

Training Module on **BATIK PRINT WORK**



नमामि
गंगे



भारतीय वन्यजीव संस्थान
Wildlife Institute of India



जङ्गल

Jalaj: Supporting conservation and livelihood through sustainable resource use





JALAJ-WII, NMCG INITIATIVE

The Ministry of Jal Shakti, Government of India through the National Mission for Clean Ganga (NMCG) entrusted the Wildlife Institute of India, (WII) a project entitled “Biodiversity Conservation and Ganga Rejuvenation” for developing a science-based aquatic species restoration plan for Ganga River by involving multiple stakeholders. This project successfully integrates livelihood and skill enhancement activities in alignment with conservation of the Ganga River and its biodiversity, employing both traditional livelihood centers and the innovative mobile livelihood unit known as "Jalaj." This pioneering business model has garnered recognition and adoption by district and state administrations across the Ganga River states. The core objective of the initiative is to interconnect local livelihoods with the conservation initiative, achieved through comprehensive training and the establishment of livelihood centers. These endeavors have been identified as a potential model for the broader "Arth Ganga" program. Consequently, this endeavor actualizes the Arth Ganga vision within the Ganga River basin by fostering a mutually beneficial relationship between the river and its communities, epitomized by the innovative "Jalaj" approach.

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PREFACE

The Ganga River, an embodiment of spiritual significance for millions, faces an ever-growing threat from pollution, deforestation, and unsustainable practices. In response to this critical juncture, Ganga Prahari endeavors to use the timeless art of Batik to not only captivate hearts but also to raise awareness and resources for the conservation of the purity of the Ganga River. This module represents a unique fusion of ancient craft and contemporary responsibility. Each piece of Batik print art is a testament to the skilled artisans who have poured their expertise into creating visual narratives that echo the cultural richness of India and the profound need to protect our natural heritage.

We invite individuals, art enthusiasts, and advocates of environmental conservation to embrace this art as a symbol of their commitment to a sustainable future. As we celebrate the beauty of Batik print art, let us also weave a narrative of hope and responsibility for the Ganga River – a river that embodies the soul of our nation and deserves our collective efforts to ensure its continued vitality. Together, let us paint a brighter, cleaner, and more sustainable future for the Ganga River.

FABRIC ARTS OF THE WEST BENGAL:

This Training module will demonstrate a particular type of fabric design – the Batik work. Batik is a unique technique of wax-resist dyeing that is now the expertise of our women working in self-help groups (SHG) in West Bengal. It is used to create delicate, exquisite floral and other designs on cloth. Today batik designs have undergone changes with the change of styles and choices. A modern batik design is simple yet attractive piece of art that captivates the various nuances of modern life in a mesmerizing blend of colors and patterns. However, there is equal craze for Kantha work, Ajrakh, Bagru, Kalamkari, Bandhani designs along with the traditional and contemporary batik designs in different regions of India.



MODULE OVERVIEW:

This training module on Batik print work introduces participants to the traditional art of Batik, a wax-resist dyeing technique. Through a combination of theory and hands-on activities, participants will learn the history, materials, techniques, and creative processes involved in creating Batik prints. This module is suitable for both beginners and those looking to enhance their Batik skills.

MODULE OBJECTIVES:

- To understand the history and cultural significance of Batik.
- To become familiar with the materials and tools used in Batik printing.
- To learn the basic techniques for creating Batik designs.
- To gain hands-on experience in creating Batik prints.

MODULE 1: INTRODUCTION TO BATIK

History and origins of Batik:

The roots of Indian batik art extend back over two millennia, showcasing India's early mastery of the resist method for printing intricate designs on cotton fabrics—a technique that preceded similar endeavors in other regions. Indian cotton and dyes garnered considerable acclaim, with indigo blue emerging as one of the earliest and most prominent dyes in use. Nevertheless, the intricate and time-consuming processes of dyeing and waxing posed challenges that contributed to the eventual decline of this art form. Through the expertise and dedication of skilled artisans, this cherished cultural tradition is lovingly passed down from one generation to the next.

Throughout the years, communities with a rich tradition of crafting Batik art have treasured the intricate floral and figurative patterns that grace Batik textiles.

Cultural significance of Batik in different regions:

Batik Printing, a renowned form of textile art, holds a significant place in the cultural heritage of different states and cities of India. It graces various items such as bed sheets, dress materials, and more. The distinctiveness of Batik Printing lies in its utilization of melted wax, which is skillfully applied to create intricate patterns on the fabric. The fusion of artistry and craftsmanship is at the heart of this ancient technique.

