CHAPTER V

PRICING SYSTEM IN PUBLIC ENTERPRISES

The previous chapter critically examined the cost pattern in relation to organisation and management of our public enterprises. The analysis revealed many problems that the public enterprises have inherited due to poor planning, unscientific organisation and inefficient bureaucratic management. These enterprises bear the cost of organisation which is inefficient at various levels of management, such as delays in decision-making and consequent operational inefficiency. The problem will elude any solution until and unless specific objectives are laid down for the public sector enterprises which are conspicuous by their absence. The organisation must be structured to achieve the goals of maximum return on their investment consistent with (a) strengthening the marketing and technological position, (b) providing the community with products that are competitive in price, quality and quantity, and (c) ensuring the efficient and socially responsible use of human resources. The public enterprises
would not be anywhere within the reach of the above objectives so long as they are not managed and run on sound principles of management. For instance, the process of decision-making should be rationalised, and decisions as far as possible be made on the spot where they occur. Only very costly decisions be made at the level of power, i.e., board of directors. To ensure success of public concerns, the boards must be composed of members drawn from diverse fields such as industry, education, research, etc. Government control over policies and operations should not be rigid. The question as to whether the pricing system in public enterprises of our country is adopted with the objectives of reducing the cost to the minimum and providing goods and services to consumers at competitive prices, quality and quantity is being examined in this chapter.

Pricing system in our public sector is regarded as an integral part of non-repayable finances. The prices of all the commodities produced in the public sector enterprises, together with tax-revenues from other sectors are to secure sufficient income for financing socio-economic programmes of the country. In these circumstances, it is not necessary to include in the price of every commodity the 'surplus' for the development of its production. In some cases the prices of particular commodities do not
only include profit but are not sufficiently high to cover the cost incurred in their production, as revealed in Chapter III. Losses are covered from the government budget. The government also distributes the means for investments, regardless of income earned by the enterprises. Although this system made possible the necessary changes in the economic structure of the country but it at the same time produced a number of negative phenomena. The system neither provided the enterprises with proper incentives to raise the effectiveness of their operations nor was it conducive to a more effective utilisation of the capital and therefore created a number of problems for the national exchequer regarding investment. The need for basic transformation of the economic structure of the country, together with the necessity of using intensively on a large scale the limited resources available for economic development, call for modifications and reforms of pricing system in our public enterprises. Before making suggestions for the reforms of pricing policy in our public enterprises, it is necessary to examine the existing pricing techniques.

**Pricing Techniques**

When a public enterprise operates in an effectively competitive market, few special problems of pricing arise. Its pricing policies will be dictated to it by the forces of the market. To make a profit or to "break-even" it will have to offer
its goods and services to the consumer at prices comparable with those offered by its competitors. The main problem is that the government must take positive steps to preserve the freedom of the market by preventing the formation of monopolies and forbidding price-fixing agreements and other "restrictive practices", through instrumentalities such as the monopolies commission. Moreover, it will have to ensure that its public manufacturing enterprises do not enjoy any privileges, such as open or concealed subsidization, that are not available to comparable and competitive enterprises in the private sector; likewise, it must refrain from imposing on its public manufacturing enterprises without adequate compensation, unremunerative responsibilities from which the private sector is exempt.

In some of the developed countries, there is some approximation to the conditions of competitive market. In France, for instance, even those enterprises (other than public utilities) that once had monopoly characteristics are feeling the impact of the availability of competitive products. Apart from a few exceptions, therefore, public manufacturing enterprises operate on a competitive basis - one that has been widened as a result of European Common Market. In France, for most manufacturing concerns in the public sector, competition sets the prices, and the freedom for such competition is guaranteed, as far as
possible, by legislation which renders liable to prosecution before the courts enterprises which take advantage of a dominant position to engage in agreed or arbitrary price-fixing. For enterprises, vastly in the public utility field, where competition is absent or limited, prices are set in accordance with the principle of 'marginal cost pricing'. This principle is intended to reconcile the interests of the enterprise with those of its customers and of the nation as a whole, by encouraging resort to the less costly forms of consumption and thereby ensuring the optimum use of capital equipment and providing a guideline for the making of the most economical forms of investment. The French, therefore, have adopted a consistent price policy for their public manufacturing enterprises.

In Sweden, the situation is not substantially different. There, for enterprises working in competition, prices are set according to 'what the market will bear', while the monopoly enterprises that have some sort of price leadership, prices are set to cover costs including a certain profit. But generally marginal cost pricing is used by the latter type of enterprises. For those undertakings which are run by central administrative boards, as distinct from those that have been given company "status", the government has price-fixing powers, but in most cases, it has delegated the right to the undertakings themselves.
In Italy, the state shareholding companies accept market price since they operate in a competitive market.

In our country, the situation is far different from that in the developed countries. In general, the public manufacturing enterprises here enjoy a "sheltered" market, sometimes because they are the only manufacturing enterprises in their particular fields, sometimes because the division of the market among the enterprises, both public and private, has in effect been 'frozen' by the operation of industrial licensing system, sometimes because effective demand so exceeds actual supply that there is a more-or-less permanent "Sellers' market". Hence, even though in some cases the enterprises are in theory free to fix their own prices, they must necessarily be guided in doing so by certain rules made for them by higher authority. Such rules, however, are rarely formulated with any precision and all too often the enterprises are compelled to sell their products at prices somewhat arbitrarily fixed by supervising ministers in the light of conceptions of the "national interest" which tend to fluctuate according to the political fortunes or prospects of the government. Such arbitrariness is not confined to India alone. In developed countries like Britain, the pricing policies imposed by ministers on some of the nationalised industries of the U.K. during the 1950s have often been conditioned as economically unjustified and politically inspired.
As a matter of general principle, prices are determined in public enterprises in India by adding an unspecified 'margin' to average costs. This may be good enough as a 'rule-of-thumb', provided that a serious effort is being made to keep costs down and that the 'margin' is decided in the light of some coherent policy governing the contribution that each class of enterprise is expected to make towards its own expansion and general capital formation.

