Japanese Civilization (Part 23) **The Spread of Cotton** to the Far East

By Kawakatsu Heita

Cotton in China

THE old world cottons which originated in India reached the three Far Eastern countries (China, Korea and Japan). The winter in China was cold and only annual types of cotton were able to survive. According to George Watt, Chinese people planted cottons in gardens as an ornamental shrub until the

end of the 7th century.

In fact, long before then, G. herbaceum variety kulijianum cotton had been grown in western China. The utilization of kulijianum, which was specially adapted to the short summers

and cold winters of Central Asia, can be dated back to as early as the 2nd century. Joseph Hutchinson wrote that "kulijianum could mature a small crop in three months from sowing, though the cotton fiber was scanty and of low quality."

Kulijianum spread to China along the famous Silk Road. The further cotton spread eastward, the stronger the competition became. Shensi Province was the terminal point for the cotton from Chinese Turkistan because the city of Sian in Shensi Province was one of the major centers of the silk industry from the time of the Han Dynasty (BC206AD220). The quality of this cotton species was not good enough to spread further East.

Marco Polo observed that the people's clothing was not made of cotton but of silk during his stay in China between 1271-1292 and says there was plenty of silk in China. He mentioned that cotton goods were manufactured in a city called Kien-ning-fu in Fukien Province, and stated that "so much cotton cloth is woven here of dyed yarn that it supplies the whole province of Manzi." This suggests that cotton had been established as a commercial crop in China by the end of the 13th century.

Indeed, the position of cotton inspector was established in Fujian Province by that period, and these inspectors had to collect an annual tribute of 100,000 pieces of cloth. These cottons are known as G. arboreum variety sinense.

Sinense is the only cotton to be successfully cultivated in the Far East. It was initially thought to have been introduced from India by land from Bengal and Assam, or by sea from Indochina. The land route is now accepted as more probable than the sea route as old Chinese literature indicates that cotton cultivation in Southern China spread from Yunnan to the adjacent districts of Kwangsi and Indochina, then to the Kwangtung coast and Hainan Island, and finally to Fujian Province. (Fig. 1)

A century after Marco Polo, cotton

Figure 1 The Introduction and Diffusion of Cotton Cultivation in China



Source: Kang Chao, 1977, op.cit.,p.17

Note: Names and spellings in the figure are consulted the original source.



had spread all over the world. When Hung-wu established the Ming Dynasty in 1368, an order was issued that in all private fields from five to 10 mou1, half a mou should be planted with mulberry, hemp and cotton; the quantities were doubled in fields over 10 mou. Eight ounces of hemp and four ounce of cotton were levied per mou.

Cotton cloth as well as raw cotton were used as taxes. The government needed such cloth for various purposes, which was exchanged for Mongolian horses, used by the military, and paid as salaries for officials. The use of cotton for military uniforms was the most important need of all, and it was increased year by year. (Table 1)

There were two centers of cotton cultivation and manufacturing in Ming China (1368-1644). One centered in the north, in the provinces bordering the Yellow River such as Hopei, Shantug, Shansi and Shensi and the other was located in the south Yangize delta, Checkiang, Fukien, Kwangtung and Szechwan. The cotton cultivation in the two centers continued until the 20th century.

During the Ming period, local specialization and commerce were developed between the two regions. The north, where the socio-economic structure was backward and the available technology was primitive, exported surplus raw cotton, while the south, which inherited the higher levels of textile technology from the traditional silk industry but lacked adequate supplies of raw cotton, imported it from the north and more or less concentrated on manufacturing cotton goods. The Sung Ciang prefecture in the Yangtze delta, situated in between the two cotton centers, could take particular advantage of both regions.

The Chinese cotton industry, which witnessed localization and the division of labor in the Ming period, however, did not show any further development in the successive period. According to Mark Elvin, "land that was used to grow cotton was the land that could be

Table 1 Quantity of Cotton Given to Soldiers by the Chinese Government, 1385-1396

Company Size	Cotton Cloth (pieces)	Raw Cotton (kin)	
1385	1,239,900	283,300	
1386	1,317,074	424,345	
1387	1,159,585	65,600	
1388	1,117,800	441,600	
1389	1,345,000	560,000	
1390	1,489,740	511,100	
1396	2,889,900	1,415,200	

Source: Nishijima Sadao, Chugoku Keizai-shi Kenkyu (Studies in Chinese Economic History) Tokyo, 1966, p. 760

used to grow grain; and by the 16th and 17th centuries there was very little land available in China for any crop except for food grains. Any expansion in the supply of raw cotton, beyond bare parity with population growth, depended on raising per-acre agricultural productivity that was already the highest in the world."

Cotton in Korea

There is a record showing that cotton cloth was already imported from China to Korea in the 13th century, but it was a luxury item used by the upper class. Before the introduction of cotton, the clothing materials available in Korea were hemp, ramie and silk.

