# DOMESTIC METHOD OF DEVELOPING INNOVATIVESHIBORI CRAFT PRODUCTS

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#### **Abstract**

Japan, a developed country where traditional and modern co-exist in harmony and is the home of substantial traditional craft. Shibori, a shaped resist dyeing technique that has been lasted for 400 years. It is the oldest dyeing technique used for different textile materials to produce clothing and interior articles. Shibori an ancient art is practiced in Japan for about 1300 years now, is a technique evolved followed by its introduction in Chins. Shibori is a Japanese word indicating textile resist dyed with threads or other materials. Currently major production of shibori is done in western Africa, minor production is done in southern China and western regions of India. The ancient art of manipulating cloth through tying, stitching, knotting or securing it, and then dyeing it to achieve specific-coloured patterns binds cultures across time. Totally six products were developed, three of which are utensil rolls and the other three of which are women's apparel. consumer's opinion was studied on each product through survey method. The history of the technique, materials used to dye, the influence of color on the design, tools to perform dying and several types of the dyeing method are researched and detailed. This study is focused in using the traditional shibori craft incorporating moderntechniques at a domestic level.

Keyword: shibori, art, craft, Japanese traditional technique, tie and dye

## 1. INTRODUCTION

Shibori is a Japanese word which express the way of knotting, stitching and securing the

cloth in specific pattern before the dyeing process. The route verb of this word in Japanese is "shizoku" that is to "wring, squeeze and press". Shibori is a unique dyeing technique that ignited in Japan. This belongs the group of resist dyeing textile. Endless number of shibori techniques exists to create unique designs on the material. Each method used gives out certain results different from one another, as this indicated that it works in harmony with the cloth used. Thus, the technique of shibori dyeing depend not only on the patterns but also the cloth being used in the dyeing process. The traditions of shibori existed for centuries in the sub-continent so India and middle east. The fabrics used were mainly of silk, hemp and cotton. The main dye used for shibori resist dyeing is indigo. Shibori includes several labour-intensive resist techniques such as stitching of elaborate patterns and tightly gathering before dying, thus forming more intricate designs patterns. The three term in which Shibori method have come into the international usage are: plangi, Banda and tritik, these represent the major Shiori technique in its tradition.

The research and development of shibori craft started from desktop research, which included reading journals, articles, books to watching videos of artisans who practice shibori craft in modern date. The patterns used in the product were forecasted, inspired from WGSN. The research and development of shibori craft products includes the following objectives

- 1. To learn about the specialty of shibori craft, it'svalue and richness
- 2. To explore and understand the techniques of shiboricraft
- 3. To develop innovative products using shibori craft
- 4. To incorporate the traditional technique in modernfashion

### 2. METHODOLOGY

## *a) Methodology*

The research and development of shibori craft products was carried out in two phases. The first phase includes the research on shibori craft, it's traditional techniques and the artisans who practice it in present and to have a complete knowledge on the subject. This phase was virtually carried out through desktop research (journals, articles, videos, books). Thesecond phase is the product development based on theresearch carried out in the first phase. The development of shibori dyed products were also based on the use on embellishments to enhance aesthetic properties of the product.

# b) Craft Research

From the first phase of research, it is known that the evolution of traditional Japanese shibori craft wasmade when the goods were donated in the 8<sup>th</sup> century

By the Emperor Shoumu to the Toudai-ji Buddhist temple in Nara. [1] Through virtual research on this phase, the challenges faced by the artisans are extremely, considering present scenarios of losing their livelihood due to the change in the modern fashion, moving on to digital printing that highly affect the artisans and even the lack of learning by the younger generations of the traditional methods.

### 3. PRODUCT DEVELOPMENT

# a) Product Development

In the second phase, development of the product was carried out with the knowledge from the first phase. Sample and products were developed using thetraditional techniques and color of shibori. The products developed under the above phase of researchare

- 1. Utensil roll (total of 3 products)
- 2. Women's apparel (total of 3 products)

The products developed were innovative and different from the market existing products. Consumer survey was done on each of the product, toknow the consumer preference and acceptability on the developed products. The survey was carried on accountable number of people using ordinal scale and Likert scale (excellent, good, neutral, poor, very poor). The shibori craft development is based on boththe patterns and the fabric used.

