

INTRODUCING KAMAL KADAI EMBROIDERY USING PINEAPPLE FIBER ON TO DIFFERENT PRODUCTS



PROJECT

In Partial Fulfillment of the Requirement for the Award of the Degree of

MASTER'S PROGRAMME IN FASHION DESIGNING

2022-2024

By

SANDRA P R

(Register Number: SM22MFD012)

**Under the guidance of
MS.SHRUTHI R**

ASSISTANT PROFESSOR

DEPARTMENT OF FASHION DESIGNING

WOMEN'S STUDY CENTRE

ST. TERESA'S COLLEGE (AUTONOMOUS)

ERNAKULAM, KOCHI 682011

APRIL 2024

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Name and signature

EXTERNAL EXAMINER

Name and signature

INTERNAL EXAMINER

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Name and signature

HEAD OF THE DEPARTMENT

Name and signature

LECTURE IN CHARGE

DECLARATION

I hereby declare that the matter in the dissertation entitled **“INTRODUCING KAMAL KADAI EMBROIDERY USING PINEAPPLE FIBER ON TO DIFFERENT PRODUCTS”** submitted in partial fulfillment of the requirement for the award of the Degree of Master’s Programme in Fashion Designing is a record of original research work done by me under the supervision and guidance of, **MS SHRUTHI R**, Assistant professor, Department of Fashion Designing, Women’s Study Centre, St. Teresa’s College [Autonomous], Ernakulam and that the thesis has not previously formed on the basis for the award of any degree work has not been submitted in part or full or any other degree/ diploma/ associate ship/ fellowship or the similar title to any candidate of any other university.

Name & signature of the candidate

Name & signature of the guide

PLACE:

DATE:

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ABSTRACT

Indian embroidery is an important part in India's cultural heritage and it is an major input product for the country. The Indian embroidery techniques were passed on from generation to generations, and thus making India, the most vibrant country in terms of textiles. In today's fast moving world, enough importance is not given to the country's culture and traditions ,therefore most of the art and crafts are in the verge of extinction.Due to the changes in lifestyle and technology of the society, the traditional embroidery craft and craftsmen have been facing many challenges. One amongst the diminishing embroidery craft is the Kamal kadai of Andhra Pradesh, which is a unique 3D embroidery style consisting square shaped woven patterns. The aim of study is to promote the idea of the working towards the preservation and revival of this dying craft , and bring sustainability in the art by using pina fiber , a natural fiber extracted from pineapple leafs, which makes it an excellent choice for developing the embroidery technique due to its high tensile strength, flexibility, light weight property, dye absorbent features, and high resistance towards skin allergies, and hence therefore , by motivating the artists to continue the tradition and flourish the art throughout the upcoming years.

Key words: Indian embroidery, Kamal kadai embroidery, natural dyes, natural fibers, pineapple fiber.

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INTRODUCTION

1. INTRODUCTION

India's cultural heritage is well known for its folk traditions, music, crafts, dance forms, arts etc. The Indian cultural characteristics focus on the rituals, communication, beliefs and values. Culture is been defined by the way of life, thinking, population that passed through generation to generations. Indian textiles focuses on the traditional value through woven and knitted fabrics. For developing a eco-friendly society focus on to sustainability plays a major role.

Handcrafts is a major cultural identity of the people and they prove their traditional art to the world also throughout centuries of periods the crafts have been embellished as a culture and tradition within the rural peoples. Handcrafts in India has a rich history that dates back to the ancient times. India's handcrafts are almost inexhaustible and are innovative and variety is infinite.

Embroidery is the art of decoration on the fabric or on to any other materials using a needle and thread. Indian embroidery plays an important role in creating its cultural heritage, it is the major input of products for the country. Indian embroidery techniques are passed on from generations to continue the traditions. History of the Indian embroidery is traced on from Indus valley Civilization in the north western part around 2800-1800 BC. Traditional embroidery shows the signature of creativity in it. Embroidery of India is of different types and it focuses on its tradition and cultural symbols, some of the Indian embroideries are Aari work, Kamal kadai, Chikankari, Gota work, Kantha, Kasuti, Phulkari, Zardozi, Mirror work. The threads are both natural and synthetic according to the traditional work.

Natural fibers are classified according to the origin such as vegetable or cellulose base, natural fibers are pure fiber extracted from the environment. Natural fibers are a good water absorbent and are found in various textures. Some of the natural plant fibers are cotton, jute, hemp, sisal, bamboo, pineapple, banana, wood, coconut and animal fibers are generally comprise proteins like collagen, keratin, and fibroin examples are silk, wool, mohair, alpaca, angora. The animal fibers are from two that is animal hair: fiber or wool taken from the animals or from hairy mammals and silk fiber: the fiber is secreted by glands of insects during the preparation of cocoons

Plant fibers are the extraction of plant fibers and some are categorized, seed fiber is the fiber collected from the seeds of various parts of the plant, the most relevant one is cotton. Leaf fiber is collected from the cells of the leaf some examples are banana, pineapple. Bast fibers are collected from the outer cell layers of the stem of the plant some examples are flax, jute, kenaf, vine, hemp. Fruit fibers are collected from the fruit of the plant, for example coconut fiber named coir. Stalk fiber is collected from the stalks of the plant for example wheat, rice, bamboo.

