

WORLD HISTORY

Part III

Subpart-I : Industrial Revolution

Subpart-II : Socialism and Marxism

Subpart-III : Colonialism and Imperialism

Subpart-IV : First World War

- How did the British Industrial Revolution appear as an unexpected event? Then different regions developed different models of industrialization according to the circumstances and how and why?
- How did industrialization act as a major factor of change in 19th century Europe?
- Industrialization strengthened the position of middle class on the one hand and it gave birth to an industrial working class on the other. Therefore, while Nationalism progressed as a middle-class ideology, Socialism and Marxism began to spread as a lower-class ideology.
- Consequently, it led to emergence of Neo-Imperialism and its spread. This gave rise to a globalized system.
- The outcome of interaction and conflict between imperialism, socialism and nationalism was the First World War.

World History (Part-III)

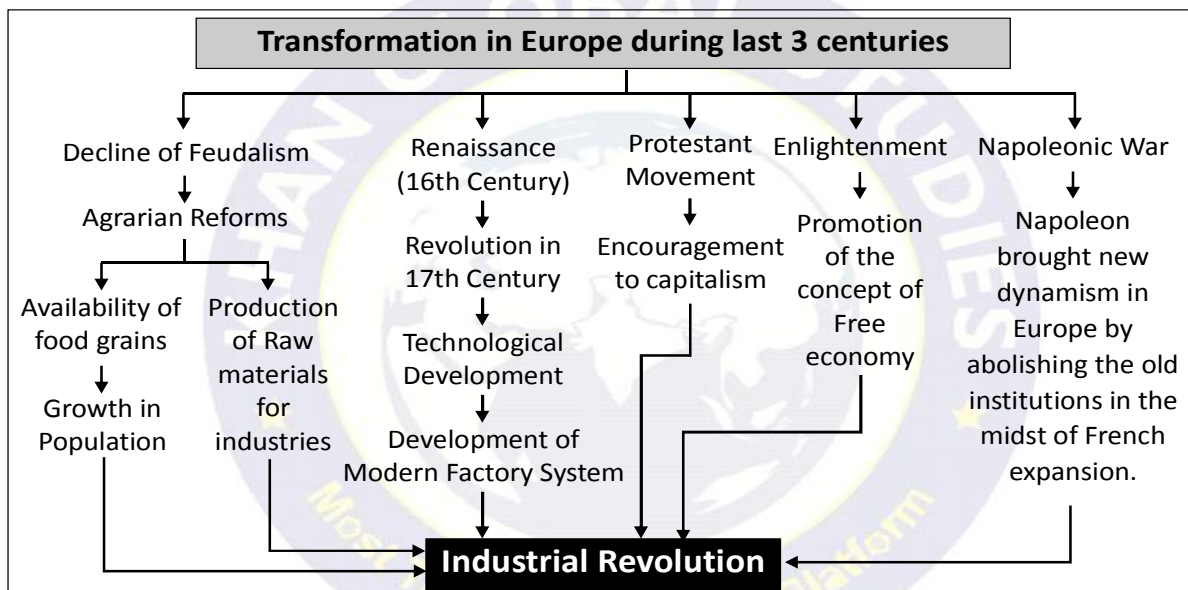
Sub-part-I: Industrial Revolution

■ What is meant by the Industrial Revolution?

- Many scholars including Arnold Toynbee coined the term 'Industrial Revolution'. It was called the revolution, not for the fact that the changes were excessive fast or sudden, rather it was called revolution as it brought a radical change in the means of production and that of transportation. Human labor was replaced by modern machines. So, it left a wider impact on contemporary society. The industrial

revolution implied the productive investment, the technological change, the rise of new production centers and the transformation in the social structure.

- The socio-economic transformation of Britain and Europe in the second half of the 18th century lay in the changes that had occurred in Europe over the previous three to four centuries. This can be understood through following diagram -

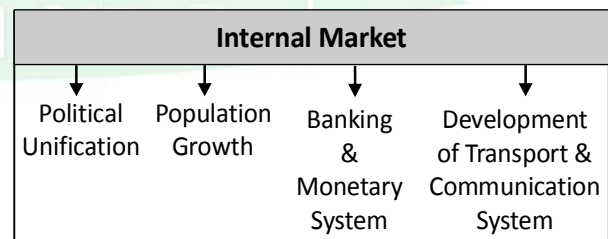


Industrial Revolution in Britain

■ Why did the industrial revolution start in Britain?

