CHAPTER - III

SOCIAL COST
BENEFIT
ANALYSIS - A
CONCEPTUAL
FRAME WORK
The present chapter presents an extensive outline as regards the conceptual framework providing a detailed review of the concepts of social costs, cost effectiveness, approaches and techniques to measure the cost-benefit, and the applicability of the specific concept of social cost benefit in SAIL.

CONCEPT OF COST BENEFIT (COST-EFFECTIVENESS) ANALYSIS:

Essentially a field of operation research, cost benefit analysis helps in evaluating the implications of alternative courses of action. Operation research is used to determine the optimum usage of available or quickly available resources. On the other hand cost-benefit analysis is indirectly related with the selection of resources, viz. equipment, products, etc. before they are available. Decisions involving large expenditures may have to be made long before the systems using such items become "operational" and before the characteristics of these systems are very clear. In deciding among alternatives in such situations, management, whether of industrial or military organisations, is invariably faced with
limited resources (particularly funds or personnel). The choice of the preferred alternative will involve evaluation of benefits and cost trade-offs. It is this class of problem that Cost-benefit Analysis treats.

A number of definition of cost benefit have been given by economists of different era. These definitions are being review and in the following paragraphs "Cost-Benefit or Cost-Effectiveness, Analysis is the quantitative examination of alternative prospective systems as to the potential trade-offs with regard to the benefit, or effectiveness, to be gained and the costs to be incurred among the alternatives for the purpose of identifying the preferred system and its associated equipment, product etc. The aspect of uncertainty is a major characteristic of Cost-Benefit Analysis but is not indispensable to a definition. It is also to be noted that certain studies using return-on investment criteria could be used as 'measures of effectiveness' in certain cost benefit studies. The line of demarcation becomes hazy in this area.¹

The term cost is wider in its application for better analysis of the term the dollar is the

generally accepted denominator, any economic resource, for a given problem, can be the limiting factor — e.g. personnel.  

The cost-benefit analysis became in vogue since the development of Operation Research. It can be identified as having been applied to problems of national water resources programs as far back as the late 1930's. However, as a fold of its own, it has blossomed only in the past few years, the 1950's being about the first period when a significant number of such studies were undertaken. Military applications have provided the prime impetus for its recent rapid growth. In military applications it is commonly termed 'Cost-Effectiveness Analysis' and is used to assist in deciding among alternative 'weapon' system configurations. Increasingly common is the requirement for industrial contractors to perform Cost-Effectiveness Analysis for the Government, such analysis customarily relates to potential products for military use.

APPROACHES AND TECHNIQUES

A Cost-Benefit Analysis mainly comprises five principal steps are briefly explained as under:

i) Identification of pertinent measures of effectiveness, i.e., benefits - The mission for which alternatives are being considered must be translated, wherever possible, into specific quantifiable selection criteria. Sufficient attention to this vital step is necessary to avoid selections based upon inadequate criteria. The 'criterion problem' which is present in a wide range of operations Research problems is a particularly difficult one in Cost-Benefit studies because of the usually ill-defined nature of future requirements.5

ii) Description of alternatives: Each alternative must be examined in sufficient detail to permit identification of its major characteristics which affect overall performance and generate costs. The major equipment, though of primary interest, should not be examined in isolation. Rather, all components of the system which are necessary to perform the desired mission (including such aspects as personnel)

and maintenance needs) should be included in the analysis.  

iii) Expression of both mission performance and cost as functions of the characteristics of each alternative: A mathematical model is developed to reflect the major relationships. The model consists of both cost and performance analysis relationships. Since Cost-Benefit Analysis generally involves alternatives which are only conceptual or preliminary design stages, the primary cost and performance trade-offs should be obtainable from the model.

iv) Estimation of appropriate values for the equation parameters. Because of the need for information on systems which may still be in the conceptual or preliminary design stages, the data problem is of particular concern in Cost-Benefit Analysis. Uncertainties in the data will be much greater, than in other types of analytical problems. Considerable attention to the development of improved cost analysis (i.e. cost estimation) techniques has resulted.

Harry P. Hatry, has advocated the application of Cost-Benefit Analysis by industry and government to

assist in the evaluation of military and other Government sponsored projects.

