

Weavers, Iron Smelters and Factory Owners

1. Craft and Industries of India under the British rule:

2. Focused on two industries:

- Textiles
- Iron and Steel} → Both crucial for the Industrial revolution in the modern world.

3. Britain was the foremost industrial nation in 19th century all because of mechanised production of cotton textiles.

4. Britain also came to be known as the “workshop of the world” after its iron and steel industry started growth from the year 1850.

5. Industrialisation in Britain is closely related to the conquest and colonisation of India. Reason was:

- As in late 18th century the Company was buying raw material from India at cheaper rates and selling them at huge profit in Europe.
- India was seen as the vast market with the growing industrialisation.

6. The market created in India by buying raw material from India and selling finished goods made in industries of England in India created a huge effect or we can say adverse affect on Indian made crafts and industries.

7. Around 1750's, during the time when Bengal was captured, India was the world's largest producer of cotton textiles as it was known for its fine quality and exquisite craftsmanship.

8. Europeans got encountered firstly by the fine cotton cloth of India when it was carried by Arab merchants in Mosul (present-day Iraq).

9. The finely woven clothes were named as 'Muslin' by the British.

10. Calico was the general name for all cotton textiles because after the arrival of Portuguese, the cotton textile which they took back to Europe along with spices was named Calico as it was derived from Calicut.

11. The different variety of clothes at that time were:

- Chintz – The word derived from Hindi word Chhint.
- Cossaes (Khassa)
- Bandanna.
- Chint was a cloth with small and colourful flowery design.

12. There was a craze for printed Indian cotton textiles in England and Europe. This was because of their exquisite floral designs, fine texture and relative cheapness.

13. Bandanna refers to any brightly coloured and printed scarf for neck or head. The term was derived from the Indian word 'Bandanna'. Produced by method of Tye and Dye.

14. The Calico Act was passed in 1720, banning use of printed cotton textiles – chintz in England. This happened because:

- Wool and silk makers started protesting against the import of Indian cotton textiles.
- The protest was due to their worry of the popularity of Indian textiles.

15. Textiles of England at beginning was unable to complete with the Indian textiles.

16. Indian designs were imitated and printed in England on Muslin, a plain unbleached Indian cloth.

17. Competition with the Indian textiles concluded with the new innovations. In 1764, the spinning jenny was invented by John Kaye resulting in increase of productivity of the traditional spindles.

18. In 1786, invention of steam engine revolutionized cotton textile weaving.

19. Indian textiles dominated the world till the end of 18th century.

20. Weavers were people from communities specialised in weaving, e.g. the tanti weavers of Bengal, the julahas or momin weavers of north India, sale and Kaikollar and devangs of south India.

21. Spinning, the first stage of production, was mostly done by women.

22. Charkha and takli were the household instruments.

23. Rangrez were the dyer of thread for cotton textiles.

24. Chhipigars were the specialised people in block printing.

25. The development of cotton industries in Britain adversely affected textile producers in India in different ways:

- Competition rose
- Exporting textiles to England was getting difficult due to high duties on India textiles.

26. By the beginning of 19th century, English made cotton textiles successfully ousted Indian goods from traditional market in Africa, America and Europe, adversely hitting the different weavers in India.

27. By 1830's British cotton cloth flooded Indian markets, by 1880, 2/3rd of all cotton clothes worn by Indians were made of cloth produced in Britain.

28. Handloom weaving never died completely in India.

29. Sholapur of west India and Madura of south India were the towns which emerged as important new centres of weaving in the late 19th century.

30. After Mahatma Gandhi urged people for boycotting imported textiles and to use hand-woven cloths.

- Khadi became a symbol of nationalism.
- Charkha represented India.
- Charkha was even put at centre of tricolour flag which was adopted by Indian National Congress in 1931.

31. The weavers and spinsters who lost their livelihood started working as agricultural labourers.

- Some went out of country to work in plantations in Africa and South America.
- Some found work in new established cotton mills.

32. The first cotton mill of India was set up as a spinning mill in Bombay in 1854.

33. Bombay grew as an important port for the export of raw cotton.

34. Mills came up in other cities too, first mill in Ahmedabad was started in 1861.

35. For the first few decades, the textile factory industry in India faced many problems. They were unable to compete with the cheap textiles imported from Britain.

36. During the first world war when textiles imports from Britain declined then the Indian factories were called upon to produce clothes for military supplies.

