Chapter V

Textiles under Mughals-

The advent of the Mughal dynasty gave an undeniable boost to production of the up-market textile, as to other craft. Textiles are singled out for mentioned by Abul Fazl, the minister and biographer of Akbar (1556-1605), in his Ain-i-Akbari, compile in the 1590's as a subject in which the emperor took particular interest. Akbar favoured woollen garment - the chosen wear of Sufis (Muslim mystics) - 'from his indifference to everything that is worldly' in preference to the richer stuffs. His penchant for wool is also indicated by the steps he took to improve shawl manufacture; especially in the relation to dyes and width of fabric. Ain-i-Akbari goes into fascinating details on the manner of classifying garments in the imperial wardrobe (toshkhana). The textiles were arranged according to the date of entry which was recorded, sometime with other information, on a label tacked on to the piece (practice which survived in provision toshkhana into the 20th century). Price, colour and weight were also taken into account. Within these boundaries, textile took precedence according to the nature of the day, astrologically auspicious or otherwise on which they were received. A further refinement took into account the colours, of which thirty five are listed in the order of precedence. Abul Fazl further records that imperial workshops had been set up in the cities of Lahore, Agra, Fatehpur Sikri and Ahmedabad, where the best of the local craftsmen were requisitioned to supply the needs of the court.² Persian masters were brought in to teach improved techniques. It is questionable whether the Hindu weaver had much to learn from Persia in this traditional field of cotton and silk weaving. What does seem likely is that, while the shawl industry which Akbar improved may itself have been a foreign import to Kashmir by Muslim craftsmen from Turkistan as late as the 15th century. Whatever the impact of the Persian intervention in the technical field and Ain-i-Akbari states that many categories of textile formerly imported from abroad could then be made in the royal workshops there can be no doubt that by far the greatest transformation took place in the field of design. The finest early Indian textiles were often plain, as with the clear muslins which one acclaimed in the cities of the Roman world. The garment pieces represented in Hindu-Buddhist sculptures and morals tend to be plain and geometrically patterned with chequers, stripes or chevrons, sometimes work in diagonal bands alternating with processions of *hamsas*, (sacred geese) and stylized rosettes.⁴

In medieval India there was hardly a city or town worth the name where no cloth was manufactured. The *Sabha Sr'ngara*, a literary work composed between the sixteenth and seventeenth centuries, mentions as much as 130 kinds of textiles.⁵ The weaver produced four major types of fabrics cotton, silk, woollen and mixed. The first two were the most important. Woollen fabrics were manufactured mostly in the north-western regions close to the Himalayas (mainly shawls and blankets), as well as in the Punjab and Rajasthan.

All textiles produced in the Indian cities may be divided into two groups: (1) Luxury items for the court, nobility and commercial elite and like golden and silver brocade, choicest shawls and silks, fine and superfine muslins, brush-painted cottons, satin, velvet, gauze, etc. These fabrics are most frequent mentioned by the sources like chronicles, bardic poems, travelogues under poetic names like *ab-i ravan* (flowing water), *tanzeb* (body beauty), *meghavana* (cloud over the forest or just dark forest) so on.⁶ (2) It comprised the majority of chintzes, cheap shawls and blankets, all coarse fabrics of cotton, silk, tasar (made of wild silkworm), etc., which the sources define as "cheap," "coarse" and "for the populace."

At the Mughal court, textiles were extraordinarily important. The sub-continent had been known for its cotton production since Roman times, and silk weaving was well established in northern India before the Mughals arrived. Indians were also masters at printing and dyeing a major exporter of fabrics to markets as diverse as Europe and South East Asia. The most exquisite fabrics produced in India stayed at the court and court demands for fabrics of all types drove producers to even greater heights of creativity. Akbar set up royal workshops (karkhanas) patterned on the workshops of the Safavid Persian court, over much of his empire. Specialized karkhanas produced textiles, embroidery, clothing and a whole range of other goods. Court demand for clothing and textiles were so high that the court often ordered goods from independence workshops. Indigenous textiles for the court were produced in Bengal, Gujarat and Kashmir at various Mughal capitals. Some of the most complex textiles ever made were producers during a fifty year period from the late seventeenth century into the early eighteenth century during the reign of Aurangzeb. The complexity of the weaving techniques that produced patkas is difficult to comprehend. Nevertheless, the skill and attention to detail needed to create such intricate double cloth weaves is truly exceptional. The court also is truly exceptional. The court also acquired textiles from many other countries, but for sheer beauty, none of the imports could outshine the local production.

Undoubtedly the Mughal rulers encouraged manufacture of various items which also catered the need of the common public although the evidence on the latter is scanty. In these workshops there were produced arms and ammunition. Carriages and portable litters for the emperor, carpet mattresses, harness for the horses in the imperial stable, beds, tents, clothes, jewellery, gold and silver wares, perfumes, medicines, shawls, turbans and other metals. The articles were supplied to the various government departments at market rates. The profits were shown as the income from karkhanas. The following *karkhanas* were concerned with the weaving of textile fabrics and the needle work connected with them, *farrash khana* (for tents and carpets), *kurkyaraq khana* and *toshak khana* (for dresses and stuffs of all kinds used

for weaving apparel etc.), and the shawl department.¹⁰ In the workshops skilled artists and artisan worked in metal, stone, ivory and other substances, and the upper reaches of art were approached in the work of goldsmiths and painters. Each department was conducted and supervised by master workers of established reputation.¹¹

