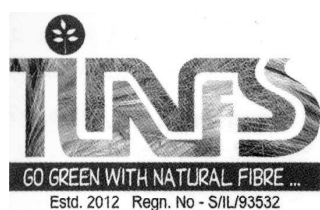


ISSN: 2348-7445  
Registration No. S/IL/93532

# Indian Journal of Natural Fibres

Volume 8, No. 2, January 2022



## **The Indian Natural Fibre Society**

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# A Review on Kalamkari : A Traditional Textile Painting

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Received: December 22, 2021

Accepted: January 30, 2022

## Abstract

The traditional folk painting of Andhra Pradesh provides an aesthetic sensibility and authenticity, making Indian folk art famous internationally. Kalamkari is one of the most popular folk paintings of Andhra Pradesh that came due to the alliance between the Persian and Indian trade merchants. The traditional Kalamkari is entirely a hand-crafted textile using natural dyes. Nowadays, the printed version of Kalamkari has become more famous due to changing market preferences and the ready availability of synthetic dyes.

**Keywords:** Artisan, Culture, Kalamkari, Natural dye, Painting

## Introduction

India is a vast country with a rich history of culture and tradition. The vastness of India can be represented by its traditional vibrancy through arts and crafts. The culture of India is supposed to be one of the oldest in the world. Cultural diversity in people, religion, languages, festivals, art, craft etc., makes India unique and distinct. Indian art lives from the ancient past to the modern era. Most people in India are unaware of these art forms as they are too vast and many of these art traditions are in the extinct stage (Singh, 2018). All the states and union territories of India have their own individual cultural and traditional identities. Indian folk art is ethnic simple, but it is vibrant and colourful enough to speak about its rich heritage.

The traditional aesthetic sensibility and authenticity makes Indian folk/tribal art famous internationally and has export potentiality. Folk art expresses the cultural identity, and folk painting has a distinct colour design with religious and mythological motifs. Different decorative media, viz. fabric, paper, clay, wood, etc., are mainly used as a substrate for this art, representing cultural identity, values and aesthetics (Sharma, 2015). Kalamkari is one of the most famous folk paintings of Andhra Pradesh. India's other popular folk paintings are Patachitra, Phad Painting, Pichhvai, Gond, Pithoro, etc. (Sharma, 2013).

## Kalamkari

Kalamkari, i.e., painting with 'Kalam', is an exquisite form of textile art with a rich heritage. 'Kalam' is a Persian word, i.e., pen, and 'Kari' in Urdu implies craftsmanship. Thus, the word Kalamkari came due to the alliance between the Persian and Indian trade merchants in ancient times (Singh, 2018). The 'kalam' used for this painting is made of short bamboo or date palm stick pieces.

The traditional Kalamkari is entirely a hand-crafted textile using dyes extracted from natural resources and mordants. This ancient textile printing art finds its root in the state of Andhra Pradesh. The craft at Machilipatnam in Andhra Pradesh evolved during the Mughal period.

During that period, the workers associated with this craft were called ‘Qua-lamkars’, and from this, ‘Kalamkari’ is evolved (Anon, 2019). In earlier days, the Kalamkari work used to be hand-painted. This traditional painted textile was very popular in Europe during the British period.

Hence, the craftsman started using blocks to meet the growing market demand, and with the help of blocks, the artisans could print the outline much faster than drawing by hand. The Kalamkari work depicted stories from the Mythological scenes of Ramayana and Mahabharata (<http://eacharya.inflibnet.ac.in>). Temples were the inspiration for all craftsmen, including weavers, painters, printers, etc. The strength of Kalamkari designs was their vibrancy and rich in colours. There are two distinctive styles of Kalamkari art in India, i.e., Srikalahasti and Machilipatnam (Sharma, 2015).