37. Story of Indian steel and iron metallurgy starts with Tipu Sultan – the man who died fighting with his sword in his hand.

- The Sword is now a valuable collection in the museums of England.
- The quality of sword to easily rip through the opponent's armoury was all because of special type of high carbon steel called wootz which was produced all over south India.

38. Francis Buchanan, a traveller, left an account of the technique by which wootz steel was produced in many hundreds of smelting furnaces in Mysore.

39. Wootz, an anglicised version of the Kannada word Ukku, Tamil word – hukker and Malayalam word – urukku, all meaning steel.

40. The Wootz making process was completely lost by mid 19th century because the imports of iron and steel from England displaced the iron and steel produced by craftspeople in India.

41. By late 19th century, the craft of iron smelting was in decline.

- Reason behind this includes forest laws that prevented people from entering the reserved forests. Entering in forests was banned so gathering and finding wood for charcoal was getting impossible with the days.
- High taxes were imposed on entering and using forest produce.

42. By the early 19th-century artisans producer of iron and steel-faced competition after ironsmiths started using iron imported from Britain to manufacture utensils and implements.

43. Jamsetji Tata had decided to spend a large part from his fortune to build a big iron and steel industry in India and for that identifying the source of fine quality iron ore was under process.

44. The Agarias were the people found carrying basket loads of iron ore which were derived from the hill nearby, declared as one of the finest ores in the world and the hill name was Rajhara hills. This hill was discovered when in the hot month of April,

Charles Weld an American geologist and Dorabji Tata (eldest son of Jamsetji) were travelling in Chhattisgarh in search of the iron ore deposit.

45. Industrial township – Jamshedpur was set up on the banks of the river subamarekha as the water source was near the iron ore deposits.

46. TISCO – Tata Iron and Steel Company began producing steel in 1912. It was set up at opportune time when India use to import steel manufactured in Britain.

47. Railway expansion in India provided huge market for rails produced by Britain.

48. With the set up of TISCO, situation was changing. Indian railway turned forward TISCO after the first world war outbreak and decline in the imports of British steel was seen.

49. Same was with the case of iron and steel as it was with cotton textiles both saw the industrial expansion at time when the British imports in India got declined.

50. During First World War and after Nationalist Movement developed and the industrial class became stronger, the demand for the government protection became louder struggling to retain its control over India.

Important Terms

Spinning Jenny: A machine by which a single worker could operate several spindles on to which thread was spun. When the wheel was turned all the spindles rotated.

Aurang: A Persian term for a warehouse – a place where goods are collected before being sold; also refers to a workshop.

Bellows: A device or equipment that can pump air.

Smelting: The process of obtaining metal from rock (or soil) by heating it to very high temperature, or of melting objects made from metal in order to use the metal to make something new.

Stag heaps: The waste left when smelting metal.

Rangrez: The thread of cotton textiles was dyed by the dyer and the dyer was known as Rangrez.

Time Period

1720: The British Govt, banned the use of printed cotton textiles in England.

1764: John Kaye invented spinning jenny which increased the productivity of the traditional spindles.

1854: India's first Cotton mill set up as a spinning mill in Bombay.

1861: The first mill in Ahmedabad was started.

1799: Death of Tipu Sultan.

1912: The Tata Iron and Steel Company (TISCO) that came up began producing steel.

1914: The First World War begun.

Indian Textiles and the World Market

- Around 1750, India was by far the world's largest producer of cotton textiles.
- Indian textiles had long been renowned both for their fine quality and exquisite craftsmanship
- They were extensively traded in Southeast Asia and West and Central Asia.
- From the sixteenth century, European trading companies began buying Indian textiles for sale in Europe.

Words tell us histories

- European traders first encountered fine cotton cloth from India carried by Arab merchants in Mosul in present-day Iraq.

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- In 1730, English East India Company sent to its representatives in Calcutta to order a variety of cloth pieces in bulk.

→ Amongst the pieces ordered in bulk were printed cotton cloths called chintz, cossaes (or

khassa) and bandanna.

→ Chintz is derived from the Hindi word chhint, a cloth with small and colourful flowery design

→ The word bandanna term is derived from the word “bandhna” refers to any brightly coloured and printed scarf for the neck or head.

- The printed cotton cloths called chintz, cossaes (or khassa) and bandanna.
- There were other cloths in the order book that were noted by their place of origin such as Kasimbazar, Patna, Calcutta, Orissa, Charpoore.

