# HISTORY

Chapter 6: Weavers, Iron Smelters, and Factory Owners



# WEAVERS, IRON SMELTERS, AND FACTORY OWNERS

# **INDIAN TEXTILE**

### **Markets**

The East India Company came to India primarily for trading purposes. To secure their trading interests, they gradually occupied the whole country. By the end of the eighteenth century, the Company began to make huge profits by exporting Indian goods to Europe. The British also systematically destroyed the Indian textile industries in order to create markets for the cheap machine-made cloth in India and to protect the interests of its home industries.

# **Indian Textile Industries in their Glorious Days**

- Around the mid-eighteenth century, India was the world's largest producer of cotton textiles in the world. Its textiles were known for their fine quality and skilled craftsmanship.
- Indian textiles had markets in Southeast Asia, Central Asia, West Asia and Europe.
   Because of the fine quality of the Indian textiles, many words related to Indian craftsmanship made their way into the English dictionary.
- European traders first came across the fine cotton cloth of India in Mosul in present-day Iraq, and since then all fine quality Indian cloth came to be termed 'Muslin'
- The Portuguese had first landed at Calicut (Kerala coast) in India in search of spices.
  Along with spices, they also took back fine cotton cloth with them to Europe which
  came to be known as 'calicos', a word which is derived from Calicut. Calicos refer to all
  cotton textiles.
- The word 'chintz' was derived from a Hindi word 'chhint' which was a cloth with small and colorful flowery designs.
- The word 'bandanna' refers to a brightly coloured printed scarf. This term was derived from the Hindi word 'bandhna', many types of brightly coloured cloth produced through tying and dying.



India was famous for the production of cotton textiles.

# Beginning of the Industrial Revolution in Britain

- As the European markets were flooded with Indian textiles, wool and silk cloth manufacturers in England began to oppose the import of Indian textiles.
- The British Government passed the Calico Act in 1720, banning the use of printed cotton cloth in England.
- The Calico industries developed in England which mostly imitated Indian designs on the plain muslin cloth.
- The invention of the Spinning Jenny by John Kaye increased the productivity of traditional spindles and the steam engine revolutionised cotton textile weaving. The English now began to manufacture large quantities of cloth at cheap rates. However, the Indian textiles were still preferred by the Europeans.
- The English East India Company at this time was making huge profits by using the revenues of Bengal for purchasing Indian textiles and then exporting them to Europe.

# Decline of Indian Textiles and the Plight of the Weavers

- The Industrial Revolution in England affected the textile industries in India in many ways. These were
  - Indian textiles now had to face stiff competition from English textiles in the European and American markets.
  - Heavy duties were imposed on imported Indian textiles in Britain.
  - The machine-made cheap textiles of Britain successfully captured the African SHIVOM CLASSES - WhatsApp for Notes (8696608541)

markets.

- By the 1830s, cheap machine-made goods from Britain flooded the Indian markets. As these were cheaper than the Indian textiles, the Indian textile industries suffered.
- All the above reasons led to the decline in Indian textiles and many weavers from Bengal were thrown out of their employment.
- Many weavers and spinners who lost their livelihood became agricultural labourers, some migrated to cities in search of work, and some migrated to Africa and South America to work on plantations.
- Handloom weaving still survived as intricate borders and traditional woven patterns could not be imitated by machines. Later, the Swadeshi and Boycott Movements gave some lease of life to the hand-spun and hand-woven cloth like khadi.

# **Beginning of Cotton Industries in India**

- The first cotton mill in India was set up at Bombay in 1854. Bombay at this time began to grow as an important port Centre for exporting raw cotton from India to England and China. Textile mills began to be set up in Bombay, because besides being a port city, it was close to the black soil region of western India where cotton was grown.
- Cotton textile mills also came up in Ahmedabad, Kanpur, Sholapur, and Nagpur.
- The cotton textile industries faced many problems in the initial years. Some of these were
  - They had to face stiff competition from the cheap textiles which were imported from Britain.
  - Many countries had imposed heavy duties on imported goods. This protected their home industries.
  - The colonial government in India however did not give such kind of protection to the local industries.
- The First World War saw the growth of the Indian cotton industries as the textile imports from Britain declined. This benefited the Indian industries as they began to produce cloth for military supplies.

