

# The Modern Age in Europe (C) Industrial Revolution

The term **Industrial Revolution** denotes all those changes that took place in the field of industry during the second half of the 18th century and the first half of the 19th century.

Before this period, goods were manufactured at home with hand. **Industrial Revolution** is the period that marked a change from handwork to machine work and from domestic system to factory system of production.

In short, the Industrial Revolution is the name given to a series of changes that brought about a transition from production by hand to production by machine, from small-scale production to large-scale production, from handmade goods to machine-made goods.

The Revolution in England around mid-eighteenth century by mass production of goods.

## CAUSES OF THE INDUSTRIAL REVOLUTION

**1. Congenial Atmosphere:** After the Renaissance and the Reformation, Englishmen began to enjoy *the freedom of thought and expression*. There was scope for experimentation; and the government did not interfere in their daily life. The large number of inventions made by the British scientists, brought about a revolution in industry in England.

*Invention of machinery and its use in manufacturing was the starting point of Industrial Revolution.*

**John Key**, a weaver of Lancashire, invented **'The Flying Shuttle'** which increased the speed of weaving. It also made the weaving of broad cloth by one man possible.

A Lancashire weaver named **James Hargreaves** invented a machine called the **Spinning Jenny**. It could spin eight threads at a time instead of one thread of the old-fashioned spinning wheel.

**Richard Arkwright** invented the **'Water Frame'**. It started in the factory system.

**2. Colonial Empire:** England had a large colonial empire. From her colonies she could get raw material



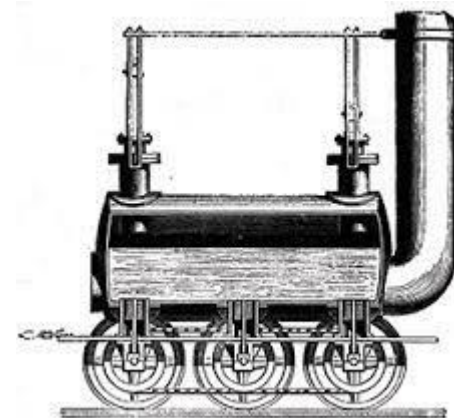
at cheaper rates for her factories. These colonies also served as markets for the British manufactured goods.

**3. Availability of Natural Resources:** Natural resources such as iron and coal were available in England. The iron and coal mines were situated close to each other. Iron was used in making machines. The coal provided cheap fuel. Both these factors helped in the development of industries.

**4. Increase in the Demand for Goods:** The incentive to produce more and more goods was provided by two factors. First, *the huge profits of expanding trade provided an impetus to discover new ways of increasing her production.* Second, *the Napoleonic wars made the English industries quite active.* The Napoleonic wars damaged trade and industry of the continental countries. Since these wars were never fought in Britain, the long period of peace in Britain proved conducive to industrial production.

**5. Availability of Labour:** The feudal system broke down and the Agrarian Revolution preceded the Industrial Revolution in England. As result, a large number of peasants were unemployed who shifted to cities. So many labourers were available in England to be employed in the factories.

**6. Effective Transport System:** A good transport system is necessary for effective trade and commerce. In the second half of the 18th century, transport system in England was adequate. The use of tarcoal and tar enabled the construction of roads in many European countries. Steamboats and steamships were extensively. **George Stephenson** designed his locomotive engine, which was used for hauling coal in the Killingworth colliery. This brought about a revolution in transport.



**7. Use of Steam:** *James Watt invented the steam engine.* The discovery of steam as a source of power, facilitated the Industrial Revolution. Transport system was revolutionised.

**COMPARATIVE STUDY OF CAPITALISM AND SOCIALISM**

## 1. CAPITALISM

Wealth could be used for generating more wealth which came to be called **capital**.

The owners of the capital became the **capitalists**. The economic system which generates and gives power to capitalists came to be known as **capitalism**.