Natural dyeing is the process of applying organic color extract from natural materials and applying the color to the fabric, yarn, or to cloth. Natural dyes sources are connected to everywhere, dyes are extracted from nuts, roots, foliage, berries and flowers. Until the mid-19th century plants were the main source of dye. Mordant is a dye fixing agent to absorb the color. Alum is a good mordant to fix color.

Due to the change in lifestyle and technology of the society traditional embroidery faces more challenges, one amongst which is the Kamal kadai embroidery of Andhra Pradesh, is an extinct embroidery. The embroidery style is different from its structure of pattern in view, another name is lotus embroidery. The reason behind the name is from its style of embroidery, it is like a lotus petals. The embroidery highlights its feature of the stitch which is made by a woven stitch with square shape patterns and it's a form of 3D embroidery technique with a very rich look.

In the study content is to try the revival of extincting embroidery using the Pina fiber on different products. An examination on the creative possibilities and techniques and properties focused by the Pina fiber on Kamal kadai embroidery, the incorporation of an innovative approach involving pineapple leaf fiber into Kamal kadai embroidery of Andhra Pradesh. Also exploring the eco-friendly alternatives within textile and fashion. The process includes the exploring of natural fibers sourcing, properties analyzing, dye ability of fiber and about the revival of embroidery. In recent years eco fashion has become a focal point in the textile field. In the study the choose of pineapple fiber is because of its natural physical property and texture,

The fiber has its property of high tenacity (gm/tex):30.00-51.00, elongation (%):2.5-3.5, length (mm):10-19, tensile strength (MPa):413-1627, lightweight texture, also due to dye absorption power these properties helps in creating a embroidery thread. Also the most important part is that the fiber is not itchy or scratchy to the skin like any other natural fiber, so that it's a better fiber to select on to the study. Hence trying to bring forth and promote extincting art through the surface ornament technique.

1.1 OBJECTIVE OF THE STUDY

- To educate and create awareness to the people about the extincting craft, Kamal kadai embroidery.
- To study the application of pineapple fiber to embellish fabric using a surface adornment technique.
- To dye the fibers using natural dyes in order to develop the embroidery samples
- To evaluate the physical properties of pineapple fiber used in the embroidery technique.
- To apply Kamal kadai embroidery technique to various products.
- To conduct a market study using survey methods and analyse the market value of the products from the feedback collected .

REVIEW OF LITERATURE

2. REVIEW OF LITERATURE

A review of literature “**INTRODUCING KAMAL KADAI EMBROIDERY USING PINA FIBER ON TO FABRIC PRODUCTS**” is described under the following heads;

3.1 TEXTILE FIBERS

3.2 NATURAL FIBERS

3.3 PINEAPPLE FIBER

3.4 NATURAL DYES

3.5 MORDANT

3.6 INDIAN EMBROIDERY

3.7 KAMAL KADAI EMBROIDERY

3.1. TEXTILE FIBERS

The word textile comes from the latin word, textile and the french word combination texere, which means pertaining to weaving of the woven fabrics, hence the textiles are the materials that can be converted into yarns and fabrics of any natural sources. Technically it must be of spinnable length and can only be made into spun yarn. A yarn is an assemblage of fibers that is twisted or laid together to form continuity for the strand of a fiber for the use of weaving or knitting techniques. The threads are three or more yarns tightly twisted, singed, dyed and finished to get a result of fit into the eye of the needle, or to be hand knotted, crocheted or tatted. The natural fibers may classified into according to the origin of the fibers as animal, vegetable, or inorganic fibers. The animal fibers are composed of chiefly with proteins they include silk, woo, goat hair, llama, and alpaca, vicuna, camel, rabbit, hog, horse, and other animals. vegetable fibers are composed chiefly of cellulose and may be as short fibers are as cotton, hemp, ramie, sisal hemp, and spanish moss. Artificial fibers can be produced either by the synthesis of polymers examples as nylon or rayon. (H.V Sreenivasa murthy, 2018).

The textiles are developed over many hundreds of years and the most of the fibers are suitably selected while regard to property and texture, and have become the basis of the textile industries of the world. Today, as for many years past cotton, jute, wool, flax, and silk are the most relevant and most important of the natural textile fibers, upon the change in lifestyle and time passed so that with in a number of others purpose of doing and unemployment focused in the areas, so that upon the few natural fibers, man developed for centuries for the clothes that keep warm to wear. The need and use of textiles for clothing and furnishing depends upon a unique features

properties of combination. In a view, textiles are warm; soft to touch; completely flexible and thus as a result it can take up any desired shape without any resistance, and will keep warm to the wearer. Textiles are derived from yarns or threads that have been interlaced within one layer or way to another. The threads are flexible, convent to hold and in the loose interweaving effect reflects its flexibility, it shows the property on the cloth itself. The threads or yarns are made by twisting together of long, thin, flexible and that result in the strong fiber.(J GORDON COOK ,1984).

