



NOTES

SOCIAL SCIENCE

(HISTORY)

THE AGE OF INDUSTRIALISATION



**REVISION NOTES
CHAPTERWISE &
TOPICWISE**

Chapter 4: The Age of Industrialisation

Concepts Covered:

1. Before the Industrial revolution

- **Industrialisation and Proto-Industrialisation**
 - Problem of Merchants
 - Proto-Industrialisation in the Country-side
 - Dependence between countryside and towns
 - Proto-Industrialisation System
- **The coming up of the Factory**
 - Reason behind increase of Cotton Consumption
- **The Pace of Industrial Change**
 - Steam engine

2. Hand Labour and Steam Power

- **Preference to hand labour over steam power**
- **Life of the Workers**
 - Spinning Jenny

3. Industrialisation in the colonies

- **The Age of Indian textiles**
 - Domination of Indian Hand-made goods in the international market
 - Coming up of European companies
- **What happened to Weavers?**
 - Situation before East India Company
 - Situation after East India Company
 - Steps taken by East India Company
 - Problems related to the system of company
 - Impact on weavers
- **Manchester comes to India**
 - Decline of Cotton exports from India
 - Problem of Indian cotton weavers

4. Factories come up

- **The Early Entrepreneurs**
- **Where did the Workers come from?**
 - Jobber

5. The Peculiarities of Industrial Growth

- **Segments of industrial ventures**
 - Changes that affected Industrialisation
- **Small scale industries Predominate**
 - Fly shuttle
 - Hardships faced by Weavers

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| 6. | Market for Goods ➤ Ways of creating market for goods <ul style="list-style-type: none">• Advertisement• Use of labels as a mark of quality• Images and illustrations.• Printing of calendars• Nationalist message |
| 7. | Mind Map (Colourful & Interactive/ Complete All Concept Covered) |
| | Practice Questions (All Topics Available) |



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THE AGE OF INDUSTRIALISATION

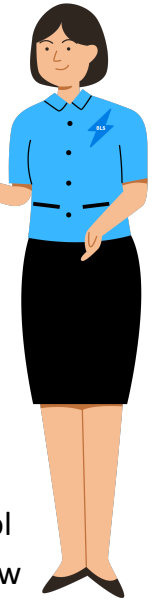
BEFORE THE INDUSTRIAL REVOLUTION

BEFORE THE INDUSTRIAL REVOLUTION

Industrialisation and Proto-Industrialisation

Industrialisation means Growth of factory industry. When we talk of industrial production, we refer to factory production. Histories of industrialisation very often begin with the setting up of the first factories.

Even before factories began to dot the landscape in England and Europe, there was large-scale industrial production for an international market. This is known as Proto-Industrialisation. Merchants from the towns in Europe began moving to the countryside, supplying money to peasants and artisans, persuading them to produce for an international market.



Problem of Merchants

- Urban crafts and trade guilds were powerful.
- These were associations of producers that trained craftspeople, maintained control over production, regulated competition and prices, and restricted the entry of new people into the trade.
- Rulers granted different guilds the monopoly rights to produce and trade in specific products.

It was difficult for new merchants to set up business in towns. So, they turned to the countryside.

Proto-Industrialisation in the Country-side

Merchants moved to countryside poor peasants and artisans began for working for merchants. This was a time when open fields were disappearing, and commons were being enclosed.

- Cottagers and poor peasants who had earlier depended on common lands for their survival, gathering their firewood, berries, vegetables, hay, and straw, had to now look for alternative sources of income.
- Many had tiny plots of land which could not provide work for all members of the household.
- In this situation, merchants provided an alternative source of income.

