as Khadi fabric is often considered a sustainable textile because it is hand-spun and handwoven fabric. Moreover, the production of Khadi fabric provides livelihood opportunities for local artisans and weavers. By supporting the production of Khadi, consumers can contribute to the preservation of traditional skills and techniques that have been passed down through generations. In addition to its sustainability and eco-friendliness, Khadi fabric also has several unique properties that make it a desirable textile. It is lightweight, breathable, and has a natural texture that adds to its aesthetic appeal. The researcher collected the swatches for the base of the product and also collected waste Khadi cut pieces for the construction of products.

### 3.5.3 Construction of products

The product construction details, included generating a precise design or blueprint, deciding size, materials, and building procedures to be employed. The size of the product were shown in the Table 3.6 and for their specification details Table 3.7.

The product constructing concept was based on a sustainable approach that entailed minimum or no waste. As a result, rectangular form paper drafts of each product were created, and placed on the fabric in such a way that the maximum parts of products were extracted from the necessary piece of fabric. This was followed for base fabric for product, embroidery bands and lining material.(Plate 3.4, Plate 3.5, Plate 3.6)

**Table 3.6:** Product Dimensions of the selected products

Product Name	Product Size			Band Size	
	Length (cm)	Width (cm)	Height (cm)	Length (cm)	Width (cm)
Basket	33	13	15	21.5	8
Batwa	18	--	25	18	8
Lampshade	--	50	32	50	8
Chandelier	--	68	61	19	8
Pen stand	13	12	20	15	8
Travel Pouch	24	--	15	22.6	8
Pot Cover	16	--	14	14.5	8
Tote bag	32	--	36	35.5	8
Clutch	16.5	--	20	20	8
Sling Bag	21	--	22	16.5	8
File Folder	7	--	9	21.5	8
Bookmark	29	--	49	8	5

*Paper Patterns:* For the construction of the product researcher developed paper drafts for each product along with seam allowance and were placed on the base fabric in such a way that maximum product pieces of different product could be extracted.

*Specification Sheet:* The spec sheet developed each product includes the product details along with its flat sketch, and the approximate price of the materials was mentioned to get an estimated bill of materials of particular product (Table 3.7).



**Table 3.7:** Sheet Showing the design details of the product construction

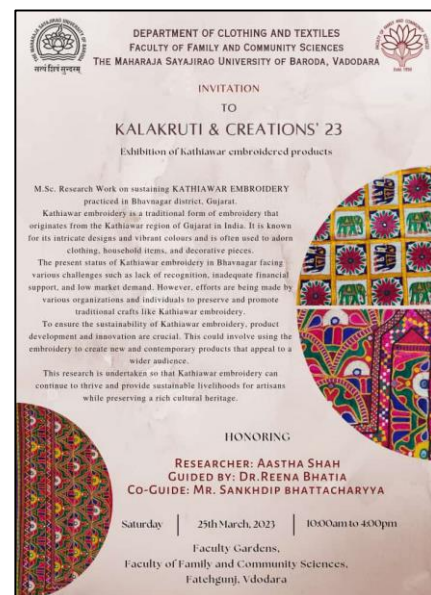
DESIGNER WORKSHEET				
Date:		Style No.:		Flat Sketch
Description:				Front
SIZE OF THE PRODUCT:				
Length:	Width:	Height:		
Color of the product:				
EMBROIDERY DESIGN DETAILS:				
Design No.:	Length:	Width:		
MARKER YARDAGE:				
<b>1. Fabric</b>	<b>Material Type</b>	<b>Cost</b>		
Base fabric				
Lining				
Fusing				
<b>2. Trimmings</b>	<b>Details</b>	<b>Cost</b>		Back
Name				
Size				
Quantity				

*Layout Planning:* The layout of pattern pieces using a 1:10 ratio of the actual measurements on A4 size paper (Plate: 3.5, 3.6 & 3.7) and then constructed the products.

### 3.5.4 Test Marketing

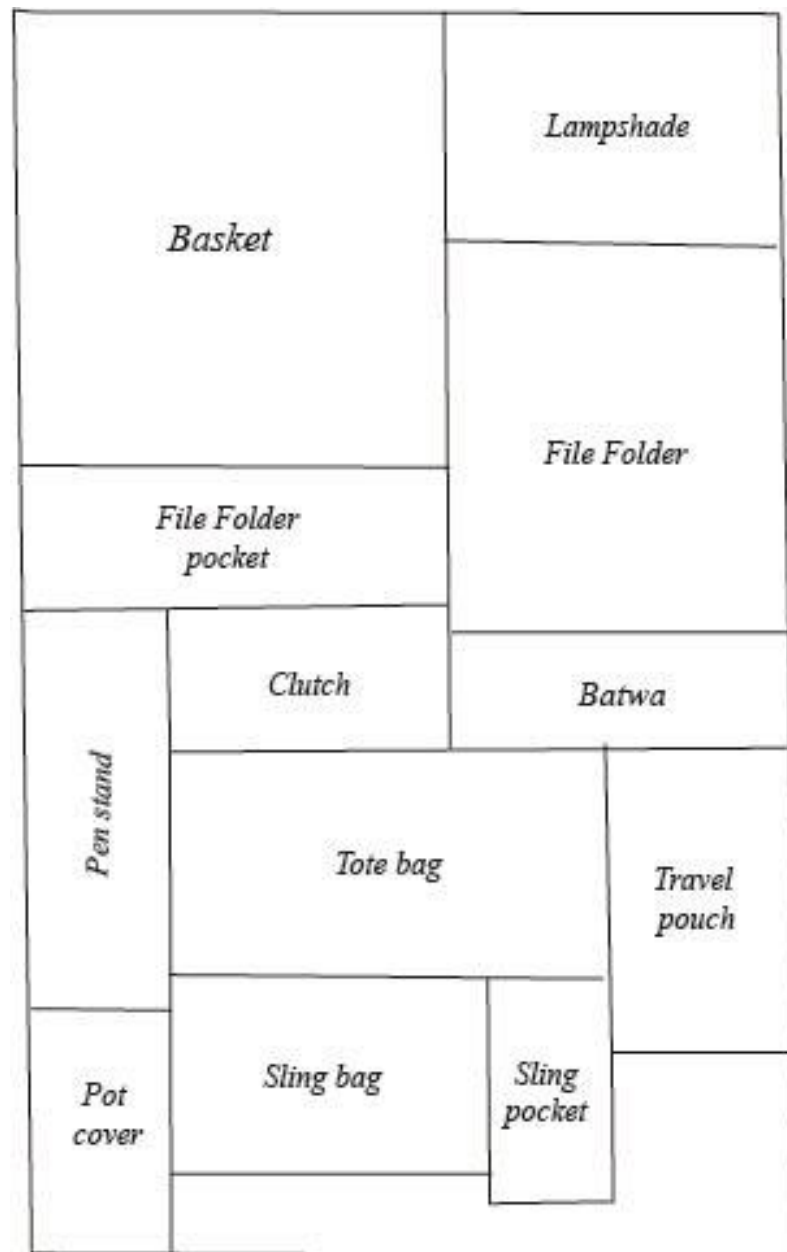
An exhibition of constructed products was carried out in the department for the test marketing where an invite was prepared and sent to the potential buyers contacted from the market survey, different faculties and students. The feedback was taken on the basis of overall aesthetic appearance, Purchase preference and Consumer cost preference.

The data was collected through the feedback board and Google form was analysed and tabulated through percentages. The results were presented in form of a graph and also supported by photographs. Likert scale on a 5-point continuum was used to evaluate the designed products. (Appendix 3)

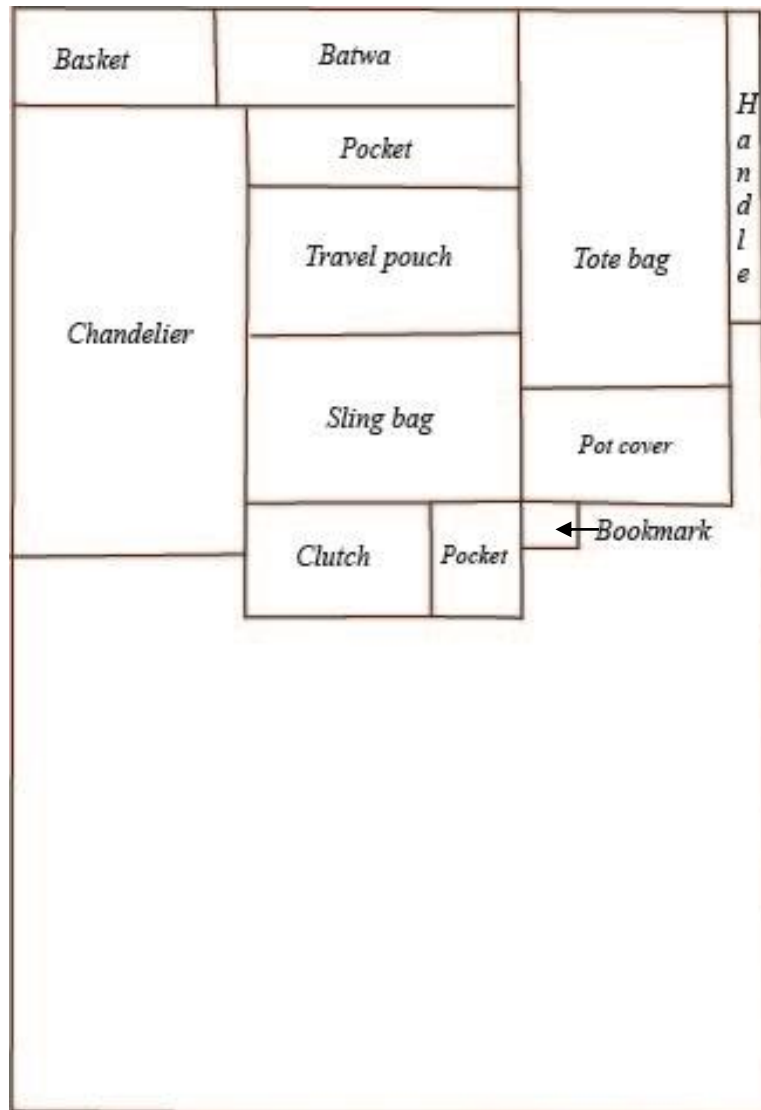
**Plate 3.4:** Invite for the exhibition

Design: 04		Design: 07		Design: 03	
Design: 09		Design: 09		Design: 24	
Design: 04		Design: 05		Design: 11	
Design: 04		Design: 04		Design: 15	
Design: 04		Design: 04		Design: 04	
Design: 10		Design: 01		Design: 26	

**Plate 3.5:** Layout of embroidery bands



**Plate 3.6:** Layout of base fabric for product



**Plate 3.7:** Layout of lining for product

# **RESULTS AND DISCUSSION**

## **CHAPTER IV**

### **RESULTS AND DISCUSSION**

The research was conducted concurrently by another researcher too in the same locale but with different objectives. The relevant primary data collected simultaneously in conjunction with the other research study was useful in fulfilling the respective research objectives. The present study aimed to gain an understanding about the present status of Kathiawar embroidery in Bhavnagar and address the issue of preserving the craft and take steps towards its sustenance through product development. The researcher attempted to connect the market and the artisan by producing products for the selected market segments based on their needs and the current handicraft market.

The research was carried out in three stages. The first phase involved gathering information regarding the present status of Kathiawar embroidery as well as the socio-economic status of the artisans. The second phase involved gathering information about possible buyers and the Kathiawar embroidery market. The third phase involved product design and development, followed by test marketing.

The results obtained are presented under the following sub-headings:

#### **4.1 Documentation of the present status of Kathiawar embroidery and its artisans**

##### **4.1.1 Present status of the embroidery**

##### **4.1.2 Present socio-economic status of the artisans**

#### **4.2 Market analysis**

##### **4.2.1 Market survey and Profile of potential buyers**

##### **4.2.2 Selection of products**

##### **4.2.3 Selection of design for each category**

#### **4.3 Design and develop prototypes**

##### **4.3.1 Specification and dimension of pattern pieces**

##### **4.3.2 Prototype Development**

##### **4.3.3 Test Marketing of the developed prototypes**

#### **4.1 Documentation of the present status of Kathiawar embroidery and its artisans**

This study was carried out in Adapur village in Palitana Taluka. The researcher visited 20 households and interviewed the artisans in person.

On the preliminary visit, the researcher interviewed artisans in Bhavnagar city. The artisans belonged to the *Lewa Kanbi* community and were solely doing this craft for their daughters and relatives, or as a hobby. The researcher saw that they were using traditional embroidered motifs on cotton textiles with acrylic threads in contemporary colours. On enquiry it was revealed that artisans in Bhavnagar city were uninterested in pursuing this skill as a commercial venture since they were well-established and lived in a joint household where they could not devote time to it.

##### **4.1.1 Present status of the embroidery**

The embroidery details have been classified into design and motifs, stitches, materials, colour schemes, and techniques. *Sadu Bharat* was a vernacular word for embroidery done by all the artisans interviewed.

The embroidery covered in the study was an ancestral skill that was passed down from generation to generation. In her early years, the girl learned this embroidery by imitating her mother and grandmother while also practicing it. Out of the selected respondents, the artisans who embroidered for themselves or for NGOs tended to utilize contemporary designs, materials, and colour palettes.

When designing the layout, motif arrangement, and colour combinations, it was seen that the artisans lacked design ideas like proportion and balance. They also did not pursue any formal degrees or training in design. The difference in terms of threads, fabric and motif details (colour combination and placement) in past and present were observed by the researcher.

##### **4.1.1 (a) Motifs used**

As the decorations from the artisans' collection were analysed, it became evident that they were combining modern designs with royal historical motifs, which were often organized as borders, whether the object was for clothing or home decor. A distinguishing quality of this embroidery is the size of the motifs, which were noticed to be larger than in Kutchi embroidery.

In an embroidered article, usually the motif arrangement took the shape of a rectangular grid or band. Many motifs representing various deities, as well as elements of nature including trees, flowers, animals, and geometric forms were employed. A theme or design was created by combining two distinct types of motifs and is referred to in local terms such as *angdapopat*, *sikalpurna*, *hathigoti*, etc.

The floral motif, which comprises of *butt mogro* (Jasmine), *phul / goti* (flower), *kevda* (leaves), and *vel* (creepers), was inspired by nature, and the many ways in which it was presented depended on the creativity and artistic ability of the artisan. The analysis revealed that while traditional motifs are still utilized today, but the look in terms of colour scheme and thread quality had a drastic difference on the embroidery appearance. (Plate 4.1)



(a) Past



(b) Present

**Plate 4.1: Butt Mogro**

Another motif is *phul*, which depicts a flower that is pronounced '*Goti*'; occasionally, the petals have a geometric form. This motif is commonly utilized with figurative motifs such as animals like elephant; such a combination was named '*Hathigoti*'. The *Goti* was put in the center of a square, and the *Kevda* motif, which represents flower leaves, was put in each of its four corners.

Because of its distinctive arrangement, the artisan managed to capture the entire bloom in a single square. It was observed that artisans were introducing new designs to cater to contemporary tastes,



(a) Past



(b) Present

**Plate 4.2: Goti**



however, in the process, the artisans were losing touch with their traditional roots in the modern-day practices. Though, the new designs would have an aesthetical appeal, it failed to represent any traditional element. (Plate 2:).

Another motif that was employed was *vel*, which portrays the arrangement of leaves, stems and flowers. The motifs of the old pieces perceived during field visit were seen to be incorporated as a border. However, there was no direct portrayal of the traditional features, hence these motifs were understood to be stylised. The researcher observed that artisans' abilities to observe, imagine and draw were closely correlated with stylization. The picture below depicts the stylization adopted by the artisans (Plate 3).



(a) Past



(b) Present

**Plate 4.3: *Vel***

*Limbodi soto* was another classic motif used as borders in antique products that added beauty since it was stitched in varied colours (Plate 4 ). This motif is called *limbodi* because it was inspired by the fruit of the Neem tree, which is highly revered for its medical characteristics and is often used in ancient Ayurveda medicine to heal many illnesses. The researcher found this motif to be drawn in a more stylized variation in terms of arrangement and colour combination as compared to the original version.

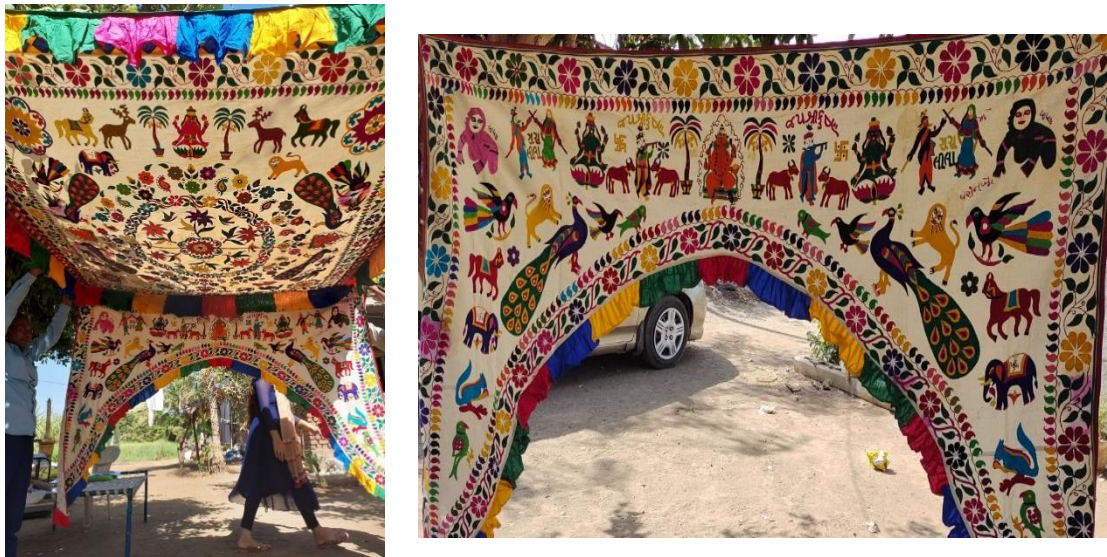


(a) Past

(b) Present

**Plate 4.4: *Limbodi***

Gods, goddesses, birds and animals were among the figurative motifs. Due to the community artisans' devotion to Krishna, they embroidered motifs such as *Bal Gopal*, *Radha Krishna*, and *Gopi Kannha Raas*. An embroidered object known as the *Ganesh Sthapana*, to which the bride and groom devote adoration features, a depiction of Ganesh embroidery along with portrayal of animals such as elephants, tigers, deer, rabbits, horses, as well as birds like peacocks and parrots. Figurative themes were perceived in the present as being more complicated and challenging to implement than simpler designs. It is possible that many women lacked the time, means, or skill necessary to produce complex figurative artwork. Furthermore, the researcher noticed that geometric or floral designs were more frequently employed since they were seen as more visually pleasant and adaptable.



