

ADAPTATION OF TRADITIONAL PAINTING MOTIFS FOR AARI WORK

By
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2013HS21M

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2015

CERTIFICATE – I

This is to certify that this thesis entitled “**Adaptation of Traditional Painting Motifs for *Aari* Work.**” submitted for the degree of **Master of Science**, in the subject of “**Textile and Apparel Designing**” to the CCS Haryana Agricultural University, is a bonafide research work carried out by **Ms. Suman Sodhi**, Adm. No. **2013HS21M**, under my guidance and supervision and that no part of this dissertation has been submitted for any other degree.

The assistance and help received during the course of investigation have been fully acknowledged.

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CHAPTER-I

INTRODUCTION

India has always been known as the land that portrays cultural and traditional vibrancy through its conventional arts and crafts. The thirty five states and union territories sprawled across the country have their own distinct cultural and traditional identities and are displayed through various forms of art prevalent there. Every region in India has its own style and pattern of art, which is known as folk art. The folk and tribal arts of India are very ethnic and simple, and yet colorful and vibrant enough to speak volumes about the country's rich heritage. Indian arts and crafts has a great potential in the international market because of its traditional aesthetic sensibility and authenticity (Sharma, 2015).

Indian arts and crafts encompass various forms such as painting, pottery, home decorations, cloth making, needle craft, jewellery and so on with exquisite designs and patterns. These crafts are not only used for decorative and religious purposes but they also cater to the day-to-day needs of the people. These are source of inspiration for contemporary designers and have emerged as the subject for representation of India at global platform because of their ethnic and traditional beauty. Printing, painting, dyeing, brocading and embroidery techniques are some of the techniques that have been traditionally used all over the world to decorate textile, apparel and home furnishing articles for their personal use.

Painting as an art form has flourished in India from very ancient period. The unique thing about Indian painting is that they are usually representative and connected to highly significant religious forms as culture events. The rural folk paintings of India bear distinctive colorful designs, which are treated with religious and mystical motifs. Some of the most famous folk paintings of India are the Madhubani paintings of Bihar, Patachitra paintings from the state of Orissa, Phad paintings of Rajasthan, Kalamkari of Andhra Pradesh, Pichhvai paintings of Rajasthan, Warli paintings of Maharashtra, Nirmal paintings of Andhra Pradesh, Aipan of Uttarakhand, Pithora paintings of Gujarat, Gond and Mandana paintings of Madhya Pradesh, Kalighat paintings of Calcutta and many more forms (Sharma,2013).

Perhaps the best known genre of Indian folk paintings are Madhubani and Warli. The Madhubani in literal translation means 'forest of honey' also known as Mithila painting from the Mithila region of Bihar state. These paintings are basically religious in nature. The paintings are done predominantly by women at home. Hindu mythology is the main theme in Madhubani paintings. It is an Indian living folk art inspired from mythological epics of Mahabharata and Ramayana. It is a divine and prayful expression of unconditional surrender and thankfulness to the God. (Sharma & Paul, 2015).

Warli is also a popular art form. Warli paintings are folk paintings from Maharashtra and are very different from other folk and tribal paintings of India. This tribal art does not narrate mythology in primary colors as does the Madhubani, instead these are painted on mud charcoal, cow dung based surface using only white color. Usually, the Warli paintings are done during marriage ceremonies. The Warlis, who are simple and happy in nature, also include life around them in their paintings because they express everything they see, feel and believe in life. Animals, Trees, birds, plants, houses, and men are predominating subjects in their paintings and they form a loose, rhythmic pattern on the entire surface. (Vedika, 2014).

Textile designing is an ancient art form prevalent in India which has given Indian designers and artisans the well deserved recognition at international platforms. Each textile demonstrates a particular aesthetic and interactive functionality. Adaptation of ancient designs and drawing ideas from earlier products is ubiquitous in all fields of design. Adapting and improving the designs refers to modifying it such that it will be easier to produce, use, fix, easier to maintain and so on. The adaptation and modification of the design is the notation of reduction in complexity, or in other words simplification. Traditional designs and motifs as well as other subjects and images, provide the building blocks for the creation of new designs. In the adaption of designs, modification, combination, manipulation and transformation of design is done.

Application of painting motifs or design on textile base can be done by different methods. Different fabric embellishment techniques can be used to decorate the textile like embroidery, printing, painting or combination of different techniques. Also designing through fusion of different techniques can be employed wherein the adapted designs can also be applied on the fabric surface for enrichment by numerous techniques. This attempt will address to the current need for product diversification and value addition in dynamic fashion world of textile sector.

The Indian arts and crafts can play an important role in fashion world. As now days fashion trends are fragile and consumer constantly demand innovative design and change over existing fashion trends. The well recognised heritage of Indian art and craft extinction. Therefore, it is necessary to safeguard this cultural heritage of arts and crafts. This will help in the preservation of painting tradition on one hand and on the other will broaden the design bases for the textile products to preserve the traditional art, so application of it can be a creative approach.

As an art form, hand embroidery has long been known for its finest traditions in India. Embroidery is the art of using stitches as a decorative feature in their own right by embellishing fabric or other material with design stitches in strands or yarns using a needle.

Each state in India is unique by itself as far as embroidery and its variegated designs are concerned (Namrata & Nack, 2008).

The craft of *Aari* embroidery has existed in India from the 12th century and was done primarily by the Muslim cobbler community in India and patronized by the Mughal courts. Hyderabad, Lucknow, Rajasthan, Kutch, Uttar Pradesh & Delhi are the regions known for *Aari* embroidery in India. (Naik & Byadgi, 2008).

Aari is extremely fine and has a refined elegance that is timeless and classic with very intrinsic & innovative designs. Today, this technique is used to produce a wide range of articles and has paved its way into the local as well as international market. According to Rama (2014) “The designing industry seems to be caught in the *Aari* wave. Quite a hit among fashion lovers. The demand is great for designers who can capitalize on the opportunity”. The industry needs new designs that could have a market internationally. This is more so with ethnic designs such as *Aari* because *Aari* work is getting popular, as it could be done on any kind of fabric or outfit.

As designing is an integral part in textile development and it is constantly changing, fashion of Indo-western patterns can be thought of to create a whole new effect (Menan, 2014). *Aari* embroidery being labour intensive, fusion of *Aari* with different techniques will help in making designing cost, time and energy saving which will be an added advantage as per demand in the national and international market.

With all these concepts in mind, the present study on “Adaptation of traditional painting motifs for *Aari* work” was conducted to exploring the possibility to strengthen creativity by fusion of traditional painting motifs and *Aari* work with different fabric embellishment techniques. The aim behind the theme was to create new range of designs by maintaining the ethnic beauty and originality of traditional art forms. The amalgamation of *Aari* work with painting motifs will help in widening the variety of textile products to consumers for product selection and availability of the products according to taste.

Hence, the study was planned with the following objectives-

Objectives

- 1) To explore the motifs of selected traditional Indian paintings for textile designing
- 2) Adaptation of selected motifs for suitability to *Aari* work through CAD
- 3) To study the effect of *Aari* work in fusion with different fabric embellishment techniques

Significance

1. Designing through *Aari* work is a tedious, time consuming, expensive and laborious work. The concept of fusing the traditional art forms with different techniques will help in overcoming this problem by making the designing cost effective while simultaneously being time and energy saving.
2. This attempt of fusing motifs of traditional paintings and *Aari* work will fulfill the need of present hour to keep our ethnic designs and art alive as well as help in widening the variety of textile products.
3. The study will also serve as means of preserving our traditional heritage in modern textiles as this will help in creating distinct and new range of textiles that can be utilized for various apparel and household end uses.
4. The study will be beneficial for setting up an enterprise comprising of different range of products.

CHAPTER-II

REVIEW OF LITERATURE

The literature of the related researches conducted provides a suitable background for the study undertaken. The review of literature of relevance to the present study is arranged in this chapter under the following sub headings:

2.1 Traditional Indian Paintings: Warli and Madhubani painting

2.2 Aari Embroidery

2.3 Designs Development

2.4 Application of CAD/CAM for Textile and Apparel Designing

2.5 Fabric Embellishment Techniques

2.6 Adaptation of Traditional Painting Motifs

2.1 Traditional Indian Paintings: Warli and Madhubani painting

Sharma (2015) stated that India has always been known as the land that portrayed cultural and traditional vibrancy through its conventional arts and crafts. Every region in India has its own style and pattern of art which is known as folk art. The folk and tribal arts of India are very ethnic and simple, and yet colorful and vibrant enough to speak volumes about the country's rich heritage. Folk art in India apparently has a great potential in the international market because of its traditional aesthetic sensibility and authenticity. The rural folk paintings of India bear distinctive colorful designs which are treated with religious and mystical motifs. Folk art expresses cultural identity by conveying shared community values and aesthetics. Some of the folk paintings of India are the *Madhubani* paintings of Bihar, *Patachitra* paintings from the state of Odisha, *Phad* Paintings of Rajasthan, *Kalamkari* of Andhra Pradesh, *Pichhvai* Paintings of Rajasthan, *Warli* Paintings of Maharashtra, *Nirmal* paintings of Andhra Pradesh, *Aipan* of Uttarakhand, *Pithoro* paintings of Gujarat, *Gond* and *Mandana* Paintings of Madhya Pradesh, *Kalighat* paintings of Calcutta and many more forms.

Sharma & Paul (2015) conducted a study on developing designs by fusion of designs of two folk paintings i.e. Warli & Madhubani, using CAD and adapt them on apparels using digital printing technique. It will be an effort to reveal the unexplored treasures to the world by introducing the newly developed fusion designs from the Plethora of these arts and to open new avenues for artisans to revolutionize the Fashion world and empower them.

Jha (2015) reported that Madhubani painting is a unique style of art originating in the North-Eastern part of India and the adjoining parts of Terai in Nepal. It is one of the oldest forms of folk art in the Indian province of Bihar, Tools like slender brushes with thin bristles, fingers, natural dyes, twigs, nib pens and matchsticks are applied to create a lovely collection

of paintings with enigmatic expressions. Themes vary from contemporary issues, mythological panels to geometric patterns. Famous for depicting numerous festivals and auspicious occasions like Kali Puja, Durga Puja, Holi, Surya Shasti, Upanayanam, birth, marriage and other fiestas or social dos, a piece of Madhubani painting is traditionally made using solid natural shades for bharni (filling in technique) and tones for delineating delicate fine lines via a method called kachni (hatching) where colours are seldom used.

Patil and Mirajkar (2014) revealed in their study that the Warli is one of the major tribe in India. The Warlis are an indigenous tribe or Adivasis, living in the mountains and coastal areas of Maharashtra, Gujarat border and surrounding areas. The word Warli come from the word Warla means piece of land. They have their own animistic beliefs, costumes and traditions; however as a result of acclimation they have also adapted many Hindu beliefs. Warli speaks the Warli language. The Warli's popularity is their paintings and these paintings reflect the close association between human communities and nature.

Sekar (2014) highlighted Warli painting in a study conducted on "How the fashion industry has adapted the various Indian Folk Art traditions and the consumer behavior towards it". This vast area of cultured art is being divided into states, communities above 600, districts, dialects, tribes which are the main reasons of its rich diversity in art forms. Though these art traditions are a lot in number, many of them are in an extinct stage and few don't exist. Each form has its own aesthetics and elegance. There are very few people who are concerned towards art forms, and they come up with great plans amongst which quite a few are breathtaking. This study focuses on the development of these art forms and their impact on the fashion industry.

Sharma (2013) reported in a study conducted to find out the awareness and interest about Madhubani painting & learning the folk art, that today Madhubani art is being promoted from its traditional distinctive form to the modern prospects. This art is being used to decorate hotels, residences, temples, eco-resorts, shopping malls to design the interiors. Fifty postgraduate female students from Home Science stream of the Govt. M.H. College of Home Science & Science for Women, Autonomous, Jabalpur MP were randomly selected for the study. The study concluded good response from college female students towards learning and earning by the traditional skill. Students seemed enthusiastic in mastering the art and use it in more diversified forms.

Anonymous (2009a) stated that in Madhubani painting widely used figures are of various god and goddesses depicting Durga, Kali, Ram and Sita, Radha and Krishna, Shiva and Parvati, Gauri and Ganesha, the ten incarnations of Vishnu. Besides these, picture of sun and moon are also painted because it is believed that they bring prosperity and joy to the family. Other figures used are figures of various animals, birds, leaves, flowers, plants alongwith symbols of Swastika and Shankha. Mostly used colors in these paintings are deep

colors like red, green, blue and black. Besides, deep colors, other colors like yellow, pink and lemons are also used. All these colors are prepared by indigenous method from some household products like banana leaves, milk and vermilion etc.

Anonymous (2009b) stated that the internationally renowned *Madhubani* folk art or Madhubani painting has its roots in the humblest of household chores of modest families in Northern Bihar, India. Figures of deities and animals and image of symbolic significance were depicted on earthen walls, using emblematic colours, in the hope of fortune and fertility. Abstract figures have been delineated in profile. Floral patterns are used as fill. The traditional double borders with linear designs have embellished the painting. Earthen hues of orange, yellow, red and green aptly contribute to the complete atmosphere of life, love and odor.

Anonymous (2009c) pointed out that Madhubani painting started once as a source of nonagricultural income, today, occupies a very important place in Indian regional crafts. These paintings are available throughout the world in various forms such as wall hangings, greeting cards, t-shirts, sarees, bed spread etc. Some common themes and symbols that adorn a Madhubani painting are Lord Rama hunting the golden deer, worship of Lord Shiva, Goddess Kali, Goddess Saraswati, Goddess Durga, fish, snakes, peacock, events in a life cycle etc.

Anonymous (2009d) described that Madhubani painting is an expression of day-to-day experiences and beliefs. As such, symbolism, simplicity and beauty hold them together, in a single school of art. In the Madhubani painting, the treatment of colour is beautifully done. The themes of daily activities, nature, flora and fauna and Hindu Gods are most prominent. The symbols that are used have their specific meaning as, for instance, fish symbolize fertility, procreation and good luck, peacock are associated with romantic love and religion, serpents are the divine protectors. Madhubani painting is characterized by the vibrant and bold use of colours and traditional geometric patterns that supports the main theme. Some of the main attributes of all the Madhubani paintings are double line border, ornate floral patterns, abstract like figures of deities and bulging eyes and a jolting nose of the faces of the figures. The Indian folk art form of Madhubani succeeded in creating a place for itself in the international house of fame and is now recognized worldwide.

Anonymous (2008) pointed out that black color in Madhubani painting is obtained by mixing root with cow dung; yellow from turmeric or pollen or lime and the milk of banyan leaves; blue from indigo; red from the kussum flower juice or red sandalwood; green from leaves of the wood apple tree; white from rice powder and orange from palasha flowers. The colors are applied flat with no shading. There is normally a double line drawn for the outlines, with the gap between the lines filled by cross or straight tiny lines. In the linear painting, no colours are applied, only the outlines are drawn.

Mishra (2008) reported that the Mithila painting is one of the living creative activities of the women of the region. It is a famous folk painting on paper, wall, movable objects etc. mainly done by the village women of Mithila. Originally, it is a folk art, practiced by the women of all castes and communities, including Muslims, on walls and floors using the natural and vegetable colors. Later some people took interest in it and taken it from walls and floors to the canvas and now the new form has given this a very distinct identity in the art world as well as in the market.

Anonymous (2007a) described that Madhubani painting is a refreshingly different folk art of Bihar. Women of Madhubani village have been practicing this art form for centuries but it came to the forefront only in the 1960s, when a drought hit the area and people had to think of an alternative non-agricultural source of earning. Selling these traditional paintings on handmade paper was the best alternative and today it is one of the most celebrated folk arts of the world. Madhubani paintings mostly featured nature related themes, mythological figures and Hindu deities. Apart from deities, the women also paint celestial subjects like Sun and Moon. The holy *tulsi* plant, court scenes, wedding scenes and social happenings are also regularly featured in these paintings. Intricate floral, animal and bird motifs and symmetrical geometric designs fill up the gaps. Since this intricate skill is handed down from generations, traditional designs and patterns are widely maintained.

Anonymous (2007b) stated that Madhubani painting is practiced in Mithila region of Bihar state of India. These originated at the time of Ramayana, when king Janak commissioned artists to do paintings at the time of marriage of his daughter Sita. The painting was traditionally done on freshly plastered mud wall of huts, but now it is also done on cloth, hand-made paper and canvas. Madhubani paintings mostly depict nature and Hindu devotional events, and the themes generally revolve around Hindu deities like Krishna, Rama, Shiva, Durga, Lakshmi and Saraswati. Natural objects like the sun, the moon and the religious plants like *tulsi*, scenes from the royal courts and social event like weddings are also widely painted. Generally, no empty space is left; the gaps are filled by paintings of flowers, animals, birds and even geometric designs. There are three styles of Madhubani painting: Brahmin, Tatoo and Kshatriya style.

Shalin (2006) studied that the origin of Madhubani paintings is traced back to epic periods with the tradition of painting walls for the purpose of home décor and ceremonial rituals. Natural and mythological figures, added with Hindu deities, besides regional flora and fauna, are painted on houses and village walls to mark the seasonal festivals of the year and for special events of the life cycle. The other symbols included the moon, a source of heavenly nectar, the sun to fertilize and impregnate, turtles being beneficent powers to the matrimonial alliance, parrots to symbolize the couple and fishes for fertility. Colours applied have no shading and normally a double line is drawn for the outlines, with the gap between

the lines filled by cross or tiny straight lines. Often, a coat of whitewash is also applied before actually starting the painting and natural colours obtained from plant extracts are used for painting.

Anonymous (2006) stated that the ceremonial folk paintings popularly identified as famous Madhubani paintings are the exclusive monopoly of women artists, passing down for generations, from mother to daughter. The central theme of all paintings are love and fertility, though the approach may vary. Symbols of fertility and prosperity like fish, parrot, elephant, turtle, sun, moon, bamboo tree, lotus etc are more prominent. The divine beings are positioned centrally as the flame while their consorts or mount or simply their symbols and floral motifs form the background. The human figures are mostly abstract and linear in form, the animals are usually naturalistic and are invariably depicted in profile. Though natural colors and things have given way to brushes and artificial paints, the subject of Madhubani paintings remain unchanged. The colors used are usually deep red, green, blue black, light yellow, pink and lemon. They create mood and hence play an important role. For instance, energy and passion find expression through the use of red and yellow, as monochrome crashed over large surfaces of the painting. Concentration of energy and the binding force is best reflected in red while green governs the natural leaves and vegetation.

2.2 Aari embroidery

Shrikant (2009) stated that *Aari* is done on silks as well as leathers. Specially in Rajasthan and some part of Kutch beautiful purses and *mojdis* (Indian shoes) are embroidered in *Aari* Bharat.

Rajpurohit (2008) stated that *Aari* is done mostly in Bikaner, Jodhpur and Udaipur, especially among the mocha community.

Jaitley and Sarabhai (2008) highlighted that *Aari* work is believed to have enriched the costumes of the Mughul court and largely prevalent during the reign of Akbar where royal ateliers were brimming with craftsmen producing rich trapping in gold. *Aari* work and *Zardozi* flourished with royal patronage but suffered a decline in Aurangzeb's time, but today it has seen resurgence.

Menon (2006) highlighted in a news article that the industry needs new designs that could have a market internationally. According to him "*Aari* work is getting increasingly popular, especially among the college girls, as it could be done on any kind of fabric or outfit. Though *Aari* design is very popular in the country, it has just begun to get noticed internationally. The designing industry in India receives orders from Italy, France.

Grewal (1990) highlighted in her study that, mocha bharat (*Aari*work) is the chain stitch generally associated with the cobblers (Mochi) of kutch area of Bhuj. Later it travelled to neighbouring area of Rajasthan. Originally it was used to sew together and decorate leather goods. Women folk of Rajasthan used this embroidery to decorate ghaghra and kachlies.

2.3 Design Development

Design is the backbone of graphic art. Besides art, it is a part of art actually a part of our life and personality and influences the enjoyment of everything to do and of everything to select.

Rand et al. (2007) opined that, “Everything is design, everything!” This is true because everything around man is designed one way or the other whether consciously or unconsciously.

Asihene (2004) stated that design and ornamentation are usually based on some traditional or ethnic motifs and beliefs. This, he said, is specially exemplified in pottery, weaving, cloth printing and dyeing, fabric craft and others. Design is an important part in the expression of culture.

Varghese (2002) referred design as any arrangement of line, color and texture. A good design should have an orderly arrangement of the material used to enhance beauty in the finished product. Design can either be structural or decorative. Structural design is incorporated during making any object whereas decorative design is the surface enrichment of any structural design.

Seymour (2002) stated that design is significant in life and this fact is emphasized in various definitions that design is “making things better for people”. Design adds beauty to our world and is mainly made to meet a need. Further, Seymour added that “design” is the “transformation of existing conditions into preferred ones”. Thus, design thinking is always linked to improved future.

Katiyar (2001) reported that design has its role to play in all aspects of good business. Designing is a rich play of elements and principles of design and creativity is kept alive by constantly experimenting with new media and designing techniques. Design needs to be innovative and find the alternative applications of the technology. Technology needs to innovate and support new design trends and designers aspirations. The approach will help to faster innovation in our products and competitive edge in the global market.

Gupta, et al. (2000) stated that design of any object should be simple and well proportionate. It should be suited for the material on which it is made and its surface decoration should be moderated enough to strengthen the shape and beauty of the object.

2.4 Application of CAD/CAM for Textile and Apparel Designing.

According to report of Ministry of textiles (1999) revealed that CAD plays a vital role in facilitating the creation of new designs, improving the designs and production in the fast changing global tradition in fashion. Manual design and card punching takes more than 15 days, whereas this system reduces the time to a day or two. The initial cost of CAD system, though high, pays off in the long run as CAD replaces the time consuming and labour

intensive manual card punching method. Competitiveness also increases as CAD enables them to respond quickly to changing fashions.

Sharma (2003) worked on Tibetan painting, sketched different motifs and transferred these on to the computer, created designs by combining the selected motifs using CAD software. Ten designs were created using selected motifs. Then five layouts were created for selected designs for different items of bed linens. The best layout with selected design was printed in three different colour combinations with the help of computer.

Goel (2004) reviewed the paintings which were based on seven themes, out of which only two themes were selected i.e. Rag-Ragini and Nayak-Naika theme. A number of figures were traced, coloured and 35 paintings were developed. Out of these 40 individual motifs were taken out through computer software (Adobe Photoshop). These motifs were evaluated by 30 judges and three best motifs were selected. Twenty designs for *kurtis* were made by combining the selected motifs. Different background designs were created with two techniques namely spray painting and tie and dye using green and orange colour. Thus, five selected designs were painted on hundred per cent pure white cotton fabric. A market survey was done to check the acceptability of the created articles. It revealed that majority of the shopkeepers showed their interest to purchase the designed articles for their unique arrangement and rare combination.

Anonymous (2005) pointed out that in 1970's CAD made an entry in the textile and apparel industry. Most companies abroad have now integrated some form of CAD into their design and production process. CAD is used in textile designing, texture mapping, 3D designing, grading, marker making systems, and cutting operations.

Oates (2005) stated that CAD has become indispensable for textile designers and has led to endless possibilities. The entire process of designing is revolutionized where previously designers used to labour over graph paper and stencils, now they simply have to play with a mouse or stylus pen to come out with innovative designs, and the result is not only an increase in speed, but greater accuracy than the manual process. It is no wonder that even small-scale textile design and manufacturing companies are using CAD systems

Yan et al. (2005) examined the determinants of CAD/CAM adoption in textile and apparel industries. He observed that the term computer-aided design includes all computer applications and hardware devices that can be used to aid digital design. CAD speeds up the design process by making it quick and easy to test and modify ideas before production starts, thus reducing mistakes and cutting costs. The CAD adoption was found to be driven primarily by the market and affected by the business-unit size.

Yadav et al. (2006) stated that computer is one of the important tools for Apparel designing. Advanced computer system of 2or 3 dimensional concept designs are used widely in developed countries. A number of softwares are used in apparel designing such as

CorelDraw, Adobe Illustrator, Karat cad whereas TUKA CAD concentrated on the practical use of Computers in pattern design and product development.

Yadav et al. (2006) stated that the computer is becoming an ever increasing important tool for apparel designing. This technology is beneficial for rationalization of production, analysis of fashion and forecast, as well as in pattern grading and marking. Now with advance computer technology, the designer can visualize and restyle a design, change colour, fabric prints and plaids thus producing better designs in seconds along with a perfect fit.

Devi (2011) conducted a study on adaptation of traditional motifs of *Kantha* embroidery. Fifteen stylized designs were developed and five placements of each design were prepared with the help of CorelDraw. The top ranked placements of selected three designs was worked in *Kantha* embroidery and replicated in fabric painting for making jackets. The preferred reasons given by the expert's preferences were placement and color combination and suitability of 'developed design' for both techniques.

Dwivedi and Dwivedi (2013) conducted a study on "Role of Computer and Autamation" in design and manufacturing for mechanical and technical industries: CAM/CAD. Computers have influenced every spheres of our life and has fasten the data manipulating system. CAD plays a vital role in textile designing as well as fabric simulation. The process give customer satisfaction on time delivery, variety in design and colour and rapid transmission of design to consumer. It is currently developing a nest of new products. Automation (CAD/CAM) involves all the processes of conceptualizing, designing, analyzing, prototyping and actual manufacturing with computers assistance.

2.4 Fabric embellishment techniques

Alelsto (2009) stated that the appliqué work is a form of needlework, where small pieces of cloth are sewn together, to make an attractive design. Various fabrics such as organdie, voile, organza, tissue, taffetas and heavy plain and textured fabric like duck, herringbone and velvet are used in unique patterns. Different types of patchworks like puff patchwork, crazy appliqués etc. are used in garments, bedding, curtains and many more and comes in both traditional and contemporary designs. Appliqué work crafts is now emerging as a profitable business for small scale industries.

Dhindsa (2009) conducted a study to develop and embellish various *kameez* designs for stout women and also assessed these designs for slenderizing effect. The market survey was conducted to find out prevalent embellishment techniques used on *kameez*. Machine embroidery ornamented with beads and sequins separately was the highly prevalent embellishment technique. The other materials used for embellishment of *kameez* were embroidered patch, borders and flowers of various materials.

Saini (2008) studied the various embellishment techniques on diversified products of *durrie* material. The preferences of expert were taken for the type of embellishment techniques used to prepare the top ranked design of preferred products i.e. belt, wall pocket, cushion cover and multipurpose bag. The three preferred embellishment techniques were painting, machine embroidery and hand embroidery. Although all the three embellishment techniques were accepted by majority of respondents but painting was preferred the most as this technique is less time consuming. The consumer had high opinion about the embellishment techniques as these provided variation to existing embellishment techniques.

Bansal and Ganguly (2011) stated that applying colored patterns and designs to decorate a finished fabric is called 'printing'. Whether a fabric is dyed or printed can be known by examining the outline of the design. On a printed fabric, the outline of a design is sharply defined on the outer side. Textile printing is the process of applying colour to the fabric in definite patterns or designs. Textile printing is related to dyeing but, in dyeing the whole fabric is uniformly covered with one color where as in printing one or more colors are applied in certain parts and in sharply defined patterns.