- As we know, in the commercial revolution, the earlier leading countries were Spain and Portugal then later Britain, Holland and France joined the race. Then why did other countries lag behind Britain in course of Industrialisation? Since these countries failed to transform the commercial capital into industrial one, but Britain successfully did so. In fact, Britain fulfilled certain conditions which could lead towards industrialisation—

1. Development of a home market increased the demand of commodities –

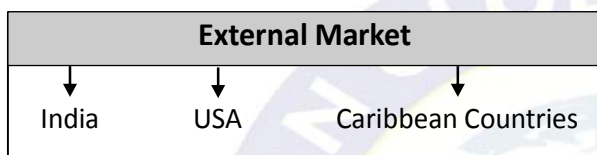


- Agrarian revolution and the improvement in the breeds of animals could lead to better availability of foods. So, it could result in population growth.
- In 17th century the different parts of the United Kingdom such as Britain, Scotland and Ireland, were duly integrated and it led to administrative

uniformity as well as the creation of a larger internal market.

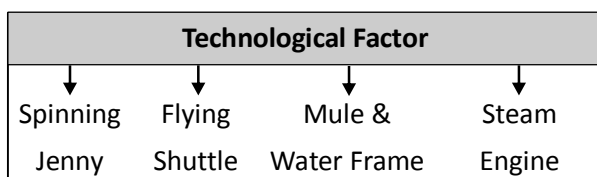
- There was a development of the banking system as well as the Chamber of Commerce. All these developments resulted in growing purchasing power among the people. So, the home market of Britain just expanded.
- This period is marked by the development of concrete roads and canals. They strengthened the means of transportation particularly the canals came into larger use for transportation of minerals from mines to the factory sites.

2. Development of External Market –



- Britain could develop a wider market for their industrial product in Asia, America and Caribbean region. It is an irony in history that, up to 18th century India was a great exporter of cotton goods but up to the beginning of 19th century Indian market was inundated with cotton goods from Britain. Furthermore, the British government enthusiastically supported its capitalist class. Today this is a common phenomenon among the nations of the world but even in 19th century the British foreign policy was completely subordinated to its economic policy. Through foreign trade, Britain could accumulate a large quantity of capital to invest in industrialisation. It is said that Britain invested 5% of the national income in industrialization, out of which 2% was transferred from India.

3. Technological Development –



- Technological development prepared the way for the rise of the modern factory system in Britain. One can underline upgradation in the following fields of technology in Britain - Cotton goods, Iron industry, Railways and Steam engine etc. The new technologies gave support to production of cotton. For example, Spinning Jenny of Hargreaves, Water frame of Archrite and Mule of Crompton multiplied the production of yarns. Finally it was the Power Loom of Edmund Cartwright which completed the technological advancement in cotton goods industries. Likewise, in the field of iron smelting the family of Abraham Derby made a major contribution. The development of steam engine brought a momentum in production and it also paved the way for the development of railways.

- In Britain, one special factor was a wider social acceptance of these new technologies. For example, it has been said that in Britain power loom was succeeded as it was artisans who accepted this, but in France, it did not get easy acceptance as it was imposed from above by the government.

4. Social Change -

- The rise of the middle class and their interest in savings and investment gave impetus to the industrial revolution.

■ Impact of Industrial Revolution on British Society -

- Industrialisation in Britain changed its national character. There was the rise of a strong middle class and simultaneously an industrial working class. The emergence of the new classes created a new base for the change. Under the demand of new classes, there was an expansion in the franchise.
- Industrialization in Britain to a greater

extent, solved the problem of production but complicated the problem of distribution. It encouraged a sharp division in society, increasing the gap between the rich and the poor. The peasants were thrown out of agriculture and they were compelled to migrate to towns which were lacking in proper infrastructure and civic facilities. So the industrial workers had to live in a pathetic condition. Even their working environment was quite unhealthy. For maximizing their profit, the capitalists used to employ women and children in a large number in their factories and even their working hours were very long and their wages were very low. Due to these reasons, the average life span of workers in industrial area was 21 to 17 years.

- Finally, the plight of the workers got the attention of some humanist thinkers. Industrialist, Robert Owen, was a humanist thinker among them. He drew the attention of the government towards the condition of the workers. So it was in this context that the Acts of 1819, 1833 and the Mining Act of 1842 were legislated to provide some protection to women and children employed as labour.

