
UNIT 18 PUBLIC UTILITIES

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18.0 OBJECTIVES

After studying this unit, you should be able to:

- explain the meaning and features of public utilities
- describe the forms of organisation and management of public utilities
- explain the pricing and sales policies of public utilities
- justify the need for control and regulation of public utilities.

18.1 INTRODUCTION

In our day-to-day life, directly or indirectly, we require a number of essential services. In the cities you have tap-water. Similarly various means of transport help you in undertaking your journey everyday. You need electricity for lighting, air-conditioning, etc. Electricity is also used for running factories, trams, railways, irrigating crops, etc. Have you ever thought how they are provided? All these services are called public utility services and the organisations which provide these services are known as public utility undertakings. In this unit we shall discuss the meaning, features, forms of organisation, management, pricing policies and sales policies of public utility undertakings. We shall also discuss about the need for state regulation and control of public utilities.

18.2 WHAT IS A PUBLIC UTILITY?

Water, gas, electricity, transport, communication, etc., are needed by the public in their daily life. Whenever there is any interruption in the supply of such goods or services, the normal life of people is disturbed. Suppose, if the water-taps go dry, you do not get water. To fetch water you have to go to nearby wells or hand-pumps. In this process you may get late for your office or place of work. Similarly, if the electricity supply or transport services are not available, public life and activities are severely upset. Therefore, these services have a great significance to the community. Hence they are termed as essential services or indispensable necessities. The business enterprises established basically to provide efficient and uninterrupted supply of the goods that are absolutely indispensable for a civilised community are referred to as public utility organisations. We can say that the public utilities are clothed with public interests. Thus, **public utilities are the business undertakings engaged in supplying essential goods and/or services of daily necessity for the general public.** The institutions which undertake certain essential services like the supply of gas, water, electricity, urban transport, etc., are examples of public utility undertakings. All the public utility undertakings have an obligation to supply the essential goods and services to everyone in the community without any discrimination at reasonable prices.

18.3 FEATURES OF PUBLIC UTILITIES

You have learnt that the public utility undertakings deal with essential goods and services. Because of this reason, these undertakings are quite distinct from other business enterprises. Now let us study the distinctive features of the public utilities.

- 1) Indispensability: Public utilities deal with essential services such as water, gas, light, power, transport, telephone, telegraph, postal services, etc. These services are required to **meet basic** needs of the community and to provide a civilised and **comfortable life** to every citizen irrespective of caste and creed. Therefore, these services must be **made** available regularly, **uniformly** and adequately. That is **why** these public utilities are indispensable in all modern societies.
- 2) Field of operation: The field of operation of public utility undertakings is mostly local. Such **concerns** fulfil the needs of the citizens, usually of a city, town or at the most of **a** district. **For** example, Delhi Milk Supply Undertaking or Mother Dairy supplies milk through its booths at various localities to the people living in Delhi **only**.
- 3) Monopolistic or semi-monopolistic position: Undertakings supplying essential public services **by** nature assume the position of a monopoly. They do not have competitors. You can take the example of Delhi Electric Supply Company. It does not have any **competitor** for supplying electricity to the residents of Delhi. It is viewed that competition in the supply of essential products or services may lead to unnecessary duplication and social waste. For example take the supply of drinking water in a town. It involves heavy expenditure in digging the well, installing the plant and laying down the distribution pipe line. This is, normally, under the control of the **concerned** municipality. If another undertaking is involved in the same operation in the **same** town, equal amount of money is required which is a waste. To avoid any such wasteful expenditure, monopoly is given to public utilities. However, some public utilities may have a few competitors. Take the case of milk supply in Delhi. Mother Dairy supplies the milk. But Delhi Milk Supply Undertaking or Nanak Milk Supply Company also supplies milk in Delhi. Therefore the position enjoyed by Mother Dairy is semi-monopolistic.
- 4) Regulation and control : As you know these undertakings **enjoy** a monopolistic or semi-monopolistic position. So, they are in a position to misuse it and exploit the customers. For instance they may supply poor quality goods, services **may** be irregular, may charge high prices, etc. The government has to ensure the quality of the products or services at reasonable prices. Public is to be assured of regular and **adequate** supply of services and goods without discrimination. Therefore, it is essential to regulate their working as well as the price and supply policies of public utilities. Regulatory powers of the government in respect of these undertakings are provided in Special Acts of the legislature.
- 5) Franchise: Public utilities operate under franchise **i.e.** the **right** to interfere with public property (land, buildings, roads, etc.) for proper functioning. For **example**, the railways which is a public utility undertaking, can put up barriers on roads restricting movement of traffic across railway track at level crossings. Similarly, water supply undertakings can dig pits across the roads **while** laying water pipes, and so on. The government grants special rights as well as casts duties **and** responsibilities on these concerns through a charter which is called franchise. The franchise or **charter** contains the **powers, privileges** and rights granted to these undertakings as well as duties and liabilities for which these undertakings are **accountable**. This is done to **ensure** their **working** efficiently and satisfactorily. The franchise can be withdrawn if the undertaking does not comply with the **regulations** and **restrictions** subject to which the franchise is issued.
- 6) **Huge** capital investment: These undertakings require huge capital **investment** in fixed assets. Take the case of Mother Dairy which **supplies** milk in Delhi. For supply of milk to its consumers it has to set up a milk plant, storage plant, **and** large fleet of **vans/** tankers. It has also to construct depots for distribution of milk at various places in different localities of Delhi. Then, it has to monitor the distribution of milk to its consumers properly. Thus, all the public utilities invest huge amount of capital in fixed assets.