2.5 Adaptation of Traditional Painting Motifs

Vedika et al (2014) made an attempt to develop blocks of Warli paintings of Maharashtra for printing of apparels and handicraft items. Total thirty designs were developed with the help of computer software "Adobe Photoshop" and "Corel Draw", ten each for apparels including *kurtis*, suits and sarees. All the developed designs were subjected to visual evaluation for selection of two best designs from each category by the panel of thirty judges. The selected designs were applied on apparels using block printing technique. The cost of each article was calculated on the basis of expenditure on raw materials, labour charges, finishing charges and profit margin. Among the apparel items, brick red and black colour printed *kurti* (K9), green and purple colour painted suit (D7) and purple colour printed saree (S6) were highly appreciated and accepted. However, all the other products were also appreciated. Selling price of apparel items was ranged between Rs. 492/- to Rs. 1163/-. The adaptation of Warli motifs on apparels using block printing has paved the way for a plethora of product diversification that could lead to a flourishing market.

Pant and Gahlot (2012) conducted a study to adapt and evaluate aipan designs ready to use borders using screen printing. The selected motifs were used to develop designs for single motif and two motif borders and forty designs for two motifs border. The best five designs were selected each for single motifs. Borders were printed in red and green color combination and two motif borders were printed in red violet and yellow green color combination. Surface enrichment of borders was done with embroidery, beads, stones and laces. Finally, the consumer acceptability of prepared borders was assessed on various design parameters. Both borders were liked by the consumer and most of the respondents stated that they would definitely purchase these borders if available commercially in the market.

Boehm (2012) stated that there are different traditional methods of printing like block printing, stencil printing, screen printing and so on. In traditional methods of printing firstly an image is made on a plate then it is transferred on textiles. Recent advances have been taken place in the field of textile printing like digital printing, roller printing, heat transfer printing and lithography and so on to increase the production of printed material and to fulfill the consumer demand.

Singh (2012) developed thirty innovative embroidery designs for chikankari embroidery adapted from aipan, the traditional floor painting of kumaon region of Uttarakhand. The designs of aipan, were adapted to develop thirty designs included buti (10), border (10), centre (10) designs for chikankari. Out of thirty, fifteen designs were selected which were embroidered using five basic stitches of chikankari and evaluated by thirty judges. Top ranked two designs with their selected placements were used for embroidery of *Kurtis*. The embroidered *kurtis* were appreciated by both consumer and manufactures cum retailers on most of the design parameters. The manufacturers cum retailers were ready to adapt aipan designs in chikankari and consumers also showed inclination to buy the chikankari items with aipan designs if available in the market.

Sangama and Rani (2012) adapted folk art of Uttarakhand for designing of textile using weaving technique. The original Aipan designs were adapted to weaving designs through extra weft figuring. The developed designs can be utilized for production of household articles as well as other type of textile products by the use of weaving techniques applied on the textile surface by printing, embroidery, painting or combination to create distinct and new range of textiles.

Sharma (2011) stated that Chamba in Himachal Pradesh is famous for the Pahari and Kangra styles of miniature paintings. The same style and figures used for the painting are traced on fine unbleached cotton or silk fabric which is mostly white or off-white in color and fine double satin stitch is applied to create exquisite hand embroidered panels. Other stitches used are stem, buttonhole. Its specially is that art piece is reversible in that it is finely finished on both sides of the cloth and is reversible.

Waldia (2009) developed fabric painting designs for home textiles using Madhubani painting motifs. Twenty designs were developed using selected motifs and six designs with their selected placements were used for painting of bed covers. The developed articles were got assessed on various parameters and found highly acceptable in terms of developed designs, color combination and overall appearance.

Beth (2007) suggested that most fabric paints are designed to work the best with fabrics made from natural fibers including cotton, silk and linen. Any type of fabric can be painted, however the natural fabrics tend to allow for better results. Different fabric paints are designed to work on different type of fabrics. For instance, most fabric paint will work on cotton while to paint on fabrics like silk one needs to purchase paint specifically designed for it.

CHAPTER-III

MATERIAL AND METHODS

The methods, techniques, tools and procedures adopted for the present investigation i.e. ‘Adaptation of Traditional Painting Motifs for *Aari* work’ have been carried out under three following phases to achieve the objectives:

3.1 Exploratory phase

3.2 Experimental phase

3.3 Assessment phase

3.1 Exploratory phase

3.1.1 Locale of study

The study was conducted in Hisar city purposively for easy approachability.

3.1.2 Selection of respondents

Selection of experts

The members from advisory committee, faculty members & Ph.D. students from the department of Textile & Apparel Designing and Family Resource Management of I.C. College of Home Science, CCS Haryana Agricultural University were selected as experts. They were asked to give their preferences for selection of motifs and designs for adaptation to *Aari* work; assessment of designed & developed samples in terms of overall appeal; acceptability level of the cost of the developed samples and application of the developed designed samples for suitable articles.

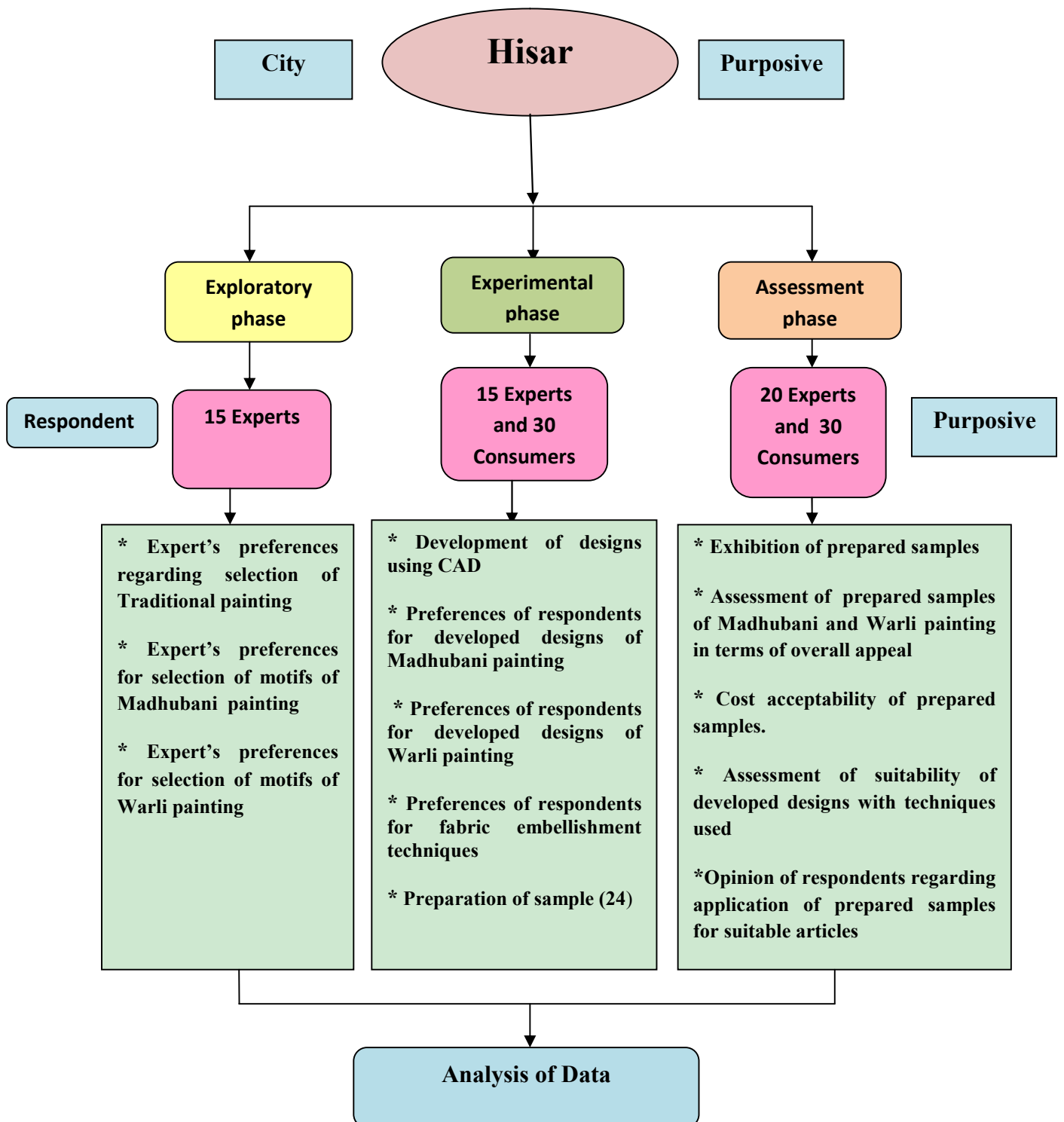
Selection of consumers

The faculty members from the department of Extension Education and Communication Management, Human Development and Family Studies and Foods & Nutrition, students of I.C. College of Home Science, CCS Haryana Agricultural University, Hisar and consumers visiting the boutiques were selected on the basis of easy approachability. They were asked to give preferences for selection of developed designs; techniques; assessment of designed and developed samples in terms of overall appeal; acceptability level of the cost of the developed samples; application of the designed & developed samples for suitable article.

3.1.3 Selection of traditional Indian paintings

Traditional Indian paintings were explored from secondary sources that included books, internet, magazines, journals and newspapers. Ten famous traditional paintings i.e. Rajput painting, Mughul painting, Pithora painting, Madhubani painting, Cave painting, Mysore painting, Kalamkari painting, Tanjore painting, Santhal painting, and Warli painting

were selected after gathering information regarding the motifs and designs seeing the possibility of transforming these into other designing techniques for contemporary use. Two traditional Indian paintings that is Madhubani and Warli painting were finalized by the experts, keeping in mind their suitability to *Aari* work for the development of designs.



3.1.4 Collection of motifs

Motifs from the great art forms of Madhubani and Warli paintings were collected from secondary sources that included books, magazines, manuals, journals and internet keeping in mind their suitability for *Aari* work. Forty motifs from each painting were sorted with the help of advisor & members from the major field.

3.1.5 Selection of motifs for adaptation to *Aari* work

Out of eighty motifs, fifteen motifs each from Madhubani & Warli paintings were selected for adaptation and design development keeping in mind their suitability to *Aari* work on the basis of experts' opinion using self-structured evaluation performance. They were asked to give their preferences on three point scale for motifs as most preferred, preferred and somewhat preferred scoring 3, 2 and 1 respectively.

3.2 Experimental Phase

This phase included design development through adaptation of motifs using CAD; selection of developed designs; selection of techniques; selection of materials; preparation of samples with pure *Aari* work and fusion of *Aari* work with suitable fabric embellishment techniques.

3.2.1 Design development through adaptation of motifs

Fifteen motifs each of Madhubani and Warli paintings having highest ranks according to weighted mean score were selected for design development. Designs were developed using CorelDraw12 (vector based programme) for experimental work with keen emphasis on maintaining or retaining the aesthetics of the forms. Two designs were developed from each selected motif of both the paintings, hence a total of sixty designs (30 each) were developed to achieve the objectives.

3.2.3 Selection of developed designs

A preferential choice index was developed to know the preferences of experts and consumers for developed designs. The respondents were asked to give their preferences on three point scale as most preferred, preferred and somewhat preferred scoring 3, 2 and 1 respectively. Ranks were given on the basis of Weighted Mean Scores. Three most preferred designs each from Madhubani & Warli paintings were selected for further application.

3.2.4 Selection of Techniques

Designing is the art of making designs and technique is a method of doing or performing something especially in the arts or science. To create distinct and new range of textile designs that can be utilized for various apparel and household end uses, a list of fabric embellishment techniques was prepared on the basis of reviews and was screened sorted with the consensus of advisory committee members. Concept behind the screening was suitability of techniques to get the same effects as of *Aari* work while simultaneously being time saving, cost effective and easy to transform painting art into other decorative techniques. The fabric

embellishment techniques listed were tie and dye, block printing, screen printing, stencil printing, batik printing, hand painting, nib painting, spray painting, nozzle painting, cut work, patch work, appliqué work, Combination of techniques were: tie and dye & block printing, screen printing & appliqué work, stencil printing & patch work, nozzle painting & stencil printing, cut work & stencil printing, hand painting & patch work, appliqué work & block printing. Consumers were asked to give their preferences for combining *Aari* work with suitable technique on three point rating scale i.e. most preferred, preferred, least preferred scoring 3, 2, and 1 respectively. Ranks were given on the basis of Weighted mean score. Three most preferred techniques i.e. hand painting; stencil printing; hand painting & patch work were selected for preparing samples to be compared with controlled samples of pure *Aari* work.

3.2.5 Selection of Material

For preparation of samples of preferred designs with pure *Aari* work and fusion of *Aari* work with selected fabric embellishment techniques, different fabrics such as cambric, organdy, terry voile, cotton, tassar silk were tried for application of selected techniques. Members of Advisory committee found that all the selected techniques had shown best results on cotton. Therefore, cotton fabric was selected as the base material for preparation of samples. Regarding selection of color of the fabric it was found that Warli painting is generally done on the dark background as per the references while no specification of fabric color for Madhubani painting was found as it was done on mud walls after white wash. Dark maroon color for Warli painting designs and white color for Madhubani painting designs was purposively selected to emphasize the hand work to be done on the samples. Original Madhubani and Warli color schemes were applied to maintain the originality and beauty of both the paintings.

3.2.6 Preparation of samples

Samples of three selected designs each from Madhubani and Warli paintings were prepared using three embellishment techniques that is hand painting with *Aari* work; stencil printing with *Aari* work; hand painting& patch with *Aari* work. Sample of pure *Aari* work was also prepared for each design as controlled sample. A total number of twenty four samples i.e. twelve samples of each painting were prepared to study the effect of *Aari* work and its fusion with other fabric embellishment techniques. Size of the sample taken was 12''x12''

3.2.7 Cost of prepared samples

Cost of prepared samples was calculated that included the actual cost of the materials used i.e. fabric, threads, colors, stencil, needle, paint brushes, stones and labour charges. The cost of consumed amount of material was calculated by unitary method according to the market rate. To calculate the labour charges, the time utilized in making of respective sample

was calculated. The labour charges were calculated on the basis of daily wages of Rs.380/- for skilled *Aari* worker for 8 hours.

3.3 Assessment phase

Acceptability was operationalized as mental readiness of the respondents for adoption of developed samples. Preferences were sought from experts and consumers on various parameters using self-structured evaluation performa to study the effect.

3.3.1 Opinion of respondents for designed & developed samples

The prepared samples were displayed in the department of Textile and Apparel Designing for evaluation. These were got assessed by a panel of 20 experts and 30 consumers on various parameters using preferential choice index. The opinion of the respondents for the prepared samples of all the designs of Warli & Madhubani painting using *Aari* work and combination of *Aari* work with hand painting, stencil printing and hand painting & patch work was sought in terms of appeal level of each design on three point scale as very appealing, appealing and least appealing . The developed samples were also measured through statements of different parameters to assess the suitability of developed designs with techniques used. A varied number of statements were formulated with reference to the parameters including reasons of preferences of the developed samples and techniques used. For assessment of developed samples, formulated statements were measured on three point scale as strongly agree, agree and somewhat agree scoring 3,2 and 1 respectively. Individual score of each respondent was calculated.

3.3.2 Cost acceptability

The respondents were asked to give their acceptability for sample cost as highly acceptable, acceptable and least acceptable. Frequency and Percentage was calculated to assess the cost acceptability of prepared samples.

3.3.3 Preferences for application of developed samples on suitable articles.

Frequency and percentage was calculated to assess the respondents' preferences for suitable articles for application of prepared samples.

The samples were finally rated on the basis of their weighted mean score as per following ratings.

WMS Rating

2.33-3.00 Most preferred, Very appealing, Highly Acceptable, Strongly agree

1.66-2.33 Preferred,Appealing, Acceptable, Agree

1.00-1.66 Least preferred, Least appealing, Least Acceptable, Somewhat agree

3.3.4 Design Catalogue

Design catalogue was prepared for documentation comprising of collected motifs, selected motifs and developed designs of Madhubani and Warli painting and photographs of the prepared samples.

Application of Statistical tools and analysis

The collected data was coded, tabulated and analyzed using suitable statistical tools to draw the meaningful inferences.

Weighted mean score: To quantify the data regarding preferential choice of the collected motifs, selected motifs, developed designs, selection of fabric embellishment techniques, assessment of prepared samples and cost acceptability, weighted mean score was calculated and ranks were allotted on the basis of the preferential choice.

$$\text{Weighted Mean Score} = \frac{\text{Total Weighted Score}}{\text{No. of respondent}}$$

CHAPTER-IV

RESULTS

The results of the present study derived through the prescribed methodology and standard tools mentioned earlier have been presented in this chapter. The results have been presented keeping in view the defined objectives of the study. The results of the study have been organized and presented into following broad sections for meaningful conclusions.

4.1 Selection of Traditional Indian Paintings

4.2 Preferences of Respondents for Selection of Motifs and Designs

4.3 Preferences for Selection of Techniques

4.4 Preparation of Designed Samples

4.5 Assessment of Prepared Samples

4.6 Preparation of Design Catalogue

4.1 Selection of Traditional Indian Paintings

Indian traditional paintings were explored from secondary sources that included books, internet, magazines, journals and newspapers. Out of these, ten traditional Indian paintings i.e. Rajput painting, Mughul painting, Pithora painting, Madhubani painting, Cave painting, Mysore painting, Kalamkari painting, Tanjore painting, Santhal painting and Warli painting were screened after gathering information regarding the motifs and designs and seeing the possibility of transforming motifs and designs into other designing techniques for contemporary use after thorough discussion with advisors (Plate-1)



Plate 1: Selected famous traditional Indian paintings

4.1.1 Experts' preferences for selection of paintings suitable to *Aari* work

The data presented in table 1 highlighted the preferences for selection of paintings suitable to *Aari* work.

Table 1: Experts' preferences for selection of paintings suitable to *Aari* work n=15

Sr. No.	Name of Painting	Experts (WMS)	Rank Order
1	Rajput Painting	1.8	III
2	Mughal Painting	1.7	IV
3	Pithora Painting	1.7	IV
4	Warli Painting	2.45	II
5	Santhal Painting	1.67	VII
6	Tanjore Painting	1.69	v
7	Madhubani Painting	2.6	I
8	Cave Painting	1.26	VIII
9	Mysore Painting	1.69	V
10	Kalamkari Painting	1.68	VI

It was found that, Madhubani and Warli paintings were most preferred by the experts with WMS 2.6 (Ist rank) and WMS 2.4 (2nd rank) respectively. The other paintings preferred in descending order were Rajput painting (1.8), Mughul painting(1.7), Pithora painting (1.7), Tanjore painting(1.69), Mysore painting(1.69), Kalamkari painting (1.68) and Santhal painting(1.67). The least preferred painting was cave painting WMS (1.26).

Out of ten selected traditional Indian paintings, two paintings *i.e.* Madhubani and Warli were finalized by the experts for the development of designs keeping in mind their suitability to *Aari* work.

4.2 Preferences for Selected Motifs, Designs and Techniques

Motifs of Madhubani painting collected from secondary sources are presented in plate 2



Plate 2 Collected motifs of Madhubani painting

4.2.1 Experts' preferences for selection of motifs of Madhubani painting

Experts' preferences for selection of Madhubani painting have been presented in Table 2, which were selected on the basis of their weighted mean score. It is clearly depicted that motif no. 29 got 1st rank with weighted mean score 2.36 followed by motif no. 19 which got 2nd rank with weighted mean score 2.3, motif no. 7 which got 3rd rank with WMS 2.26 and motifs no 27, 18, 34, 11 ranked 4th, 5th, 6th, 7th with WMS 2.23, 2.16, 2.1 and 2.03 respectively. The other preferred motifs in descending order were motif no. 30 (2), 22 (1.96), 14 (1.93), 15 (1.9), 20 (1.83), 26 (1.82), 10 (1.8) and 8 (1.7). The least preferred motif was 31(1.06).

Table 2: Experts' preferences for selection of motifs of Madhubani painting **n=15**

Motif. No.	WMS	Rank Order
1	1.63	XVII
2	1.66	XVI
3	1.43	XXII
4	1.56	XVIV
5	1.23	XXVI
6	1.53	XX
7	2.26	III
8	1.7	XV
9	1.4	XXIII
10	1.8	XIV
11	2.03	VII
12	1.4	XXIII
13	1.66	XVI
14	1.93	X
15	1.9	XI
16	1.3	XXV
17	1.6	XVIII
18	2.16	V
19	2.3	II
20	1.83	XII
21	1.6	XVIII
22	1.96	IX
23	1.66	XVI
24	1.23	XXVI

25	1.46	XXI
26	1.82	XIII
27	2.23	IV
28	1.46	XXI
29	2.36	I
30	2	VIII
31	1.06	XXVIII
32	1.23	XXVI
33	1.63	XVII
34	2.1	VI
35	1.36	XXIV
36	1.33	XX
37	1.23	XXVI
38	1.46	XXI
39	1.16	XXVII
40	1.66	XVI

WMS-Weighted Mean Score

Top fifteen motifs were selected for further work on the basis of their weighted mean score according to experts' choices. Motifs selected were no. 29, 19, 7, 27, 18, 34, 11, 30, 22, 14, 15, 20, 26, 10 and 8 (Plate 3).

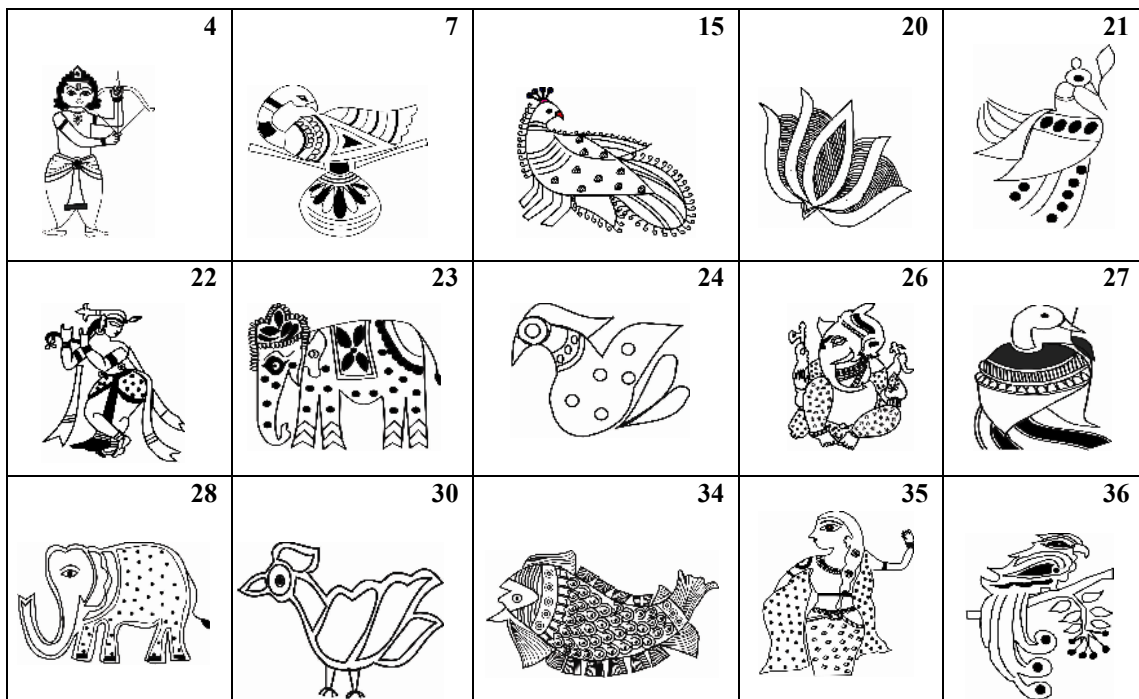


Plate 3 Top fifteen selected motifs of Madhubani painting

4.2.2 Experts' preferences for motifs of Warli painting

The preferential choice for selection of motifs of Warli painting is depicted in table 3. It is evident that motif no. 10 got 1st rank with weighted mean score 2.7 followed by motif no. 24 which got 2nd rank with weighted mean score 2.5, motif no. 9 which got 3rd rank with WMS 2.4 and motifs no. 31, 25, 21, 38 got 4th, 5th, 6th, and 7th rank with weighted mean scores 2.33, 2.3, 2.16 and 2.13 respectively. The other motifs in descending order were no. 3(2.1), 22(2.06), 28(2), 33(1.96), 40(1.93), 12(1.9), 23(1.86), 20(1.83). The least preferred motif was no. 4(1.1).



Plate 4 Collected motifs of Warli painting

Table 3: Experts' preferences for selection of motifs of Warli painting **n=15**

Motif. No.	WMS	Rank Order
1	1.8	XVI
2	1.4	XXII
3	2.1	VIII
4	1.1	XXV
5	1.3	XXIII
6	1.2	XXIV
7	1.6	XX
8	1.6	XX
9	2.4	III
10	2.7	I
11	1.7	XVII
12	1.9	XIII
13	1.7	XVII
14	1.7	XVII
15	1.3	XXIII
16	1.6	XX
17	1.8	XVI
18	1.7	XVII
19	1.6	XX
20	1.83	XV
21	2.16	VI
22	2.06	IX
23	1.86	XIV
24	2.5	II
25	2.3	V
26	1.8	XVI
27	1.66	XVIII
28	2	X
29	1.46	XXI
30	1.7	XVII
31	2.33	IV
32	1.63	XIX
33	1.96	XI
34	1.46	XXI
35	1.3	XVI
36	1.6	XX
37	1.7	XVII
38	2.13	VII
39	1.63	XIX
40	1.93	XII

WMS=Weighted Mean Score

Top fifteen motifs of Warli painting were selected *i.e.* 10, 24, 9, 31, 25, 21, 38, 3, 22, 28, 33, 40, 12, 23 and 20 according to experts' choices for further work on the basis of their weighted mean score (Plate 5).






















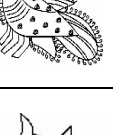

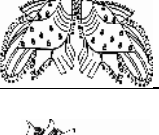



9 	10 	13 	20 	21 
22 	23 	24 	28 	30 
31 	32 	33 	36 	40 

Plate5 Top fifteen selected motifs of Warli painting

4.2.3 Developed designs of Madhubani painting from selected motifs

Two designs were developed from each selected motif of Madhubani painting which were named as a and b, total thirty designs were developed with the help of CorelDraw. These are presented in plate 6.

Sr. No.	Motif No.	Selected Motifs	Developed designs with selected motifs of Madhubani painting	
			Design (a)	Design (b)
1	4			
2	7			
3	15			
4	20			



















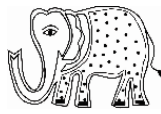

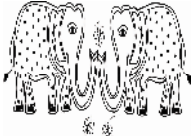












5	21			
6	22			
7	2			
8	24			
9	26			
10	27			
11	28			
12	30			
13	34			
14	35			
15	36			

Plate 6 Developed designs of Madhubani painting

4.2.4 Preferences of respondents for developed designs of Madhubani painting

Table 4 encases the thirty designs (design a & b) developed from selected Madhubani painting motifs which were given preferences as per the choices of respondents. Design no. 22a got rank 1st with average mean score of 2.88 followed by design no. 21b which got 2nd rank with weighted mean score 2.84 and design no. 35a which got 3rd rank with weighted mean score 2.68. The least preferred design was no. 20 b with weighted mean score 1.4. Top three selected designs were design no. 22a, 21b and 35a.




