Bernier testifies his experience. He writes that within the fortress, large halls are seen in many places called *karkhanas* or workshops for the artisans. In one hall the embroiders are busily employed, superintended by a master. In another goldsmiths, in a third painters, in a fourth varnishers in lacquer work, in a fifth, jointers, turners, tailors, and shoe makers; in a sixth, manufacturers of silk, brocade and those fine muslins of which are made turbans, girdles, with golden flowers, drawers worn by females, so delicately fine as frequently to wear out in one night. The article of dress which lasts only a few hours may cost ten or twelve crowns, and even more, when beautifully embroidered *karkhanas* where the workers remain employed the whole day; and in the evening return to their homes. The embroiderer brings up his son as an embroiderer, the son of a goldsmith becomes a goldsmith, and the physician of the city educates his son for a physician. No one marries but in his own trade or profession and this custom is observed almost as rigidly by the Muhammadans as by the Hindus.¹²

During the Mughal period, dresses with gold and silver embroidery were much in fashion with the royalty and the nobility. The treasures of Akbar included a wide range of stitched garments which were embellished with metal embroidery. Bernier while describing Shahjahan's appearance in the court in his accounts wrote, "the king appeared seated upon his throne at the end of the great hall in the most magnificent attire, which was of white and delicately flowered satin with a silk and gold embroidery of fine texture." He also mentioned other stuffs striped with gold and silver and also turbans embroidered with gold.¹³

The following is the list of gold, silk, cotton and woollen stuffs and their prices during Akbar's age (c. 1600 A.D.):

1.	Brocaded velvet from Yazd per piece (length, than)	- 15 to 150 gold muhr
2.	Brocaded velvet from Europe per piece	- 10 to 70 gold muhrs
3.	Brocaded velvet from Gujarat per piece	- 10 to 50 gold <i>muhr</i>
4.	Brocaded velvet from Kashan per piece	- 10 to 40 gold <i>muhr</i>
5.	Brocaded velvet from Herat per piece	- price not known
6.	Brocaded velvet from Lahore per piece	- 10 to 40 gold <i>muhr</i>
7.	Brocaded velvet from Barsah per piece	- 3 to 70 gold muhr
8.	Mutabbaq Brocaded from Khallukh and Turkistan	- 2 to 70 gold muhr
9.	Milak brocade per piece	- 3 to 70 gold muhr
10.	Brocaded from Gujarat per piece	- 4 to 60 gold muhr
11.	Tas brocade from Gujarat per piece	- 1 to 35 gold muhr
12.	Dara'i-baf (brocade silk from Gujarat)	- 2 to 50 gold muhr
13.	Muqayyash (silk with stripes of silver from Gujarat)	- 1 to 20 gold muhr
14.	Sherwani brocade from Gujarat	- 6 to 17 gold muhr
15.	Mushajjar (silk with leaves and branches woven in it)	
	from Europe per gaz	- 1 to 4 gold muhr
16.	Deba (coloured) silk from Europe per gaz	- 1 to 4 gold muhr
17.	Deba silk from yazad per gaz	- 1 to 1 ½ gold <i>muhr</i>
18.	Khara per gaz	- 5 rupiya to 2 muhr

19.	Satin from Chinese Tartary	- price not known		
20.	Nawar from Chinese Tartary	- price not known		
21.	Khazz silk	- price not known		
22.	Tafsila (stuff from Mecca) per gaz	- 15 to 20 rupiya		
23.	Kurtahwar from Gujarat per piece	- 1 to 20 muhr		
24.	Mindil per piece	- 1 to 14 <i>muhr</i>		
25.	Chira (for turbans) per piece	- ½ to 8 muhr		
26.	Dupatta per piece	- 8 to 9 <i>rupiya</i>		
27.	Fotas (loin-bands) per piece	- ½ to 12 muhr		
28.	Counterpanes per piece	- 1 to 20 muhr		
SILK:				
SII	LK:			
SII	Velvet from Europe per <i>gaz</i> (yard)	- 1 to 4 <i>muhr</i>		
		- 1 to 4 muhr - 2 to 4 muhr		
1.	Velvet from Europe per gaz (yard)			
 2. 	Velvet from Europe per gaz (yard) Velvet from Kashan per piece (than)	- 2 to 4 <i>muhr</i>		
 2. 3. 	Velvet from Europe per gaz (yard) Velvet from Kashan per piece (than) Velvet from Yazd per piece	- 2 to 4 muhr - 2 to 4 muhr		
 1. 2. 3. 4. 	Velvet from Europe per gaz (yard) Velvet from Kashan per piece (than) Velvet from Yazd per piece Velvet from Mashhad per piece	- 2 to 4 muhr - 2 to 4 muhr - 2 to 4 muhr		
 1. 2. 3. 4. 5. 	Velvet from Europe per gaz (yard) Velvet from Kashan per piece (than) Velvet from Yazd per piece Velvet from Mashhad per piece Velvet from Herat per piece	- 2 to 4 muhr - 1 ½ to 3 rupiya		
 1. 2. 3. 4. 5. 6. 	Velvet from Europe per gaz (yard) Velvet from Kashan per piece (than) Velvet from Yazd per piece Velvet from Mashhad per piece Velvet from Herat per piece Velvet from Khafi per piece	- 2 to 4 muhr - 2 to 4 muhr - 2 to 4 muhr - 1 ½ to 3 rupiya - 2 to 4 rupiya		