It was not until 1364, when Mun Ikku-jum, an envoy to China, brought back the seed of sinense, which was the first cotton introduced to Korea. The strong encouragement by the government helped cotton cultivation to spread rapidly over southern Korea within a few decades. Kyonsan and Chorula Provinces were the cottongrowing regions until the end of the Yi Dynasty (1392-1910).

As precious metals were scarce in Korea, cotton goods and were acquired a high position to be used as money by a decree of King Sejong (1418-1450). Cotton cloth was one of the most important financial assets, and large amounts were also used to make the uniforms of soldiers deployed on the northern border.

One of the most important factors which influenced Korean cotton proPhoto: Japan Cotton Promotion Institute



duction in the 15th and 16th centuries was overseas demand, particularly from

Japan did not have an indigenous cotton industry but had abundant precious metals. Naturally trade between the two countries developed as an exchange of cotton cloth and precious metals. For example, in 1439, a Japanese trade mission of 1,300 members was sent to Korea to persuade the Korean government to export more cotton goods to Japan. Korea declined the request for financial reasons. Another envoy was sent in 1471, and Japan was able to secure an increased supply of Korean cotton cloth in exchange for gold this time and, 4,532 pieces of cotton cloth were exported to Japan in 1482. The volume of cotton cloth exports soon reached 500,000 pieces annually, and to secure a sufficient amount the annual levy on cotton farmers was doubled.

Because of the domestic demand for cotton cloth, Korea had to reduce the

Table 2 Korean Exports of Cotton Cloth to Japan

Year	Pieces	*Japanese Importer	Year	Pieces	*Japanese Importer
1418	1,539		1481 Oct.	300	
1419	412		1482 Feb.	3,206	Sou
1420	2,280		1482 May	300	
1421	5,430		1483 Apr.	1,000	Sou
1422	-		1483 Oct.	1,100	
1423	2,640		1486	500,000	
1424	130		1488 Jan.	6,212	Sou
1450 May	998		1488	100,000	
1451 Mar.	2,394		1489 Sep.	1,000	
1453 Jun.	3,860	Doan	1489 Dec.	1,339	Miura
1464 Sep.	1,082		1489 Dec.	480	Taira
1467 Aug.	10,000		1490	10,754	The Government
1468 Mar.	2,000		1490	9,294	Sou
1470 Aug.	500		1491 Feb.	10,906	Sou
1470	1,000	Ise	1492 Mar.	15,245	Sou
1471 Dec.	3,000		1494 Mar.	28,839	The Government
1472 Jan.	100		1500	10,454	Sou
1474 Aug.	200		1525	85,000	The Government
1474 Dec.	500		1528	21,500	Ouchi
1475	27,208		1529	60,000	The Government
1476 Jan.	3,000	Sou	1538	8,000	Ouchi
1476	37,421		1542 Apr.	60,000	The Government
1477 Jul.	400		1544	20,000	Shouni
1479 Jul.	200		1544	45,000	The Government
1480 Jul.	400				

Sources: Ono Koji, Nihon Sangyo Hattatsu-shi no Kenkyu (Studies in Japanese Industrial Development)

Tokyo,1941, pp.301-319; K. Sudo, op.cit., pp.39-45

Notes: *As far as the name is identified.

The figures on the table cover only those officially recorded by the government.

The total quantity exported including consignments sent without leaving records or by illicit traders would undoubtedly exceed these figures.

export value by half. In 1500, Japan proposed exchanging 110,000 kun² of its copper for Korean cotton cloth. Korea reversed its policy and accepted the copper in exchange for great quantities of cotton cloth, which were provided at the expense of Korean cotton farmers. (Table 2)

To curtail the increasing exports to Japan, Korea prohibited commerce with Japan in 1523, and cotton goods exports to Japan declined in the second half of the 16th century.

Japan then began to increase the imports from China. The trade was carried as smuggling from Fukien Province. The cotton cloth from China flooded into Japan in the 1570s,

exceeding the amount of Korean products. The trade between Japan and Korea stopped in 1592 when Japan invaded Korea, and did not resume until 1609.

This damaged Korea rather than Japan, because, by that time, Japan had succeeded in cultivating cotton and had begun to manufacture cotton goods domestically, whereas Korea could not obtain the necessary goods, such as precious metals and spices, which had previously been provided by Japan. Moreover, the export-oriented Korean cotton textile industry suffered from a recession caused by the abrupt half of export.

After the treaty of 1609, strictly regu-

lated trade was carried on between Korea and a Japanese daimyo (domain load), named Sou, who was the only daimyo allowed to trade with Korea by both the Tokugawa and Korean governments on the basis that Japanese goods up to the equivalent value of 56,000 pieces of Korean cotton could be exchanged at the Korean port. This regulation lasted for about 40 years.