### ***Historical background***

The presence of fabric produced through resist technique on a flower at the ancient site of Harappa confirms that the tradition of Kalamkari is old ([www.craftmark.org](http://www.craftmark.org)). The ancient Buddhist *Chaitya Viharas* were also decorated with Kalamkari cloth. The artisans have been working with Kalamkari since the Vedic period, supported by the Hindu text describing the colour and pattern of the fabric worn by the people.

Kalamkari paintings were trendy in the 17<sup>th</sup> century, and they gained immense popularity in Europe during the 18<sup>th</sup> century. The fabrics were used as draperies and bedspreads. The Kalamkari floral designs were in great demand. The Coromandel Coast, i.e., the southeast coast, had been a flourishing stretch for trading Kalamkari products. Machilipatnam, the commercial capital of the Nizam ruled Golconda state in Andhra Pradesh, had been the central place of this craft (Ramani, 2007).

Over time, Machilipatnam mainly catered to the Mughal tastes with Persian influence, while Srikalahasti under Hindu influence developed a unique style of painting, which elaborates the glory of the Hindu mythology. The typical character of the craft practised in Srikalahasti highlighted the figurative motif and emerged as an important centre for Kalamkari in the second half of the 19<sup>th</sup> century (Varadarajan, 1982).

Resisting technique, complex and careful dyeing, sketching and painting are the integral components of this art. The usage of natural dyes, indigenous tools and soulful rendering of lines make this craft unique. The craftsmanship struggled to keep up to the demands of the changing markets and is slowly adapting itself to the dynamic market orientation (Divakala and Vasantha, 2017).

### ***The styles of Kalamkari***

There are two distinct styles of Kalamkari art in India: i) Srikalahasti and ii) Machilipatnam.

#### ***Srikalahasti style***

These painted cloths of Srikalahasti are unique in their crafting manner. In the Srikalahasti style of Kalamkari, only natural dyes are used with indigenous crafting techniques. The nature of tools used, colouring practices and the base materials have made the craft a true example of ecological textile tradition. In this style, ‘*Kalam*’ is used for freehand drawing,

and filling in the colours is entirely hand worked. This style had a religious identity, and scrolls, temple hangings, chariot banners, scenes taken from great epics Ramayana and Mahabharata, Puranas and mythological classics are the source of inspiration.

#### *Machilipatnam style*

For centuries Kalamkari print had specialised in Machilipatnam and was considered the birthplace of Kalamkari art. This painting style has a distinct Islamic influence caused by Qutub Shahi's rule. Due to changes in fashion and the growing demand for Kalamkari, the artisans adopted new processes and developed their designs to suit the local market. The artisans made their work easy by using blocks for outline and then filling the colour with the help of *Kalam*. They are also using synthetic dye for a bright look to attract the consumer.

#### **Review of literature**

Different researchers have studied the various aspects of Kalamkari painting, and some of them are reported hereunder.

- The value-addition through the Kalamkari design concept has been reported by researchers (*Rupal and Tejashwini, 2017*) discussing design documentation. Fifteen methods were selected, and ten pairs of shoes were produced using the ten most suitable methods out of the fifteen chosen procedures. The respondents highly appreciated these shoes.
- The establishment of the cotton industry in Europe in the 18<sup>th</sup> century was the downfall of this traditional art form. The rise of the batik industry in Indonesia during the 19<sup>th</sup> Century had also responsible for the loss of market share of Kalamkari. Production at Srikalahasti declined at the beginning of the 20<sup>th</sup> century. The temple patronage declined, and local landlords also lost wealth and power. In 1958 the All-India Handicrafts Board set up a training centre to upgrade the skills of the few remaining artisans (*Gillow and Barnard, 2008*).
- In the year 1956, Smt. Kamaladevi Chattopadhyay first got the opportunity to feel the Kalamkari art. During the 1980s, the Srikalahasti hangings were no longer purchased for ritual use, and the craft deviated from its religious context (*Dhamija, 2010*).
- According to some researchers, India had always been known as the land of cultural diversity through its conventional arts and crafts. The folk arts are very ethnic and simple, and colourful. Traditionally, these paintings were done by hand, time-consuming and labour-intensive. With technological advancement, the designs can be created directly with the help of CAD (*Sharma and Paul, 2015*).
- The hand-painted Srikalahasti Kalamkari is widely used in textiles, clothing, home décor and lifestyle products. The history and evolution of hand-painted Kalamkari, the present Kalamkari market, and the creation of new age prints were also addressed (*Purohit, 2011*).
- The revival and promotion of Kalamkari art had been studied (*Deshmukh and Ganeshani, 2013*). Researchers used less popular vegetable resources for painting and natural mordants viz. Babul bark, Anar Chal and Alum give due importance to the present

