

## **Revision Notes**

### **Class -10 Social Science(History)**

#### **Chapter 4- The Age of Industrialisation**

CBSE Class 10 Science History Chapter 4 begins with the outline of two pictures. The primary one was printed on the cover page of ET Paull's music book. It features the Angel of Progress, seen on a winged wheel symbolizing the changing times that ushered in an era of commercial brilliance. The image also features factories and machines- the drivers of industrialization and railways, camera- the fruits of industrialization. The second picture was published in a magazine called Inland Printers. This picture depicts how the magician of the yesteryears - Aladdin - has been replaced with the magician of the fashionable world - the mechanic. These two pictures associate industrialization with the spread of progress and modernity.

#### **Highlights**

This chapter will discuss:

- How relevant are these comparisons?
  - The very fact that industrialization didn't just involve big factories
  - Examine if everything was smooth during the propagation of industrialization
- Proto Industrialisation: The Baby Steps Towards Modern Industrialisation
- Industrialization, over the years, has been chiefly considered something related to machines and factories. But within the seventeenth and eighteenth centuries, the towns' merchants encouraged the agricultural peasants and artisans to supply goods exported to overseas markets. The merchants were interested to require the assistance of the agricultural people because, within the towns, they were blocked from fixing new businesses by the trade guilds.

Franklin Mendels termed this phenomenon because of Proto Industrialisation. During this point, the agricultural households worked as mini-factories.

#### **The Dawn of Industrialisation In England**

Although we are saying that the economic Revolution in England started within the 18th century, the initial decades of this century weren't so eventful. The small mills of this point used legacy technologies like waterwheels, windmills, etc. British Library informs that it had been only after a series of inventions like Thomas Newcomen's steam-driven piston engine, the Darby

Family's unique inventions concerning iron manufacturing, etc., greatly improved textile production, coal mining, and iron industry other such industrial sectors.

### **Factors that led to the Industrial Revolution:**

1. With the rapid advancement in technology, access to cotton and other raw materials for the heavy engineering sector became easier.
2. Transportation and communication were cheaper and more accessible. The navigable waterways of Britain saw big ships transporting coal to various plants.
3. Coal replaced wood as the primary source of power to the manufacturing units. The city of Bristol saw a massive increase in coal production.
4. There was finally a stable government and, more importantly, a stable monetary policy.
5. New inventions added momentum to the changes happening across Britain. For example, the steam engine was invented by James Watt in 1763, John Kay invented the flying shuttle, and Edmund Cartwright invented the power loom. The flying shuttle made weaving automatic for the first time. Moreover, it increased the consumption of yarn so much that the need for spinning machines was felt. This eventually led to the adaptation of power looms.

### **Richard Arkwright And His Contributions**

Richard Arkwright is remembered because of two reasons. The first one was that he invented the Water-frame. It employed the techniques used by James Hargreaves' Spinning Jenny. The water-frame automated the process of carding and spinning.

Secondly, now that Arkwright had this revolutionary technology in hand, he set up factories where many workers could use several water frames to mass-produce yarns for textile manufacturing.

### **Industrial Revolution Did Not Come with a Bang**

- When we talk about revolution, we think of some sweeping progress that changes the scenario in days. But the pace of the industrial revolution was slow. Even when many advanced types of machinery flooded England, the traditional small-scale industries were alive and kicking.
- It is true, though, that after the revolution in the textile industry, the iron and steel industry experienced rapid advancements. With the progress of the coal industry, iron and steel were made using coal. Later, when the steam-powered engines became a reality, the industry grew rapidly.

