ABSTRACT OF THESIS

TEXTILE CRAFTS AND TRADE IN INDIA IN THE 16TH AND 17TH CENTURIES

K.A.S.M. Ishrat Alam

The textile industry constituted the most important sector of Indian economy, after agriculture during the 16th and 17th centuries. Within pre-colonial India, different regions had become known for certain degree of specialization based on local supplies, income levels, inherited artisanal skills. Because of the importance of textile exports, much attention was paid in contemporary European commercial literature, especially in Dutch and English, to the different kinds of textiles, their production centres and various other aspects of textile manufacture. But there exists a significant amount of Persian and indigenous source material as well.

Modern authors, beginning with Moreland have depended heavily on the archives of the English East India Company (Factory Records) and the accounts of European travellers. Moreland also pioneered the scrutiny of the Dutch East India Company i.e. (V.O.C.) records, which are much richer than those of English Company. Hence it is not surprising that of late there has been an increasing tendency to tap Dutch sources. In a measure this thesis continues this tendency and much Dutch archival material, hitherto either not noticed or noticed for purposes other than textile history has been
utilised here. Simultaneously, Persian texts and indigenous sources have also been explored.

The present thesis comprises three broad sections viz. A. The Making of Textiles, B-Surface Treatment of Textiles, and C. Commercial Organization and Trade studied Regionally.

In the Section A, we have focussed broadly on the technology of the medieval textile craft. Obviously, strict lines in point of time are hard to lay down, and identification of particular tools or techniques as specifically medieval can only be attempted unless one looks at evidence from previous period of Indian history as well. On the other hand, certain medieval techniques can only be understood from more recent descriptions of the ‘traditional’ craft. Often our material here comes from the most miscellaneous sources, to be located in places where the description is often unintentional or incidental. Records have to be supplemented by products of graphic art (the Ajanta frescoes, Mughal miniatures and modern drawings).

In addition to these, standard works on history of technology of Europe, Iran and China have been consulted, for purposes of comparison with other cultures and for descriptions and interpretations of the history of individual techniques and devices.

In the thesis an attempt is made to analyse the extent of influence of diffusion on Indian techniques as well as establish the techniques that show evidence of indigenous origins. The possibility is examined of pace and
quantum of particular technological change increasing in the medieval period (1200-1750). This has necessitated a scrutiny of ancient textile technology. We have found evidence to confirm Needham's speculation that cotton gin was invented in India. Of similar indigenous origin has been the bow-string device for cotton-carding. On the other hand, we offer evidence that the spinning wheel arrived in India only in the fourteenth century, and that certain attachments, like its handle came only in the Mughal period. In weaving, the foot-pedals were introduced into the loom only in the fifteenth century. Vertical loom appeared by eleventh century AD. But the complex drawloom might have arrived possibly in the 13th century through Iran, but did not become common in Mughal India. Indian weavers could achieve patterns with simple looms by the 'patola' and jamdani techniques. In the process we have also dealt with the structural deficiencies of Indian horizontal loom. Shawl weaving and carpet weaving similarly were diffused in medieval times. Akbar took very keen interest in spreading them by opening imperial karkhanas in many places of the the Mughal empire. A weaving of carpet on vertical loom was subsequently introduced into the Southern India by the 16th century A.D.

In the second chapter attempt has been made to trace the history of sericulture in India. From our investigation of Sanskrit and Chinese sources we have found that sericulture was not practised in India in ancient times. It was practised in Kashmir and Bengal by the 15th century. Even as late as
16th century, Abul Fazl, informs us that eggs of silk worms were imported from Gilgit and Little Tibet. Abul Fazl also reports that Kumaun in the Himalaya also became familiar with sericulture. By 17th century it had reached Sind. So far southern India is concerned only some abortive efforts were made to introduce mulberry cultivation at Nagapatnam in the 17th century.

Besides Sericulture, we have also discussed the Saturnidae group of silks.

Our third chapter deals with wool production and felt-making; and the fourth chapter deals with hemp and preparation of sailcloth from hemp. We here discuss the need for distinguishing hemp from jute in our sources.

We begin our Section B, Surface Treatment of Textiles, with Chapter 5 dealing with ‘Dyes and Dyeing’. Indigo being the primary dyeing agent, we have devoted much space to its history and methods of preparation. The best indigo in India grew in the Bayana tract and second best in quality at Sarkhej near Ahmadabad. The accounts of Pelsaert, Finch, Mundy and Tavernier have enabled us to describe in fair detail the indigo manufacturing process in the northern indigo tract. Indigo vats were very important for producing indigo under “wet leaf” process. Archaeological finds indicate that the indigo vats were now a clearly medieval innovation. On the Sarkhej tract the accounts of Pieter van den Broeke, W. Geleynssen de Jongh and
Mattheus van Heck have helped us to see how the process of manufacture differed here from those of the Bayana tract.

Unlike northern India and western India, in peninsular India, indigo was produced in earthen pots and not indigo vats till as late as 17th century, a most curious continuance of an earlier inefficient technology clearly for want of capital. Another interesting method of indigo manufacture was reported by Joseph Salbancke (1609) who refers to “Dry Leaf Process.” He refers to use of boilers at Bayana, an early anticipation of later ‘plantation’ practice.