**Plate 4.5:** Traditional Mythological, animal and bird



**Plate 4.6:** *Hathi Goti*



Geometric motifs such as *pandi*, *sikal*, *adadhiya*, *khajoro*, *zarmarwel*, *kodi phul*, *kachh bavadiyo*, and *watka-vel* were prominent in Kathiawar embroidery. The *adadhiya* and *khajoro* were used to distinguish and frame other motifs. *Adadhiya* appeared to be a half-filled box that created a checkerboard pattern in repetition (Plate 4.7). *Khajoro* was a herringbone stitch, fully filled, half-inch border. In most traditional articles, *Pandi* was a triangle motif put on the outside border. Depending on the product size, the motif ranged from one to one and a half inches in size. *Sikal purna*, was used as a border and had a size range of two inches. The *purna* motif was inspired by the shells and was placed around the *sikal* to form *kodiya goti* design. (Plate 4.9) .



(a) Past



(b) Present

**Plate 4.7: Adadhiya**



(a) Past



(b) Present

**Plate 4.8: Pandi**



(a) Past



(b) Present

**Plate 4.9: Sikal kevda**

Other popular geometric motifs of Kathiawar embroidery which were mentioned previously were used as a complete block and placed in a grid formation.

**Kodiphul** – It was a arrangement of triangle and square along with mirror which combined to form *Kodi phul*. The whole motif was about three by three inches of square and it was framed by *khajoro*. (Plate 4.10)



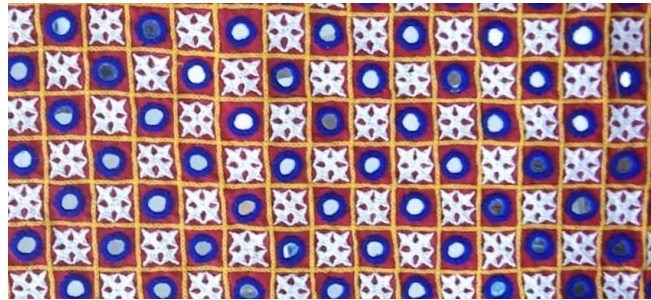
(a) Past



(b) Present

**Plate 4.10:** *Kodiphul*

**Kachh Bavadiyo** – This motif was used as a border and has similarities with Kutch embroidery, but it differs in size and position, as the *bavadiyo* in Kutch embroidery was smaller and placed very close to each other, whereas in Kathiawar embroidery the *bavadiyo* was placed in a square which is finished with stem stitch. Here the *kach* is finished with buttonhole stitch. In Kutchi embroidery, the *Kach* is completed with two to three chain stitches.



(a) Past



(b) Present

**Plate 4.11:** *Kachh bavadiyo*

**Watka- vel-** This motif was created by arranging *adakhadi* and *sikal*. *Adakhadi* was a wave-shaped border on both sides of a square with *sikal* in the middle. *Sikal* was a circular motif with a mirror inserted in the center which was first finished with a buttonhole stitch and then herringbone stitch was used to fill outer circle which is called *sikal*. The *watka-vel* motif was inspired by the utensil *watki* (bowl).



(a) Past



(b) Present

**Plate 4.12:** *Watka-vel*

#### 4.1.1 (b) Stitches Used

The stitch used for Kathiawar embroidery in majority of the samples seen were motif is herringbone stitch. This stitch is used to fill the whole area of the motif. Hence embroidery using herringbone was locally called '*sadu bharat*'. Other stitches used were *amdo tako* (stem stitch) and *sakadi* (chain stitch) to outline the motifs, *gaaj tako* (buttonwhole) stitch to finish the mirror, *jhavla tako* (couching on open stain stitch) which was appearing in the form of rice grain and used as a border of half an inch which was framed around the motif or between two motifs. Lastly *sarvadiya tako* (double cretean stitch in combination with running stitch), this stitch also used as a frame around the motif



**Plate 4.13:** *Sarvadiya tako*



**Plate 4.14:** *Jhavla tako*



#### 4.1.1 (c) Materials Used

##### i. Fabric

The embroidery fabrics were chosen based on the products to be embroidered and the sort of embroidery to be done. The artisans utilize a single piece of cloth for embroidery; one layer serves as a lining material to conceal the embroidered threads and support the embroidery. According to a survey of the literature and observations conducted on the ground, it was determined that historically speaking, people have been using handspun fabric for a very long time. Also, the traditional artwork displayed by the artisans is produced entirely of this fabric, with no lining material employed, making it a highly durable fabric. Yet, because machine-made textiles like cotton, polyester, velvets, and mixes are more affordable nowadays, it has been seen that consumers are utilizing them.

It was noted that NGOs utilized a variety of fabrics, but in the majority of cases, they used muslin, which they purchased from the Palitana region, for both lining cloth and for embroidering.

##### ii. Threads Used

To embroider the items, threads were the primary raw material employed. For long years, *sefa dora*, which means cotton thread, was utilized. Throughout time, *reshmi dora*, or untwisted silk thread, took its place. They had to quit using *sefa dora* since it used to bleed and was easily damaged. To combat this, they initially used *reshmi* threads, but today they use acrylic threads since they don't bleed and are more affordable.



**Plate 4.15:** *Different types of threads*

The researcher observed that craftsmen who embroider with acrylic threads look less attractive and less finished than those who embroider with cotton threads. NGOs supply cotton (anchor) and cotton-polyester blend threads for a commercial base so that more finished embroidered products may be produced.

### iii. Mirror Used

The second most popular material was mirror which was locally named Kachh, amongst artisans. The craftspeople were buying it in grams at the Palitana market. They were offered in various sizes. Artisan use to first finish the Kachh with buttonhole stitch and then the embroidery use to be done.



The research concluded that actual mirrors were utilized in the early time period, but that plastic sheet mirrors are currently used in their replacement.

**Plate 4.16:** *Kachh* (plastic mirrors)

The artisan claimed that the reason for the shift in mirrors was that consumers preferred plastic mirrors since they were lighter, easier to maintain, and more reasonably priced.

### iv. Laces used

The laces were composed of cotton fabric with machine-drawn geometric motifs. It was available in many colors, including green, yellow, red, and blue on which the design was made in white colour. In addition, ready-made multi colour laces were utilized to



(b) Fabric lace



(a) Ready-made lace

**Plate 4.17:** Laces used to finish the product

### v. Needle used

Another important material for practicing embroidery was needles. It was shown that many respondents were not familiar with the nomenclature of different types of needles. During the research, it was observed that the artisans were using sharp needles with the seven, eight and nine numbers. Outlines were first embroidered to



**Plate 4.18:** Needle

begin embroidery. The mirror would be embroidered first, then the motif, if it were positioned in the middle of the design. Afterward, the borders and motif filling were done. After that, the outermost line of motifs and borders were embroidered with a chain or back stitch.

#### **4.1.1 (d) Technique Used**

The embroidery technique began with the preparation of the foundation cloth on which the tracing of the motif or design would take place. This process is called '*chappai kaam*' in the local language. To trace the motif, it was first sketched on paper and then transferred to butter paper, on which the design was punched with a pin-wiser.

Method of tracing: To trace the design onto the fabric following steps were followed by the artisan:

Step 1: Made a solution of Kerosene + White powder (for dark colour fabrics) or Kerosene + Black powder (for light colour fabric) in a 70/30 ratio.

Step 2: With a pin, fix the butter paper to the cloth where the design was to be traced.

Step 3: The solution was applied using a little piece of cloth rubbed on butter paper, which caused the design to be traced on the fabric with the help of holes.



**Plate 4.19:** Tracing design on Butter paper



**Plate 4.20:** White Powder



**Plate 4.21:** Pin



**Plate 4.22:** Solution



**Plate 4.23:** Traced design



#### 4.1.1 (e) Product made from this embroidery

The two main product categories created by artisans nowadays are clothing and home furnishings. *Coin batwas*, *Khes* (Jain male attire), and *cushion covers* were among the products embroidered for the NGO.

The majority of the artisans were practicing embroidered items for their ownself and for daughter's wedding- dowry set called '*Aanu*'. It was regarded as the ritual to be followed by the community in which artisans embroidered the products which were given to the daughter at her wedding. This dowry set includes clothing and household furnishings including *toran*- hung on the door to welcome guests *kandhi* & *chakla*- a wall piece, *chadar oshika*- bedsheet and cushion cover, *todliya*, *chattriya*, *parda* – door decorating items and *ghagra choli*- skirt and blouse.



**Plate 4.24:** *Oshika* (Unstitched Cushion cover)



**Plate 4.25:** *Parda* (Door



**Plate 4.26:** *Choli* (Blouse)

The products made by the artisans for NGO were cushion covers, coin batwa and *khes*- male attire worn by Jain community people.



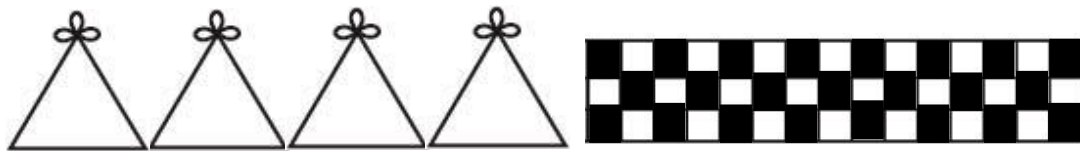
**Plate 4.27:** *Coin batwa*



**Plate 4.28:** Cushion Cover

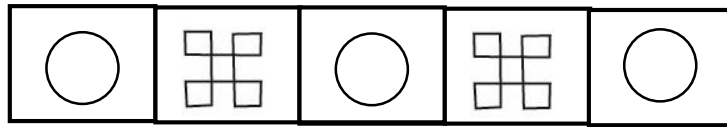


**Plate 4.29:** *Khes* (Cloth wrap around the body)

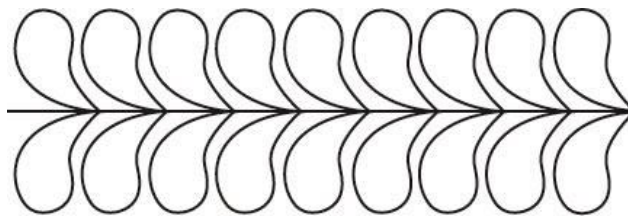


a. Pandi

b. Adadhiya

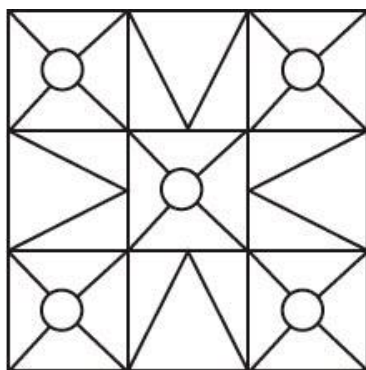


c. Kachh bavadiyo

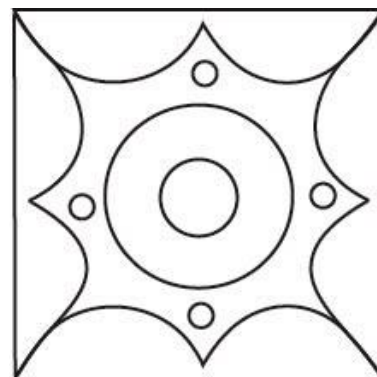


d. Limbodisoto

**Plate 4.30: Borders**

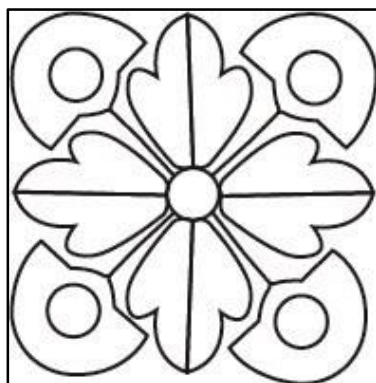


a. Kodi phul

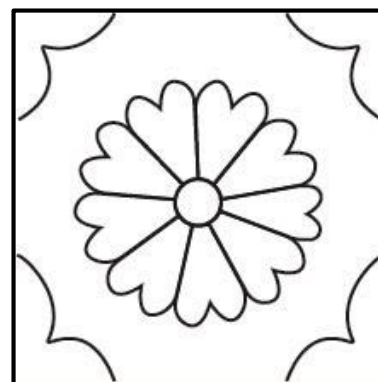


b. Sikal purna

**Plate 4.31: Geometric**



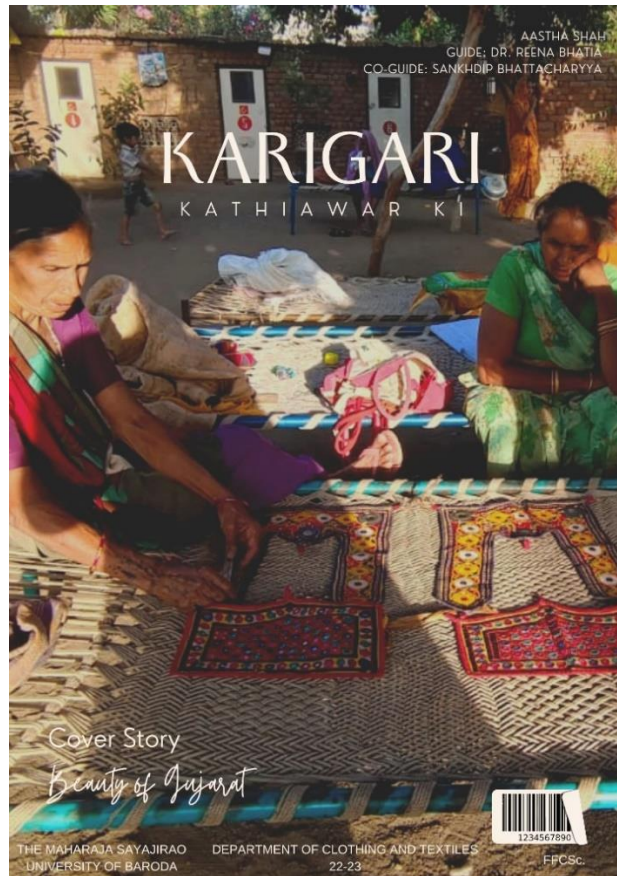
a. Butt Mogro



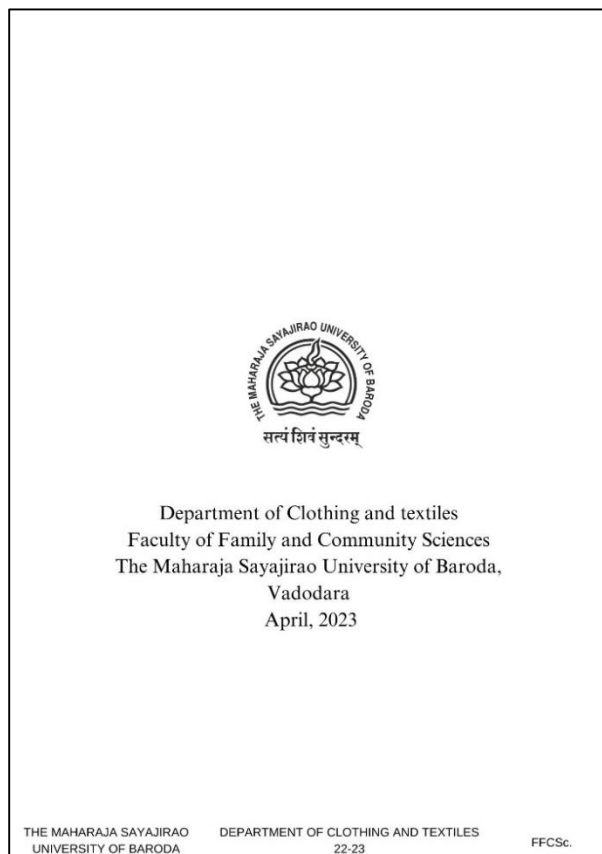
b. Goti

**Plate 4.32: Floral Motifs**





**Plate 4.33:** Front page of embroidery catalog



**Plate 4.34:** End page of embroidery catalog

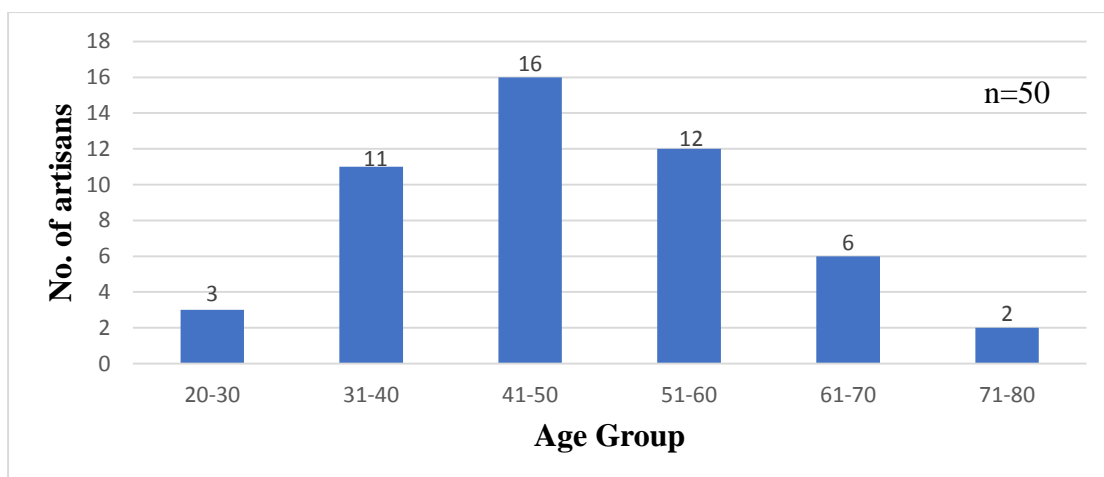
#### 4.1.2 Present socio-economic status of the artisans

The present field research seeks to examine the socio-economic analysis of the artisan community, which plays an important role in cultural preservation in this region. Based on the results of this survey, it can be stated that the socio-economic situation of the Koli community is affected by a lack of financial and technological support. This research study takes into account some of social economic and demographic elements. The age of the respondents, literacy status, economic level, class and caste status, and residential circumstances are some of the fundamental characteristics considered in this study.