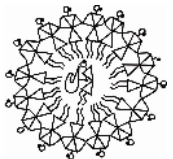




Table 4: Preferences of respondents for developed designs of Madhubani Painting n=45

Sr. No.	Design No.	WMS (a)	Ranks Order (a)	WMS (b)	Ranks Order (b)
1	4	1.7	XXI	1.95	XIV
2	7	2.2	IX	2.33	VIII
3	15	1.86	XVI	1.99	XII
4	20	2.4	VII	1.4	XXIII
5	21	2.66	IV	2.84	II
6	22	2.88	I	2.53	V
7	23	1.9	XV	2.15	X
8	24	1.96	XIII	2.11	XI
9	26	2.46	VI	2.53	V
10	27	1.7	XXI	1.71	XX
11	28	1.7	XXI	1.73	XIX
12	30	1.4	XXIII	1.84	XVII
13	34	1.9	XV	1.8	XVIII
14	35	2.76	III	2.66	IV
15	36	1.53	XXII	1.73	XIX

WMS-Weighted Mean Score

4.2.5 Development of designs of Warli painting from selected motifs

Two designs were developed from each selected motif of Warli painting which were named as a and b, total thirty designs were developed with the help of CorelDraw and are presented in plate 7.

Sr. No.	Motif No.	Selected Motifs	Developed designs with selected motifs of Warli painting	
			Design (a)	Design (b)
1	9			
2	10			
3	13			
4	20			
5	21			
6	22			
7	23			
8	24			


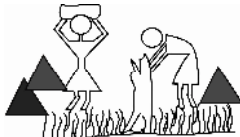












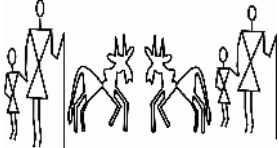
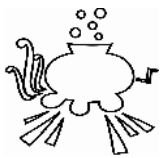
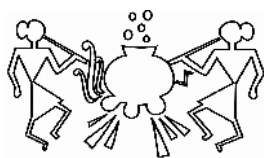
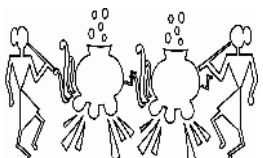



9	28			
10	30			
11	31			
12	32			
13	33			
14	36			
15	40			

Plate 7: Developed designs of Warli painting

Preferences of respondents for developed designs of Warli Painting

Table 5 depicts the thirty designs developed from selected Warli painting motifs which were given preferences as per the choices of respondents. Design no. 24b got 1st rank with weighted mean score 2.81 followed by design no. 10b which got rank 2nd with weighted

mean score 2.66 and design no. 9a which got rank 3rd with weighted mean score 2.63. The least preferred design was no. 33a with weighted mean score 1.4 which got 26th rank. Top three selected designs were design no. 24b, 10b and 9a (Plate 8).

Table 5: Preferences of respondents for developed designs of Warli Painting n=45

Sr. No.	Design No.	WMS (a)	Ranks Order (a)	WMS (b)	Ranks Order (b)
1	9	2.53	III	2.46	IV
2	10	1.93	XV	2.66	II
3	13	2.06	X	2.33	VIII
4	20	2.36	VII	2.01	XI
5	21	2.4	VI	2.45	V
6	22	1.73	XXI	1.66	XXIII
7	23	1.9	XVII	1.95	XIV
8	24	2	XII	2.83	I
9	28	1.8	XIX	1.83	XVIII
10	30	1.6	XXIV	1.7	XXII
11	31	1.96	XIII	2.08	IX
12	32	2	XII	1.7	XXII
13	33	1.4	XXVI	1.46	XXV
14	36	1.9	XVII	1.78	XX
15	40	1.6	XXIV	1.91	XVI

WMS-Weighted Mean Score



Plate 8 Top three selected designs of Madhubani painting

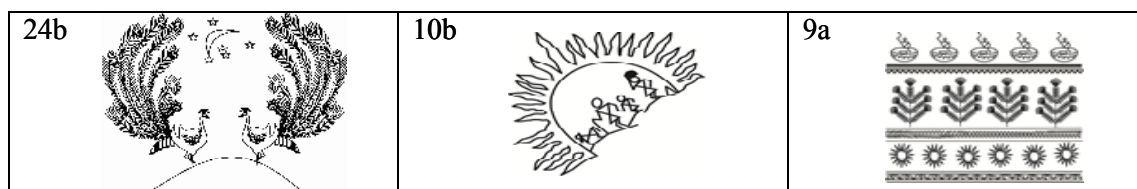


Plate 9 Top three selected designs of Warli painting

4.3 Preferences for selection of Techniques

To create distinct and new range of textile designs that can be utilized for various apparel and household end uses, a list of fabric embellishment techniques suitable for combining with *Aari* work was prepared on the basis of reviews and sorted with the consensus of advisory committee members. Fabric embellishment techniques were selected on the basis of their weighted mean score according to respondents' choices.

4.3.1 Preferences of respondents for selection of fabric embellishment techniques

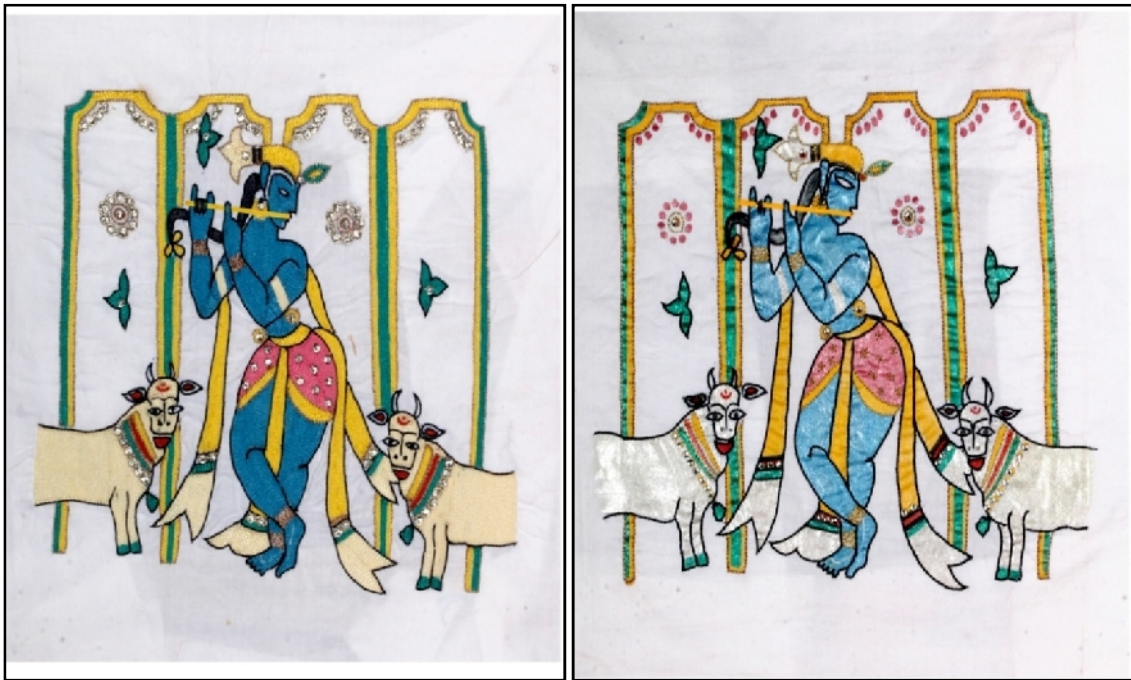
Preferences of respondents for selection of fabric embellishment techniques are depicted in Table 6. It was found that hand painting which got Ist rank with weighted mean score 2.8 followed by hand painting with patch work got IInd rank with weighted mean score 2.76 and Stencil printing which got IIIrd rank with weighted mean score 2.63.

Table 6: Preferences of respondents for selection of fabric embellishment techniques n=30

Sr. No.	Fabric Embellishment techniques	WMS	Rank Order
1	Dyeing -Resist Dyeing		
	Tie and Dye	1.4	X
2	Printing		
	Block Printing	1.1	XV
	Screen Printing	1.87	VI
	Stencil Printing	2.63	III
	Batik Printing	1.06	XVI
3	Painting		
	Hand Painting	2.8	I
	Nib Painting	1.53	VIII
	Spray Painting	1.46	IX
	Nozzle Painting	1.3	XII
4	Embroidery		
	Cut Work	1.1	XV
	Patch Work	2.43	IV
	Appliqué Work	1.23	XIII
5	Combination of Techniques		
	Tie and Dye and block printing	1.03	XVII
	Screen Printing with appliqué work	1.3	XII
	Stencil Printing with patch work	2.33	V
	Nozzle Painting and spray painting	1.56	VII
	Stencil Printing and Cut Work	1.33	XI
	Hand painting and Patch Work	2.76	II
	Block printing and appliqué Work	1.13	XIV

WMS=Weighted Mean Score

Design 22a



Aari Work

Hand painting with *Aari work*

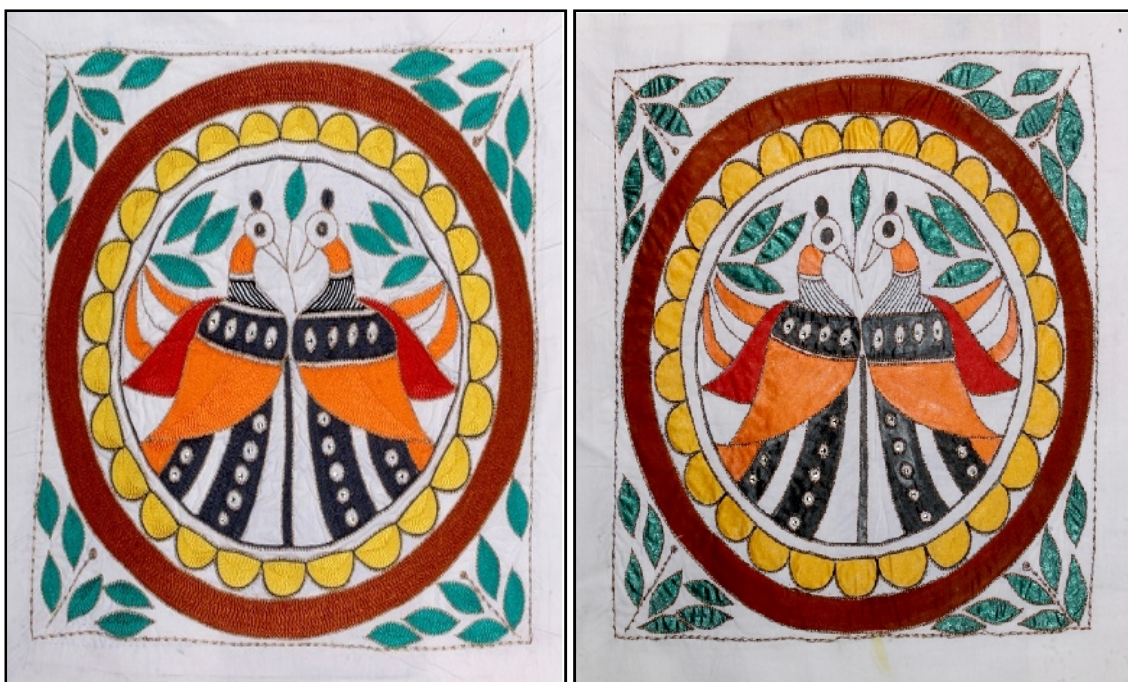


Hand painting & patch with *Aari work*

Stencil printing with *Aari work*

Plate 10(a): Prepared Samples of Madhubani Painting Designs in Fusion with Selected Fabric Embellishment Techniques.

Design 21b



Aari Work

Hand painting with *Aari* work

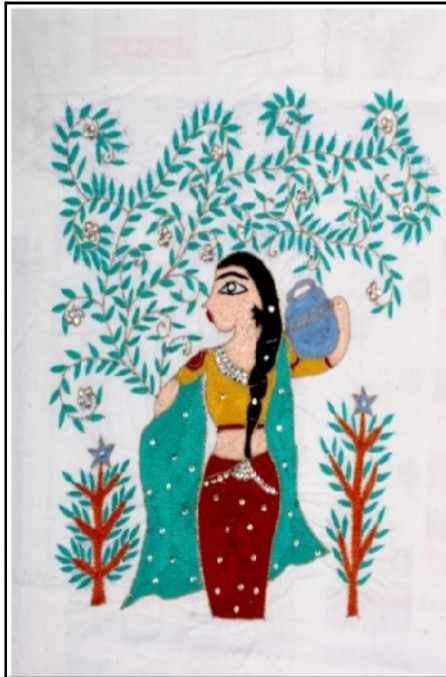


Hand painting & patch with *Aari* work

Stencil printing with *Aari* work

Plate 10(b): Prepared Samples of Madhubani Painting Designs in Fusion with Selected Fabric Embellishment Techniques.

Design 35a



***Aari* Work**



Hand painting with *Aari* work



Hand painting & patch with *Aari* work



Stencil printing with *Aari* work

Plate 10(c): Prepared Samples of Madhubani Painting Designs in Fusion with Selected Fabric Embellishment Techniques.

Design 24b



Aari Work



Hand painting with *Aari work*



Hand painting & patch with *Aari work*



Stencil printing with *Aari work*

Plate 11(a): Prepared Samples of Warli Painting Designs in Fusion with Selected Fabric Embellishment Techniques.

Design 10b



Aari Work



Hand painting with *Aari work*



Hand painting & patch with *Aari work*



Stencil printing with *Aari work*

Plate 11(b): Prepared Samples of Warli Painting Designs in Fusion with Selected Fabric Embellishment Techniques.

Design 9a



Aari Work



Hand painting with *Aari work*



Hand painting & patch with *Aari work*



Stencil printing with *Aari work*

Plate 11(c): Prepared Samples of Warli Painting Designs in Fusion with Selected Fabric Embellishment Techniques.

4.4 Preparation of Designed Samples

Samples of three selected designs each from Madhubani and Warli painting were prepared using three embellishment techniques *i.e.* hand painting with *Aari* work, Stencil printing with *Aari* work and hand painting & patch with *Aari* work. A controlled sample with pure *Aari* work was also prepared for each selected design of both the paintings. A total number of twenty four samples *i.e.* twelve samples of each painting were prepared to study the effect of *Aari* work and its fusion with other selected fabric embellishment techniques (Plate 10 & 11).

4.5 Assessment of Prepared Samples

The prepared samples of Madhubani and Warli painting designs were got assessed by a panel of twenty experts and thirty consumers in terms of overall appeal, cost acceptability and opinion regarding suitability of developed designs with techniques used.

4.5.1 Assessment of prepared samples of Madhubani painting by experts and consumers in terms of overall appeal

Assessment of prepared samples of Madhubani painting by experts and consumers in terms of overall appeal has been presented in Table 7. It is evident *i.e.* design no.22a, samples prepared with all the techniques *i.e.* *Aari* work, hand painting, hand painting & patch work and stencil printing were found highly appealing with average score in the range of 2.48-2.81. Likewise, in design no. 21b, samples prepared with *Aari* work, hand painting, hand painting with patch work and stencil printing were highly appealing with average score in the range of 2.69-2.36. While in design no. 35a samples prepared with hand painting & patch work, hand painting and stencil printing were highly appealing with average score (2.49-2.64) and samples prepared with *Aari* work were also found appealing with average score 2.28.

Table 7: Assessment of prepared samples of Madhubani painting in terms of overall appeal **n=50**

Design No.	Techniques	Experts n=20 WMS	Consumers n=30 WMS	Average Score	Rank Order
22a	T	2.9	2.73	2.81	I
	T1	2.65	2.83	2.74	II
	T2	2.5	2.8	2.65	III
	T3	2.4	2.56	2.48	IV
21b	T	2.65	2.73	2.69	I
	T1	2.35	2.6	2.47	II
	T2	2.2	2.53	2.36	IV
	T3	2.35	2.56	2.45	III
35a	T	2.7	1.86	2.28	IV
	T1	2.45	2.76	2.60	II
	T2	2.45	2.83	2.64	I
	T3	2.35	2.63	2.49	III

T=*Aari* work, T1=Hand painting with *Aari* work, T2=Hand painting & patch with *Aari* work, T3=Stencil printing with *Aari* work
WMS-Weighted Mean Score

4.5.2 Assessment of prepared samples of Warli painting in terms of overall appeal

Assessment of prepared samples of Warli painting in terms of overall appeal has been depicted in table 8. It was observed that in design no. 24b and 9a samples prepared with all the techniques were highly appealing with average score in range of (2.33-3.00), while in design no. 10b, samples prepared with hand painting and patch work with *Aari* work and stencil printing with *Aari* work were highly appealing with average score (2.33-3.00). Sample of hand painting & patch with *Aari* work was also highly appealing (average score 2.2) on the basis of assessment.

Table 8: Assessment of prepared samples of Warli painting in terms of overall appeal
n=50

Design No.	Techniques	Experts n=20 WMS	Consumers n=30 WMS	Average Score	Rank Order
24b	T	2.95	2.8	2.87	I
	T1	2.6	2.86	2.73	II
	T2	2.35	2.83	2.59	IV
	T3	2.55	2.7	2.62	III
10b	T	2.7	2.76	2.69	I
	T1	2.4	2.93	2.66	II
	T2	2	2.53	2.2	IV
	T3	2.25	2.53	2.39	III
9a	T	2.85	2.83	2.84	I
	T1	2.45	2.56	2.50	IV
	T2	2.4	2.63	2.51	III
	T3	2.6	2.93	2.76	II

T=*Aari* work, T1=Hand painting with *Aari* work, T2 =Hand painting & patch with *Aari* work, T3=Stencil printing with *Aari* work.
WMS- Weighted Mean Score

4.5.3 Cost acceptability of the prepared samples

Cost of the prepared samples was calculated including their raw material (painting colors, printing colors, painting brushes and stencils) and charges of skilled labour.

4.5.3.1 Estimation of the cost of prepared samples

The cost was calculated on the basis of raw material used *i.e.* fabric, thread, color, stone, brushes, stencil and cost of skilled labour. The labour cost was calculated on the basis of hours spent on preparation of samples through different techniques at the rate of Rs 380 per day *i.e.* labour charges of skilled worker. In case of Madhubani painting designs, the total cost of the samples prepared with *Aari* work, hand painting with *Aari* work, hand painting & patch

with *Aari* work and stencil printing with *Aari* work was Rs 900, 585,590 and 545 respectively. In case of Warli painting designs, the total cost of sample prepared with *Aari* work, hand painting with *Aari* work, and hand painting & patch with *Aari* work and stencil printing with *Aari* work was Rs 840, 510, 485 and 500 respectively.

Table 9: Estimated cost of prepared samples

Samples	Cost of raw material(Rs)				Total cost of material (Rs)	Preparation Hours spend (Hrs.)	Labour Charges (Rs)	Total Cost of Product (Rs)
	Fabric	Threads	Colors	Ornamentation material				
Madhubani painting								
T	30	80	-----	20	140	16-17	760	900
T1	30	50	125	20	205	8-9	380	585
T2	40	50	100	20	210	7-8	380	590
T3	30	30	125	80	165	7-8	380	545
Warli painting								
T	30	30	-----	20	80	16-17	760	840
T1	30	30	50	20	130	7-8	380	510
T2	40	30	25	20	105	8-9	380	485
T3	30	30	50	70	180	7-8	380	500

T=*Aari* work, T1=Hand painting with *Aari* work, T2=Hand painting & patch with *Aari* work, T3=Stencil printing with *Aari* work

4.5.3.2 Acceptability level of the cost of the prepared samples of Madhubani and Warli painting

Acceptability level of the estimated cost of the prepared samples was got evaluated from the experts. The acceptability level of the cost of samples are shown in Table 10 and Fig.1

Table10: Cost acceptability of prepared samples of Madhubani painting by experts n=20

Design No.	Techniques	Actual Cost (Rs)	Cost		
			Highly Acceptable	Acceptable	Least Acceptable
			Freq.(%)	Freq.(%)	Freq.(%)
22 a	T	900	15(75)	3(15)	2(10)
	T1	585	19(95)	1(5)	-
	T2	590	17(85)	2(10)	-
	T3	545	18(90)	2(10)	-
21b	T	900	20(100)	-	-
	T1	585	19(95)	1(5)	-
	T2	590	18(90)	2(10)	-
	T3	545	15(75)	5(25)	-
35a	T	900	19(95)	1(5)	-
	T1	585	18(90)	2(10)	-
	T2	590	17(85)	3(15)	-
	T3	545	17(85)	2(10)	1(5)

T=*Aari* work, T1=Hand painting with *Aari* work, T2=Hand painting & patch with *Aari* work, T3=Stencil printing with *Aari* work

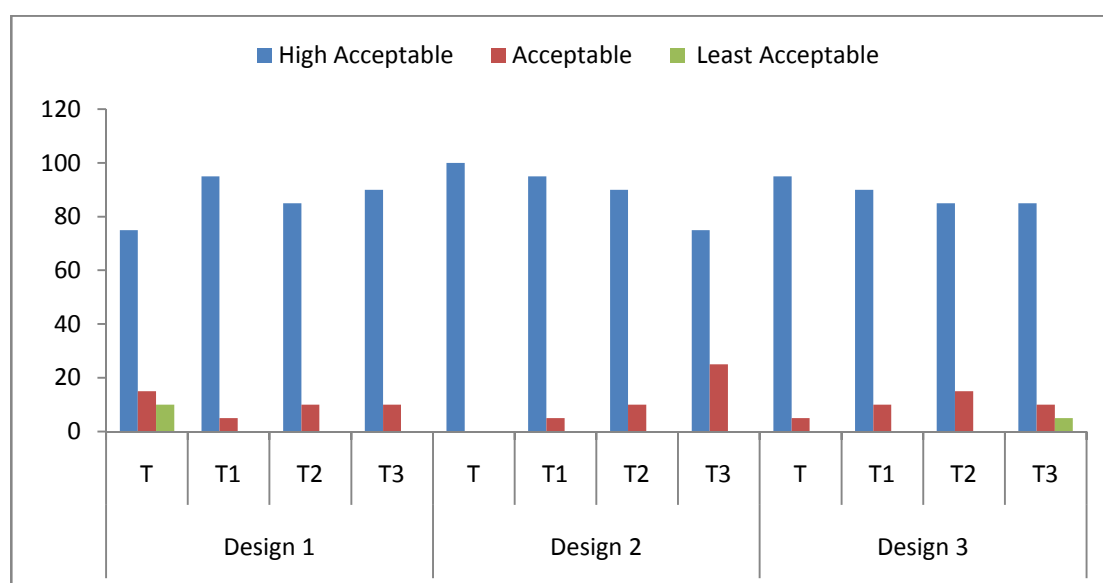


Fig. 1: Cost acceptability of prepared samples of Madhubani painting by experts

Cost acceptability of prepared samples of Madhubani painting by experts

The experts' opinion regarding cost acceptability of prepared samples of Madhubani painting has been presented in Table 10 and Fig 1. The data showed that in design no.22a, cost of sample prepared with hand painting was highly acceptable by 95 per cent experts followed by Stencil printing with *Aari* work (90%), hand painting & patch work with *Aari* work(85%)and *Aari* work (75%) whereas fifteen per cent experts found the cost of sample prepared with *Aari* work as acceptable followed by hand painting & patch work with *Aari* work, stencil printing with *Aari* work(10%) and hand painting with *Aari* work (5%).Only ten per cent experts stated the cost as least acceptable in case of sample prepared with *Aari* work.

In design no.21b, cost of sample prepared with *Aari* work was highly acceptable by all the experts (100%) followed by hand painting with *Aari* work (95%), hand painting & patch work with *Aari* work (90%) and stencil printing with *Aari* work (75%).

In design no.35a, the sample with *Aari* work was highly acceptable by 95per cent experts followed by hand painting with *Aari* work (90%), hand painting & patch with *Aari* work and stencil printing with *Aari* work (85%).Fifteen percent experts found the cost of the sample prepared with hand painting & patch with *Aari* work as acceptable followed by sample prepared with hand painting with *Aari* work, stencil printing with *Aari* work (10%) and *Aari* work (5%). None of the experts found the cost as least acceptable except for stencil printing with *Aari* work in design 35a.

Table 11: Cost acceptability of prepared samples of Madhubani painting by consumers

n=30

Design No.	Techniques	Actual Cost (Rs)	Cost		
			Highly Acceptable	Acceptable	Least Acceptable
			Freq. (%)	Freq. (%)	Freq. (%)
22 a	T	900	8(26.6)	14(53.2)	8(26.6)
	T1	585	24(80)	4(13.3)	2(6.6)
	T2	590	25(83.3)	5(16.7)	—
	T3	545	27(90)	3(6.6)	—
21b	T	900	8(26.6)	14(53.2)	8(26.6)
	T1	585	27(90)	3(10)	—
	T2	590	24(80)	6(20)	—
	T3	545	26(86.6)	3(10)	1(3.3)
35a	T	900	9(30)	12(40)	9(30)
	T1	585	27(90)	2(6.6)	1(3.3)
	T2	590	25(83.3)	5(16.7)	1(3.3)
	T3	545	24(80)	4(13.3)	2(6.6)

T=*Aari* work, T1=Hand painting with *Aari* work, T2=Hand painting & patch with *Aari* work, T3=Stencil printing with *Aari* work

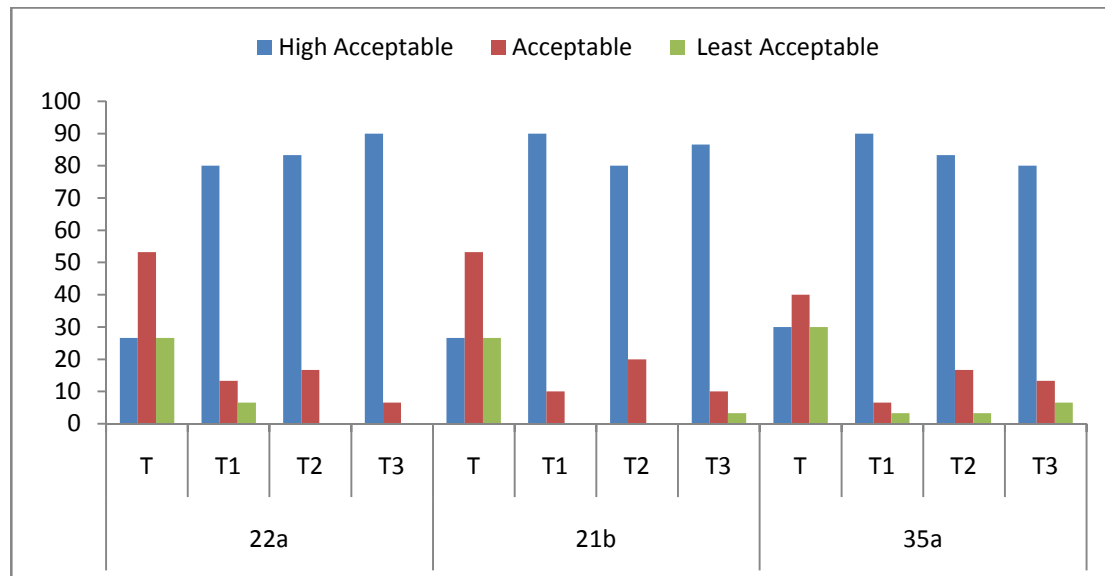


Fig. 2: Cost acceptability of prepared samples of Madhubani painting by consumers

Cost acceptability of prepared sample of Madhubani painting by consumers

The opinion of the consumers' regarding cost acceptability of cost of prepared samples of Madhubani painting has been presented in Table 11 and Fig.2. The data depicts that in design no. 22a, ninety per cent consumers found the cost of the sample of stencil printing with *Aari* work as highly acceptable followed by hand painting & patch with *Aari* work (83.3), hand painting with *Aari* work (80%) and *Aari* work (26.6). Near about fifty three

per cent consumers found the cost as acceptable for the sample of *Aari* work followed by hand painting & patch with *Aari* work (16.7%), hand painting with *Aari* work (13.3%) and stencil printing with *Aari* work (6.6%). Twenty per cent consumers found the cost of *Aari* work and 6.6 per cent found the cost of hand painting with *Aari* work as least acceptable. While in design no.21b, ninety per cent experts found the cost as highly acceptable for the sample prepared by hand painting with *Aari* work followed by stencil printing with *Aari* work (86.6%), hand painting & patch with *Aari* work (80%) and *Aari* work (26.6%). Nearly half of the consumers (53.2%) consumers found the cost of the sample prepared with *Aari* work as acceptable followed by hand painting & patch with *Aari* work (20%), *Aari* work (16.7%), hand painting with *Aari* work and stencil printing with *Aari* work (10%). Near about twenty seven percent consumers found the cost as least acceptable for *Aari* work followed by the sample prepared with stencil printing with *Aari* work (3.3%).