10. Taja-baf per piece - 2 to 30 muhr 11. Dara'i-baf per piece - 2 to 30 muhr 12. Mutabbaq per piece - 1 to 30 muhr 13. Sherwani per piece - 1 ½ to 10 muhr 14. Milak per piece - 1 to 7 muhr 15. Kimkhab from Kabul and Persia per piece - 1 to 5 *muhr* 16. Tawar per piece - 2 rupiya to 2 muhr 17. Khuri per piece - 4 to 10 *rupiya* 18. Mushajjar from Europe per gaz - 2 rupiya to 1 muhr 19. Mushajjar from Yazd per piece - 1 to 2 muhr 20. Satin from Europe per gaz - 2 rupiya to 1 muhr 21. Satin from Herat per piece - 5 rupiya to 2 muhr 22. Khara per gaz - 1 to 6 *rupiya* Sihrang (changing silk, jhilmil) per piece 23. - 1 to 3 *muhr* 24. Qutni per piece - $1\frac{1}{2}$ rupiya to 2 muhr 25. Katan (fine muslin) from Europe per gaz - ½ to 1 *rupiya* 26. Tafta (taffeta) per gaz - ½ to 2 *rupiya* 27. - 4 dam to ½ rupiya Anbari per gaz 28. Dari'i per gaz - 8 dam to 2 rupiya 29. Sitipuri per piece - 6 rupiya to2 muhr

30. Qababand per piece - 6 rupiya to 2 muhr 31. Tat bandpuri per piece - 2 *rupiya* to 1 ½ *muhr* 32. Lah per gaz - 1/3 to 1/7 *rupiya* 33. Misri per piece - ½ to 1 muhr 34. Sar per gaz - 4 to 8 dam 35. Tassar per piece - 1/3 to 2 *rupiya* 36. Plain *kurtawar* satin per *gaz* - ½ to 1 *rupiya* 37. Kapurnur (kapurdhur) per gaz - 5 dam to 1 rupiya 38. - 8 dam to 2 rupiya Alcha per gaz 39. Tafsila per piece - 7 to 12 *rupiya* **Cotton clothes:** 1. Khasa per piece (than) - 3 rupiya to 15 muhr 2. Chautar per piece - 2 rupiya to 9 muhr 3. Malmal per piece - 4 rupiya - 4 rupiya to 5 muhr 4. Tansukh per piece 5. Siri saf per piece - 2 rupiya to 5 muhr Gangajal per piece - 4 rupiya to 5 muhr 6. 7. Bhiraun per piece - 4 rupiya to 4 muhr - 1 to 3 *muhr* 8. Sahan per piece 9. Jhona per piece - 1 rupiya to 1 muhr

10.	Atan per piece	- 2 ½ <i>rupiya</i> to 1 <i>muhr</i>
11.	Asawali per piece	- 1 to 5 <i>muhr</i>
12.	Bafta per piece	- 1½ rupiya to 5 muhr
13.	Muhmudi per piece	- ½ to 3 muhr
14.	Panchtoliya per piece	- 1 to 3 <i>muhr</i>
15.	Jhola per piece	- ½ to 2 ½ muhr
16.	Salu per piece	- 3 rupiya to 2 muhr
17.	Doriya per piece	- 6 rupiya to 2 muhr
18.	Bahadur shahi per piece	- 6 rupiya to 2 muhr
19.	Garba suti per piece	- 1 ½ to 2 muhr
20.	Shela from the Dakhin per piece	- ½ to 2 muhr
21.	Mihirkul per piece	- 3 rupiya to 2 muhr
22.	Mindil per piece	- ½ to 2 muhr
23.	Sarband per piece	- ½ to 2 muhr
24.	Dupatta per piece	- 1 rupiya to 1 muhr
25.	Katancha per piece	- 1 rupiya to 1 muhr
26.	Fota per piece	- ½ to 6 <i>rupiya</i>
27.	Goshpech	- 1 to 2 rupiya
28.	Chhint per gaz	- 2 dam to 1 rupiya
29.	Gazina per piece	- ½ to 1 ½ rupiya
30.	Silahati per gaz	- 2 to 4 <i>dam</i>

Woollen stuffs:

1.	Scarlet broadcloth from turkey,	
	Europe and Portugal, per gaz	- 2½ rupiya to 1 muhr
2.	Scarlet broadcloth from Nagpur and Lahore, per gaz (than)	- 2 rupiya to 1 muhr
3.	Suf-i-Murraba' per piece	- 4 to 15 muhr
4.	Parmnaram per piece	- 2 rupiya to 20 muhr
5.	Chira-yi-paramnaram per piece	- 2 rupiya to 25 muhr
6.	Fota per piece	- ½ to 3 muhr
7.	Jamawar-i-paramnaram per piece	- ½ to 4 muhr
8.	Goshpech per piece	- 1 ½ rupiya to 1 ½ muhr
9.	Sarpech per piece	- ½ to 4 muhr
10.	Aghri per piece	- 7 rupiya to 2 ½ muhr
11.	Parmgarm per piece	- 3 rupiya to 2 ½ muhr
12.	Katas per piece	- 2 ½ rupiya to 10 muhr
13.	Phuk per piece	- 2 ½ to 15 rupiya
14.	Durman per piece	- 2 rupiya to 4 muhr
15.	Patu per piece	- 1 to 10 <i>rupiya</i>
16.	Rewkar per piece	- 2 rupiya to 4 muhr
17.	Misri per piece	- 5 to 50 <i>rupiya</i>
18.	Burd-i-yamani per piece	- 5 to 35 <i>rupiya</i>

19. *Manji Namad* per piece - 2 *rupiya* to 1 *muhr*

20. *Kanpak Namad* per piece - 2 *rupiya* to 1 muhr

21. Takya Namad from Kabul and Persia - price not known

22. Country made *Takya Namad* per piece - 1 ½ to 5 *rupiya*

23. Loin per piece - 14 dam to 4 rupiya

24. Blanket per piece - 10 dam to five rupiya

25. Kashmiri caps per piece - 2 dam to 1 rupiya 14

Kharkhanas under the Mughals:

During Mughal period there were two forms of industrial organizations the artisan system in which the independent artisan supplied his own capital however small, his own material and his own labour in manufacture and the *karkhana* system in which the artisan worked to order in state controlled *karkhana*.