■ **Impact of Industrial Revolution on British Culture –**

- In Britain, the industrial revolution resulted in significant cultural changes. In the cultural field, there were two types of changes that were seen -
1. The Industrial Revolution encouraged many consumer-related products. So, there was a growing sense of consumerism among the people. It resulted in the decline in human compassion i.e. the sensitivity towards other individuals of his own group decreased.
 2. There was also a natural reaction against increasing urbanization, desolation of villages, devastation to nature and

increasing insensitivity. Moreover, a section of intellectuals was also showing their attraction towards the pre-Industrial Revolution situation. For example, the romanticist scholars Wordsworth, P.B. Shelley and John Keats showed their reaction against this. In the 19th century, author Charles Dickens, portrayed town life and working conditions of industrial workers quite vividly in his famous text 'Hard Times'.

■ **Expansion of industrialisation in other countries -**

- The industrialization progressed first in Britain and then it spread to other regions. The industrialisation of Britain was unplanned, but all subsequent industrializations in various nations were well designed. Naturally, the industrialization in one region encourages the deindustrialization in the other. So, it was very difficult for a new comer to maintain the pace of industrialization in the face of the competition from the country which had industrialized earlier. Therefore, the threat of deindustrialization loomed large on the head of those countries which continued the production with conventional method, for example, India and China. Therefore, to protect their industries and to compete with Britain, the other countries had to follow a separate model of industrialization. In this context, we can understand the other models of industrialization i.e., American model, German model, Russian model and Japanese model.

American Model of Industrialisation

- After its independence, America progressed towards industrialisation. But the biggest hindrance in the path of industrialization was to bring the change in trade structure. Before its independence, America was merely an

importer of British industrial goods and the exporter of agricultural produce. Apart from this, there was lack of proper infrastructure, for example, transport and communication system, centralized bank, monetary system etc. Therefore, the United States of America developed a model of industrialization different from British model. It gave emphasis on following factors -

1. **Powerful federal government based on the new constitution**– A strong federal government was formed in 1790, which played an important role in developing the United States of America as a unified market.
2. **Protection to American industries**– To compete with European products, the United States of America implemented a protectionist policy for their industries which became a model of American industrialization. This protectionist policy established America as an industrial power in the world. Hamilton, an economist and politician, laid special emphasis on protectionist policy.
3. **Development of modern transport and communication system**– Development of modern transport and communication system played an important role in connecting the internal market. For example, the federal government constructed some major roads and canals, including Cumberland road. Apart from this, initiatives were taken to construct highways and superhighways, railways and airports.
4. **Emphasis over primary education**– An important reason for the success of the American model was the emphasis over primary education by the American government. For example, in 1830 the primary school model was implemented. One of the objectives of this model was to provide basic education to the common

people so that they could value business matters and industrialization.

5. **Establishment of National Bank**– National Banks were established with the aim of strengthening the credit system for industrialization. The first and second banks known as the Bank of United States, were established in 1796 and 1816, respectively. Along with this, the monetary and insurance system were also established.
- Industrialization of America presented a different model of industrialization in comparison to British one because of its protectionist policy. In fact, the labor in America was costlier than in Britain. So, in American model there was greater emphasis on the efficiency of technology to compensate the labour. Therefore, through the research and development programme USA successfully developed a better technology. Because of which the American economy remained high-tech and an expensive labor economy. Therefore, any nation which tried to adopt the American model of industrialisation had to face many problems.
 - As we have observed, Britain was the first industrialised country. As it represented the first industrialisation in history. From 1860s there was the rise of the second industrialisation. While in the first industrialisation there was emphasis over mainly on cotton goods industries, woollen industries, iron-forging industry etc., but during the second stage, there was the foundation of basic and heavy industries like iron and steel industries, chemical industries etc. Furthermore, during this stage, there was the development of railways. During the second stage, industrialisation expanded from western Europe to the other parts of Europe and even to Asia (Japan).

Industrialisation in Germany

- In the second industrialisation, Germany emerged as a leading country but for its industrialization, Germany had to overcome a series of obstacles.

1. At that time Germany was a collection of 200 tiny states. The presence of such a large number of states created a barrier against a big market.
2. Likewise, serfdom was existing in German region. So, there was a dearth of sufficient labor force for industrialisation. Furthermore, in a major part of Germany, the old system of production i.e. guild system was still prevailing.
3. In Germany, unlike Britain, there was a dearth of individual capital for investment.
4. Apart from that, paternalistic laws were prevailing in Germany. These laws put a check over the free settlement of the people from one region to another region.