A travelling barber, Richard Arkwright understood the economic potential of using machines 'to clothe' millions of people. From the word 'to clothe' its Latin '**investire**' gave rise to a new term **called investment** which *mean acquisition of financial or productive assets with the help of the capital*.

**Capital** came to be defined as the money which is invested for producing different articles in a factory, for buying machinery and raw material and for selling finished goods in the market.

In capitalism, the means of production such as labour, raw material, tools and machines are owned and controlled by private individuals or groups of them.

### Causes for the Rise of Capitalism

**1. Increase in Population:** The Industrial Revolution increased the national wealth, raised the standard of living, made life more comfortable. All this helped in checking the onslaught of various diseases. Thus, it led to an increase in population.

**2. Legal Requirement:** There was the new enclosure law which required farmers to put fences or hedges around their fields to prevent common grazing on the land. Small farmers who could not afford to enclose their fields had to sell out their farms to larger landholders and search for work elsewhere. These factors combined to provide a ready workforce for the new industries.

**3. Growth of Towns:** New manufacturing towns and cities grew dramatically. Many of these cities were located close to the coalfields that supplied fuel to the factories. Factories had to be close to sources of power because power could not be distributed very far. The names of British factory cities soon symbolised industrialisation to the wider world: Liverpool, Birmingham, Leeds, Glasgow, Sheffield and especially Manchester.

**4. Mass Production:** Mass production destroyed the domestic system of production. The growth of industries the use of huge machines gave rise to

factories. The people of villages shifted to towns for employment in the factories.

**5. Disappearance of Small Farmers:** The small farmers who cultivated land and manufactured goods in their spare time, in their homes shifted to new industrial towns. They were forced to seek employment in factories because they were replaced by big landlords.

## **IMPACT OF CAPITALISM**

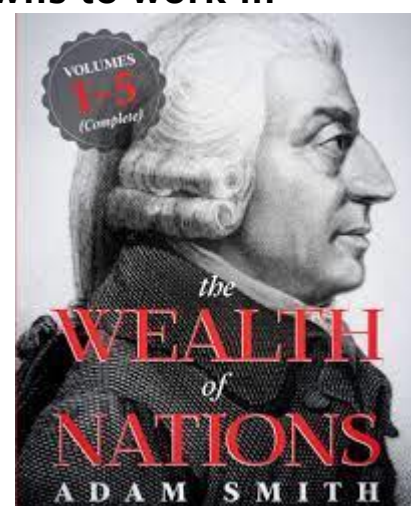
1. **Loss of Traditional Jobs:** The movement of people away from agriculture and into industrial cities brought great stress on the labour force. Women in households, who had earned income from spinning, found the new factories taking away their source of income. Traditional handloom weavers could no longer compete with the mechanised production of cloth. Skilled labourers lost their jobs as new machines replaced them.

2. **Exploitation:** In the factories, people had to work long hours under harsh conditions. Factory owners and managers paid the minimum amount necessary for a workforce, often recruiting women and children to tend the machines because they could be hired for very low wages.

3. **Stress and Strain:** Division of labour greatly improved productivity, but many of the simplified factory jobs were repetitive and boring. Workers also had to labour for many hours. Factory workers faced strict rules and close supervision by the managers. Safety was not a matter of concern, and workers often suffered serious even fatal accidents. The clock ruled life in the mills which caused lot of stress among the workers.

4. **Overcrowding:** People moved from small villages and towns to work in factories located in cities. Cities became overcrowded and unsanitary. The working poor lived in crowded areas in the center of cities in shoddy houses.

## **2. SOCIALISM**



In 1776, the famous Scottish economist Adam Smith expanded his theory in his Inquiry into the Nature and Causes of the Wealth of Nations.

In his book he propounded the doctrine of 'Laissez faire' or "let us alone". Adam Smith very strongly disliked state interference in the economy.