As regards imperial *karkhanas*, the emperors issued instructions to governors, officers and Jagirdars in the provinces to induce the best master artisans and workers in various arts and crafts from all over India to join the *karkhana*. Under Akbar, who took special interest in these *karkhanas* there were possibilities of improved design and workmanship. The manufactured articles were not intended for sale in the market but for meeting the needs of the state in the court and the camp and for distribution among the nobles, constituting the elite, and among the foreign ambassadors for presentation to brother rulers. The *karkhanas* in turn served as radiating centres of skill. Abul Fazl remarks that skilful masters and workmen settled here to teach the people an improved system. The workshops furnished all stuffs made in foreign countries.¹⁵

The royal *karkhanas* were found all over the country. Big centres were found in Kashmir, Lahore, Agra, Ahmedabad, Fatehpur and Burhanpur. The workmanship of Kashmir was renowned. Its *palkis*, bedsheets, trunks, inkstands, boxes, and spoons were used all over India. But its shawls were superb. "Great Plains has taken to manufacture similar shawls in Patna, Agra and Lahore but notwithstanding every possible care they never have the delicate texture and softness of the Kashmir shawls." ¹⁶

The state karkhanas worked on lines of large scale industries in which the raw materials, the tools and implements, and the workshops was provided by the state. The workers who were the real producer were concerned only with wages he received and had nothing to do with the consumption of the goods produced by him. They could not develop into real commercial factories.¹⁷ The karkhanas cared to produce the commodities more according to the taste of the emperors which displayed the skill of the workmen. Though accounts of the costs involved in their production were properly maintained it was not a factor to decide production cost. The state had no dearth of finance and the emperors had no end to their fancy and refinement of taste. Under the circumstances these karkhanas could never develop into commercial industries, on the contrary their existence depended on the choice and taste of the emperors and the state requirements. As a result of this with the decline of the Mughal Empire these *karkhanas* also declined. ¹⁸ The state extended its patronage to manufacture and Lahore was a great centre of handicrafts where "art or crafts was practised. 19 Elaborate arrangements were made for importing raw materials. Cloth was also manufactured by private concerns as for instance shawls and carpets at Lahore. There were more than a thousand workshops of shawls in Lahore only. A kind of shawl called mayan is chiefly woven which consists of silk and wool mixed. As a matter of fact it was not a regular shawl at all because it was used for *chiras* (turbans) and *fotas* (loin bands) etc. ²⁰ Coarse varieties of woollen goods were also produced and 20 kinds of Lahore woollen stuffs were on sale Agra market. The silk industry seems to have been in a flourishing state here as it turned out brocades and velvets which again were on sale in the Agra market. The cotton goods, *ormesins*, *aljaks*, embroidered goods and painted stuffs were specialities of Lahore.²¹ Ships and boats too were built here.²² Agra manufactures too turned out a variety of goods. Amongst the textiles, carpets occupy the most important place though cotton goods too were produced. Silken stuffs and very fine cloth of gold and silver were woven for turban lace or other adornments for women.²³

Beside this, brocaded velvet, silk, cotton cloth and woollen stuffs were also prepared.²⁴ Sialkot, Bajwara and Sultanpur were also famous for embroidery. Silken paper of very fine texture, white, clean and durable was produced at Sialkot. Many kind of *bafta*, *chira*, *fotah*, *sozni*, *adsaka*, table cloth, tray covers, small tents with figure were also manufactured there.

Gujarat a city of the Punjab which had soon grown up into a great industrial town by the time of the Aurangzeb became a great manufacturing centre famous for sword, jandhars and embroidery. To create demand for the home industry Akbar had ordered that "people of certain rank must purchase certain articles". The value of these articles depend upon the cost-lines of the material as well as the artistic skill spent upon them, so these crafts, could not become popular in spite of the active imperial patronage.²⁵

Supplies came not only from private individual weavers and dealers but from private establishments of provincial governors or high officials. This implies that either these high officials maintained private *karkhanas* where the artisans worked under direction with materials supplied by officials themselves or that they engaged in private trade themselves procuring manufactured articles purchased from the market with the help of their agents or brokers.²⁶

In the middle of the seventeenth century the French doctor Bernier saw these factories at work during his visit to the Mughal capital.²⁷ Bernier has left an eye witness elaborated account of these *karkhanas* which he saw the growing considerably during his day in India. There is also available list of *karkhanas* in the official manuals called *dastur-ul-amals* and certain other historical work composed at the end of the seventeenth century. State factories were also maintained in provinces at Burhampur, Aurangabad and Kashmir. The state *karkhanas* manufactured goods to meet the royal demands. State was thus the biggest entrepreneur. The Mughal emperors monopolized the best skilled workers.²⁸

Centres of textiles production:

The manufacture of velvet, embroidered with gold or silver in the royal *karkhana* at Ahmedabad deserves special mention, because beautiful pavilions made up this rich material were sent from this city to the imperial court of Agra. In 1635, Sipahdar Khan who had been newly appointed as viceroy of Gujarat, forwarded to the emperor a magnificent present as *peshkash*²⁹