■ Germany's progress towards industrialization–

- In spite of these barriers mentioned above, Germany went for industrialisation and in future, it emerged to be the most industrialised nation in Europe.
- First of all, base work was done by Napoleon Bonaparte. Napoleon, after conquering Germany, just reorganized German states into 16 bigger states in place of 300 tiny states. So, this phenomenon led to the integration of the market.
- Furthermore, Napoleon Bonaparte introduced the continental system against Britain. Under this system, British goods were boycotted everywhere including Germany. So, naturally, this resulted in creation of a market for German goods in German region.
- In the Congress of Vienna, Prussia exchanged some Polish (Poland) region with iron and coal-producing Rhine

region. So, Prussia went for industrialisation and this industrialisation stimulated the same even in other parts of Germany.

- Gradually, serfdom was abolished and even paternalistic laws were discarded in 1849. It increased the movement of laborers which reduced the dearth of workers.
- In 1830s and 1840s, there was the expansion of railways in Germany. So, the internal market of Germany expanded. This market was integrated further due to the formation of Zollverein (1834), a custom union.
- Lastly, there was a question of investment in industrialisation. Here we come to know that the role which had been played by individual capital in Britain, the same role was played by joint-stock banks in Germany. In other words, Joint-stock banks fulfilled the need of investment and mobilise the capital for industrialisation. In this way, Germany went on the path of industrialisation.

■ Impact–

- Industrialisation in Germany was having a wider impact. As a result of industrialization Germany went far ahead of Britain in the field of basic and heavy industries like chemical industries, electrical industries and automobiles industries. What Britain had achieved in the last 100 years, Germany achieved only within 30 years. The immediate impact of Industrialisation was the unification of Germany. Then unified Germany created a major problem for the Balance of power in Europe. In fact, the German capitalist class created a social base for unification in the hope that a unified Germany could give support to the German industrialist class in the manner the British Empire had been giving support to the British

capitalist class. So, naturally, the unification of Germany resulted in a rivalry between the British Empire and the German Empire for the expansion of the market. Finally, it resulted in the First World War.

Industrialisation in Russia

■ Challenges in the path of industrialization–

- Russia was a country of continental size but due to its **climatic factor** and some other factors like the **dearth of individual capital** and the **feudal nature of society**, Industrialisation appeared to be a very difficult phenomenon in Russia. But in spite of the barriers mentioned above, Russia went for Industrialisation.

■ Russia's progress towards industrialization–

- **Bid for industrialisation in Russia in 18th century-** In 18th century, Russian emperor Peter the Great shown his enthusiasm for Industrialisation. For that, he decided to establish some industries producing weapons and in the industries, he employed slaves. But his initiative for Industrialisation did not produce the expected result.

- **Industrialisation in Russia in 19th century-** In actual sense industrialisation in Russia started in 19th century under the Russian emperor Czar Alexander II. Russian industrialisation was based on the Gerschenkron model. According to this model, whosoever country is going to join industrialisation later is not bound always follow the model of first industrialised nation. He may create his own model. Furthermore, if in that country some factors for industrialisation were missing that may be compensated through active participation of the state.

• Features of Industrialisation in Russia –

1. In Russian industrialisation, the state played a major role, while the middle class didn't play any significant role. It was the

state which acted as the investor, the producer and the consumer.

2. In order to mobilise the resources, the state imposed heavy taxation on the peasantry.
3. In the dearth of individual capital, the state played the role of investor in order to fulfill the need for investment, the state took loans even from abroad. So, up to the beginning of 20th century, Russia became the most indebted country in the world.
4. In Russian industrialisation, there was emphasis over the big as well as heavy industries.

■ Impact:-

- Whenever we observe the impact of industrialisation in Russia, we come to the point that in one sense it was Russian industrialisation that prepared the way for Russian Revolution as well as the success of the Communist Party. For example, due to heavy taxation peasants were offended, so they joined the revolution. Then two factors ensured the success of the Communist Party.
- First one was the weak middle-class in Russia. As we know, the Russian middle-class didn't play any important role in industrialisation. So, it was in a weak position in Russia and whenever there was the rise of the Communist Party, the middle class could not counter the communist movement in Russia.
- Second one factor was the specific nature of Industrialisation in Russia. In fact, in Russia, most of the industries were established in a particular region, so the movement of the working-class was confined to that particular region only. This resulted in growing consciousness among the working-class and finally the success of the Communist Party in Russia.