The enterprises adopting this technique are Hindustan Cables Ltd., Hindustan Aeronautics Ltd., Indian Telephone Industries Ltd., etc. These have for their main or only customer the government and enjoy monopoly in supplying the products in question.

In support of this technique, it is said that it is fair to meet the actual costs in full in the case of those enterprises which are in the early stages of an enterprise in a new technology area where the production problems and long-term cost conditions cannot be predicted exactly. For enterprises having government as the main or the only customer, this pricing technique is justified on the ground that the government has the choice of either paying a price which includes 'profit' or a price lower than the cost; for in the latter case, the government happens to
be in the position of making good losses of the enterprises by direct or indirect subsidization.

This method of pricing has revealed certain deficiencies. Firstly it does not penalize inefficient management; for whatever are the costs the price is sufficient to meet them. In fact it tends to place a premium on inefficiency. An interesting aspect of the formula is the addition of a set percentage to the cost of a product in order to arrive at its price. If the cost shoots up, due to work stoppages, material wastages or any other reason, the "margin" rises too. Non-uniform and abrupt changes in the costs of production change the real relations in profitability as compared with the assumed ones. This principle of covering the cost plus a minimum profit consists in making the profit in the price dependent upon the requirements of development in particular fields of production and increasing its share in the price structure.

Secondly, the cost-plus formula is apt to make every line of production profitable. As a result, the enterprises lose initiative to optimise its 'product scale' and 'product-mix'. It does not try to regulate demand into the more economical outputs and produce them at optimum point of output. None of these economical measures is likely to emerge from the 'cost-plus' formula.
In some other public enterprises, discriminatory pricing system has been adopted. For instance, Indian Railways, Indian Airlines, State Trading Corporation of India Ltd., etc., have discriminatory price structure for their services and products. Within the framework of this principle the distribution of the commodities produced is based on the possibilities and readiness of consumer to pay the price thus determined. The price here is a factor of selection of potential purchasers and of limiting their demand to the available supply particularly in the case of such enterprises as State Trading Corporation of India Ltd. Effect of this principle in the case of those public enterprises engaged in the provision of service goods is also to divert the excessive demand during inflationary period to the sectors of the economy where no fresh investments are required to meet the increasing demand like railways, roadways, etc. In other cases, discriminatory prices play the role of balancing the demand for and the supply of a particular commodity. An excessive rigidity of prices limits their distribution function because disturbances in the market equilibrium are removed only by changes in supplies or possibly by various measures affecting demand (changes in terms of sales, advertising, etc.). Differential prices make pricing system more elastic. In its absence, the total output or utilisation of capacity tends to decline so as
to raise the unit cost for the rest of the output.

Apart from the above economic justifications, discriminatory pricing system is also politically inspired; or they result from the casual pricing decisions on the part of the management. A few instances may be cited to support this view. For instance, there exists inter-regional and inter-functional subsidisation of a severe nature in the case of railways and Indian Airlines. Under the guise of uniform rates, South-Eastern Central and Eastern Railways have been subsidizing the operations of North-East Frontier, North-Eastern and Southern Railways since 1954. Goods traffic has been subsidizing passenger traffic and many branch lines have not been recovering even the marginal costs.

Similarly, the cost price relationships are diverse among the different air-routes. The region-wise, route-wise or aircraft-wise figures of cost and revenue offer evidence in support of this conclusion. In 1965-66, there were 17 routes where the total revenue exceeded the total cost, 15 routes on which the prices covered the direct operating costs but fell short of the total cost, 12 routes on which the prices covered only the variable direct operating cost and 41 routes on which the prices did not cover even the variable direct operating cost.
In other public enterprises, "import parity" is used as a standard. This makes some sense only if the price of the imported product has not been already raised by means of import duties or lowered by exporter in a bid to capture market.

The Hindustan Shipyard Ltd. and Hindustan Aeronautics Ltd. are the best examples of the international parity price. The Avro aircraft built by the Hindustan Aeronautics Ltd. is the replica of the Fokker Friendship aircraft; hence the sales price of this aircraft to Indian Airlines Corporation was determined on the basis of the price at which the Fokker Friendship could be imported from abroad. The difference between the cost of production and the price so arrived at was made good by the government by way of subsidy to Hindustan Aeronautics Ltd. The Avro transactions of this nature are, however, a minor proportion of the total operations of this enterprise.

Hindustan Shipyard Ltd. provides a complete illustration of this pricing formula. At one time the buyer of a ship was offered price parity with a corresponding U.K. ship; later the principle of international price parity was adopted, the reason being that the Indian ship-owner who bought a ship from Hindustan Shipyard Ltd. ought not to be at a disadvantage in capital cost in the competitive international shipping operations that he conducts. The
difference between the international parity prices and the actual cost of production at the shipyard was paid by the government to the company as a subsidy. It is true that the subsidies are repayable to the government when the company earns profits exceeding a certain per cent on capital; it remains a target yet to be reached by the company. But for the subsidy element, it is instructive to note that the entire capital of the company would have been eaten up long ago.

