

INDUSTRIAL SOCIOLOGY: UNIT-2

RISE AND DEVELOPMENT OF INDUSTRY

Early Industrialism

Process of change from an agrarian, handicraft economy to one dominated by industry and machine manufacture begin in England in the eighteenth century. Technological changes include the use of iron and steel, new energy sources, the inventions of new machine that increase production, the development of factory system and important development in transportation and communication.

Stages in the Evolution or Development of Industries

We can classify the stages in the evolution of industry as follows:

1. The Primitive Stage.
2. The Agrarian Society.
3. The Handicraft Stage.
4. The Guild System.
5. The Putting out (Domestic) System.
6. The Industrial Revolution.

The Primitive Stage

At this stage, the families were self sufficient as their needs were limited. Hence there was no problem of exchange of goods. Division of labor was restricted only to the family level. Men devoted their time to activities like hunting, fishing and making of weapons and women engaged themselves in cooking, bringing up the children, agriculture and domestication of animals. In short, all the activities of the family were carried on to produce or procure products for family consumption. As every family was able to satisfy its needs, there was no question of exchange of goods.

In the course of time, some families started keeping animals rather than killing them. This led to domestication of animals. **Animals were treated as a form of wealth** which could be exchanged for other products required by the family. This gave birth to the *Barter Economy*.

The Barter Economy may be defined as the direct exchange of one commodity for another commodity. It developed because of the increase in the number of human wants and inability of a family to produce all the things required by it. The exchange was direct and without the use of any common medium of exchange. Every person used to exchange his surplus goods with the other persons for the goods required.

The main difficulty of the Barter system was the lack of double coincidence of wants and a common measure of value. Therefore, the exchange was restricted only to the goods in which some families were surplus and other families were deficient.

The Agrarian Stage

Agriculture became the primary source of maintenance during this stage. Many tribes settled down permanently at some place and began to sow seeds and rear cattle on the land which they shared in common. These tribes were self-sufficient as they produced everything they required. The division of labor confined to the division of work between men and women of the tribe.

In the tribal society, property was a common and collective asset of the groups. Under this system, the employees were treated as slaves. The employer-employee relationship was that of the master-slave type. The slaves used to do all types of manual or specialized

work for their master and in return were paid no wages except for the food, old clothes and a small place to live. The government did not wield any power over the employment relationships.

Land was regarded as the major source of wealth and is individually owned. This creates major difference between the social strata. Agriculture societies provide the basic for the establishment of economic institutions. Trade becomes more elaborate and money is medium of exchange. It also demands the maintenance of records of transaction, crop harvest, taxation, governmental rules and regulations. Religion becomes separate institution with elaborate rituals and traditions. There is far more complex social structure.

With the rise of private ownership of property in land and cattle, the tribe split up into families. Gradually, human wants also became varied. These families were not self-sufficient. Moreover, some families concentrated on occupations other than agriculture. This led to exchange of goods for goods to satisfy needs of various families and the establishment of village economy.

The Handicraft Stage

The Handicraft system was developed as a result of the growth of towns and cities and increase in trade and commerce. This system was an important innovation in the situation of workers since they could now actually move from the rank of workers or employees to those of employers.

The workers or the craftsmen owned the factors of production. There was hardly any machinery. They used their simple hand tools and manual skills for producing the goods and had support from their family members. There was no division of labor at this stage. The craftsman was responsible for assembling various raw materials, and selling the goods produced by him. They used to sell their products directly to the customers and there were no middlemen. Separate craftsmen existed for separate works. There were also found some type of specialization of work like shoe-making, blacksmith, carpentry, pottery, cloth weaving etc. Thus the organization of industry was quite simple.

The Guild System

Guilds were associations of people who did the same job or had same interests. In other words, a guild is an association of craftsmen in a particular trade. The earliest guilds were formed as fraternities of self-employed skilled craftsmen with ownership and control over the materials and tools they needed to produce their goods. A guild had the exclusive right to produce certain goods or certain services.