Silk was an old industry, Akbar evinced great interest in the production of silk and encouraged foreign artisans to improve silk-weaving. Silk yarn was also found in abundance in Kashmir, besides Bengal. The silk of Kasimbazar was yellowish like Persian and Sicilian silk, but when bleached white by the manufacturers it was like Palestinian silk. The industry progressed much under Jahangir and Shahjahan. Peter Mundy found the sale of skein silk to have been a monopoly of the governor and it has to be purchased from the kotwal of Patna. ³⁰ Agra was the metropolis of northern India and that Akbar took interest in the industry, encouraged it so much that the demand in court circles was stimulated considerably and large quantities of silk cloth were requisitioned not only for royal *kharkhanas* and wardrobe but also by nobles and upper classes in the empire. ³¹ In fact Akbar sought to improve the output

by his patronage: the production of foreign stuffs was studied, foreign workmen were encouraged to settle in India, silk spinning was perfected, silk weaving expanded and imperial workshops at Lahore, Agra, Fatehpur, Ahmedabad and Gujarat manufactured the materials that were imported from foreign countries.³² Gujarat was noted in the time of Akbar for the excellence of its cotton and silk goods. Abul Fazl writes of stuffs worked with gold thread and of the kinds *chirah* (a partly coloured cloth for turbans), *fotah*, *jamahwar* (flowered woollen stuff) *khara* (undulated silk cloth), and velvets and stuffs from Turkey, Europe and Persia are also produced. Other sources speak of *kimkhab*, *dopatta*, *badla*, *kurta*, embroidered cloth, *kinara*, *pagri*, and *tazeb* of Gujarat and *khasa* of the Deccan.³³ Ahmadabad was noted for its gold and silver- worked cloths and painted cloths. Pattan in Gujarat manufactured "good cotton cloths", which were carried to "distant parts as gifts of value". The weavers of Broach produced *baftas* which were "famous all over India, the country producing the best cotton in the world."³⁴(Plate No.15)

Khandesh was noted for good cloth stuffs woven there, *siri saf* and bhiram coming from Dharmangaon, Burhanpur was famous its fine white and coloured or painted cloths, belts and gold and silver embroidered turbans. Bidar was reputed for cotton cloths embroidered with gold and silver.³⁵ Malwa ranked next to Gujarat industrially.³⁶ Abul Fazl speaks approvingly of the cloth of the best texture that was woven there, and refers to the white muslin (*mahmudi*) of Sironj, an important centre of manufacture of gold and silver embroidered cloth. It was also reputed for fine see through or transparent muslin (ab-i-Irawan or flowing water) *saIris* for use in the seraglios of the emperor and the nobles.³⁷

Mughal handloom products were of five types:

1 White ordinary cloth, produced in Sind, Bengal and Orissa, and exported to South Asia, the Archipelago.

- 2 Coloured ordinary and plain in texture or calicoes, bafItas or cotton cloths dyed red or blue exported to Mozambique, Abyssinia, the Phillippine Islands, Sumatra and Far East.
- 3. Flowered fabrics worked in gold and silver from Benaras, Ahmadabad, Bihar and Agra and exported to Asian and European countries from both coasts of India.
- 4. Chintz or printed used locally and also exported to Asian and European countries.
- 5. Muslins highly prized export.³⁸

The cotton industry, already well-established in Akbar's time continued to flourish under Jahangir and Shah Jahan. By 1627 the Gujarat export trade in calicoes came to be established. Madras calicoes became a principal item of the eastern coast exports by the end of Shah Jahan's reign. Textiles industries, particularly silk and cotton, required certain associative processes like reeling, bleaching, dyeing, printing.³⁹

Another source of extravagance was dress. It was costly both for quantity and materials-cotton, painted or plain, wool, silk, striped or plain, embroidered velvets and brocade, etc.⁴⁰

Reference made by historian Ali Muhammad Khan in the Mirat-i-Ahmadi is indicative of the high reputation and primacy enjoyed by Gujarat throughout the Mughal period among all the imperial provinces not only because of the fertility of the soil but also by virtue of the excellence of its manufacturers of silk and brocade. In the province of Gujarat 'the beauty and ornament of India, all kinds of fine arts and crafts were flourishing and that the article made in the royal *karkhanas* at Ahmedabad were rich, splendid and lustrous and of proper weight.⁴¹

In the Ain-i-Akbari Abul Fazl speaks of the existence century. He is particularly enthusiastic about the weavers' shop in which master craftsmen produced all sorts of textile. The city of Agra was renowned for its wide range of economic activities which included commerce, in land and foreign made industries and handicraft. Agra remained one of the biggest

commercial centres under the Mughals. According to Sujan Rai, author of the *Khulasat-ut-Tawarikh*, 'article of seven divisions of the globe are bought and sold here'. Monserrate mentions that every necessity of human life could be obtained in the market of Agra including articles which have to be imported from distant corners of Europe.⁴²

Agra was not merely a trading centre. Ample evidences point to its teeming with local industries and flourishing craft. According to Abul Fazl, the masterpieces of workmanship of Agra astonished experienced travellers. 43 In his memoirs Jahangir says: 'Inhabitants of Agra exert themselves greatly in the acquirements of crafts....' It was the textile industry on which the fame of Agra rested chiefly. Cotton, silken and woollen cloth of different types was manufactured in large amount.⁴⁴ Manucci mentions the manufacture of cloth of extreme fineness incorporating gold and silver threads used for turbans and laces and other adornment for women. In addition to textile the manufacture of carpets was an important industry.⁴⁵ Abul Fazl says that Akbar cared more for dress than food, employing skilled tailors for new inventions. His wardrobe was elaborate with 1000 complete suits a year, partly given away as gifts. Even Abul Fazl distributed his wardrobe among his servants every year. The dress of rich Muslims included shalwars or tight trousers, shirts, waist coat, long coats, (qaba), and cotton stuffed vests (arcabi ek) shawls, waist scraves (patka) in winter, turbans and shoes (either leather or embroidered silk). Muslim ladies also used shalwars, shirts, ghagra, dopatta and burga and the rich used qabas and kashmi shawls. Hindu ladies used sari, angiya and also dopatta.46