Indian textiles in European markets

- By the early eighteenth century, worried by the popularity of Indian textiles, wool and silk makers in England began protesting against the import of Indian cotton textiles.
- In 1720, the Calico Act was introduced in England which banned the use of printed cotton textiles – chintz.
- 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.
→ In 1786, steam engine was invented by Richard Arkwright which revolutionised cotton textile weaving.
- European trading companies – the Dutch, the French and the English – made large profits through textile trade with India.
- These companies purchased cotton and silk textiles in India by importing silver.

Who were the weavers?

- Weavers often belonged to communities that specialised in weaving.
- Their skills were passed on from one generation to the next.
- Some communities famous for weaving:
→ tanti weavers of Bengal, the julahas or momin weavers of north India.
→ sale and kaikollar and devangs of south India.
- The first stage of production was spinning done mostly by women in which charkha and the t were used.

- After weaving, spinning was done mostly by men.
- For coloured textiles, the thread was dyed by the dyer, known as rangrez.
- For printed cloth the weavers needed the help of specialist block printers known as chhipigar

The decline of Indian textiles

- The development of cotton industries in Britain affected textile producers in India in several ways: → Indian textiles now had to compete with British textiles in the European and American markets.
- Exporting textiles to England also became increasingly difficult since very high duties were imposed on Indian textiles imported into Britain.
- By the beginning of the nineteenth century, English-made cotton textiles successfully displace Indian goods from their traditional markets in Africa, America and Europe.
- By the 1830s, British cotton cloth flooded Indian markets
- Some types of cloths could not be supplied by machines thus handloom weaving did not textiles and use hand-spun and hand-woven cloth.
- Khadi gradually became a symbol of nationalism
- Many weavers became agricultural labourers.
- Some migrated to cities in search of work, and others went out of the country to work in plantations in Africa and South America.
- Some handloom weavers also found work in the new cotton mills that were established in Bombay, Ahmedabad, Sholapur, Nagpur and Kanpur.

Cotton mills come up

- The first cotton mill in India was set up as a spinning mill in Bombay in 1854.
- From the early nineteenth century, Bombay had grown as an important port for the export of raw cotton from India to England and China.
- By 1900, over 84 mills started operating in Bombay.
- The first mill in Ahmedabad was started in 1861.
- Growth of cotton mills led to a demand for labour.
- Thousands of poor peasants, artisans and agricultural labourers moved to the cities to work the mills.
- The textile factory industry in India faced many problems.

→ It found it difficult to compete with the cheap textiles imported from Britain.

- The colonial government in India usually refused to protect the local industries.
- During the First World War, textile imports from Britain declined and Indian factories were called upon to produce cloth for military supplies which increased the development of cotton factory production in India

The sword of Tipu Sultan and Wootz steel

- Wootz steel when made into swords produced a very sharp edge with a flowing water pattern
- Wootz steel was produced in many hundreds of smelting furnaces in Mysore.
- Indian Wootz steel fascinated European scientists.

→ Michael Faraday, the legendary scientist and discoverer of electricity and electromagnetism spent four years studying the properties of Indian Wootz (1818-22).

- The Wootz steel making process, which was so widely known in south India, was completely lost by the mid-nineteenth century.
- The swords and armour 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 craftspeople in India.

Abandoned furnaces in villages

- Iron smelting in India was extremely common till the end of the nineteenth century.
- The furnaces were most often built of clay and sun-dried bricks. The smelting was done by men while women
- By the late nineteenth century, however, the craft of iron smelting was in decline.

This was because:

- New forest laws enacted by the colonial government prevented people from entering the reserved forests, which reduced the supply of charcoal.
 - 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.
- By the early twentieth century, the artisans producing iron and steel faced a new competition new iron and steel factories come up in India.
 - In the year 1904, Charles Weld and Dorabji Tata explored the hill pointed out by the Agarias

people and found one of the finest iron ores in the world.

→ Rajhara Hills had one of the finest ores in the world.

- 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 – Jamshedpur.
- The Tata Iron and Steel Company (TISCO) that came up began producing steel in 1912.
- In 1914, when the First World War broke out imports of British steel into India declined dramatically and the Indian Railways turned to TISCO for supply of rails.
- By 1919 the colonial government was buying 90 per cent of the steel manufactured by TISCO.
- Over time TISCO became the biggest steel industry within the British empire