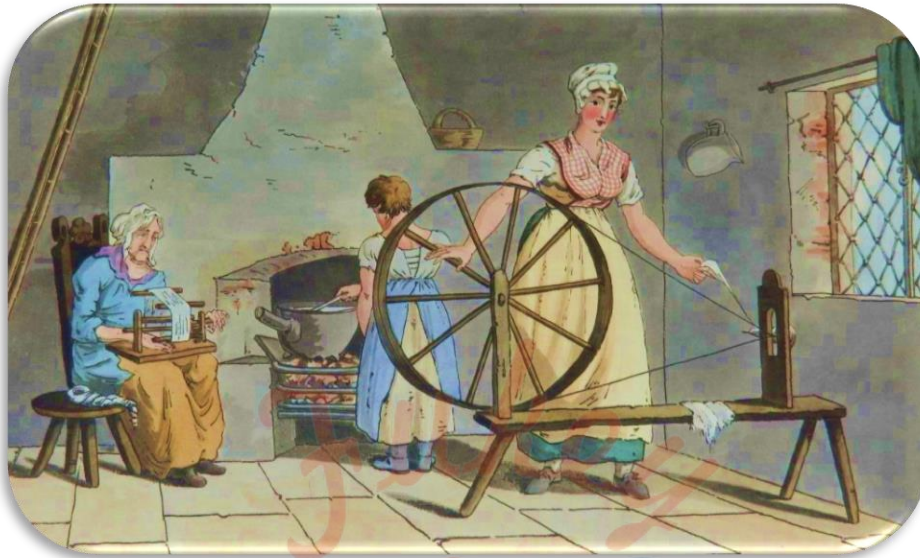
Dependence between countryside and towns

- Within this system a close relationship developed between the town and the countryside.
- Merchants were based in towns, but the work was done mostly in the countryside.
- Spinning, weaving, and dying was done in the countryside, where as finishing was done in towns like London.

THE AGE OF INDUSTRIALISATION

BEFORE THE INDUSTRIAL REVOLUTION

Proto-Industrialisation System



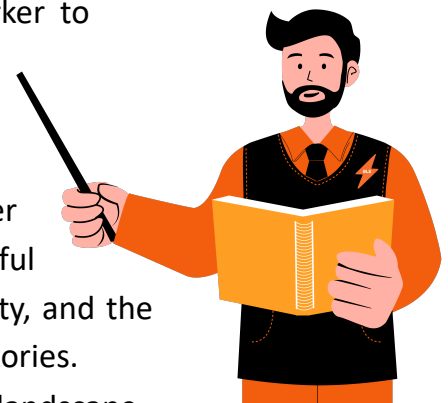
- It was a part of a network of commercial exchanges.
- It was controlled by merchants and the goods were produced by a vast number of producers working within their family farms, not in factories.
- At each stage of production, 20 to 25 workers were employed by each merchant.

The coming up of the Factory

It was a period between 1730's to late eighteenth century. The first symbol of the new era was cotton. In 1760 Britain was importing 2.5 million pounds of raw cotton to feed its cotton industry. By 1787 this import soared to 22 million pounds.

Reason behind increase of Cotton Consumption

- A series of inventions in the eighteenth century increased the efficacy of each step of the production process (carding, twisting, and spinning, and rolling).
- They enhanced the output per worker, enabling each worker to produce more, and they made possible the production of stronger threads and yarn.
- Then Richard Arkwright created the cotton mill
- Within the mill, all the processes were brought together under one roof and management. This allowed a more careful supervision over the production process, a watch over quality, and the regulation of labour. These big mills came to be known as factories.
- Factories increasingly became an intimate part of the English landscape.



THE AGE OF INDUSTRIALISATION

BEFORE THE INDUSTRIAL REVOLUTION

The Pace of Industrial Change

The most dynamic industries in Britain were clearly cotton and metals. By 1873 Britain was exporting iron and steel worth about ₹ 77 million, double the value of its cotton export. The new industries could not easily displace traditional industries. Even at the end of the nineteenth century, less than 20 per cent of the total workforce was employed in technologically advanced industrial sectors.

Technological changes occurred slowly. New technology was expensive, and merchants and industrialists were cautious about using it. The machines often broke down and repair was costly. Also, they were not as effective as their inventors and manufacturers claimed.

Steam engine

- **James Watt** improved the steam engine produced by Newcomen and patented the new engine in 1781.
- His industrialist friend **Matthew Boulton** manufactured the new model.
- But for years he could find no buyers.



So even the most powerful new technology that enhanced the productivity of labour manifold was slow to be accepted by industrialists.