Some of the enterprises have adopted landed cost formula. Heavy Engineering Corporation Ltd., Heavy Electricals (I) Ltd., Hindustan Photo Films Manufacturing Co., Ltd., etc., are its examples. The underlying idea is that the consumer ought not to be burdened with the high costs of production of the enterprise. However, this price basis is characterised by certain difficulties. Firstly, it is not certain that the imported product to which the landed-cost basis applies exactly approximates, in quality, and technical composition, to the product manufactured at home. Secondly, the prices of the imports may be particularly low as a matter of the “dumping” policy adopted by foreign exporters; for example, a Japanese firm has quoted to a state electricity board a price for a steam turbo-generator set, which represented about half of the corresponding price that an established firm in the U.K. was capable of.
Fundamentally, the landed-cost basis has four variables in it: (i) the price at which the foreign producer decides on exporting the product to the Indian market, (ii) the rate of exchange between the foreign currency and the Indian currency, (iii) the import duty levied on the product, and (iv) the cost at which the foreign producer can produce the output. The first factor depends on a policy decision of the exporter, the second and the third depend on policy decisions by the government of India; and the last one depends on the production efficiency on the part of the foreign manufacturer. On grounds of both scale of output and established experience in the technology concerned, he is likely to have attained an economical level, which the new entrants in the field in India will take time to reach.

An example of how this formula operates may be provided with reference to Heavy Electricals (I) Ltd. The prices of power transformers, large motors and generators are fixed at a certain per cent above the landed cost applicable to similar products imported from the U.K. This involves a reduction in the allocation of factory expenses. The difference between the landed-cost basis and the international parity-price bases seems to lie in the large deficits involved in the latter case, which is assumed by the government. Another difference lies in the speculation that the enterprises to which the landed-cost basis applies are expected to "break-even" after a few years,
though it is a matter of doubt as to whether the Hindustan Aeronautics Ltd., and Hindustan Shipyard Ltd. will be able to operate at cost comparable with international prices in the foreseeable future.

Moreover, certain prices are controlled by the government on the ground of essentiality of the product irrespective of the fact that they are produced either by the public or the private sector. For instance, we find that uniform price control applies to both public and private undertakings to road transport, drugs, fertilizers, steel, etc. The uniform price control is desired to serve twin purposes of restricting demand to the available supply of scarce product so basic to industries and agriculture that the market forces cannot be allowed to determine prices without risking 'cost-push inflation'. This approach presents a complex problem: if unequal retention price is determined on the basis of cost pattern of individual firms, inefficiency gets subsidized; on the other hand, if equal retention price is determined on the cost pattern of marginal firm, the most efficient firm in the industry reaps a 'bonanza'. I, therefore, recommend that these unintended results of government control over the prices must be maintained to the minimum by devising a meticulous system of price control.
Inter-enterprise pricing is a complex affair. In such cases too little use has been made of the fundamental principles of price determination, viz., cost or the demand. Prices are determined arbitrarily. More often than not, price tribunals are appointed to settle disputes between them. For instance, there was price arbitration over the price dispute between Oil and Natural Gas Commission and Gujarat State Electricity Board, involving several questions of far-reaching consequences like the computation of capital outlay involved in the supply of gas to the Board, the structure of prices of gas supplied by the Commission to different states, and the paying ability of the Board vis-a-vis the conditions of non-availability of alternative rates within the State of Gujarat, etc.

The foregoing analysis of different techniques of product pricing system in public enterprises makes it amply clear that the autonomy of the public enterprises in the fixation of prices varies as between undertakings. To recapitulate the above discussion, for instance, the selling price and distribution of essential products like fertilizers, drugs, coal and petroleum products are controlled or regulated by the Government. In the case of steel (as will be examined in detail in the forthcoming chapter VI), the price has been decontrolled since May 1, 1967, but is still the subject of government control.
so far as scarce categories of steel are concerned. In the case of fares and freight charges levied by the I.A.C., Mogul Lines, etc., the rates are subject to government approval. In the case of the Hindustan Shipyard, the purchasers are charged prices on the basis of the prevailing international prices, and the excess of the cost of construction of ship over its actual sale price is reimbursed by the government as subsidy. This subsidy is repayable if and when the undertaking earns a profit of over a certain per cent on the paid-up capital. Undertakings with foreign competitors like the Air India, Shipping Corporation of India, Indian Rare Earths, etc., have to go by the international market situation; in the case of the first two, the fares etc., are fixed by mutual agreement, among the international lines with the concurrence of the government. In the case of others, the general position is that the undertaking is free to price its products. Usually these prices are fixed on 'cost plus' basis or on the 'landed cost' formula. But, here, too, there is a degree of informal consultation with the government.

It is significant to note that the pricing structures of the public enterprises are bound to contain an element of arbitrariness as these financial obligations have
not been indicated to the public undertakings in precise terms. Even the Third Five Year Plan, the Fourth and the Fifth Five Year Plans have given only a general indication that public enterprises should aim a rate of return on the capital employed. Such directives do not make it clear to the management whether each of them has to aim at this return or this is supposed to be an indication of the average performance expected from all the public enterprises taken together. It will not be a healthy development if public enterprises working under monopoly or near-monopoly conditions attempt to increase surpluses more by increasing prices, less by reducing costs and ensuring fuller utilisation of their capacity. The managements of such undertakings, as have a monopolistic element and are free to price their products should not attempt to bring larger surpluses by increasing their prices without reference to their own production efficiency and the wholesome trends that such an increase in prices might generate.

It has sometimes been suggested that the decision as to the level at which they (prices) should be fixed must be taken out of politics by confiding it to a quasi-judicial tribunal. In former days, Britain made use of such a body, the Transport Tribunal, to control the fares and freights charged by her railway transport undertakings.
Prices, however, are ultimately a matter of national economic policy, which is something which cannot be determined by contentious proceedings before a panel of judges. The right price will not automatically emerge from a quasi-judicial balancing of the respective claims of the enterprise and its customers, which is the type of exercise in which a tribunal inevitably tends to perform, even though it may not be specifically enjoined to do so.