# Iron Steel Production in India

- The sword of Tipu Sultan was an example of excellent craftsmanship which was involved in the production of articles made of iron and steel.
- The sword of Tipu Sultan was known for its hardness and sharp edge which could easily tear through the enemy's armour. The manufacturing of this quality of sword was made

possible by using a type of high-carbon steel known as Wootz. Wootz steel when made into a sword produced a very sharp edge with a flowing pattern. Wootz was produced all over South India.

- Francis Buchanan toured Mysore in 1800 and noted the technique by which Wootz steel was produced in a smelting furnace all over Mysore. It was made in the following way:
  - Iron was mixed with charcoal in furnaces and was then placed inside pots made of clay.
  - By controlling the temperature inside furnaces, smelters produced blocks of steel which were then used for making swords.
- European scientists were fascinated by Indian Wootz. Michael Faraday spent four years in studying the properties of Indian Wootz.
- With the advent of the British rule, this technique of making steel gradually began to die down. The sword and armour-making industries took a hit in India.
- After the British conquered India, iron and steel began to be imported from England displacing the iron and steel industry in India.

### **Fate of Smelters in Villages**

- Production of iron through the Wootz technique was common in India till the nineteenth century. Almost every district in Bihar and Central India had furnaces where smelters produced iron.
- Agarias were a community of iron smelters which specialised in iron smelting in India.
- The furnaces were built of clay and sun-dried bricks. However, during the colonial rule, the technique of iron smelting began to decline because of various reasons. These were
  - The introduction of forest laws demarcated forests as protected and reserved. The smelters now were not able to find wood for charcoal and iron ore for producing iron. Many smelters thus abandoned their work.
  - When smelters obtained permission for obtaining iron ore or wood, they had to pay high taxes for each furnace which they used.
  - By the nineteenth century, iron and steel began to be imported from Britain.
     Ironsmiths in India began to use steel imported by Britain for making various articles.
     Thus, the demand for iron produced by local smelters reduced.
  - Smelters also faced competition from the iron and steel industries which began to be set up in the country.

# **Establishment of the First Iron and Steel Company in India**

- The Tata Iron and Steel Company (TISCO) was set up on the bank of Subarnarekha River at Jamshedpur in 1912. Jamshedpur was selected as a place for setting up the industry as deposits of iron ore and water supply were located close by.
- In the nineteenth century, India was mostly importing steel from Britain. The
  expansion of the railways in India also provided huge markets for rails which were
  produced in the country.
- After the establishment of TISCO, the First World War broke out in 1914. British steel
  industries were producing steel for fulfilling the war needs of Europe. TISCO was also
  producing shells and cartridge wheels for fulfilling Britain's war needs.
- By 1919, the colonial government was purchasing about 90% of steel manufactured by TISCO.
- As the nationalist movement became strong, the industrial class demanded protection of their interests from the Government. The British Government being under pressure because of the rising tide of nationalism in India agreed to many demands made by the industrialists.

### The iron smelting decline in the later years because:

- (a) The swords and armours making industry died with the conquest of India by the British and imports of iron and steel from England displaced the iron and steel produced by craft persons in India. (b) Secondly, production of Wootz steel required a highly specialized technique of refining iron. But iron smelting in India was extremely common till the end of the 19th century. (c) In most villages, furnaces fell into disuse and the amount of iron produced came down. (d) One more reason was the new forest laws imposed when the colonial government prevented people from entering the reserved forests, the iron smelters could not find wood for charcoal, and they also could not get iron ore.
- (e) Defying forest laws, they often entered the forests secretly and collected wood, but they could not sustain their occupation on this basis for long.
- (f) Many gave up their crafts and looked for other means of livelihood.
- (g) In some areas, the government granted access to the forest. But the iron smelters had to pay a very high tax to the forest department for every furnace they used. This reduced their income. By the late 19th century, iron and steel was being imported from Britain. Ironsmiths in India began using imported iron to manufacture utensils and equipments. This inevitably lowered the demand for iron produced by local smelters.