environmental consideration. The hand-painted Kalamkari samples were assessed for different colourfastness properties, viz. washing, rubbing and light.

- Researchers had discussed the aim to identify the design principles of Indian folk painting. The authors also analysed some traditional images of master artisans from Srikalahasti, Madhubani, and Raghurajpur and further discussed the different initiatives to reinterpret the effectiveness of storytelling through visual graphics. The tradition of narrative folk paintings emerged in remote and isolated locations but is no longer confined to the temples and rituals because of cross-cultural exchanges (*Thakurta Roy, 2013*).
- Kalamkari tradition owes to Smt. Kamaladevi Chattopadhyay and the surviving artisans were traced out due to her visionary leadership quality, and a training centre was established in Srikalahasti by the Handicraft Board.
- In their paper, authors discuss the development, historical evolution and technical features of Kalamkari painting. The decline of this art and its conservation has also been addressed in the article (*Uniyal and Humane, 1996*).
- The researcher discussed the relevance of traditional crafts as a powerful medium in a sustainable fashion (*Divakala and Vasantha, 2017*). Like all other crafts, this classic Kalamkari art struggles for survival due to social changes.
- The hand-painted Srikalahasti Kalamkari is prevalent in today's clothing, home décor and lifestyle products. Still, there is little variety of this expensive textile craft available in the market as daily wear. Consumers are not easily satisfied with fashion, and they are powerful in their tastes and preferences (*Singh, 2018*).
- Some researchers also try to find out the reasons for the downfall of the Kalamkari painting. According to them, the cotton industry in the 18<sup>th</sup> century in Europe was the main reason for declining this art. That was the beginning of the downfall of Kalamkari in India. The rises of the batik industry during the 19<sup>th</sup> century in Indonesia lead to India's loss of market for the Kalamkari cloth (*Chisti and Jain, 2000*).
- According to some researchers, the Kalamkari craft was restricted to only a handful of practitioners for many years. They had kept the process and the technique secret. No written records were available on the technique and methodology followed by those traditional artisans. They did not even disclose the dye yielding plants used for this work. This may be one of the main reasons for declining this beautiful art form, and at present, only a dozen dye recipes are available in over a hundred which existed before (*Bhatnagar, 2011; Crill, 2008*).
- The main reason for the downfall of Kalamkari is its lengthy and tedious process. The dyeing process takes around a month and the preparation to start dyeing is even longer. Natural dyes are also not readily available, and the dyeing cost is more than synthetic dyes. Each shade has to be prepared separately from various materials. The black is made by soaking iron dust in jaggery (molasses) and water in a mud pot. The solution takes about twenty days to mature when it is decanted. The use of cheap

synthetic dyes drove the final nail in the coffin, and Kalamkari artisans these days are using this readily available dye for quick and easy production (*Gillow and Barnard, 1991*).

### **Motif influence**

Masulipatnam style has a distinct Islamic influence, and it involves drawing with a ‘*Kalam*’ and a wooden block with nonfigurative motifs. Floral butas, mihrab of the mosques, animals as mentioned in Sufi literature and Quran, traditional tree of life, etc., are the central motifs used in Masulipatnam style. Declining of Islamic rule in Andhra Pradesh is the reason for the downfall of this craft (*Thakurta Roy, 2013*).

