Dyeing In Ancient Indian Textile : an Analytical Study

Dr. Ritu Punia

Abstract

The art of dyeing was as old as human civilization from the historical records, it is learnt that natural colourants were available to man from the earliest times. With the development of fixed settlements and agriculture around 7000-2000 B.C. man began to produce and use textiles and would therefore add colour to them as well. Colour plays a vital role in Indian textiles. India’s expertise in natural dyes dates back to ancient times. It was an important occupation during ancient times. Ancient Indian literature gives immense proofs regarding the techniques of dyeing in ancient Indian textiles industry. In this paper I have selected the period of ancient Indian history from vedic period to Mauryan period to study the dyeing as an industry in Ancient India.

Keywords: Dyes, Textiles, Madder Like, Muslin, Indigo.

Dyeing and painting activities have accompanied the development of human culture since the early beginnings. The use of dyeing and pigmenting materials was probably born out of the necessity of prehistoric man to adorn and beautify his objects of daily use. The knowledge and use of colour began with the dawn of civilization and dyeing is as old as the textile industry itself.

The term dye, is derived from old English word daeg or daeh meaning "colour". The earliest dyes were probably discovered by accident and may have been noticed from the stains from available berries, fruits and nuts and blossoms, leaves, stems and roots of shrubs. The exact period of the commencement of the art of dyeing in the world could not be ascertained correctly. It is presumed that the appearance of dye-vat occurred in the history along with the brick-kiln.\(^1\) Archeological evidence however shows that dyeing was an wide-spread industrial enterprise in Egypt, India and Mesopotamia round about third millennium B.C.\(^2\)

India’s expertise in natural eyes dates back to ancient times. Colour plays a vital part in Indian textiles. Dyeing of cloth was essential for increasing its beauty. What made the Indian textile fabrics more interesting was the variety of colour employed in dyeing them.\(^3\) So the art of dyeing was in vogue since remote past and it was an important occupation during the ancient times. The love of brilliant colour combinations like vermillion and yellow, is ingrained in the minds of the Indian people. Although at the beginning these colours were borrowed from nature, the people soon imbued with immense significance, sometimes social, and sometimes spiritual. The chief characteristic of the use of colour in Indian textiles is the principle of"rhythmic contrasts."\(^4\)

The purple dye on a piece of cotton was in all probability produced from the madder plant and the discovery of dyer's vessel\(^5\) from the Harappa and Mohenjo-daro indicate that the art of dyeing was known and practised. The purpose dye on cotton piece, is thought by Messers – Turner and Gulati.\(^6\) The chief vegetable dyes used were indigo, clay-root, lac, turmeric and flower.\(^7\)

The vedic people also knew different methods of dyeing the clothes because the dyeing of textiles was also a subsidiary craft. In this art both male and female dyers were engaged, but the latter excelled the former;
so they have been dedicated to delight. The vedic texts refer to several colours in which cloth was usually dyed. The colours known to the people of Rigvedic period seem to be evidenced from the occurrence in the Rigveda. Though the texts refer to several dye-stuffs and cloths of different colours, but they do not shed any light on the technique of dyeing.

As far later vedic period dyeing process is concerned, it was done with the juice of "lodhra" flower or with madder or indigo. Several colours mentioned in later vedic literature. They include white, red, yellow, green, blue and black.

The compilers of the Grihyasutras were also acquainted with the art of dyeing also, as the Asvalyan Grihyasutra states that a Brahmana should wear reddish yellow (Kasaya), a kshatriya's garment should be manjistha (dyed with madder), and a vaisya should put on yellow garment (charindra) at the time of upanayana. So, it appears that vegetable and stone dyes have been widely used from the very early times. The Brhidaranyak Upanishd suggests that clothes used to be dyed with various colours such as yellow, scarlet and red.