Cost-Volume profit which is commolator of cost benefit analysis denotes technique for the financial analysis of the relations between costs and profits under conditions of changing volume. This technique is used for measuring the functional relationships between the major factors affecting profits; and for determining the profit structure of the firm.\(^7\)

The cost volume profit is correlated with the cost behaviour, because underlying the technique of cost-volume profit analysis is a fundamental principle governing the manner in which costs respond to changing volume. Some costs vary quite closely with changes in volume whereas others remain unchanged in total amount regardless of changes in rate of activity. Costs which change with volume are ordinarily called variable costs while those costs which do not change with volume are called fixed cost. Inherently, costs are neither fixed nor variable, but acquiring such characteristics as a result of management policies and decisions, they are classified

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as 'fixed' or 'variable' for the purpose of this analysis.

The fixed costs refer to the provision of capacity in readiness to do business, which remain unchanged and constant in short-run irrespective of fluctuations in production or sales volume. Since such costs are fixed for a given period of time they have numerous connotations such as stand by or capacity costs. They include rent, depreciation, property taxes, insurance, and the salaries of key executives and supervisory personnel. On the other hand, the variable costs represent the factors of cost which increase or decrease proportionately with actual volume of production or sales. Usually, raw materials and certain kinds of labour, supplies, and service are variable costs, (also called direct costs) because the amount of total cost varies directly with volume of activity.

In analysing cost-volume-profit relationships the first step is to study the behaviour of costs under conditions of changing volume, and to divide costs into fixed and variable components. The next step is to determine the total amount of fixed costs and the rates at which variable costs and profit
change in response to volume.  

Volume is a key factor in profit planning, because most managerial decisions are affected by the changes in costs and sales income which accompany changes in volume. Therefore, Cost-Volume Profit Analysis (CVP Analysis) is a highly useful management technique for studying business problems and has many practical applications in connection with planning and control. The information derived from this type of analysis provides a suitable basis both for projecting profits under alternative proposed combinations of costs and volumes, and also for evaluating the profit consequences of alternative decisions. In particular, the principles of cost-volume-profit relationships have been implicitly accepted in connection with direct costing, profit planning, break-even analysis, marginal analysis, flexible budgeting, and pricing policy.

COST AND BENEFITS: The term cost and benefits has been defined in a variety of ways. The dictionary


meaning of cost and benefits refer to the measurement of resources used in an activity, and their comparison with the value of benefit to be derived from the activity'. The measurement of benefits (accurately) is not an easy task. It is easier to find and measure cost as compared to benefits or outputs.

In business arena the utility of cost benefit analysis is to establish that the benefits emanated by resource utilisation. The first is the cost Analysis. This must be conducted for each activity after deciding on its fixed, variable or semi-variable nature. The costs are then to be assigned to different activities. The second is the contribution analysis. This helps to identify which activity contributes or produces the maximum. The third is the benefit analysis. The most appropriate method of conducting this would be to completely break down each activity into its minutes forms, analyse reasons as to why they are incurred and then make an evaluation of the benefits. The fourth step is to design and develop cost reduction or cost cutting strategy for each class and component of cost. Strategies and plans for cost cutting should be chalked out in collaboration with the management and financial accountants.
The last important analysis relates to the development of profitability improvement plan by identifying income generation strategies from existing and new resources and rationalising and cutting cost of existing activities or replacing by better low cost based resources.

PAST PRESENT AND FUTURE COST: Most accountants the usually confused regarding the issue of past and future costs. There is a subtle difference between the two. In fact we can introduce here a term 'Present Cost' which will help to define and differentiate between past and future costs more clearly. There are two schools of thought, one which thinks of costs in terms of resources used in the production of a commodity or an article which will begin to yield benefits or be used for the purpose of manufacture for the costs of the product lie in the past if the resource inputs to build it are considered and they will lie in the future if alternative uses or output is measured. This controversy of past and future costs brings to the surface, the problem of drawing a demarcation line between the past costs & future costs.  

Yet past costs cannot be determined or computed without using the process of 'Backward Linkage'. Similarly, when considering the future costs or future usage costs, the costs of production of the product ready for use, such as the cost of research, designing, engineering and development etc. are no longer relevant for future decision. They are past costs, which are irrelevant to the cost analyst for future. However, the cost of operation supporting facilities etc. which are currently being expressed are present cost. The cost of production or construction was relevant at the time when the production decision was being taken and while the process was going on. The costs are very much relevant to the:

- Decision maker when he is deciding whether or not to undertake the particular project.
- Accountant who has to examine and assign costs and expenses, or
- Cost analyst who has to base his future estimates on these costs.

The importance of future costs, also referred to as incremental costs, cannot be over emphasised. However, small amounts in the future
costs are the real and meaningful costs.  