Craft and craftsmanship:

The period saw the emergence of several regional centres with their distinctive quality. The craftsmen who dispered to the provincial courts, got a new boost by the introduction of *riyasati karkhanas* which replaced the early court *karkhana*. The system of *karkhanas* which

was introduced during the Mughal period was a vital economic system and after a lapse of time, this becomes rejuvenated in the provincial court under the *riyasati karkhanas* system. The *zardozi* craftsmen working at Delhi and Agra at this stage shifted to the provincial centres. Thus while the traditional *karkhanas* system was losing its roots in Delhi, it was gaining its strength in the provincial areas.⁴⁷

The craft was in existence in the pre-Islamic period. During the sultanate and Mughal periods due to patronage extended by the rulers, the craft seems to have established firm roots in India .but the fall of the Mughal Empire resulted complete dislocation of the craft tradition of the craft tradition, forcing it to shift its activities from Delhi and Agra to several provincial courts. During this period new centres like Hyderabad, Jaipur, Patiala, Rampur, Bhopal and Banaras emerged as active centres of this craft.⁴⁸

Among the most important centres of cloth printing the Gujarat towns and cities were of special significance. The very process, as practised in the seventeenth century, was described in detail by the French businessmen George Roques. The wooden blocks used by the printers were of three sorts (1) for the border with carved edges; (2) for the background – plain; and (3) various kinds for various pattern details.⁴⁹

The dyeing ingredients used by the Indian dyers and printers were of extremely high quality. To learn the Indian dyeing recipes Father Courdoux, a French Jesuit chemist, specially visited the country in the 40s of the eighteenth century. From his letters, Roques' book and other sources it is known that for making dyestuffs Indian dyers used juice and peel of lemon, lime, pomegranate, myrobalan, as well as milk, flour, alum, ochre, antimony, alkaline solutions, copper and iron vitriol, , indigo, saffron, sandal, safflower, etc.⁵⁰

Throughout medieval period the list of dyeing stuffs as wells the number of chemical agents and operation expanded: in the earlier period organic dyes prevailed, later on mineral and chemical dyestuffs began to play an important role; mordants came into use.⁵¹

In the technology of the textile production as spread in medieval Indian cities and towns the distinction between luxury goods and common demands goods is noticeable. The former kind of manufacture was distinguished by special talent, artistic taste and dexterity of the craftsmen, while the latter-by a higher level of technology and productivity. As it was discussed above, the manufacture of choice fabrics was much more labour-and timeconsuming-it required not charkha but spindle, not printing but brush painting, more complicated types of bleaching and dyeing. To make a simple sari a weaver had to work between 6 and 7 days; for a choice sari a month or more was needed. In Sindh a weaver of lungi (a local variety of a high quality cloth of mixed cotton and silk) could weave about 15 inches a day only.⁵² The labour required for manufacturing different type of fabrics can be judged by the cloth prices mentioned. Mirza Nathan, 17th century Mughal General, bought in Malda a piece of Muslim (Malda was famous for his kind of clothes) for Rs. 4000. 53 According to Abul Fazl, chintz was dozens of times cheaper than even the simplest muslins and silk, not to mention velvet, gauze and brocade. ⁵⁴ Medieval period, was, not a "dark period" for the Indian textile technology. The list of Medieval innovation included charkha, horizontal loom with headdles and threadles, draw-loom, block-printing, silk-twisting implements, ribbon-loom, vertical-loom for carpet-making, new dyeing ingredients. It was noteworthy that in the tenth-thirteen century textile occupied a rather modest place in the Indian export. The travelogues of this period the list of goods exported from India with species, scents, precious stones, pearls, coral, herbs, elephant tusk, etc., The eighteenth century sources also inform about nurdeah who stretched and measured cloth, raffugar who darned the small holes and knots on the clothes and dagh dhobi whose job was to remove all

the stains. Apart from the abovementioned profession other craftsmen also participated in the textile production: *naggaash* was an artist who created on paper the pattern for future fabric; talimguru had to sort the threads colour wise and make the interweaving scheme, bataya's work was to interweave silk and golden thread; zarbaf was a brocade-maker; there were also embroiderers like cikandoz, zardoz Cotton was probably produced in every part of the country both for local consumption and distant markets. Contemporary sources mentioned variety of cotton fabrics, 150 names occur in the first ten years of the English factory records13. There were variety of names for different types of textiles. Some were named after their place of origin, e.g., dariabadi, khairabadi etc., the east coast variety of percalles (parkalas), 'moorees' (muhris) and 'salempores'. Most varieties were produced in most places, longcloth came mainly from southern Coromandel and northern India, muslin from Deccan and Bengal (the finest from the district of Dacca), the best painted cloth from southern Coromandel and fabrics of mixed cotton and silk from Gujarat. The export varieties came mainly from four regions, the Indus Plain including Punjab and Sind, Gujarat and the west coast as far south as Kabul, the Coromandel Coast, both south and north, and Bengal. 56 Internal and external trade, royal workshop and private manufactories provided the requirements of the haremsara. Silk was imported from many foreign countries like China and Persia as well as produced indigenously.⁵⁷ Bernier says that the consumption of fine cloths of gold, brocades, silk, embroideries, pearls, musk, amber and sweet essence in the seraglio "is greater than can be convinced." ⁵⁸ Manucci and Bernier talk in general terms, but Abul Fazl gives specific names of cottons, silk and woollen fabrics, Indian as well as those imported from "Turkey, Europe and Portugal." The well-known fabrics were Satin, Atlas, Kimkhab, Khatan, Tafta, Ambari, Tasser, etc. Plain and brocaded velvet (makhmal) was imported from Europe, Sashan, Yazd, Mashad, Herat and many other places.⁵⁹ By the time of Shah Jahan, more and more foreign stuff had begun to be imported.