The research included 50 artisans, all of whom were members of the Koli community. Importantly, all the artisans were female, and they had grown up learning this technique from their mothers or grandmothers.

##### 4.1.2 (a) Age group distribution

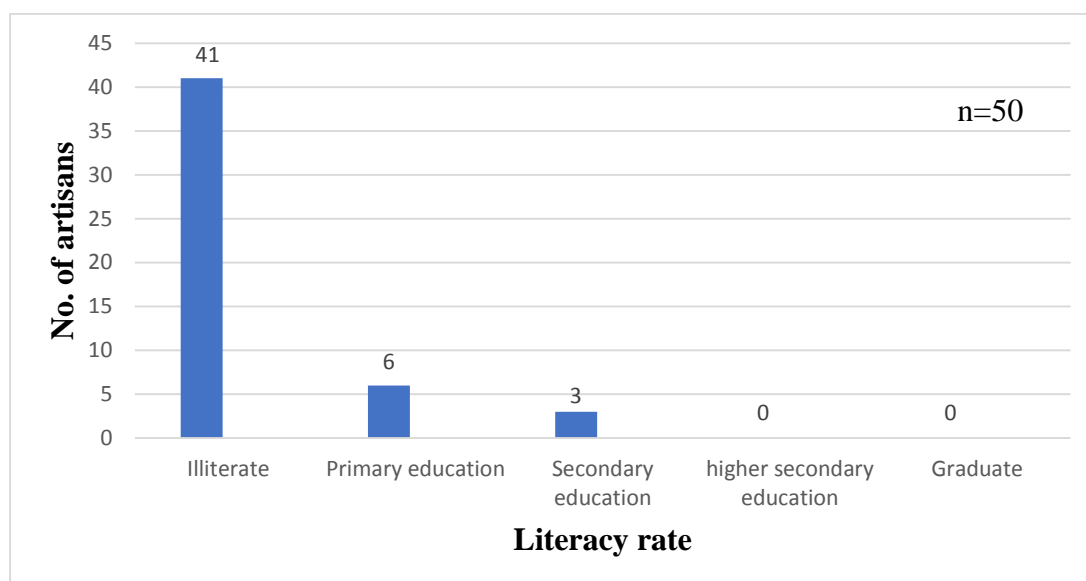
According to an analysis of the information on age, the artisans' ages ranged from 20 to 80 years old. For simplicity of understanding, the data were divided into seven groups, typically with a range of years between them. According to Graph 4.1, the bulk of artisans were found in 41-50, followed by 50-60 age group. It was observed by the researcher that a relatively small percentage of artisans fall into the last group due to vision and other physical issues experienced by an artisan in this age group, which causes them to discontinue practicing their craft.



**Graph 4.1 Age group distribution of the artisans**

#### 4.1.2 (b) Distribution of Educational Qualification:

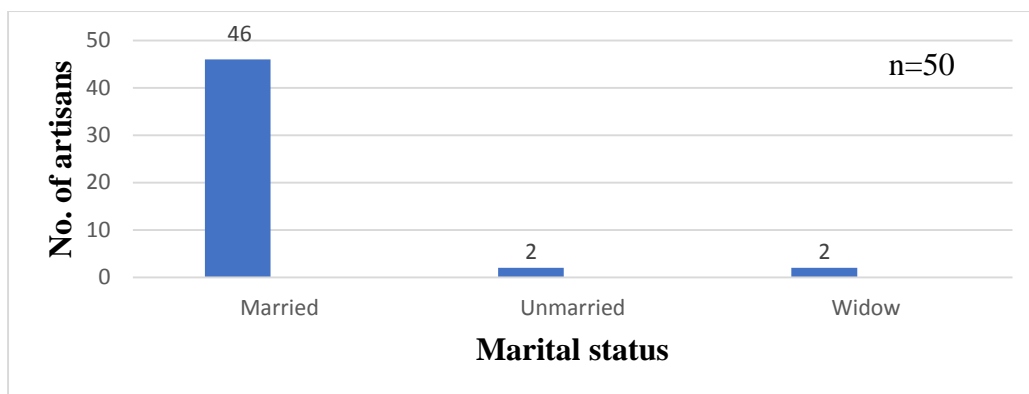
According to the research, the majority of artisan responders were illiterate or had only completed basic education as shown in Graph 4.2. Literacy rates in secondary and high school were negligible. Graduate respondents account for 0 per cent of the total. The researcher discovered that education was an important indication for analyzing a community's socioeconomic existence since an educated individual can quickly adopt multiple abilities that boost their output efficacy.



**Graph 4.2 Distribution of the artisans as per their literacy rate**

#### 4.1.2 (c) Marital status of artisans

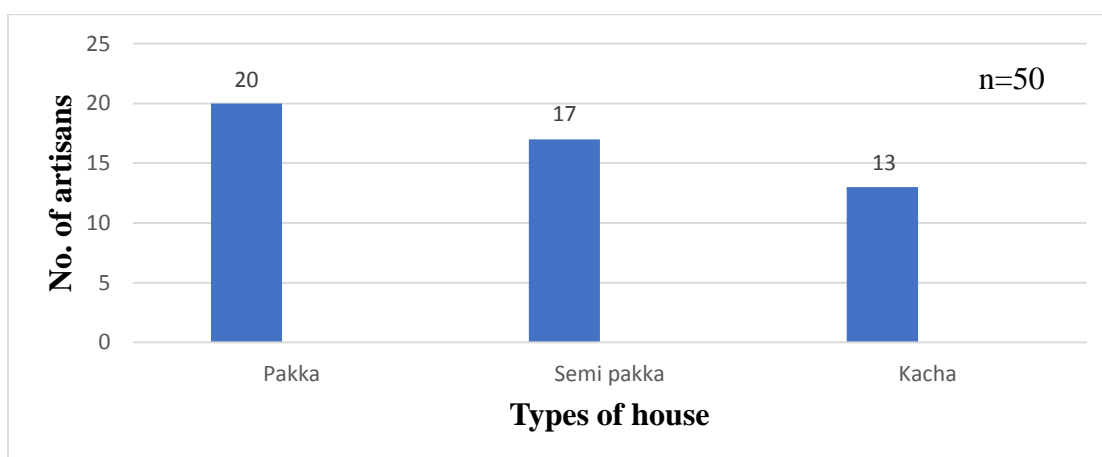
According to the graph 4.3, below, the majority of respondents were married, with the unmarried accounting for a negligible percentage. It was discovered during data collecting that, out of 50 craftsmen, the majority of participants wed between the ages of 15 and 20 due to their custom of having early marriages. The researcher observed that early marriage practice filled women with a lot of commitments, which prevented them from practicing the craft for years, and this was recognized as one of the reasons why the craft was stopped practicing.



**Graph 4.3 Distribution of marital status**

#### **4.1.2 (d) Nature of house of the respondents:**

According to data collection, 100 percent of artists owned their own home. The houses were classified as follows: Kachha houses, semi pakka and pakka houses. According to graph 4.4, out of the total 50 chosen artisan, 26per cent lived in Kachha houses, while 34per cent lived in semi-pakka and 40per cent lived in pakka housing units. Semi-pakka houses had simple square chambers, but the roof was formed of mud bricks in the shape of a bent pyramid.



**Graph 4.4 Distribution of artisans as per their house hold type**

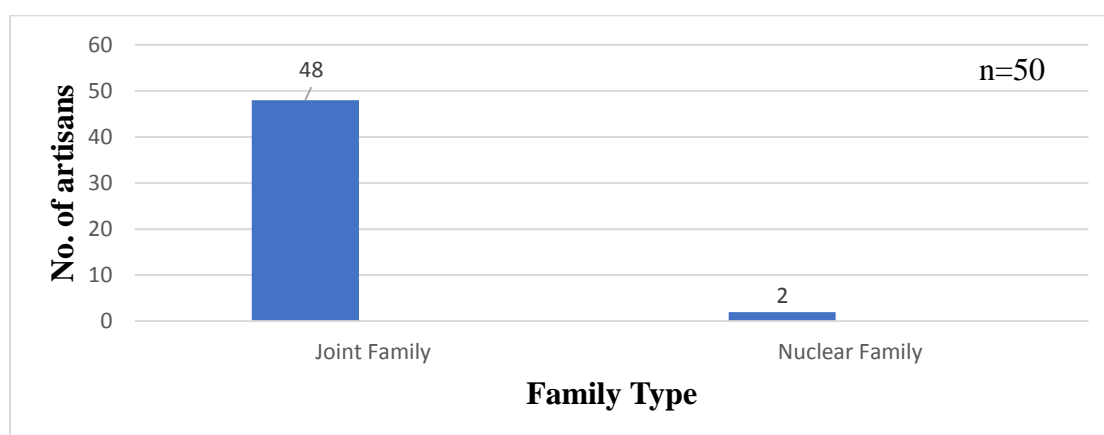
#### **4.1.2 (e) Consumer durable possessed by the artisan:**

Vehicles and technological devices such as TV, transistor phone, and smart phone were catagorised among the durable commodities owned by the artisans. According to the data collection, 40per cent artisans owned a two-wheeler vehicle, 74per cent owned a

television, 58per cent had a smartphone, 84per cent owned a transistor, and 4per cent did not own any electronic devices. The researcher observed that while artisans had vehicles and other technical devices, they were not trained to operate them.

#### **4.1.2 (f) Family types of the respondents:**

The majority of respondents (84per cent) come from joint families and work collaboratively with NGO and in diamond industry. The researcher observed that in this joint family of responders, income potential, work opportunities, and skill development opportunities are easier to achieve. A small percentage of responders (16per cent) live in a nucleated family. According to research 44 the total 50 respondents owned cattle also to meet their household's dairy product demands. They consider it as a part of family.

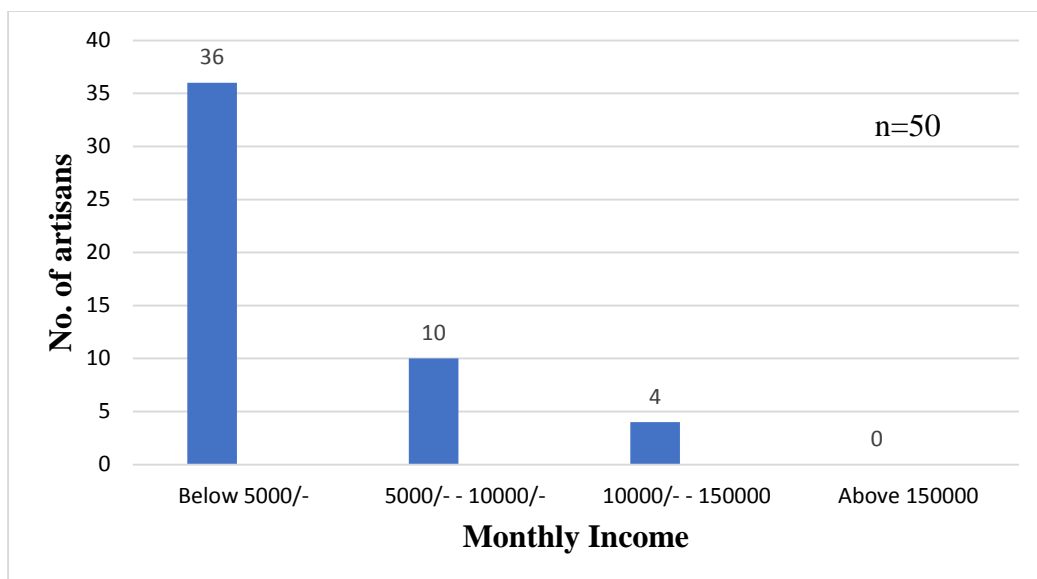


**Graph 4.5 Distribution of artisans as per their family type**

#### **4.1.2 (g) Economic status of the respondents:**

According to researcher, this is a major factor in figuring out the respondents' socioeconomic status. A significant percentage of the respondents 58percent are artists who fall within the salary range of 5000–10,000. Just 22per cent of respondents had a monthly salary of between 10,000 and 15,000. 14per cent of the population belongs to the below 5000 income bracket, which is quite concerning. Hence, the respondents' financial situation is not very good in this regard. According to observations, appropriate knowledge of government schemes and support would help the artisans in numerous ways.





**Graph 4.6 Distribution of artisans as per their economic status**

#### **4.1.2 (h) Artisans collaborated with NGO**

According to the study, these artisans do not make any money from their craft since they only ever do it for their relatives and daughter's Aanu. However, during the past two years, artisans have begun working with NGOs and making Rs. 1,000/- to Rs. 2,000/- per month. While 86 per cent of artisans routinely collaborated with NGOs, just 14per cent worked whenever it was convenient for them(Table: 4.1)

**Table 4.1: Artisans and NGO collaboration**

Sr. No.	Working with NGO	Frequency (f)	Percentage(per cent)
1	Regularly	43	86per cent
2	Occasionally	7	14per cent



a. Interior of the house



b. Cooking habits



c. Family of the artisan



d. Kaccha house



e. Koli women's habits



f. Roads of the village



g. Cattel at artisan's house

**Plate 4.35: Artisan's living**

## 4.2 Market analysis

### 4.2.1 Market survey of hand embroidered products and potential buyers

### 4.2.2 Selection of products

### 4.2.3 Selection of design for each category

## 4.2 Market analysis

### 4.2.1 Market survey and Profile of potential buyers

The researcher conducted a market study of hand-embroidered products in Vadodara city and the NGO of Palitana with whom the researcher had collaborated. Through market study researcher identified the potential buyers their profiles were developed as a 'buyer's directory' (Annexure 1). The study entails conducting research and assessing different aspects of the market for hand-embroidered products. Here are some of the important aspects that were taken into account:

**Demand:** The first stage in market study would be to identify the product demand in the city for hand-embroidered. The researcher surveyed retailers and artisans who attended city exhibitions such as Hastkala, Craftmela and Aapno-varso, and analysed that Kathiawar hand embroidered products are not available in the market except two retailers from which one is from migrant of Bhavnagar and developing Kathiawar hand embroidered product but lack of market response was observed, rest everywhere machine-embroidered products of Kathiawar embroidery were available. To determine the market reach of Kathiawar embroidery, the researcher studied eleven stores to analyze demand in the same sector and another twenty in diverse sectors such as interior designers, corporates, NGOs, and academic institutions. Product demand, according to respondents and were shown in Table 4.2.

**Competition:** It is necessary to examine the amount of competition in the market. The researcher explored market sectors that sell and acquire comparable products, examining their pricing practices and marketing strategies. In the same sector, it was analysed that most shops created their websites to appeal to a large number of clients. Knowing how the market would react, the retailer will advise the artisan to develop new products or design variations to stay competitive.

**Pricing:** The review claims that pricing is an important consideration. The researcher examined pricing strategies and conducted a survey to determine what consumers were prepared to pay for the hand-embroidered products they desired shown in Table 4.2.

**Table 4.2 : Product and price demand by potential buyers**

Sr. No.	Name of the category	Name of Product	Price Points
1.	Retailer	Handbags (Utility Bag), File folders, Mobile pouches Utility baskets and Batwas	600/- to 800/-
2.	Interior Designer	Home Furnishing, Lampshade, Chandeliers, Photo frames and Wall Piece	5000/- to 7000/-
3.	Corporate	Shawls, Stoles, Cards, Diaries, File Folders, Pen stands, Pot /Jar covers, Travel pouches	500/- to 600/-
4.	NGO	Cushion Covers, Stationery pouches, Pot covers, Bottle covers, Tote bags, Clutch and Sling bag	400/- to 500/-
5.	Academic Institution	Bookmarks, File Folder Sashes, Badges, Pot covers, Diaries, T-shirts, and Document holder	300/- to 400/-

**Market trends:** According to the analysis, market trends have a big influence on the demand for hand-embroidered products. The respondents revealed that sustainable and ethical fashion was becoming more popular, which might create a market opportunity for handmade products. On the basis of the respondent's requirements, researcher observed the market trends in terms of product design, materials and colour combinations. As a consequence, the researcher opted to create a product using eco-friendly cloth, and the Kathiawar embroidered pattern was transformed into a monochromatic color scheme and a modern color scheme by studying Pantone 2023, which was also preferred by the target market. The respondents supplied product images along with their requirements, which are presented below. (Plate 4.36 and 4.37).



**Plate 4.36:** Product preference by retailers



**Plate 4.37:** Product preference by interior designers

#### 4.2.2 Selection of products

Following a market analysis, the researcher narrows the range of viable products, focuses on those that best suit budgetary requirements, were well-liked by your target market, and address any detected market gaps.

For NGO, the researcher chose four items based on various market demands from Vadodara and Palitana, while for other market segments, two products from each category were chosen, as stated in Table 4.3. A product code was also provided by the researcher for the collection to be created by following initials of the particular segment and numerical.

**Table 4.3:** Selected product for the market segments

Sr. No.	Name of the Category	Name of Product	Product Code
1.	Retailer	<ul style="list-style-type: none"> <li>Utility baskets</li> <li>Batwas</li> </ul>	R01 R02
2.	Interior Designer	<ul style="list-style-type: none"> <li>Lampshade</li> <li>Chandeliers</li> </ul>	I01 I02
3.	Corporate	<ul style="list-style-type: none"> <li>Pen stands</li> <li>Travel pouches</li> </ul>	C01 C02
4.	NGO	<ul style="list-style-type: none"> <li>Pot covers</li> <li>Tote bags</li> <li>Clutch</li> <li>Sling bag</li> </ul>	N01 N02 N03 N04
5.	Academic Institution	<ul style="list-style-type: none"> <li>Bookmarks</li> <li>File Folder</li> </ul>	A01 A02

#### 4.2.3 Selection of design for each category

For a revival of the old traditional motifs, the researcher created 30 designs for the responders utilizing Kathiawar-embroidered ancient products from the primary source. The researcher experimented with colour schemes and kept the design and motif of the



Kathiawar embroidery as it is to determine the target group's preference towards traditional design and for traditional, contemporary, and monochrome colour schemes. This extensive color palette was created by researching Pantone's 2023 colour trend and using Corel Draw program to create color combinations.