Characteristics of Guild System

- 1) Artisan or Craft guilds were formed by artisans engaged in the same line of industrial activity.
- 2) The guilds were generally in a town or a village. The membership of a guild was compulsory.
- 3) The main aims of these guilds were:
 - a) To protect the interests of the members.
 - b) To ensure implementation of various rules and regulations formed by town authorities.
- 4) The guilds used to elect 'wardens' in order to regulate their working. The wardens used to ensure the implementation of various rules and regulations.
- 5) The members of the guilds were expected to produce quality goods only. Any deviation from standard business practices could attract punishment from the guild.
- 6) Guilds were responsible for the welfare of their members. The sick and disabled members were looked after and financially weak members were helped by the guilds.

Types of Guilds

Two kinds of guilds were especially important to civic life:-

- i. The Merchant guilds
- ii. The Craft guilds.

Merchant Guilds

A merchant guild was an association of merchant engaged in trade in a particular locality. The purpose merchant guild was to enforce equality of opportunity for the members of the guild, to protect their interest, to avoid competition among the members and also to regulate the conduct of its members by prohibiting unfair practices.

Craft Guilds

The craft guilds came into existence by increased specialization of industry. A group of artisans engaged in the same occupation, e.g., bakers, cobblers, stone masons, carpenters etc. associated themselves together for protection and mutual aid.

The craft guild regulated entry to craft, prescribed standards of workmanship and regulated the conduct of the members. After some time, no one within a town could practice a craft without belonging to the appropriate guild associations. The purpose of the guilds was to maintain a monopoly of a particular craft especially against outsiders.

Reasons for decline of guild system

- 1) Rigid outlook of craftsmen. They did not like to introduce changes.
- 2) Restriction on the entry of the new members.
- 3) Lack of commitment among the guild members.
- 4) Development of new towns without guilds.
- 5) Opposition from journeymen who developed grievances against master-craftsmen.

The Domestic or Putting-Out System

With the decline of guild system, the production moved out from the master's shop into the home. The Domestic or Putting-Out or Workshop System was a means of subcontracting work. In this system, work was contracted by a central agent to sub-contractors who complete the work in their own home. It was a system of domestic manufacturing.

The capitalist gave out work to the artisans who worked in their homes. The direct producers are separated from the means of production, depending on capitalists to provide them with the necessary tools, machinery and raw materials to produce commodities. Such producers also receive a wage from the capitalist.

Characteristics of the Domestic or Putting-Out System

- 1) Workers worked from home and manufactured individual articles from raw materials (the merchant received the finished product, as the raw materials were provided by him, hence the synonymous term putting-out system).
- 2) The articles were assembled and sold in the market located at a central place.
- 3) Many entrepreneurs took advantage of the domestic system to bypass the guild system, which was thought to be cumbersome and inflexible.
- 4) This system was used in various industries like, the manufacture of wrought ironware such as pins, pots and pans for the ironmongers.

Advantages of the Domestic or Putting-Out System

- 1) The workers could work at their own speed while at home.
- 2) Since the woman of a family could work at home, she was there to look after her children.
- 3) Children working in the system were better treated than they would have been in the factory system.
- 4) The workers earned higher incomes.

Disadvantages of the Domestic or Putting-Out System

- 1) The homes of the workers were polluted by the waste materials.
- 2) Time taking process due to manual work.
- 3) Unfulfilling quality of the product which was not up to the customer demand

Decline of the Domestic or Putting-Out System

Mechanization of industry made this system obsolete. As the capitalists invested huge amounts of money into industry for maximum mechanization, the domestic system became economically non-viable. Moreover, with rapidly increasing population, the demand for goods were pushed up which was beyond the capability of the domestic system and could only be met through machines.

The Industrial Revolution

Industrial revolution is the process of change from an agrarian, handicraft economy to one dominated by industry and machine manufacture. This process began in England during the later part of the 18th century and earlier part of the 19th century and from their spread to other parts of the world. It had a vital influence on the development of industry and commerce. It was beyond the capacity of the industry using labor intensive techniques to meet the increasing demand. It changed radically the techniques of production and had an important impact on the life of mankind.

Under this system, human labor was replaced by machines. Woman and children were also employed as labor because machines simplified the production, operation and reduced skill requirements. With the increased production and developed technology, decision-making between the workers and the employer become more and more impersonal.

Characteristics or Features of Industrial Revolution

- 1) There were a series of mechanical inventions by the English scientists.
- 2) Production in factories started with the help of machines run by the mechanical power such as steam, oil and electricity. Thus setting up a factory required huge amount of capital. This gave birth to two classes in industry, namely, capitalist and labor.
- 3) Introduction of machinery led to mass scale production of standardized goods.
- 4) The factory system provided both direct and indirect employment to a large number of people. Direct employment was generated by the factories and trading in raw materials and factory products gave indirect employment to traders and mercantile agents.
- 5) Large scale employment in factories gave birth to labor problems which necessitated some steps by employers to create good human relations in factories.