The textile fibers are perhaps most commonly characterized by the fineness, and also that are long and very thin. Fibrous structures are numerous in nature, but only some can be converted into yarn are suitable for the construction of textile fibers.(Robert R.Maher, Roger H Wardman,2015)

The characteristics of a good textile fibers as follows any textile fiber consists of two important facts that is the essential or the primary properties and the desirable or the secondary properties: essential properties contains length, strength and related properties, flexibility and the cohesiveness and the second properties are desirable which focus on the fineness, resiliency, uniformity, porosity, luster, durability and the commercial availability. In detail length plays an important role in fibers overall categories that is parameter which that is determines the usefulness of a textile fiber from the point of spinning itself the length of the fiber must be 5mm and not be less than 5mm.load bearing capacity is the strength of a fiber which means the form of load it supports at break to limit and normally the strength of the textile fiber is measured in tension when the fiber is loaded along it long axis and is designated as tensile strength and the tensile strength of the fiber is measured as the maximum tensile stress in force per unit .cohesiveness is the property of an individual fiber by virtue of which the fiber hold on to one another as the fiber spun into yarn. Flexibility focused to be sufficiently pliable,only it can wrap around fiber during spinning.fineness of a fiber is a relative measure of its size, diameter, density or the weight per unit length which is expressed in variety of units. (H.V.Sreenivasa murthy,2015)

3.2. NATURAL FIBERS

Over the last decades, the use of natural fibers as a main force phase of the society, in general, natural fibers are the fibers derived from natural sources such as plants for example ;(jute, sisal, hemp, flax, cotton, kenaf, pineapple, banana, wheat, straw) and the wood (softwood and hard wood) and certain animal fibers (wool, silk). The natural plant fibers provides the high tensile strength, stiffness, low density, biodegradability , renewable origin, small about of carbon footprint and a good thermal and acoustical insulation properties and also these natural fibers is been recognized as the attractive alternatives to other synthetic traditional reinforcements such as carbon fibers and glass. Next is about the plant fibers is a cellulose, which is found in the plant cells with the wall together with hemicellulose, lignin, pectin, and of some proteins. The properties consists of the availability, biodegradability, biocompatibility, high tensile strength, stiffness and non-toxicity. (Anish khan, 2022)

3.3. PINEAPPLE FIBERS

The main content forced upon the sustainable development that encouraged efforts toward increasing the efficiency of the utilization of the raw sources and the agricultural byproducts. Pineapple is one of the most familiar and reasonable tropical fruits widely cultivated around the world for its fruits. Pineapple leaves is a major parts of the fruit and was the part of the plant that is currently unused and needs global attention for its commercial exploitation. After the harvesting of the fruit, the leaves are disposed of by burning or decomposed off, this happens because of outdated technology and the purpose and ignorance from the farmers and local communities regarding the existence of the commercial uses of pineapple leaves. The process of extraction of the fiber contains of so mainly six steps through the explaining parts moves on, the scrapping tool is called as `ketam` to extracting tool of long bench fiber, the scrapped leafs is washed under running water and is dried directly under the sun after that the leaf is been passed through pineapple leaf machine for extraction, the machine is used of two blades to remove the waxy layer on the leaf. Last step contains the fiber that is been pulled off to remove the waxy layer and is washed and dried out. (Elsevier B.V, 2015)

The pineapple fiber is a soft fiber extracted from the leaves of the pineapple plant and also the fiber produced by breaking the matured leaves through a decorticating machine. Leaves are the waste material in pineapple production so that is been turned into fiber and sold to the contract market. Majority of the pineapple production is from Asia – Philippines. It generally agreed that the fiber contain one or more following matters, i.e. waxes, fats, pectin, hemicellulose, cellulose and lignin. The fiber is been extracted either by decortication or by combination of water retting and scutching. The extracted fiber will forms as a long strands and slightly dull yellowish in color. The fibers are then washed and dried gently through the combing of the fibers as in wet condition with five pins to separate the fibers strand bundles. The multicellular fibers are more crystalline and the strength and elongation is comparable with the cotton fiber. Also both flexural rigidity and torsional rigidity matters on the higher than the cotton fiber. The fiber are mostly used in for the making of a ropes, table cloths, mats, hand bags. The pineapple fiber is a good dye absorbent as it mentions that the fiber can easily be dyed with direct,basic and reactive dyes. Since pina (pineapple fiber) is a form of leaf, the leaf must has to cut from the plant, then the fiber is pulled is to be spit away from the leaf and most of the leaf fibers are long and somewhat stiff in the texture of the fiber. Each strand of the pina fiber is hand scraped and is knotted one by one to form a continuous flow of hand woven and then is made into pina cloth.

Pineapple leaf fiber is rich in cellulose,relatively it is inexpensive and was too abundantly available has the main potential for polymer reinforced composite. The fiber is considered to be more delicate in the texture than any other vegetal fiber. A kilo of leaves may provide a large amount as upto 15-18 pieces of white or creamy color and lustrous as silk fiber about 60cm long and it easily retains the dye to the fiber, the fibers dye absorbance is high in amount. The pineapple fibers are scrapped by means of a broken plate or coconut shell and a fast scraped can extract the fiber from over 500 leaves per day and after which the fibers is washed and dried in the open air. After which the fiber are then waxed to remove the entanglements of the fiber and then knotted and bind into yarns for the next processing of weaving it into a fabric of to the purpose. (H.V. Sreenivasa murthy,2018).