The design which was highly ranked by the particular target group was selected for the product of that category (Table 4.3)

#### 4.2.3 Selection of design for each category

For a revival of the old traditional motifs, the researcher created 30 designs for the responders utilizing Kathiawar-embroidered ancient products from the primary source. The researcher experimented with colour schemes and kept the design and motif of the Kathiawar embroidery as it is to determine the target group's preference towards traditional design and for traditional, contemporary, and monochrome colour schemes. This extensive color palette was created by researching Pantone's 2023 colour trend and using Corel Draw program to create color combinations.

The design that was highly ranked among overall respondents were mentioned below:



a. Design No. 01



b.Design No. 03



c. Design No. 04



d. Design No. 05



e. Design No. 07



f. Design No. 09



g. Design No. 10



h. Design No. 11



i. Design No. 15



j. Design No. 22



k. Design No. 24



l. Design No. 26

**Plate 4.38:** Selected embroidery designs















The design which was highly ranked by the particular target group was selected for the product of that category (Table 4.3)

**Table 4.4:** Design selected for each category (n=31)

Category	Design No.	Ranking		Colour Harmony
		f	per cent	
Retailers	1	28	90.32	Traditional
Retailers	10	22	70.96	Traditional
Interior designers	3	26	83.88	Contemporary
Interior designers	4	19	61.29	Monochromatic
Corporate	15	21	67.74	Traditional
Corporate	22	16	51.61	Contemporary
NGO	7	28	90.32	Contemporary
NGO	9	22	70.96	Traditional
NGO	24	19	61.29	Traditional
NGO	26	16	51.61	Traditional
Academic Institution	11	26	83.88	Traditional
Academic Institution	5	25	80.64	Traditional



**Table 4.5:** Images of the designs for the category

Sr. No.	Kathiawar hand embroidery Designs	
1.	Retailer	
		
2.	Interior Design	
		
3.	Corporate	
		
4.	NGO	
		
		
		
5.	Academic Institution	
		

## Design and develop prototypes

### 4.3.1 Specification and dimension of pattern pieces



#### 4.3.2 Prototype Development

#### 4.3.3 Test Marketing of the developed prototypes

### 4.3 Design and develop prototypes

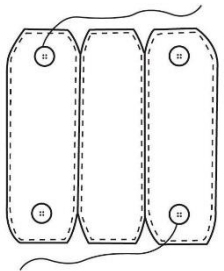
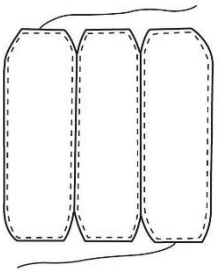
The concept of the product was towards a sustainable approach, therefore, the developed products using Khadi fabric and the embroidery bands was formed which were placed to the products. The layout of each product was made by the researcher in such a way that the fabric wastage would be minimal considering sustainability as a theme, also considering the artisan's limitations and availability of raw materials.

#### 4.3.1 Specification and dimension of the product

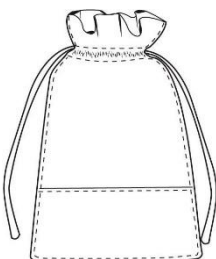
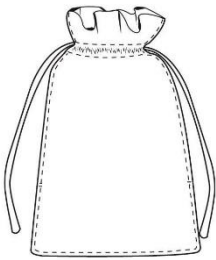
A specification sheet describes the technical details, needs, and specifications for a specific product or project. The purpose was to guarantee that the finished product met the necessary standards and specifications.

Table 4.6 to 4.17 were the specification sheet of each product.

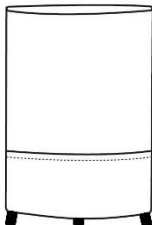
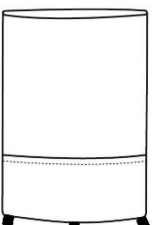
**Table 4.6:** Specification sheet of Utility Basket

DESIGNER WORKSHEET				
Date: 23/03/23		Style No.: R01		<div>Flat Sketch</div> <div></div> <div>Front</div> <div></div> <div>Back</div>
Description: A folding utility basket with embroidery is a multipurpose storage item that may be utilized in many ways. As the name implies, this style of basket can be folded up when not in use, which makes it simple to transport and store.				
SIZE OF THE PRODUCT:				
Length: 33cm		Width: 13cm	Height: 15cm	
Color of the product:		Off white		
EMBROIDERY DESIGN DETAILS:				
Design No.: 01		Length: 21.5	Width: 8cm	
MARKER YARDAGE:				
1. Fabric		Material Type	Cost	
Base fabric		Khadi	40/-	
Lining		Khadi		
Fusing		Canvas		
2. Trimmings		Details		
Name		Button	20/-	
Size		2.5cm		
Quantity		4		

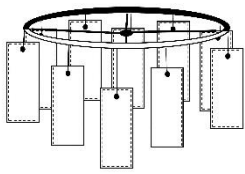
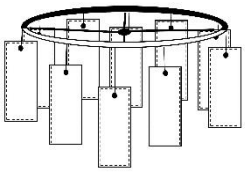
**Table 4.7:** Specification sheet of Batwa

DESIGNER WORKSHEET				
Date: 23/03/23		Style No.: R02		<div>Flat Sketch</div> <div></div> <div>Front</div> <div></div> <div>Back</div>
Description: Batwa is worn around the wrist or held in one's hand. It is a popular accessory for weddings, festivals, and other special occasions. It is frequently used to carry little goods like jewellery, cash, or cosmetics.				
SIZE OF THE PRODUCT:				
Length: 18cm		Width:--	Height: 25cm	
Color of the product:		Off white		
EMBROIDERY DESIGN DETAILS:				
Design No.: 10		Length: 18cm	Width: 8cm	
MARKER YARDAGE:				
1. Fabric		Material Type	Cost	
Base fabric		Khadi	30/-	
Lining		Cotton		
Fusing		--		
2. Trimmings		Details	Cost	
Name		String	10/-	
Size		60cm		
Quantity		1		

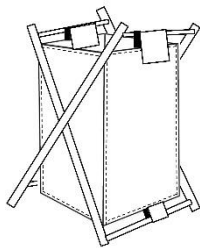
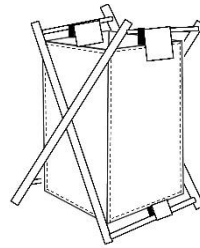
**Table 4.8:** Specification sheet of Lampshade

DESIGNER WORKSHEET				
Date: 23/03/23		Style No.: I01		Flat Sketch
Description: A lampshade is a decorative cover that is used to disperse and soften the light emitted by a light bulb or light source.				 <b>Front</b>
SIZE OF THE PRODUCT:				
Length: --		Width: 50cm	Height: 32cm	
Color of the product:		Off white		
EMBROIDERY DESIGN DETAILS:				
Design No.: 03		Length: 50cm	Width: 8cm	
MARKER YARDAGE:				
<b>1. Fabric</b>		<b>Material Type</b>	<b>Cost</b>	
Base fabric		Khadi	60/-	
Lining		--		
Fusing		Canvas		
<b>2. Trimmings</b>		<b>Details</b>	<b>Cost</b>	
Name		Ring	20/-	
Size		15cm		
Quantity		2		
				 <b>Back</b>

**Table 4.9:** Specification sheet of Chandelier

DESIGNER WORKSHEET				
Date: 23/03/23		Style No.: I02		Flat Sketch
Description: A chandelier is a beautiful light fixture that is usually hanging from the ceiling and has light in the center.				 <b>Front</b>
SIZE OF THE PRODUCT:				
Length: --		Width: 68cm	Height: 61cm	
Color of the product:		Off white		
EMBROIDERY DESIGN DETAILS:				
Design No.: 04		Length: 19cm	Width: 8cm	
MARKER YARDAGE:				
<b>1. Fabric</b>		<b>Material Type</b>	<b>Cost</b>	
Base fabric		Khadi	130/-	
Lining		Khadi		
Fusing		Soft canvas		
<b>2. Trimmings</b>		<b>Details</b>	<b>Cost</b>	
Name		Ring	20/-	
Size		20cm		
Quantity		1		
				 <b>Back</b>

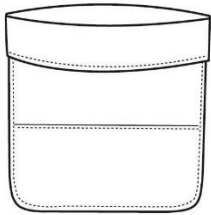
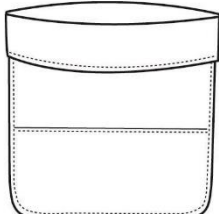
**Table 4.10:** Specification sheet of Pen stand

DESIGNER WORKSHEET				
Date: 23/03/23		Style No.: C01		<div>Flat Sketch</div> <div></div> <div>Front</div> <div></div> <div>Back</div>
Description: A foldable pen stand is a space-saving desk device that holds pens, pencils, and other writing implements.				
SIZE OF THE PRODUCT:				
Length: 13cm		Width: 12cm	Height: 20cm	
Color of the product:		Off white		
EMBROIDERY DESIGN DETAILS:				
Design No.: 22		Length: 15cm	Width: 8cm	
MARKER YARDAGE:				
1. Fabric		Material Type	Cost	
Base fabric		Khadi	40/-	
Lining		Khadi		
Fusing		--		
2. Trimmings		Details		
Name		Velcro	5/-	
Size		5cm		
Quantity		1		

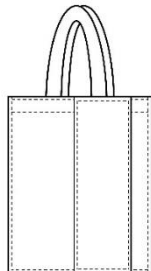
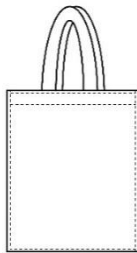
**Table 4.11:** Specification sheet of Travel pouch

DESIGNER WORKSHEET				
Date: 23/03/23		Style No.: C02		Flat Sketch
Description: A travel pouch is used to store and organize personal belongings when traveling.				<div><div></div><div></div><div>Front</div><div></div><div>Back</div></div>
SIZE OF THE PRODUCT:				
Length: --		Width: cm	Height: cm	
Color of the product:		Off white		
EMBROIDERY DESIGN DETAILS:				
Design No.: 15		Length: 22.6 cm	Width: 8cm	
MARKER YARDAGE:				
1. Fabric		Material Type	Cost	
Base fabric		Khadi	50/-	
Lining		Khadi		
Fusing		--		
2. Trimmings		Details	Cost	
Name		Magnetic Button	5/-	
Size		2cm		
Quantity		1		

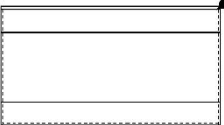
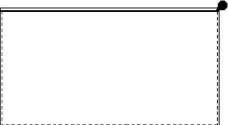
**Table 4.12:** Specification sheet of Pot cover

DESIGNER WORKSHEET				
Date: 23/03/23		Style No.: N01		<div>Flat Sketch</div> <div></div> <div>Front</div> <div></div> <div>Back</div>
Description: A plant pot cover is an effortless way to add aesthetic and uniqueness to a plant.				
SIZE OF THE PRODUCT:				
Length: 16cm		Width: --	Height: 14cm	
Color of the product:		Off white		
EMBROIDERY DESIGN DETAILS:				
Design No.: 09		Length: 14.5cm	Width:8cm	
MARKER YARDAGE:				
1. Fabric		Material Type	Cost	
Base fabric		Khadi	30/-	
Lining		Polyester		
Fusing		--		
2. Trimmings		Details	Cost	
Name		--	--	
Size		--		
Quantity		--		

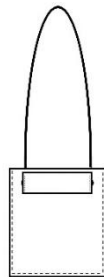
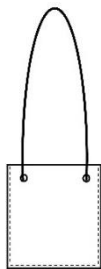
**Table 4.13:** Specification sheet of Tote bag

DESIGNER WORKSHEET				
Date: 23/03/23		Style No.: N02		Flat Sketch
Description: Tote bag is a large and versatile handbag with parallel handles that can be worn over the shoulder or carried by hand				 <b>Front</b>
SIZE OF THE PRODUCT:				
Length: 32cm		Width: --	Height: 36cm	
Color of the product:		Off white		
EMBROIDERY DESIGN DETAILS:				
Design No.: 07		Length: 35.5	Width: 8cm	 <b>Back</b>
MARKER YARDAGE:				
<b>1. Fabric</b>		<b>Material Type</b>	<b>Cost</b>	
Base fabric		Khadi	60/-	
Lining		Cotton		
Fusing		--		
<b>2. Trimmings</b>		<b>Details</b>	<b>Cost</b>	
Name		--	--	
Size		--		
Quantity		--		



**Table 4.14:** Specification sheet of Clutch

DESIGNER WORKSHEET				
Date: 23/03/23		Style No.: N03		Flat Sketch
Description: A clutch, strapless bag meant to be carried in one hand.				 <b>Front</b>
SIZE OF THE PRODUCT:				
Length: 16.5cm		Width: --	Height: 20cm	
Color of the product:		Off white		
EMBROIDERY DESIGN DETAILS:				
Design No.: 24		Length: 20cm	Width: 8cm	
MARKER YARDAGE:				
<b>1. Fabric</b>		<b>Material Type</b>	<b>Cost</b>	
Base fabric		Khadi	30/-	
Lining		Cotton		
Fusing		--		
<b>2. Trimmings</b>		<b>Details</b>	<b>Cost</b>	
Name		Zipper	10/-	
Size		20cm		
Quantity		1		
				 <b>Back</b>

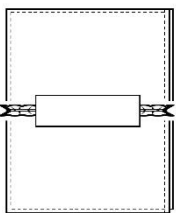
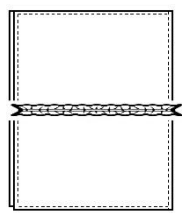
**Table 4.15:** Specification sheet of Sling bag

DESIGNER WORKSHEET					Flat Sketch
Date: 23/03/23		Style No.: N04			
Description: A sling bag, a crossbody bag or shoulder bag, is a form of bag with a single strap that is meant to be worn across the body or on one shoulder. The strap is adjustable to use as closure as per wearer's taste.					 <b>Front</b>   <b>Back</b>
SIZE OF THE PRODUCT:					
Length: 21cm		Width: 5cm		Height: 32cm	
Color of the product:		Off white			
EMBROIDERY DESIGN DETAILS:					
Design No.: 26		Length: 16.5cm		Width: 8cm	
MARKER YARDAGE:					
<b>1. Fabric</b>		<b>Material Type</b>		<b>Cost</b>	
Base fabric		Khadi		50/-	
Lining		Cotton			
Fusing		--			
<b>2. Trimmings</b>					
Name		Rivets		20/-	
Size		2cm			
Quantity		4			

**Table 4.16:** Specification sheet of Bookmark

DESIGNER WORKSHEET				
Date: 23/03/23		Style No.: A01		Flat Sketch
Description: A bookmark, consists of magnet which hold the pages and can be used as fridge magnet.				<div></div> <div>Front</div> <div></div> <div>Back</div>
SIZE OF THE PRODUCT:				
Length:7cm		Width: --	Height: 9cm	
Color of the product:		Off white		
EMBROIDERY DESIGN DETAILS:				
Design No.: 5		Length: 8cm	Width: 5cm	
MARKER YARDAGE:				
1. Fabric		Material Type	Cost	
Base fabric		Khadi	10/-	
Lining		Khadi		
Fusing		--		
2. Trimmings		Details	Cost	
Name		Magnet	20/-	
Size		1.5cm		
Quantity		2		

**Table 4.17:** Specification sheet of File Folder

DESIGNER WORKSHEET				
Date: 23/03/23		Style No.: A02		<div>Flat Sketch</div> <div></div> <div>Front</div> <div></div> <div>Back</div>
Description: A file folder used to organize and store paper documents. The elastic band is designed to be used as a closure.				
SIZE OF THE PRODUCT:				
Length:29cm		Width: --	Height:49cm	
Color of the product:		Off white		
EMBROIDERY DESIGN DETAILS:				
Design No.: 11		Length: 21.5cm	Width: 8cm	
MARKER YARDAGE:				
1. Fabric		Material Type	Cost	
Base fabric		Khadi	80/-	
Lining		Khadi		
Fusing		Canvas		
2. Trimmings		Details	Cost	
Name		Elastic	10/-	
Size		3.81		
Quantity		40cm		

On the basis of the specificat sheets and layouts researcher analysed the average product development cost for each market segment. (Table 4.16)

### 4.3.2 Prototype Development

A total of twelve products were constructed and these were categorised into five categories i.e. retailers, interior designers, corporates, NGOs and academic institutions. Each category was having two products except NGOs having four products.