In design no.35a, ninety per cent consumers found the cost of the sample prepared by hand painting with *Aari* work followed by hand painting & patch with *Aari* work (83.3%), stencil printing with *Aari* work (80%) and *Aari* work (30%). Forty per cent consumers found the cost as acceptable for the sample prepared with *Aari* work followed by hand painting & patch with *Aari* work (16.7%), stencil printing with *Aari* work (13.3%) and hand painting with *Aari* work (6.6%). Thirty per cent consumers found the cost as least acceptable for the sample prepared with *Aari* work followed by stencil printing with *Aari* work (6.6%) and hand painting with *Aari* work and hand painting & patch with *Aari* work (3.3%).

Table 12: Cost acceptability of prepared samples of Warli painting by experts n=20

Design No.	Techniques	Actual Cost (Rs)	Cost		
			Highly Acceptable	Acceptable	Least Acceptable
			Freq. (%)	Freq. (%)	Freq. (%)
24b	T	840	17(85)	2(10)	1(5)
	T1	510	18(90)	2(10)	—
	T2	485	16(80)	4(20)	—
	T3	560	17(85)	3(15)	—
10b	T	840	18(90)	2(10)	—
	T1	510	16(80)	3(15)	—
	T2	485	17(85)	3(15)	—
	T3	560	16(80)	3(15)	1(5)
9a	T	840	19(95)	1(5)	—
	T1	510	18(90)	2(10)	—
	T2	485	16(80)	2(10)	—
	T3	560	16(80)	4(20)	—

T=*Aari* work, T1=Hand painting with *Aari* work, T2=Hand painting & patch with *Aari* work, T3=Stencil printing with *Aari* work

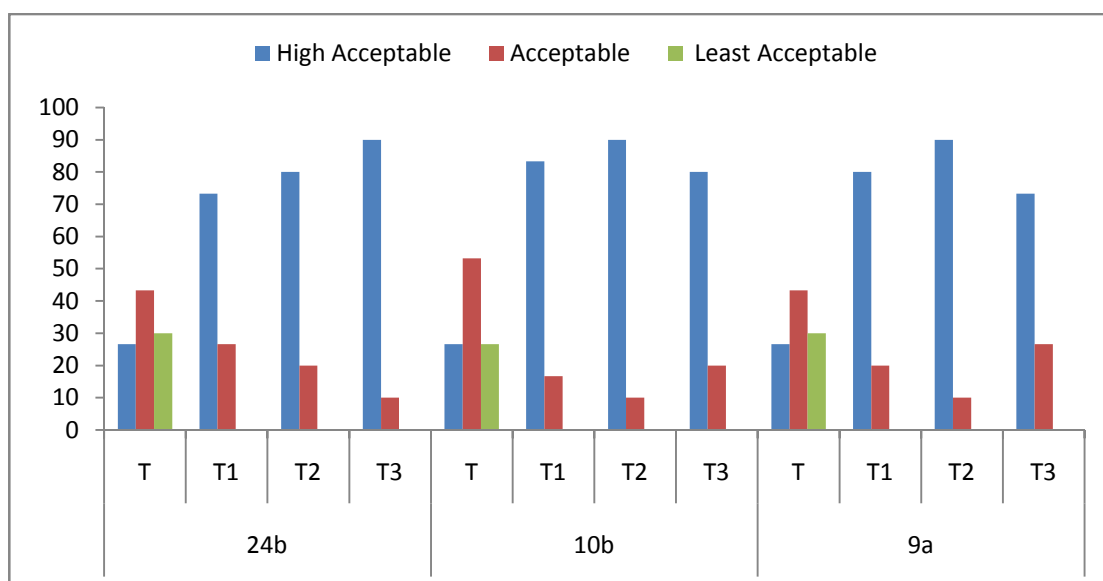


Fig. 3: Cost acceptability of prepared samples of Warli painting by experts

Cost acceptability of prepared samples of Warli painting by experts

Table 12 and Fig.3 highlighted the opinion of experts regarding cost acceptability of prepared samples of Warli painting. Data revealed that for design no.24b, the cost of the sample prepared with hand painting was found to be highly acceptable by 90 percent experts followed by *Aari* work and stencil printing with *Aari* work by 85percent experts and hand painting& patch with *Aari* work by 80 percent experts. Twenty percent experts found the cost as acceptable for the sample prepared with hand painting & patch with *Aari* work followed by stencil printing with *Aari* work (15%), *Aari* work and hand painting with *Aari* work (10%).Only 5 per cent experts found the cost as least acceptable in case of sample prepared with *Aari* work.

While in design no. 10b, the cost of the sample prepared with *Aari* work was found to be highly acceptable by 90 per cent experts followed by hand painting & patch with *Aari* work (85%), *Aari* work and stencil printing with *Aari* work (80%).Fifteen per cent experts found the cost as acceptable for the prepared sample of hand painting with *Aari* work and stencil printing with *Aari* work and hand painting & patch with *Aari* work followed by *Aari* work (10%). Only 5 percent experts found the cost as least acceptable for the sample prepared by stencil printing with *Aari* work.

In design no. 9a, the cost of the sample prepared with *Aari* work was found to be highly acceptable by 95 per cent experts followed by hand painting with *Aari* work (90%), hand painting & patch with *Aari* work and stencil printing with *Aari* work (80%). Twenty percent experts opined the cost of the sample prepared with stencil printing as acceptable followed by hand painting with *Aari* work and hand painting & patch with *Aari* work (10%) and *Aari* work (5%). None of the experts found the cost of any sample as least acceptable.

Table 13: Cost acceptability of prepared samples of Warli painting by consumers n=30

Design No.	Techniques	Actual Cost (Rs)	Cost		
			Highly Acceptable	Acceptable	Least Acceptable
			Freq.(%)	Freq.(%)	Freq.(%)
24b	T	840	8(26.6)	13(43.3)	9(30)
	T1	510	22(73.3)	8(26.6)	—
	T2	485	24(80)	6(20)	—
	T3	560	27(90)	3(10)	—
10b	T	840	8(26.6)	14(53.2)	8(26.6)
	T1	510	25(83.3)	5(16.7)	—
	T2	485	27(90)	3(10)	—
	T3	560	24(80)	6(20)	—
9a	T	840	8(26.6)	13(43.3)	9(30)
	T1	510	24(80)	6(20)	—
	T2	485	27(90)	3(10)	—
	T3	560	22(73.3)	8(26.6)	—

T=*Aari*work, T1=Hand painting with *Aari* work, T2=Hand painting & patch with *Aari* work, T3=Stencil printing work

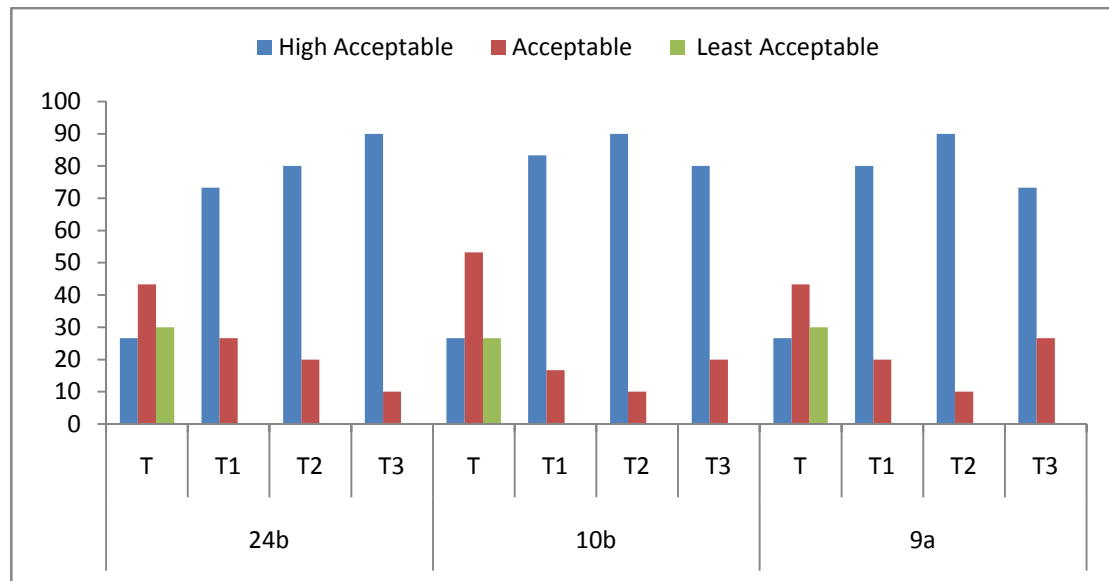


Fig. 4 Cost acceptability of prepared samples of Warli painting by consumers

Cost acceptability of prepared samples of Warli painting by consumers

The opinion of the consumers regarding the acceptability of the cost of prepared samples of Warli painting has been exhibited in Table 13 and Fig. 4. The data depicts that in design no. 24b, the cost of the sample prepared with stencil printing with *Aari* work was highly acceptable by 90 per cent consumers followed by hand painting & patch with *Aari*

work (80%), hand painting with *Aari* work (73.3%) and *Aari* work (26.6%) while 26.6 per cent consumers found the cost as acceptable for *Aari* work followed by hand painting (26.6%), hand painting & patch with *Aari* work (20%), *Aari* work (16.7%) and stencil printing with *Aari* work (10%). Thirty per cent consumers found the cost of sample with *Aari* work as least acceptable.

In design no.10b, the cost of the sample prepared with hand painting & patch with *Aari* work was highly acceptable by 90 per cent consumers followed by hand painting with *Aari* work (83.3%), Stencil printing with *Aari* work (80%) and *Aari* work (26.6%). Nearly half of the consumers (53.2%) found the cost as acceptable for the sample prepared with *Aari* work followed by stencil printing with *Aari* work, hand painting with *Aari* work (16%) and hand painting & patch with *Aari* work (10%).

In case of design no.9a, the sample prepared by hand painting & patch with *Aari* work was found as highly acceptable by 90 per cent consumers followed by hand painting with *Aari* work (80%) and stencil printing with *Aari* work (73.3%) and *Aari* work (26.6%). The cost was found as acceptable for the sample prepared with *Aari* work (43.3%) followed by stencil printing with *Aari* work (26.6%), hand painting with *Aari* work (20%), hand painting & patch with *Aari* work (10%). Thirty per cent of the consumers found the cost of *Aari* work sample as least acceptable.

Thus, it is concluded that the cost of samples prepared with all the selected techniques including *Aari* work was highly acceptable by majority of the experts. But in case of consumers the cost of samples of *Aari* work was not as acceptable as that by experts.

4.5.4 Opinion of respondents regarding suitability of developed designs with techniques used for Madhubani and Warli painting

The developed samples were measured through statements of different parameters to assess the suitability of developed designs with techniques used for Madhubani and Warli painting

Table 14: Opinion of experts regarding suitability of developed designs with techniques used for Madhubani painting

n=20

Sr.No.	Statement	Design 22b				Design 21b				Design 35 a			
		T	T1	T2	T3	T	T1	T2	T3	T	T1	T2	T3
		WMS	WMS	WMS	WMS	WMS	WMS	WMS	WMS	WMS	WMS	WMS	WMS
1	Developed design is suitable as per selected technique.	2.65	2.75	2.7	2.4	2.55	2.6	2.65	2.55	2.65	2.6	2.55	2.45
2	Developed designs are appropriate for technique in combination with <i>Aari</i> work.	2.65	2.75	2.55	2.55	2.65	2.4	2.65	2.5	2.5	2.65	2.6	2.6
3	Developed designs maintain the beauty of painting.	2.4	2.8	2.6	2.55	2.45	2.65	2.70	2.65	2.6	2.55	2.65	2.45
4	Color combinations used in designs are as per trend and acceptable.	2.75	2.65	2.7	2.65	2.55	2.65	2.65	2.6	2.65	2.6	2.65	2.6
5	Creative use of Madhubani painting designs.	2.6	2.75	2.65	2.65	2.55	2.75	2.65	2.55	2.65	2.55	2.6	2.55
6	Effect produced is innovative.	2.7	2.85	2.6	2.70	2.75	2.65	2.75	2.65	2.85	2.75	2.6	2.65
7	The developed samples are attractive with the combination of embellishment technique.	2.7	2.75	2.7	2.65	2.55	2.65	2.55	2.75	2.7	2.65	2.65	2.75
8	Developed designs can be used on household articles & apparel.	2.55	2.6	2.6	2.65	2.55	2.65	2.6	2.55	2.65	2.55	2.6	2.6
9	Fusion of techniques gives an elegant and sophisticated look.	2.6	2.75	2.5	2.55	2.45	2.35	2.45	2.5	2.5	2.34	2.65	2.4
10	Combination of technique decreases the cost of <i>Aari</i> work and increases the market demand.	2.6	2.75	2.8	2.75	2.5	2.75	2.7	2.75	2.6	2.8	2.75	2.66
11	Quality of workmanship is good.	2.6	2.65	2.6	2.65	2.6	2.65	2.6	2.65	2.6	2.65	2.60	2.7

Strongly agree=2.34-3.00, Agree=1.66-2.34, least agree=1.00-1.66

WMS- weighted means score

4.5.4.1 Opinion of experts regarding suitability of developed designs with techniques used for Madhubani painting

The result presented in Table 14 shows the opinion of experts regarding suitability of developed designs along with techniques used for Madhubani painting. Responses about prepared samples were assessed by the ranks given on the basis of their weighted mean score. This table shows that in design no.22a, experts strongly agree with all the statements asked for assessment *i.e.* “effect produced is innovative”, “combination of technique decreases the cost of *Aari* work and increases the market demand”, “developed design maintain the beauty of painting”, “developed designs are appropriate for technique in combination with *Aari* work”, “developed designs is suitable as per selected technique”, “creative use of Madhubani painting designs”, “color combinations used in designs are as per trend and acceptable”, “developed samples are attractive with the combination of embellishment techniques”, “quality of workmanship is good”, “fusion of techniques given an elegant and sophisticated look” and “developed designs can be used on household articles & apparel” with WMS in the range of 2.4-2.9.

In design no. 21b, experts strongly agree for the statements “combination of technique decreases the cost of *Aari* work and increases the market demand”, “effect produced is innovative”, “developed samples are attractive with the combination of embellishment techniques”, “developed design maintain the beauty of painting”, “developed designs are appropriate for technique in combination with *Aari* work”, “developed designs is suitable as per selected technique”, “creative use of Madhubani painting designs”, “quality of workmanship is good”, “fusion of techniques give an elegant and sophisticated look” and “developed designs can be used on household articles & apparel” with WMS in the range of 2.4-2.85.

In design no.35a , “combination of technique decreases the cost of *Aari* work and increases the market demand”, “effective produced is innovative”, “developed samples are attractive with the combination of embellishment techniques”, “developed designs are appropriate for technique in combination with *Aari* work”, “developed design is suitable as per selected techniques”, “developed designs maintain the beauty of painting”, “developed designs can be used on household articles & apparel”, “combination of technique decreases the cost of *Aari* work and increases the market demand”, “quality of workmanship is good”, “fusion of techniques gives an elegant and sophisticated look”, and “ color combinations used in designs are as per trend and acceptable” with WMS in the range 2.34-2.8.

Table 15: Opinion of the consumers regarding suitability of developed designs with techniques used for Madhubani painting

n=30

Sr. No.	Statement	Design no.22a				Design no.21 b				Design no.35a			
		T	T1	T2	T3	T	T1	T2	T3	T	T1	T2	T3
		WMS	WMS	WMS	WMS	WMS	WMS	WMS	WMS	WMS	WMS	WMS	WMS
1	Developed design is suitable as per selected technique	2.95	2.8	2.75	2.7	2.9	2.75	2.65	2.20	2.85	2.65	2.95	2.85
2	Developed designs are appropriate for technique in combination with <i>Aari</i> work	2.75	2.65	2.65	2.6	2.8	2.75	2.60	2.55	2.65	2.75	2.65	2.65
3	Developed designs maintain the beauty of painting	2.8	2.75	2.85	2.6	2.75	2.65	2.75	2.80	2.75	2.70	2.75	2.80
4	Color combinations used in designs are as per trend and acceptable	2.7	2.65	2.75	2.70	2.70	2.65	2.60	2.65	2.70	2.65	2.60	2.66
5	Creative use of Madhubani painting designs	2.75	2.7	2.55	2.6	2.85	2.55	2.40	2.60	2.85	2.55	2.60	2.55
6	Effect produced is innovative	2.8	2.75	2.70	2.80	2.75	2.60	2.75	2.65	2.75	2.75	2.65	2.75
7	The developed samples are attractive with the combination of embellishment technique	2.5	2.85	2.7	2.75	2.60	2.80	2.65	2.65	2.75	2.8	2.70	2.75
8	Adapted designs can be used on household articles & apparel	2.75	2.55	2.65	2.75	2.95	2.75	2.65	2.60	2.75	2.70	2.50	2.60
9	Fusion of techniques gives an elegant and sophisticated look	2.15	2.75	2.70	2.60	2.65	2.80	2.70	2.75	2.75	2.80	2.70	2.65
10	Combination of technique decreases the cost of <i>Aari</i> work and increases the market demand	2.5	2.75	2.8	2.7	2.6	2.75	2.9	2.85	2.75	2.75	2.8	2.8
11	Quality of workmanship is good	2.85	2.8	2.75	2.7	2.85	2.75	2.7	2.75	2.80	2.8	2.75	2.7

T=*Aari* work, T1=Hand painting with *Aari* work, T2=Hand painting & patch with *Aari* work, T3=Stencil printing with *Aari* work

WMS- weighted means score

4.5.4.2 Opinion of consumers regarding suitability of developed designs with techniques used for Madhubani painting

The result presented in Table 15 shows the opinion of consumers regarding suitability of developed designs along with techniques used for Madhubani painting. Responses about prepared sample were assessed by the ranks given on the basis of their weighted mean score. This table shows that in design no.22a, consumers were strongly agree with the statements “developed design is suitable as per selected technique”, “effect produced is innovative”, “creative use of Madhubani painting designs”, “developed design maintain the beauty of painting”, “developed designs are appropriate for technique in combination with *Aari* work”, “developed samples are attractive with the combination of embellishment techniques”, “color combinations used in designs are as per trend and acceptable”, “quality of workmanship is good”, “fusion of techniques given an elegant and sophisticated look”, “combination of technique decreases the cost of *Aari* work and increases the market demand”, “developed designs can be used on household articles & apparel” with WMS in the range of 2.5-2.95 .

For design no. 21b, experts were strongly agree with the statements “developed designs is suitable as per selected technique”, “creative use of Madhubani painting designs”, “effect produced is innovative”, “combination of technique decreases the cost of *Aari* work and increases the market demand”, “developed design maintain the beauty of painting”, “developed samples are attractive with the combination of embellishment techniques”, “developed designs are appropriate for technique in combination with *Aari* work”, “developed designs can be used on household articles & apparel”, “color combinations used in designs are as per trend and acceptable”, “quality of workmanship is good” “fusion of techniques given an elegant and sophisticated look” with WMS in the range of 2.40-2.9.

For design no. 35a, consumers were strongly agree with the statements “developed design is suitable as per selected technique”, “creative use of Madhubani painting designs”, “effect produced is innovative”, “developed design maintain the beauty of painting”, “combination of technique decreases the cost of *Aari* work and increases the market demand”, “developed samples are attractive with the combination of embellishment techniques”, “developed designs are appropriate for technique in combination with *Aari* work”, “developed designs can be used on household articles & apparel”, “color combinations used in designs are as per trend and acceptable”, “quality of workmanship is good” “fusion of techniques given an elegant and sophisticated look” WMS in the range of 2.50-2.95.

It is concluded that the respondents had very high opinion about the prepared samples which are effective in producing contemporary version of traditional art forms by fusion of Madhubani painting motifs and *Aari* embroidery with different fabric embellishment techniques. Samples prepared with different techniques that is hand painting with *Aari* work, hand painting & patch with *Aari* work and stencil printing with *Aari* work when compared with sample of pure *Aari* work were found to be time saving, cost effective and labour saving. Moreover all the samples have market demand, elegance, acceptability, appropriateness, innovativeness, creativity, suitability and attractiveness.

Table 16: Opinion of the experts regarding suitability of developed designs with techniques used for Warli painting

n=20

Sr. No.	Statements	Design no.24b				Design no.10b				Design no.9a			
		T	T1	T2	T3	T	T1	T2	T3	T	T1	T2	T3
		WMS	WMS	WMS	WMS	WMS	WMS	WMS	WMS	WMS	WMS	WMS	WMS
1	Developed design is suitable as per selected technique	2.85	2.8	2.6	2.7	2.9	2.75	2.50	2.60	2.95	2.65	2.95	2.85
2	Developed designs are appropriate for technique in combination with <i>Aari</i> work	2.75	2.65	2.25	2.6	2.8	2.75	2.60	2.45	2.65	2.75	2.65	2.65
3	Developed designs maintain the beauty of painting	2.8	2.75	2.55	2.6	2.75	2.65	2.55	2.60	2.55	2.70	2.50	2.50
4	Colour combinations used in designs are as per trend and acceptable	2.6	2.5	2.7	2.75	2.50	2.55	2.60	2.65	2.70	2.55	2.60	2.45
5	Creative use of Warli painting designs	2.75	2.7	2.55	2.6	2.85	2.55	2.60	2.50	2.85	2.65	2.55	2.55
6	Effect produced is innovative	2.8	2.65	2.70	2.6	2.65	2.60	2.75	2.65	2.75	2.65	2.65	2.65
7	The developed samples are attractive with the combination of embellishment technique	2.9	2.75	2.60	2.75	2.70	2.70	2.65	2.75	2.65	2.60	2.75	2.65
8	Adapted designs can be used on household articles & apparel	2.75	2.5	2.65	2.75	2.75	2.65	2.65	2.70	2.70	2.65	2.65	2.70
9	Fusion of techniques gives an elegant and sophisticated look	2.8	2.75	2.75	2.6	2.80	2.85	2.65	2.75	2.75	2.80	2.70	2.65
10	Combination of technique decreases the cost of <i>Aari</i> work and increases the market demand	2.6	2.75	2.8	2.85	2.65	2.85	2.7	2.65	2.65	2.85	2.8	2.75
11	Quality of workmanship is good	2.6	2.65	2.65	2.70	2.60	2.6	2.65	2.55	2.65	2.60	2.65	2.6

T=*Aari* work, T1=Hand painting with *Aari* work, T2=Hand painting & patch with *Aari* work, T3=Stencil printing with *Aari* work
WMS- weighted means score

4.5.4.3 Opinion of the experts regarding suitability of developed designs with techniques used for Warli painting

The result presented in Table 16 shows the opinion of experts regarding suitability of developed designs along with techniques used for Warli painting. Responses about prepared sample were assessed by the ranks given on the basis of their weighted mean score. This table shows that in design no.24 b, experts strongly agree with the statements “developed designs is suitable as per selected technique”, “combination of technique decreases the cost of *Aari* work and increases the market demand”, “effect produced is innovative”, “developed design maintain the beauty of painting”, “developed samples are attractive with the combination of embellishment techniques”, “developed designs can be used on household articles & apparel”, “color combinations used in designs are as per trend and acceptable”, “fusion of techniques given an elegant and sophisticated look”, “creative use of Warli painting designs”, “developed designs are appropriate for technique in combination with *Aari* work”, “quality of workmanship is good” (WMS range 2.5-2.85).

In design no.10 b, experts strongly agree with the statements “developed design is suitable as per selected technique”, “effect produced is innovative”, creative use of Warli painting designs” “fusion of techniques given an elegant and sophisticated look”, “developed designs can be used on household articles & apparel”, “developed samples are attractive with the combination of embellishment techniques”, “combination of technique decreases the cost of *Aari* work and increases the market demand”, “developed designs are appropriate for technique in combination with *Aari* work”, “developed design maintain the beauty of painting”, “quality of workmanship is good”, and “color combinations used in designs are as per trend and acceptable” with WMS in the range of 2.40-2.9.

In design no.9a, experts strongly agree with the statements “developed designs is suitable as per selected technique”, “effect produced is innovative”, “combination of technique decreases the cost of *Aari* work and increases the market demand”, “fusion of techniques given an elegant and sophisticated look”, “developed designs are appropriate for technique in combination with *Aari* work”, “creative use of Warli painting designs”, “developed samples are attractive with the combination of embellishment techniques”, “quality of workmanship is good”, “color combinations used in designs are as per trend and acceptable” and “developed designs can be used on household articles & apparel” (WMS in the range of 2.45-2.95).