3.4. NATURAL DYES

Natural dyeing is a ancient practice of extracting color or the dyes from the plants or from minerals for the need of dyeing cloth and natural fibers. The ancestors discovered that the natural materials are been used as a form of pigment, ink or dye and the evidence of mineral based pigments used on the life in the olden times as a result shows that cave paintings.(kathryn davey,2022).

Natural dyes and the use in dyeing is probably the most ancient art in all times. People started using of dyes to beautify their garments texture and the main important features was its availability of the raw materials , natural colors are more available near the areas. One of the important things about natural dye is it source from various plant parts. It can be get from wood, fruit, roots, flowers, and even from insects, nature is unique and such a variety in shades of color is seen in fruits and flowers. The choice of the use of all natural dyes sources is of many reasons, the most important reason is the low impact that effect the environment and to the people and from the protection from the exposure to toxic chemicals. The revival of natural dyes has kept the more attention from the ancient knowledge itself and with the use of natural dye demands the creative things, providing come and increase the practise of the dye using and the sustainability remains closed to family and the environment. There is a growing demand in the eco friendly, non toxic colorants in the garment manufacturing system.dyeing is the most popular part of a fabric production. The dyes are applied in aqueous solution and the application of the mordents helps to improve the fastness of the dye on the fabric. Handling of natural dyeing process focus of four main steps : that is extraction, isolation of dye molecule, dyeing, dye fixing. In detail processing about extraction of dyes , the effective way of extraction goes on with the standardization and optimization of natural dyes. Dye extraction from the fruit of plant souce is crushed and color was extracted by the end od three hours .(Padma shree vankar, Dhara shukla, 2019).

From the historic records, it is clear that the use of natural colorants were available to the people during the Greco-Roman periods. The vedas, Atharveda carries the description of the natural dye contents and the use of natural dyeing materials is a evidence symbol with in the walls of Ajanta, Ellora and Sithannavasal and it is still demonstrated in the craft of those regions. Natural dyeing is been practiced from the ancient periods and until the middle of last century most of the dyes were extracted from plants and animal sources by long elaborate process. Among them Indigo, Tyrian purple, Alizarin, Cochineal and Logwood dyes were derived by specific mentions. The main reason for the revival of the natural dye is the non availability of the synthetic dyes , bulk isolation of the dye stuff, complexity of the dye process and reproducibility of shade. The textile processing unit is one of the most popular industry in the world and so the dyestuff waste forms a huge amount in the atmosphere as gas and in toxic substance and the wastewater found on the areas as pollution. (D.r Padma S Vankar,2016)

3.5. MORDANT

The mordant is the life of the natural or to the vegetable colors.without the use of mordant no color adheres in vegetable dyeing process. The mordant acts as an agent between the fiber and the color

by the helping process that is to penetrate the color into the fiber or to fabric permanently, and makes it fast absorbent. Most of the natural dyestuffs will not by themselves adhere to the yarn or cloth except the surface stain which can easily be washed. A mordant is usually of metallic origin applied into a cloth during the pre preparation of a dyeing, usually heated to form an insoluble lake. The role of the mordants in colorfastness on the dyed fabric with the natural dye plays an important role and the mordants like alum, tin and iron are the main things used for achieving the better color and shades variety on to the fabric and these mordants fall into the eco friendly category list. Mordants and the dye stuff measures are followed; most dyeing procedures ingredients by the weight rather than the measure. The specific amount of fiber to be dyed or other ingredient must be measured in ratio to fiber weight this is due to the amount of water in the dye bath will not affect the strength of the color, but the dyestuff amount matters. So if one gm of fiber has to be dyed with one gm of dyestuff and after one wants to reproduce the same color on five more gm of the fiber, the amount of dye stuff must be five times as well. The water must be for the free movement of the fiber; water quantity should be sufficient to saturate the fiber. The word "mordant" comes from the French "mordre" it is a metallic salt with affinity for both fiber and dye to improve its color fastness. Alum and iron are ideal safe mordants. (Dr. Padma S Vankar, 2016).