This timeless tradition of designing cloth has been passed down through the ages, with Indonesia's Java region considered the cradle of the finest Batik. The term "batik" itself originates from the Javanese word "titik," which translates to "dot." This art form flourished on the island of Java in Indonesia and is still unrivaled in its quality.

STYLES AND VARIATIONS OF BATIK PRINTS ALONG THE DIFFERENT BOUNDARIES:

Batik is a versatile textile art form, known for its diverse styles and variations. Traditional Javanese Batik involves intricate hand-painted designs with wax resist, showcasing rich cultural motifs. Meanwhile, Malaysian Batik often features larger, bold patterns with vibrant colors. African Batik exhibits a fusion of tribal symbols and modern creativity. Contemporary Batik explores innovative techniques like block printing and screen printing. Additionally, there are regional variations within

countries, each reflecting unique traditions and inspirations. From the elegant floral patterns of Indian Batik to the geometric precision of Indonesian Batik, this craft continually evolves, offering a myriad of styles, colors, and designs that captivate art enthusiasts and fashion connoisseurs worldwide.

MODULE 2: MATERIALS AND TOOLS

Types of fabric used in Batik: The common batik fabrics that make for excellent batik prints are cambric, poplin, voiles, cotton, rayon or hemp, linen and pure silk.

Types and source of colors: Natural colors derived from barks of trees, leaves, flowers and minerals are mainly used to prepare the dyes.

A Craft in Transition: Initially, Batik prints involved the use of a block dipped in hot pilu seed oil (*Salvadora persica*), which was then applied to fabric. After the dyeing process, the oil paste was carefully removed, revealing the printed design. As time progressed, a more practical and efficient alternative to oil emerged in the form of wax. This transition to wax brought about a notable transformation in the appearance of the textile. In the wax printing method, slender dye veins intricately woven through the motif, producing an exquisite veined effect.

Batik tools and equipment: The main tools used in Batik art work is wax, tjanting (brushes) and dyes.

Safety precautions while working with Batik materials:

- When working with Batik materials, safety precautions are essential.
- Ensure proper ventilation in the workspace to mitigate inhaling harmful fumes from dyes and wax.
- Use protective gear like gloves and aprons to shield the skin from chemicals.
- Keep a well-maintained fire extinguisher nearby since Batik often involves open flames to melt wax.
- Store dyes and chemicals securely, away from children and pets.
- Never eat or drink in the workspace to avoid contamination.
- Overall, prioritize safety, follow instructions, and exercise caution when handling Batik materials to prevent accidents and protect your health.

MODULE 3: BASIC BATIK TECHNIQUES

Batik print is a distinctive method for coloring or adorning fabric by applying a wax coating to hide certain areas before dyeing, resulting in those waxed portions retaining their original color. When the wax is removed, the contrast between the dyed and undyed areas creates intricate patterns. The process of creating batik art involves three main stages: waxing, dyeing, and dewaxing (removing the wax). Additionally, there are several sub-processes, such as cloth preparation, stretching the cloth on a frame, preparing the dye, dyeing the cloth, dewaxing, and washing.

The process of Batik Printing involves meticulous steps. First, the fabric is meticulously prepared. Patterns are marked or directly drawn on it using a pen-like tool called a Tjanting. Wax flows through the column on a wooden handle, creating lines and dots as it glides across the fabric. Subsequently, the cloth is dyed, and the wax is removed by subjecting it to hot steaming water. This forms the fundamental process of Batik Printing, and it can be repeated to achieve a rich array of colors and intricate designs.

Batik production techniques are commonly categorized into three types:

Canting (Tjanting or Tulis): This technique involves using a small, handheld tool called a "canting" to draw intricate designs or patterns with melted wax directly onto the fabric.

Cap (Block Printing): In block printing, a stamp or block with a pre-made design is dipped in wax and then pressed onto the fabric to create repeating patterns.

Silk Screening (Screen Printing): Silk screening, also known as screen printing, is a method where a screen with a stencil of the desired design is used to apply wax or dye to the fabric, creating a consistent pattern.

Hand batik printing encompasses a wide range of themes, including religious motifs and abstract patterns. The batik prints on fabric often represent the cultural elements of the regions they originate from and are influenced by the surrounding nature. This art form is not only a means of adorning fabric but also a reflection of the rich cultural and artistic traditions of various states and regions.

Various Methods

Batik is created in several ways like splash method, screen-printing method, and hand painting. In splash method vibrant dye splatters on fabric, creating dynamic patterns. It is an expressive and unpredictable

technique in textile art. Screen-printing method incorporates intricate designs that emerges as wax blocks selected areas. Dye applied through a mesh screen reveals patterns, marrying precision with traditional batik artistry. Hand painting one is by a Kalamkari pen involves skilled artisans meticulously applying wax and vibrant dyes onto fabric, creating unique, detailed designs that reflect the rich heritage of this traditional craft.