**Plate 4.39:** Basket (flat)





**Plate 4.40: Basket**



**Plate 4.41: Batwa**





**Plate 4.42: Chandelier**



**Plate 4.43: Lampshade**



**Plate 4.44: Pen stand**

**Plate 4.45: Travel pouch**





**Plate 4.46:** Pot cover



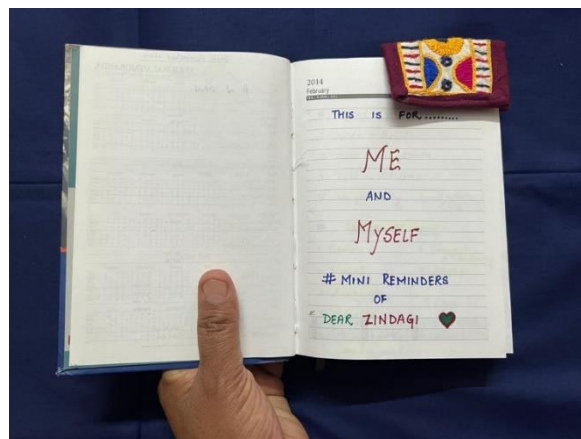
**Plate 4.47:** Tote bag



**Plate 4.48:** Clutch



**Plate 4.49: Sling bag**



**Plate 4.50: Bookmark**

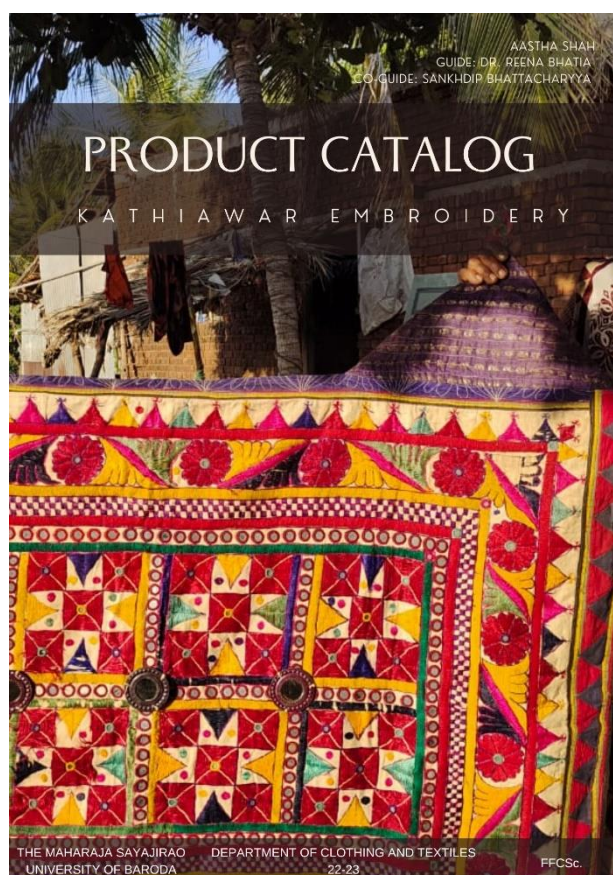




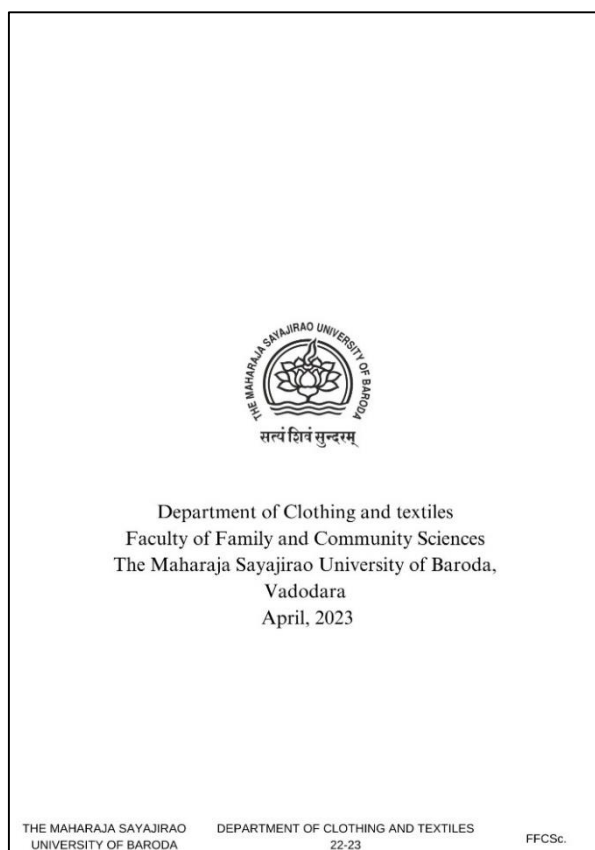
Plate 4.51: File Floder



Plate 4.52: Collection of products



**Plate 4.53:** Front page of product catalog



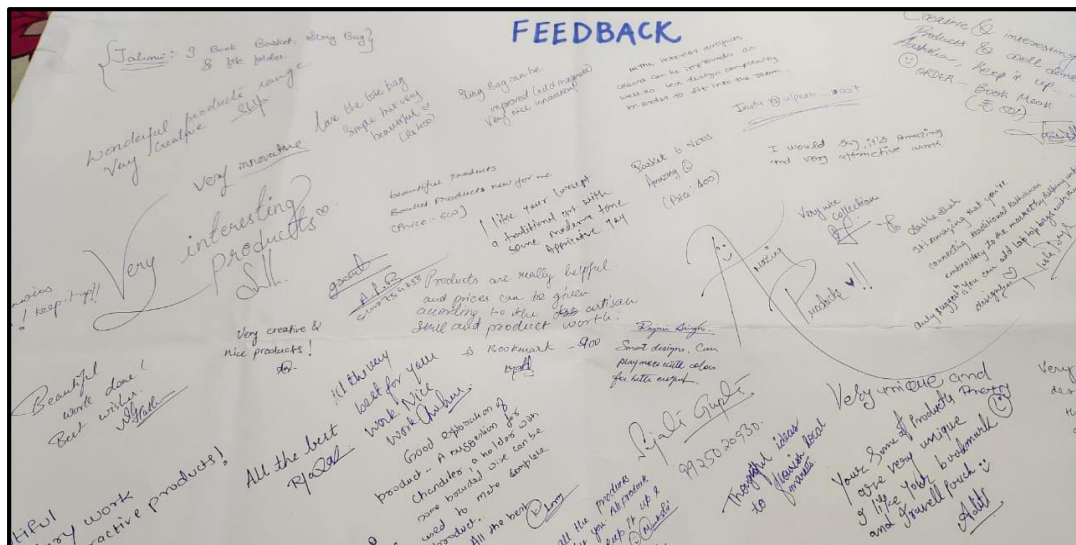
**Plate 4.54:** End page of product catalog



### 4.3.3 Test Marketing of the developed prototypes

Test marketing was carried out in the faculty where the researcher exhibited the products. For the exhibition the different type of consumers were invited to watch the actual appearance of the products.

The test marketing was to gauge the market response of the customer and identify improvements before the product launch through feedback forms and a feedback board kept for the reviews. The customers from different sectors gave their feedback (Plate: 4.55)



**Plate 4.55:** Feedback board

The prototype was tested were qualitatively and quantitatively analysed in which qualitative analysis was based on responses, feedback on the aesthetic, purchase and cost preference (Table 4.18).

**Table 4.18:** Respondent's qualitative analysis:

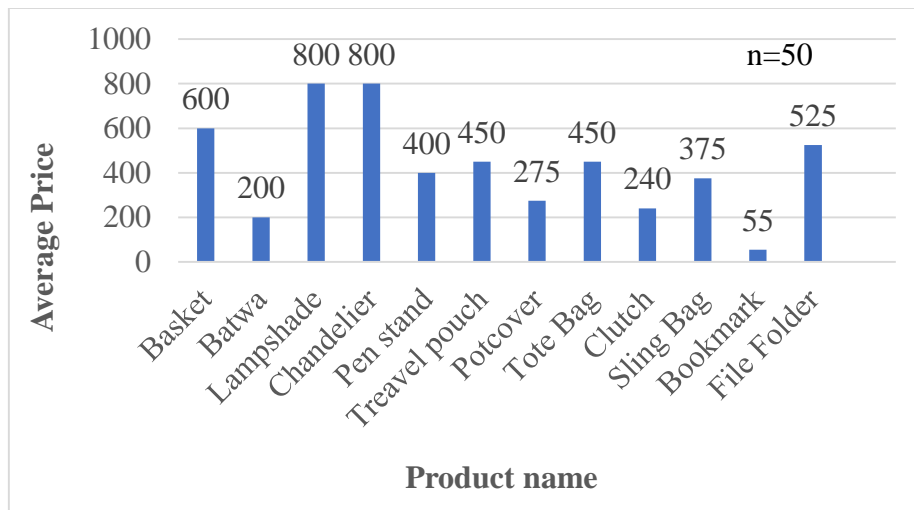
Statements
All items are too good very nice
Bookmark for 80rs
Amazing products like to buy Lampshade 800
Travel bag 300
Basket
The sling bag
Bookmark (80)
Well-developed ideas... Good

More options needed in bookmark
Batwa- 250
Book mark - 60, batwa – 250
Great initiative of bringing embroidery art of Bhavnagar to the lives by beautiful products. File folder: 450₹. Bookmark is good idea but can be made without magnets as it adds thickness and will leave gap between pages of book. Think to add this beauty of embroidery in mobile pouch and round Badges. Good luck and carry on.
Sling bag nice concept
Appreciable, Beautiful work
Tote bag:-300
I would like to buy clutch (180), tote bag(230) & batwa(150) price
I would like to buy Basket(500), file folder(350) and sling bag(350)...
Nice Chandelier embroidery colour. I would like to buy chandelier- 900 file ho.
Nice Chandelier embroidery colour. I would like to buy chandelier- 900 file holder---500,basket ----700, batwa ---200, travel pouch --- 400, clutch ---300,. Tote bag --- 500.
Bookmark is extremely amazing!
Nice keep it up
Batwa- 350
Looking forward for the more products. All the best !
For tote bag i want long handles, white colour, and for tote bag i give you 400 or 450..
Basket is very amazing (price 400)
Order totebag (400)
Totebag (499)
Potcover – 350

The majority of responders expressed their appreciation for each product using terms like wonderful, good job, and beautiful designs, along with ideas and a price range. Many respondents supplied their responses in accordance with the fact that they were viewing embroidery for the first time and were unaware of it. After analyzing the data, the researcher discovered proposals for more goods that may be made using this embroidery, like laptop bags and mobile covers. Additionally, respondents

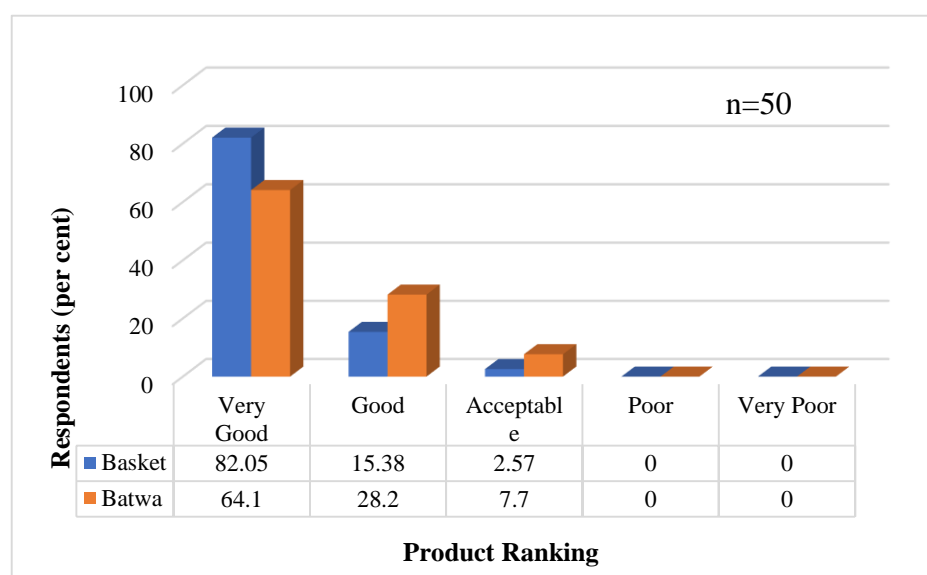


recommended offering dark cloth color options along with multiple sizes for products like baskets. The preferred price range by respondents was examined, and its average was reported (Graph )



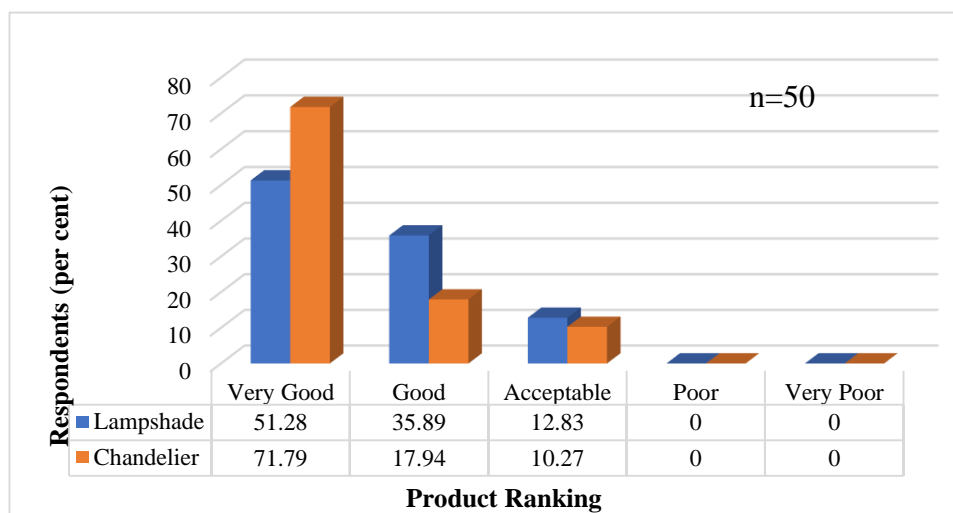
**Graph 4.7 Average price preferred by the respondents**

The respondents' quantitative analysis was done on the basis of a comparative study between the products of a particular sector. The researcher analysed each sector's product. Results for the retailers in which the products were basket and batwa, basket was highly ranked by 82.05per cent of respondents whereas batwa was ranked by 64.1per cent of respondents. It was assumed that product basket was comparatively liked more then batwa. (Graph:4.8 )



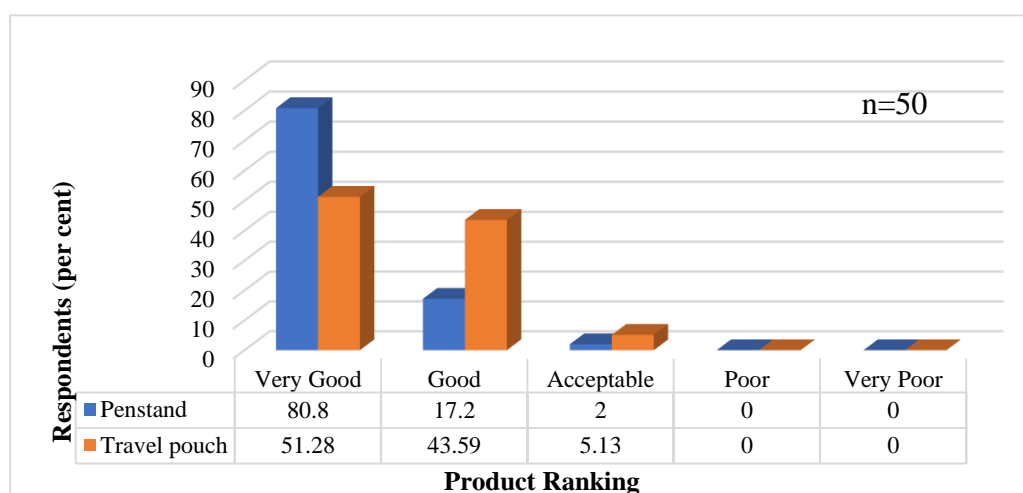
**Graph 4.8 Rank given by the respondents to the retailer segment products**

Results for the interior designer segment in which the products were lampshade and chandelier, the chandelier was highly ranked by 71.79per cent of respondents whereas lampshade was ranked by 51.28per cent of respondents. It can be said that the product chandelier was comparatively liked more than then lampshade. (Graph:4.9 )



**Graph 4.9 Rank given by the respondents to the interior designer segment products**

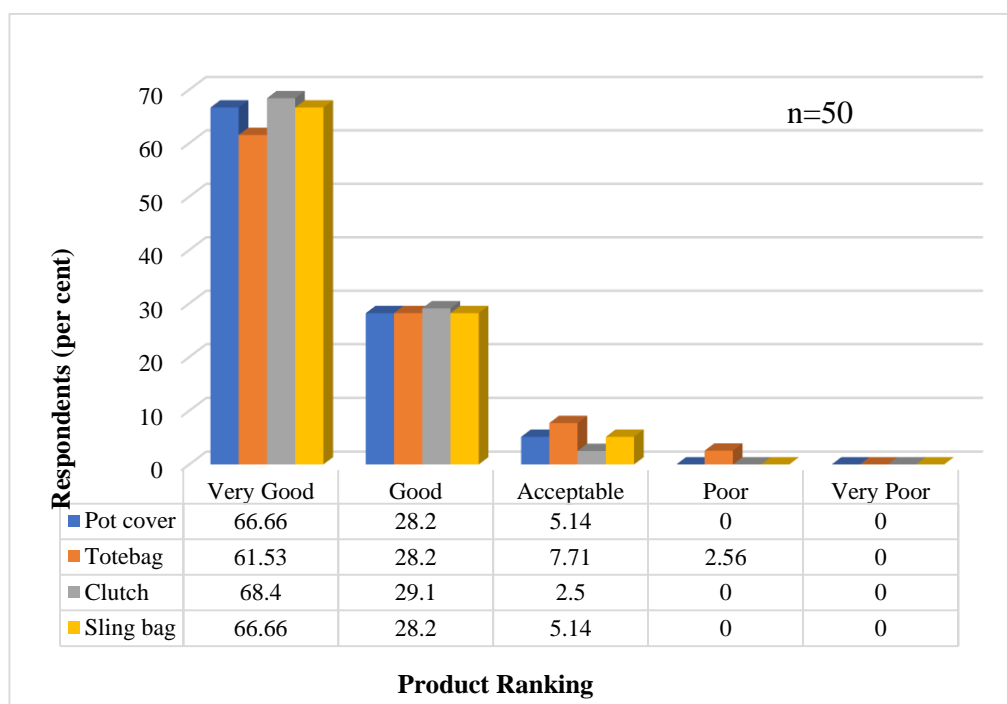
Results for the corporate segment in which the products were pen stand and travel pouch from which pen stan was highly ranked by 80.8per cent of respondents whereas travel pouch was ranked by 51.28per cent of respondents. (Graph:10 )



**Graph 4.10 Rank given by the respondents to the corporate segment products**

Results for the NGO segment in which there products were four products i.e. pot cover, tote bag, clutch and sling bag. Here was highly ranked by 68.4per cent respondents was

clutch and followed by pot cover, sling bag and tote bag by the respondents. (Graph:4.11)



**Graph 4.11 Rank given by the respondents to the NGO segment products**

Results for the academic institution segment in which there products were bookmark and file folder; the bookmark was highly ranked by 56.41per cent respondents whereas 51.28 per cent for the file folder. (Graph: 4.12)



**Graph 4.12 Rank given by the respondents to the academic institution segment product**

# **SUMMARY AND CONCLUSIONS**

## **CHAPTER V**

### **SUMMARY AND CONCLUSION**

#### **5.1 Introduction**

Indian handicrafts have changed over time in response to people's needs, shifting fashions, and religious ideals. Numerous local artisans put in long hours, day and night, to produce beautiful works of art. The embroidering involves embellishing stitches to a piece of fabric to enhance its beauty. Over the years, embroiderers have experimented with the materials at their reach, adopted and improved their skills, and drawn inspiration from their surroundings or the artwork and ornaments of earlier eras and other cultures.