3.6. INDIAN EMBROIDERY

Embroidery, is the embellishment on the cloth with designs made by the help of a needle and a thread, it is an art that stretches back the hoary antiquity. The embroidery word is a middle English word derived from old French 'broder' which means to edge, in olden times the Egyptians mummies were wrapped in embroidered garments with gold and robes detailing on to kings and noblemen were embellished on the elements structure of fabrics. The designs are made of threads like linen and wool, the hair of goats and camel and of fine strips of silver and gold. Over the centuries, embroidery has been used to adorn everything from the smallest products like curtains, cushions, wall hangings, bed covers and so on. The embroidery is done on all kinds of materials with needle with the accompaniment of linen, wool, silk, leather. Pearls, precious stones, shells, seeds are used to create its work more elegant and beautiful. Embroidery was obviously given importance by the Mughal as other arts because of the aesthetic natural look of the cloth after adornment technique. During the 16th and 17th century, Gujarat is the internationally famous centre for the embroidery which is the silk chain stitch embroidery on the cotton at that time. Embroidery is that like any other art, reflects the cultural traditions of a people and in India artists show the variety in the prints in peacock, lotus, elephant and the mango shaped designs. Embroidery is done in all parts of India, the work productions in each area have its own creativity and distinctive character. In many parts of country such as Punjab, Gujarat, Kutch, Kathiawar, Bengal, certain tribal art were focused also the origin and the life style also details in the works. Traditional Indian embroidery achieved its beauty and luminosity in the skills and quality matters, the natural colors used on the thread that is indigo, madder and kermes (tiny insects extracted dyes) produced the colors of blue, red, pink, violet, and blacks. Indian embroideries never use too many colors in the pieces. The most of the embroidery is done with fine chain stitch. The stitches are of so many types and for the specific countries stitches vary the satin stitch is used in Kashmir, is originated in China. The farming stitch bagh and phulkari of Punjab. The interlaced stitch of Kutch and Kathiawar is originated from Spain and kasuti is from Karnataka. The white chikan work is from Uttar Pradesh. (Jamila Brijbhushan, 1990).

3.7. KAMAL KADAI EMBROIDERY

Traditional indian textiles are not only famous in their intricate techniques and craftsmanship it also famous in the motifs and in the rich symbolism. The symbols and motifs have deep cultural and historical signs and respective cultural believes, and traditions the narratives passes the craft to the generations for the cultural believes and the purity. The lotus motif is a precious symbol in indian culture which represent purity, enlightenment, and spiritual growth. Also depicted in various stages as blooming ,showcasing the journey from darkness to light.kamal kadai is an indian embroidery which is native to Andhra Pradesh also known as lotus embroidery in the style as form as lotus petals its a form of 3d style embroidery focuses the rich and looks beautiful appeal, its a form of woven style embroidery mostly seen in sarees and ladies top(Dr. Sukhvir singh,2023) .

METHODOLOGY

3. METHODOLOGY

3.1 SOURCING OF FIBERS

3.1.1 TREATING OF FABRIC

3.1.2 EXTRACTING THE DYE AND DYEING FIBER

3.2 SELECTION OF FABRIC

3.2.1 PREPARATION OF FABRIC

3.2.2 PREPARATION OF DYE

3.2.3 DYE BATH PROCESS

3.3 SELECTION OF EMBROIDERY

3.3.1 APPLYING ON THE FABRIC AFTER PATTERN MAKING

3.3.2 FINAL PRODUCT

3.1 SOURCING OF FIBERS

In the study the main role was to the pineapple fiber, the fiber which has more physical properties that is the strength and durability, softness, breathability, and compared to other natural fiber it safe because it is not itchy for the skin and also for a embroidery technique use of Pina fiber is a new innovation. The fiber is more abundant and budget friendly. The fiber is sourced from VRUKSHA COMPOSITES, at Tenali, Guntur, Andhra Pradesh. It is a prominent manufacturing company of raw flax, bamboo fiber, areca fiber, pineapple fiber, fabric mats etc. Through courier service fiber was collected.



Fig: 1



Fig: 2

3.1.1 TREATING OF FIBERS

The fiber is sourced from vruksha composites at Tenali, Andhra Pradesh. The fiber is treated with NaOH (sodium hydroxide) . This is to remove the natural oils from the fibers and after getting the fiber it is treated with vinegar for softening the fiber texture.



Fig: 3

3.1.2 EXTRACTING THE DYE AND DYEING FIBER

Dyeing process : Measuring the weight of the fiber.

Dye powder form or paste form = 50% of the weight of the fiber

Aluminum potassium sulphate =25% of the weight of the fiber

Aluminum acetate = 10% of the weight of the fiber.

Dyeing materials like dye powder, or paste , fiber and alum is first measured for dyeing process. The dye which used for the study is coffee and beetroot. Dye is extracted by heating of those selected dye materials. After that the dye is sieved and the fiber is treated with alum mordent and after the treatment of alum the dye which is sieved for dyeing is taken and the dyeing process completed. After one day it is dried under air.



Fig: 4



Fig: 5



Fig: 6



Fig : 7



Fig : 8

3.2 SELECTION OF FABRIC

For the study the product which was selected is a men's shirt, ladies top and a embroidered wall hanging clock .Cotton was the fabric which was selected for the product.

3.2.1 PREPARATION OF FABRIC

The fabric is measured for the purpose of the study. For the shirt 2.5 meter is taken and for the ladies top 2.5 meter is taken and finally for the wall hanging 0.25 meter is taken and those clothes are prepared for tie dyeing and the cloth is roughly washed and treated with alum mordant for one hour.



Fig :9

3.2.2 PREPARATION OF DYE

For the dyeing purpose I have chosen coffee. The coffee is extracted by heating and is sieved.

3.2.3 DYE BATH PROCESS

Prepared fabric which is dipped in the mordant is drained and it is put on to the dye bath and for 2 hours the fabric is heated on the dyebath, finally the dyed fabric is dried on air.