Changes Brought about by Industrial Revolution

- a) Development of Engineering**
Engineers were required to design machinery for textiles, coal mining etc. for making and repairing stean engines, and making tools and locomotives.
- b) Revolution in iron making**
The engineers, who took charge of important task connected with the industrial change, could succeed in their work only if iron was cast in large quantities and was of fairly good quality.
- c) Use of power driven machines**
Power driven machines were used in industry. It began with cotton spinning and weaving and later on spread to wool, silk etc.
- d) Rise of chemical industry**
The application of power driven machines in textile mills made it necessary to develop bleaching, dyeing, finishing and printing processes to keep pace with the output of textile mills.

e) Development of coal mining

Coal was needed to refine pig iron and cast it into the form in which it was needed by the engineers. It was also needed for generation of steam power.

f) Development of means of transport

For regular supply of raw materials, etc., to industry and for the distribution of goods produced by the factories, effective transport was a must. The development of the means of transport like railways and steamships constitutes the most important impact of the industrial revolution.

Economic Effects of Industrial Revolution

i. Large Scale Production

The industrial revolution made mass production of goods possible by the use of power driven machinery in place of hand tools.

ii. Change of Form of Ownership

Large Scale Production increased the size of industrial enterprises. Sole proprietorship concerns expanded into partnership firms and further developed into joint stock companies. The evolution of joint stock companies was an important outcome of the industrial revolution.

iii. Specialization

Industrialization led to a craze for specialization in every field because of development in the means of transport and communication. Different parts of the country (and even different parts of the world) specialized in producing or manufacturing different commodities or parts. Specialization helped in reducing cost of production.

iv. Rise of Capitalism

Cottage system of production was generally replaced by the factory system. Under the factory system, capital is the crucial factor. Large scale production further increased the need and significance of capital. This gave birth to capitalistic economy under which there are two classes of people, namely, capitalists and workers. The workers are purely wage earners dependent for their living on the capitalist employers. The capitalist system also increased the importance of money as a medium of exchange, measure of value and store of value.

v. Trade Cycles

Large scale production accompanied by capitalism gave birth to trade cycles having successive periods of inflation and depression. During the period of prosperity, there is high level of employment and sustained rise in prices. But during depression, there is large scale unemployment, decrease in demand and so on.

vi. Standard of Living

Industrial revolution had a positive impact on the standard of living of the people. Factories produced goods of better quality and at cheaper rates for the consumption of the people. This improved their standard of living.

Social and Political Effects of Industrial Revolution

i. Urbanization

The factory system was largely responsible for the rise of the modern city, as large numbers of workers migrated into the cities in search of employment in the factories. This led to the concentration of population in towns because factories and other establishments were located in the towns. This gave birth to the housing problem. Even now, lakhs of workers continue to live in slums areas in the industrial towns.

ii. Rise of Individualism

People from the villages came to the towns to find employment. Their close ties with the village, land and family were broken. The industrial revolution created conditions under which workers aimed at material progress by working in the factories. This led to the disintegration of joint family life.

iii. Poor working conditions

The workers were paid lower wages and they had to work under poor working conditions. There was no one to convince the factory owners about the need of good working conditions so long as trade unions did not protest. This was an obstruction in increasing the productivity of the workers.

iv. Health

Huge numbers of the workers died due to diseases spreading through the cramped living conditions. Diseases were spread through a contaminated water supply. Chest disease from the mines, cholera from polluted water and typhoid were also extremely common as was smallpox.

v. Child labor

In the industrial revolution period, there was limited opportunity for school education and the poor children became laborers. Employers preferred child workers because they could pay a child less than an adult even though their productivity was comparable. Children were also employed because there was no need for strength to operate a machine and there were no experience adult laborer readily available since the industrial system was completely new.

vi. Awareness of Rights

The industrial revolution gave birth to two classes, namely capitalists and workers. There was economic inequality between the rich and the poor. Slowly and slowly, class consciousness came in the minds of workers and they organized themselves in the form of unions to fight for their economic, social and political rights.

vii. Political Awareness

Industrial revolution increased the income and standard of living of the people. The earning people started spending more and more on the education of their children. Press also progressed a lot to air the grievances of the working class. These factors created political consciousness among the people. The workers demanded the right to form unions and to participate in the management of the industrial undertakings.