## 4. RESULTS AND DISCUSSIONS

## a. History of shibori craft

One of the oldest methods to decorate textiles is using dyeing techniques, that is being used in many parts of the world: Africa, China, India, South America, Indonesia, Japan. The resist dyeing began with some sort of accident, a juice or dye was spilled on some scrunched or folded cloth which when it wasmoved showed some interesting arrangement of shades and marks from which the prompting of creative mind started, on the implementation of this simple technique simplest motifs were created like circuit – circular or squarish from binding round a pinched- up section of cloth. [2] Amongst the dye used in hemp and cotton fabrics, natural indigo dyes are primarily used ones. The techniques used in traditional shibori evolved from generation to generation. At the end, each group of dyeing differs from one another in style, patterns and even sometimes in color, but the base technique is the same that is being derived from Japan and China. [3] The word shibori itself refers to the act of manipulating the fabric, giving it a three-dimensional form. Shibori is practiced in Japan is a 1300 years old technique which evolved following its introduction in China. Indigo dyeing technique was popular among lower class in feudal Japan where, shibori is being practiced for 1300 years now

following its introduction in China.

Shibori emerged as a technique to renew old, faded and stained cloths. [4] In the mid of 19th century there were economic and technological advances in shibori craft. Shibori craft was widely looked out during  $17^{th} - 19^{th}$  century due to the flourishment of arts and culture. [5] In that period a developer named Suzuki kanezo he was born on 1837 into a prosperous Shiori producing family, he originated a Shiori process named "SHIROKAGE" when he was at the age of 14.

He found a new and faster method of dye patterning cloth and ingenious wat of creating pattern by wrapping the cloth around a long pole and pushing it along the pole into it tightly to have a compressed folds and "Okada" found a new method that was more satisfactory for the silk than for the cotton since the binding thread was easier to remove from silk after the cloth is been dyed and the silk retain the texture of dyeing than cotton fabric. [6]



Source: https://en.wikipedia.org/wiki/Shibori

Figure 1. a woman making Shiori by Utagawa Kunisada

# a. Raw materials

The raw materials used in the process of shibori dyeing are unbleached cotton, single jersey knitted fabrics, threads, natural indigo dye powder, fixing agent, soda ash, rubber band, wooden board, PVC pipe, gloves. The fabric materials were purchased from local stores in Coimbatore and Tirupur the unbleached cottons were purchased in meters and knitted fabrics were bought in kgs. The dye powder and fixing agent were sourced from the local market at Erode, they were purchased ingrams. In order not to deviate from the natural process of shibori dyeing techniques and for the standardized color, natural indigo dye is used.

# b. Dyeing recipe

The raw materials from figure 5 were sourced in the available locations. The dyeing recipe used in the shibori indigo dyeing process is, in about 3 gallons of hot water add 5 tablespoons of natural

indigo dye powder. Add tablespoons of soda ash, for better color absorption and about 4 tablespoons of thiox as and agent. Now gently stir the mixture in one direction for a good long time and reverse the direction of stirring and when the bubbles form stops stirring and cover the dye bath, let it rest for an hour.

# c. Fabric selection and preparation

Shibori craft is traditionally carried out in cotton, silk and bast fibers, lately in 3<sup>rd</sup> and 4<sup>th</sup> century the wovenfabrics came into practice. The fabrics used in makingthe products were unbleached cotton and single jerseyknitted fabrics. Initial process in fabric preparation is scouring, for the removal of resins and sized particles for better dye absorption.

Table 1 Fabric specifications

S.NO	FABRIC	GSM
01	Cotton	252
02	Single jersey knit	140

# d. Product development

The first utensil product is color pencil roll, is constructed after following the dyeing process. The shibori dyeing pattern used for this product is Kanako.





The second product out of the three-utensil roll is the cutlery roll, that includes different kinds of spoon, fork and butter knife. The type of pattern used in making this product using shibori craft dyeing is Arashi.