Srikalahasti style was developed during Hindu rule and inspired by Hindu mythology. In this style, drawing on cloth was done using a ‘*Kalam*’ and dye. The motifs were inspired by the narrative relief panels on the walls of Hindu temples, based on Hindu mythology.

Indian mythology captured in Kalamkari is more imaginative than real. This style followed religious identity viz. scrolls, temple hangings, chariot banners and images inspired from Ramayana and Mahabharata.

### **The traditional process of Kalamkari painting**

#### ***Materials***

Kalamkari painting was done on *Kora*, i.e., unbleached cotton fabric. The other raw materials used in Kalamkari painting are vegetable dyes, buffalo milk, cow dung, *phitkiri*, haritaki/harda, charcoal, iron filling, jaggery and flowing water (*Anon, 2018*).

#### ***Tools and equipment***

##### *Kalam or pen*

For Kalamkari painting, two types of pens are used. They are made either with bamboo sticks or date palm sticks. One *Kalam* is a sharp-tipped used for outline drawing, and the other one has a broad round tip with a fibrous edge. It is used for the filling of mordant.

##### *Charcoal pencil*

Twigs from nearby tamarind trees are collected and burnt uniformly. The fire is extinguished with sand when the twigs are half-burnt and blackened to cool the twigs. Half-burnt twigs are used as a charcoal pencil, which provides the basic layout in the Kalamkari painting.

##### *Wooden frame*

The adjustable wooden frame is used for painting purposes. The fabric is attached at one end and then stretched slightly to the other end and locked using a wooden piece locally called *karra*.

The wooden frame can be adjusted if the artisan requires more stretchability in the fabric. Usually, thin cloth goes on to the edge because it is easier to draw and paint; thicker material like cotton is laid on the ground with a woollen cloth underneath for protection.

## ***Process of Kalamkari painting***

### ***Preparation of cloth***

The cloth used by the artisans for Kalamkari painting is unbleached. The first step involves the preparation of material for painting purposes, which can be achieved by soaking the fabric in water and consequent washing for the removal of the starch. The washing process is performed in running water (river water). Artisans generally use Castrol oil and soda to remove the starch and glue to improve the absorbency.

Haritaki/Harda is soaked overnight in water and then ground on a grinding stone to make a thick paste. Buffalo milk is mixed with Haritaki in a big vessel along with water, and the solution is used to prepare the ground for painting. The milk helps to prevent the colour from spreading and smudging. The cloth to be painted is dipped into this solution loosely so that the mixture can penetrate inside.

The fabric is then taken out from the vessel and twists and opens out. This process helps to remove the thick portions of Haritaki. The cycle is repeated in the opposite direction, and squeezing helps spread the buffalo milk in the cloth. The cloth is dried in sunlight, and this effect on the fabric lasts for one month. Sometimes, the fabric is dipped in cow dung only once for achieving a more cleaned surface.

If bleaching is required, then sheep dung or cow dung is used. Sheep dung is more effective as it contains a higher proportion of sodium carbonate. A handful of manure is mixed with water to bleach 10 m of cloth. The cloth is dipped in this solution, taken out, squeezed and kept aside. Fresh dung with water is then added as per requirement. The material was kept overnight with the dung mixture.

The next day, it is washed in river water, beaten and rewashed in the flowing water. The fabric is then dried on the wet sand, and to keep the cloth damp, water is sprinkled on it every few minutes. The material is exposed to the sun, and the process continues for four to five days until the fabric becomes white.

### ***Colours used***

Primarily Kalamkari art used earthy colours viz indigo, mustard, rust, black and green. The colourants extracted from natural resources are used as painting paste. In the early days, the use of synthetic dyes was restricted. The artisans extract black colour used for outlining the sketches by blending jaggery, water and iron filings in a clay pot. Jaggery helps the fermentation process.