Table 17: Opinion of the consumers regarding suitability of developed designs with techniques used for Warli painting

n=30

Sr. No.	Statement	Design no.24b				Design no.10b				Design no.9a			
		T	T1	T2	T3	T	T1	T2	T3	T	T1	T2	T3
		WMS	WMS	WMS	WMS	WMS	WMS	WMS	WMS	WMS	WMS	WMS	WMS
1	Developed design is suitable as per selected technique	2.75	2.85	2.75	2.6	2.9	2.75	2.50	2.65	2.95	2.75	2.95	2.80
2	Adapted designs are appropriate for technique in combination with <i>Aari</i> work	2.8	2.65	2.55	2.6	2.8	2.75	2.60	2.70	2.65	2.75	2.65	2.75
3	Developed designs maintain the beauty of painting	2.8	2.55	2.65	2.70	2.75	2.65	2.70	2.50	2.55	2.70	2.50	2.65
4	Colour combinations used in designs are as per trend and acceptable	2.75	2.6	2.7	2.75	2.50	2.45	2.50	2.65	2.70	2.55	2.65	2.65
5	Creative use of Warli painting designs	2.75	2.7	2.55	2.6	2.85	2.55	2.50	2.40	2.85	2.75	2.70	2.65
6	Effect produced is innovative	2.8	2.75	2.65	2.6	2.65	2.60	2.75	2.65	2.75	2.65	2.65	2.75
7	The developed samples are attractive with the combination of embellishment technique	2.60	2.9	2.65	2.55	2.70	2.75	2.65	2.35	2.55	2.60	2.75	2.65
8	Adapted designs can be used on household articles & apparel	2.70	2.65	2.65	2.55	2.65	2.75	2.45	2.60	2.50	2.55	2.50	2.70
9	Fusion of techniques gives an elegant and sophisticated look	2.75	2.75	2.6	2.6	2.75	2.80	2.65	2.75	2.55	2.80	2.70	2.75
10	Combination of technique decreases the cost of <i>Aari</i> work and increases the market demand	2.6	2.9	2.7	2.85	2.5	2.75	2.85	2.8	2.6	2.75	2.9	2.85
11	Quality of workmanship is good	2.9	2.85	2.8	2.75	2.9	2.8	2.85	2.75	2.9	2.85	2.8	2.75

T=*Aari* work, T1=Hand painting with *Aari* work, T2=Hand painting & patch with *Aari* work, T3=Stencil printing with *Aari* work
WMS - weighted means score

4.5.4.4 Opinion of the consumers regarding suitability of developed designs with techniques used for Warli painting

The result presented in Table 17 shows the opinion of consumers regarding suitability of developed designs along with techniques used for Warli painting. This table shows that in design no.24b, consumers strongly agree with the statements, “effect produced is innovative”, “combination of technique decreases the cost of *Aari* work and increases the market demand”, “fusion of techniques given an elegant and sophisticated look”, “developed designs are appropriate for technique in combination with *Aari* work”, “developed designs maintain the beauty”, “creative use of Warli painting designs”, “developed samples are attractive with the combination of embellishment techniques”, “quality of workmanship is good”, “color combinations used in designs are as per trend and acceptable” and “developed designs can be used on household articles & apparel” with WMS in the range between 2.5-2.9. While in design no.10b, consumers strongly agree with the statements “, “effect produced is innovative” ,“combination of technique decreases the cost of *Aari* work and increases the market demand”, “fusion of techniques given an elegant and sophisticated look”, “creative use of Warli painting designs”, “developed designs maintain the beauty”, “developed designs are appropriate for technique in combination with *Aari* work”, “combination of technique decreases the cost of *Aari* work and increases the market demand”, “color combinations used in designs are as per trend and acceptable”, “quality of workmanship is good” and “developed designs can be used on household articles & apparel”, with WMS in the range of 2.45-2.95. In design no. 9a, consumers strongly agree with the statements“ effect produced is innovative”, “creative use of Warli painting designs”, “combination of technique decreases the cost of *Aari* work and increases the market demand”, “fusion of techniques gives an elegant and sophisticated look”, “developed designs are appropriate for technique in combination with *Aari* work”, “developed designs maintain the beauty”, “color combinations used in designs are as per trend and acceptable” “developed designs can be used on household articles & apparel”, “developed samples are attractive with the combination of embellishment techniques” and “quality of workmanship is good” with WMS in the range 2.50-2.95.

It is concluded that the respondents had very high opinion about the prepared samples which are effective in producing contemporary version of traditional art forms by fusion of Warli painting motifs and *Aari* embroidery with different fabric embellishment techniques. Sample prepared with different techniques that is hand painting with *Aari* work, hand painting & patch with *Aari* work, and stencil printing with *Aari* work when compared with sample of pure *Aari* work were found to be time saving, cost effective and labour saving. Moreover all the samples have market demand, elegance, acceptability, innovativeness, creativity, suitability and attractiveness.

4.5.5 Opinion regarding application of the prepared samples of Madhubani and Warli painting for suitable articles

Opinion of respondents was sought regarding application of the prepared samples of Madhubani and Warli painting for suitable articles.

4.5.5.1 Experts' opinion regarding application of the prepared samples of Madhubani painting for suitable articles

The opinion of the experts regarding application of prepared samples of Madhubani painting for suitable articles has been exhibited in Table 18. It is evident from the table that in relation to design 22a, all the experts preferred samples prepared with *Aari* work for application on cushion cover, *kurti*, shawl and wall piece. Majority of experts preferred *Aari* work for suit, top, purse/bag and file cover (95%), saree and curtain (90%) and *dupatta* (85%). The experts' preference was less for the articles with *Aari* work for bed sheet (20%) and *diwan* cover (15%). All the experts preferred samples prepared with hand painting with *Aari* work for application on cushion cover, *kurti*, curtains, shawl and wall piece. Majority of the experts preferred hand painting with *Aari* work for suit, top, purse/bag and file cover (95%), saree (90%) and *dupatta* (85%). All the experts preferred samples prepared with hand painting & patch with *Aari* work for application on cushion cover, top, curtains, purse/bag, file cover and wall piece. Majority of the experts preferred hand painting & patch with *Aari* work for suit, and *kurti* (95%), saree and *dupatta* (90%). The experts' preference was less for the sample of hand painting with *Aari* work for bed sheet (10%), shawl (20%) and *diwan* cover (30%). All the experts preferred samples prepared with stencil printing with *Aari* work for application on cushion cover, top, purse/bag, file cover and wall piece. Majority of experts preferred stencil printing with *Aari* work for suit (95%), saree, *kurti* and curtain (90%), *dupatta* (85%) and half of the experts preferred stencil printing with *Aari* work for Shawl.

While for design no.21b, all the experts preferred samples prepared with *Aari* work for application on cushion cover, *kurti* and wall piece. Majority of the experts preferred the *Aari* work for suit, saree, shawl, top, purse/bag and file cover (95%), curtain (90%) and *dupatta* (85%). All the experts preferred samples prepared with *Aari* work for application on cushion cover, *kurti* and wall piece. Majority of the experts preferred the *Aari* work for suit, saree, shawl, top, purse/bag and file cover (95%), curtain (90%), and *dupatta* (85%). All the experts preferred samples prepared with hand painting with *Aari* work for application on cushion cover, *kurti*, curtains, shawl, file cover and wall piece. Majority of experts preferred hand painting with *Aari* work for suit, *kurti* and saree (95%), *dupatta* (85%). All the experts preferred samples prepared by hand painting & patch with *Aari* work for application on cushion cover, top, curtains, purse/bag, file cover and wall piece. Majority of experts preferred hand painting & patch with *Aari* work for suit, and *kurti* (95%), saree and *dupatta* (90%).

Table 18: Experts opinion regarding application of the prepared samples of Madhubani painting for suitable articles

n=20

Sr. No.	Article Name	Design no.22a				Design no. 21b				Design no. 35a			
		T Freq(%)	T1 Freq(%)	T2 Freq(%)	T3 Freq(%)	T Freq(%)	T1 Freq(%)	T2 Freq(%)	T3 Freq(%)	T Freq(%)	T1 Freq(%)	T2 Freq(%)	T3 Freq(%)
1	Diwan Cover	3(15)	4(20)	6(30)	5(25)	9(45)	12(60)	10(50)	15(75)	8(40)	10(50)	11(55)	12(60)
2	Cushion Cover	20(100)	20(100)	20(100)	20(100)	20(100)	20(100)	20(100)	20(100)	20(100)	20(100)	20(100)	20(100)
3	Bed sheet	4(20)	5(25)	2(10)	2(10)	4(20)	6(30)	4(20)	4(20)	6(30)	5(25)	6(30)	4(20)
4	Curtains	18(90)	20(100)	18(90)	18(90)	18(90)	19(95)	18(90)	20(100)	18(90)	20(100)	18(90)	20(100)
5	Wall Piece	20(100)	20(100)	20(100)	20(100)	20(100)	20(100)	20(100)	20(100)	20(100)	20(100)	20(100)	20(100)
6	Suit	19(95)	19(95)	19(95)	19(95)	19(95)	19(95)	19(95)	19(95)	19(95)	19(95)	19(95)	19(95)
7	Kurti	20(100)	20(100)	19(95)	18(90)	20(100)	20(100)	19(95)	19(95)	20(100)	20(100)	19(95)	19(95)
8	Saree	18(90)	18(90)	18(90)	18(90)	19(95)	19(95)	19(95)	18(90)	20(100)	19(95)	18(90)	18(90)
9	Dupatta	17(85)	17(85)	18(90)	17(85)	17(85)	17(85)	20(100)	18(90)	17(85)	17(85)	20(100)	18(90)
10	Shawl	20(100)	3(15)	4(20)	10(50)	19(95)	6(30)	3(15)	15(75)	20(100)	3(15)	4(20)	16(80)
11	Top	19(95)	19(95)	20(100)	20(100)	19(95)	20(100)	20(100)	20(100)	19(95)	20(100)	20(100)	20(100)
12	Purse/Bag	19(95)	19(95)	20(100)	20(100)	19(95)	19(95)	20(100)	20(100)	19(95)	19(95)	20(100)	20(100)
13	File Cover	19(95)	19(95)	20(100)	20(100)	19(95)	20(100)	20(100)	20(100)	19(95)	18(90)	20(100)	20(100)

T=*Aari* work, T1=Hand painting with *Aari* work, T2=Hand painting & patch with *Aari* work, T3=Stencil printing with *Aari* work

The experts' preference was less for the articles of hand painting with *Aari* work i.e. bed sheet (10%), shawl (20%), and *diwan* cover (30%). All the experts considered the samples prepared with stencil printing with *Aari* work for application on cushion cover, curtain, top, purse/bag, file cover and wall piece. Majority of the experts preferred stencil printing with *Aari* work for suit and *kurti* (95%), saree and *dupatta* (90%), *diwan* cover and shawl (75%).

For design no.35a, all the experts preferred samples prepared with *Aari* work for application on cushion cover, *kurti*, saree, shawl and wall piece. Majority of experts preferred the *Aari* work for suit, saree, top, purse/bag and file cover (95%), curtain (90%), and *dupatta* (85%). All the experts preferred samples prepared using hand painting with *Aari* work for application on cushion cover, *kurti*, top and wall piece. Majority of the experts preferred hand painting with *Aari* work for suit, saree, shawl, top, purse/bag and (95%), curtain, file cover (90%), and *dupatta* (85%). All the experts preferred samples prepared with hand painting & patch with *Aari* work for application on cushion cover, *kurti*, curtains, shawl, file cover and wall piece. Majority of the experts preferred hand painting & patch with *Aari* work for suit, *kurti*, saree (95%) and *dupatta* (85%). All the experts considered the samples prepared by stencil printing with *Aari* work for application on cushion cover, curtain, top, purse/bag, file cover and wall piece. Majority of the experts preferred stencil printing with *Aari* work for suit and *kurti* (95%), saree and *dupatta* (90%) and shawl (80%). The experts' preference was less for bed sheet and *diwan* cover in all the designs.

4.5.5.1 Consumers' opinion regarding application of the prepared samples of Madhubani painting for suitable articles

The opinion of the consumers regarding application of prepared samples of Madhubani painting for suitable articles has been exhibited in table 19. It is evident from the table that in relation to design 22a, all the consumers preferred samples prepared with *Aari* work for application on cushion cover, curtains, *kurti*, top, shawl, purse/bag, file cover and wall piece. Majority of the consumers preferred the *Aari* work for saree & suit (83.3%) and *dupatta* (80%). All the consumers preferred samples prepared using hand painting with *Aari* work for application on cushion cover, curtains, *kurti*, shawl, purse/bag, file cover and wall piece. Majority of the consumers preferred hand painting with *Aari* work for suit, saree (80%) and *dupatta* (73.3%). All the consumers preferred samples prepared with hand painting & patch with *Aari* work for application on cushion cover, curtains, *kurti*, top, purse/bag, file cover and wall piece. Above 50% consumers preferred hand painting & patch with *Aari* work for *dupatta* (56.3%), saree and suit (53.3%). All the consumers preferred sample prepared with stencil printing with *Aari* work for application on cushion cover, top, purse/bag, file

cover and wall piece. Majority of the consumers preferred stencil printing with *Aari* work for suit and *dupatta* (80%), saree and top (73.3%).

While for design no. 21b, all the consumers preferred sample prepared with *Aari* work for application on cushion cover, suit, *kurti*, saree and wall piece. Majority of the consumers preferred the *Aari* work for *dupatta*, top, file cover (80%) and (63.3%). All the consumers preferred samples prepared with *Aari* work for application on cushion cover, *kurti* and wall piece. Majority of the consumers preferred the *Aari* work for suit, saree, shawl, top, purse/bag and file cover (95%), curtains (90%), and *dupatta* (85%). All the consumers preferred sample prepared using hand painting with *Aari* work for application on cushion cover, suit, *kurti*, shawl, file cover and wall piece. Majority of the consumers preferred hand painting with *Aari* work for curtains (83.3%), saree (80%) and top and *dupatta* (73.3%). All the consumers preferred sample prepared with hand painting & patch with *Aari* work for application on cushion cover, top, curtains, purse/bag, file cover and wall piece. Majority of consumers preferred hand painting & patch with *Aari* work for top, and *kurti*, saree and *dupatta* (90%). All the consumers considered the samples prepared with stencil printing with *Aari* work for application on cushion cover, curtain, top, purse/bag, file cover and wall piece. Majority of the consumers preferred stencil printing with *Aari* work for suit and *kurti* (95%), saree and *dupatta* (90%), *diwan* cover and shawl (75%).

For design no.35a, all the consumers preferred sample prepared with *Aari* work for application on cushion cover, suit, *kurti*, saree, and wall piece. Majority of the consumers preferred *Aari* work for curtain, shawl, top, and purse/bag (80%), file cover and *dupatta* (70%). All the consumers preferred sample of hand painting with *Aari* work for application on cushion cover, curtain, suit, *kurti*, purse/bag, file cover and wall piece. Majority of the consumers preferred hand painting with *Aari* work for saree, *dupatta* and top (83.3%). All the consumers preferred samples prepared with hand painting & patch with *Aari* work for application on cushion cover, suit, *kurti*, saree, purse/bag and wall piece. Majority of consumers preferred hand painting & patch with *Aari* work for *dupatta* and top (83.3%). All the consumers considered the sample prepared with stencil printing with *Aari* work for application on cushion cover, curtain, suit, purse/bag, file cover and wall piece. Majority of consumers preferred stencil printing with *Aari* work for suit and *kurti*, saree and top (80%), and *dupatta* (73.3%). In all the designs, the least preferred articles were bed sheet and *diwan* cover.

Table 19: Consumers' opinion regarding application of the prepared samples of Madhubani painting for suitable articles

n=30

Sr. no	Article Name	Design no.22a				Design no. 21b				Design no. 35a			
		T Freq. (%)	T1 Freq. (%)	T2 Freq. (%)	T3 Freq. (%)	T Freq. (%)	T1 Freq. (%)	T2 Freq. (%)	T3 Freq. (%)	T Freq. (%)	T1 Freq. (%)	T2 Freq. (%)	T3 Freq. (%)
1	Diwan Cover	3(10)	4(13.3)	4(13.3)	2(6.6)	6(20)	19(63.3)	15(50)	17(56.6)	5(25)	17(56.3)	15(30)	16(53.3)
2	Cushion Cover	30(100)	30(100)	30(100)	30(100)	30(100)	30(100)	30(100)	30(100)	30(100)	30(100)	30(100)	30(100)
3	Bed sheet	2(6.66)	5(16.6)	2(6.66)	4(13.3)	2(6.66)	14(46.6)	3(10)	6(20)	5(16.6)	7(23.3)	9(30)	3(10)
4	Curtains	30(100)	30(100)	30(100)	30(100)	18(60)	30(100)	25(83.3)	30(100)	22(73.3)	30(100)	30(100)	30(100)
5	Wall Piece	30(100)	30(100)	30(100)	30(100)	30(100)	30(100)	30(100)	30(100)	30(100)	30(100)	30(100)	30(100)
6	Suit	25(83.3)	24(80)	16(53.3)	24(80)	30(100)	30(100)	30(100)	30(100)	30(100)	30(100)	30(100)	30(100)
7	Kurti	30(100)	30(100)	30(100)	30(100)	30(100)	30(100)	30(100)	18(60)	30(100)	30(100)	30(100)	24(80)
8	Saree	25(83.3)	24(80)	16(53.3)	22(73.3)	30(100)	18(60)	16(53.3)	18(60)	30(100)	25(83.3)	30(100)	24(80)
9	Dupatta	19(63.3)	22(73.3)	17(56.3)	24(80)	24(80)	17(56.6)	20(66.6)	20(66.6)	18(60)	25(83.3)	25(83.3)	22(73.3)
10	Shawl	16(53.3)	2(6.66)	4(13.3)	11(36.6)	18(60)	3(10)	14(46.6)	5(25)	17(56.3)	4(13.3)	6(20)	14(46.6)
11	Top	30(100)	30(100)	30(100)	22(73.3)	24(80)	17(56.3)	22(73.3)	18(60)	18(60)	25(83.3)	25(83.3)	24(80)
12	Purse/Bag	30(100)	30(100)	30(100)	30(100)	19(63.3)	20(66.6)	30(100)	30(100)	19(63.3)	30(100)	30(100)	30(100)
13	File Cover	30(100)	30(100)	30(100)	30(100)	24(80)	30(100)	30(100)	18(60)	21(70)	30(100)	30(100)	30(100)

T=Aari work, T1=Hand painting with Aari work, T2=Hand painting & patch with Aari work, T3=Stencil printing with Aari work

Experts' opinion regarding application of the prepared samples of Warli painting for suitable articles

The opinion of the experts regarding application prepared samples of Warli painting for suitable articles has been exhibited in Table 20. It is evident from the table that in relation to design 24b, all the experts preferred samples prepared with *Aari* work for application on cushion cover, curtain, *kurti*, shawl, top, purse/bag, file cover and wall piece. Majority of the experts preferred the *Aari* work for *dupatta* (95%), saree (90%) and suit (85%). All the experts preferred samples prepared with hand painting with *Aari* work for application on cushion cover, curtains, *kurti*, top, purse/bag, file cover and wall piece. Majority of the experts preferred hand painting with *Aari* work for saree (95%), *dupatta* (90%), *diwan* cover and bed sheet (75%). All the experts preferred samples prepared with hand painting & patch with *Aari* work for application on cushion cover, curtains, *kurti*, top, purse/bag, file cover and wall piece. Majority of the experts preferred hand painting & patch with *Aari* work for *dupatta* (85%), suit and saree (80%) *diwan* cover and bed sheet (75%). All the experts preferred samples prepared with stencil printing with *Aari* work for application on cushion cover, *kurti*, top, purse/bag, file cover and wall piece. Majority of experts preferred stencil printing with *Aari* work for saree (95%), curtain, *dupatta*, suit and *diwan* cover (90%). The experts' preference was less for the sample of stencil printing with *Aari* work for shawl (55%).

While for design no.10b, all the experts preferred samples prepared with *Aari* work for application on cushion cover, suit, *kurti*, saree, file cover and wall piece. Majority of experts preferred the *Aari* work for file cover (100%), purse/bag (95%), shawl and curtain (90%). All the experts preferred sample prepared using hand painting with *Aari* work for application on curtains, suit, *kurti*, file cover and wall piece. Majority of experts preferred hand painting with *Aari* work for purse/bag (95%), saree (90%), *dupatta*, cushion covers and top (85%), bed sheet and *diwan* cover (80%). All the experts preferred samples prepared with hand painting & patch with *Aari* work for application on curtains, suit, purse/bag, and wall piece. Majority of the experts preferred hand painting & patch with *Aari* work for cushion covers, *kurti*, saree, *dupatta* and top (90%), *diwan* cover (85%), bed sheet (75%). All the experts considered the samples prepared with stencil printing with *Aari* work for application on cushion cover, suit, *kurti*, purse/bag, file cover and wall piece. Majority of the experts preferred stencil printing with *Aari* work for curtain (90%), *dupatta* and top (85%), saree (80%) *diwan* cover (75%), bed sheet (70%) and shawl (65%).

Table 20: Experts' opinion regarding application of the prepared samples of Warli painting for suitable articles

Sr. No.	Article Name	Design no.24b				Design no.10b				Design no. 9a			
		T Freq. (%)	T1 Freq. (%)	T2 Freq. (%)	T3 Freq. (%)	T Freq. (%)	T1 Freq. (%)	T2 Freq. (%)	T3 Freq. (%)	T Freq. (%)	T1 Freq. (%)	T2 Freq. (%)	T3 Freq. (%)
1	Diwan Cover	2(10)	15(75)	15(75)	9(45)	3(15)	9(45)	17(85)	15(75)	3(15)	9(45)	9(45)	8(40)
2	Cushion Cover	20(100)	20(100)	20(100)	20(100)	20(100)	17(85)	18(90)	20(100)	20(100)	20(100)	20(100)	20(100)
3	Bed sheet	2(10)	5(20)	5(20)	9(45)	2(10)	9(45)	10(50)	10(50)	2(10)	9(45)	9(45)	10(50)
4	Curtains	20(100)	20(100)	20(100)	18(90)	18(90)	20(100)	20(100)	18(90)	20(100)	20(100)	20(100)	20(100)
5	Wall Piece	20(100)	20(100)	20(100)	20(100)	20(100)	20(100)	20(100)	20(100)	20(100)	20(100)	20(100)	20(100)
6	Suit	17(85)	18(90)	16(80)	18(90)	20(100)	20(100)	20(100)	20(100)	20(100)	20(100)	20(100)	20(100)
7	Kurti	20(100)	20(100)	20(100)	20(100)	20(100)	20(100)	18(90)	20(100)	20(100)	20(100)	20(100)	19(95)
8	Saree	18(90)	19(95)	16(80)	19(95)	20(100)	18(90)	18(90)	16(80)	20(100)	17(85)	16(80)	18(90)
9	Dupatta	19(95)	18(90)	17(85)	18(90)	16(80)	17(85)	18(90)	17(85)	18(90)	17(85)	18(90)	17(85)
10	Shawl	20(100)	2(10)	7(35)	11(55)	18(90)	3(15)	6(30)	13(65)	17(85)	4(20)	5(25)	14(70)
11	Top	20(100)	20(100)	20(100)	20(100)	17(85)	17(85)	18(90)	17(85)	18(90)	17(85)	17(85)	18(90)
12	Purse/Bag	20(100)	20(100)	20(100)	20(100)	19(95)	19(95)	20(100)	20(100)	19(95)	20(100)	20(100)	20(100)
13	File Cover	20(100)	20(100)	20(100)	20(100)	20(100)	20(100)	18(90)	20(100)	20(100)	20(100)	20(100)	20(100)

T=*Aari* work, T1=Hand painting with *Aari* work, T2=Hand painting & patch with *Aari* work, T3=Stencil printing with *Aari* work

For design no.9a,all the experts preferred samples prepared with *Aari* work for application on cushion cover, curtain, suit, *kurti*, saree, file cover and wall piece. Majority of the experts preferred the *Aari* work for purse/bag (95%), top and *dupatta* (90%), shawl (85%). All the experts preferred sample prepared with hand painting with *Aari* work for application on cushion cover, curtains, suits, *kurti*, purse/bag, file cover and wall piece. Majority of the experts preferred hand painting with *Aari* work for *diwan* cover, bed sheet, saree, *dupatta* and top (85%). All the experts preferred samples prepared with hand painting & patch with *Aari* work for application on cushion cover, curtains, suit, *kurti*, purse/bag, file cover and wall piece. Majority of the experts preferred hand painting & patch with *Aari* work for *dupatta* (90%), top (85%), saree (80%), *diwan* cover(75%) and bed sheet (70%). All the experts considered the samples prepared with stencil printing with *Aari* work for application on cushion cover, curtain, suit, purse/bag, file cover and wall piece. Majority of experts preferred stencil printing with *Aari* work for *kurti* (95%), saree and top (90%),*dupatta* (85%),*diwan* cover (80%) shawl and bed sheet (70%). The experts' preference was less for bed sheet and *diwan* cover in all the designs.

Consumers opinion regarding application of prepared samples of Warli painting for suitable articles

The opinion of the consumers regarding application of prepared samples of Warli painting for suitable articles has been exhibited in table 21.It is evident from the table that in relation to design 24b, all the consumers preferred sample prepared with *Aari* work for application on cushion cover, *kurti*, top, purse/bag and wall piece. Majority of the consumers preferred the *Aari* work for saree, suit, *dupatta*, shawl and curtain (83.3%). All the consumers preferred samples prepared with hand painting with *Aari* work for application on cushion cover, curtains, *kurti*, top, purse/bag, file cover and wall piece. Majority of the consumers preferred hand painting with *Aari* work for saree, *dupatta* and suit (90%). All the consumers preferred sample prepared with hand painting & patch with *Aari* work for application on cushion cover, top, curtains, *kurti*, purse/bag, file cover and wall piece. Majority of the consumers preferred hand painting & patch with *Aari* work for suit, and suit, saree and *dupatta* (80%). All the consumers preferred samples prepared with stencil printing with *Aari* work for application on cushion cover, curtain, *kurti*, purse/bag, file cover and wall piece. Majority of consumers preferred stencil printing with *Aari* work for saree (80%), *dupatta* (76.6%) and top (73.3%).

While for design no.10b, all the consumers preferred samples prepared with *Aari* work for application on cushion cover,suit, *kurti*, saree and wall piece. Majority of consumers preferred

the *Aari* work for curtain (90%), purse/bag and top (83.3%) and file cover and *dupatta* (80%) and shawl (73.3%). All the consumers preferred samples prepared with hand painting with *Aari* work for application on curtains, *kurti*, suit, file cover and wall piece. Majority of consumers preferred hand painting with *Aari* work for cushion cover (93.3%), saree and *dupatta* (90%), top and purse/bag (80%) and *diwan* cover (73.3%). All the consumers preferred samples prepared with hand painting & patch with *Aari* work for application on cushion cover, top, curtains, purse/bag, file cover and wall piece. Majority of consumers preferred hand painting & patch with *Aari* work for suit, and *kurti* (95%), saree and *dupatta* (90%) and *diwan* cover (70%). All the consumers considered the samples prepared with stencil printing with *Aari* work for application on cushion cover, suit, *kurti*, purse /bag and wall piece. Majority of the consumers preferred stencil printing with *Aari* work for purse bag and saree (90%), top, *dupatta* and curtains (83.3%).

For design no.9a, all the consumers preferred samples prepared with *Aari* work for application on cushion cover, suit, *kurti*, saree and wall piece. Majority of consumers preferred the *Aari* work for top, purse/bag (93.3%) curtains, *dupatta* (83.3%) and shawl and file cover (70%). The consumers' preference was less for the articles with *Aari* work i.e. bed sheet (20%) and *diwan* cover (25%). All the consumers preferred samples prepared hand painting with *Aari* work for application on cushion cover, curtains, suit, *kurti*, purse/bag, file cover and wall piece. Majority of consumers preferred hand painting with *Aari* work for saree, top, and *dupatta* (80%) and *diwan* cover (70%). All the consumers preferred samples prepared with hand painting & patch with *Aari* work for application on cushion cover, suit, *kurti*, curtains, purse/bag, file cover and wall piece. Majority of the consumers preferred hand painting & patch with *Aari* work for top (83.3%), saree and *dupatta* (80%). The consumers' was less for the articles of hand painting & patch with *Aari* work for bed sheet and *diwan* cover (30%) and shawl (43.3%). All the consumers considered the samples prepared with stencil printing with *Aari* work for application on cushion cover, suit, purse/bag, file cover and wall piece. Majority of consumers preferred stencil printing with *Aari* work for *kurti* (93.3%), curtain and *dupatta* (90%), suit and top (80%). In all the designs, the consumers' preference was less for bed sheet and *diwan* cover.