# The European companies trade with India

European trading companies such as-the Dutch, the French and the English made enormous profits out of the flourishing trade with India. These companies purchased cotton and silk textiles from India by importing silver. When the English East India Company gained political power in Bengal, they no longer imported the precious metal to buy Indian goods. They collected revenues from peasants in India and used this revenue to buy Indian textiles.

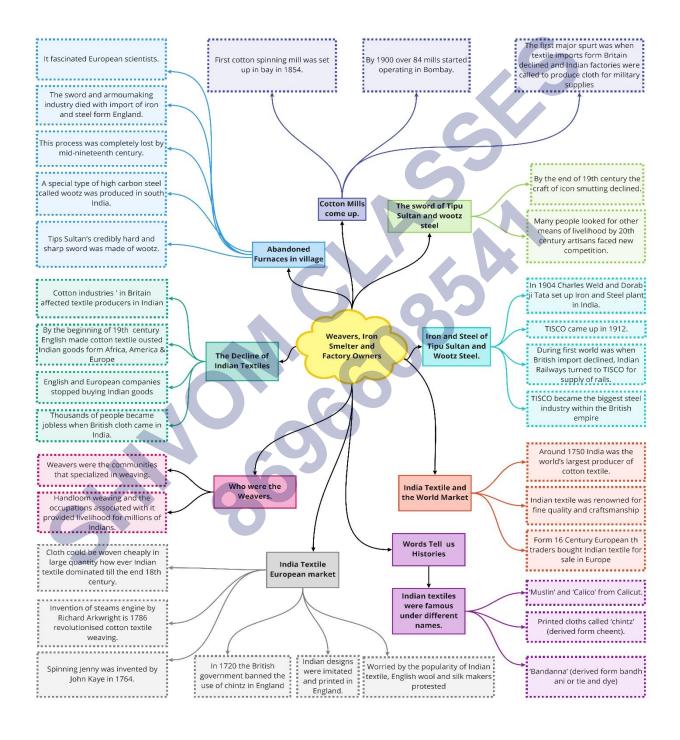
The popularity of the printed Indian cotton cloths in England and Europe: Chintz, Cossaes (Khassa) and Bandanna were the most popular printed cotton cloths with many floral designs and fine texture at that time. From 1680s, the printed cotton cloths became very popular among the people of England and Europe. Rich people of England including the Queen wore clothes made of Indian fabric. Other clothes that were popular in Europe were the varieties of Kasimbazar, Patna, Calcutta, Orissa and Charpoore clothes.

The efforts taken by the Meiji regime to industrialize Japan were: It imported the most advanced technology from the Western countries. Many foreign experts were brought to train professionals in Japan. It introduced postal services, telegraph, railways and steampowered shipping. Industrialists were provided loans to start new investments and business by the government banks. The government started many large factories and then sold them off at cheap rates to businessmen.

### Handloom weaving did not completely die in India, despite the decline of Indian textiles

The handloom weaving did not completely die in India, despite the decline of Indian textiles, because the machine-made clothes did not have the features of handloom weaving. For example, machines could not produce saris with intricate borders or clothes with traditional woven patterns. Cloths with traditional patterns had great demand in the rich and the middle classes. They could not produce very coarse cloths used by the poor people in India. All these factors sustained the handloom weaving in India.