Alum and other salt are used to develop the rest of the vegetable dyes. The mustard or yellow is obtained by boiling pomegranate peels; red hues are created from the bark of madder or alizarine, whereas blue is obtained from indigo. The green colour is derived by mixing yellow and blue together. Myrobalan produces a greenish-yellow shade (*Thakurta Roy, 2013*).

### ***Painting***

A charcoal stick draws the outline. This is held in between the thumb and four fingers. The charcoal drawing provides a basic layout filled by '*Kalam*'. A woollen blanket is spread on a

wooden table, making the surface smooth and helping absorb the colour sipping through. The iron mordant is kept in a mug. The pointed '*Kalam*' is used to outline drawings and other details, whereas the second '*Kalam*' with a broader tip is used for larger areas.

The operation is a very skilful job and requires patience and creativity. The '*Kalam*' is typically made of a bamboo stick, sharply pointed at the end and tied by cotton threads that hold the liquid dye to be squeezed and dropped as the artist executes the images with a smooth and continuous flow.

After the final development, the painted clothes are washed in running water and dried on the riverbank under sunlight. Two persons are holding the cloth in river water for 5 min. During this time, the excess mordants are removed by the flowing water.

### **Kalamkari printing of Machilipatnam**

The Kalamkari printing in Machilipatnam of Andhra Pradesh mainly follows the following step. i) design and block cutting, ii) making of '*Kalam*', iii) preparation of the cloth before printing, iv) formulation of starch, v) preparation of Haritaki solution and mordanting the cloth, vi) outline block printing, vii) filling the colour with '*Kalam*', bleaching, washing and application of alum and finally soaping (Anon, 2021).

#### ***Printing process***

##### *Bleaching of kora cotton fabric*

'Kora' cotton cloth is soaked in a solution of water and cow dung for a few minutes (10 minutes approximately) and kept in wet condition overnight. It is then washed in the river or flowing water and dried under sunlight.

##### *Application of Myrobalan*

The bleached cloth is soaked in a Haritaki (Myrobalan) solution. The solution is prepared under boiling conditions for two hours in a stone pot and constantly stirred with a wooden rod. After extraction, the solution is then cooled and filtered. This filtrate is ready for dyeing purposes.

The bleached cloth is then dipped in this solution and removed immediately. It is then squeezed and dried in the sun. The tannin present in Myrobalan reacts with iron to give black colour. When the tannin reacts with alum, it improves the fastness of the dye. Tannin also acts as a mordant and helps to absorb the metal more evenly.

##### *Dyeing processes*

Mordants play a vital role in dyeing textiles with natural dyes. It helps to improve the fastness properties and increase the dye's affinity to the fibre. Iron acetate, popularly known as '*Kasim*' in Telugu ([www.craftmark.org](http://www.craftmark.org)), is used to get black colour on the fabric. Generally, 36 litres of saltwater, 12 kg of jaggery, 21 kg of iron strips and one sack of paddy husk is used to prepare this mordant.

Alum, i.e., '*Karam*' in Telugu, is also used in the Kalamkari printing process. Dry alum crystals are pounded to powder and 4 litres of water is mixed with 3.5 kg of alum. The solution is allowed to boil with occasional stirring until reduced to half.

*Anar* is used for a light-yellow shade, and alum is used as mordant to obtain red. The alum printed fabric is boiled in Alizarine for red colour. The blue colour is achieved from Indigo. It is obtained from indigo cakes and mixed with rice starch for printing purposes. Orange can be obtained by combining red and yellow or boiling the alum-printed fabric in a mixture of Alizarine and *Moduga* ([www.craftmark.org](http://www.craftmark.org)).

For printing paste preparation, the gum is a thickener except for Indigo. Rice gruel is mixed with buffalo milk. It is then stirred to provide additional stiffness to starch and helps it to spread evenly. The starch is mainly used during the painting of the yellow ([www.craftmark.org](http://www.craftmark.org)).

### ***Block printing***

The printing is done on a long wooden table. The surface of the table is covered with gunny cloth and a damp cloth is spread over it. The fabric to be printed is stretched out on the table. Iron acetate and alum are used for the outline, background, or design motifs. The printing of iron mordant precedes that of alum. Mordant is placed in a rectangular tray, i.e., a printing pad.

