Splendours of Cotton: An Overview of its Trade and Production in early India

Suchandra Ghosh
Department of Ancient Indian History & Culture
University of Calcutta
Introduction

- India has been at the centre of Indian Ocean trade in textiles for a long period of time.
- While all kinds of commodities, including precious metals, have figured in the Indian Ocean trade, textiles both for mass as well as elite consumption have always had a very special place, both qualitatively, as well as quantitatively, in this trade.
- In the genre of textiles this presentation would focus on cotton as an important item of export.
Cotton trees of India excited the admiration of Greek historians. Herodotus writes, "There are trees which grow wild, the fruit of which is a wool exceeding in beauty and goodness that of sheep. The Indians make their clothes of this tree wool."

Alexander’s troops, it is claimed, stuffed their mattresses with cotton wool.

According to Nearchus, from a distance the cotton plantations on the plains of North-West India looked like neatly laid out vineyards.
The earliest archaeologically attested find of cotton in South Asia is the mineralized remains of cotton string (?) in a Neolithic copper bead at Mehrgarh on the Kachi Plain in Baluchistan, dating to c. 6000-5500 BCE.

The Kachi Plain may in fact have been the location where cotton was first domesticated in South Asia. The flourishing urban communities of the Indus Valley during the Harappan Period (2600-1700 BCE) were cotton-dependent, as mineralized finds of cotton suggests.
The best overview of the geography of the Early Historic cotton industry of India is offered by the *Periplus of the Erythraean Sea*. That Indian bale of cotton and manufactured fabrics were an important item of trade with the Eastern Roman empire is amply attested from the text, written by an anonymous author around the middle of the first millennium CE.

Each port acted as a market and clearing house for the cotton grown, spun and woven in its hinterland, and in some cases much further afield. In the northwest Barygaza drew upon the region of Ariake (in Madya Pradesh and probably Gujarat) The towns of Minnagara (the regional capital of Ariake) and Ozene (Ujjain) are specifically mentioned (*PME* 41, 48) as cotton suppliers. *Further south, cotton cloth from* Tagara in the Deccan was carted overland for export through Barygaza (*PME*51).
The Malabar ports of Muziris in the Cheran kingdom and Nelkynda in Pandya did not have the benefit of cotton-growing countryside close by but they actively promoted transit trade. Among the wares was cotton cloth from the district of Argaru (around Uraiyur in the Chola kingdom) (PME 59). Local Indian traders also delivered cotton cloth from further places like from Sri Lanka (PME 61), from Masalia (Masulipatnam) (PME 62) on the east coast, and from the Gange region (PME 63) on the Bay of Bengal.

The author of the Periplus had a keen eye for cloth quality. He employed two virtual synonyms in Greek for cotton cloth: othonion and sindon. Othonion, widely available, is often described as ‘ordinary’ and seems to be less fine than sindon, the term he uses for higher-grade fabrics. Ariake in the north-west (including Gujarat) is evidently a mass-producer of both othonia and sindones, while Sri Lanka and Masalia (in Andhra Pradesh) only export sindones, as does Argaru (Uraiyur) in Chola (PME 59;)

The highest praise is reserved for cottons from the Ganges region of Bengal – which had a long journey by land or sea to reach the Roman shippers. The text mentions the Ganges as the greatest river of India. Cotton garments of the very finest quality, the so called Gangetic. (PME 60)
Cotton in early historic India according to the Periplus of the Erythraean Sea

Courtesy: J.P. Wild
Principal ports of trade
Indian cotton textiles at Berenike:

- The information gathered from Periplus is supported by presence of cotton cloth in Berenike (an important sea port in Red sea) . It is a reasonable working hypothesis that the 1060 fragments of cotton textiles recorded by F and J.P. Wild and (about one-third of the total number of fragments from the site) came from India.

- Thus the Red Sea route from Barygaza popular during the time of trade with the Roman Empire was functioning as a route also for export of cotton.

- Here fragments of Indian cotton have been identified from different levels suggesting a continuity in cotton trade.
Location of Berenike
Cotton Pile

Courtesy: J.P. Wild
Check Cotton, Berenike

Courtesy: J.P. Wild
The world of Indian Ocean

Fig. 1: The world of the Indian Ocean: ports, cotton trading centres and selected find spots of textiles (drawing by J. P. Wild).
We notice that in around 3rd to 6th century CE (post Roman trade period), cotton trade continued. One fragment of “resist dyed” cotton from a trash deposit in Berenike’s late Roman residential quarter has been found. Interestingly exactly same type of scraps has been found along the Silk Road in Western China. Similar designs appear in paintings depicting wall hangings and other decorations in Ajanta paintings dated to 5th century CE. Thus this cloth was mass produced in India and was exported to Roman Egypt, Central Asia and China.