Class: 8th Social Studies (History)
Chapter 6 Weavers, Iron Smelters and Factory Owners



# **Important Questions**

# **Multiple Choice Questions-**

- Q1. ..... cloth had a large market in Europe.
- (a) Chintz
- (b) Patola
- (c) Jamdani
- (d) None of these
- Q2. The Europeans started using the term Chintz, derived from the Hindi word Chhint. What is the meaning of Chhint?
- (a) A weaver
- (b) A cloth made of silk
- (c) A cloth with small and colourful flowery designs.
- (d) An order ready to be shipped to Britain
- Q3. Women and men who carried basket loads of iron ore on their heads were called
- (a) wootz
- (b) agaria
- (c) bandanna
- (d) cossaes
- Q4. In which place in present day Iraq did the European trader's first encountered fine cotton from India carried by Arab merchants?
- (a) Basra
- (b) Mosul
- (c) Tekrit
- (d) Baghdad
- Q5. In which century did the India's textile industry decline?
- (a) 17th century
- (b) 18th century
- (c) 19th century

- (d) 20th century
- Q6. Around 1750, before British conquered Bengal, India was by far the world's largest producer of this. Which one of the following options will replace the term this here?
- (a) Cotton textiles
- (b) Cement
- (c) Paper
- (d) Coffee
- Q7. TISCO expanded steel production during the
- (a) First World War
- (b) Second World War
- (c) Third World War
- (d) None of these
- Q8. Mechanised production of which textiles made Britain the foremost industrial nation in the 19th century?
- (a) Cotton
- (b) Silk
- (c) Mining
- (d) Chemical
- Q9. Portuguese first came to India in search of
- (a) cotton
- (b) spices
- (c) steel
- (d) muslin
- Q10. Name the person who invented Spinning Jenny?
- (a) Andrew Kay
- (b) Thomas Kay
- (c) James Kay
- (d) John Kaye
- Q11. What things did Portuguese take back to Europe?

- (a) Steel
- (b) Sugar
- (c) Cotton textile
- (d) Coffee
- Q12. Bandanna is derived from the word bandhana. which one would be the most appropriate meaning of the word Bandanna?
- (a) Any bright coloured dress.
- (b) A shirt
- (c) A woolen shawl
- (d) A bright coloured scarf for the neck or head
- Q13. Tipu Sultan's sword was made of
- (a) stainless steel
- (b) wootz
- (c) silver
- (d) none of these
- Q14. Among the following, which place in Uttar Pradesh I was the important centre of Jamdani weaving?
- (a) Kanpur
- (b) Shillong
- (c) Dacca
- (d) Lucknow
- Q15. Which of the following was NOT the name of Indian textile?
- (a) Chintz
- (b) Cossaes
- (c) Calico
- (d) Agaria

# **Very Short:**

- 1. Why were bellows used?
- 2. How did Indian cotton factories prove to be helpful during the First World War? SHIVOM CLASSES WhatsApp for Notes (8696608541)

- 3. What became a symbol of nationalism?
- 4. How did European trading companies purchase cotton and silk textiles in India?
- 5. What were piece goods?
- 6. Why did the British government enact the Calico Art?
- 7. Who were Agarias?
- 8. What is spinning jenny?
- 9. What were the furnaces made of?
- 10. How did Indian cotton factories prove to be helpful during the First World War?

# **Short Questions:**

- 1. Who were the weavers? Mention the names of the communities famous for weaving.
- **2.** Give a description of the four regions where textile production was concentrated in the early 19th century.
- **3.** How did the inventions of Spinning Jenny and Steam Engine revolutionise cotton textile weaving in England?
- **4.** What was Wootz Steel? How was it produced?
- 5. Give a brief description of growth of cotton mills in India.
- **6.** Describe the process of cloth making.

# **Long Questions:**

- 1. How did Iron and Steel factories come up in India?
- 2. Describe how the Indian iton smelting industry declined in the nineteenth century.
- 3. Why did the Indian iron smelting industry decline in the nineteenth century?
- 4. How do the names of different textiles tell us about their histories?
- 5. Why handloom weaving did not completely die in India?