3.3 SELECTION OF EMBROIDERY

For the study the main part was focused on the embroidery, Kamal kadai embroidery of Andhra Pradesh was an extinct embroidery which is also known as Lotus embroidery due to its shape which was a 3D form of embroidery with woven effect, which has a rich look in its texture.

3.3.1 APPLYING ON THE FABRIC AFTER PATTERN MAKING

For the application of the embroidery the dyed fabric is marked and selected embroidery is traced on the fabric with a design stencil and the embroidery is done by pineapple fiber .



Fig :10



Fig 11



Fig : 12



Fig : 13

3.3.2 FINAL PRODUCT

As a final result , the embroidery is done to the 3 products, one is on the yoke of the men`s shirt ,and the 2nd was on the neck part of the ladies top, and the final is on the wall hanging clock.

RESULT AND DISCUSSION

4. RESULT AND DISCUSSION

The result and discussion of the study **INTRODUCING KAMAL KADAI EMBROIDERY USING PINEAPPLE FIBER ON TO DIFFERENT PRODUCTS.**

Is described under the following heads:

4.1 FINAL PRODUCT EVALUATION.

Men`s shirt, ladies top and wall hanging clock were the product developed for the study. The pineapple fiber is sourced from Andhra Pradesh, and is treated for softening and for dyeing, the fiber is dipped in the mordent and is dyed. Kamal kadai motifs is selected and the embroidery is done with the pineapple fiber. By developing this products, I aim to focus the revival of the Kamal kadai embroidery, and the selection of Pineapple fiber is an innovative content that the fiber is more relevant and budget friendly. Also it`s physical property is which makes it an excellent choice for developing the embroidery technique due to its high tensile strength, flexibility ,light weight property, dye absorbency and high resistance towards skin allergies, and hence therefore, by motivating the artists to continue the tradition and flourish the art throughout the upcoming years.

PRODUCT 1



Fig : 14 (men`s shirt)

PRODUCT 2



Fig: 15 (ladies top)

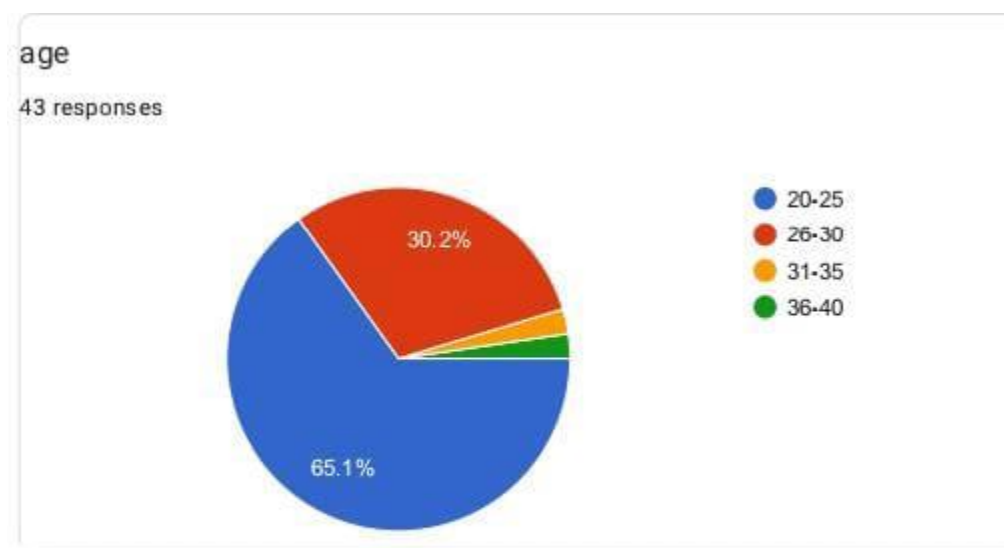
PRODUCT 3



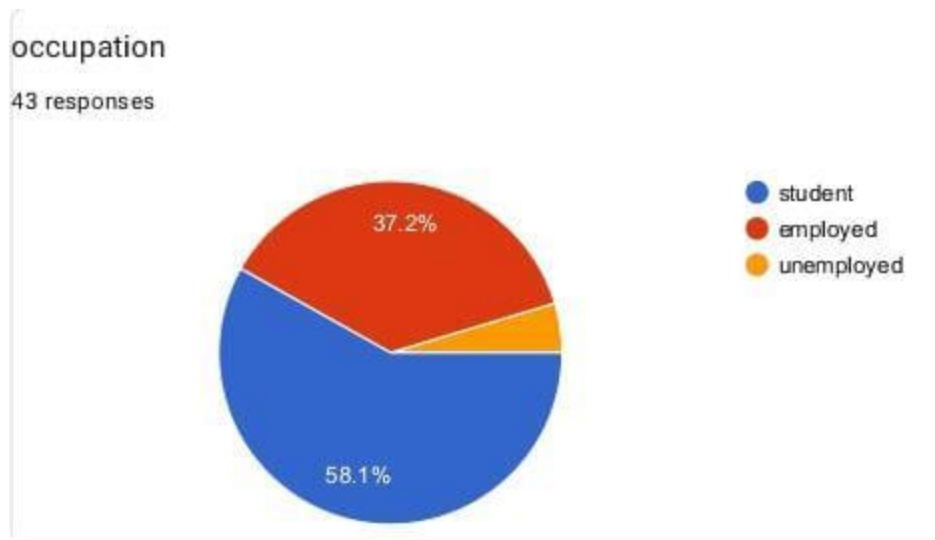
Fig: 16 (Wall hanging clock)