Chapter 6 deals with painting on cotton cloth. Hendrik Adrian van Rheede’s account (1688) is very helpful in explaining how the painting of cloth was undertaken.

Economically much more important was Cotton printing, discussed in chapter 7. Our evidence shows it was invented in China as early as second century A.D. and possibly from there it arrived in India by 9th –10th century A.D. During 16th-17th century India was a major producer of block print textiles.

In the eighth chapter we deal with embroidery techniques. Embroidery on wooden frame (karchob) was apparently a late comer.

Section C is concerned with production organisation, commerce, credit and trade. It deals with organization of production and trade. The regional studies that have appeared so far, important as they are, have been
largely confined to Gujarat, Coromandel and Bengal. The thesis takes account of this work and tries to survey regional features not yet fully studied. Thus Chapter 9 examines the relationship evolving between the V.O.C. and the artisans of South India on the basis of the V.O.C. records. We find that here textile manufacture was not undertaken by weavers alone as a domestic craft. We are told by our documents that a prominent group of merchants had turned to weaving, painting and printing cloth.

In the Chapter 10 we compare the relative position of Gujarat and Coromandel as two important exporting regions and the composition of their exports. We have tried to study the relative position of various items of textile trade within a host of commodities.

Chapter 11 deals with organization of commerce at Malda and the following one with organisation of commerce in Awadh, two important regions which were twin hinterlands of western and southern respectively exporting regions. They help us in understanding the organisation of production and trade in the hinterland, an aspect largely ignored by studies of seaborne commerce.

In the Conclusion, we relate technology to various forms of labour. The textile crafts were carried on mostly in villages upto the stage of spinning. Until the sixteenth century, spinners seem largely to have been confined to villages. However, this is not to suggest that spinners were not to be found in urban centres. The introduction of the spinning wheel (14th
century) possibly facilitated the rise of specialised spinners in towns along with their village based counterparts. Spinning was mainly pursued by women of both low as well as high castes, being a marked feature of the gender-division of labour. Women of Brahman castes spun yarn in Bengal and Bihar and presumably other parts of north India, but, in contrast, Brahman women in southern India would not stoop to practise the craft.

In the subsection on ‘Social Framework’, we have touched upon the caste system’s influence on textile artisans. It seems that there was no rigid barrier to adoption or adaptation in textile industry. Then, there are instances of simple “skill compensation.” By 16th-17th centuries, there seems to have been an abundance of skilled textile labour created by centuries of commodity or market oriented production. This was possibly a major factor responsible for the development of extreme specialization and multiplicity of sub-crafts. The caste system presumably also contributed to the evolution of craft specialization in the textile industry. Babur, Terry, Pelsaert, W. Geleynsesen de Jongh, and P.V.D.B.’s accounts attest to this in unequivocal terms. However, the extent of caste determinism should not be over-emphasised. In practice, the artisans based caste system faced a challenge from the mass of ordinary or unskilled people who apparently formed a reserve, from amongst whom new classes of skilled professions might emerge. Secondly, there is no evidence to prove that weavers were eternally fixed in their attachment to a single professions or skill. There are instances
of occupational mobility. Therefore, while it is admitted that caste system was a social reality, but it was scarcely an absolute obstacle to the mobility of labour.

The domestic form largely dominated the sphere of production, but merchant capital also played an important role. The main lever of the merchant’s control over weavers was through the system of advances, mostly in the form of money, foodgrain or work-material. It ensured regular supplies answering to given specifications. There were also instances of preindustrial manufactories organized by the Court, nobility and substantial merchants. The Dutch East India Company also attempted to organise production of silk yarn, bleaching and dyeing of cotton cloth on these lines. The condition of artisans working in these manufactories were similar to those of ordinary artisans, with the difference perhaps that, rather than sellers on the market, they were nearer to wage-worker.

A substantial expansion of textile production can, perhaps, be attributed to Mughal times. The large urban market in the Mughal Empire and European trade were presumably the twin factors responsible for such an expansion. We have taken into account the high share of expenditure on textiles in the imperial household. As much as Rs.4,43,305 was spent on furnishing Imperial wardrobe in 1595-6. Even this amount was not reflective of all expenditure. The next important segment of demand for luxury textiles was generated by the nobles of the empire. The middle class
and poorer sections of the urban population also created demand for ordinary textiles. This is also attested by the depictions of poorer people in the paintings of the 16th-17th centuries. Even poorer artisans, are depicted fairly well attired.

The textile production increased also owing to the demand for Indian textiles in overseas markets in Europe, Southeastern Asia and Africa. Evil as it was the Trans-Atlantic slave trade as it grew in the 17th and 18th centuries, increased the demand for Indian chintz, fancied by chiefs and warriors engaged by the European slave-traders to hunt for slaves.

Such an enormous expansion in the demand for textiles of Indian origin doubtless led to increase of employment in textile crafts. A large section of population earned their livelihood by producing cloth and satisfying a growing demand.