Lesson 2: The Industrial Revolution

Lesson 2: Video Lecture

Brainstorming Questions

- What were the factors that led to the industrial revolution?
- What were the political and socio-economic consequences of the industrial revolution?

Competencies

By the end of this lesson, you will be able to:

- List down the main features of capitalism.
- Describe the theoretical foundations of Marxian Economics.
- Identify major factors that led to the Industrial Revolution?

Lesson Overview

Industrial Revolution, in modern history, **the process of change from an agrarian and handicraft economy to one dominated by industry and machine manufacturing**. These technological changes introduced novel ways of working and living and fundamentally transformed society. Therefore, in this lesson you will learn about the factors that led to the Industrial Revolution, and its political and socio-economic results.

- **1. The Industrial Revolution**

The industrial revolution was the first establishment of industrial capitalism took place in Britain in the period between 1750/1780 and 1850. The industrial revolution was preceded and made possible by a long period of change and development going back at least to the mid-16th century and even to the Middle Ages. Moreover, change and development did not cease in the 1850's but continued because of industrialization and the change which it brought was a continuing process.

The industrial revolution meant that industrial production in major industries was transformed so that far greater and cheaper production was possible than ever before. This cheap mass production was achieved by interconnecting organizational and technological changes. These organizational and technological changes were at the heart of the Industrial Revolution.

Machines in factories replaced or complemented work done by hand with human strength and skill. The industrial revolution took machinery a stage further. There were more machines of new types, and they were more complex and larger. The size and expense of machinery in the industrial revolution meant that by the late 18th century the employment of these machines required industrial capitalists and factory systems. The new machines in factories and elsewhere employed inanimate power. Inanimate power from water and

from the wind has been used since the Middle Ages or in the case of sailing ships since ancient times. However, as the economy expanded and when industry needed a form of power greater than water could provide and more flexible than waterpower, a new form of power came into use, i.e., steam power. The heat to generate steam came from burning coal, which in Britain was cheap and abundant. The first commercially viable steam engine was constructed by Newcomen around 1705/1709. But it could only be used for pumps chiefly in mining. James Watt in 1783/84 made a steam engine which was more powerful and more economical in its use of fuel and adapted to operate machinery in factories. From 1780s, more and more factories adopted steam power.

Steam power was also applied to land transport in the form of railways. The first modern railway was operated entirely by steam locomotives and carried passengers as well as freight. The Liverpool and Manchester railway was opened in 1830. By 1850, a network of railways connected all important places in Britain.

1.1 Political and Socio-economic Consequences of the Industrial Revolution

Cheap mass production was one of the features of the industrial revolution. Before the industrial revolution, economic depression usually resulted from wars, big epidemics, or most often bad harvests. From the industrial revolution onwards, however, a normal cause of economic depression was overproduction caused by a lack of effective demand.

The industrial revolution made the agricultural sector of advanced countries less dominant. People transferred to other sectors of the economy, and investment and production in other sectors increased. Agricultural productivity has increased in advanced countries because of the spread of better methods of agriculture for example, the development of artificial fertilizers and pesticides.

The industrial revolution accelerated the shift from the country side to the towns and cities. Population expanded rapidly in Britain and other industrialized countries of the west despite bad living and working conditions for the working class. Probably, the main reasons for this population growth were that more food was available to support a larger population and industrialization with expanding economies could provide more employment for an expanding population.

As a result of the industrial revolution, a new class system developed with more class consciousness than ever before. A large industrial capitalist class was added to the existing bourgeoisie of merchants, professional people and bankers, making the bourgeoisie as a whole richer and more numerous.

Alongside the industrial bourgeoisie and because of industrialization, there developed the new class of the industrial proletariat. There had always been wage workers, but these were now more numerous and were more and more concentrated in large factories especially in towns and cities. The industrial proletariat came to provide the mass base for the new doctrines of socialism and the support for working class political parties with

socialist programs governments and ruling classes were alarmed by the growth of socialism in the 19th century

Industrialization increased national wealth although this was very unevenly distributed. From about 1850, industry, technology, and science were applied to armies and navies. This meant that the already existing gap in power between western states and non-western states became bigger than ever before. This meant clashes of interest and confrontations between western states and non-western states. Conflicts could be resolved more easily by western states using military or naval force or both. Moreover, the growth of industry and the expansion of the western economy in general meant that western states became more interested in non-western areas of the world than before as sources of raw materials and as markets for export or potential markets. Also, steamships, railways and the electric telegraph (1840s on) improved transport and communications and tied the world more closely together than ever before. So that from the third quarter of the 19th century, the world became increasingly one single integrated capitalist world economy.

The result of all these changes was the imperialism of the late 19th century, i.e., the expanding and accelerated drive for colonial acquisitions and spheres of influence. However, the earlier industrial revolution and the spread of industrialization had laid the groundwork for late-19th century imperialism. In fact, very large acquisitions of colonial territory took place in the 19th century before what is usually called the "Age of Imperialism," beginning around 1885 or 1890. Finally, the industrial revolution made economic, social, and cultural changes faster than ever before, so that "change became the norm".

- **Key Concepts and Terminology**
- *Industrial Revolution*
- During the late eighteenth and early nineteenth centuries, a revolution—an industrial one was transforming the economic and social structure of Europe, although in a less dramatic and rapid fashion. The period of the Industrial Revolution witnessed a quantum leap in industrial production. New sources of energy and power, especially coal and steam, replaced wind and water to create labor-saving machines that dramatically decreased the use of human and animal labor and, at the same time, increased the level of productivity. In turn, power machinery called for new ways of organizing human labor to maximize the benefits and profits from the new machines; factories replaced shop and home workrooms. Many early factories were dreadful places with difficult working conditions. Reformers, appalled at these conditions, were especially critical of the treatment of married women.