## Meaning of Socialism

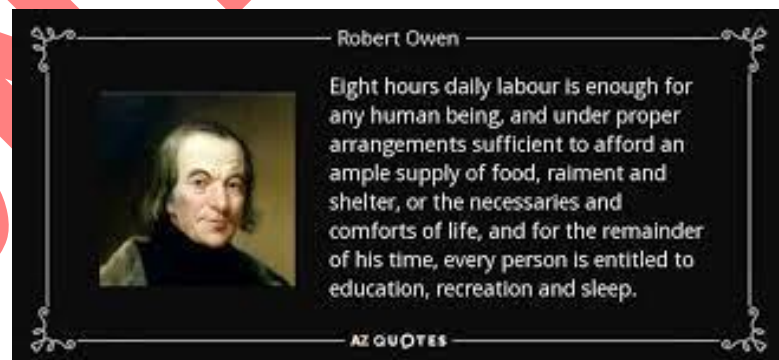
Socialism is defined as an economic system in which the means of production are owned not by private individuals but by the community in order that all may share more fairly in the wealth produced.

Socialism is based on three principles:

- (i) It is opposed to private capitalism.
- (ii) It is the voice of all workers and the working class.
- (iii) It demands a just distribution of wealth.

## Early Socialists

The first socialists were Frenchmen- Babeuf, Saint-Simon, Fourier and others. Robert Owen (1771-1858) has been called "the Father of -British Socialism". He owned a cotton mill in Scotland. He reduced the labourers' working hours, paid them good wages and helped the Trade Union Movement to grow.



## CAUSES FOR THE RISE OF SOCIALISM

### (i) As a Reaction to the Evils of Capitalism:

As a result of the Industrial Revolution the society was divided into two distinct classes-the capitalists and the socialists. The capitalists had their selfish interests and they began to exploit the workers. They paid them low wages and made them work for long hours. They collected great wealth and began to lead a luxurious life at the cost of the workers. The rich were becoming richer and the poor, still poorer. This gulf went on widening and created social disharmony and ultimately led to struggle between the two classes. The socialists took the cause of the workers and tried to save them from the exploitation of the capitalists.



## (ii) Trade Union Movement:

The strong Trade Union Movement had forced the British government to recognise the rights of workers. It had brought the division of society into the rich and the poor into sharp focus. This had led to rethinking among the vast majority of workers,

## (iii) The Chartist Movement:

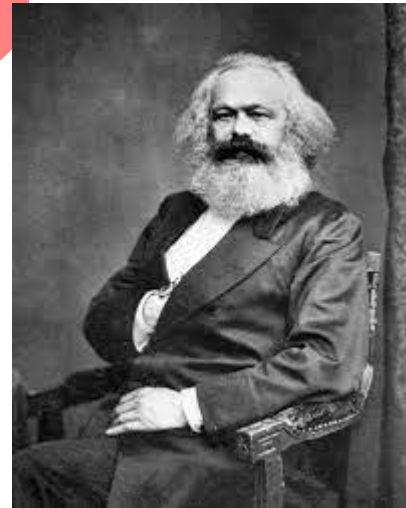
Leaders put up their demands before the Parliament in the form of a charter, so the movement was named the Chartist Movement. It aimed at getting the right to vote for workers. It led to many riots and strikes and the movement declined in the mid 19th century.

## MARXIST SOCIALISM

Karl Marx (1818-83) & Frederick Engels (1820-1895) lived in London. They had earlier prepared a charter of Demands or a Manifesto for the German Communist League. Another famous book of Marx and Engels is Das Kapital

Karl Marx thought of a new society would be 'socialist' in nature, a society without exploitation is known as 'Marxist Socialism' or 'socialism'.

Eventually, socialism would give way to a communism, i.e., a classless, stateless system based on common ownership and free access and maximum freedom to individuals to develop their own capacities and talents.



**Lenin and Trotsky** were the chief organisers of this Communist Revolution. On October 1, 1949, a Communist regime was established in China under the of **Mao Tse-Tung**.

In India too socialist parties emerged. In 1934 Socialist party was established in India under the leadership of Acharya Narendra Dev, Achyut Patwardhan, Jayaprakash Narayan and Dr. Ram Manohar Lohia.