Table 21: Consumers' opinion regarding application of prepared samples of Warli painting for suitable articles

n=30

Sr. No.	Article Name	Design no.24b				Design no.10b				Design no. 9a			
		T Freq. (%)	T1 Freq. (%)	T2 Freq. (%)	T3 Freq. (%)	T Freq. (%)	T1 Freq. (%)	T2 Freq. (%)	T3 Freq. (%)	T Freq. (%)	T1 Freq. (%)	T2 Freq. (%)	T3 Freq. (%)
1	Diwan Cover	4(13.3)	6(20)	8(26.6)	2(6.6)	6(20)	22(73.3)	21(70)	15(50)	5(25)	17(56.3)	9(30)	16(53.3)
2	Cushion Cover	30(100)	30(100)	30(100)	30(100)	30(100)	28(93.3)	30(100)	30(100)	30(100)	30(100)	30(100)	30(100)
3	Bed sheet	3(6.66)	5(16.6)	4(13.3)	6(20)	2(6.66)	15(50)	6(20)	3(10)	6(20)	7(23.3)	9(30)	11(36.6)
4	Curtains	25(83.3)	30(100)	30(100)	30(100)	27(90)	30(100)	30(100)	25(83.3)	22(73.3)	30(100)	30(100)	27(90)
5	Wall Piece	30(100)	30(100)	30(100)	30(100)	30(100)	30(100)	30(100)	30(100)	30(100)	30(100)	30(100)	30(100)
6	Suit	25(83.3)	27(90)	24(80)	15(50)	30(100)	30(100)	30(100)	30(100)	30(100)	30(100)	30(100)	30(100)
7	Kurti	30(100)	30(100)	30(100)	30(100)	30(100)	30(100)	22(73.3)	30(100)	30(100)	30(100)	30(100)	28(93.3)
8	Saree	25(83.3)	27(90)	24(80)	24(80)	30(100)	27(90)	21(70)	27(90)	30(100)	24(80)	24(80)	24(80)
9	Dupatta	25(83.3)	27(90)	24(80)	23(76.6)	24(80)	27(90)	21(70)	25(83.3)	25(83.3)	24(80)	24(80)	27(90)
10	Shawl	25(83.3)	6(20)	8(26.6)	11(36.6)	22(73.3)	14(46.6)	16(53.3)	16(53.3)	21(70)	11(36.6)	13(43.3)	9(30)
11	Top	30(100)	30(100)	30(100)	22(73.3)	25(83.3)	24(80)	22(73.3)	25(83.3)	28(93.3)	24(80)	25(83.3)	24(80)
12	Purse/Bag	30(100)	30(100)	30(100)	30(100)	25(83.3)	24(80)	30(100)	27(90)	28(93.3)	30(100)	30(100)	30(100)
13	File Cover	20(66.6)	30(100)	30(100)	30(100)	24(80)	30(100)	24(80)	30(100)	21(70)	30(100)	30(100)	30(100)

T=Aari work, T1=Hand painting with Aari work, T2=Hand painting & patch with Aari work, T3=Stencil printing with Aari work

The present study was conducted to strengthen creativity by exploring the possibility of fusion of traditional painting motifs and *Aari* work with different fabric embellishment techniques. The concept behind the theme was to create new range of textile designs by maintaining the beauty and originality of traditional paintings as well as *Aari* work. The results of the study have been discussed and presented under the following sections:-

5.1 Selection of Traditional Indian Paintings

5.2 Preferences of Respondents for Selection of Motifs and Designs

5.3 Preferences for Selection of Techniques

5.4 Preparation of Designed Samples

5.5 Assessment of Prepared Samples

5.6 Preparation of Design Catalogue

5.1 Selection of traditional Indian paintings

Results showed that two famous traditional Indian paintings that is Madhubani and Warli were selected for further work by the experts. These two paintings were selected may be due to the reason that the motifs of both the paintings are suitable for adaptation to *Aari* work. The results of the study are supported by the findings of Sharma (2015) who reported that some of the most famous folk paintings of India are Madhubani paintings of Bihar, Patachitra paintings from Orissa, Phad paintings of Rajasthan, Kalamkari of Andhra Pradesh, Pichhvai paintings of Rajasthan, Warli of Maharashtra, Aipan of Uttarakhand, Pithora of Gujarat and many more forms. Sharma and Paul (2015) also supported the results stating that the two most famous folk paintings of India are Warli art of Maharashtra and Madhubani of Mithila.

5.2 Preferences of the respondents for selection of motifs and designs

It was found that the fifteen motifs of Madhubani painting which were selected from the collected motifs comprise of figures of deities, animals, birds, plants, image of symbolic significance, sun and moon. This may be due to the reason that Madhubani paintings expresses day to day experiences and beliefs. The results of Anonymous (2009a) are in lines with study as in Madhubani paintings widely used figures are of various gods and goddesses, pictures of sun and moon, various animals, birds, leaves, flowers, plants along with symbols of Swastika and Shankha etc. Result shown in table 3 depicts that the collected forty motifs of Warli painting were assessed by the experts to select fifteen motifs for further work. The selected motifs comprised of human figures, plants, animals, sun, moon, stars and other

figures related to nature and life. The study of Anonymous (2011) also supported the results that the Warlis who are simple and happy in nature also include life around them in their paintings because they express everything they see, feel and believe in life. Paintings include animals, trees, plants, birds, houses and men in their paintings and they form a loose, rhythmic pattern on the entire surface.

The results of the table 4 and 5 reveals that out of thirty developed designs each for Madhubani & Warli painting, three top preferred designs were selected according to experts preferences, to study the effect of *Aari* work in fusion with three suitable fabric embellishment techniques. Waldia (2009) developed fabric painting designs for home textiles using Madhubani painting motifs. Designs were developed using selected motifs and selected placements were used for painting of bed covers. The developed articles were got assessed on various parameters and found highly acceptable in terms of developed designs, color combination and overall appearance. According to Asihene (2004), design and ornamentation are usually based on some traditional or ethnic motifs and beliefs and is an important part in the expression of culture.

5.3 Preferences for selection of techniques

Three fabric embellishment techniques i.e hand painting, hand painting & patch work and stencil printing were selected on the basis of consumers' preferences for preparation of samples in combination with *Aari* work using selected designs' of Madhubani and Warli painting. The reason for preferences might be designs' suitability to *Aari* work and selected fabric embellishment techniques. Gupta *et al* (2000) supports the result of the study that the design of any object should be simple and well proportionate. It should be suited for the material on which it is made and its surface decoration should be moderated enough to strengthen the shape and beauty of the object. The results of Pant and Gahlot (2012) are in line with the study as the researcher adapted aipan designs for ready to use borders using screen printing. Surface enrichment of the borders was done with embroidery, beads, stones and laces.

Kaur (2004) described that embroidery and applique work were preferred as surface embellishment technique for decorating jute articles. It was revealed that innovative articles made by reusing jute fabric and decorated with applique and embroidery are commercially viable in economic terms.

5.4 Preparation of designed samples

After selection of techniques, total twenty four samples were prepared using selected designs of Madhubani and Warli paintings. Twelve samples each for selected designs of Madhubani and Warli paintings were prepared that included controlled samples of pure *Aari* work, hand painting with *Aari* work, hand painting & patch with *Aari* work and stencil printing with *Aari* work. Singh (2012) in a study developed innovative embroidery designs

for chikankari embroidery adapted from aipan, the traditional floor painting of kumon region of Uttarakhand. The embroidered *kurtis* with selected designs were appreciated by the respondents.

5.5 Evaluation of prepared samples

5.5.1 Assessment of the prepared samples by respondents in terms of overall appeal

Samples of Madhubani and Warli painting designs prepared with all the techniques were highly acceptable in terms of overall appeal by the experts and consumers. The results of Grewal (2011) are in the line of the study as the researcher reported that developed jackets with embroidery and fabric painting were most appealing in terms of overall appeal. Similar results were reported by Saini (2013) that preferences of experts for *kurtis* were most appealing in terms of overall appeal. Srivastava and Rajvanshi (2010) investigated the textile designs from Phad paintings for fashion apparels in different color ways using textile design softwares. Developed designs were printed on fashion apparels using screen printing. The finding of present study revealed that the created designs were very innovative, creative and as per the current market need and were highly appreciated by the judges.

5.5.2 Estimated cost of the prepared samples

The cost of prepared samples for Madhubani painting design with different techniques including raw material and labour charges were Rs 900/- for pure *Aari* work, Rs 585/- for hand painting with *Aari* work, Rs 590/- for hand painting & patch with *Aari* work and Rs 545/- for stencil printing with *Aari* work.

For Warli painting designs Rs 840/- for pure *Aari* work, Rs 510/- for hand painting with *Aari* work, Rs 485 for hand painting & patch with *Aari* work and Rs 500/- for stencil printing with *Aari* work. The estimated cost for pure *Aari* work was almost double that the samples prepared with other techniques. Thus is because it is labourious & time consuming technique. Devi (2014) also estimated the cost of developed product on the basis of material used and labour charges. The estimated cost of prepared samples was high as it being the cost of the samples and it may be less when produced at commercial level. It is concluded that the cost of samples prepared with all the selected techniques including *Aari* work was highly acceptable by the experts. But in case of consumers the cost of samples of *Aari* work was not as acceptable as that by experts. Experts' does not mind to pay somewhat more if they get new designs.

5.5.3 Acceptability level of the cost of the prepared samples

The acceptability level of the experts for estimated cost of all the prepared samples of Madhubani and Warli painting designs was opined as high by majority of the respondents. Results of Grewal (2011) reported that the cost of embroidered and fabric painted jackets were found to be most appropriate by experts.

5.5.4 Respondents' opinion regarding suitability of developed designs with the techniques used for Madhubani and Warli painting

Respondents were strongly agreed with all the statements asked for assessment i.e. “effect produced is innovative”, “combination of technique decreases the cost of *Aari* work and increases the market demand”, “developed designs maintain the beauty of painting”, “developed designs are appropriate for technique in combination with *Aari* work”, “developed designs are suitable as per selected technique”, “creative use of Madhubani painting designs”, “color combinations used in designs are as per trend and acceptable”, “developed samples are attractive with the combination of embellishment techniques”, “fusion of techniques given an elegant and sophisticated look” “quality of workmanship is good”, and “developed designs can be used on household articles & apparel”

The results of this study are supported by the results of Saini (2013) according to which the that the designs of *kurtis* were started as “the effect is as per market trends “ developed designs were assessed on the statements helped in producing effect of particular embroidery , selected technique was appropriate for *kurtis* and “color combination used is appropriate”.

5.5.5 Experts' and consumers' opinion regarding application of the prepared samples of Madhubani and Warli painting.

Experts and consumers preferred the prepared samples of Madhubani and Warli painting designs in combination with different techniques for application on different articles like cushion cover, *kurti*, shawl, purse / bag, file cover, wall piece, curtain, suit, saree and *dupatta*. It was observed that the preferences were specific regarding application of particular design and technique. Designs of gods or goddesses were not given preferences for saree, suit and bed sheets. This may be due to the reason that deeply embedded cultural values inhibit them to wear articles with figures of deities. Also, it was found that preferences for techniques were also specific as the samples in which beads, stones etc. are used were not preferred for specific articles eg. bed sheets etc. Hand painting technique was not considered more for application on shawls because being woolen scaly in structure and shawl will not absorb the colors uniformly.

According to Beth (2007) most fabric paints are designed to work best with fabrics made from natural fibers including cotton, silk and linen. Most fabric paints will work on cotton while to paint on fabrics like silk one needs to purchase a paint specifically designed for it. Sangama and Rani (2012) also developed designs that can be utilized for production of household articles as well as other type of textile products by the use of weaving techniques applied on the textile surface by printing, embroidery, painting or combination to create distinct and new range of textiles.

5.6 Preparation of Design catalogue

Design catalogue was prepared for documentation comprising of collected motifs, selected motifs and developed designs of Madhubani and Warli painting and photographs of the developed samples.

Yadav et al. (2006) reported that various teaching materials developed in the form of design catalogue, product catalogue, CD ROM using computer technology will be very helpful for the trainees and students to learn about the creative designing of the products.

CHAPTER-VI

SUMMARY AND CONCLUSION

India's centuries old tradition of ornamenting fabrics has survived the ravages of time, preserving local crafts which gives ample testimony of this great culture. However, the revival of traditional Indian painting and *Aari* embroidery needs to be twinned with ways to find new and contemporary expression in harmony with the needs and aspirations of future citizens of the world, while valuing the traditional. There is also a need to enhance understanding and to provide necessary support for professional marketing and adaptation to global demands as the craft moves into the new era. Therefore, the present study on "Adaptation of traditional Indian painting motifs for *Aari* work." was conducted for exploring the possibility to increase creativity by fusion of traditional painting motifs and *Aari* work with different fabric embellishment techniques.

The concept behind the theme was to create new range of designs by maintaining the beauty and originality of traditional paintings as well as *Aari* work. The work amalgamation of *Aari* work with painting motifs will help in widening the variety of textile products for product selection. With these concepts in mind and considering *Aari* work and painting as important for revival of traditional art forms, the study was planned with the following objectives:-

- 1) To explore the motifs of selected traditional Indian paintings for textile designing
- 2) Adaptation of selected motifs for suitability to *Aari* work through CAD
- 3) To study the effect of *Aari* work in fusion with different fabric embellishment techniques

Methodology

The present study was conducted in the Hisar city. The study was conducted in three phases i.e. exploratory phase, experimental phase and assessment phase.

6.1 Exploratory phase

Famous traditional Indian paintings were explored from secondary sources. Ten paintings were selected after seeing the possibility of transforming motifs and designs into other designing techniques for contemporary use. Two paintings, that is Madhubani and Warli were finalized by the experts, keeping in mind their suitability to *Aari* work for the development of designs.

Total eighty motifs were collected through secondary sources (forty each from Madhubani and Warli paintings). Out of these motifs, thirty motifs were selected by experts' preferences for development of designs for further application.

6.2 Experimental Phase

Two designs were developed for each selected motif of Madhubani and Warli paintings with the help of CorelDraw. Total sixty designs were developed from selected motifs, six designs i.e. 22a, 21b and 35a from Madhubani and 24b, 10b and 9a Warli painting were selected by experts' preferences on the basis of their WMS for further work.

Preferences of consumers were sought for exploring the feasibility of combining *Aari* work with suitable fabric embellishment techniques. Three most preferred techniques i.e. hand painting, stencil printing, hand painting & patch work were selected according to consumers' preferences for preparing samples. Twenty four samples were prepared using three fabric embellishment techniques i.e. hand painting with *Aari* work, stencil printing with *Aari* work, hand painting & patch with *Aari* work and controlled sample of pure *Aari* work for Madhubani and Warli painting designs.

6.3 Assessment Phase

The prepared samples were displayed in the department of Textile and Apparel Designing for evaluation and got assessed on various parameters. The assessment of the developed samples was done in terms of overall appeal, cost acceptability and suitability of designs and techniques used. Opinion of the respondents was also sought for the application of the developed samples of Madhubani & Warli paintings for suitable articles.

Design catalogue was prepared for documentation comprising of collected motifs, selected motifs and developed designs of Madhubani and Warli painting and prepared samples.

Major findings

- Two traditional Indian paintings i.e. Madhubani and Warli were selected keeping in mind their suitability to *Aari* work with WMS 2.6 and 2.45.
- Out of eighty motifs, fifteen motifs of each painting were selected by the experts for design development according to their WMS.
- In Madhubani painting, motif no. 22 got 1st rank with WMS 2.36 followed by motif no. 21 which got 2nd rank with WMS 2.31 and motif no. 35 which got 3rd rank with WMS 2.26. In Warli painting, motif no. 24, 10, 9 got 1st rank (2.23), 2nd rank (2.16), and 3rd rank (2.1) respectively.
- Two designs were developed from each selected motif, total 60 designs of both the paintings were developed and top three most preferred designs of each painting were selected according to their WMS.
- Design no. 22a (2.88), 21b (2.84) and 35a (2.76) of Madhubani painting and design no. 24b (2.83), 10b (2.66) and 9a (2.53) of Warli painting were most preferred by the experts while the least preferred design was design no. 20 b (1.4) of Madhubani painting and design no. 33 (1.4) of Warli painting.

- Three techniques i.e. hand painting (2.8), hand painting & patch work (2.76), stencil printing (2.63) were selected for preparing samples in combination with *Aari* work.
- In design no. 22b and 21b, samples prepared with all the techniques that is *Aari* work, hand painting with *Aari* work, hand painting & patch with *Aari* work and stencil printing and *Aari* work were highly preferred in terms of overall appeal with average score in the range of 2.48-2.81 and 2.69-2.36 respectively. In design no. 35a, samples prepared with hand painting & patch work, hand painting and stencil printing with *Aari* work were highly preferred with WMS in the range of 2.49-2.64 .
- For design no. 24b and 9a of Warli painting, samples prepared with all the techniques were highly preferred with average score in range of (2.33-3.00), while in design no. 10b, samples prepared with hand painting and patch with *Aari* work and stencil printing with *Aari* work were highly preferred with average score 2.33-3.00.
- The consumers had very high opinion regarding the prepared samples stated as “developed design is suitable as per selected technique”, “combination of technique decreases the cost of *Aari* work and increases the market demand”, “effect produced is innovative”, “developed designs maintain the beauty of paintings”, “prepared samples are attractive with the combination of embellishment techniques”, “quality of workmanship is good”, “developed design can be used on household articles & apparel” with average score in the range of 2.34-2.95.
- The total cost of prepared samples of Madhubani painting designs was Rs 900/- (*Aari* work), Rs 585/- (hand painting with *Aari* work), Rs 590/- (hand painting & patch with *Aari* work) and Rs 545/- (Stencil printing with *Aari* work). The total cost of prepared samples of Warli painting designs was Rs 840/- (*Aari* work), Rs 510/- (hand painting with *Aari* work), Rs 485/- (hand painting & patch with *Aari* work), and Rs 500/- (Stencil printing with *Aari* work). The estimated cost for pure *Aari* work was almost double than the samples prepared with other techniques.
- The cost of prepared samples of Madhubani and Warli painting designs in combination with selected fabric embellishment techniques was highly acceptable by majority of the respondents.
- Majority of the respondents preferred the prepared samples of Madhubani and Warli painting designs for application on Cushion Cover, Curtains, Wall Piece, Suit, *Kurti*, *Sarees*, *Dupatta*, *Shawl*, Top, Purse/Bag and File Cover.

Conclusion

- Two traditional Indian paintings i.e. Madhubani and Warli were finalized.
- Total thirty motifs of both the paintings were selected on the basis of experts’ preferences and converted into sixty designs.
- Top three designs of each painting were selected for further application.

- Three techniques i.e. hand painting; stencil printing and hand painting & patch work were selected for preparing samples to be compared with controlled sample of pure *Aari* work.
- Samples of Madhubani and Warli painting designs prepared with all the techniques, that is Pure *Aari* work, hand painting with *Aari* work, hand painting& patch with *Aari* work and stencil printing with *Aari* work were highly preferred.
- The cost of prepared samples of Madhubani and Warli painting was highly acceptable by the majority of the respondents.
- The respondents had very high opinion about the developed designs and techniques used for sample preparation.
- Prepared samples of Madhubani and Warli painting were preferred for application on wide range of articles.

It can be concluded that

- The motifs explored from Madhubani and Warli paintings were highly acceptable for product development.
- Variety of designs can be created through the use of CAD technology employing design tools which aid creativity and make the process more efficient.
- Fusion of traditional art forms with different techniques will help in making the designing, cost effective while simultaneously being time and energy saving.

Recommendations

1. Other forms of traditional paintings can also be explored for innovative textile designing.
2. Using combination of embellishment techniques, cost effective products can be produced.
3. CAD technology can be utilized to prepare galaxy of designs from different sources as per researcher's creativity and imagination for the development of fashion oriented products.
4. An enterprise offering different range of products with new designs can be set up.

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ANNEXURE-I

Preferential index for selection of traditional painting suitable to *Aari* work.

Name of respondent:

Faculty/Student:

Kindly give your opinion in rank order for the following traditional paintings.

Sr.No.	Name of Painting	Most Preferred	Preferred	Least Preferred
1	Rajput Painting			
2	Mughal Painting			
3	Pithora Painting			
4	Warli Painting			
5	Santhal Painting			
6	Tanjore Painting			
7	Madhubani Painting			
8	Cave Painting			
9	Mysore Painting			
10	Miniature Painting			











ANNEXURE-II












Preferential index for selection of motifs of Madhubani painting suitable to *Aari* work.











Name of respondent:-









Faculty/ student :-

1.Kindly give your opinion in rank order for the following motifs of Madhubani painting

	Motifs	Most Preferred	Preferred	Least Preferred
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				



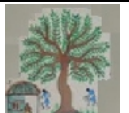
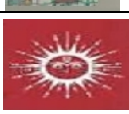

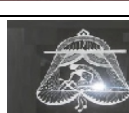


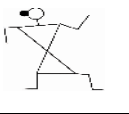
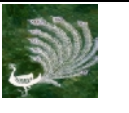






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2. Kindly give your opinion in rank order for the following motifs of Warli painting

Sr. No.	Motifs	Most Preferred	Preferred	Least Preferred
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				

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ANNEXTURE-III
























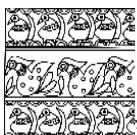
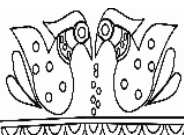
Preferential index for selection of developed designs of Madhubani and Warli painting







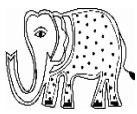






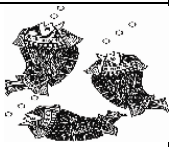






Name of respondent :-

Faculty/ student :-




























1. Kindly give your opinion in rank order of the following developed designs suitable to *Aari* work for preparation of samples.













Developed designs of Madhubani painting

Sr. No.	Designs no.	Motifs	Designs (a) Designs (b)	Most Preferred	Preferred	Least Preferred
1	4		 			
2	7		 			
3	15		 			
4	20		 			
5	21		 			
6	22		 			
7	23		  			
8	24		 			

9	26		 			
10	27		 			
11	28					
12	30		 			
13	34		 			
14	35		 			
15	36		 			

Developed designs of Warli painting

Sr. No.	Designs no.	Motifs	Design(a) Design(b)	Most Preferred	Preferred	Least Preferred
1	9		 			
2	10		 			
3	13		 			
4	20		 			
5	21		 			
6	22		 			
7	23		 			
8	24		 			
9	28		 			

10	30					
11	31					
12	32					
13	33					
14	36					
15	40					

ANNEXURE-IV

Respondents preferences for selection of embellishment techniques for combination with *Aari* work.

Name of respondent :-

Faculty/ student :-

Kindly give your opinion in rank order for the following fabric embellishment techniques for combination with *Aari* work.

Sr. No.	Techniques	Most preferred	Preferred	Somewhat preferred
1	Tie and Dye			
2	Printing			
	Block Printing			
	Screen Printing			
	Stencil Printing			
	Batik Printing			
3	Painting			
	Hand Painting			
	Nib Painting			
	Spray Painting			
	Nozzle Painting			
4	Embroidery			
	Cut Work			
	Patch Work			
	Appliqué Work			
5	Combination of Techniques			
	Tie and Dye and batik printing			
	Screen Printing with appliqué work			
	Stencil Printing with patch work			
	Nozzle Painting and batik printing			
	Cut Work and stencil printing			
	Patch Work and hand painting			
	Appliqué Work and block printing			

ANNEXURE-V

Evaluation of developed samples using traditional motifs of Madhubani painting.

General Information:

Name of respondents:

Age:

Education qualification :

Occupation:

Family monthly income:

Family type:

- Opine your preference for the developed design of Madhubani painting using *Aari* work and in combination with Hand painting, Stencil Printing and Patch Work.

Sr.No.	Sample	Developed designs		
1.	Design	V.A.	A.	L.A.
	T			
	T1			
	T2			
	T3			
2.	Design			
	T			
	T1			
	T2			
	T3			
3.	Design			
	T			
	T1			
	T2			
	T3			

T- *Aari* work, T1-Hand painting with *Aari* work, T2- Hand painting & patch with *Aari* work, T3- Stencil painting with *Aari* work

V.A. -Very Appealing, A. -Appealing , L.A.- Least Appealing.

- Give your opinion about the acceptability of prepared sample cost.

Samples	Cost of raw material(Rs)				Total cost of material (Rs)	Preparation Hours spend (Hrs.)	Labour Charges (Rs)	Total Cost of Product (Rs)	Opinion regarding cost		
	Fabric	Threads	Colors	Ornamentation material					H.A.	A.	L.A.
T	30	80	-----	20	140	16-17	760	900			
T1	30	50	125	20	205	8-9	380	585			
T2	40	50	100	20	210	7-8	380	590			
T3	30	30	125	80	165	7-8	380	545			

T- *Aari* work, T1-Hand painting with *Aari* work, T2- Hand painting & patch with *Aari* work, T3- Stencil painting with *Aari* work
H.A.-Highly acceptable, A-Acceptable, LA-Least Acceptable

3. Reasons for preferences of the experts regarding developed Designs and Techniques of Madhubhani Painting.

Sr. No.	Statement	Design 1												Design 2												Design 3											
		T			T1			T2			T3			T			T1			T2			T3			T			T1			T2			T3		
		SA	A	SW	SA	A	SW	SA	A	SW	SA	A	SW	SA	A	SW	SA	A	SW	SA	A	SW	SA	A	SW	SA	A	SW	SA	A	SW	SA	A	SW			
1.	Developed design is suitable as per selected technique.																																				
2	Adapted designs are appropriate for technique in combination wih Aari work.																																				
3	Developed designs maintain the beauty of painting.																																				
4	Colour combination is as per design /motif and enhance the beauty of design used in designs are as per trend																																				
5	Creative use of Madhubani painting design.																																				
6	Effect produced is innovative																																				
7	The developed samples are attractive with the combination of embellishment technique.																																				
8	Adapted designs can be used on household articles & apparel																																				
9	Combinations of technique decrease the cost of Aari work and increase the market demand.																																				
10	Fusion of techniques gives an elegant and sophisticated																																				
11	Quality of workmanship is good																																				

T- Aari work, T1-Hand painting with Aari work , T2- Hand painting & patch work with Aari work, T3- Stencil painting with Aari work
SA-Strongly Agree, A- Agree, SW- Somewhat Agree

4. Give your opinion regarding application/use of the developed designs sample with different embellishment technique for suitable articles.

Sr.No.	Article Name	D22b				D21b				D35a			
		T	T1	T2	T3	T	T1	T2	T3	T	T1	T2	T3
1.	Diwan Cover												
2.	Cushion Cover												
3.	Bed sheet												
4.	Curtains												
5.	Suit												
6.	Kurti												
7.	Saree												
8.	Dupatta												
9.	Shawl												
10.	Top												
11.	Purse/Bag												
12.	File Cover												
13.	Wall Piece												
14.	Any other												

T- *Aari* work, T1-Hand painting with *Aari* work, T2- Hand painting & patch with *Aari* work, T3- Stencil painting with *Aari* work

ANNEXURE-VI

Evaluation of developed samples using traditional motifs of Warli painting.

General Information:

Name of respondents:

Age:

Education qualification :

Occupation:

Family monthly income:

Family type:

2. Opine your preference for the developed design of Warli painting using *Aari* work and in combination with Hand painting, Stencil Printing and Patch Work.