- 7) Inelastic demand: The demand of public utility services is more or less inelastic. It means that there will be no change in demand with rise or fall in the price of that service. Take the example of electricity for domestic use. With the rise or fall in the rate of electricity per unit, the consumption of electricity remains more or less the same. Thus, the demand for electricity is inelastic. Demand for public utilities has also the following special features:
- a) These services cannot be shared and, therefore, their demand has been increasing day-by-day.
 - b) These services sell themselves. There is no need for advertisement or salesmen for creation of demand for such services.
 - c) These services have **both** direct and derived demand. When electricity is used for domestic lighting, cooling, heating, cooking, etc, it is a direct demand. But when it is used by a factory for manufacturing or production purposes, it is a derived demand. Thus, direct demand arises from the requirements for direct and immediate consumption. Derived demand is created by the utilisation of these services for industrial and commercial purposes.
 - d) The derived demand for such services is generally elastic. Derived demand for these public utility services is particularly elastic and direct demand is normally inelastic. Demand for gas or electricity by a housewife is usually inelastic. Demand for electricity in factories may decline if **the** cost of electricity is too high.
- 8) Non-transferable demand by the consumer: The demand of the consumer is non-transferable. If a consumer is provided electricity at his house, he cannot transfer his right of using electricity to his neighbour. Every consumer is to obtain the supply separately after fulfilling the rules and regulations of the undertakings.
- 9) Risk involved: The degree of risk involved in the business carried out by the public **utilities** is less as compared with other industries. This is because the demand for essential goods and services is not likely to fall, rather it is likely to increase over time. For instance, the demand for water, gas, milk, electricity, etc., is not likely to fall **but** increase since the population is increasing continuously **year** after year.
- 10) Size of the undertaking: These undertakings are required to be set up on a sufficiently large scale so as to meet the demand of the public of that locality. Moreover, the size of the unit must **be** **large** enough to make it possible for **the** undertakings to supply the service continuously at economical rates.
- 11) Choice **of** site: The promoters of public utilities do not have much choice in the selection of site for the undertaking. They have to locate their enterprise as per the permission granted to them by the concerned authorities. They have to operate as per the prescribed **local** conditions and regulations.

Check Your Progress A
1) Define Public Utility Undertaking.

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- 2) Which of the following services are called public utility services? Indicate with a tick mark.
- a) Supply of water
 - b) Supply of newspaper
 - c) Manufacture and supply of bread
 - d) Supply of electricity
 - e) Supply of milk.
 - f) Manufacture and supply of cloth
 - g) Transportation by rail
- 3) Which of the following characteristics apply to public utilities?
- a) Inelastic demand for service provided

- b) Franchise
 - c) Nation-wide operation
 - d) Many competitors
- 4) Which of the following statements are True and which are False?
- a) Public utility services must be advertised to create demand
 - b) Public utility services cannot be shared.
 - c) Direct demand for public utility services is elastic.
 - d) The demand for electricity of a consumer is non-transferable.