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HAND LABOUR AND STEAM POWER

In Victorian Britain, there was no shortage of human labour. When there is plenty of labour, wages are low. So, industrialists had no problem of labour shortage or high wage costs.

Preference to hand labour over steam power

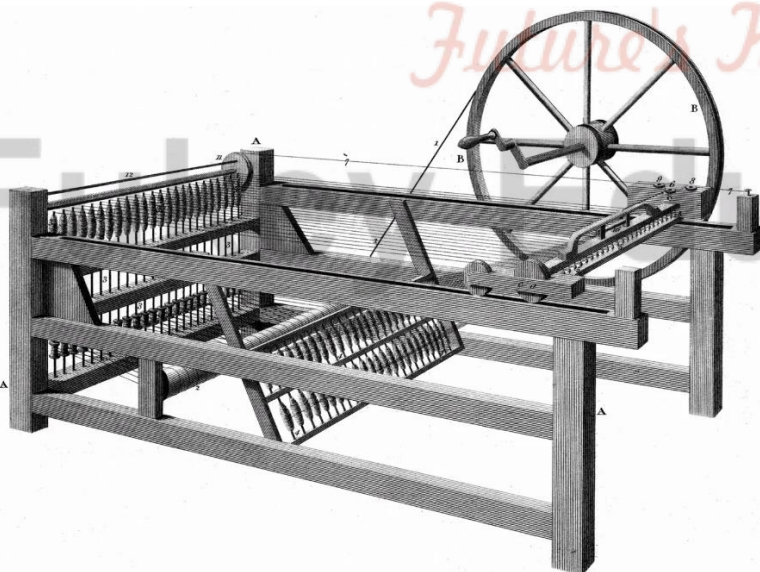
In 19th century, Europe some British industrialists preferred hand labour over machines because: -

- New technologies and machines were expensive, so the producers and the industrialists were cautious about using them.
- Machines often broke down and their repair was expensive.
- There were plenty of labours who were willing to work for low wages.
- A range of products could be produced only with hand Labour. Example In mid-nineteenth-century Britain, for instance, 500 varieties of hammers were produced and 45 kinds of axes. These required human skill, not mechanical technology.

Life of the Workers

The abundance of labour in the market affected the lives of workers. They started migrating from countryside to towns in search of jobs. They spent weeks in seeking jobs and sleeping under bridges and night shelters and night refuges. The actual possibility of getting a job depended on existing networks of friendship and kin relations.

Spinning Jenny



It was a machine devised by James Hargreaves in 1764 which consisted of number spindles, operated by turning a single wheel which can spin several threads at the same time. It replaced the hand spinning and labour work. Rise in the unemployment resulted in hostility towards the technology replacing the workers and there were attacks on spinning jenny.

INDUSTRIALISATION IN THE COLONIES

The Age of Indian textiles

Before the age of machine industries, silk and cotton goods from India dominated the international market in textiles.

Domination of Indian Hand-made goods in the international market

The reason for domination are: -

- Quality of Indian products.
- Demanded all over the world.
 - Armenian and Persian merchants took the goods from Punjab to Afghanistan, eastern Persia, and Central Asia.
 - A vibrant sea trade operated through the main pre-colonial ports. Surat on the Gujarat coast connected India to the Gulf and Red Sea Ports; Masulipatam on the Coromandel coast and Hooghly in Bengal had trade links with Southeast Asian ports.



A variety of Indian merchants and bankers were involved in this network.

- Supply merchants linked the port towns to the inland regions.
- They gave advances to weavers, procured the woven cloth from weaving villages, and carried the supply to the ports.

At the port, the big shippers and export merchants had brokers who negotiated the price and bought goods from the supply merchants operating inland.

Coming up of European companies

- European companies gained concessions from local courts also got monopoly rights to trade giving competition to local merchants.
- This resulted in decline of the old ports of Surat and Hooghly through which local merchants had operated. Exports from these ports fell dramatically.
- The local bankers slowly went bankrupt.
- This shift from the old ports to the new ones was an indicator of the growth of colonial power.
- Trade through the new ports came to be controlled by European companies and was carried in European ships.
- While many of the old trading houses collapsed, those that wanted to survive had to now operate within a network shaped by European trading companies.