Such bodies can play a useful role if they are staffed by persons adequately trained in the relevant branches of business economics. Such bodies can help the government to develop coherent and consistent pricing policies and thereby reduce the element of arbitrariness in the decision-making process. There is, in fact, a very strong case for insisting, by law, that the minister to whom approval of the prices proposed by the enterprises is confided should be compelled to seek the advice of such a body and publicly to state reasons if the decision is to reject or alter its recommendations. Whether this proviso is included in the law or not, there is now ample evidence of the value of control agencies for price investigation. Britain has her Prices And Income Board, France her Technical Committee on Price-fixing, and Sweden her National Price and Cartel Office.
bodies very differently constituted and empowered, but all concerned with investigation and recommendation. Such bodies are almost certainly to be preferred to "mixed ones" such as the Italian International Committee on Prices, in which the politicians outnumber the experts by 10 to 3.

In the last resort, of course, an "administered" price is a matter of judgment, since our Government running mixed economy has imperfect knowledge of the impact of a whole number of exogenous factors which ought to be influencing its decisions. In this respect, the Government of India is in a very different position from the governments of centrally-planned economies. Ideally, if not always in reality, the latter kind of government has all the factors under its own control. Even when such control is reasonably complete, however, there will remain a conflict of objectives which somehow has to be resolved; for there are very few public enterprises, even in the field of manufacturing industry, which have not been given wider social objectives as well as the latter clearly have to be taken into consideration when deciding pricing policies; but the ever-present danger is that they will be used as excuses for bad policies rather than as reasons for good ones. Hence, the importance of at least starting the price-fixing
exercise by the most vigorous application of the best economic principles which are summed up in the phrase "marginal cost pricing" - although there is still plenty of controversy about the techniques of calculating marginal costs, about the precise circumstances that warrant the application of the short-term as distinct from the long-term marginal cost principle and vice-versa, and about the modifications that may have to be made, particularly if it is decided that full accounting costs also have to be covered. The use of such pricing policies, as is well known, is impossible unless the right kind of accounting information is available to properly trained accountants. Though I am hesitant to recommend it for immediate adoption by the public enterprises in the country, it should carefully be considered by them, with a view to future adoption.

In fact a system of price determination should serve three basic principal objectives, viz., it should be promotive of efficient investment decisions, lead to maximum productivity of inputs and speed up the process of economic growth. It leads me to the discussion of the problems of 'profitability and efficiency'.
PRICING POLICY IN RELATION TO PROFITABILITY AND EFFICIENCY

The profit and pricing policies are closely inter-related. It is obvious that if the average revenue of an enterprise is fixed while the average cost is allowed to increase, the financial results of an enterprise, both in the public and the private sectors, will be below the prescribed standards, and will fail to adequately reflect the cost reductions through greater efficiency that might be brought about by the management. In the case of our public enterprises, the fixed average revenue is the direct outcome of the widely divergent official policy, as observed in the preceding paragraphs. It is significant to note that this is not confined to India alone; it is also prevalent in a large number of developing countries. For instance, Argentina, Greece, Iran and Sudan are among the countries where public enterprises are not required to show profit on their operations. Iran attaches importance to price stabilisation, which may be incompatible with profitability and, inevitably if so, if the general economic situation is characterised by inflation. Sudan pursues "self-sufficiency" as the fundamental aim of her industrial policy, which means that profit-making, although not the "ultimate goal", is certainly not ruled out as a subsidiary one. In Argentina "profit-making" is
not regarded as a basic requirement, which suggests that profits may not be undesirable. Profits in French manufacturing enterprises are regarded as the result of efficiency in production for a competitive market, and are normally required of them for the financing of expansion. In Sweden, long-term profit-maximisation is the goal of the public manufacturing enterprises that operate under competitive conditions. Italy requires her enterprises to remunerate at current rates of interest that portion of their capital which is raised from a competitive market. In Turkey, by law 440, profitability is declared "essential"; in Iraq, it is normally fixed at 10 per cent of the total cost of the products; in Ceylon public enterprises are required to make profits; and in Ghana they are expected to yield return. In India, with the exception of a few, the statutes governing the public corporations and the memorandum of association of government companies do not call for a commercial bias in their operations. To cite a few examples of the Acts speculating profits, Section 24 of the State Financial Corporations Act, 1951, requires that the "Board in discharging its functions under this Act shall act on business principles." Strangely, there is no corresponding provision in the Industrial Finance Corporation Act, 1948, though in practice this corporation has been running far
more profitably than the State Financial Corporations. The Air Corporations are required to act as far as may be on business principles under Section 9 of the Air Corporation Act, 1953. The Road Transportation Act, 1950, lays down under Section 22 that the Road Transport Corporation in carrying on its undertaking shall act on "business principles". A similar provision is made under the Delhi Transport Authority Act, 1950. The Electricity Supply Act, 1950, is the only other Act in which clear bias is found in favour of commercial performance. It is, therefore, recommended that Acts of other corporations and the memorandum of association of government companies must be amended to provide for the right degree of emphasis on "business principles" in their performance.

In addition, none of the Acts governing the public corporations specify the upper limit to the profits to be earned, or alternatively for effective control of prices. It is, therefore, desirable to introduce appropriate provisions that place automatic checks and balances on the profit targets of the public enterprises.

Though it may be assumed that the statutes take for granted the requirements on the part of the public enterprises to recover not only their costs but also interest or dividend on capital, specific provisions to this effect are lacking. To point out the general absence of such
provisions in the Acts is not merely of economic value. The non-declaration of dividend on capital as an item of cost has led to financial anomalies, as discussed in the previous chapters II and III.