18.4 ORGANISATION AND MANAGEMENT OF PUBLIC UTILITIES

You have learnt about the meaning and features of public utility undertakings. Now let us study about the organisation and management of these undertakings. Public utility undertakings are organised in any of the following three forms: i) a public or private limited company, ii) statutory corporation, and iii) departmental undertakings of the government or any public authority like municipality. When organised as a private limited company, the ownership and management rest with the private parties. When organised as a public limited company, the ownership and management rest with the government. Large public utilities are often organised as statutory corporations under a special act of the legislature. The act lays down the bye-laws and rules which are part of the constitution of the undertaking. The ownership and management rest with the corporation and its governing board. Comparatively smaller concerns are registered under the Companies Act, 1956, having their Memorandum and Articles of Association. If a public utility is established as a department of the government or any local authority, it is naturally owned by the government or municipality and managed by their officials.

Every public utility undertaking has to take a licence from the concerned government. This licence confers monopoly and franchise rights upon them. The licence is to be renewed from time to time depending upon the satisfactory working of the undertaking. The franchise empowers these undertakings to acquire private property and interfere with public property (land, buildings, roads, etc.) whenever it is necessary for them to do so. Each of the above forms of organisation and management has got its own merits and limitations. However, since public interest is involved, the government has control directly or indirectly over the management and working of all these undertakings. As a matter of prudence, governments, central or state or local bodies such as municipalities, run most of such undertakings. Let us study briefly the merits and limitations of each of the above forms of organisation.

Private Limited Company: As you know a private limited company is a form of business organisation registered under the Companies Act, 1956, with a minimum number of two persons and a maximum number of 50 persons. It has its Memorandum and Articles of Association. It has certain privileges and is subject to certain restrictions. You have earlier studied the features and formation of private limited companies in Units 2 and 4. Usually, goods transport by road is operated by private limited companies. But other public utility services may also be organised as private limited companies. The important merit of this form of organisation is the maintenance of quality of product or service. But the major limitation of this form of organisation is the lack of public accountability.

Public Limited Company: As you know, a public limited company is formed by at least seven persons, without any limit to its maximum number of members. Unlike a private company, it is free from restrictions of transferability of shares and issue of its prospectus to the public. You have studied in detail the features and formation of public limited companies in Units 2 and 4. A number of public utility services have been provided by these companies in the past in Europe and the USA as well as in India. Indian Railways and Electricity Supply Undertakings in various cities are some examples. Such companies however, suffer from the shortcoming of public accountability and social responsibility. Most of these undertakings have been nationalised now.

Departmental Management: Some public utility undertakings are run by government departments, under the control and direction of Ministries headed by ministers. Examples of such undertakings are: Railways run by the Ministry of Railways through the Railway Board, Posts and Telegraphs run by the Ministry of Communications, etc. You have studied about the departmental form of organisation in detail in Unit 17. The chief advantages of organising public utilities under this form of organisation are as follows:

- 1) It ensures control by responsible officials of the government.
- 2) Finances are provided by the government through annual budget grants which are passed by the Parliament or State Legislature of the respective State Government.
- 3) The revenue goes to the public exchequer.
- 4) Public accountability is maintained, since report on their working is presented and discussed in the Parliament/State Assembly.

The major shortcoming of departmental management is that of red-tapism and bureaucracy. Efficiency of operations suffer due to lack of proper attitude of workers towards public service.

Some of the public utility concerns owned and managed by local authorities are: the Bombay Electric Supply & Transport Undertaking (BEST) owned and managed by the Bombay Municipal Corporation and the Delhi Electric Supply Undertaking (DESU) owned and managed by the Delhi Municipal Corporation and so on. In these cases, they are managed by elected committees of the Municipalities. Municipal management is justified because it provides the elected representatives an opportunity to manage the affairs of public utilities. However, municipal control has the following limitations:

- 1) The elected members of such bodies may not possess necessary skill and competence.
- 2) Sometimes the political wrangling may only add to the miseries of the people.
- 3) Local areas are sometimes too small for the economic conduct of certain utilities. Due to the restricted area of operation, sometimes plants may not work to their maximum capacity resulting in higher operational costs.