THE AGE OF INDUSTRIALISATION**INDUSTRIALISATION IN THE COLONIES****What happened to Weavers?****Situation before East India Company**

- British cotton industries had not yet expanded.
- Indian fine textiles were in great demand in Europe.
- Competition from The French, Dutch, Portuguese as well as the local traders compete in the market, to secure woven cloth.

Situation after East India Company

- It could assert a monopoly right to trade.
- It proceeded to develop a system of management and control that would eliminate competition, control costs, and ensure regular supplies of cotton and silk goods.

**Steps taken by East India Company**

- The East India Company took control of the cotton and silk goods market by appointing the paid Gomastha s (A paid servant appointed to supervise weavers, collect supplies, and examine the quality of cloth.
- It also established direct control over weavers and prevented company weavers from dealing with other buyers.
- The East India Company appointed Gomastha to supervise the weavers in India.

Problems related to the system of company

- Weavers had to engage on the full time basis
- Regular clashes between weavers and Gomastha.
- They were different from the supply merchants. The new Gomastha were outsiders, with no long-term social link with the village.

They acted arrogantly, marched into villages with sepoy and peons, and punished weavers for delays in supply—often beating and flogging them.

Impact on weavers

- The weavers lost the space to bargain for prices and sell to different buyers.
- The price they received from the Company was miserably low.
- The loans they had accepted tied them to the Company.
- Weavers deserted villages and migrated, setting up looms in other villages where they had some family relation.

THE AGE OF INDUSTRIALISATION**INDUSTRIALISATION IN THE COLONIES**

- Weavers along with the village traders revolted, opposing the Company and its officials.
- Many weavers began refusing loans, closing down their workshops and taking to agricultural labour.

Manchester comes to India**Decline of Cotton exports from India**

In 1811-12 piece-goods accounted for 33 per cent of India's exports. By 1850-51 it was no more than 3 per cent. There was a decline due to cotton industries in England. They persuaded the East India Company to sell British manufactures in Indian markets as well and pressurised the government to impose import duties on cotton textiles so that Manchester goods could sell in Britain without facing any competition from outside.

The British imposed large import duties on cotton textiles which led to the collapse of the export market in the 19th century.

Problem of Indian cotton weavers

- Their export market collapsed.
- The local market shrank, being glutted with Manchester imports.



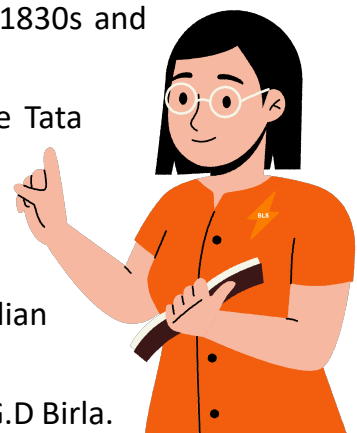
Future's Key
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FACTORIES COME UP

The Early Entrepreneurs

The history of many business groups goes back to trade with China. The British in India began exporting opium to China and took tea from China to England. Many Indians became junior players in this trade. They started providing Finance, procuring supplies, and shipping consignments. Having earned through trade, some of these businessmen had visions of developing industrial enterprises in India.

- In Bengal, Dwarkanath Tagore made his fortune in the China trade before he turned to industrial investment, setting up six joint-stock companies in the 1830s and 1840s.
- In Bombay, Parsis like Dinshaw Petit and Jamsetjee Nusserwanjee Tata who built huge industrial empires in India, accumulated their initial wealth partly from exports to China, and partly from raw cotton shipments to England.
- Seth Hukum Chand, a Marwari businessman who set up the first Indian jute mill in Calcutta in 1917 also traded with China.
- So did the father as well as grandfather of the famous industrialist G.D Birla.



Where did the Workers come from?

- In most industrial regions, workers came from the districts around.
- Peasants and artisans who found no work in the village went to the industrial centers in search of work.
- Most often, mill workers moved between the village and the city, returning to their village homes during harvests and festivals.
- The numbers seeking work were always more than the jobs available.

