Objectives

- To introduce the technique of resist dyeing for value-addition.
- To create awareness about the different resist dyed textiles of India.
- To initiate differentiation between yarn resist dyed (Ikat) and cloth resist dyed textiles (Bandhej).
- To understand the origin of technique and design with reference to resist dyed textiles.
- To learn about the evolution of resist dyeing over a period of time.

Learning Outcomes

After completing the unit, the students shall be able to

- Understand the finer nuances of resist dyed textiles.
- Classify the regional tie-dyed textiles of India.
- Identify specific ikat textiles of India on the basis of technique, colours, patterns and layout.
- Identify specific tie-dyed textiles of India on the basis of technique, colours, patterns and layout.
- Identify the influencing factors for development and evolution of a specific resist-dyed textile.

Unit overview

What is resist dyeing and what are the different resist dyed textiles of India?

In this unit we will learn about the two major resist dyeing textile techniques of India: Bandhani or Bandhej and Ikat, in terms of process, production centres, colours, patterns and layout.

Resist dyeing is a technique of colouring yarn or fabric in order to create a pattern by blocking or resisting certain areas, so that only the unblocked areas receive colour. Resist materials like thread, wax, rice or mud paste can be used keeping in view the patterns.

Traditional resist dyed textiles of India can be broadly classified into two categories:

- Bandhani or Bandhej Cloth resist dyed textiles
- Ikat Yarn resist dyed textiles



Chapter 2: Bandhani

Bandhani, derived from the word 'bandha' which means to tie, are tie-dyed textiles primarily from Rajasthan and Gujarat. Tie-dye is a resist dyeing technique in which pre-determined areas on the fabric are tied tightly with thread to protect them from the colour, followed by dyeing and removal of threads to reveal an interesting pattern on fabric.

The earliest reference to bandhani dates back to 6th-7th century AD at the Ajanta cave paintings that portray women wearing bodices with resist dyed designs. There is a literary reference to bandhani textiles in Harshacharita written by Banabhatta in 7th century AD. The biography quotes the wedding of King Harsha's sister, Rajyashri and details the tie-dyeing of the bride's *odhani*.

The word 'chunari' is a commonly used term that refers to patterns created by fine tie-dyed dots. Since the resist dyeing is done on head-cloths, *chunari* is also the name of the garment worn by women in Rajasthan (Pic. 2.1).

The basic steps of creating a bandhani textile are as follows:

• **Pre-preparation of fabric:** The fabric generally used for tie and dye is finer variety of cotton and silk, so that dye can penetrate deep into the layers of tied fabrics. It is soaked in water overnight and washed thoroughly to remove the starch in order to improve its dye uptake. The fabric is bleached by drying it in the sun.



Pic. 2.1: Chunari – Head-cloth worn by women of Rajasthan



- Tracing of design: The fabric is folded into four or more layers for convenience of tying as well as to achieve symmetry in design. The design layout is marked on the folded fabric with wooden blocks, dipped in washable colours like *neel* or *geru*.
- **Tying of fabric:** As per the design, the folded fabric is raised with a pointed metal nail worn over the finger. A cotton thread coated with wax is wrapped tightly around the raised area to create a simple fine dot: *bundi* or *bindi*, which is the basic motif of the design.
- **Dyeing of fabric in the lightest colour:** After tying, the fabric is dyed in the lightest colour first from the selected colour scheme. After dyeing, fabric is washed, rinsed and dried.
- Renewal of tying and dyeing in next-darker colour: Parts of the fabric to be retained
 in the lighter colour are covered with tying and then the fabric is dyed in the next darker
 colour. The Process of re-tying and dyeing is continued till the darkest colour in the scheme
 is applied.
- Washing: Following the final dyeing, the textile is washed to remove excess dye and starched.
- Opening the ties: The ties of the tie-dyed fabric are kept tied till purchased by a consumer
 in order to differentiate between a bandhani textile and a printed imitation. Only a portion
 of the bandhani textile is opened to display the colour scheme to the customer. To unravel
 the ties, the bandhani textile is stretched crosswise to open all ties at the same time.

The tie-dye in India can be categorized according to region into Bandhani of Gujarat and Bandhej and Leheriya of Rajasthan

2.1 Bandhani of Gujarat

The tie-dye from Gujarat called Bandhani is regarded for its fine resist dots and intricate designs. Traditionally the tie-dye is done on silk, cotton and wool. The motifs created by outlining with tiny dots are animal and human figures, flowers, plants and trees. The products range varies from *odhanis*, saris, shawls to stitched garments like *kurta* and skirts (Pic. 2.2).