4.1.1 CONDUCTING SURVEY AND FEEDBACK.

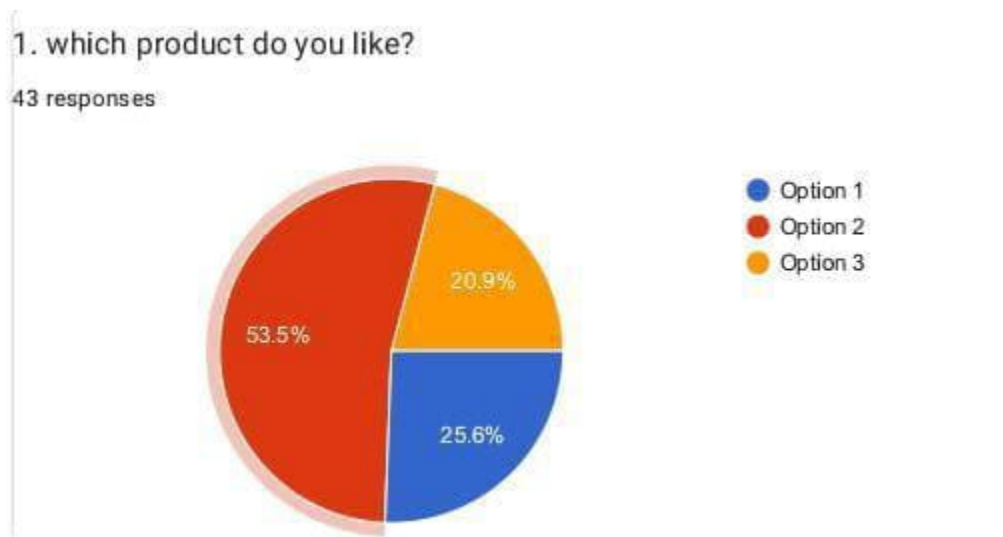
A products feedback survey was conducted and the respondents are through online, the survey was to get a feedback on the products value and to aware about the study.



In the survey response most number of resonance is from the age from 20-25 that is 65.1% and behind that 26-30 resonance with 30.25 and last list was of age 31-35 and 36-40



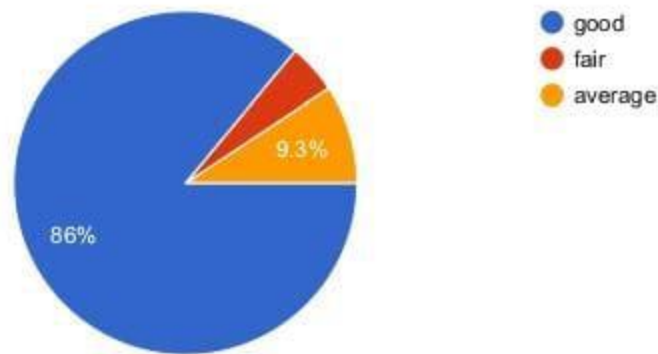
Response from the survey was 58.1% were students, 37.2% were employee and the remaining are unemployed people.



Majority of the people preferred option 2 which was shirt design in 53.5%, 25.6% of people liked ladies top design and 20.9% of people liked wall hanging clock.

2. evaluate in overall appearance of the product?

43 responses



From the survey report it was observed that 86% people evaluated a good appearance of the product , 9.3% valued average and less valued fair.

3. Does the product give an awareness about eco-fashion concept for the society?

43 responses



From the survey report 97.7% that is majority of the people valued that the product will give an awareness about eco fashion concept for the society.and that 3.3% responded no as an answer.

4.Does the product give an awareness about revival of Kamal Kadai embroidery?

42 responses



From the survey response 100% valued the product will definitely give awareness about the revival of kamal kadai embroidery.

5. Does the product give a knowledge about the purpose of pineapple fiber for embroidery?

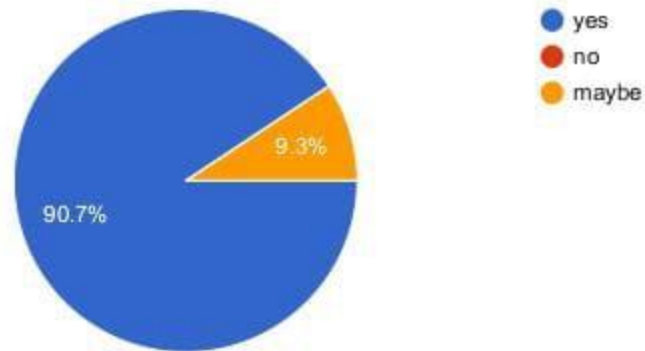
43 responses



From the survey 100% of people valued that the product will give knowledge about the purpose of using pina fiber as an embroidery thread.