In 1651, the Tsushima domain demanded rice instead of cotton in exchange for Japanese goods consisting mainly of silver, copper and spices, because the rapidly developing cotton industry in Japan was able to produce a sufficient amount of cottons and to import cotton cloth was no longer profitable. Korea conceded to the request by providing rice equivalent to 15,000 pieces of cloth, or 26% of the total. A few years later, the share of rice increased to 36%. The remaining 64% was paid in cotton cloth, but these cotton goods were illicitly exchanged by the Japanese traders for other goods such as ginseng and silk fabrics before they left the Korean port. Only 5,000 pieces of cotton cloth were brought back to Japan in 1774, and Korean cotton cloth had virtually ceased to be used in Japan by that time. The further development of the cotton industry in Korea was impeded by the imposition of increasingly heavy tax burdens.

Cotton in Japan

An authentic record compiled in 841 stated that cotton seeds were first brought into Japan by a Malay who came from Sumatra to Japan in AD 799. Another record compiled in 892 described the method of cotton cultivation and its geographical distribution in the country. This cotton, which is believed to be the G. arboreum variety indicum, had died out by the Kamakura period (1192-1333).

The new cotton seed of sinense was brought into Japan during the 16th century from China either via Korea or Ryukyu (the present Okinawa Prefecture). There are number of theories on the date of the introduction of sinense: between the 1490s and the 1510s, or in 1588, or between 1592-1595.

These different dates suggest that the cotton seeds were probably brought to Japan from Korea or Ryukyu on different occasions and spread to different regions. Undoubtedly by the early 16th century, there had been cotton cultivation and manufacturing in Mikawa (the present Aichi Prefecture), as some records suggest that Mikawa-made cotton was sold in Nara from around 1510s, and that Mikawa merchants, who were under the protection of their local lord, were trying to widen their textile markets to Kyoto. Totomi and Suruga (the present Shizuoka Prefecture) were also reported to have produced cotton textiles by the middle of the 16th century. In the 1570s, Musashi (between the present Tokyo and Saitama Prefectures) had local markets for cotton textiles. About the same time, cotton textiles were collected as taxes in the town of Kofu (the present Yamanashi Prefecture).

The places mentioned above were all situated in the eastern part of Japan between Nagoya and Tokyo. The center of cotton production throughout the Edo period (1600-1868) was consolidated in the western half of Japan: Osaka, the surrounding Kinai region and the coastal region of the Inland Sea. Production then moved westwards in the late 16th century. There is a report that cotton was grown in Yamato (the present Nara Prefecture) in 1591. Cotton then seems to have spread fur-

ther westwards to Osaka.

Osaka is mentioned for the first time as a cotton region in a record of 1623, stating that a merchant group was organized to secure hoshika (dried sardine and herring) used as fertilizer for growing cotton. By this time cotton cultivation had been established. In 1644 this trade organization developed into a guild which monopolized the trade of hoshika brought from the present Chiba Prefecture over a distance of 500 km. In 1658 another guild was formed to monopolize sales of raw cotton for export to the northern Japan. Nogyozensho (Encyclopedia Agriculture) published in 1597 and Hyakushodenki (Record of Peasantry) published during 1580-1582 both mentioned Kawachi, Izumi (the present Osaka), Harima, Settsu (the present Hyogo Prefecture) and Bingo (the present Hiroshima Prefecture) as the main centers of cotton production in the late 17th century.

The cotton products brought into Osaka in 1735 consisted of cotton cloth (74%), cotton yarn (16%) and ginned and raw cotton (10%). The quantity of ginned cotton amounted to 50,000 kan³ and raw cotton amounted to 350,000 kan. Annual average production rose to 2 million and 1.5 million kan respectively between 1804 and 1834. The cotton growing area in the early 19th century was almost the same in the early Meiji period.

Concerning the quality of Japanesemade cotton cloth, Ono Koji stated, "what is certain is that the early homemade cotton fabrics would have been much thicker than we imagine; because the Japanese had hemp for summer clothing, cottons were initially employed for winter clothing; they were very thick."

THE introduction of cotton into Japan served as the foundation of a new era the industrial history, an era characterized by rising prosperity and productive energy. The rapid development of the Japanese cotton industry was one of the most important commercial achievements of the Edo Period.

It is now an accepted view that the transition from an agrarian to a modern industrial society after the Meiji Restoration was the result of the industrial and commercial progress which was already in motion in pre-modern Japan and the cotton industry played a pioneering role.

Japan in the 16th century was far behind China and Korea in cotton textile production, just as England lagged behind all European countries. Both countries started last in the race, and although they were quite different in historical contexts, both subsequently outstripped every other competitor in the West and the Far East respectively in the 19th century.

(Continued in Part 24)

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