The major centres of bandhani in Gujarat are Jamnagar, Bhavnagar, Rajkot and Porbandar.





Pic. 2.2: Bandhani woolen shawls

2.1.1 Special Bandhani Textiles from Gujarat

Gharcholu: A popular bandhani textile produced in Gujarat is called *gharchola* or *gharcholu*, a traditional *odhani* for Hindu brides, which is nowadays available as a sari worn on auspicious occasions. The tie-dyed textile in cotton or silk is red in colour and the layout is a checkerboard created with woven gold threads. Each square within the check contains a different tie-dyed motif like dancing lady, parrot, elephant, peacock, flowering shrub and geometric forms (Pic. 2.3).



Pic. 2.3: Close view of Gharcholu

Chandrokhani: The traditional *odhani* for a Muslim bride in red and black colour is called *chandrokhani*. It is a tie-dyed textile with a big medallion in the centre surrounded by four smaller medallions and wide borders (Pic. 2.4). Motifs created with small tie dye dots are small paisleys, zig zag lines, sunflowers etc.





Pic. 2.4: Close view of Chandrokhani

Aba or Abo: The traditional upper garment for Muslim women is called *aba* or *abo*. The *kurta* has an intricate tie-dye pattern shaped like a yoke on the bodice front, which is identical in the front as well as the back.

2.2 Bandhej and Lehariya of Rajasthan

The tie-dyed textiles produced in Rajasthan are known as bandhej and are similar to the bandhani of Gujarat in terms of production process. Besides the fine resist dots, other types of shapes seen in bandhej are tiny boxes called *dabbi*, sweetmeats termed *laddu* and cowrie shells named *kori*. The tie-dye motifs range from very simple to complex forms including geometric and floral designs. The tie-dye done on fine cotton and silks are used as *odhani* for women, turban cloth for men and stitched into garments like skirt and bodice. The colourful textile that is considered auspicious is also offered to goddesses on special occasions.



Rajasthan is also known for its multi-coloured resist dot pattern that is produced by a process called 'lipai' (Pic. 2.5). In this technique, the fabric is first dabbed with various colours according to the design, followed by tying the coloured areas to resist penetration of dye. The tied fabric is finally dyed in order to obtain multi-coloured dots in localized areas on a coloured background.



Pic. 2.5: Multi-coloured resist dots pattern

Another category of tied-dyed fabrics which are very popular from Rajasthan are lehariya (Pic. 2.6). The patterns are diagonal or zigzag lines created by wrap-resist technique. Fine cotton or silk fabric is diagonally rolled into a tight rope and tied with thread at regular intervals to obtain stripes on dyeing. The fabric may be rolled again and re-tied to resist the existing colour and add another colour in the leheriya pattern. The fabric when opened fully shows diagonal white and varied light coloured lines on a darker background. Lehariya fabrics are used as head cloth or *safa* by men, worn on special occasions like festivals and weddings.





Pic. 2.6: Single colour lehariya from Rajasthan

The finest bandhej is made in Sikar and Bikaner in Rajasthan. Other production centres for bandhej and leheriya are Jodhpur, Udaipur, Barmer and Jaipur.

2.2.1 Special Tie-Dyed Textiles from Rajasthan

Piliya/Pilado: The traditional odhani in red and yellow colour scheme is an important part of the costume for young mothers. These textiles were dyed with turmeric to impart properties of anti inflammation. Hence it had social significance as they were gifted to the mothers of new born boys. A typical piliya is largely yellow in colour with red appearing in borders, big central circular motif and four smaller circles around it (Pic. 2.7).





Pic. 2.7: Close view of Piliya

Mothra: A traditional leheriya textile that has a fine checkered pattern created by crisscrossing diagonal lines (Pic. 2.8).



Pic. 2.8: Close view of Mothra



Exercises

- 1. State whether the following statements are True or False. If False, write down the correct one.
 - a) Gharcholu is a traditional lehariya textile.
 - b) The traditional odhani, Piliya is worn by Gujarati women.
 - c) Aba is traditional tie-dyed upper garment worn by Muslim women of Gujarat.
 - d) Mothra is an example of a tie-dyed textile with fine resist dots.
 - e) Lehariya is a tie-dyed textile of Rajasthan.
- 2. Fill in the blanks.

a)		is a traditional red and black odhani worn by a Muslim bride
,	from Gujarat.	
b)		is a process to produce multi-coloured resist dot pattern.
c)	Tie-dye is a	dyeing technique.
d)		is a tiny square shaped resist in bandhej.
e)	Lehariya textile has	lines.