The larger Aurangabad/Ajanta area is famous for the production of cotton as it is covered by regar also known as black cotton soil. Western India must have been a hub for the production of cotton textiles destined to both Indian Ocean markets as well as to the Silk Road. That cotton fabrics were part of the local material culture and were produced in the area is clearly understood by the variety of textiles represented in the Ajanta paintings. The preparation of cotton is illustrated in an Ajanta painting as shown by D.Schlingloff.
India sold cotton cloth to China at an early but undetermined date in the Common Era, and that certain kinds of Indian cotton cloth continued to be sold in China well after the Chinese cultivation of cotton and production of cotton cloth blossomed in the late thirteenth and early fourteenth centuries. Put another way, silk cloth production originated in China and the Indians continued to produce certain varieties of cotton that always found a market in China.

The knowledge of silk and cotton cultivation was transmitted to India and China, respectively, both via the so-called 'Silk Road' routes of Central Asia as well as the southeast overland route that linked Szechwuan and the Chinese heartland with Myanmar, Assam, Bengal and the Ganges valley.
The Chinese consumption of cotton cloth is rarely discussed in the surveys of Asian trade. However, what was the 'Silk Road' for Chinese silk was, in the reverse direction, a 'Cotton Road'. Cotton and cotton cloth, first reached territories where China periodically exercised suzerainty in the present-day Xinjiang. Fragments of cotton cloth with an Indian design dating to the eastern or later Han have been found in the ruins of a site near Niya, east of Khotan, on the southern section of the silk road.

It seems likely from the extant fragmentary evidence that it was aristocratic Chinese consumers who sought out certain especially fine varieties of cotton cloth. While the tribute of inferior Gansu cotton took place, T'ang sources indicate that cotton was an expensive foreign product and that most Chinese monks who wished to follow strict vinaya texts requiring them to wear cotton found it too expensive.

A recent study by Stephen F.Dale shows that Indian cotton and Chinese silk were probably the principal manufactured goods exchanged between these civilizations.
Kashgarh - Taklamakan - Dunhuang
T'ang era texts also extol the 'sunrise clouds of morning' or 'rosy cotton' beautifully printed fine cloth that came from the states of Southeast Asia. Myanmarese Buddhists, like Chinese Buddhist monks, were said to wear cotton cloth because of their Buddhist non-violent beliefs, which forbade them to use silkworms and thus injure living things.

At least some of the cotton cloth that T'ang writers praised probably came from India, for Indian musicians who played in Xian (Ch'ang-an) are described in at least one source as being clothed in 'dawn-flushed cotton'.

Vinaya texts’ prescription for use of cotton cloth was in some way responsible for the growing demand for cotton in most of the Southeast Asian countries which were predominantly Buddhist.
Apart from archaeological findings, paintings, textual references and other sources pointing towards cotton production, land grant charters from regions of the eastern sector of the Indian Ocean could also help in understanding cotton trade.

Weaver as a community is represented in copper-plate charters from regions across the eastern sea-board. Here we shall take the case of Bhaumakara dynasty of Orissa (late 8th century CE - 10th century CE).
In these copper-plates, in most cases we have regular mention of tantuvaya/tantravaya. Here they are referred to as a part of the land which has been donated. What is important to note that these were not rich cotton growing area like the western Deccan. Then their raw material must have come from regions of Andhra or would come from western Deccan, the cotton producing area.

We know of the trans-peninsular land route connecting eastern Deccan to Ter, Paithan and Bharuch. Taxes interpreted as levy on cotton bales could be seen from inscriptions of the Telengana region in around 11th/12th centuries. It is not unlikely that a network among the weavers were formed which we find in the later period. The Bengal coast, the littorals of Andhra Kalinga and the Coromondal coast were the main points of overseas contact.
Zhao-ru Gua in the early thirteenth century refers to cotton from Pong-kie-lo. Pong-kie-lo is generally identified with Vanţgala (referred to in the Chola inscription as territory of the Chandra ruler Govindachandra, presently in Bangladesh. Here one may also point out that in and around tenth century CE, Hudud-al Alam also talks about large quantities of good cotton in the Harkand, identifiable with Harikela region.
Concluding Remarks

- This preliminary overview brings to light the fact that India as a cotton/cotton cloth exporting country has a legacy which goes back to early centuries of the common era.

- This continued over the ages and in different phases which is attested by textual, art historical and epigraphic references.

- The trade was not only towards the eastern Roman empire or regions of Southeast Asia, even China was very much a part of this network.

- To understand the larger maritime network it is imperative that we understand the internal network which facilitated the movement of raw materials to be converted into beautiful textiles by the weavers whose strong presence is attested by epigraphic sources.

- Our aim is to study the epigraphs of the Bengal, Andhra-Kalinga and Coromandel coasts till 1300CE and map the presence of weavers through the lens of the inscriptions.
Thank You