Gujarat was the world's most important center for beautiful commercial needlework throughout the seventeenth century. Each caste passes down its designs, colours, and a variety of stitches, from generation to generation which, along with their specific style of clothing form the significant visual aspect of a caste's cultural identity.

In Gujarat, one of the important regions of embroidery work is Saurashtra called the peninsular region of Gujarat, situated on the Arabian Sea coast which comprises of 10 districts such as Amreli, Bhavnagar, Botad, Devbhoomi Dwarka, Gir Somnath, Junagadh, Jamnagar, Porbandar, Rajkot, Morbi. . Kathiawar embroidery of Saurashtra Previously, the canvas used in Kathi embroidery was mostly satin and hand-spun fabric, but currently, the embroidery is done on any woven fabric. In this type of needlework, the most commonly used stitch is herringbone. However, the chain stitch is the primary base stitch. While discovering the depth of Kathi embroidery in its items, your eyes will be drawn to the stunning designs of elephants, tigers, flora, and fauna, embroidered on the materials' symbols of elegance and loveliness. In present status machine-made embroidery pose a threat: The development of technology has reduced the cost and sped up the production of machine-made embroideries. Hence because the researcher studied the craft to revive through product development for different market segments. The researcher studied Kathiawar embroidery can continue to thrive and provide sustainable livelihoods for artisans while preserving a rich cultural heritage.

## **5.2 Purpose of the study**

Bhavnagar, one of Saurashtra's principal districts, historically had a thriving Kathi embroidery industry. The researcher's objective is to restore Kathiwar hand embroidery, assess its cultural significance and the decline in its practice in modern times, as well as to look into alternative methods for maintaining and reviving product creation for the present market. A study might look into the present state of Kathiwar hand embroidery techniques and designs, as well as the social and economic circumstances of the artisans, the state of the Kathiwar embroidery market, and the difficulties that today's hand embroidery practitioners must overcome.

## **5.3 Objectives of the study**

1. To study the prevailing status of Kathiwar embroidery in Bhavnagar
2. To study the socio-economic status of the artisans
3. To identify commercial opportunities for the sustainability of Kathiwar embroidery
4. To design and develop prototypes for market segments

## **Delimitations**

- The study is limited to Palitana taluka and Bhavnagar city of the Bhavnagar district.

## **5.4 Methodology**

This research study's technique was exploratory and descriptive in nature. The research intended to better understand the present state of Kathiwar hand embroidery and its artisans in Bhavnagar, Gujarat, India. The researcher developed a schedule of interviews with the artisans in order to gather information on their craft methods. The interviews were performed in person, and the questions were left open-ended to allow respondents to make detailed responses. The observations gathered during the field visit were also utilized for gathering data of the present status of Kathiwar embroidery.

The information gathered via interviews and observations was examined to determine the present state of Kathiwar hand embroidery and its artisans. The data acquired through interviews and observations was analyzed using a qualitative data analysis approach by the researcher. The researcher looked into a variety of market segments

for the development of products after researching the present state of craft and sustaining it. The researcher analyzed the market to determine the level of sustainability and performed test market to know how consumers would respond to Kathiawar embroidery.

## **5.5 Results and Discussion**

The research was conducted concurrently by another researcher too in the same locale but with different objectives. The relevant primary data collected simultaneously in conjunction with the other research study was useful in fulfilling the respective research objectives. The present study aimed to gain an understanding about the present status of Kathiawar embroidery in Bhavnagar and address the issue of preserving the craft and take steps towards its sustenance through product development. The researcher attempted to connect the market and the artisan by producing products for the selected market segments based on their needs and the current handicraft market. The research was carried out in three stages. The first phase involved gathering information regarding the present status of Kathiawar embroidery as well as the socio-economic status of the artisans. The second phase involved gathering information about possible buyers and the Kathiawar embroidery market. The third phase involved product design and development, followed by test marketing.

### **5.5.1 Documentation of the present status of Kathiawar embroidery and its artisans**

The embroidery details have been classified into design and motifs, stitches, materials, colour schemes, and techniques. *Sadu Bharat* was a vernacular word for embroidery done by all the artisans interviewed. Out of the selected respondents, the artisans who embroidered for themselves or for NGOs tended to utilize contemporary designs, materials, and colour palettes.

When designing the layout, motif arrangement, and colour combinations, it was seen that the artisans lacked design ideas like proportion and balance. They also did not pursue any formal degrees or training in design. The difference in terms of threads, fabric and motif details (colour combination and placement) in past and present were observed which result in the modernization the craft has been prevailing.

The present study also examine the socio-economic analysis of the artisan community, which plays an important role in cultural preservation in this region. The research

included 50 artisans, all of whom were members of the Koli community. Importantly, all the artisans were female, and they had grown up learning this technique from their mothers or grandmothers. It was observed the socio economic status of the artisans plays an important role in craft preservation as they were not well educated there has been lack of knowledge in terms craft its importance also the cant able to connect well in other areas too.

### **5.5.2 Market analysis**

The market study of hand-embroidered products in Vadodara city and the NGO of Palitana with whom the researcher had collaborated. Through market study researcher identified the potential buyers their profiles were developed as a 'buyer's directory'(Annexure 1). The study entails conducting research and assessing different aspects of the market for hand-embroidered products. After gathering data through different market segment on product demands, the products were created. The researcher then carried out market test on product's overall look, commercial viability, and cost preference to the test. The test marketing campaign's results showed that customers placed a high value on the products. There was a wide spectrum of consumer preferences for Kathiawar embroidery, as evidenced by the fact that customers embraced traditional, contemporary, and monochromatic color schemes.

### **5.5.3 Design and develop prototypes**

A specification sheet describes the technical details, needs, and specifications for a specific product or project. The purpose was to guarantee that the finished product met the necessary standards and specifications. According to the study's findings, if Kathiawar embroidery is launched in the market, customers will be pleased with the product. This implies that Kathiawar embroidery has the potential to be a popular product on the market and may present chances for artisans to make a livelihood from their craft. Test marketing of the product, revealed that their products satisfy the demands and preferences of consumers.

## **5.6 Conclusion**

According to the results of the present research conducted on the prevailing status of Kathiawar hand embroidery and its practitioners in Bhavnagar, Gujarat it can be concluded that Kathiawar hand embroidery is a traditional art form that has been passed down from generation to generation, however, the craft was no longer practiced



according to tradition. It had diminished in its relevance and reach within the community. There are likelihoods that the traditional designs, motifs, and other characteristics that make Kathiawar embroidery unique is completely lost with time. The socio-economic status of the artisans is generally low, and they face several challenges due to inappropriate tools of communication and transport leading to lack of market access, knowledge of market trends. The artisans were unaware of the value of their craft in the commercial markets though they were employed in a local NGO for other income generation activities. However, there are opportunities for commercialization of Kathiawar embroidery, which can help to promote the art form and provide a sustainable livelihood for the artisans. Market analysis helped in identifying specific segments of customers that are more likely to be interested in purchasing a Kathiawar embroidered product, for which relevant product prototypes were developed. The results of the test marketing of created products demonstrated that customers appreciated the products highly and accepted traditional, contemporary, and monochromatic colour schemes, demonstrating the wide range of customer preferences for Kathiawar embroidery.

The conclusion reflects information on the prospective market for Kathiawar embroidery and emphasize the value of maintaining traditional crafts while also catering to modern consumers' demands and tastes. The analysis also indicates that in order to develop and preserve the craft, organizations, artisans, and customers must work together. An in-depth assessment of the present status of the craft and its business potential is provided by the study on Kathiawar hand embroidery and its artisans in Bhavnagar, Gujarat. The study emphasizes the need of maintaining traditional crafts while simultaneously making improvements for contemporary market trends and consumer preferences. The research offers insightful information on Kathiawar embroidery's prospective market as well as the necessity of a coordinated effort to promote and preserve the art.

### **5.7 Scope of the study**

The purpose of the research on the current state of Kathiawar embroidery and its practitioners in Bhavnagar was to investigate the craft's present condition and that of its practitioners, as well as to identify the Kathiawar embroidery's potential market. The study identified the current challenges faced by the craft and its practitioners, which

could serve an important document for the policy makers of various institutions to draft relevant schemes and activities for their upliftment.

- The research made provisions for the prospective market for Kathiawar embroidery that values our cultural heritage and was eager to include such products in their collection for sale, artefacts, and gifts or as souvenirs.
- The research outcomes provided a potential platform for artisans to bring their craft to a new market.
- This further would ensure the sustenance of this traditional craft and its makers while also catering to modern consumers' demands and tastes.

### **Recommendations for further research**

1. Training should be given to artisans on new product development and market knowledge.
2. Future research can focus on exploring various marketing strategies to promote Kathiawar embroidery, including e-commerce platforms and social media marketing.
3. Moreover, there is a need to create awareness among consumers about the uniqueness and value of this traditional art form.
4. Additionally, the study can also be extended to cover the training and capacity building of artisans in new design techniques and innovative practices, which can help to enhance the quality and marketability of the products.
5. Finally, the study can also examine the impact of Kathiawar embroidery on the cultural and social fabric of the region and identify the measures needed for its preservation and promotion.

# **BIBLIOGRAPHY**

## Bibliography

1. Dhamija J. (1985) *Living Traditions of India Crafts of Gujarat*, Mapin International Inc., New York
2. Gillow J. & Barnard N. (2008) *Indian Textiles*, Thames & Hudson Ltd., London. (pg. 72-74)
3. Dongerkery K. (1951) *The Romance of Indian Embroideries*, Thacker & Co. Ltd., Bombay (pg.32-33)
4. Agrawal, A. (2018) *Traditional Embroideries of India*, A.P.H. Publishing Corporation, New Delhi. (pg.3)
5. Nita J. Patel (1987), *A study of Embroideries of Kutch and Kathiawar*, (Master's dissertation) The Maharaja Sayajirao University of Baroda, Vadodara
6. Barnard, N., & Gillow, J. (1991). *Traditional Indian Textiles*. Thames and Hudson Ltd., New Delhi.
7. Chattopadhyaya, K., (1975). *Handicrafts of India*. Secretary ICCR, New Delhi.
8. Chattopadhyaya, K., (1963). *Indian Handicrafts*. Indian Council for Cultural relations, New Delhi.
9. Nanavati, J. M., Vora, M. P., & Dhaky, M. A., (1966). *The embroidery and bead work of Kutch and Saurashtra*. Department of Archeology of Gujarat State, India.
10. Parmar, K., (1999). *Lokbharatni Sarjat*. Pravin Prakashan Pvt. Ltd., Rajkot.
11. Rivers, V. (2000). Decoding the divine: Kathi embroideries of Saurashtra. *Textile Society of America Symposium Proceedings*, 783.
12. Vidhale. C. N., (2006). *Development of Household Art Training Modules for Empowerment of Women*. Sant Gadge Baba Amravati University.
13. Ranjan, A., Ranjan, M., (2007). *Crafts of India*. Council of Handicraft Development Corporations , New Delhi
14. Dholakia, K., (2012) *Prevailing status of kutch embroideries and artisans: Scope of its sustainability and promotion*. The Maharaja Sayajirao University of Baroda, Vadodra.
15. Acharya. A. P., (2015). Innovative traditional Kathiawar embroidery on fashion garment. *International Journal of Science and Research (IJSR)*. 2319-7064.
16. Agrawal, A., (2018). *Traditional embroideries of India*. A. P. H Publishing Corporation, New Delhi.

17. Chowdhury. F., (2018). Application of rubrics in the classroom: A vital tool for improvement in assessment, feedback and learning. *International Education Studies* 12(1), 1913-9020.
18. Parmar, K., (2018). *Lokbharatma Chitrakala*. Ramanika Zapadia, Surat.

**Webliography:**

19. Government of India (2022) <https://bhavnagar.nic.in/history/> Retrieved on 20<sup>th</sup> September 2022
20. Pan India Internet Private Limited (PIIPL) (2022), <https://www.bhavnagaronline.in/city-guide/about-bhavnagar> Retrieved on 7<sup>th</sup> December 2022
21. Bhavnagar Heritage (2021), <https://www.bhavnagarheritage.com/> Retrieved on 10<sup>th</sup> August 2022
22. Pan India Internet Private Limited (PIIPL) (2022), <https://www.bhavnagaronline.in/city-guide/culture-of-bhavnagar> Retrieved on 16<sup>th</sup> March 2023
23. Research and Markets (2022), <https://www.researchandmarkets.com/reports/5546906/handicrafts-market> Retrieved on 16<sup>th</sup> March 2023
24. Arora, R. (2014), *Capacity building of artisans for the sustenance of traditional Chamba embroidery*, (Ph.D. Thesis) University of Delhi, Shodhganga February 2014 <https://shodhganga.inflibnet.ac.in/> Retrieved on 28<sup>th</sup> March 2023
25. Choudhary A. and Dr. Mishra P. (2022) *A Study of Youth Perception Towards Sustainability of Handicraft Industry Chapter-11*, ResearchGate January 2022 [https://www.researchgate.net/publication/358164970\\_A\\_STUDY\\_OF\\_YOUTH\\_P  
ERCEPTION\\_TOWARDS\\_SUSTAINABILITY\\_OF\\_HANDICRAFT\\_INDUST  
RY](https://www.researchgate.net/publication/358164970_A_STUDY_OF_YOUTH_PERCEPTION_TOWARDS_SUSTAINABILITY_OF_HANDICRAFT_INDUST) Retrieved on 28<sup>th</sup> March 2023
26. Sharan D., Dr. Priya A., and Shrivastava M. (2020) *Crafting the way forward: Sustainability Model for Indian Rural Artisans*, International Journal of Management (IJM), December 2020, [http://iaeme.com/MasterAdmin/Journal\\_uploads/IJM/VOLUME\\_11\\_ISSUE\\_12/IJM\\_11\\_12\\_284.pdf](http://iaeme.com/MasterAdmin/Journal_uploads/IJM/VOLUME_11_ISSUE_12/IJM_11_12_284.pdf) Retrieved on 1<sup>th</sup> March 2023
27. Government of India (2022) [https://www.census2011.co.in/data/village/516510-  
adapar-gujarat.html](https://www.census2011.co.in/data/village/516510-adapar-gujarat.html) Retrieved on 20<sup>th</sup> March 2023

28. Marketsegmentation

<https://www.investopedia.com/terms/m/marketsegmentation.asp>

29. J. M. Nanavati, M. P. Vora and M. A. Dhaky. *The Embroidery and Beadwork of Kutch and Saurashtra*. (Gujarat: Department of Archaeology, 1966),

<https://livingwithart.blog/2015/12/25/indian-embroidery-the-kathipo-style-of-saurashtra/>

30. Product plan (2023) Retrieved on 20<sup>th</sup> March 2023

<https://www.productplan.com/glossary/product-development-process/>

<https://www.productplan.com/glossary/design-thinking/>

<https://www.knowledgehut.com/blog/agile/best-development-process>

31. Artisans and Craftsmen <https://bestaccreditedcolleges.org/articles/difference-between-artisan-craftsman.html> Retrieved on 20<sup>th</sup> March 2023

32. Sustainability <https://circularecology.com/sustainability-and-sustainable-development.html> Retrieved on 21<sup>th</sup> March 2023

# APPENDICES

Appendix 1

**INTERVIEW SCHEDULE**

Department of Clothing and Textiles,  
Faculty of Family and Community Sciences,  
The Maharaja Sayajirao University of Baroda, Vadodara

**(Artisans)**

**I) SOCIO-ECONOMIC DETAILS:**

**A. Demographic data**

Name:

Age:

Gender:

Community:

Contact Number:

Language you know:

Education Level: Primary schooling/ Secondary schooling/ Higher Secondary/  
Graduate/

Any other

Are you originally from Bhavnagar?

Yes / No

If migrant,

- a. How long you have been in Bhavnagar?
- b. What was the reason for migration?

**B. Family Structure and Income:**

1. Living Condition:

- a. Type of House - Own/ Rented
- b. Condition of the house -It is Kachha / Pakka / Semi pakka

2. Family composition

- a. Type of Family - Joint/nuclear
- b. No. of earning members

3. Income:

- a. Total income
- b. Main source of income
- c. Other income sources

4. Consumer Durables

Do you possess:

- a. Vehicle
- b. Radio / T.V



**C) Profession**

1. How long have you been practicing this craft?
2. At what age you started practicing this craft?
3. The nature of your job: Working for someone else / Working for yourself
4. Are you solely reliant on this craft? Yes / No  
If not, what is your other area of work?
5. Those that practice the craft in your family are:
  - a. Each and every member of the family Yes / No
  - b. Some members are involved in this craft (mention number) Yes / No

**C) Technology**

1. What kind of phone do you have?
  - a. Smartphone
  - b. Mobile phone
2. Do you make use of social media? Yes / No  
If yes, name it.

**II) CRAFT DETAILS:**

**A. Transfer of Skills**

1. Is this craft a family-owned business? Yes / No  
If No, then what was the reason you learned this craft?
2. Do you want your children to get into this craft? Yes/ No  
If No, then what is the reason behind it?
3. Who has trained you in this craft?
  - a. Parent
  - b. Grandparent
  - c. Relative
  - d. Self-learning
  - e. Any Other

**B) Tools and types of equipment**

1. What tools are utilized at each stage of production?

Tools and Equipment					
Define Production Stage	Local Name	English Name	Working Function	Required Number	Place of Procurement

2. Give a detailed description of the tools used

Type of the Tool	Material	Size

3. Are you comfortable with the current tools? Yes / No

If not, what more tools are needed?