MODULE 4: CREATING BATIK PRINTS

The art of batik is a three-stage process of waxing, dyeing and dewaxing (removing the wax). There are also several sub-processes like preparing the cloth, tracing the designs, stretching the cloth on the frame, waxing the area of the cloth that does not need dyeing, preparing the dye, dipping the cloth in dye, boiling the cloth to remove wax and washing the cloth in soap. The characteristic effects of the batik are the fine cracks that appear in the wax, which allow small amounts of the dye to seep in. Batik wax exercises an important function in the process of batik printing. Proper usage of wax results into an impeccable batik work. 30 per cent beeswax and 70 per cent paraffin wax are generally applied. During application wax should not be overheated or it will catch fire.

The main steps in creating Batik design art work are:

- 1. Preparing the fabric and tracing the designs:** Select the fabric and wash it to remove any sizing or impurities. Then sketching or tracing the design on the fabric using a pencil or chalk. The design will guide for the wax application on the fabric to mark the design with wax, before coloring to create beautiful batik pattern.



Figure 1: Tracing the design into the fabric

- 2. Making the dye:** Mix hot water with fabric dye for the desired color. Always remember to use proper safety precautions and protective gear while working with dyes and hot water.



Figure 2: Preparing the dye for putting the design into the fabric

3. Waxing the area of the fabric that does not need dyeing and wax application techniques including drawing, stamping, and screen printing. Apply melted wax to the fabric using a tjanting tool or a brush or tuli. The design is made using tuli and then wax (liquid) is applied over the cloth. Waxing serves to resist dye and preserve the chosen design, allowing for a layered and intricate patterning process.



Figure 3: Waxing the area of the fabric

- 4. Dyeing methods:** After applying the wax, the fabric is then dipped in the color (Naphthol ASG), apply immersion and brush-on techniques to stretch the design over non-waxed area. The waxed part will retain the crack design while applying color over the fabric. The wax over the fabric is crushed by the hand and again dipped into the color. This will create random crack design over the fabric.



Figure 4: Dyeing the design on the fabric

- 5. Removing wax from the fabric:** The fabric after waxing and applying dye is then washed into the hot water to remove the wax from the fabric. Later, the fabric is washed in cold water to allow the dyes color to settle.



Figure 5: Removing the wax from the fabric

6. Washing the cloth to remove residual soap: Finally, the fabric is washed and cleaned using cold water and dried in sunlight. The fabric is ready as a product to be worn or sell.



Figure 6: Washing the fabric to remove residual soap

After the following steps, the vibrant fabric with the desired elegant design will be ready to be transformed into the final products! Products include sarees, wrap around skirts, kurtis (tops for women) and more.



Figure 7: Final Product after applying Batik design into the fabric

Troubleshooting common issues in the Batik process.

The Batik process, while beautiful and intricate, can encounter several common issues:

- **Wax Cracking:** If the wax cracks while applying, it can allow dye to seep through, disrupting the design.

- **Uneven Dye Application:** Inconsistent dye application can result in blotchy or faded areas in the fabric.
- **Bleeding Colors:** Overlapping colors may lead to unintended blending or bleeding, altering the intended design.
- **Wax Residue:** Inadequate wax removal post-dyeing may leave unwanted wax traces on the fabric.
- **Uneven Wax Melting:** Irregular wax melting can create unintended variations in the wax-resist areas.
- **Fabric Damage:** Overexposure to hot wax can damage the fabric or lead to scorch marks.
- **Misalignment:** When working with multiple fabric layers, ensuring design alignment can be challenging.
- **Uneven Design:** Achieving symmetrical and consistent patterns can be difficult, especially for beginners.

Addressing these issues often requires experience, careful technique, and attention to detail throughout the Batik process.

MODULE 5: CONTEMPORARY APPLICATIONS

The role of Batik in contemporary art and fashion.

Batik, a traditional textile art, has evolved into a vital player in contemporary art and fashion. In the art world, it's embraced by artists for its unique, versatile medium. They employ Batik to create intricate paintings, blending tradition with modern expressions. In fashion, Batik has found a global following. Designers incorporate Batik fabrics into diverse collections, from haute couture to streetwear. Its distinctive patterns and vibrant colors resonate with consumers seeking authenticity and individuality. Batik's fusion of tradition and innovation allows it to bridge the gap between the past and the present, maintaining its cultural significance while influencing and inspiring the aesthetics of contemporary art and fashion.