- The cotton or textile industry still relied on traditional workshops and rural cottage industries.
- One more reason for the slow adoption of new technologies and advanced machines is their cost. Cheap manual labour became a detriment to the progress of the Industrial Revolution

As earlier said, the rural peasants found it hard to earn a living through agriculture at the beginning of the 18th century. So, they came to the urban towns in droves, searching for work in the newly made factories and mills. Of course, the industrialists preferred manual labor despite technological advancements because manual labor saved a lot of their money. There were also few other reasons-

- Many products could not be made with the help of machines.
- Handmade products were considered more valuable and of 'class' than machine-made ones.
- The machine-made products could not be made with intricate designs and an immaculate finish.

### **The Plight of the Workers**

However, the workers had to work long hours, but they got low wages. The workers with no prior contacts from the villages had to wait for weeks before getting a job. In the 19th century, their wages increased, but inflation made this increase meaningless.

### **Industrialization In Pre-Colonised India**

Before the British caged the Golden Bird, India was at the pinnacle of textile manufacturing. India was the only one that was manufacturing finer cotton clothes. The traders frequented both the land and sea routes through which the Indian textiles traveled through far-off parts of the world like Central Asia and the Gulf of South-East Asia. The network was robust. On the one hand, there were supply merchants. And then there were the export merchants. The supply merchants paid the weavers in advance. They transported the finished materials to the ports where the export merchants bought them from the supply merchants.

### **The Happy Days Ended When the British Came**

- because the European companies gained power in India, they undermined the free movement of the Indian traders and monopolized the trade.
- Old ports in Surat and Hooghly deteriorated fast, new ports in Bengal and Bombay were developed. But they were controlled by the British.
- Even after the British Malay Archipelago Company came to India, the weavers were still at a plus - their products were very fashionable in Britain and other European countries. So that they had the bargaining power.

- But gradually, the Malay Archipelago Company made the weavers supply textile to them alone.
- In England, the traders there lobbied so that the import of foreign finer cotton clothes would stop. Later the cotton traders from the Manchester area started exporting cheap machine-made clothes to the Indian market. Therefore, the local traders here in India suffered double setbacks. Later, when the US war started, the British stole the raw cotton and supplied them to their homeland.
- Further, the British reduced India from an exporter of products to an exporter of raw materials. The precious raw materials like silk, jute, cotton, sugar, and even minerals were siphoned off to Britain. Thus, India's resources began to deplete - the economic fallout even to the present date.

### **The Industrial Forefathers**

- Despite obstacles from the British, cotton mills in Bombay and Ahmedabad, Jute mills in Bengal, Spinning and Weaving Mills in Madras started cropping up.
- When the British started exporting Opium to China from Indian, some Indian businessmen leveraged this opportunity. After earning a substantial amount by providing financial and logistical service, they tried to set up factories in India. In Bengal, Dwarkanath Tagore and Seth Hukumchand, Bombay Dinshaw Petit or Jamsetjee Nusserwanjee Tata, and other such visionaries many factories in India. But they were not allowed to trade in Europe.

### **Luck Favoured the Indian Industrialists**

- When the First World War started, the British mill had to supply war materials. So they stopped exporting cheap Manchester clothes.
- So, the Indian market came to the Indian producers again.
  - Later the Indian mills also had to supply war materials. However, instead of negatively affecting the mills, this newly found demand propagated the growth of the Indian factories. Many new factories were set up.
- After the War, the British industries failed to regain their dominant position. In the colonies, the local producers reigned the home market. In India, too, large industries could primarily be seen in Bengal and Bombay. It was the small-scale workshops that dominated the production. These small-scale industries cleverly adopted new technologies that were not so capital-intensive. So, they (especially the handloom industry) were able to increase their production.

### **Important Question and Answers.**

#### **1. Why did the women workers in Britain Attack the Spinning Jenny?**

**Ans:** Most of the workers who worked in factories were peasants. They joined these factories because they could not sustain their livelihood through farming. So, they know the pains of unemployment.

The introduction of Spinning Jenny meant that the manual workers employed in the spinning work had to bid goodbye. Spinning Jenny could automatically do the task that the workers did manually. So, the women who earned a living through hand spinning feared losing their job if the Spinning Jenny became popular. Thus, they attacked the machines.