**C) Raw Materials:**

1. What are the most commonly used raw materials?

Raw Material English / Local Name	Description	Colours	Quantity	Cost

2. What types of threads and materials are most frequently used?

Fabric	Description	Colours
Threads	Description	Colours

**D) Design Development**

a. Product and its process

1. What kinds of embroidered products do you make?

Name of the product		Size of the product	Produce For		Season of Production
Local Name	English Name	Length x Breadth	Local Market / Export Market	Own Purpose	

2. What are the production steps?

Production Stage	Description	Time Consumed	Another specific requirement

b. Stitches and type of work

Types of Stitch	Most Frequently and Popular Stich	Importance

c. Motifs and Design

1. Motif details:

Motif		Placement	Colour	Special Characteristic
Local Name	English Name			

2. Do you own any samples made by your ancestors? Yes / No  
 If yes, how old are these samples?  
 If Yes, do you apply these examples' designs, artwork, colours, or other elements? Yes / No
3. What process do you follow to create a design?
4. Which designs are often used?
5. What do you practice to preserve the designs?

d. Problem faced by Artisan

Income generation from this craft	Health issues	Tools or equipment	Procurement difficulties	Market Approach	Any Other

### III) MARKET

A. Market and Marketing practices

1. Do you market your products? Yes / No
2. About marketing channels, venue to sell product and its value

Marketing Channel	Venue				Product name & Quantity	Cost
	Exhibition	Shop	From Home	Online Store		
a. Direct Marketing						
1. Local						
2. Export						
Indirect Marketing						
1. Middleman						
2. Local Handicraft Merchants						
3. Government organization						
4. NGO						
5. Any other						
6. None						

3. When do you have a high demand for your product?

4. Which product range do you frequently develop for your customer?

**INTERVIEW SCHEDULE**  
**(Retailers)**

**A. DEMOGRAPHIC DETAILS**

Shop name:

Location/Address:

Email Id:

Phone Number:

**B. PRODUCT**

1. Do you keep Kathiawar embroidery products? Yes /

No

If Yes which are those,

2. Which embroidered product is highly in demand?  
3. In which season are your products more in demand?  
4. What other handicraft products do you have?  
5. Do you buy your product directly from

Artisans? Yes / No

If No, then from whom are you purchasing?

**C. PRICE**

1. What is the approximate price range of handicrafts products in the shop?  
2. What is the highest and lowest price range for embroidered products?  
3. Which product category has a variety of price ranges available?  
4. What is the price range of Kathiawar embroidery products if available in your shop?

**D. PLACE**

1. Where do you sell your products?  
a. Permanent Shop  
b. Online Store / Website / Social Media  
c. Exhibitions  
2. How many physical stores do you own?

**E. PROMOTION**

1. Do you sell products online? Yes / No  
If Yes, on which online store?  
2. Do you give any special offers to promote the product? Yes / No  
If Yes, when and what offers do you provide?

**G. PROCESS**

1. To restock your product do you analyse market demands? Yes / No  
If Yes, what is your next step towards it?  
2. How frequently you place orders with artisans for their goods?

## **H. PEOPLE**

1. Who are your target market group?
  - a. Local
  - b. NRI
  - c. Others
2. Is your staff aware of the product details? Yes/No

## **INTERVIEW SCHEDULE**

**(Interior designer, Academic Institutions, Corporates, and NGOs)**

### **A. DEMOGRAPHIC DETAILS**

Name:

Name of the Institution:

Contact No.:

Email address:

Do you know Kathiawar hand embroidery?

Do you buy hand-embroidered products?

What do you like to have in Kathiawar embroidered articles?

Product Name	Product requirements	Cost limit

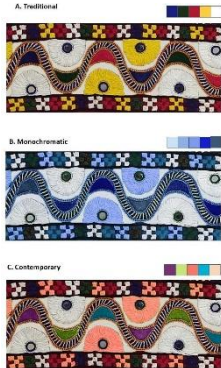
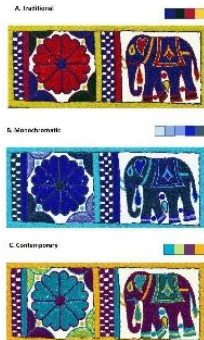
Appendix 2

























**Design and Colour Palette Preference**

Department of Clothing and Textiles,  
Faculty of Family and Community Sciences,  
The Maharaja Sayajirao University of Baroda, Vadodara













**Evaluation sheet for Developed portable shelter**













**Name of Interviewer:** \_\_\_\_\_ **No. of respondent:** \_\_\_\_\_













Que no.	Question	
1	Name & Mobile: Email address:	
2	 <p> <input type="checkbox"/> A. Traditional  <input type="checkbox"/> B. Monochromatic  <input type="checkbox"/> C. Contemporary         </p>	
3	 <p> <input type="checkbox"/> A. Traditional  <input type="checkbox"/> B. Monochromatic  <input type="checkbox"/> C. Contemporary         </p>	













4	<p>A. Traditional </p>  <p>B. Monochromatic </p>  <p>C. Contemporary </p> 	<p><input type="checkbox"/> A. Traditional</p> <p><input type="checkbox"/> B. Monochromatic</p> <p><input type="checkbox"/> C. Contemporary</p>
5	<p>A. Traditional </p>  <p>B. Monochromatic </p>  <p>C. Contemporary </p> 	<p><input type="checkbox"/> A. Traditional</p> <p><input type="checkbox"/> B. Monochromatic</p> <p><input type="checkbox"/> C. Contemporary</p>
6	<p>A. Traditional </p>  <p>B. Monochromatic </p>  <p>C. Contemporary </p> 	<p><input type="checkbox"/> A. Traditional</p> <p><input type="checkbox"/> B. Monochromatic</p> <p><input type="checkbox"/> C. Contemporary</p>
7	<p>A. Traditional </p>  <p>B. Monochromatic </p>  <p>C. Contemporary </p> 	<p><input type="checkbox"/> A. Traditional</p> <p><input type="checkbox"/> B. Monochromatic</p> <p><input type="checkbox"/> C. Contemporary</p>















8	<p>A. Traditional</p>  <p>B. Monochromatic</p>  <p>C. Contemporary</p> 	<p><input type="checkbox"/> A. Traditional</p> <p><input type="checkbox"/> B. Monochromatic</p> <p><input type="checkbox"/> C. Contemporary</p>
9	<p>A. Traditional</p>  <p>B. Monochromatic</p>  <p>C. Contemporary</p> 	<p><input type="checkbox"/> A. Traditional</p> <p><input type="checkbox"/> B. Monochromatic</p> <p><input type="checkbox"/> C. Contemporary</p>
10	<p>A. Traditional</p>  <p>B. Monochromatic</p>  <p>C. Contemporary</p> 	<p><input type="checkbox"/> A. Traditional</p> <p><input type="checkbox"/> B. Monochromatic</p> <p><input type="checkbox"/> C. Contemporary</p>
11	<p>A. Traditional</p>  <p>B. Monochromatic</p>  <p>C. Contemporary</p> 	<p><input type="checkbox"/> A. Traditional</p> <p><input type="checkbox"/> B. Monochromatic</p> <p><input type="checkbox"/> C. Contemporary</p>


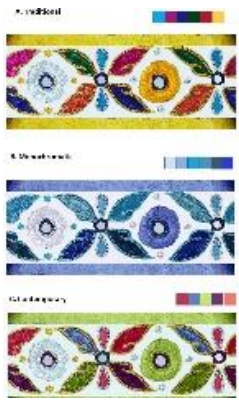


12	<p>A. Traditional</p>  <p>B. Monochromatic</p>  <p>C. Contemporary</p> 	<p><input type="checkbox"/> A. Traditional</p> <p><input type="checkbox"/> B. Monochromatic</p> <p><input type="checkbox"/> C. Contemporary</p>
13	<p>A. Traditional</p>  <p>B. Monochromatic</p>  <p>C. Contemporary</p> 	<p><input type="checkbox"/> A. Traditional</p> <p><input type="checkbox"/> B. Monochromatic</p> <p><input type="checkbox"/> C. Contemporary</p>
14	<p>A. Traditional</p>  <p>B. Monochromatic</p>  <p>C. Contemporary</p> 	<p><input type="checkbox"/> A. Traditional</p> <p><input type="checkbox"/> B. Monochromatic</p> <p><input type="checkbox"/> C. Contemporary</p>
15	<p>A. Traditional</p>  <p>B. Monochromatic</p>  <p>C. Contemporary</p> 	<p><input type="checkbox"/> A. Traditional</p> <p><input type="checkbox"/> B. Monochromatic</p> <p><input type="checkbox"/> C. Contemporary</p>

16	<p>A. Traditional</p>  <p>B. Monochromatic</p>  <p>C. Contemporary</p> 	<p><input type="checkbox"/> A. Traditional</p> <p><input type="checkbox"/> B. Monochromatic</p> <p><input type="checkbox"/> C. Contemporary</p>
17	<p>A. Traditional</p>  <p>B. Monochromatic</p>  <p>C. Contemporary</p> 	<p><input type="checkbox"/> A. Traditional</p> <p><input type="checkbox"/> B. Monochromatic</p> <p><input type="checkbox"/> C. Contemporary</p>
18	<p>A. Traditional</p>  <p>B. Monochromatic</p>  <p>C. Contemporary</p> 	<p><input type="checkbox"/> A. Traditional</p> <p><input type="checkbox"/> B. Monochromatic</p> <p><input type="checkbox"/> C. Contemporary</p>
19	<p>A. Traditional</p>  <p>B. Monochromatic</p>  <p>C. Contemporary</p> 	<p><input type="checkbox"/> A. Traditional</p> <p><input type="checkbox"/> B. Monochromatic</p> <p><input type="checkbox"/> C. Contemporary</p>

20	<p>A. Traditional</p>  <p>B. Monochromatic</p>  <p>C. Contemporary</p> 	<p><input type="checkbox"/> A. Traditional</p> <p><input type="checkbox"/> B. Monochromatic</p> <p><input type="checkbox"/> C. Contemporary</p>
21	<p>A. Traditional</p>  <p>B. Monochromatic</p>  <p>C. Contemporary</p> 	<p><input type="checkbox"/> A. Traditional</p> <p><input type="checkbox"/> B. Monochromatic</p> <p><input type="checkbox"/> C. Contemporary</p>
22	<p>A. Traditional</p>  <p>B. Monochromatic</p>  <p>C. Contemporary</p> 	<p><input type="checkbox"/> A. Traditional</p> <p><input type="checkbox"/> B. Monochromatic</p> <p><input type="checkbox"/> C. Contemporary</p>
23	<p>A. Traditional</p>  <p>B. Monochromatic</p>  <p>C. Contemporary</p> 	<p><input type="checkbox"/> A. Traditional</p> <p><input type="checkbox"/> B. Monochromatic</p> <p><input type="checkbox"/> C. Contemporary</p>



24	<p>A. Traditional</p>  <p>B. Monochromatic</p>  <p>C. Contemporary</p> 	<p><input type="checkbox"/> A. Traditional</p> <p><input type="checkbox"/> B. Monochromatic</p> <p><input type="checkbox"/> C. Contemporary</p>
25	<p>A. Traditional</p>  <p>B. Monochromatic</p>  <p>C. Contemporary</p> 	<p><input type="checkbox"/> A. Traditional</p> <p><input type="checkbox"/> B. Monochromatic</p> <p><input type="checkbox"/> C. Contemporary</p>
26	<p>A. Traditional</p>  <p>B. Monochromatic</p>  <p>C. Contemporary</p> 	<p><input type="checkbox"/> A. Traditional</p> <p><input type="checkbox"/> B. Monochromatic</p> <p><input type="checkbox"/> C. Contemporary</p>
27	<p>A. Traditional</p>  <p>B. Monochromatic</p>  <p>C. Contemporary</p> 	<p><input type="checkbox"/> A. Traditional</p> <p><input type="checkbox"/> B. Monochromatic</p> <p><input type="checkbox"/> C. Contemporary</p>

28		<input type="checkbox"/> A. Traditional <input type="checkbox"/> B. Monochromatic <input type="checkbox"/> C. Contemporary
29		<input type="checkbox"/> A. Traditional <input type="checkbox"/> B. Monochromatic <input type="checkbox"/> C. Contemporary
30		<input type="checkbox"/> A. Traditional <input type="checkbox"/> B. Monochromatic <input type="checkbox"/> C. Contemporary
31		<input type="checkbox"/> A. Traditional <input type="checkbox"/> B. Monochromatic <input type="checkbox"/> C. Contemporary

Appendix 3



**Product Feedback**





Department of Clothing and Textiles,  
Faculty of Family and Community Sciences,  
The Maharaja Sayajirao University of Baroda, Vadodara

**Feedback sheet for developed products**

Name of Interviewer: \_\_\_\_\_



No. of respondent: \_\_\_\_\_

Que no.	Question	
1	Name & Mobile:	
2	Basket 	<input type="checkbox"/> D. Very Poor <input type="checkbox"/> E. Poor <input type="checkbox"/> F. Acceptable <input type="checkbox"/> G. Good <input type="checkbox"/> H. Very Good
3	Batwa 	<input type="checkbox"/> A. Very Poor <input type="checkbox"/> B. Poor <input type="checkbox"/> C. Acceptable <input type="checkbox"/> D. Good <input type="checkbox"/> E. Very Good

4	Lamp Shade		<input type="checkbox"/> A. Very Poor <input type="checkbox"/> B. Poor <input type="checkbox"/> C. Acceptable <input type="checkbox"/> D. Good <input type="checkbox"/> E. Very Good
5	Chandelier		<input type="checkbox"/> A. Very Poor <input type="checkbox"/> B. Poor <input type="checkbox"/> C. Acceptable <input type="checkbox"/> D. Good <input type="checkbox"/> E. Very Good
6	Pen stand		<input type="checkbox"/> A. Very Poor <input type="checkbox"/> B. Poor <input type="checkbox"/> C. Acceptable <input type="checkbox"/> D. Good <input type="checkbox"/> E. Very Good
7	Travel Pouch		<input type="checkbox"/> A. Very Poor <input type="checkbox"/> B. Poor <input type="checkbox"/> C. Acceptable <input type="checkbox"/> D. Good <input type="checkbox"/> E. Very Good



8	Pot cover		<input type="checkbox"/> A. Very Poor <input type="checkbox"/> B. Poor <input type="checkbox"/> C. Acceptable <input type="checkbox"/> D. Good <input type="checkbox"/> E. Very Good
9	Tote Bag		<input type="checkbox"/> A. Very Poor <input type="checkbox"/> B. Poor <input type="checkbox"/> C. Acceptable <input type="checkbox"/> D. Good <input type="checkbox"/> E. Very Good
10	Clutch		<input type="checkbox"/> A. Very Poor <input type="checkbox"/> B. Poor <input type="checkbox"/> C. Acceptable <input type="checkbox"/> D. Good <input type="checkbox"/> E. Very Good
11	Sling Bag		<input type="checkbox"/> A. Very Poor <input type="checkbox"/> B. Poor <input type="checkbox"/> C. Acceptable <input type="checkbox"/> D. Good <input type="checkbox"/> E. Very Good

12	Bookmark 	<input type="checkbox"/> A. Very Poor <input type="checkbox"/> B. Poor <input type="checkbox"/> C. Acceptable <input type="checkbox"/> D. Good <input type="checkbox"/> E. Very Good
13	File Folder 	<input type="checkbox"/> A. Very Poor <input type="checkbox"/> B. Poor <input type="checkbox"/> C. Acceptable <input type="checkbox"/> D. Good <input type="checkbox"/> E. Very Good

# ANNEXURES



Accredited Grade "A+" by NAAC

**DEPARTMENT OF CLOTHING AND TEXTILE  
FACULTY OF FAMILY & COMMUNITY SCIENCES  
THE MAHARAJA SAYAJIRAO UNIVERSITY OF BARODA  
VADODARA**

**INFORMED CONSENT FORM FOR ARTISANS**

**STUDY TITLE: Prevailing Status of Kathiawar hand embroidery and its artisans in Bhavnagar: Sustainability through product development**

**PURPOSE OF THE STUDY:**

The purpose of the study is to preserve the hand embroidery of Kathiawar in Bhavnagar city by documenting its present status and an attempt towards sustainability through product development. This research will help to preserve Bhavnagar's heritage craft, Kathiawar embroidery, and its artisans, while also contributing to the development of the economic value of the craft.

**PROTOCOL OF THE STUDY**

If you decide to join this study, you will be required to respond to questionnaires.

**DURATION**

This study will take six months. The interview schedule will be done in multiple visits and interaction during single visits will take approximately two hours.

**COSTS**

The study only requires your time and participation. All the costs incurred will be borne by the researcher and there is no financial burden on you for your participation in this research.

**CONFIDENTIALITY**

In the study, your identity will be kept confidential and so are you expected to keep confidential your service given in the construction of the product.

### RIGHT TO WITHDRAW

Your decision to join this study is voluntary. You may quit at any time, for any reason, without notice. We hope you will participate in the entire study period because we need your specialized service to construct the product.

### VOLUNTARY CONSENT

Your cooperation is essential to the success of this study. The participant is allowed to discuss these procedures throughout the study.

### INVESTIGATORS STATEMENT

I have explained the research program, and the purpose of the study. The participant is allowed to ask any additional questions.

---

Aastha Shah

### PARTICIPANT'S STATEMENT

I certify that I have read, or have read out to me and that I have understood the description of the study. By signing this form, I am attesting that I have read and understood the information given above.

I give my consent to be included as a subject in the study being carried out by Ms. Aastha Shah under the guidance of Dr. Reena Bhatia and Mr. Sankhdip Bhattacharyya of the Maharaja Sayajirao University of Baroda to study the **prevailing status of Kathiawar hand embroidery and its artisans in Bhavnagar for sustainability through product development.**

I understand that the study requires the participant to respond to the question asked by the investigator and share their background, family structure, occupations, and the materials and techniques they use for hand embroidery solely for research and research publishing. I have had a chance to ask questions about the study. I understand that I may ask further questions. I have explained to my satisfaction the purpose of this study and I am also aware of my right to opt out of the study at any time.