The third product is a cosmetic roll, where there are 2 major parts divided for functional purpose and where the first compartment is again subdivided into 7 compartments. The type of Pattern used here is Tajine





"KANOKO" technique is used, where it involves binding area of the cloth using thread from the top to bottom of the cloth, here the desired pattern depends on how tightly the cloth is bound, then the cloth is dyed in the prepare dye solution asmentioned above





This product is a multi-styling shrug, where two techniques of dyeing are used. the first one is the "NUI" technique and the other one is "ARASHI" technique. Nui- In this technique the cloth is roughly pleated and is tied from the top to bottomof the cloth from the two sides tightly is dyed: Arashi – this is a pole wrapping





A full sleeve garment is designed with a small embellishment in sleeve hem area. The dyeing technique used was "ITAJIME "technique where thisis a shaped resist technique





# e. Consumer preference towards theproducts

A survey was conducted for 25 general people of age group above 15 years. The survey was done to know the consumer preference towards the shibori craft product. The survey consisted the questions like name, age group occupation and the products were rated according to the attributes of the design, and pattern of the dye absorption. The rating of the public was expressed through Likert scale, denoting from excellent to very poor. The result of the public for both products were liked equally and the public was even more interested towards the product when in the survey it was mentioned that the dyeing process was carried out at a domestic level.

Table 2 results of the survey

(U- utensil roll, W- women's apparel)

S.NO	Product	Design	Pattern	Aesthetic
01	U1	Good	Neutral	Excellent
02	U2	Neutral	Excellent	Good
03	U3	Excellent	Excellent	Excellent
04	W1	Good	Excellent	Excellent
05	W2	Excellent	Excellent	Excellent
06	W3	Neutral	Neutral	Good

#### 5. CONCLUSION

Traditionally shibori craft was the main dyeing process that gave life to the Japanese people after its evolution from China. Shibori craft was cherished and it took a wide spread all around the world, it took a change in its pattern, color, but still having its base technique as the same as the traditional techniques. As the technique of shibori dyeing using natural indigo powder possess hot process and more labour-intensive work, it is fading out now a day. This research paper gives information about a simplified method of carrying out the hot industrial process at a domestic level, without labour intensive work.

This study helps in setting a small-scale industry on shibori craft at domestic level techniques and methods incorporating it in modernways. There were totally six products developed using shibori indigo dyeing. Consumer survey was conducted to know the preference towards each product, and it is known that consumers like each ofthe products equally. This study of research and development of shibori craft products was mainly focused to carry out the dyeing process at a domestic level, excluding industrial process andlabour-intensivel work. Shibori craft products are developed using traditional.

#### 6. REFERENCES

- 1. Southan, Mandy. Shibori: Designs & Techniques. Search Press, 2008.
- 2. Rice, Mary Kellogg, Yoshiko Iwamoto Wada, and Jane J. Barton. Shibori: The inventive art of Japanese shaped resist dyeing. Kodansha America, Incorporated, 2012.
- 3. Wada, Yoshiko Iwamoto. Memory on cloth: Shibori now. Kodansha International, 2002.
- 4. Novak, Martina, Nadeţda Ljubojev, and Vasilije Kovacev. "Shibori–Overview of Traditional Japanese

Fabric Dyeing Method." Textile Science and Economy VII, May (2015).

- 5. Pujeeb, Nuttida. "THE DEVELOPMENT OF NATURAL DYED FABRIC PRODUCT WITH SHIBORI FABRIC DYEING TECHNIQUE." PalArch's Journal of Archaeology of Egypt/Egyptology 17.4 (2020).
- 6. Kavyashree, M. "Printing of textiles using natural dyes: a global sustainable approach." Chemistry and Technology of Natural and Synthetic Dyes and Pigments. IntechOpen, 2020.
- 7. Hedstrom, A. L. (2000). Shibori: tradition and innovation.
- 8. Mzcquarrie, E. L., & An, M. R. P. (2017). MODERN SHIBORI: BEYOND HANDCRAFTED TRSDITION
- 9. Southan, M. (2008). Shibori: Designs & Techniques (p. 96). Search Press.

# **Book Source**

- 1. Shibori, the inventive art of Japanese resist dyeing
- 2. The Inventive Art of Japanese Shaped Resist Dyeing, Tokyo: Kodansha International