## **2. Why did the Port of Surat decline as the 18th century came to an end?**

**Ans:** The port of Surat was used by the Indian merchants and traders to go far-off places like the Gulf or the Red Sea port to sell Indian-made textiles. Later, the British came to India and monopolized Indian trade. The first thing they did was remove these merchants and merchants from the trading scene, and they were able to trade freely without competition. Secondly, they established new ports in Bombay and Bengal, where they traded on their terms. The Surat port, once crowded with the Indian merchants, was neglected. Very few Indian traders were left in the last decades of the 18th century; that's why the Surat port died an untimely death.

## **3. How did the Swadeshi movement help the Indian textile traders and producers?**

**Ans:** During the Swadeshi movement, stalwarts like Mahatma Gandhi decided to boycott foreign products. People burned the cheap textiles that they bought from foreign traders. They vowed to buy only Swadeshi or Indian textiles and other products. Although the Swadeshi movement failed in the long run, it gave a solid push to the indigenous factories and small workshops. The movement might have failed, but the ideology did not die.

## **4. Who were the Gomasthas?**

**Ans:** The Gomasthas was a kind of control mechanism used by the British. They knew that they had to watch the weavers even though they had already eliminated the Indian traders. The Gomasthas worked as a supervisor of the weavers. They were the bridge between the East India Company and the weavers. They would collect clothes and examine their quality. They had no respect for the weavers. The weavers who took advance loans from the British had to supply the cloth to Gomasthas only.

## **5. Give two examples where progressive modern development has led to socio-economic or environmental problems?**

**Ans:** a. The scientists involved in the Manhattan Project are excited about its innovations; they were giddy when they thought about their innovation problems. What was their innovation? The atomic bomb. Did it solve the issues

plaguing humans? The two atomic bombs took lives of 66000 and 39000 innocent Japanese respectively, to not mention the after-effects of the bombs getting manifested generations after generations."

b. A few years earlier, social networking sites were termed as the game-changer. Today, even the youths are doubtful about this claim. Social networking sites have been more and more associated with depression and the fear of missing out syndrome. Today, malicious actors use social networks to spread misinformation and destroy the fabric of society. Every once in a while, social networking sites are accused of spying on their users.

## **6. What is proto-industrialization?**

**Ans:** Proto-industrialisation refers to the emergence of small workshops and home-based production units involving textiles, pottery, food processing, glassworks. These formed the basis of factory-based industrial production. Hans Medick calls it industrialization before industrialization. Very often, we associate industrialization with big factories or industries. Still, in the 17th and 18th centuries, small workshops were the beginning of what we know as the wheels of the industrial revolution.

## **7. What was the impact of industrialization in England?**

**Ans:** England was the first country to be industrialized. The effects of automation could be seen vividly in England -

- The small-scale home-based textile industries gave way to big factory-based textile industries. The advent of the spinning jenny changed the manual form of textile production to an automated build.
- On the one hand, Britain could cater to the growing domestic demands for textiles. On the other hand, it could export surplus materials to overseas countries - especially the colonies.
- The iron and steel production increased manifold. The primary reason for this was the usage of coke instead of charcoal.
- The increase in iron and steel production gave a push to the construction and railroad industries.
- The History channel informs that many industries became viable, and their productions increased because of the steam engine and its later advanced versions. These industries were the cotton mills, the iron and steel industries, or even coal mining.
- As the factories, displays, and businessmen increase, the bankers and financiers would come and give the loans and other monetary services. Thus many new banks were established.
- Later as industrialization became a norm and not an exception, we see the advent of more advanced technologies like the telegraph.
- Lastly, the industries and the country progressed, but the lives of the workers deteriorated. On the one hand, the workers involved in the traditional

production method found it hard to compete with the big industries. On the other hand, the big industries paid a paltry sum of money to their workers, who had to work overtime.