# **Answer Key:**

# **MCQ**

- 1. (a) Chintz
- 2. (c) A cloth with small and colourful flowery designs.
- 3. (b) agaria
- 4. (b) Mosul
- 5. (c) 19th century
- 6. (a) Cotton textiles
- 7. (a) First World War

- 8. (a) Cotton
- 9. (b) spices
- 10.(d) John Kaye
- 11.(c) Cotton textile
- 12.(d) A bright coloured scarf for the neck or head
- 13.(b) wootz
- 14.(d) Lucknow
- 15.(d) Agaria

# **Very Short Answer:**

- 1. Bellows were used to keep the charcoal burning.
- 2. They began to produce cloth for military supplies.
- 3. Khadi became a symbol of nationalism.
- 4. European trading companies purchased cotton and silk textiles in India by importing silver.
- 5. Piece goods were usually woven cloth pieces that were 20 yards long and 1 yard wide.
- 6. The British government enacted the Calico Act to ban the use of printed cotton textiles i.e., chintz.
- 7. The Agarias are a community of iron smelters living in villages in Central India.
- 8. Spinning jenny is a machine by which a single worker could operate several spindles on to which thread was spun.
- 9. The furnaces were made of clay and sun-dried bricks.
- 10. They began to produce cloth for military supplies.

# **Short Answer:**

- 1. Weavers belonged to communities that specialised in weaving. Weaving is a method of textile production in which two distinct sets of yarns or threads are interlaced at right angles to form a fabric or cloth. Their skills were passed on from one generation to the next. Some of the communities famous for weaving are the tanti weavers of Bengal, the julahas or momin weavers of north India, sale and kaikollar and devangs of south India.
- 2. Textile production was concentrated in the following four regions in the early 19th century:
  - Bengal was one of the most important centres. Located along the numerous rivers in the delta, the production centres in Bengal could easily transport goods to distant places.
  - Dacca in Eastern Bengal, present- day Bangladesh, was the foremost textile centre in the 18th century. It was famous for its mulmut and jamdani weaving.

- Textile production was concentrated along the Coromandal coast stretching from Madras to nothem Andhra Pradesh.
- On the western coast there were important weaving centres in Gujarat.
- 3. Textile industries had just emerged in England in the early 18th century. So, it was difficult for the English producers to compete with Indian textiles. This competition with Indian textiles led to a search for technological innovation in England. In 1764, the Spinning Jenny was invented by John Kaye which increased the productivity of the traditional spindles. Then came the steam engine. It was invented by Richard Arkwright in 1786. These two inventions revolutionised cotton textile weaving in England. Cloth could now be woven in immense quantities and cheaply too.
- 4. Wootz was a special type of high carbon steel. It was produced all over south India.
  - Wootz steel when made into swords produced a very sharp edge with a flowing water pattern. This pattern came from very small carbon crystal embedded in the iron.
  - Wootz steel was produced in many hundreds of smelting furnaces in Mysore. In these furnaces, iron was mixed with charcoal and put inside small clay pots. Through an intricate control of temperatures the smelters produced steel ignots that were used for sword making not just India but in West and Central Asia too.
- 5. The first cotton mill in India was set up as a spinning mill in Bombay in 1854. By 1900, over 84 mills started operating in Bombay.
  - Mills were set up in other cities too. The first mill in Ahmedabad was started in 1861. A year later a mill was established in Kanpur, in the United Provinces. Growth of cotton mills led to a demand for labour. As a result, thousands of poor peasants, artisans and agricultural labourers moved to cities to work in the mills.
- 6. The process of cloth making consists of two stages:
  - The first stage of production was spinning, Le. work done mostly by women. The charkha and the takli were household spinning instruments. The thread was spun on the charkha and rolled on the takli
  - When the spinning was over the thread was woven into cloth by the weaver.
     In most communities weaving was a task done by men. For coloured textiles, the thread was dyed by the dyer, called rangrez. For painted cloth the weavers needed the help of specialist block printers called chhipigars.