Industrialisation in Japan

- Japanese industrialization was the product of an unusual course and it trailed towards a unique path. The reason for this unique path was the challenges Japan had faced during the industrialization -

■ Challenges -

1. Japan was a victim of western imperialism. In fact, he lost the right to protect his industries by levying taxes. So the challenge was how to protect its newly established industries.
2. The group of bankers in Japan believed that investment in heavy industries involved larger resources and a long gestation period in reaping the profit, so they found the investment in agriculture more lucrative than in industry.

■ Japan's strategy in the direction of industrialization -

1. Industrialization in Japan was a part of modernization programme which started with the landmark event of Meiji restoration in 1868. After the Meiji Restoration, Japan brought some changes in its administrative structure, legal system and form of government, which gave impetus to Japan's modernization.
2. Japan adopted the one important aspect of American industrialization, the development of primary education. But unlike the American model, Japan was having the availability of cheap labor, so Japan preferred the consumer-based industries like cotton textile industry, silk industry.
3. Furthermore, in order to develop its transport and communication system, Japan strengthened its railways and automobile industries.
4. Since initially Japan did not have the freedom to patronize its industries through imposing import duty (this became possible only after 1911), hence it

gave subsidy to the industries in order to make competitive.

■ Features -

- Since, initially the private investors in Japan did not take much interest in the industrialisation program, so the Japanese government itself took initiative in the industrialisation program. It led the foundation for basic and heavy industries but it did not prefer to maintain these industries under government control. So, except for certain industries with strategic importance, the government sold out all the industries to private investors at a subsidized rate.
- This industrialisation program of the government created a very unique situation in Japan. In other words, industrialisation in Japan could not give birth to any independent industrial class. In fact, it was the bankers of Japan who took initiative in purchasing industries, so it was a part of the banking capital which was converted into industrial capital and a group of bankers turned to be industrialist as well. This created some sort of deformity in Japanese capitalism.
- In fact, during the earlier phase of capitalism, there was generally a separation between banking capital and industrial capital. It was during the very late phase only amalgamation between the banking capital and industrial capital became possible. Thus appeared the monopoly capital and this monopoly capital was having a negative orientation as it started not simply to dominate the whole economy but also to influence the political policies of the government. Due to the specific nature of industrialisation, the sort of deformity appeared in Japanese industrialisation during the very early phase. For example, the Zaibatsu family was a big banker family; it possessed 34% of banking capital. Later, it captured

industries as well. So, now it started to dominate not only the economy but also the foreign policy of Japan.

- Japan was attracted towards the Western model and adopted their technological development but not adopted its ideology of liberalism rather Japan was influenced by the Samurai culture. In this way, industrialization of Japan presented a different model of capitalism.

■ Impact -

- The rise of monopoly capital and the influence of Samurai culture in Japan prepared the way for militarization in Japan. In fact, Japan was a tiny state so its home market was smaller in size. That's why the Japanese capitalists provoked the government to search for new markets abroad. Furthermore, the Japanese expansion could ensure even the raw materials for Japanese industries. The imperialistic ambition of Japan brought it in enmity with Russia first and then with USA and finally, it led to the attack on Pearl Harbour by Japan and Japanese involvement in the Second World War.

Industrial Revolution: A Continuous Revolution

■ First Industrial Revolution (1760-1840)

- **Major features**– Steam engine, Cotton textile, Woolen textile and Iron industry
- Limited to Western Europe only.
- **Impact**– Policy of free economy and search for market.

■ Second Industrial Revolution (1860-1914)

- **Major features**– Electric power, petroleum and internal combustion engines, automobile industry, development of telegraph, development of aircraft.
- **Expansion** in Central Europe, Eastern Europe and Asia.
- **Impact**– Spread of imperialism and colonialism, Partition of Africa, First

World War as a result of competition between Britain and Germany.

■ Third Industrial Revolution (1990s and after)

- **Major features**– The concept of third industrialization has been given by Jeremy Rifkin. The base of third industrialization is considered to be information technology and renewable energy sources.
- As far as India is concerned, it was deprived of the last two industrial revolutions, but it joined the third industrial revolution.
- **Impact:** The Third Industrial Revolution sheltered the socialist governments of Eastern Europe in the 1990s and the dictatorial regime in the Arab countries in 2011.

■ Fourth Industrial Revolution

- Recently the Fourth Industrial Revolution has been envisaged. It is linked to artificial intelligence, robotics, genome technology, nanotechnology, big data analysis etc.