Sr.No.	Sample	Developed designs		
1.	Design	V.A.	A.	L.A.
	T			
	T1			
	T2			
	T3			
2.	Design			
	T			
	T1			
	T2			
	T3			
3.	Design			
	T			
	T1			
	T2			
	T3			

T- *Aari* work, T1-Hand painting with *Aari* work, T2- Hand painting & patch with *Aari* work, T3- Stencil painting with *Aari* work

V.A. -Very Appealing, A. -Appealing , L.A.- Least Appealing.

2. Give your opinion about the acceptability of prepared sample cost.

Samples	Cost of raw material(Rs)				Total cost of material (Rs)	Preparation Hours spend (Hrs.)	Labour Charges (Rs)	Total Cost of Product (Rs)	Opinion regarding cost		
	Fabric	Threads	Colors	Ornamentation material					H.A.	A.	L.A.
Warli											
T	30	30	-----	20	80	16-17	760	840			
T1	30	30	50	20	130	7-8	380	510			
T2	40	30	25	20	105	8-9	380	485			
T3	30	30	50	70	180	7-8	380	500			

T- *Aari* work, T1-Hand painting with *Aari* work, T2- Hand painting & patch with *Aari* work, T3- Stencil painting with *Aari* work
H.A.-Highly acceptable, A-Acceptable, LA-Least Acceptable

3. Reasons for preferences of the experts regarding developed Designs and Techniques of Warli Painting.

Sr. No.	Statement	Design 1												Design 2												Design 3											
		T			T1			T2			T3			T			T1			T2			T3			T			T1			T2			T3		
		SA	A	SW	SA	A	SW	SA	A	SW	SA	A	SW	SA	A	SW	SA	A	SW	SA	A	SW	SA	A	SW	SA	A	SW	SA	A	SW	SA	A	SW			
1.	Developed design is suitable as per selected technique.																																				
2	Adapted designs are appropriate for technique in combination with Aari work.																																				
3	Developed designs maintain the beauty of painting.																																				
4	Colour combination is as per design /motif and enhance the beauty of design used in designs as per trend																																				
5	Creative use of Warli painting design.																																				
6	Effect produced is innovative																																				
7	The developed samples are attractive with the combination of embellishment technique.																																				
8	Adapted designs can be used on household articles & apparel																																				
9	Combinations of technique decrease the cost of Aari work and increase the market demand.																																				
10	Fusion of techniques gives an elegant and sophisticated																																				
11	Quality of workmanship is good																																				

T- Aari work, T1-Hand painting with Aari work , T2- Hand painting & patch work with Aari work, T3- Stencil painting with Aari work
SA-Strongly Agree, A- Agree, SW- Somewhat Agree

4. Give your opinion regarding application/use of the developed designs sample with different embellishment technique for suitable articles.

Sr.No.	Article Name	D24b				D10b				D9a			
		T	T1	T2	T3	T	T1	T2	T3	T	T1	T2	T3
1.	Diwan Cover												
2.	Cushion Cover												
3.	Bed sheet												
4.	Curtains												
5.	Suit												
6.	Kurti												
7.	Saree												
8.	Dupatta												
9.	Shawl												
10.	Top												
11.	Purse/Bag												
12.	File Cover												
13.	Wall Piece												
14.	Any other												

T- *Aari* work, T1-Hand painting with *Aari* work, T2- Hand painting & patch with *Aari* work, T3- Stencil painting with *Aari* work

DESIGN CATALOGUE
ON
ADAPTATION OF TRADITIONAL PAINTING
MOTIFS FOR *AARI* WORK

Suman Sodhi
Dr. Nisha Arya
Dr. Nirmal Yadav



DEPARTMENT OF TEXTILE AND APPAREL DESIGNING
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HISAR - 125004 (HARYANA)

2015

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INTRODUCTION

Designs are of great importance when it comes to give an enchanting and intriguing look to the textile products. They play a vital role in bringing about a remarkable change in appearance of different items produced by the textile industries. A fabric or cloth with designs is capable of having a more captivating impression than the ones without them. Designs of various types can be inspired from a variety of sources like nature or from the folk arts and crafts such as wall painting, floor painting, sculptures, carving etc. The rich motifs and designs of the existing arts and crafts can be readily adapted into contemporary forms. This contemporary version of traditional art could occupy a good place in the field of textile and apparel designing due to the changes in fashion trends and increasing demand of the consumer for the ethnic motifs and designs. Painting forms one of the example of Indian traditional art.

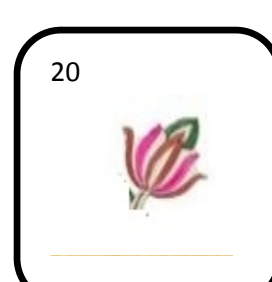
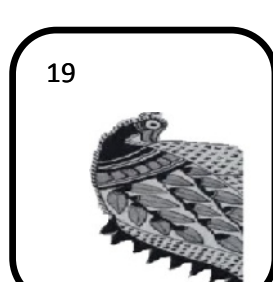
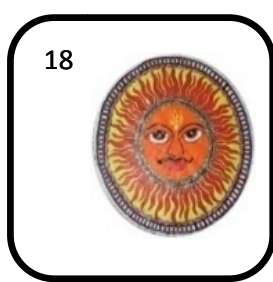
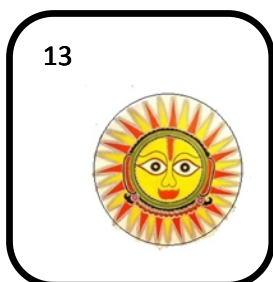
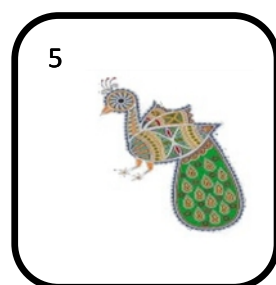
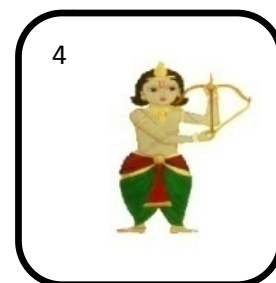
Painting in India has a very old tradition and the unique thing about them is that they are usually representative and connected to highly significant religious or cultural events. Paintings provide a pleasing continuum that extends from the early civilization to the present date. Painting has evolved over the year to become a fusion of various cultures and traditions.

The craft of *Aari* embroidery has existed in India from the twelfth century and was patronized by the Mughal courts. With its very fine embroidery, *Aari* suited the working of elaborate and highly refined floral motifs, which the royals favored. The process of *Aari* embroidery is labour intensive at all stages, which is why it will remain a strictly handmade technique. It is done with both colored and golden threads. The thread is put on the tip of a pen-like needle which is passed through the cloth giving chain-stitch like impressions, characterized by long chain stitches and embellishments produced on stretched frames.

The work Amalgamation of *Aari* work with painting motifs will help in widening the variety of textile products to consumers for product selection and availability of the products according to taste. The study will also serve as a mean of preserving our traditional heritage in modern textiles as this will help in creating distinct and new range of textile designs that can be utilized for various apparel and household end uses.

Motifs of two famous traditional Indian paintings that is Madhubani and Warli painting were selected and designs were developed using motifs of both the paintings. Samples were prepared using selected designs of Madhubani and Warli paintings in combination with three fabric embellishment techniques. The application of prepared samples with fusion of different techniques i.e. hand painting, hand painting with patch and stencil printing was done on different articles using computer aided designing in order to visualize the overall appearance of the created designs as per their suitability on various articles, application of prepared samples was done on different articles and depicted in the catalogue.

Collected Motifs of Madhubani Painting



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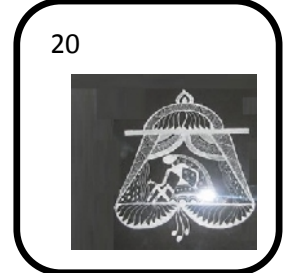
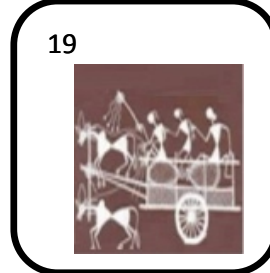
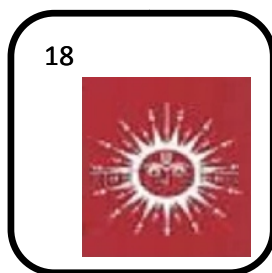
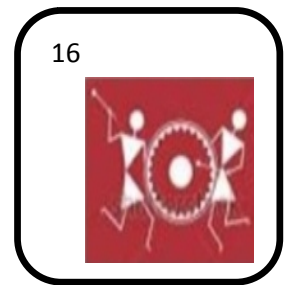
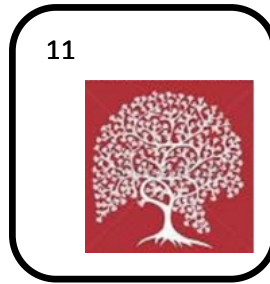
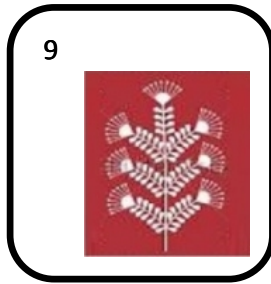
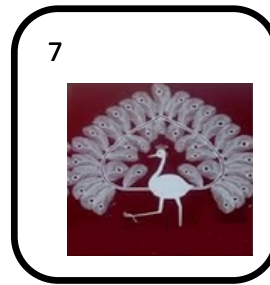
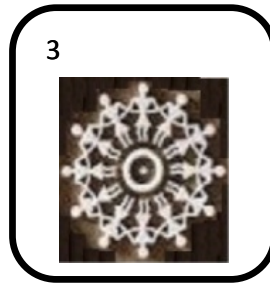
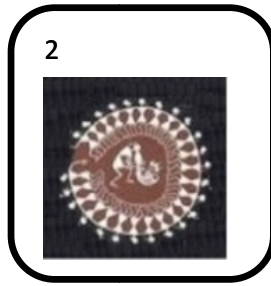
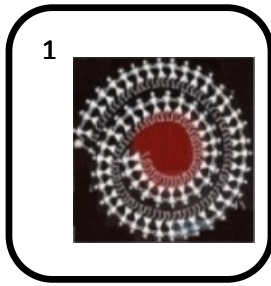
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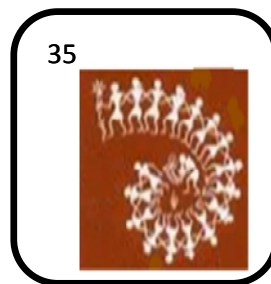
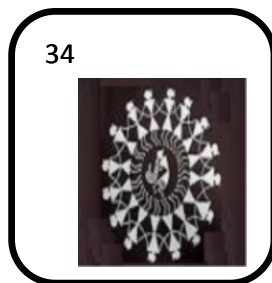
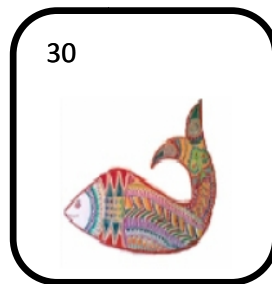
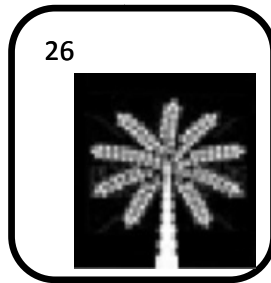


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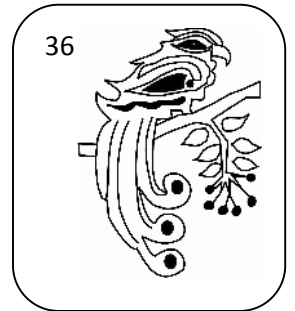
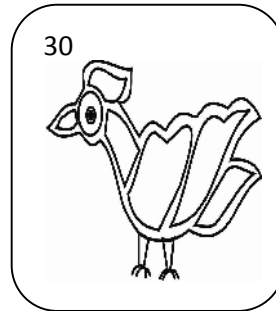
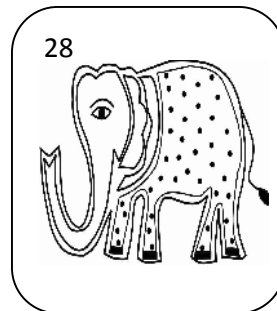
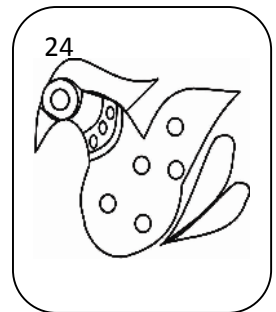
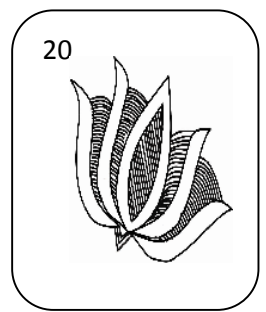


Collected motifs of Warli painting





Selected motifs of Madhubani paintings

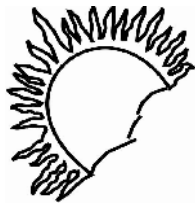


Selected motifs of Warli painting

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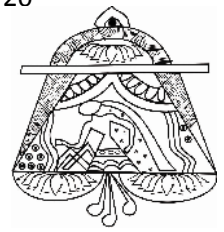
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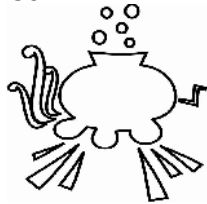
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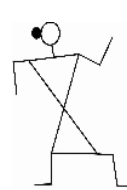
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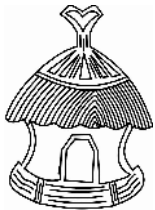
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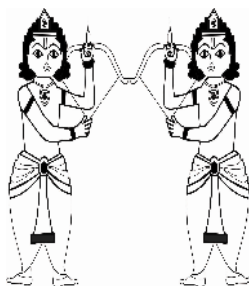
Designs developed from selected motifs of Madhubani painting

Motif

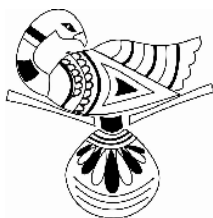
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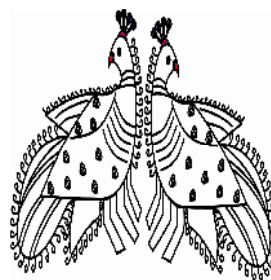
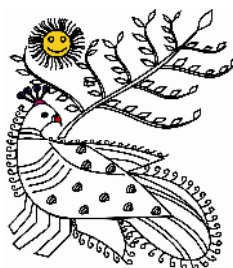
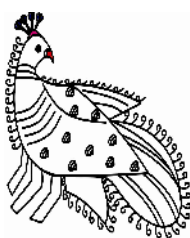
Designs



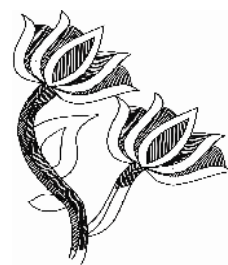
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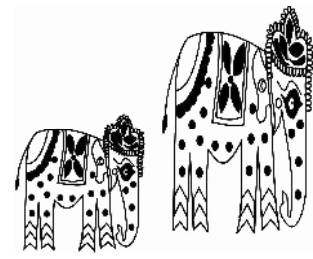
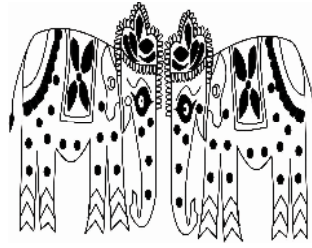
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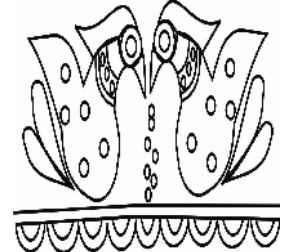
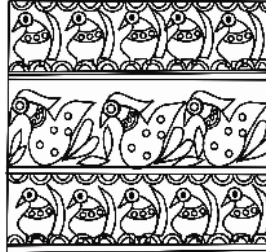
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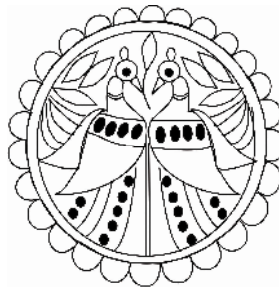
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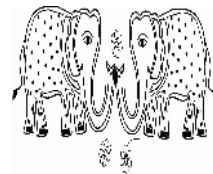
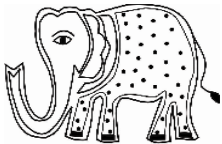
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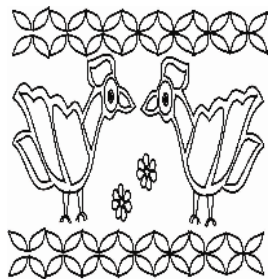
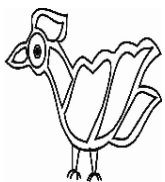
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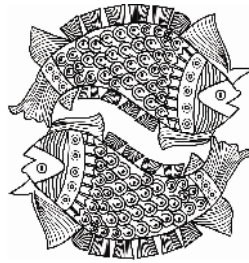
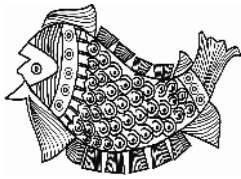
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30



34



35



36

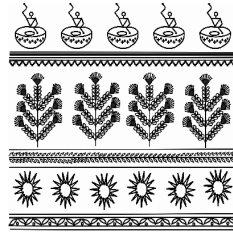


Designs developed from selected motifs of Warli painting

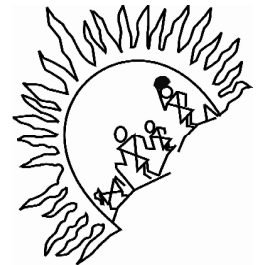
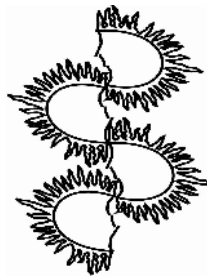
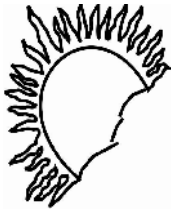
Motif

Designs

9



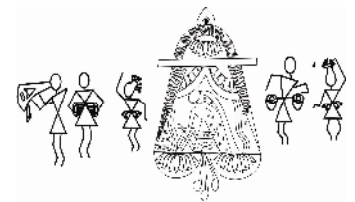
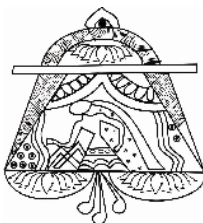
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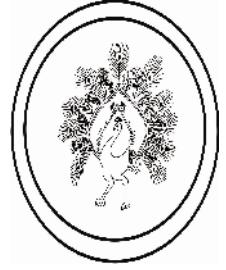
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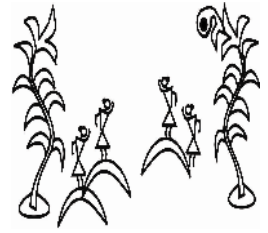
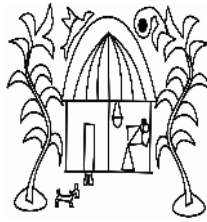
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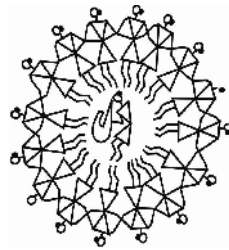
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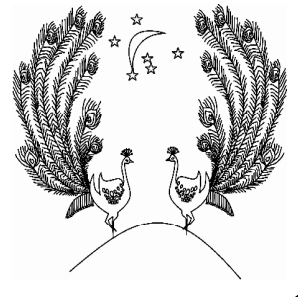
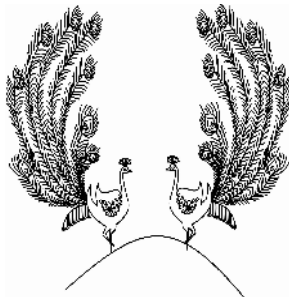
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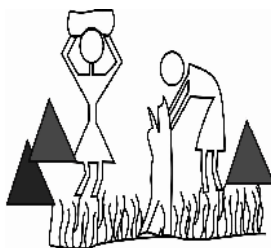
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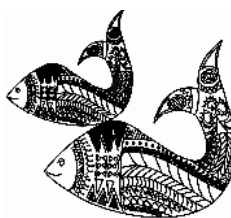
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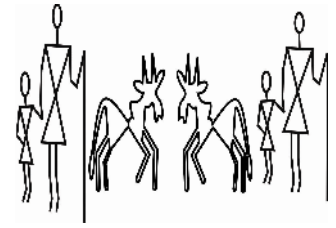
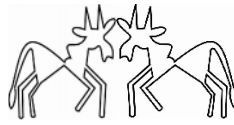
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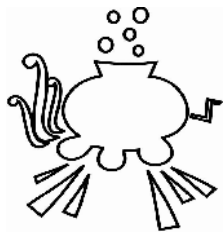
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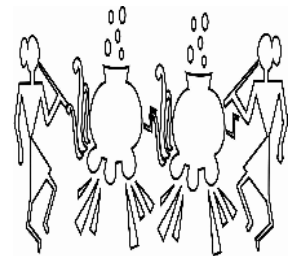
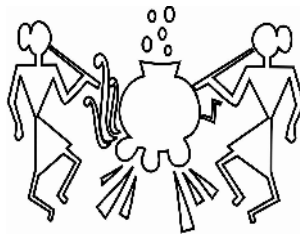
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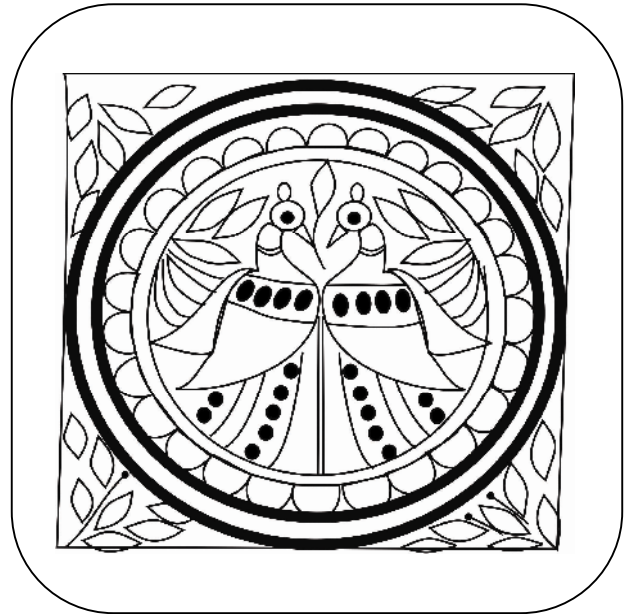
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Top three selected designs of Madhubani painting



22a

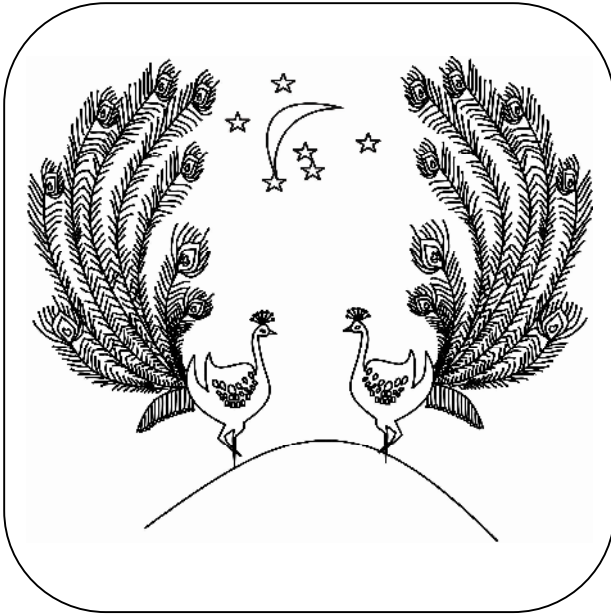


21b

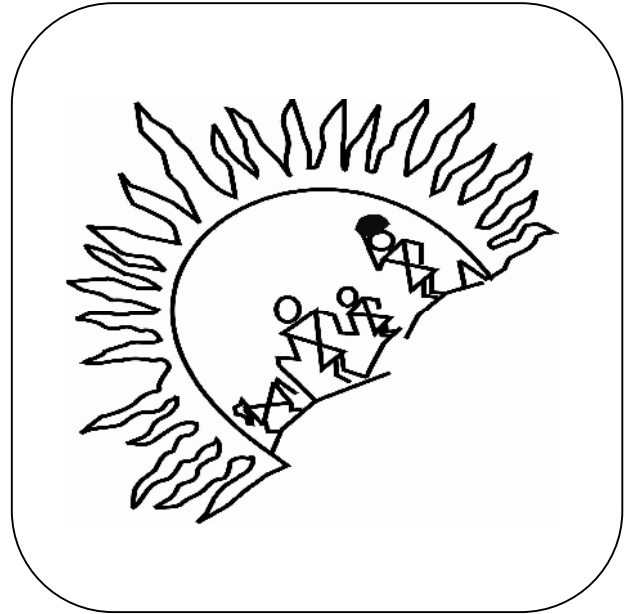


35a

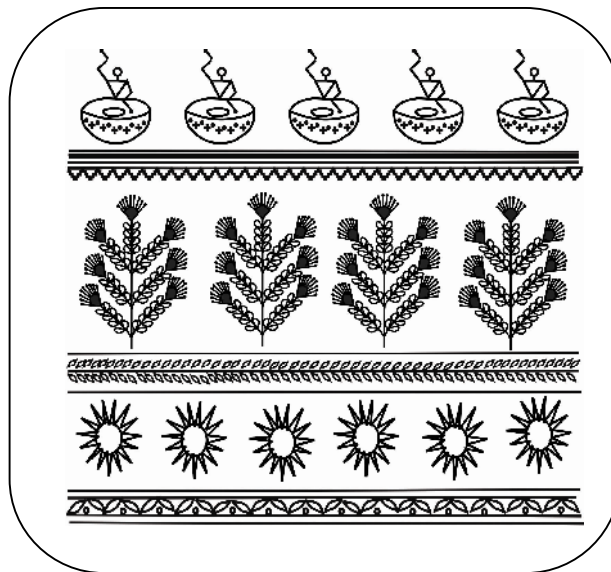
Top three selected designs of Warli painting



24b



10a



9a

Prepared Samples of Madhubani Painting Designs In Fusion With Selected Fabric Embellishment Techniques

DESIGN 22 (a)



Aari Work



Hand painting with *Aari work*



Hand painting & patch with *Aariwork*



Stencil printing with *Aari work*

DESIGN 35 (a)



Aari Work



Hand painting with *Aari work*



Hand painting & patch with *Aari work*



Stencil printing with *Aari work*

DESIGN 21 (b)



Aari Work



Hand painting with *Aari work*



Hand painting & patch with *Aari work*



Stencil printing with *Aari work*

Prepared Samples of Warli Painting Designs in Fusion With Selected Fabric Embellishment Techniques.