Finally, no public corporation Act or the memorandum of association of public manufacturing companies provides for price modifications under conditions of deficit. It is necessary to provide this, for it will strengthen the possibility of a needy public enterprise seeking to raise its prices vis-a-vis ill-informed public criticism.

From the above it becomes amply clear that the government companies and the public enterprises have fewer clear financial stipulations. In most cases the matters are left to be decided by the President. It tends to place in the hands of government executives uncontrolled power to enunciate pricing policies. It is necessary to provide for a clear demarcation of functions in this respect between the ministry and the management of the enterprise.

The variety of attitudes and statutory provisions illustrated above reflect a distinction between approaches adopted by the countries to suit their economic developmental programmes. In France, Italy and Sweden public manufacturing enterprises are subject to the operation
of competition; their profitability, therefore, is not only expected but taken as a rough-and-ready measure of their efficiency.

In our country, competitive conditions are either non-existent or extremely imperfect, particularly in those lines of production in which public manufacturing enterprises specialise. Profitability, therefore, is neither correlated with efficiency nor regarded as a means of measuring it. Where expected, it is deliberately planned for as a means of providing self-generated resources for enterprise expansion and re-equipment or as a contribution to general capital-formation in the total national economy.

In countries which have extensive systems of public manufacturing enterprises, the generation of surpluses by their enterprises is an important segment of economic growth, as noted in the previous chapter I. And those countries which rely more on the private sector or those whose industrial development is still in its early stage, place less emphasis on this objective. In Greece, for instance, surpluses accruing from the operations of public manufacturing enterprises can hardly be more than marginal in their effect on the total economy, while for Sudan the immediate objective is the initial establishment
enterprises which can lead to greater industrial self-
sufficiency, irrespective of their profitability, at
least in the short-term.

Where profit is not the more-or-less automatic result
of success in competition, it has to be planned for, by
the enterprise itself or by the public authorities or by
both, through a process of consultation and collaboration.
Here, again, practices differ, depending partly on the
extent to which the profits of the enterprises enter as
important elements into the resource-calculations made
for the national economic plan. In Ghana, where
'financial planning' is very elementary, whether at the
plant level or the national level, there are virtually
no profit targets. In Argentina, Ceylon, Iran and Sudan
the targetting is undertaken by the enterprises themselves.
Iraq has the rather curious system by which one group of
enterprises (i.e., those directly under the control of
the government) have their profit-targets set by the
national plan, while another group (i.e. those dependent
on the 'holding company' known as the State Organisation
for Industry) set their own. However, the distinction
between the different kinds of arrangement for profit-
targetting is not of much significance because profit-
ability is closely related to investment and pricing
policies, in respect of which the enterprise is rarely
endowed with autonomy. Hence, even when the enterprise is left free to plan for the realisation of a particular level of profit, it does so within economic parameters stringently determined by the public authorities.

It is significant to note that, of all the countries, in India government sets targets of resources for planned development. The Third Plan set an overall target of Rs. 450 crores, the Fourth Plan Rs. 1,265 crores and the Fifth Plan of Rs. 1,615 crores (Chapter I). These targets were fixed too generally, too arbitrarily and without sufficient consultation with the enterprises themselves. This has led to the following comments by the Committee on Public Undertakings: "The Committee regret the manner in which the assessment of surpluses from the public undertakings has been made for the Third Plan. Ad hoc assessment of surpluses is unfortunate as it raises hopes which cannot be fulfilled and exposes the undertakings to public criticism. The Committee trust that, while making provision in the Fourth and subsequent plans, the estimates of surpluses from public undertakings would be made on a realistic basis and in consultation with them."  

An overall target for the profits to be realised by public enterprises is not very meaningful unless it represents

an aggregate or average of the individual targets for each of the enterprises, which can be realistically formulated only by a process of close consultation with the managements of the enterprises themselves, who alone can say what is feasible and what is unfeasible in the conditions under which they are required to conduct their operations.

It may be usefully added that, whereas certain countries appear to be little concerned with the profitability of their public manufacturing enterprises, and others - the majority - expect them to make profits or hope that they will do so, none adopt, as a general rule, the so-called "break even" policy. This policy was originally written into certain of the British "nationalisation" laws, which required the newly nationalised industries to bring into balance their receipts and expenditure on current account. It has been abandoned even in the country of its origin. There are now few who would seriously recommend its general adoption, particularly by manufacturing industries - although it may have its merits, in particular circumstances, for public utilities.

Treatment of losses in public enterprises deserves special mention. When losses are registered by public
manufacturing enterprises, they may be covered by a great variety of methods, viz., straight-forward subsidization from national budgetary funds; the granting of loan, sometimes interest-free; the waiver of service charges on outstanding loans or the declaration of a moratorium on loan repayments; the use of the enterprise's own reserves, etc. (as discussed in Chapter III in detail). It is impossible to say, except in relation to particular circumstances, which of these methods is to be regarded as superior to others. There are, however, certain principles which may be suggested with some confidence.

Much depends on the precise reason for the loss. In some cases, as analysed in Chapter III, it is the result of deliberate government policy. For social or political reasons, the government may have refused the enterprise permission to charge prices that will enable it to cover its costs of production, or have imposed upon it loss-making obligations which "put it in the red" in respect of the totality of its operations. In such cases, open subsidization, however arranged, is invariably the best method of covering the loss. Such subsidisation, however, needs to be calculated with great care, since an enterprise (and sometimes the government itself) may be under strong temptation to attribute to extraneous factors of losses which are in fact the result of
managerial inefficiency. I would, therefore, suggest that circumstances under which subsidisation may be legitimately employed and the techniques that may be used for the calculation of the amount are subjects to which the government must pay careful attention.