Public Corporations: As you know, public corporations are autonomous bodies set up under the special Acts of Parliament or State Legislatures. Such corporations derive their rights and powers through the special acts and the area of operation is also fixed by the Act. The corporation is not completely controlled by the Government. It has its own finances and Board of Management. It works like a joint stock company. However, it is accountable to the Parliament or State Legislatures, since its audited annual report is placed before the Parliament or State Assembly, as the case may be. You have studied in detail about public corporations in Unit 17. Public utility concerns, organised as public corporations, have the following merits:

- 1) They possess the efficiency and flexibility of private enterprises.
- 2) They are directly accountable to the Parliament/State Legislature. Thus the broader interest of community at large, is safeguarded.

However, the public utilities organised in the form of public corporations suffer from the following limitations:

- 1) Indirect interference of the leaders of the ruling party in the functioning.
- 2) The Managing Directors or the Executive Directors are usually appointed from among the civil servants or the politicians, who hardly have any knowledge or acumen of business dealings.

Check Your Progress B

- 1) Name the alternative forms of organisation and management of public utilities.
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- 2) Which of the following statements are True and which are False?
 - a) Public corporations are established by government in order to operate public utilities.
 - b) Management of public utilities by municipal corporation is just like management as a government department.
 - c) The revenue earned by public utilities run by government department is set aside as a reserve of the public utility undertaking.
 - d) The major limitations of the public utilities organised as private limited companies is the lack of public accountability.

18.5 PRICING POLICY OF PUBLIC UTILITIES

Price of a commodity is usually determined by two factors: 1) demand, and 2) supply. This does not apply in the case of all goods and services supplied by the public utility undertakings. There are other considerations which play a more important role in fixing the price. In the case of public utility concerns, price is not fixed on the basis of cost involved in the production or supply of such services i.e. **cost** of service principle. It is determined on the basis of the purchasing capacity of the consumers, which is called the principle of what the traffic will bear. You must be eager to know why it is so. Let us now discuss about it.

As you know, the goods and services provided by public utility concerns are **essential** services or goods. These products or services are used by the poor and the rich alike. The rich can pay higher price to avail of these services, while the poor may not be able to pay for it if prices are fixed on cost basis. Hence the government takes care of and safeguards the interests of the poor by regulating the prices of such goods and services so that the poorer people may also be able to use them. Normally, the consumer would like to pay a fair price. But what is a fair price, is a question which cannot be easily answered. Determination of a fair price involves a number of considerations like cost of production, cost of supply, a reasonable rate of profit, paying capacity of the customers, changes in the general price level, and so on. Thus, price determination is not a simple matter. It is to be determined after due consideration and consultation with various interests. However, the following three broad aspects of the price policy of public utility undertakings can be kept in mind.

- 1) Promotional aspect: This aspect is concerned with the promotion of demand of the services provided by the public utility undertakings. Promotional aspect refers to increasing demand for the products or services. Promotion of demand is necessary to ensure full utilisation of the production capacity of the undertaking. This helps in spreading the overhead costs over large output. You may have seen that transport services such as roadways and railways issue monthly tickets (Season tickets) as a concessional rates to a large number of regular passengers.
- 2) Price discrimination: As you have learnt, the demand for the products of a public utility undertaking is elastic in some markets and inelastic in other markets. Take the case of transport services. In the case of general public or tourists the demand for bus service is elastic, since these persons do not depend upon public buses alone. They may hire three wheelers or taxis. But most of the regular office-goers or students depend mainly upon public buses only. For them the demand is inelastic. Here the undertakings have to charge less from the students and office-goers, and more from the tourists and the general public. Take another example of electric supply undertakings. They charge more for supply of electricity for domestic purposes than for agricultural purposes. In some cases, public utilities can demand lower price in one market and higher price in others, or may charge lower price from one category of consumers and higher price from the other category of consumer.
- 3) Social considerations: Some of the public utility undertakings touch everyday life of the people and are "affected with public interests". In such cases the price of the product is not fixed purely on economic basis. Considerations of social welfare play an important role in the price fixation. Consumers with low incomes or poor people get the services at concessional or subsidised rates.