---

Participants name and signature

Contact No:

Email:

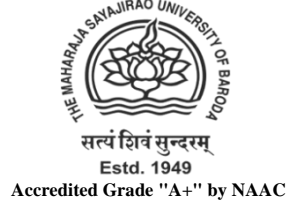
Date:

INVESTIGATORS

Aastha Shah  
Department of Clothing and Textiles  
Faculty of Family and Community  
Sciences  
The Maharaja Sayajirao University of  
Baroda  
(M): +6359642280  
Email Id: [aasthashah742000@gmail.com](mailto:aasthashah742000@gmail.com)

Guide -Dr. Reena Bhatia  
Department of Clothing and Textiles  
Faculty of Family and Community  
Sciences  
The Maharaja Sayajirao University of  
Baroda  
(M): +919376235666  
Email Id: [reenabhatia-  
ct@msubaroda.ac.in](mailto:reenabhatia-ct@msubaroda.ac.in)

Co-guide -Mr. Sankhdip Bhattacharyya  
Department of Clothing and Textiles  
Faculty of Family and Community  
Sciences  
The Maharaja Sayajirao University of  
Baroda  
(M): +919163774621  
Email Id: [sankhdip.b-  
ift@msubaroda.ac.in](mailto:sankhdip.b-ift@msubaroda.ac.in)



ડિપાર્ટમેન્ટ ઓફ કલોથિંગ અને ટેક્સટાઇલ્સ  
ફેકલ્ટી ઓફ ફેમિલી એન્ડ કોમ્યુનિટી સાયન્સ  
મહારાજા સયાજીરાવ યુનિવર્સિટી ઓફ બરોડા  
વડોદરા

### કારીગરો માટે જાણિત સંમતિ ફોર્મ

અભ્યાસ શીર્ષક: ભાવનગરમાં કાઠિયાવાડ ભરતકામ અને તેના કારીગરોની પ્રવર્તમાન  
સ્થિતિ: પ્રોડક્ટ ડેવલપમેન્ટ દ્વારા ટકાઉપણું નો પ્રયાસ

અભ્યાસ માટેનો હેતુ:

અભ્યાસનો હેતુ ભાવનગર શહેરમાં કાઠિયાવાડની ભરતકામની જાળવણી અને પ્રોડક્ટ ડેવલપમેન્ટ દ્વારા ટકાઉપણું નો પ્રયાસ તથા તેના કારીગરો માટે બજાર મૂલ્ય વિકસાવવાનો છે. આ સંશોધન ભાવનગરની હેરિટેજ હસ્તકલા, કાઠિયાવાડ ભરતકામ અને તેના કારીગરોને જાળવવામાં મદદ કરશે, સાથે જ હસ્તકલાના આર્થિક મૂલ્યના વિકાસમાં પણ ફાળો આપશે.

અભ્યાસનો પ્રોટોકોલ

જો તમે આ અભ્યાસમાં જોડાવા માંગતા હોય તો, તો તમારે પ્રશ્નોનો જવાબ આપવો પડશે.

સમયગાળો

આ અભ્યાસ છ મહિનાનો રહેશે. ઇન્ટરવ્યુ શેડ્યૂલ અનેક મુલાકાતોમાં કરવામાં આવશે અને એક મુલાકાત દરમિયાન સમય લગભગ બે કલાક લેશે.

ખર્ચ

અભ્યાસ માટે ફક્ત તમારો સમય અને સહભાગિતાની જરૂર છે. તમામ ખર્ચ સંશોધક દ્વારા ઉઠાવવામાં આવશે અને આ સંશોધનમાં તમારી ભાગીદારી માટે તમારા પર કોઈ નાણાકીય બોજ નથી.

#### ગોપનીયતા

અભ્યાસમાં, તમારી ઓળખ ગુપ્ત રાખવામાં આવશે અને તેથી તમે ઉત્પાદનના નિર્માણમાં આપેલી તમારી સેવાને ગુપ્ત રાખવાની અપેક્ષા રાખવામાં આવે છે.

#### પાછી ખેંચવાનો અધિકાર

આ અભ્યાસમાં જોડાવાનો તમારો નિર્ણય સ્વૈચ્છિક છે. તમે કોઈપણ સમયે, કોઈપણ કારણસર, સૂચના વિના છોડી શકો છો. અમે આશા રાખીએ છીએ કે તમે સમગ્ર અભ્યાસ સમયગાળામાં ભાગ લેશો કારણ કે અમને ઉત્પાદન બનાવવા માટે તમારી વિશિષ્ટ સેવાની જરૂર છે.

#### સ્વૈચ્છિક સંમતિ

આ અભ્યાસની સફળતા માટે તમારો સહકાર જરૂરી છે. સહભાગીને સમગ્ર અભ્યાસ દરમિયાન પ્રક્રિયાઓની ચર્ચા કરવાની છૂટ છે.

#### તપાસકર્તાઓનું નિવેદન

મેં સંશોધન કાર્યક્રમ અને અભ્યાસનો હેતુ સમજાવ્યો છે. સહભાગીને કોઈ પણ પ્રકારના પ્રશ્નો પૂછવાની મંજૂરી છે.

---

#### આસ્થા શાહ

#### સહભાગીનું નિવેદન

હું પ્રમાણિત કરું છું કે મેં વાંચ્યું છે, અથવા બીજા સહભાગી દ્વારા મને સમજાવ્યું છે અને મને અભ્યાસનું વર્ણન જણાવ્યું છે. આ ફોર્મ પર સહી કરીને, હું પ્રમાણિત કરું છું કે મેં ઉપર આપેલી માહિતી વાંચી અને સમજી લીધી છે.



બરોડાની મહારાજા સયાજીરાવ યુનિવર્સિટીના ડૉ. રીના ભાટિયાના અને સુ શ્રી સંખદીપ ભટ્ટાચાર્ય ના માર્ગદર્શન હેઠળ સુશ્રી આસ્થા શાહ “ભાવનગરમાં કાઠિયાવાડ ભરતકામ અને તેના કારીગરોની પ્રવર્તમાન સ્થિતિ નો અભ્યાસ કરી તેને પ્રોડક્ટ ડેવલપમેન્ટ દ્વારા ટકાઉપણું નો પ્રયાસ ને વિષય તરીકે સમાવેશ કરવા માટે હું મારી સંમતિ આપું છું.

હું સમજું છું કે અભ્યાસમાં સહભાગીએ તપાસકર્તા દ્વારા પૂછવામાં આવેલા પ્રશ્નનો જવાબ આપવા અને તેમની પૃષ્ઠભૂમિ, કુટુંબનું માળખું, વ્યવસાયો અને તેઓ જે સામગ્રી અને તકનીકોનો ઉપયોગ ફક્ત સંશોધન અને સંશોધન પ્રકાશન માટે હાથથી ભરતકામ માટે કરે છે તે શેર કરવાની આવશ્યકતા છે. મને અભ્યાસ વિશે પ્રશ્નો પૂછવાની તક મળી છે. હું સમજું છું કે હું વધુ પ્રશ્નો પૂછી શકું છું. મેં મારા સંતોષ માટે આ અભ્યાસનો હેતુ સમજાવ્યો છે અને હું કોઈપણ સમયે અભ્યાસમાંથી નાપસંદ કરવાના મારા અધિકારથી પણ વાકેફ છું.

સહભાગીઓનું નામ અને સહી

સંપર્ક નં:

ઈમેલ:

તારીખ:

તપાસકર્તાઓ

આસ્થા શાહ

ડિપાર્ટમેન્ટ ઓફ કલોથિંગ અને ટેક્સટાઇલ્સ  
ફેકલ્ટી ઓફ ફેમિલી એન્ડ કોમ્યુનિટી સાયન્સ  
મહારાજા સયાજીરાવ યુનિવર્સિટી ઓફ બરોડા

(M): +6359642280

ઈમેલ: [aasthashah742000@gmail.com](mailto:aasthashah742000@gmail.com)

માર્ગદર્શક - ડૉ. રીના ભાટિયા

ડિપાર્ટમેન્ટ ઓફ કલોથિંગ અને ટેક્સટાઇલ્સ  
ફેકલ્ટી ઓફ ફેમિલી એન્ડ કોમ્યુનિટી સાયન્સ  
મહારાજા સયાજીરાવ યુનિવર્સિટી ઓફ બરોડા

(M): +919376235666

ઈમેલ:

[reenabhatia-ct@msubaroda.ac.in](mailto:reenabhatia-ct@msubaroda.ac.in)

સહ-માર્ગદર્શક - શ્રી. સંખદીપ ભટ્ટાચાર્ય

ડિપાર્ટમેન્ટ ઓફ કલોથિંગ અને ટેક્સટાઇલ્સ  
ફેકલ્ટી ઓફ ફેમિલી એન્ડ કોમ્યુનિટી સાયન્સ  
મહારાજા સયાજીરાવ યુનિવર્સિટી ઓફ  
બરોડા

(M): +919163774621

ઈમેલ: [sankhdip.b-ift@msubaroda.ac.in](mailto:sankhdip.b-ift@msubaroda.ac.in)



Accredited Grade "A+" by NAAC

**DEPARTMENT OF CLOTHING AND TEXTILE  
FACULTY OF FAMILY & COMMUNITY SCIENCES  
THE MAHARAJA SAYAJIRAO UNIVERSITY OF BARODA  
VADODARA**

**INFORMED CONSENT FORM FOR RETAILERS AND MICRO ENTERPRISE**

**STUDY TITLE: Prevailing Status of Kathiawar hand embroidery and its artisans in Bhavnagar: Sustainability through product development**

**PURPOSE OF THE STUDY:**

The purpose of the study is to preserve the hand embroidery of Kathiawar in Bhavnagar city by documenting its present status and an attempt towards sustainability through product development. This research will help to preserve Bhavnagar's heritage craft, Kathiawar embroidery, and its artisans, while also contributing to the development of the economic value of the craft.

**PROTOCOL OF THE STUDY**

If you decide to join this study, you will be required to respond to questionnaires.

**DURATION**

This study will take six months. The interview schedule will be done in multiple visits and interaction during single visits will take approximately two-three hours.

**COSTS**

The study only requires your time and participation. All the costs incurred will be borne by the researcher and there is no financial burden on you for your participation in this research.

**CONFIDENTIALITY**

In the study, your identity will be kept confidential and so are you expected to keep confidential your service given in the construction of the product.

**RIGHT TO WITHDRAW**

Your decision to join this study is voluntary. You may quit at any time, for any reason, without notice. We hope you will participate in the entire study period because we need your specialized service to construct the product.

#### VOLUNTARY CONSENT

Your cooperation is essential to the success of this study. The participant is allowed to discuss these procedures throughout the study.

#### INVESTIGATORS STATEMENT

I have explained the research program, and the purpose of the study. The participant is allowed to ask any additional questions.

---

Aastha Shah

#### PARTICIPANT'S STATEMENT

I certify that I have read, or had read out to me and that I have understood the description of the study. By signing this form, I am attesting that I have read and understood the information given above.

I give my consent to be included as a subject in the study being carried out by Ms. Aastha Shah under the guidance of Dr. Reena Bhatia and Mr. Sankhdip Bhattacharyya of the Maharaja Sayajirao University of Baroda to study the **prevailing status of Kathiawar hand embroidery and its artisans in Bhavnagar for sustainability through product development.**

I understand that the study requires the participant to respond to the question asked by the investigator and share their details regarding products, sales, customers, and marketing strategies solely for research and research publishing. I have had a chance to ask questions about the study. I understand that I may ask further questions. I have explained to my satisfaction the purpose of this study and I am also aware of my right to opt out of the study at any time.

---

Participants name and signature

Contact No:

Email:

Date

INVESTIGATORS

Aastha Shah  
Department of Clothing and Textiles  
Faculty of Family and Community  
Sciences  
The Maharaja Sayajirao University of  
Baroda  
(M): +6359642280  
Email Id: [aasthashah742000@gmail.com](mailto:aasthashah742000@gmail.com)

Guide -Dr. Reena Bhatia  
Department of Clothing and Textiles  
Faculty of Family and Community  
Sciences  
The Maharaja Sayajirao University of  
Baroda  
(M): +919376235666  
Email Id: [reenabhatia-  
ct@msubaroda.ac.in](mailto:reenabhatia-ct@msubaroda.ac.in)

Co-guide -Mr. Sankhdip Bhattacharyya  
Department of Clothing and Textiles  
Faculty of Family and Community  
Sciences  
The Maharaja Sayajirao University of  
Baroda  
(M): +919163774621  
Email Id: [sankhdip.b-  
ift@msubaroda.ac.in](mailto:sankhdip.b-ift@msubaroda.ac.in)



Accredited Grade "A+" by NAAC

**DEPARTMENT OF CLOTHING AND TEXTILE  
FACULTY OF FAMILY & COMMUNITY SCIENCES  
THE MAHARAJA SAYAJIRAO UNIVERSITY OF BARODA  
VADODARA**

**INFORMED CONSENT FORM FOR ACADEMIC INSTITUTIONS, CORPORATES AND  
NGOs**

**STUDY TITLE: Prevailing status of Kathiawar hand embroidery and its artisans  
in Bhavnagar: Sustainability through product development**

**PURPOSE OF THE STUDY:**

The purpose of the study is to preserve the embroidery of Kathiawar in Bhavnagar city by documenting its present status and an attempt towards sustainability through product development. This research will help to preserve Bhavnagar's heritage craft, Kathiawar embroidery, and its artisans, while also contributing to the development of the economic value of the craft.

**PROTOCOL OF THE STUDY**

If you decide to join this study, you will be required to respond to questionnaires.

**DURATION**

This study will take six months. The interview schedule will be done in multiple visits and interaction during single visits will take approximately two hours.

**COSTS**

The study only requires your time and participation. All the costs incurred will be borne by the researcher and there is no financial burden on you for your participation in this research.

**CONFIDENTIALITY**

In the study, your identity will be kept confidential and so are you expected to keep confidential your service given in the construction of the product.

### RIGHT TO WITHDRAW

Your decision to join this study is voluntary. You may quit at any time, for any reason, without notice. We hope you will participate in the entire study period because we need your specialized service to construct the product.

### VOLUNTARY CONSENT

Your cooperation is essential to the success of this study. The participant is allowed to discuss these procedures and ask additional questions.

### INVESTIGATORS STATEMENT

I have explained the research program, and the purpose of the study. The participant is allowed to ask any additional questions.

---

Aastha Shah

### PARTICIPANT'S STATEMENT

I certify that I have read, or had read out to me and that I have understood the description of the study. By signing this form, I am attesting that I have read and understood the information given above.

I give my consent to be included as a subject in the study being carried out by Ms. Aastha Shah under the guidance of Dr. Reena Bhatia and Mr. Sankhdip Bhattacharyya of the Maharaja Sayajirao University of Baroda to study the **prevailing status of Kathiawar hand embroidery and artisans in Bhavnagar for its sustainability and product development.**

I understand that the study requires the participant to respond to the question asked by the investigator and share details of their departmental events, gifts given at the events, preference as a customer for embroidery products, and awareness of craft products only for research and research publishing. I have had a chance to ask questions about the study. I understand that I may ask further questions. I have explained to my satisfaction the purpose of this study and I am also aware of my right to opt out of the study at any time.

---

Participants name and signature  
Contact No:  
Email:  
Date:

INVESTIGATORS

Aastha Shah  
Department of Clothing and Textiles  
Faculty of Family and Community  
Sciences  
The Maharaja Sayajirao University of  
Baroda  
(M): +6359642280  
Email Id: [aasthashah742000@gmail.com](mailto:aasthashah742000@gmail.com)

Guide -Dr. Reena Bhatia  
Department of Clothing and Textiles  
Faculty of Family and Community  
Sciences  
The Maharaja Sayajirao University of  
Baroda  
(M): +919376235666  
Email Id: [reenabhatia-  
ct@msubaroda.ac.in](mailto:reenabhatia-ct@msubaroda.ac.in)

Co-guide -Mr. Sankhdip Bhattacharyya  
Department of Clothing and Textiles  
Faculty of Family and Community  
Sciences  
The Maharaja Sayajirao University of  
Baroda  
(M): +919163774621  
Email Id: [sankhdip.b-  
ift@msubaroda.ac.in](mailto:sankhdip.b-ift@msubaroda.ac.in)

## Request letter



**Department of Clothing and Textiles**  
**Faculty of Family and Community Sciences**  
**The Maharaja Sayajirao University of Baroda**  
Fatehgunj Road, Vadodra-390002  
Ph: (+91-0265)2795523

Date: 23/09/22

To,

---

---

---

Subject: Requesting information for the field study in Bhavnagar for the Master's Research titled: **Prevailing status of Kathiawar hand embroidery and its artisan in Bhavnagar: Sustainability through product development**

Dear Sir/ Madam,

Greetings from the Department of Clothing and Textiles!

The student Ms. Aastha Shah is pursuing a Master's in Clothing and Textiles. In partial fulfillment of their Degree requirements, they have undertaken a respective Dissertation titled:

*“Prevailing status of Kathiawar embroidery and artisans in Bhavnagar, its sustainability through product development”*

To fulfill the stated objectives of the study, authentic preliminary information from your office will facilitate the data collection from the field. Provision of the requested information, your insights, and your foresight as a privileged observer will be beneficial.

In pursuit of cultural preservation and its growth through academic research, I hereby request you to please spare your valuable time to share the required facts and figures with the research student regarding Bhavnagar's census and geographical data, past and present textile craft (embroidery) communities and their socioeconomic status, textile craft entrepreneurs along with their addresses.

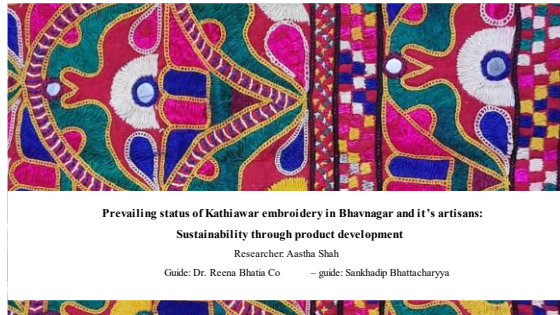
Thank you and Sincere Regards,

Dr. Reena Bhatia  
Research Guide  
Assistant Professor  
Department of Clothing and Textiles,  
Faculty of Family and Community  
Sciences,  
The Maharaja Sayajirao University of  
Baroda

Through,  
Prof. Anjali Karolia  
I/C Head and Dean,  
Department of Clothing and  
Textiles



## Story booklet for the exhibition



### CONTENT

1. Introduction
2. The Culture
3. Present-Day Scenario
4. Market Survey
5. Product Development