6. Do you think this product is good for society?

43 responses



From the survey 90.7% of people responded the product is good for the society and 9.3% responded maybe option. No one answered no for the question.

7. Would you buy an eco-friendly product like this if it came on the market?

43 responses



From the survey report 95.3% of people supported that they will buy an eco friendly product like this and 4.7% responded maybe option.

8. Do you like the idea of campaigning of embroidery with pina fiber to support the artisans and to create the idea of innovation.

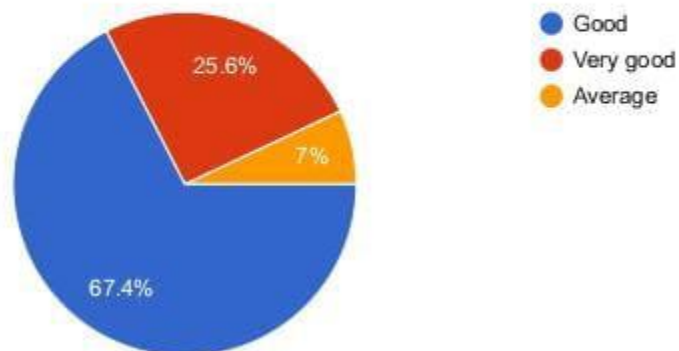
43 responses



From the survey 100% responded that the idea as an campaigning of pina fiber with the extincting embroidery is a creative and innovative content to support the artisans.

9. Evaluate the color of the product?

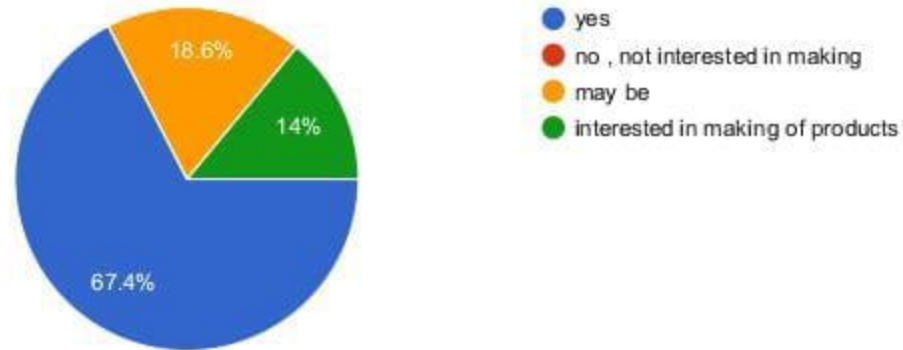
43 responses



From the survey report 67.4% evaluted the colour of the product was good, 25.6% answered verygood and the rest 7% answerd average.

10. Is there a sale value in the market , and are you interested in making such products

43 responses



From the survey report 67.4% of the people valued a positive response for the sale value in market, 18.6% valued maybe there is a chance , also 14% of the respondents answer they are interested in make of products and no one answers; not interested in makings and there is no value in market options.

CONCLUSION

5. CONCLUSION

The environmental impact that happens in the textile fields and revival of the Kamal kadai embroidery using the pineapple fiber as a embroidery thread. When the customers get increased awareness to purchase environmentally right products. Through this thesis the customers get knowledge about the pineapple fiber and its properties and also about the extincting embroidery. Hence, change the behavior of society and focus on an eco-friendly environment through reconsidering the attractive process and product. Fashion industry is the most developing and fast changing industry in the world. so the study helps to motivate the artists to continue the traditional art and to focus on the pineapple fiber for the use of embroidery.

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6. BIBLIOGRAPHY

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APPENDIX

7. APPENDIX

QUESTIONNAIRE

Survey

1. What is your name?

.....

2. What is your email?

.....

3. Age?

☐ 20-25

☐ 26-30

☐ 31-35

☐ 36-40

4. Occupation?

☐ Student

☐ employed

☐ unemployed

5. which product do you like?

☐ Ladies top

☐ Men`s shirt

☐ Wall hanging clock

6. Evaluate in overall appearance of the product?

- ☐ Good
- ☐ Fair
- ☐ Average

7. Does the product give an awareness about eco-fashion concept for the society?

- ☐ Yes
- ☐ No

8. Does the product give an awareness about revival of Kamal Kadai embroidery?

- ☐ Yes
- ☐ No

9. Does the product give a knowledge about the purpose of pineapple fiber for embroidery?

- ☐ Yes
- ☐ No

10. Do you think this product is good for society?

- ☐ Yes
- ☐ No
- ☐ maybe

11. Would you buy an eco-friendly product like this if it came on the market?

- ☐ yes
- ☐ no

☐ maybe

12. Do you like the idea of campaigning of embroidery with pina fiber to support the artisans and to create the idea of innovation.

☐ Yes

☐ No

13. Evaluate the color of the product?

☐ Good

☐ Very good

☐ Average

14. 10. Is there a sale value in the market, and are you interested in making such products?

☐ Yes

☐ No, not intrested in making

☐ Maybe

☐ Intrested in making of product