18.6 SALES POLICY OF PUBLIC UTILITIES

You have learnt that the pricing policy of the public utilities are different from other business firms. Similarly, the marketing strategy of public utility undertakings is also somewhat different from the other commercial undertakings. Let us now study the sales policies of public utilities.

- 1) The products or services offered by public utilities are 'essential' requirements of the public and have usually large demand from the public.
- 2) The public utilities do not generally have rivals or competitors. A particular product is supplied by one undertaking in a particular area. So there is no possibility of different

- rates being charged by different producers in the same area. So there is no necessity for price discount.
- 3) These undertakings are granted franchise by the government. They had the right to interfere with private property as well as right to use public property (roads, land, buildings, etc.).
 - 4) There are no middlemen or intermediaries for sale of their products or services. They sell directly to their consumers or sell through their own distribution network. For example water supply, electric supply, and transport undertakings come in direct contract with the consumers. Therefore, they have to offer best possible terms to users of these services.
 - 5) Unlike other commercial concerns, public utility undertakings do not have the problems of credit collection from the customers. In some cases, as in electricity undertakings, the supply is stopped if there is default in payment of bills by a specified date. In some cases, the dealings are on cash basis, as in railways and road transport undertakings.
 - 6) There is no necessity for the public utility undertakings to advertise their goods and services like other business units. However, they have to inform the public about the service which they provide. For example, a transport undertaking has to keep the public informed about the new services introduced from time to time on different routes, changes in the routes, changes in the timings, etc. Such information facilitates the customers in utilising the service which ultimately leads to utilisation of full capacity.

18.7 PUBLIC CONTROL AND STATE REGULATION

As you have learnt, the public utility undertakings are engaged in the supply of essential goods and services to the public. The products and services are to be supplied regularly. They should be of a standard quality and reasonably priced. You have also learnt that the public utility undertakings assume the position of monopolies or semi-monopolies. What will happen if they misuse this monopolistic position? Suppose if the water supply undertaking supplies impure water, what will be the result? Epidemics like cholera, gastro-enteritis, jaundice, etc., will spread. Similarly, if the railways do not run the trains in time, the normal life shall be disturbed. Offices, schools, business houses will be hampered for some time. Sometimes taking advantage of the monopoly position, public utilities may charge higher prices which the general public may not be able to pay. For all these reasons, it is necessary to regulate and control the functioning of public utility undertakings.

The Central or State Governments or the local authorities regulate the functioning of public utilities. The objectives of such regulation are as follows:

- i) To ensure quality and regular supply of the goods and services.
- ii) Fixation of reasonable prices in the public interest.
- iii) To assure proper maintenance of equipment and machinery so as to avoid breakdowns and prevent inconvenience to the public.

Public utilities are being regulated by the government in different ways. Private promoters of public utilities are required to obtain a licence from the government. The licence stipulates the controlling powers of the government. Besides, rates may be also framed to ensure that the undertaking adopts its policies in the interest of the public consumers. The government may also nationalise public utilities run by the private undertakings and manage them through public corporations or boards having sufficient representation of the public: Establishing public utilities directly as a departmental undertaking of the government is often preferred as it enables direct control by government. Thus, public utility undertakings are accountable to the public as they deal with the utilities or services of public interest. In most of the countries, therefore, they are manned by public authority

Check Your Progress C

- 1) Enumerate the broad aspects of price policy of public utility undertakings.
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- 2) Fill in the blanks.
 - a) Prices of public utility services are fixed on the principle of
 - b) The demand for public utility services is in some markets and in others.
 - c) Demand for water for domestic use is.....
 - d) When different prices are charged in different markets for the same product or service, it is known as
- 3) Which of the following statements are True and which are False'?
 - a) Demand for electric power for industrial purposes is inelastic.
 - b) Problems of credit recovery do not arise in the case of public utility concerns.
 - c) Regulation and control of public utilities are not necessary if they are run by government departments.
 - d) Controlling powers of the government are included in the licence granted to private parties which promote the public utilities.