In continuation of the remedies already discussed in chapter II, it may be added that the use of the grant or even of the interest-free loan is normally an inappropriate method to cover the losses if an enterprise fails to pay its way for reasons unconnected with any directives it may have received from the government. One must, of course, give due allowance for the enterprise with a lengthy maturation period, which may have been allocated to the public sector precisely for the reason that, during its first years of operation, it will inevitably be loss-making. Proper financial provision has therefore to be made for their "running-in period". If the project analysis has been inadequately done, and if the expected yield on invested capital is more than delayed, the enterprise therefore is entitled to a moratorium, on rather than waiver of, the financial obligations it would normally incur. Hence, the appropriate way of covering losses is to make a loan on which interest payments and amortization instalments are deferred for a number of years. Admittedly, this is a counsel of
perfection, and it may well be that circumstances will compel
the government eventually to write off the charges as a result
of the inability of the enterprise to meet them. It may even
be that some portion of the enterprise’s original capital
will have to be written off. But these are the measures to
be used only in the last resort, when all else has failed;
for if the enterprise starts its life in the expectation
that a solicitous government will provide it with “easy”
money to cover any losses it may incur, its incentives to
improve its efficiency and to achieve profitability will be
reduced to a very low level.

The use of depreciation funds for wiping out losses is
not a desirable measure; for if it is continuously resorted
to, the financial affairs of the enterprise will become more
and more confused, and eventually its soundness as a
commercial entity completely undermined. The use of reserves,
however, falls into a different category, since the covering
of temporary losses is one of the purposes for which the
accumulation of reserves are intended. In the developed
countries, such as France, losses are normally met in this
way, with the exception of those which arise from the slow
maturing of a project or from the need for its radical
reconstruction. But it is obvious that reserves have to be
created before they can be used, and the ability of an
enterprise to have recourse to this method is in itself
evidence that it has already achieved a considerable financial success.

When prices are fixed at the 'optimum level of output' of public enterprises and they make profit, the question of its disposition arises. Some countries have provided for the division of enterprises' profits in a tedious way. In Iraq, for instance, the manufacturing enterprises under the control of the State Organisation for Industry (SOI) are required to operate a tedious scheme of distribution of profit. At the other end of the scale is India, which has no clear and specific methods for the distribution of the profits generated by the public manufacturing enterprises. In practices, most of our public enterprises have been ploughing back their profits in the form of various reserves, e.g., general reserves, development rebate reserve, etc., as seen in Chapter II. Such flexibility, of course, facilitates both the long-term planning and short-term adjustment of the national economy; but it is wide open to abuse by governments less responsible and development-minded, and does not embody any pattern of "incentives" that might guarantee rewards for managers and workers who make special efforts to achieve the targets they have been set.
Other countries without laws for the regulation of profit distribution have adopted varying practices. The Ghanian manufacturing enterprises, for instance, normally retain their profits but sometimes pay some of them into the Treasury. The Sudanese enterprises use their profits, apparently in accordance with a series of ad hoc decisions by the government, for repayment of capital, payment of dividends and transfer to reserves.

There is also a group of countries that specify by law the distribution of certain portion of their enterprises' profits but leave the remainder to be used as the enterprise or the government sees fit. In some cases, the law confines itself to stating the principles upon which bonuses shall be allocated to managers and workers. In France, for instance, the Act of 17 August, 1967, on "participation by workers in gains through expansion" obliges enterprises with more than one hundred employees to pay their employees a sum calculated according to predetermined norm. In other cases, the law makes general provisions for reserve creation and debt redemption. Swedish companies, for instance, are required to contribute 10 per cent of their profits to reserves until the reserve fund is equal to 20 per cent of the shareholders' capital, and to use a further 10 per cent for debt redemption so long as outstanding debts are greater than total equity
capital. The remaining profits are used for reinvestment or for the payment of dividends to the state, in accordance with decisions taken by managements of the companies themselves. There are yet other countries which, while making no general legal regulations for the distribution of profits, applicable to every enterprise or to all enterprises falling within certain categories, embody special provisions within each enterprise's constituting law. Turkey is one of these which, among other things, foresee the payments of premiums and dividends from the net profits to the personnel who have played a role in increasing the productivity of all her state economic enterprises. In Italy, the matter is entirely decided by the statute relating to the management agency concerned. The IRI, for instance, is required by its own law to contribute 20 per cent of its profits to a reserve fund, 15 per cent to vocational training, management training, and technical and social assistance, and 65 per cent to the State Treasury.

The above illustrations reveal the enormous variety of practices governing profit distribution. I shall therefore enunciate four principles which, in my view, should as far as possible be observed by our public enterprises. Firstly, the pattern of profit-distribution should be thought out in advance, and not left to a series
of ad hoc decisions. Secondly, it should not be so rigid as to inhibit distribution in a manner conformable with the requirements of the national economy as a whole. Thirdly, it should give the maximum practicable freedom to the managers and workers with financial incentives for the improvement of their performance. Fourthly—and most importantly—it should ensure that the highest possible portion of the enterprise's profits should be either ploughed back or used for purposes of general capital-formation. I am aware, of course, that these principles are by no means complementary; indeed, they may frequently come into acute conflict with one another. What I am saying is simply that they should all be borne in mind by those who are entrusted with the making decisions in our public enterprises on this important subject.