Exploring creative possibilities:

Batik work offers a world of creative possibilities through color blending, layering, and mixed media techniques. Color blending allows artists to produce intricate gradients and harmonious palettes by subtly merging different hues. Layering empowers artists to add depth and complexity to their designs, as each layer of wax and dye unveils new dimensions, creating depth and texture. Additionally, Batik combines seamlessly with mixed media, enabling artists to incorporate elements like beads, sequins, and embroidery into their creations. These innovative approaches push the boundaries of traditional Batik, offering endless avenues for artistic expression and experimentation, making it a dynamic and ever-evolving art form in contemporary creative landscapes.

Applications:

Batik art, a traditional technique, finds versatile applications across various domains, reflecting its cultural richness and aesthetic appeal. In the realm of fashion, batik textiles are widely used for crafting vibrant garments, ranging from casual wear to haute couture. The unique patterns and colors add a distinctive touch, making batik a sought-after choice for designers globally. Beyond clothing, batik is employed in home decor, with intricately designed batik fabrics adorning furnishings such as curtains, bedspreads, and pillow covers. The art form's versatility extends to accessories like scarves, bags, and even footwear, creating a harmonious blend of tradition and modernity.

In the fine arts, batik serves as a medium for expressive paintings. Artists utilize the wax-resist process to create stunning visual narratives on canvas, bringing the rich cultural heritage of batik into the realm of contemporary art. Moreover, batik has practical applications in crafts and design, including the creation of wall hangings, tablecloths, and linens. Its adaptability makes it suitable for diverse creative expressions, from personalized gifts to corporate branding through customized batik products. The batik art transcends cultural boundaries and finds applications in fashion, home decor, fine arts, crafts, and beyond. Many products prepared by the batik art work are famous among people especially women including batik sarees, uttario, wraparounds, stalls, jackets, kurtis, shirts for men, bed linen/pillow covers, light shawls and skirts.



Figure 8: Sarees with batik design into the fabric



Figure 9: Batik design into the Wraparound and Uttario

MODULE 6: OPPORTUNITIES FOR FURTHER LEARNING AND RESOURCES FOR BATIK ENTHUSIASTS

Key Centers of Batik

Batik art received an impetus when it was introduced as a subject at the famous university of Shanti Niketan in Calcutta. Chola Mandal in Madras is also popular for its Batik product. Outside India, Indonesia is considered the cradle of batik with its many designs, which are restricted for different wearers and occasions. Indonesian batik has characters of mystic and ritualistic connection. Objects like flowers, trees and birds have a significant meaning. The Sawat in Javanese batik has its origins in Hindu mythology, as it is the decorative form of Garuda, Lord Vishnu's bird. 'Sidomukti' is another Hindu influence in batik. 'Mukti' means happiness and prosperity in the Hindu mythology. While Indonesia, Malaysia and Thailand are known for their block printing (tjab) method to create batik on a large scale, in Sri Lanka batik is still made by hand. The art of Batik is also practiced in some African countries.

Batik is both an art and a craft, which is becoming even more popular and well known among contemporary artists all over the world, as a wonderfully creative medium. The art of decorating cloth using wax and dye, has been practised for centuries in many parts of the world including China, Japan, India, South America and Europe.

In Java, an island in Indonesia, batik is part of an ancient tradition, and some of the finest batik cloth in the world is still made there. Batik is usually made on a fabric surface (such as cotton, silk, linen, rayon or hemp), but batik techniques can also be used on paper, wood, leather and even a ceramic surface. Batik tapestries originating in India served as intricate and vivid visual storytellers, portraying the rich tapestry of art, culture, and traditions that defined historical epochs.

Usage and Tips

This training module provides a comprehensive introduction to Batik print work, encompassing its history, materials, techniques, and contemporary applications. Participants will leave with the knowledge and practical skills necessary to create their own Batik designs and appreciate the cultural and artistic significance of this ancient craft.

LINKING LIVELIHOOD AND CONSERVATION

Linking livelihoods with the conservation is paramount for the sustainable future of both people and the environment. The Ganga sustains millions of livelihoods through different sectors such as agriculture, fishing, tourism. However, these activities often harm the river and its diverse ecosystems. To ensure the health of the Ganga River and its biodiversity, it is essential to promote eco-friendly livelihoods. Initiatives like Jalaj that implements practices like organic farming, sustainable fishing practices, and responsible tourism can provide economic opportunities while safeguarding the river. Additionally, raising awareness and involving local communities in conservation efforts can create a sense of ownership, fostering a collective commitment to conserve the rich biodiversity of the Ganga River, ensuring a harmonious coexistence between human and nature.



National Mission for Clean Ganga (NMCG)

Ministry of Water Resource, River Development & Ganga Rejuvenation



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