Question: - Late comer Industrial Revolution in Japan involved certain factors that were marked by difference from what west had experienced. Analyze (200 words) (UPSC - 2013)

Answer: - Difference in experience between industrialization in Western Europe and that in Japan should be viewed in context of specific politico-economic condition of Japan.

In Western Europe industrialization was basically an economic programme but Japan's industrialization was guided mainly by a political project. It was the part of modernization programme that had started with Meiji restoration. Its objective was to make Japan a powerful nation so that it could counter western imperialism.

Unlike Western Europe, in Japan there did not emerge any independent

entrepreneurial class which could have initiated investment or industrialization. Thus, in Japan the whole process was initiated by ex-daimyo or ex-Samurai. So Japanese capitalism flourished under feudal set up.

Apart from that unlike Western Europe, in Japan government itself invested in industries and when industries became functional they sold them to private capitalists at subsidized rate. It produced two visible impact - firstly as we find the case in west it could not gave birth to an independent middle class that could have put a check over autocratic nature of the government. Secondly the purchasers of these industries were none else but Japanese bankers. So in Japan it was banking capital itself which was converted into industrial capital. Marriage between industrial capital and banking capital culminated into the rise of monopoly capital. In Western Europe this tendency appeared during late phase but in Japan it appeared very early. It was monopoly capitalism which added militarist flavour to Japanese foreign policy.

In this way in objective and in nature both industrialization in Japan reflected distinct features.

Question: - Why did the Industrial Revolution first occur in England? Discuss the quality of life of the people there during industrialization. How does it compare with that in India at present times? (UPSC-2015)

(Meaning of the question- England and the Industrial Revolution has been a well-known issue of world history. Even, the impact it had on life of the people in Britain has also been a common issue. But certainly, the question setter has tried to make this question more fundamental and complex in nature by asking aspirants to compare the standard of life in Britain with that in present India. Therefore, it is challenging for the candidates to deal with the latter part of this question.)

Answer: Many countries had participated in the commercial revolution, but the industrial revolution occurred for the first time in Britain. The following factors contributed for industrialization in Britain-

During 17th century, Britain was going through a process of socio-economic transformation. The agricultural revolution fulfilled the need for food grains and raw materials. The landlords started commercial farming by enclosing their land. On the other hand, a middle class emerged as a result of the commercial revolution and this class took interest in investing. Then this was the time when canals and roads developed as an easy means of transportation. Along with this, money and banking got encouragement during this period. Because of these reasons the domestic market of Britain started growing. Britain's external market was also quite extensive. Its colonies were established in America, West Indies and Asia from where it was getting capital as well as raw materials. Finally, the technological revolution played an important role in the emergence of the Industrial Revolution. The development of modern factory system would not have been possible without technological revolution. The development of spinning jenny, water frame, power loom etc. gave impetus to the cotton textile industry. Then the development of the steam engine laid the foundation for the modern factory system.

In the early stages of the Industrial Revolution, people in Britain suffered immensely. Due to the enclosure of land by the landlords, the small farmers were deprived of the land and thus they migrated towards cities. There they had to work on very low wages and allowances and in very unhygienic conditions. But gradually their condition improved. The government also implemented labour laws in 1819 and 1833 for their protection and their standard of living improved with increasing industrialization.

The situation in India is completely different from that of Britain. In true sense India could not go through the process of industrialization. Therefore, even at present, more than 50% of the population is dependent on agriculture, while the contribution of agriculture to the entire GDP is only about 15%. If manufacturing sector was developed, the population pressure on agriculture could be reduced. But, unfortunately this has not been possible till

now. We have definitely progressed in the service sector, but that sector has been able to provide employment only to high skilled professionals. On the other hand, farmers are troubled by the double loss due to the climate change and the economic liberalization. Still about a quarter of the population is below the poverty line. Therefore, the desired improvement in the quality of life of the people has not been achieved till now.

Food for Thought

- How did the route of industrial revolution lie in socio-economic-political changes which Europe had witnessed since the last three centuries?
- How did the industrial revolution in Britain create hurdles in the way of industrialisation in others?
- How did the countries like Germany, Russia and Japan chart their separate path of industrialisation?
- How can the social impact of the industrial revolution in Britain be compared with social impact of economic policy in India presently?
- How did Japan experiment with its own model of industrialisation and what impact did it produce on Asian continent?

■■■