18.8 LET US SUM UP

Public utilities are the enterprises which supply essential goods and services to the public. They are expected to supply the essential goods and services to everyone in the community without discrimination. The institutions which undertake certain essential services like the supply of water, gas, electricity, rail and road transport, postal service, milk supply, etc., are some examples of public utility undertakings. Public utilities are distinct from other commercial undertakings. They are endowed with certain characteristics. They are:

1) indispensability of product or service, 2) restricted area of operation, 3) monopolistic or semi-monopolistic position, 4) regulation and control by government, 5) franchise, 6) huge capital investment, 7) inelastic demand, 8) non-transferability of supply by the consumer, 9) lower risk, and 10) limited choice of size and of site.

Public utility undertakings are accountable to public authorities since they are entrusted with public interests. Therefore, their ownership and management are usually vested in public authority. There are four alternative forms of organisation and management of public utilities: 1) public or private limited company, 2) public corporation, 3) government department, and 4) a local authority such as municipality or board or council.

Price fixation of public utility products and services is not done on the basis of demand and supply of these products/services. It is determined on the principle of "what the traffic will bear". However, other considerations like cost of service, price discrimination, promotional aspect and social considerations also play important role in the price fixation. Marketing strategy of the public utilities is different from the other 'commercial undertakings. These undertakings need not necessarily advertise their products or services. Problems of credit collection do not arise in the case of public utilities. The products or services of some public utilities are sold on cash basis. Therefore, these undertakings do not suffer much loss on account of bad debts. In some cases the supply on credit is stopped if bills are not paid by a specified time. Normally, there are no intermediaries for the sale of their products. They sell directly to their consumers.

Public utility undertakings are subject to government regulation and control since they deal in products and services essential to the public. The objective of government regulation is to ensure quality of service and uninterrupted supply at a reasonable price.

18.9 KEY WORDS

Cost of Service Principle: The principle of fixing the price of a product or service on the basis of cost incurred by the organisation for providing that service or product.

Franchise: A charter issued by government to the public utility undertakings granting powers, privileges and rights as well as assigning duties and responsibilities for which the undertakings are accountable to the Government.

Monopolistic or Semi-monopolistic Position: Absence of competition from rival enterprises or the existence of one or two competitors.

Price Discrimination: Charging different prices for the same product or service in different markets or from different customers in the same market.

Principle of “What the Traffic Will Bear”: The principle of fixation of price of a product or service on the basis of what the consumer may be able to pay.

Public Accountability: The accountability of public utilities to the Parliament or State Legislatures for their performance.

Public Utilities: Business undertakings which deal with essential goods and services like gas, water, electricity, etc., and are 'clothed with public interests'.

18.10 SOME USEFUL BOOKS

Bhushan Y.K., 1987. *Fundamentals of Business Organisation and Management*, Sultan Chand: New Delhi. (Part Nine, Chapter 6).

Ramesh, M.S., 1985. *Principles and Practice of Modern Business Organisation, Administration & Management*, Kalyani Publishers: New Delhi. (Volume I, Chapter 2).

Sinha, J.C., and Mugali, V.N., 1988. *Principles and Practice of Business Organisation and Management*, R. Chand & Co: New Delhi. (Chapter 2.4).

18.11 ANSWERS TO CHECK YOUR PROGRESS

- A 2) a, d, c, g are public utility services.
3) Characteristics of public utilities: a, b
4) a) False b) True c) False d) True
- B 2) a) False b) True c) False d) True
- C 2) a) What the traffic will bear b) elastic, inelastic
c) inelastic d) price discrimination
3) a) False b) True c) False d) True

18.12 TERMINAL QUESTIONS

- 1) What is a public utility undertaking? State its essential characteristics.
- 2) Discuss the various aspects of price policy of public utilities.
- 3) "Selling and pricing strategies of public utilities are different from other organisations". Discuss.
- 4) Do you advocate private ownership and inangement of public utility undertakings? If so, why?
- 5) Explain the following brietly:
a) Public utility undertakings
b) Moriopolistic positioq of public utilities
c) Franchise
d) Problems faced by public utility undertakings

Note : These Questions will help you to understand the unit better. Try to write answers for them. But do not send your answers to the university. These are for your practice only.