Chapter 3: Ikat

The term 'ikat' is derived from the Malay-Indonesian word 'mangikat' that means to bind or knot. It is a yarn resist technique wherein the yarns are tie-dyed, and on weaving a pattern is created on the surface of the fabric. An ikat textile can be identified from the typical hazy patterning on fabric due to the resist dyeing of the yarns prior to weaving.

Ikat can be classified into three categories:

- **Single ikat:** There are two kinds of single ikat namely warp ikat and weft ikat. As the name suggests, in warp ikat, the warp yarns are tie-dyed and woven with plain solid coloured weft yarns and similarly and in weft ikat, the weft yarns are tie-dyed and woven with plain warp yarns.
- **Double ikat:** In double ikat, both warp and weft yarns are tie-dyed according to a pre-determined pattern and then woven to create clear designs on fabric (Pic. 3.1).



Pic. 3.1: Close view of double ikat



Combined ikat: In combined ikat, both warp and weft yarns are tie dyed but they are
present in selected areas of a textile, to create interesting patterns.

The earliest reference to ikat can be found in the Ajanta cave paintings of the 6th century AD. Designs similar to ikat are seen on the dresses of the females portrayed in the murals of Ajanta. There is a mention of double ikat in the couplets of Rani Ranakdevi, Gujarati literature from 11th century AD as well as in the records of European travelers from 16th century AD.

The main production centres of ikat in India are Gujarat, Odisha and Andhra Pradesh. The ikat of each region known by different names can be identified from the motifs and the patterns achieved on weaving the tie-dyed yarns.

The ikat textiles of India can be classified into three categories on the basis of region as follows:

- Patola of Gujarat
- Bandhas of Odisha
- Ikat textiles of Andhra Pradesh: Telia Rumal and Pochampalli

3.1 Patola of Gujarat

The double ikat weaving tradition of Gujarat is called 'Patola'. The textile is produced by the weavers of the Salvi community using expensive silk yarns. In the past, Patolas were manufactured in Patan, Khambat, Surat, Porbander, Ahmedabad and Baroda in Gujarat. However with the passage of time, there are only two families in Patan who continue to practice this craft.

The earliest reference to Patola can be visually seen in the Ajanta cave murals of 6th century AD. During the 16th and 17th century, Patolas were regarded as precious silks by South-east Asia and Europe, and thus became an important trade item at that time.

In India, Patola saris are considered to be auspicious and are thus worn on very special occasions like weddings and festivals (Pic. 3.2). In the past, the textile was also used as temple hangings and offered to the divinity.





Pic. 3.2: Patola sari from Patan

The process of producing the double ikat Patola fabrics is very time consuming and labour intensive. The design is planned very carefully since both warp and weft yarns are tie-dyed repeatedly in order to introduce more than one colour. After the yarns are tie-dyed, the warp and weft are woven in plain weave. A sari takes nearly one month to weave as the adjustments of the weft yarn to make precise pattern with warp yarns is done with a pointed metal rod after each weft insertion. Due to the perfect alignment of the warp and weft, the motifs formed have defined outlines in comparison to the hazy outlines seen in single ikats.

Patola textiles use intense colours like bright red, golden yellow, green, dark blue, reddish brown etc. The distinctive Patola motifs are flowers, jewels, elephants, birds and dancing women for the Hindu and Jain communities. The Muslim community restricts themselves to abstract designs. The Patola designs are named as Kunjar Popat Bhat (Elephant – Parrot), Nari Kunjar Popat Bhat (Lady – Elephant – Parrot), Navratan Bhat (Jewel Mosaic), Phool Wali Bhat (Floral), Chabri Bhat (Basket of Flowers) etc (Pic. 3.3).





Pic. 3.3: Nari Kunjar Popat Bhat

The expensive Patola saris are prized possession of every Indian woman, reserved for ceremonial wear. Due to the high cost, the patola sari attracts very limited clientele and also cheap imitations manufactured by ikat weavers of Pochampalli, has affected its sales. Thus the number of artisans practicing the craft has drastically declined over a period of time.

3.2 Bandhas of Odisha

The ikat textiles called 'bandhas' are produced in Odisha. Mostly, bandhas are single ikats or combined ikats, woven by specific weaver groups like Mehars and Patras. Cotton and silk ikats are manufactured in Cuttack, Nuapatna, Sonepur, Bargarh and Sambalpur.