Types of Productive Systems

The different types of productive systems are:-

- 1) The Manorial or Feudal System
- 2) The Guild System
- 3) The Domestic or Putting-out System
- 4) The Factory System

The Manorial or Feudal System

Feudalism or Manorialism was the social and economic system which characterized most European societies in the middle ages. Feudalism was the expression of society in which every man was bound to another by mutual ties of loyalty and service. Feudalism gave rise to a hierarchy of rank. The social structure was static in which every man knew his place.

The structure of this system was built around three key elements-lords, vassals and fiefs:-

- (i) A lord was a noble who owned and controlled land.
- (ii) A vassal was a person who was granted possession of the land by the lord, and the land was known as a fief.
- (iii) In exchange for the fief or the land, the vassal was obliged to provide military service to the lord.

(iv) The vassal was required to yield a certain amount of his farm's output to his lord.

Knight was the most important element in making war. As it was very expensive to maintain a retinue of knights, tenants in chief were granted large holdings of land in return for providing the king with warriors. A grant of land was known as a feud or a fief, hence the term feudalism. The tenants in chief received this land directly from the king who in turn, leased parts of their estates to the knights, who in turn gave leases to farmers. Rights of succession to land were strictly controlled by various laws or customs.

The lord and vassal entered into a contract in which the vassal promised to fight for the lord at his command. The fief is the primary reason the vassal chose to enter into the relationship. In addition, the lord sometimes had to fulfill other obligations to the vassal and fief. One of those was its maintenance. Since the lord had not given the land away, only loaned it, it was still the lord's responsibility to maintain the land while the vassal had the right to collect revenues generated from it. Another obligation that the lord had to fulfill was to protect the land and the vassal from harm.

The vassal's primary obligation to the lord was to provide "aid" or military service. This security of military help was the primary reason the lord entered into the feudal relationship. The vassal was required to yield a fixed amount of his farm's output to his lord.

Manorialism was a term used for describing the political, economic and social system by which the peasants were tied to the land and their lord through serfdom. The basic unit was the manor, a self-sufficient landed estate or fief, under the control of a lord. The manor was a self-contained unit made of land cultivators. Under this system the owner of the land was called feudal lord and the persons engaged by him were called serfs. The serfs were virtual slaves of the feudal lord and were required to give all kinds of services to their respective lords. The tenants paid rent or provided military service in exchange for the use of the land. Besides agriculture, other important professions were those of carpentry, black-smithy, pottery and weaving. Even these artisans were dependent upon feudal lords.

Characteristics or Features the Feudal System

- 1) **Structure of Feudal society:** Feudal society is characterized by feudal landlords and working peasants (serf or vassal). Though king was the supreme authority or centre of power, yet feudal lords frequently revolted against him.
- 2) Each group of society, i.e. manor, got its own identity including social and economic security.
- 3) Hierarchy of rank started developing.
- 4) The employer-employee relationship was that of master-slave type. Only death of the serf terminated this relationship.
- 5) There were almost no levels of supervision.
- 6) The central agency (or king) did not have any power over the employment relationship.
- 7) The authority of the landlords was supported by political organizations that developed from alliances and conquests of the landlords.

The Factory System

A gradual rise in the population pushed up the demand for industrial goods. This led to the growth of industrialization, which in turn led to the creation of what came to be known as Factory. Thus, a factory emerged as a manufacturing plant which is an industrial building where production of goods takes place. It requires worker, capital and machinery to carry out the production. The workers manufacture goods or supervise machines producing and converting one product into another. With the rise in demand for goods, more and more machines were used. So the factory system arose.

The factory system of production came about because of combination of economic and technological causes and favorable external condition. In the factory system, work was organized to utilize power-driven machinery and reduce goods on a large scale. The employer owned the tools and raw material and set the hours and other conditions under which the workers had to work.

The factory system superseded the domestic system because of the economy of scale and a standardized product. This was a new way of organizing labor.