**EFFICIENCY AND THE PRICING POLICY**

As to the actual effect of pricing policy promotive of efficiency, one must make a distinction between (a) the general effect deriving from the ability of the enterprise to show profit and from its freedom to exercise some control over the use to which that profit is put; and (b) the specific effect arising from the distribution of some portion of the profit in the form of bonuses to its personnel.
When an enterprise can claim that it is a venture that yields adequate returns to its founders and owners, it tends to get favourable publicity. Moreover, profitable enterprise is likely to subject to less interference by the political and administrative authorities than an unprofitable one. Both of these factors obviously enhance the morale of the enterprise's managers, and it is even possible that some of the ordinary employees may begin to take a pride in the achievements of "their" concern. When profits have been genuinely won, such reactions are fully justified. It must always be remembered, however, that in a situation where the enterprise enjoys some degree of monopoly or is operating in a consistent seller's market, profits may be easy to obtain and hence offer no real criterion of efficiency. Such a situation prevails in India and other developing countries. Indeed, profitability which has been obtained as a result of no particular effort may induce complacency rather than stimulate initiative. As for management's freedom to use the profits that it makes or at least a significant proportion of them - for its own self-determined purposes, that the greater the freedom accorded, the higher will be the morale. Managers cannot be accorded total freedom to dispose of their net profits. If an enterprise is not scheduled for further expansion, it would be simply foolish to allow them to pursue an
indiscriminate policy of "ploughing back"; such a course would simply restrict the possibilities of capital-formation in those areas where it was really required, and would be incompatible with coherent national economic planning. On the other hand, it would at least seem to be inimical to managerial morale if all the fruits of success were arbitrarily taken away by higher authority, to be used — perhaps — for purposes which seemed to the managers themselves to be of comparatively low priority. Perhaps the key word here is arbitrarily, and it may be that what managers really want is not the right to dispose of the profits they have made but to be seriously consulted about the disposition of such profits. There is plenty of evidence that consultation does not always take place or that when it does take place it is not always serious.

The specific effect of bonuses for personnel, fed from the enterprises' profits, is also the subject of some controversy. In theory, it should be good for morale; in practice it is not always so. When an enterprise enjoys a comparatively sheltered existence, the payment of bonuses out of regularly accruing profits may settle down into a routine and the bonuses come to be regarded as a normal addition to standard wages and salaries. Equally serious is the situation where certain enterprises, through no particular effort of their own, are able to pay bonuses
whereas other enterprises, through no fault of their own, are unable to do so. In this case whatever stimulatory effect the bonus-paying regulations have on the first group of enterprise may be offset by the depressant effect on the second group. Similar considerations apply to the use of profits for the provision of services in kind, such as housing and recreational facilities. Such services are provided on a fairly lavish scale in the public enterprises of our country. Much more useful, from this standpoint, is the payment of bonuses and provision of services based, not on profitability, but on productivity, both individual and collective; but this requires that there should be reasonably sophisticated means of measuring productivity and of apportioning responsibility for it. So far as workers are concerned, the simplest method is the introduction of piece-work schemes; but whether this is possible depends both upon the nature of the enterprise's operations and the reaction of the workers in this particular form of remuneration, which differ from industry to industry.

Among other specific incentives is the introduction of schemes for worker participation in managerial functions, by way either of representation on decision-taking bodies or of membership of consultative committees. Most of the enterprises are equipped with some form of consultative
machinery in India, and that a few have decided to involve the workers, usually through their trade unions, in actual managerial functions. Of all the countries, France has the longest experience of "participatory" practice. By her nationalisation laws, dating from the period immediately following the Second World War, she established "tripartite" boards of directors on which the workers received representation. India also has introduced a similar type of workers' participation in management at an experimental level.

I now turn to some of the problems of measuring efficiency in our public manufacturing enterprises. As already indicated, profit fails to provide a meaningful yardstick except where competitive conditions prevail, which is rarely the case in India. Even in the more developed countries it is rarely adopted as the sole criterion. France which regards other tests of efficiency as "secondary", nevertheless admits that there are cases where the profitability criterion is "debatable" (e.g., when the state is the sole buyer of the products of a public manufacturing enterprise) and where other criteria must be used (e.g., when the enterprise has as its main objective the trying out of certain technological innovations, or is striving to
obtain a foothold in markets that as yet potential rather than actual).

Efficiency can be measured only in relation to defined objectives. As, in many countries, the objectives of public manufacturing enterprises have received no more than vague and ambiguous definition, any form of efficiency measurement may be a difficult exercise. Even where clear definition of objectives has been attempted, difficulties are likely to arise from the fact that many public manufacturing enterprises are expected to pursue "social" as well as purely commercial goals. The problem of giving each kind of goal its due emphasis is well illustrated by the document issued by the British Government in 1961, entitled "The Financial and Economic Objectives of the Nationalised Industries" which first defined the government's main task as that of measuring the efficiency to ensure "that the industries are organised and administered efficiently and economically to carry out their responsibilities, and that they are thus enabled to make the maximum contribution towards the economic well-being of the community as a whole", but then immediately added that "although the industries have obligations of a national and non-commercial kind, they are not, and ought not to be regarded as social services absolved from economic and commercial justification". From 1961 onwards an attempt
was made to bridge this dichotomy by setting five-yearly targets, expressed in terms of percentage return on total capital, which would take into consideration both the commercial and the social obligations of the industries concerned. Of recent years, however, more sophisticated techniques have been developed, using the devices of Discounted Cash Flow and cost-benefit calculations. These are useful both for choosing objectives and for defining them in quantitative terms. They greatly facilitate the task of checking performance. But they, by no means, offer anything in the nature of automatic problem-solving devices.