# **Long Answer:**

1. Jamsetji Tata had decided to spend a large part of his fortune to build a big iron and steel industry in India. But this could not be done without identifying the sources of fine quality iron ore. For this reason his son, Dorabji Tata along with Charles Weld, an American

geologist, began travelling in Chhattisgarh in search of iron ore deposits. It was the year 1904. One day, after travelling for many hours in the forests, Weld and Dorabji came upon a small village where they met the Agarias, who were carrying basket loads of iron ore. When asked where they had found the iron ore, the Agarias pointed to hill in the distance, Weld and Dorabji rushed to the hill. On exploring the hill the geologist declared that they had at last found what they had been looking for.

But there was a problem. The region was dry and the Tatas had to search for a more suitable place to set up their factory.

A few years later a large area of forest was cleared on the banks of the river Subarnarekha to set up the factory and an industrial township, i.e. Jamshedpur. Here, there was water near iron ore deposits. The Tata Iron and Steel Company, popularly known as TISCO began producing steel in 1912.

### 2. There were several reasons behind this:

- The new forest laws introduced by the colonial government in India prevented people from entering the reserved forests. This created problems for the iron smelters. It became difficult for them to find wood for charcoal and iron ore. As a result, many gave up their craft and looked for other means of livelihood.
- In some areas the government did grant access to the forest. But the iron smelters had to pay a very high tax to the forest department for every furnace they used. This reduced their income.
- By the late nineteenth century iron and steel was being imported from Britain. Ironsmiths in India began using the imported iron to manufacture utensils and implements. This lowered the demand for iron produced by local smelters.
- By the early twentieth century, the artisans producing iron and steel faced a new competition that came up with the emergence of iron and steel industries in India.

# 3. Indian iron smelting industry began to decline in the nineteenth century due to the following reasons:

- The new forest law colonial government prevented people from entering the reserved forests. Thus, the iron smelters were not able to find wood for charcoal and iron ore for producing iron.
- Defying forest laws, they often entered the forests secretly and collected wood, but they could not sustain their occupation on this basis for long. Many gave up their craft and looked for other means of livelihood.

- In some areas the government did grant access to the forest. But the iron smelters had to pay a very high tax to the forest department for every furnace they used. This reduced their income.
- Moreover, by the late nineteenth century iron and steel was being imported from Britain. Ironsmiths in India began using the imported iron to manufacture utensils and implements. This inevitably lowered the demand for iron produced by local smelters.
- 4. It is interesting to trace the names of different textiles as it tells us about their histories.
  - **Muslin:** European traders first encountered fine cotton cloth from India carried by Arab merchants in Mosul in present-day Iraq. So they began referring to all finely woven textiles as "muslin".
  - Calico: When the Portuguese first came to India in search of spices they landed in Calicut on the Kerala coast in south-west India. The cotton textiles which they took back to Europe, along with the spices, came to be called "calico" (derived from Calicut), and subsequently calico became the general name for all cotton textiles.
  - **Chintz:** It is derived from the Hindi word chhint, a cloth with small and colourful flowery designs.
  - **Bandanna:** The word bandanna now refers to any brightly coloured and printed scarf for the neck or head. Originally, the term derived from the word "bandhna" (Hindi for tying), and referred to a variety of brightly coloured cloth produced through a method of tying and dying.

### 5. Handloom weaving did not completely die in India.

- This was because some types of cloths could not be supplied by machines. For example, machines could not produce saris with intricate borders or cloths with traditional woven patterns. These had a wide demand not only amongst the rich but also amongst the middle classes.
- Nor did the textile manufacturers in Britain produce the very coarse cloths used by the poor people in India.
- Sholapur in western India and Madura in South India emerged as important new centres of weaving in the late nineteenth century.
- Later, during the national movement, Mahatma Gandhi urged people to boycott imported textiles and use hand-spun and handwoven cloth. Khadi gradually became a symbol of nationalism.