Characteristic or Features of the Factory System

- 1) **Large Scale Production**
Modern factories carry on large scale production to meet the demands of large number of people. Production is carried on in anticipation of demand.
- 2) **Mechanization**
The developments in the fields of science and technology have increased the degree of mechanization in the modern factory system. The efficiency of the factories has increased many times because of new innovations.
- 3) **Automation**
In many advanced countries like the USA and the UK, automation has been introduced in the production system. By automation we mean installation of one set of machines to run another set of machines.
- 4) **Management Information System**
Introduction of management information system with the help of electronic computers is another highlight of modern machine age. The computers have vast memories. They can store huge amount of information and make available the required information within seconds. They help in taking managerial decisions at the proper time.
- 5) **Specialization**
There is a greater specialization and division of labor in the modern factories. Many industrial units specialize in the manufacture of a small number of components or parts of different products. Division of labor has facilitated the workers to concentrate on limited operations.
- 6) **Standardization**
Standardization brings about uniformity of equality and size, and facilitates large scale production. Now days, many organizations, whether production or services based, are trying to get themselves standardized as per International Standards called ISO certifications. Thus overall quality consciousness has increased in the industry.
- 7) **Growth of Industrial Areas**
Concentration of industries in certain regions of the country has given rise to the growth of the industrial areas which offer special advantages in regard to raw materials, power, access to market, financing, transporting etc.
- 8) **Expansion of International Trade**
Mass production, standardization of products and improved means of transport and communication have increased the volume of international trade among different countries.
- 9) **Research and Development**
Big industrial enterprises have established separate departments for research and development and they spend a considerable portion of their earnings for innovating new products and ideas. Research and development activities have the effect of decreasing cost, increasing quality and consumer satisfaction and raising the standard of living of the people.
- 10) **Competition**
There is cut-throat competition among the producers of goods in all capitalist economies. Economic relations between different persons are based on contract rather than on custom and tradition.

Industrialization

It is the process of social and economic change whereby a society is transformed from a pre-industrial society into industrial one. It connotes a shift from an agrarian economy leading to the rise of manufacturing industries.

Industrialization is the process of converting into a social-economic order in which industry is dominant. It is an economic and social system based on large scale industries and marked by the production of large quantities of goods and products and the concentration of employment in urban factories.

It is a part of a wider modernization process, where social change and economic development are closely related with technological innovations.

Characteristic or Features of Industrialization

- 1) Industrialization involves large scale mechanization and automation.
- 2) It lays the foundation of factory system under which an entrepreneur employs hired labor in the production process.
- 3) It involves the application of scientific methods in industry for the purpose of improving productivity and quality.
- 4) It leads to division of labor and specialization.
- 5) It attracts labor from agriculture and allied occupations to industry.
- 6) It increases the geographic and social mobility of labor.
- 7) It involves better utilization of idle natural resources for speedy economic development.

Causes of Industrialization

1) Large Scale Production

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2) Mechanization

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Consequences of Industrialization

The consequences of industrialization can be seen in all walks of life. "What cannot be cured, must be endured" is the artistic view of philosophy, but a scientist, technocrat or a researcher believes in curing everything and so the development of science is seen.

1) Impact of Industrialization on Marriage

- (i) Marriage as a social contract
- (ii) Higher age of marriage
- (iii) Practice of non-marrying
- (iv) Practice of love marriage
- (v) Increase in divorce rate

2) Impact of Industrialization on Family

- (i) Role of family
- (ii) Breaking-up of joint family
- (iii) Nucleus families
- (iv) Status of women
- (v) Disintegration of family
- (vi) Change in the family goals

3) Impact of Industrialization on Caste System

- (i) Disintegration of caste system
- (ii) Reduction in influence of Brahmins
- (iii) Abolition of system of caste-based functions
- (iv) Division of labor based on specialization
- (v) Dilution of control of castes
- (vi) Loosening hold of untouchability
- (vii) Solemnization of inter-caste marriages

4) Impact of Industrialization on Social Stratification

- (i) Occupation
- (ii) Education
- (iii) Income
- (iv) Caste

5) Impact of Industrialization on Religion

- (i) Decline in superstitions
- (ii) Development of religious tolerance
- (iii) Secular states

6) Impact of Industrialization on Morals

- (i) Rational outlook
- (ii) Materialist outlook
- (iii) Individualism
- (iv) Permissiveness in sex morals
- (v) Increase in rates of crime
- (vi) Loosening of social control