Quilts and coverlets, bed sheet and pillow, were made at home. Silk quilts of Satgaon were famous. These were also prepared at Patna, Qasim Bazar, Murshidabad and Orissa. Banaras silk and embroidered silk fabrics were rightly renowned. Terry says that the country, "yields good store of silk which they weave curiously, sometimes mingled with silver or gold. They make velvets and satin taffetoss" fine cotton cloth was manufactured at Delhi, Lahore, Agra, Patna, Banaras, Burhanpur, Dacca and many other places. Dacca produced prodigious quality of fine white cloth and silken stuffs. 10

Clothes, embroideries, carpets, shoes, vanity boxes, items of furniture and score of other nick-nack prepared in the royal karkhanas and imported from abroad. Europeon ambassadors, traders and visitors were happy to provide large and small ink glasses, gold and silver laces, fine scarlet and green broad cloths and several articles of Chinese and Japanese workmanship. The royal manufactories or karkhanas were spread all over the country from Kashmir, Lahore and Agra to Ahmedabad, Fatehpur and Burhanpur. The workmanship of Kashmir was renowned. Its palkis, bedsheets, trunks, inkstands, boxes and spoon were used all over India.⁶² But its shawl were superb. "Great plains have been taken to manufacture similar shawls in Patna, Agra and Lahore but notwithstanding every possible care, they never have the delicate texture and softness of the Kashmir shawl." Kashmir, Fatehpur and Jaunpur carpets were also famous. Woollen carpets or *galins* were imported from Iran and Central Asia. Thick carpets were called *Pari* while *shatranji* carpets were both woollen and cotton. In short, there were "karkhanas in large halls seen in many places. In one hall (work) embroiderers, in the other goldsmiths, painters, varnishers, lacquer worker, joiners, tailors, turners, shoemakers, (makers of) silk, brocade and those fine muslins of which are made by turbans, girdles with golden flowers and drawers worn by females. So dedicatedly fine as to wear out in one night." ⁶³

With all these items of dress and decoration, the harem-ladies knew how to live in sensual luxury, and the Mughal kings and noble knew how to provide them with this luxury. Young ladies in neck bottom dresses, having their hands painted with delicate designs of henna, laughing like wayward birds, one with the spirit of feminist, togetherness and a feeling of camaraderie. Many Mughals miniatures having recaptured the sensuous and appealing charm that have remained the hall mark of Indian ideal of feminine dresses and beauty.⁶⁴

India witnessed the beginning of a mercantile economy during the Mughal period. During Akbar's reign, Ahmedabad became a thriving centre of trade in textiles and by some accounts was one of the largest cities in the world at that time. Mughal India had a bigger industry than any other pre-colonial country of the world at that time. It was an exporter of a range of products including cotton textiles and silks.⁶⁵

Bengal textiles manufacturers were renowned around the world, however for their finely woven goods, especially muslins and other delicate cloths. The muslins were sent from Bengal to meet the substantial courtly demand in Mughal times. ⁶⁶ While cloth painting and printing were not done in Bengal, embroidery was widespread, and was especially important in Bengal's trade from the mid sixteenth to seventeenth century. The fine cloths of the region were elaborately finished in number of ways. In some cases, the cloth was given a fine sheen with smooth chunk shells which were rubbed over the fabric.⁶⁷

The growing trade in calicoes and the other fabrics not only provided necessary impetus for popularising the weaving industry but also gave birth to a number of ancillary trades in this regard may be made of cotton carding, spinning, thread processing, bleaching, dying, embroidering with gold and silver threads.⁶⁸

The various categories of handicraft producers residing in towns were firstly weaver (*Julaha*) of cotton, silk and woollen clothes and those who plied allied industry, carders (*dhuhiya*),

spinners (*Katera*), processors of thread (*koli*), painters (*chitari*), embroiderers (*patwa*), dyers (*rangrez*), bleachers, workers in gold and silver thread and weaver of rough fabric.⁶⁹

Later on this technique spread in Europe from India is attested by the fact that the English word "chintz", like, for instance, its Russian counterpart, citets are both derived from the Hindi chint. The Indian chintzes had a tremendous market in Europe. For Moliere's Monsieur Jourdian to get a chintzes robe was equal to entry to the most aristocratic society. In 1680 the British weavers ransacked the London headquarters of the East India Company, as the English textiles were unable to compete with the Indian fabrics, especially chintzes. The seventeenth and eighteenth century's mercantilist works echo the widespread complaint against the Indian fabrics that ruin the British weavers.⁷⁰

Techniques of dress embroidering:

Zardozi as a technique is understood to be a distinctive style of stitching as it differs from the traditions of embroidery like *kantha*, *kasuti*, *phulkari*, etc. where the movement of the threaded needle is guided by a variety of stitches. In other embroideries, silk, cotton or woollen threads are used, which are pliable enough to move freely. However, in *zardozi*, the thread only acts as binding medium, whereas the body of the design is completed by laying varieties of metallic threads in several shapes and forms along with beads, stones, beetle wings, etc. The whole process is more indicative of applique rather than embroidery. Thus it may be called metal applique. This this is further corroborated by the fact that *zardozi* always gets payments for amount of wire stitched on the cloth by weight. They never used the work *kadai*, the Hindi word for embroidery; instead refer to it as *salme sitare ki kam ka takna* which means lying of *salma*, *sitara* on the body of the fabric. 71

During the Mughal period, the court costumes of the Mughals were all made in *zardozi* work.