In Epics also we get number of references regarding dyeing industry. It is said that Sita received among other things, garments of various colours, when she was getting married to Rama. The Ramayana mentions the ladies of Ravana clothed in garments of variegated hues. "Kusumba" was one of the prominent dyes used in ancient India. In the Mahabharata we read an uncoloured cloth, when dirty, can be cleansed, but not a piece of cloth that is dyed with black, even so O king ... is the case with sin. A snataka was asked to avoid all dyed dresses and all naturally black cloth. Gautama also forbids him the use of dyed or sumptuous garments. Block printing was also an ancient folk tradition in India. It was certainly known in the days about which the Greek Scholar Arrian wrote and probably in the days of the Mahabharata as well. The dye manufacturer "Rangakara" is also referred in the Ramayana and Mahabharata.

During Buddhist period, dyeing industry was in full fledged way. The Jataka refers to a variety of colours and to garments, rugs and curtains as dyed scarlet, orange etc. Even an umbrella is noted as red coloured. The word rajaka who performed the work of dyeing after having washed the cloth, may be taken to mean both a washerman and a dyer. The Majjhima Nikaya says that before dyeing the cloth it should be washed properly, so that it may absorb the true colour properly. It says –

"A foul and dirty piece of cloth, if dipped by the fuller in blue, yellow, red or pink dye, would take the dye badly, and not come out in a good colour, and that is because of the cloth's impurity.

Mahavagga mentions the techniques of dyeing employed by Bhikkhus and informs that they dyed their clothes with cow dung or with yellow clay. The robes were badly coloured. So the blessed one allowed them to use dye made of roots. Further they were allowed to boil and not a drop of it was put on to the nail. The dye was prepared into the jars and a large trough was used for dyeing the cloth.

The Vinayapapitaka informs us that dyed clothes like blue, light yellow were prohibited for the monks. This suggests that clothes of these colours were used by the laity.

In the Buddhist canons we find many references to coloured cloth. "Some of the Likkhavis were dark, dark in colour and wearing dark clothes and ornaments, some of them were fair in colour and wearing light colours and ornaments, some of them were red in colour and wearing red clothes and ornaments, some of them were white, pale in colour and wearing white coloured clothes and ornaments." Now there is no doubt that these were vegetable dyes employed for the purpose of colouring textile goods.

Dyes were prepared from the roots, trunks and bark of threes, leaves, flowers and fruits. Probably dyes
were made from substances like cinkura (a yellow coloured fragrant plant), Haritala (yellow orpiment), Sarisava (mustard), the flowers of kimsuka (japakusuma), Kumkuma (Saffron), blue lotus, sirisa, flowers and collyrium etc. Dyes were first boiled in order to give a fast colour to clothes. Apart from dyeing clothes, dyes were needed for ladies who often painted their hands and feet. Jatakas also mention various colours such as white (sveta), dark-blue (nila), brown (pingala), yellow (halidda), golden (suvarna), silverly (rajatamaya), red (rattain dagopo), black (kali), madder like (Manjetha) etc. It can be presumed that these colours were utilised for dyeing clothes. Hence we may infer that the art of dyeing was equally developed as weaving in this period.

Jain literature and Bhasya inform us that the coarse cloth was first washed and bleached before dyeing. Soda (Sajjiyakhara) is mentioned as washing agents. Clothes dyed in reddish colour (Kasai) were worn in hot weather. The "Parivrajaks" used to wear clothes dyed in red ochre (geruya). Indeed the cotton tissues and stuffs of India have always been more sought after for the beauty and brilliancy of their natural dyes than for the fineness and softness with which they are interwoven.

Panini also informs about the colours known to the people then. They were raga, red, black, also called jalu, madder (majistha) and orpiment (rochana). It is confirmed that by the time of Panini people were well acquainted with the knowledge of colours. According to Katyayana, powdered potsherds and kardama (black mud from the bottom of pool) also served as dyeing stuffs. Haridra and maharajana are other dyeing agents.