Jobber

- Industrialists usually employed a jobber to get new recruits, very often the jobber was an old and trusted worker.
- He got people from his village, ensured them jobs, helped them settle in the city and provided them money in times of crisis.
- The jobber therefore became a person with some authority and power.
- He began demanding money and gifts for his favour and controlling the lives of workers.



THE PECULIARITIES OF INDUSTRIAL GROWTH

Segments of industrial ventures

European managing agencies- They established tea and coffee plantations, acquiring land at cheap rates from the colonial government. They invested in mining, indigo and jute. Also imported Manchester made goods.

Indian Businessmen- They avoided competing with Manchester goods in the Indian market. Production of coarse cotton yarn rather than fabric. The yarn produced in Indian spinning mills was used by hand loom weavers in India or exported to China.

Changes that affected Industrialisation

A series of changes affected the pattern of industrialisation.

Swadeshi movement

- Nationalists mobilised people to boycott foreign cloth.
- Industrial groups organised themselves to protect their collective interests, pressurising the government to increase tariff protection and grant other concessions.
- Swadeshi products captured the imagination of market.

Industrialists in India began to shift from yarn to cloth to yarn production

- Exports of Indian goods to China declined.
- Produce from Chinese and Japanese mills flooded the Chinese market.
- Cotton piece goods production in India doubled between 1900 and 1912.

Impact of First World War

- Manchester could never recapture its old position in the Indian market.
- Local industrialists gradually consolidated their position, substituting foreign manufactures and capturing the home market.



Small scale industries Predominate

Large industries formed only a small segment of the economy. Only a small proportion of the total industrial labour force worked in registered factories: 5 per cent in 1911 and 10 per cent in 1931. The rest worked in small workshops and household units, often located in alleys and by lanes, invisible to the passer-by. Handicrafts production actually expanded in the twentieth century. Hand loom cloth production expanded steadily: almost trebling between 1900 and 1940.

THE AGE OF INDUSTRIALISATION**THE PECULIARITIES OF INDUSTRIAL GROWTH****Fly shuttle**

- It is a mechanical device used for weaving, moved by means of ropes and pullies.
- It places the horizontal threads (called the weft) into the vertical threads (called the warp).
- The invention of the fly shuttle made it possible for weavers to operate large looms and weave wide pieces of cloth.

Hardships faced by Weavers

- Weavers and other craftspeople, who continued to expand production through the twentieth century, did not necessarily prosper.
- They lived hard lives and worked long hours.
- Very often the entire household-including all the women and children had to work at various stages of the production process.
- But they were not simply remnants of past times in the age of factories.
- Their life and labour were integral to the process of industrialisation.

MARKET FOR GOODS

Ways of creating market for goods

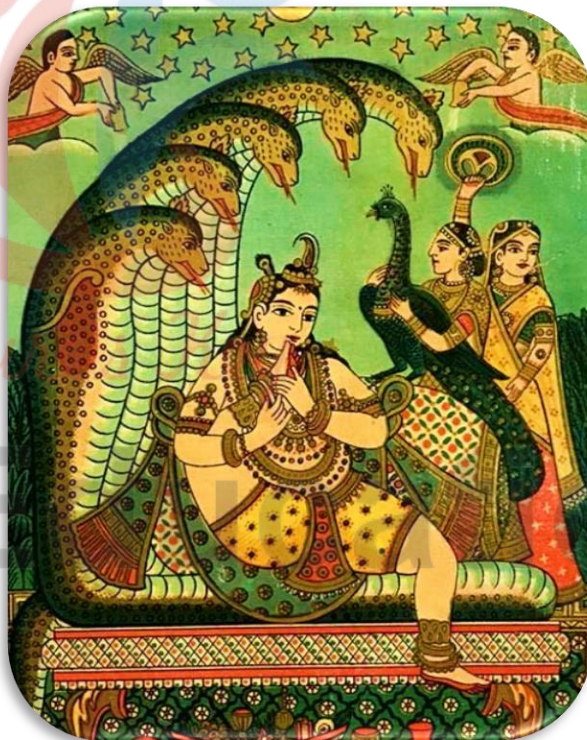
When new products are produced, people have to be persuaded to buy them. They have to feel like using the product.