Consequently, there grew up important centre of this craft, as the centre of court *karkhana*

shifted with the change in capital by different Mughal emperors. Akbar's court was at Agra, which was shifted to Delhi by Shahjahan, the epicentres of the Mughal culture. Paut court-run workshops were organised in several other places to cater to the requirement of the court, small or big. The Mughal paintings from the time of Akbar provided an illuminating picture of *zardozi* work prevalent during the time. The Ain-i-Akbari gives the rich account of *zardozi* work in various items, particularly the shawls. The text elaborately speaks about the production of the embroideries under the *karkhana* system. It further refers to people generally wearing tus shawls without altering its natural colour. His majesty had them dyed. The emperor paid much attention to craftsmanship and the genuineness of the materials. He took special care that pure gold and silver was used. All embedded textured fabrics used to give the finished products a subtle aura. All embedded textured fabrics used to

Besides garments, the Mughals adopted this craft in various other items. One of the most important objects which seem to have been decorated with *zardozi* work was the tent material. In describing the camp furnishing of the tents Abul Fazl commented about various types of tent structures viz. *Chubin*, *rawati*, *do*-ashiyana *manzil*, *zarhindoz*, *ajaibi*, *mandal shamiyana*, all having inner lining of velvet brocade. It is to be noted that he did not specifically mention gold embroidery, but he referred to *zardozi* tent in some places in connection with the servants. It is thus clear that the temporary structures for the emperors also had works in gold embroidery on the inner side. Looking at the rich assemblage of *zardozi* material, and on the basis of information giving Akbar's patronage, there is no doubt that the *zardozi* craft reached its highest peak during this time. Plate No.16

Monserrate also corroborates this view. It is said that the emperor use to wear garments of silk, beautifully embroidered in gold pearls and gold jewellery. The list of the official records presenting the state of things at the death of Akbar was included in De Laet Manrique's Itinerario Itenertents. These were published in 1531and 1640. Abdul Aziz reproducing these

facts states that there were 5,000,000 items with gold and silver decorations, which included tents, *kanats* etc. decorated with gold and silver covering; covering clothes for horses and elephants, cloak for every kind etc. Also various kinds of coats and equestrian ornaments, worked and embroidered with gold, silver and precious stones, including the arms borne and insignia carried before the imperial persons and those of the royal house.⁷⁶

The *zardozi* embroidery which was firmly established by Akbar in the large production system, continued to maintain its excellence during the regime of Jahangir.⁷⁷

The author of the Khulasat-ut-tawarikh while giving an account of craft and industries of different provinces writes, "Agra was famous for its gold and silver embroidery on turbans and Gujarat for stuffs for stuffs of gold embroidered velvet.⁷⁸

Shahjahan's period may be called the golden period in regard to sophistication of this craft. With the shifting of his political seat from Agra to Delhi, the court based *karkhanas* spread up in and around Delhi; the *karkhanas* then worked in full swing, and the craftsmen got patronage from all sections of rich people. As the seat of Mughal rule was shifted to Delhi, a large number of craftsmen moved to Delhi from Agra as well as other parts of the country.⁷⁹

But the period of Aurangzeb shows a turning point in *zardozi* work. Due to incessant warfare, royal resources became scare. Beside, Aurangzeb was in favour of austere living. The court no longer patronised this art and as a result many craftsmen left the Mughal metropolis and took shelter around provincial courts.⁸⁰

Reference made by historian Ali Muhammad khan in the Mirat-i-Ahmadi is indicative of the high reputation and primacy enjoyed by Gujarat throughout the Mughal period among all the Imperial provinces not only because of the fertility of the soil but also by virtue of the excellence of its manufacturers of silk and brocades. In the province of Gujarat the beauty and ornament of India, all kinds of fine arts and crafts were flourishing and that the articles

made in the royal *karkhanas* at Ahmedabad were rich, splendid and lustrous and of proper weight.⁸¹

In the Ain-i-Akbari Abul Fazl speaks of the existence of various state workshops in Akbar's palace at Agra at the end of the sixteenth century.⁸²

The Mughal ladies too took initiatives in the development of textiles industry. The Mughal ladies contributed to the flourishing economy of Mughal age. The needs and requirement of the Mughal ladies gave an impetus to many industries, to fulfil certain requirements of their goods were brought from foreign lands. Starting with textiles as we know the harem ladies dressed in the costliest clothes made from the finest material whether of cotton silk or wool. The muslins called *Shabnam* were famous as Dhaka *Malmal* and came from Dhaka. The great love of Mughal ladies for silk especially in making their dresses resulted in a lot of silk being imported from foreign lands and also many parts of the country like Banaras, Bengal and Orissa. Hur Jahan Begum took personal interest in textiles manufacturing, during her times and because of her encouragement in Agra there seems to have existed a whole market called Kinari Bazar where the craftsmen were engaged in the manufacture of the famous *Kimkhab* textile. The dress making and jewellery making industries got a boost under her encouragement and innovations. More and more skilled craftsmen got employed in this industrial units.

Textiles seem to be a flourishing trade in Mughal India. Almost all the emperors of the Mughal dynasty gave special attention for the development of it. The Mughal rulers and their royal ladies have a passion for wearing costliest and rarest materials. The textiles were brought almost from every corners of the world to fulfil their need.

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