The bandhas of Odisha are characterized by curved forms with hazy outlines. The distinct hazy lines are created since only one set of yarns in the fabric are tie-dyed. Mainly weft ikat is done in Odisha. Some popular motifs are *shankha* or conch shell, *swastika*, creepers, flowers like lotus, intertwined snake, fish, tortoise and elephant.

The bandha weavers of Odisha are known for the usage of striking colour combinations and delicate intricate patterns. The ikat saris of Odisha are the popular attire of the local women, and are also preferred by the modern women of India. Besides the cotton and silk ikat saris, the other products woven by the weavers are yardage, stoles, scarves and dupattas.



A well-known example of the ikat sari from Odisha is 'Saktapar' sari. This sari is traditionally the pride of the region, with the double ikat checker board pattern and extra weft brocaded border of rudraksha, bead and fish (Pic. 3.4). The sari is characterized by its typical end piece, pallu comprising of bands of floral and figurative ikat motifs, divided by narrow woven patterned lines.



Pic. 3.4: Saktapar sari

3.3 Ikat Textiles of Andhra Pradesh

There are two types of ikat textiles produced in Andhra Pradesh, namely Telia Rumal and Pochampalli ikats. Telia Rumal is the age-old ikat technique of Andhra Pradesh, whereas Pochampalli ikats were introduced later by the telia rumal weavers.

3.3.1 Telia Rumal

The traditional ikat textile known as Telia Rumal is produced in Chirala, a coastal village in Andhra Pradesh. It is a square rumal or handkerchief measuring around one metre square. Since oil (tel) is an important ingredient used in the production of the rumal, the textile is known as telia rumal.

Traditionally the telia rumal were produced by the weavers belonging to the Padmasali community. In the early 20th century, these double ikat rumals were exported to Middle East, Africa and Burma. Within the country, the telia rumal became part of the fishermen's clothing, worn as a turban or as a lower garment called lungi.



Traditionally, the commonly used colours for the telia rumal were terracotta red and black, using natural dyes. The fabrics were mordanted with iron solution and alum so that on dyeing with alizarine, areas with iron would become deep black and the ones with alum turned red (Pic. 3.5). The layout of a typical telia rumal comprised of a



Pic. 3.5: Telia Rumal in typical red & black colour scheme

geometrical grid-like patterning with borders all around, thereby creating small squares at the four corners. In the 19th century, simple geometric designs like crosses, dots and diamond shapes were used in the central field. In the 20th century, simple curvilinear forms like flowers, birds, animals, stars and moon were introduced in order to cater to the export market. Some contemporary pieces of telia rumal have used motifs like clock, gramophone and aeroplane.

By the 1950s, the demand for telia rumals declined and the technique was adapted to produce commercially viable products like saris and yardage for apparel and home products.

3.3.2 Pochampalli Ikats

In the early 20th century, the telia rumal weavers introduced the ikat technique to the Devang and Padmasali weavers of Pochampalli, a village near Hyderabad. As the popularity for Pochampalli ikats grew over a period of time, ikat weaving spread to many other villages like Koyalagudam, Puttapakka, Chautupal and Elanki.



The Pochampalli weavers applied the technique of ikat weaving to saris, dupattas and yardage. Initially the ikat designs were copied from the Patolas of Gujarat, but later on the weavers developed geometric motifs of their own, mainly inspired from the telia rumal. The weavers are also influenced by the Japanese and Indonesian ikats.

The Pochampalli ikats can be found in a range of colours including magenta, brown, parrot green, bright golden yellow, orange, off-white, black etc.

The Ikat weavers of Andhra Pradesh use mainly combined ikat technique to produce very modern and graphic designs mainly for exports (Pic. 3.6). They also cater to the



Pic. 3.6: Contemporary ikat textile from Andhra Pradesh

domestic market, producing a wide range of saris, stoles and dupattas, and yardage for apparel and home furnishings. The weavers also imitate patola patterns and develop saris preferred by many due to cheaper costs in comparison to a double ikat patola sari.

Exercises

- 1. Match the following:
 - a) Bandha
 - b) Saktapar
 - c) Lungi
 - d) Devang weavers
 - e) Salvi weavers

- a) Patola
- b) Pochampalli
- c) Sari
- d) Single ikat
- e) Telia Rumal



- 2. Find the odd one out.
 - a) Nuapatna, Sonepur, Chirala, Sambalpur.
 - b) Shankha, Kunjar, Popat, Chabri
 - c) Mehar, Patra, Padmasali, Patan
 - d) Handkerchief, Double Ikat, Single ikat, Telia
 - e) Lotus, Swastika, Tortoise, Nari