Once targets have been decided on, numerous criteria are available to measure the economic efficiency with which a public manufacturing enterprise is striving to reach them. One will be interested in how economically the enterprise is using its capital resources and its inputs of raw materials, fuel and power, in what steps it is taking to save on overheads and inventories; in the results of its efforts - if any - to raise the productivity of labour; and in the changes that are taking place in cost per unit of production of given quality. On the basis of these and other criteria, an efficiency profile of the enterprise may be built up over the years, and with the help weaknesses may be identified and
corrected. In the developed countries such criteria are being regularly employed; in India they are often used, if at all, only fitfully and inexpertly. Government is sometimes afraid to use them, because they do not wish to expose to public inspection the inefficiency of the enterprise for which they are responsible; but even in more favourable political circumstances, knowledge of how to use them is often absent among the inadequate number of trained efficiency experts, usually concentrated in the central ministries rather than spread out among the enterprises themselves.

In our country it is therefore a matter for no surprise that Planning Commission specifies "fulfilment of plan targets" and this, indeed, is an objective as important as it is obvious. One is aware, however, that plan targets tend to be expressed in industry-by-industry figures for physical production. Unless these are broken down into specific assignments, both physical and financial, for each undertaking, they cannot offer even rough-and-ready criteria for the assessment of performance. Other criteria specified are "best use of resources", "output", "quality", "production costs", "prices", "meeting of demand", and "non-financial, social and economic objectives". Such a miscellaneous collection shows little more than that the Government is in favour of virtue and against sin. They do not provide evidence of any attempt at precise definition
of objectives or at precise measurement of the extent to which the objectives are being reached — although there is no doubt that such an attempt is actually being made, more vigorously in some countries than in others.

The problems of product-pricing and operational efficiency are closely inter-linked issues. Low level of efficiency in public manufacturing enterprises, as evident from the analyses in the previous chapters, is one of the main criticisms currently levelled against them. As public manufacturing enterprises are to remain an important segment of our economy, such criticisms must be met with a positive response.

CONCLUSION

It becomes amply clear from the foregoing analysis that conditions in India are generally different from those prevailing in advanced countries like France, U.K., Sweden, Italy, etc. Public countries here enjoy a "sheltered market", sometimes because they are the only manufacturing enterprises in their particular fields, sometimes because the division of the market among the enterprises, both public and private, has in effect been 'frozen' by the operation of industrial licensing system,
sometimes because effective demand so exceeds actual supply that there is a more-or-less permanent 'seller's market'. Hence, the prices are fixed by 'higher' authority. However, administered prices are formulated with any precision and all too often the enterprises are compelled to sell their products at prices arbitrarily fixed by the ministries in the light of conceptions of the 'national interest' which tends to fluctuate according to political fortunes or prospects of the government. The role of Central ministries must be one of monitoring their activities, asking questions and recommending courses of action. But the final decision must rest with the chief executive of the public enterprise and not as it does now with a deputy or joint secretary in a ministry, who today exercises power but is not held responsible for the consequences. The importance of this reform cannot be over-stressed. India has underpriced its steel, cement, coal, fertilizers and a horde of other products for two decades and then tied up literally the colossal investment in public manufacturing enterprises when with more realistic pricing the growth of public enterprises would have been financed entirely from profits and normal bank borrowings. The analysis reveals that a number of public enterprises have been virtually starved of funds through administered pricing. As a result today more and more public money is being tied up in reviving
sick units in the heavy industries which need never have
become sick at all.

In fact, a system of price determination must be
promotive of efficient investment decisions, maximum
productivity of inputs and accelerated economic growth.
Hence it has been recommended that bodies comprising
persons adequately trained in relevant branches of business
economics must be set up to help the Government develop
a coherent and consistent pricing policy and thereby
reduce the element of arbitrariness in the decision-
making process. But there will still remain a conflict
between the objectives of maximum economic and social
returns; hence the importance of fixing prices by applying
the best economic principles summed up in the phrase
'marginal cost pricing'.

The prices must include profit margin which must be
formulated realistically by a process of close consulta-
tion with the management of the enterprises themselves,
who alone can say what is feasible and what is unfeasible
in the conditions under which they are required to conduct
their operations. At present these targets are actually
determined too generally, too arbitrarily and without
sufficient consultation with the enterprises themselves.
An overall target for the profits to be realised by public
enterprises is not very meaningful unless it represents
the aggregate or average of the individual targets to be included in prices for each of the enterprises.

As regards losses registered by public enterprises, prices must not be raised to cover them unless factors causing losses are known. In such cases as the losses are the result of 'administered prices', open subsidisation is invariably the best method. If the enterprise is expected to pay its way, but fails to do so for any reasons unconnected with any directives from the government, the use of grant or even interest-free loan is normally an appropriate method of covering the losses. If the project analysis has been inadequately done and the expected yield on invested capital is more than delayed, the enterprise is entitled to a moratorium on the financial obligations. The use of depreciation fund for wiping out losses is not a desirable practice because it eventually undermines the financial soundness of these enterprises as a commercial entity.

In addition, pricing policy must facilitate the checking of performance. One will be interested in how economically the enterprise is using its capital resources, its inputs of raw materials, fuel and power, in what steps it is taking to save on overheads and inventories; in the results of its efforts to raise the productivity of labour; and in the changes that are taking place in cost per unit of output of given quality. On the basis of
these criteria, an efficiency profile of the enterprise may be built up over the years and with its help weaknesses may be identified and corrected. In the developed countries such criteria are regularly employed, but in India the government is afraid to use them, because they do not wish to expose to public inspection the inefficiency of the enterprise for which they are responsible. Application of these criteria would ensure that prices are fixed at the level of minimum cost and optimum output.

It is significant to note that questions of pricing product, profitability and efficiency are inter-related issues. As public enterprises are to play a key role in the economic growth of our country, by providing infrastructure and acting as 'model employers', administered pricing system must give way to 'marginal cost pricing'.

In the subsequent chapter, a case study of pricing system in iron and steel industry is made to identify its weakness.