Manu and Milindpanho also refer dyeing and the dyer’s street respectively. These instances clearly indicate the prevalence of dyeing and dyer’s art in this regard. The dyeing of textiles was practised in the Maurya period as evidenced by the Arthasastra which mentions white, pure red, rose-red. and black woolen and fur of one uniform colour such as – black, dark red, grey or of wheat colour or of straw colour. Manjistha or Indian madder is also heard of in the Arthasastra as a red-dye stuff. Kautilya refers to the cultivation of "kusumba" in the royal forms for lowers which were, according to the commentator, productive of colouring materials.

Kautilya in his Arthasastra has given proper time limitation for dyeing or colouring the clothes. The dyers were known as 'Rajaka' and they were paid double in amount as compared to washerman. Megasthenese tells that garments were dyed of bright colours. He also refers to the turban and upper garment worn by people of India and informs that generally they dress in white muslin. There is also a mention of carpets and curtains with blackish circular five spots which reflects the degree of sophistication reached in the field of art and craft.

One of the interesting features gleaned from the classical literature is that they inform about the knowledge of dyeing, which was employed in attributing different colour sheds to the textile goods. Among different sheds of colours the following deserve their mention – Fine - embroidered muslin with purple and golden colour, grey coloured-linen garments with sun shades, white coloured cotton garments, sombre colour. According to Strabo Indians had special predilection for wearing white coloured garments, instead of other coloured garments. This evidence shows the prominence of the white-coloured textile goods over the other known coloured textile garments.

Indigo was an important dye-product of India, exported to western countries, evidenced by Periplus and Pliny. They also refer "black colour is considered sacred to Saturn, yellow to Venus and red to Mars, in
astrological works. Schoff suggests that the mellow was a coarse cotton dyed with a preparation of a variety of the hibicus native in India. This purplish cloth must have corresponded closely to the coarse blue drills still in demand in the African coasts. The most well-known of ancient printed textiles are the Calicoes of Masalia, Madras, Masulipatnam. The beauty of design, colour and fastness of the dye of this ancient printed textiles made them more popular all over the world. The Sangam texts are also replete with references to South Indian dyes. Indigo was commonly used vegetables dye and cloth dyed with Indigo is referred to as "nilikanchchai". Indigo was a plant from whose leaves different shades of blue colours were prepared and was exported to other countries for "seventeen dinaries" per pound. Huge brick dyeing vats pertaining to the first and second centuries have been unearthed from Arikamedu in Pondicherry and Uraliyur in Tiruchirapalli, both known to be important weaving centres from the account of Periplus.

Conclusion
Thus we see that the art of dyeing was as old as human civilization. From historical records, it is learnt that natural colorants were available to people from ancient times. The early vedic Aryans did not practise so much techniques of dyeing because they were a pastoral and migratory people. With the development of civilization weaving of cloth was considered to be a very useful job, for it resulted in material prosperity of the weaver and ensured his sound economic condition. On account of this, cloth was regarded as the embodiment of prosperity and nourishment. People in general wanted to make their clothes beautiful for which it was necessary to make fascinating designs on them. In this regard dyeing played an important role. India's rich natural resources for dyeing played a vital role. Its varied geographical regions and climates provide a huge range of plant fibers and natural dyes for cultivaters, weavers and dyers since the dawn of the civilization upto Maurya period.

Assistant Professor
Department of History and Indian Culture, University of Rajasthan, Jaipur

References
11. Ibid.
17. Ibid.
27. Ibid.
29. Ibid.
33. Ibid, V, 4.32.
34. Ibid, V, 4.38.
35. Ibid, IV, 2.2
37. Ibid, 8.3.97.
38. Ibid, IV, 2.2.
39. Ibid.
40. Agrawal, V.S., India as known to Panini, University of Lucknow, 1953, p.231.
42. Kautilya's Arthasastra (tr.) Shamasasty, p.230.
43. Ibid.
45. Vidyalankara, S., Maurya Samrajaya Ka Itihas, Shri Saraswati Sadan, Mussorie, 1971, p.341-42.
46. Kautilaya Arthasastra 4/1.
49. Ibid.
51. Strabo, 281.
60. Rama Swamy, V., Textiles and Weavers in Medieval South India, Oxford University Press, Madras, 1985, 2.