Advertisement

- They try to shape the minds of people and create new needs.
- They appear in newspapers, magazines, hoardings, street walls, television screens.
- But if we look back into history, we find that from the very beginning of the industrial age, advertisements have played a part in expanding the markets for products, and in shaping a new consumer culture.



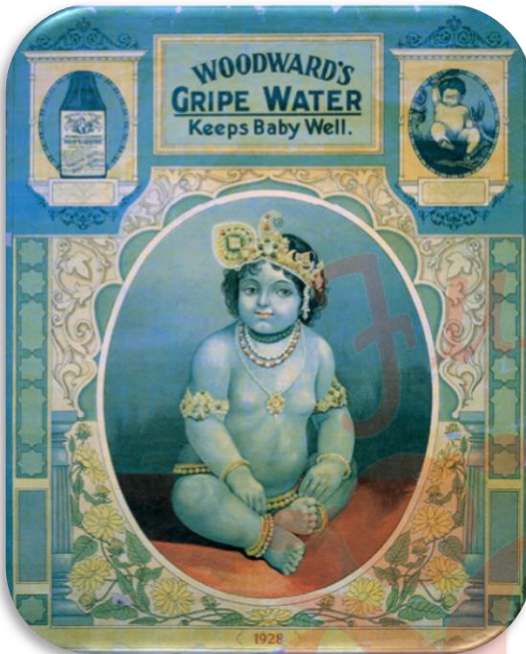
Use of labels as a mark of quality



- When Manchester industrialists began selling cloth in India, they put labels on the cloth bundles.
- When buyers saw MADE IN MANCHESTER written in bold on the label, they were expected to feel confident about buying the cloth.
- They also carried images and were very often beautifully illustrated.

THE AGE OF INDUSTRIALISATION**MARKET FOR GOODS**

- If we look at these old labels, we can have some idea of the mind of the manufacturers, their calculations, and the way they appealed to the people.

Images and illustrations.

- Images of Indian gods and goddesses regularly appeared on these labels.
- It was as if the association with gods gave divine approval to the goods being sold.
- The imprinted image of Krishna or Saraswati was also intended to make the manufacture from a foreign land appear somewhat familiar to Indian people.

Printing of calendars

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THE AGE OF INDUSTRIALISATION**MARKET FOR GOODS**

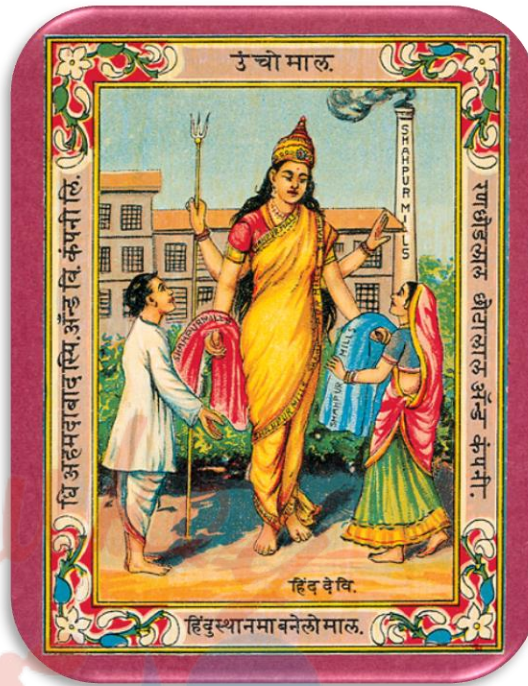
- Manufacturers were printing calendars to popularise their products.
- It captured the imagination of people as they saw them again and again.
- Unlike newspapers and magazines calendars were used even by people who could not read.
- Figures of important personages, of emperors and nawabs, adorned advertisement and calendars.
- When the product was being used by kings, or produced under royal command, its quality could not be questioned.

Nationalist message

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THE AGE OF INDUSTRIALISATION

MARKET FOR GOODS



- If you care for the nation, then buy products that Indians produce.
- It captured the imagination of people as they saw them again and again.
- Advertisements became a vehicle of the nationalist message of swadeshi.

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THE AGE OF INDUSTRIALISATION

MIND MAP