The printing pad is made of bamboo separators that act as a base on which a sponge layer is put, covered with a woollen or gunny cloth. Initially, the background of the designs is printed, and then the outline is printed on the fabric previously treated with myrobalan.

### ***Washing***

After block printing, the cloth is kept for two to three days for drying. It is then washed in flowing water to remove the gum and other unfixed dye and avoids spreading mordants on the fabric. Washing is done for one hour, followed by drying under sunlight.

### ***Fake Kalamkari***

The popularity of Kalamkari print in India and the international market makes the artisans go for fake Kalamkari production in short duration to meet the consumers' requirements. The artisans now use synthetic colour instead of natural to avoid costs and minimise time. Instead of hand painting and block printing, the workers use the screens to make Kalamkari designs on the fabric. But those artisans are selling this fake Kalamkari at the same price as the original one.

### ***Process of fake Kalamkari***

In fake Kalamkari, the designs are developed on screen. The fabrics are placed on a table, and the workers are standing across the long table. Long length sarees are placed over the table. Through the screen, the designs are transferred to the fabric. It takes only 10-15 min to complete two sarees.

After printing, the saree is washed in water and dried in the presence of sunlight. Screens are then appropriately cleaned, and the process continues. Screen printing with synthetic dye is popularly used as an alternative to traditional Kalamkari.

### *Advantages and drawbacks of fake Kalamkari*

Every process has its merits and drawbacks. There are certain advantages of fake Kalamkari. Still, the main problem is that the cultural heritage and tradition is lost while going for mass production to maintain the supply in the market.

The advantages of fake Kalamkari are –

- brighter colours, which attract the consumers,
- less time-consuming process,
- easy to produce, and
- last but not the least high profitability.

But there are certain negative sides of this fake Kalamkari also

- environmental pollution due to use of synthetic dyes,
- declining nature of traditional and heritage,
- originality of conventional hand-painted Kalamkari is not readily available,
- the current generation is not willing to continue this traditional form of Kalamkari painting. Instead, they prefer to produce fake Kalamkari.

Due to the tedious and lengthy process of producing traditional Kalamkari compared to fake Kalamkari, the cost per meter of fabric is relatively high for the traditional one. The artisans also sell the fake Kalamkari as a traditional one. The fake Kalamkari is more profitable to the artisans in business volume.

### **Conclusion**

In the olden days, Kalamkari prints were used for canopies, screen cloth, prayer cloth, etc. Nowadays, it has diversified purposes ranging from dress material, saris, handkerchiefs, curtains, wall and frame hangings, and upholstery. The fabrics printed at Masulipatinam are used as bedspreads, curtains, table cloths, mats, carpets, *durries*, caftans, bags, purses etc., apart from apparel like *kurtas*, sarees and *dupattas*, etc.

In Srikalahasti, the artisans are prompt to adapt to the social changes, viz., they are using the website for connecting buyers directly. On the contrary, the international trading port in Machilipatnam is shrunken to a fishing village and is not easily accessible. The fading of Islamic motifs is also responsible for declining this art in that area. The artisans are moving towards the hand-painted Srikalahasti style for a better scope of innovative production. In both places, the artisans are more concerned about intellectual security to the production parameters and a possible alteration to the existing production management (*Thakurta Roy, 2013*).

The printed version of Kalamkari became more famous due to changing market preferences, modern techniques, the ready availability of chemical dyes and the tedious nature of dyeing and painting. Hence, efforts are being made to orient the artisans to revive the traditional hand-painted Kalamkari. Nowadays, raw silks, chiffon and georgettes etc., are also being

used along with the cotton fabric as base material. The motifs have also been contemporised with new natural forms and stylised figures. New colour schemes of pastels, neutrals like brown, beige, maroon etc., have been added to the traditional colour story.

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