DESIGN 24 (b)



Aari Work



Hand painting with *Aari* work



Hand painting & patch with *Aari* work



Stencil printing with *Aari* work

DESIGN 9 (a)



Aari Work



Hand painting with *Aari work*



Hand painting & patch with *Aari work*



Stencil printing with *Aari work*

DESIGN 10 (a)



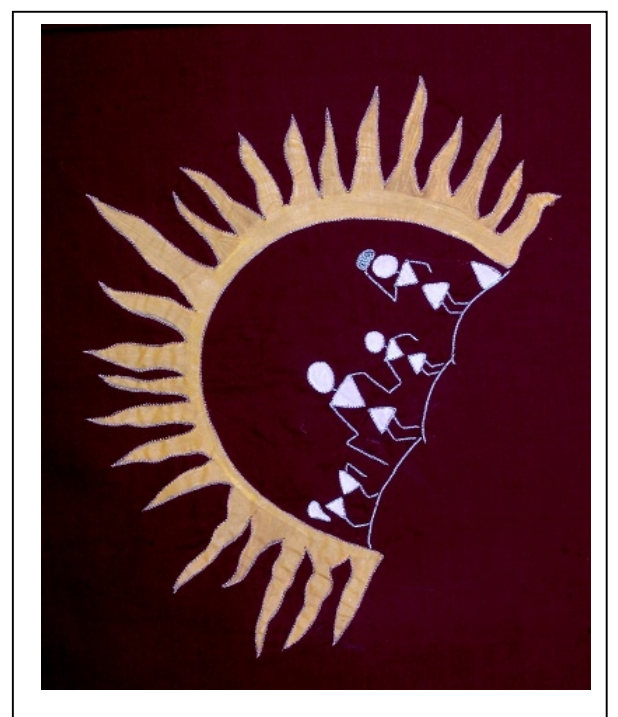
Aari Work



Hand painting with Aari work

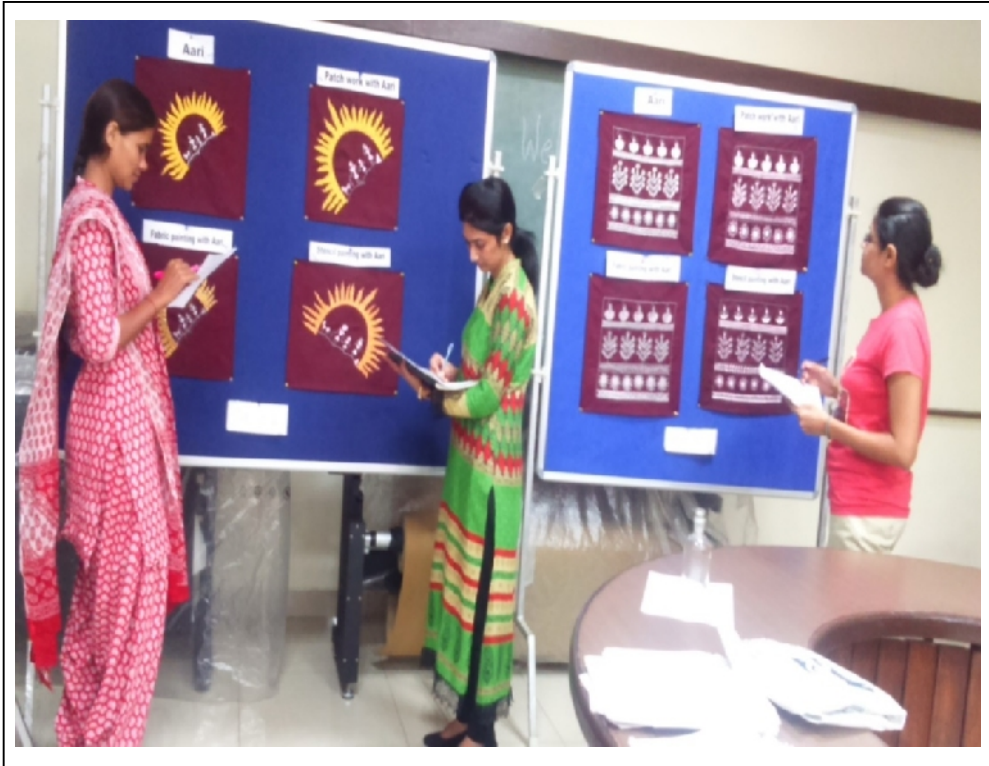


Hand painting & patch with Aari work

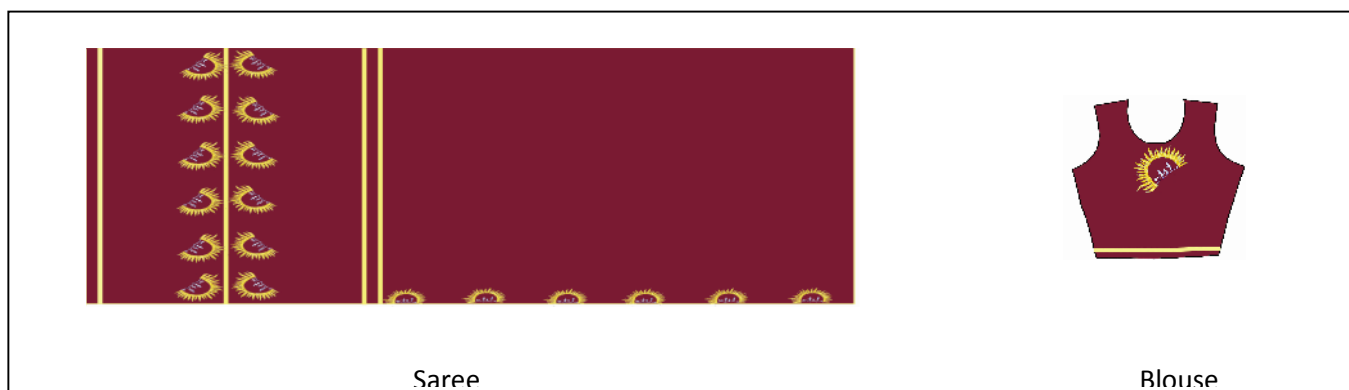
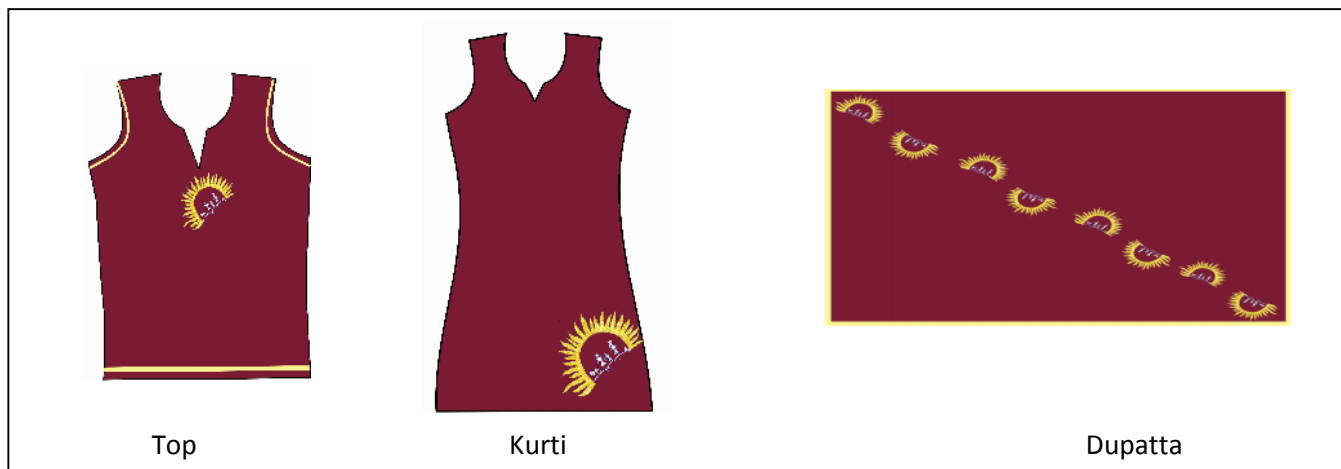
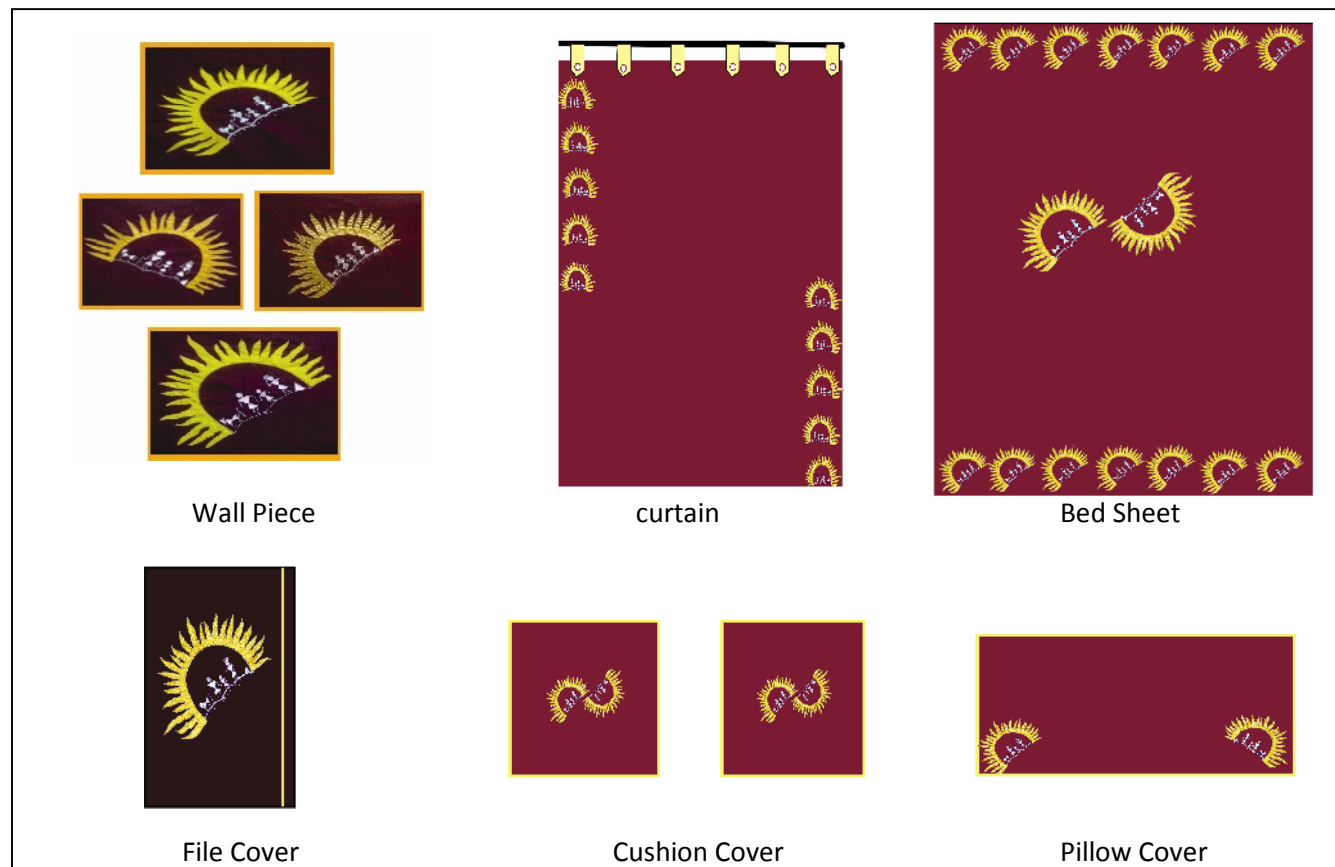


Stencil printing with Aari work

Assessment of Prepared Samples



Application of prepared samples on different articles using CAD.





Wall Piece



Curtain



Bed Sheet



File Cover



Cushion Cover



Pillow Cover



Top



Kurti



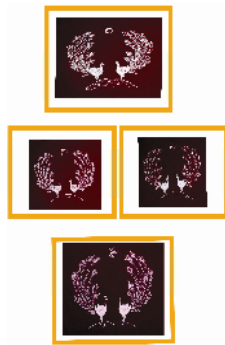
Dupatta



Saree



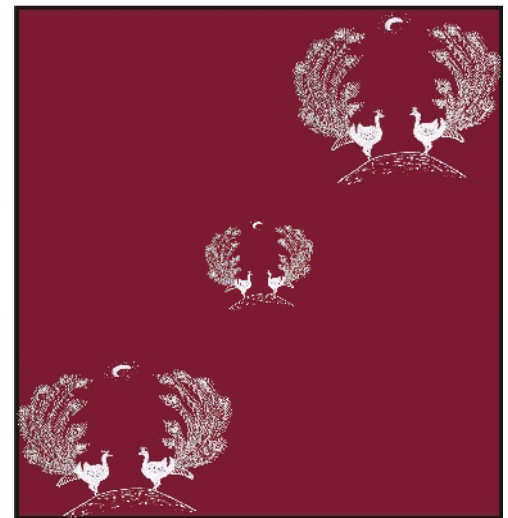
Blouse



Wall Piece



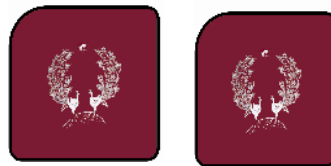
Curtain



Bed Sheet



File Cover



Cushion Cover



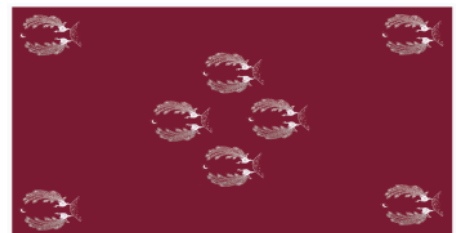
Pillow Cover



Top



Kurti



Dupatta



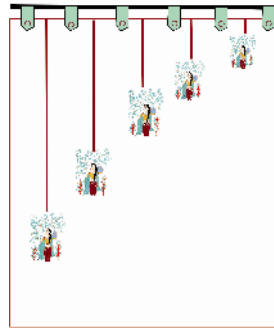
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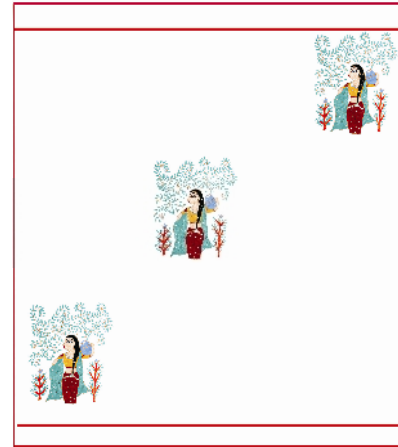
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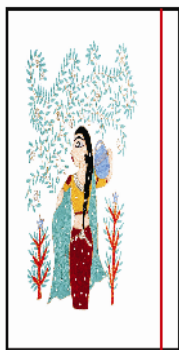
Wall Piece



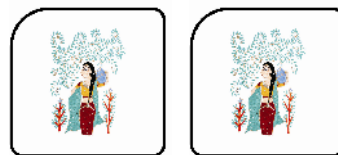
Cartain



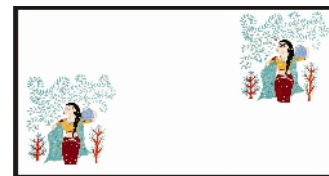
Bed Sheet



File cover



Cushion Cover



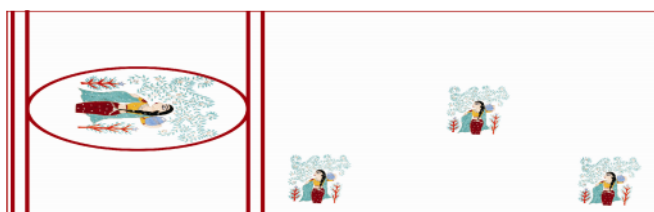
Pillow Cover



Dupata



Kurti



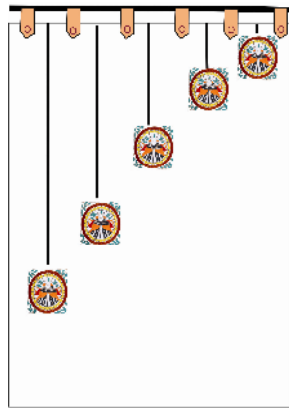
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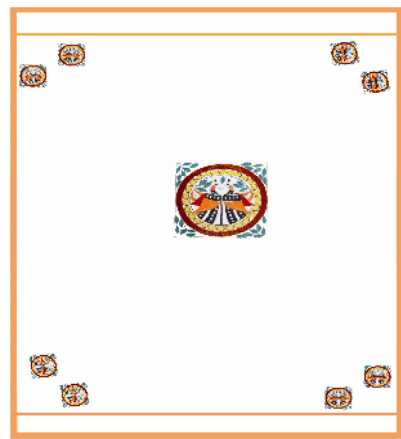
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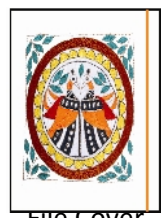
Wall Piece



Cartain



Bed Sheet



File Cover



Cushion Cover



Dupatta



Top



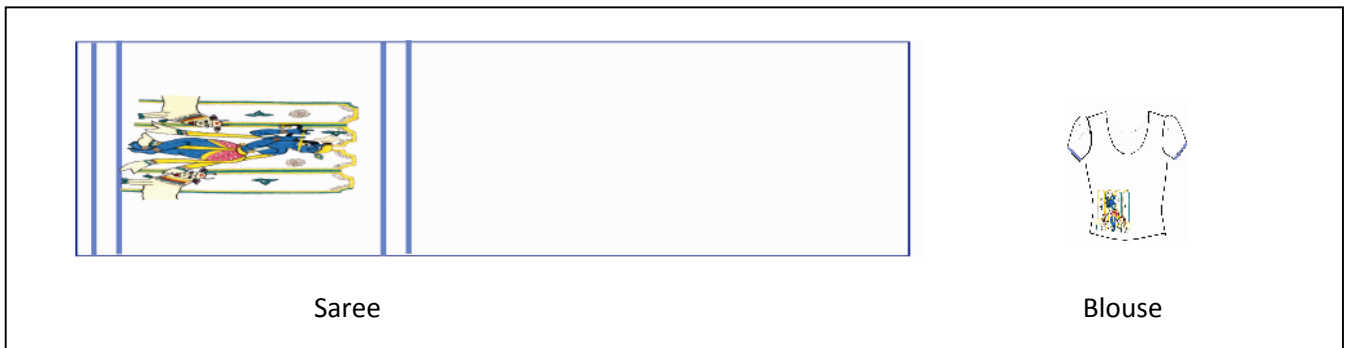
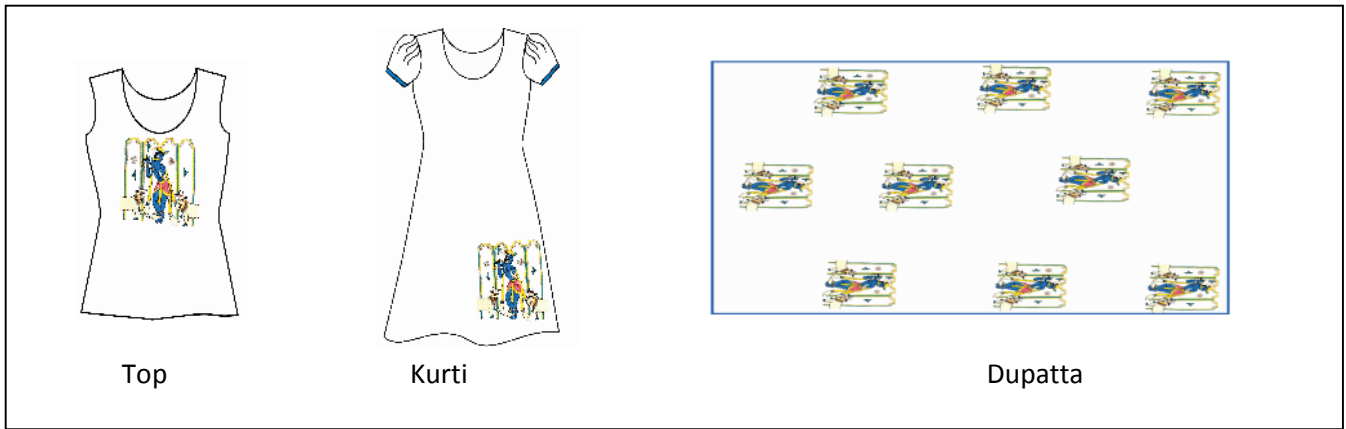
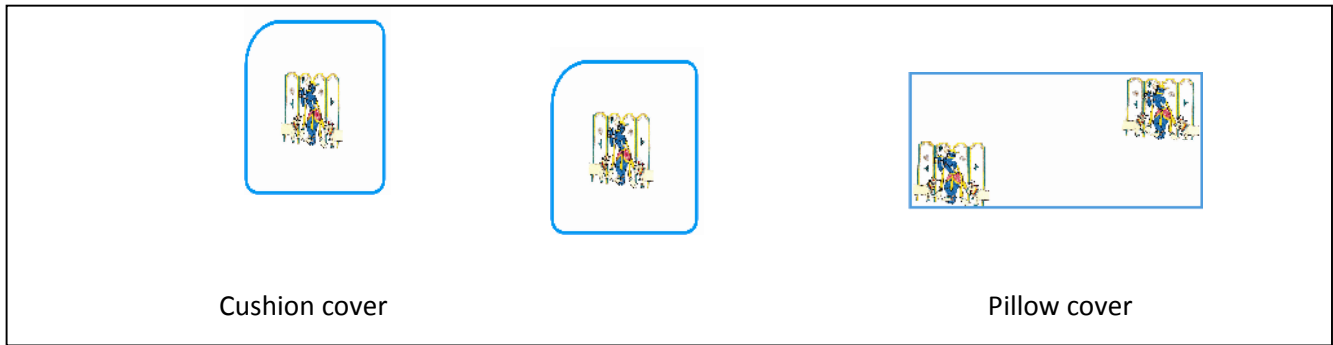
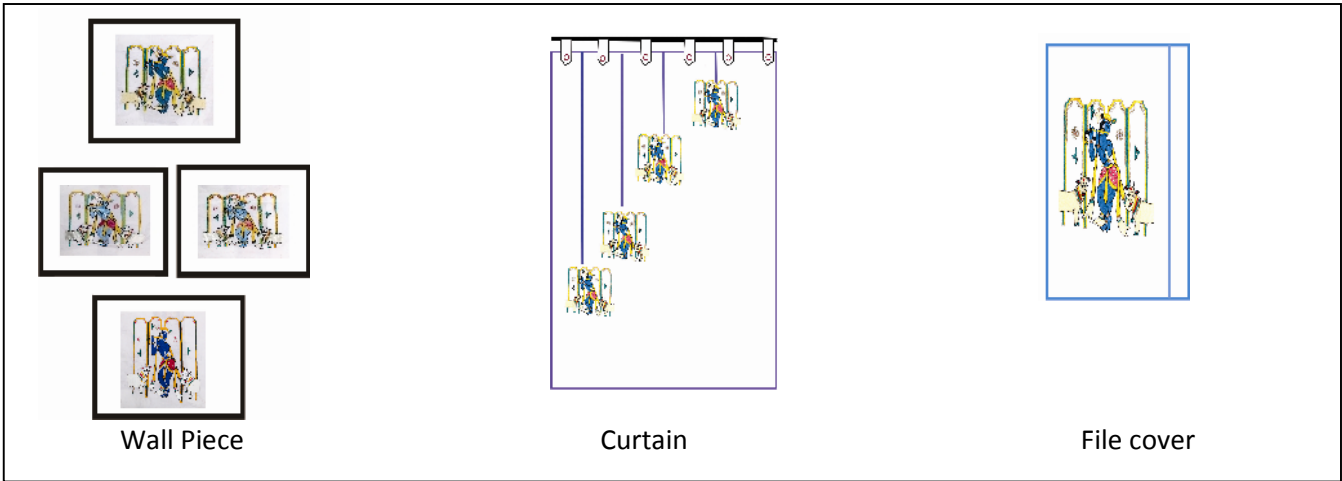
Blouse



Saree



Blouse



ABSTRACT

Title of Thesis : **Adaptation of Traditional Painting Motifs for *Aari* work**

Full name of Degree holder : Ms. Suman Sodhi

Admission No. : 2013HS21M

Title of degree : Master of Science

Name and Address of Major : Dr. (Mrs.) Nisha Arya
Assistant Professor
Textile & Apparel Designing

Degree awarding University/ Institute : CCS Haryana Agricultural University
Hisar-125001, India

Year of award of Degree : 2015

Major Subject : Textile & Apparel Designing

Total No. of Pages in thesis : 70+iv+XIX

No. of words in the Abstract : Approx. 342

Key words : *Aari*, traditional, painting, Madhubani, Warli

(An abstract of the thesis presented to CCS Haryana Agricultural University, Hisar in partial fulfillment of the requirements for the degree of M.Sc. in the subject of Textile and Apparel Designing)

The present study on 'Adaptation of Traditional Painting Motifs for *Aari* Work' was conducted to strengthen creativity by exploring the possibility of fusion of traditional painting motifs and *Aari* work with different fabric embellishment techniques. The concept behind the theme was to create new range of textile designs by maintaining the beauty and originality of traditional paintings as well as *Aari* work. In this study, two famous traditional Indian paintings that is Madhubani and Warli were selected keeping in mind their suitability to *Aari* work. Out of total eighty motifs which were collected through secondary sources, thirty motifs were selected by experts' preferences for development of designs. Two designs for each selected motif of both the paintings were developed using CAD. Six designs i.e. 22a, 21b and 35a from Madhubani painting and 24b, 10b and 9a were selected on the basis of experts' preferences. Twenty four samples were prepared using three fabric embellishment techniques i.e. hand painting with *Aari* work, hand painting & patch with *Aari* work and stencil printing with *Aari* work and controlled sample of pure *Aari* work for Madhubani and Warli painting designs. The prepared samples were got assessed by the experts and consumers in overall appeal, cost acceptability and suitability of designs and techniques used. It was found that the respondents had very high opinion about the developed designs and techniques. The cost of prepared samples of Madhubani and Warli painting was highly acceptable by the majority of the respondents. The work done in the form of prepared samples was appreciated and preferred for application on wide range of articles.

Thus, the motifs explored from Madhubani and Warli paintings were highly acceptable for product development as variety of designs can be created through the use of CAD technology. Fusion of traditional art forms with different techniques will help in making the designing cost effective while simultaneously being time and energy saving.

MAJOR ADVISOR

SIGNATURE OF STUDENT

HEAD OF THE DEPARTMENT

CURRICULUM VITAE

- a) Name of the Student : Suman Sodhi
b) Date of Birth : 02nd Feb. 1986
c) Place of Birth : Hisar
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Degree	University/Board	Year of Passing	Percentage of marks	Subjects
Matric	CBSE	2001	44.6%	Hindi, English, Math, S.S., Science
10+2	HBSE	2005	57.2%	Hindi, English, Sociology, Home Science, Word Processing
B.Sc. Home Science (Hons.)	I.C. College of Home Science, CCSHAU, Hisar	2010	65.3%	FN,HDFS,FRM,TAD,EECM
M.Sc. TAD	I.C. College of Home Science, CCSHAU, Hisar	2015	74.7%	Textile and Apparel Designing

- k) Co-curriculum activities :
I. Attended NI Camp in CCSHAU, Hisar
II. Participated in Women International Conference, Delhi
l) Medal/Honours received : Nil
m) List of publications : Nil

(Suman Sodi)

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Signature of student