Cost benefit analysis is used to make certain economic choices. Most of the choices to which it has been applied involve investment projects and decisions whether or not a particular project is worth-while, which is the best of several alternative projects, or when to undertake a particular project. Cost benefit can also be applied to proposed changes in laws or regulation, to new pricing schemes, such schemes involve making economic choices along the same lines as investment schemes. As choice involves maximization it is that decision makers want to maximize. This formulation is very general, but it does at least enable to set out a series of questions, the answer to which constitute the general principles of cost-benefit analysis which are:

1. Which costs and which benefits are to be included?

2. How are they to be valued?


3. At what interest rate are they to be discounted?
4. What are the relevant constraints?

Before we can take these four questions seriation it is convenient to discuss an issue which involves more than one of these questions. It arises because the conditions for a welfare maximum are not likely to be fulfilled throughout the economy. The marginal social rate of time preference and the marginal social rate of return from investment would coincide. A single rate of interest would then serve both to compare benefits and costs of different dates and to measure the opportunity cost of that private investment which is displayed by the need to provide resources for the projects is question. "This problem has been discussed by a number of authors, including Eckstein (1958, 1961), Steiner (1959), Marglin (in Mass et al. 1962) and Feldstein (1964a, b and c)." They suggest that the cost and benefits of a project are the time streams of consumption foregone and provided by that project. The nature of this approach emerges clearly from Feldstein's remarks on the social opportunity cost of funds transferred from the private sector to the public sector.13

The application of this approach to both costs and benefits produce a complicated expression for the present worth of a project's benefits less its costs. Nobody has as yet succeeded in qualifying the expression. However, at present, the approach can only serve as a reference standard for judging simpler but more practicable ways of tackling the problem. Meanwhile, it is noted that the problem arises to the extent:

i) That a project's benefits are reinvested or create new investment opportunities, or

ii) That some of the funds used for the project would otherwise have been invested. If neither of these conditions is fulfilled; in other words, benefits and costs both consist exclusively of consumption, then these complications do not arise, and the problem is reduced to one of choosing an appropriate social time preference rate of discount.

When we are dealing with costs and benefits which can be expressed in terms of money it is generally agreed that adjustments need to be made to the expected prices of future inputs and outputs to allow for anticipated changes in relative prices of
the items involved, but not for expected changes in the general price level. The essential principle is that the cost benefit in case of prices must be reckoned on the same basis, and for convenience this will usually be the price level prevailing in the initial year. In case of the social opportunity cost rate, the government borrowing rate is a popular and easily applicable to find out the costs, because it is a financial cost of the government financed investment and, more academically, because it can be regarded as the risk free rate of interest. Yet despite the recent empirically founded recrudescence of belief in the interest elasticity of private investment, no one has demonstrated that the latter's marginal efficiency does actually equal the interest rate. A direct attempt to measure marginal rates of return on private investment is therefore required.

The best method to measure the cost benefit is essentially a practical tool for decision-making and it is not worth while pursuing the second best problem into the higher reaches of welfare economics. The non-fulfilment of the conditions for a welfare maximum


elsewhere in the economy is relevant to cost-benefit analysis only in so far as it makes the market values of outputs and inputs obviously biased measures of benefits and costs.

In the cost benefit analysis the first question is what benefits should be included, and how such benefits should be measured. Unless distributional considerations are to be inserted into the objective function, cost benefit analysts agree that purely pecuniary benefits should not be allowed for all other benefits should ideally be included. But the evaluation is easy where the goods provided are in the nature of private goods, and provision is through public sales, so that benefits can be measured by market price. In this case, the planner merely performs functions usually assumed by the private firms and the economics of that firm apply.

The situation is more manageable, however, where benefits are reflected in price change, or are made calculable with reference to price. Thus, the benefits from irrigation may be measured in terms of increased agricultural output; flood control results is cost-saving since measurable damage to capital assets or resources is avoided; better roads reduce
automotive costs and save trucking time, which can be valued; public health measures, reduce remedial care cost; investment in education raise earning power and so forth. The common characteristics of these cases is this further output is in the nature of a private good which may be valued efficiently at the market force. While external effect on production cost is deal with the general theory of externalities, the specific case of social goods and intermediate goods has been neglected in the development of social good theory nearly all of which is dealt with final goods.

In case of investment decisions, the primary application of cost-benefit analysis has been to public investment rather than to the provision of short-lived goods. This may be due to concern with investment planning in developing countries as well as the economists fascination with the niceties of time discount analysis. Also, the choice of the discount rate involves an externality problem is that the social rate is usually held to fall short of the


private rate. For our purposes there are two main aspects of the investment problem of the particular interest, i.e.  

i) the relation between my investment and total investment and  

ii) the way in which the means of finance enter the profitability calculation.

Now, in the words of E.J. Mishan the cost - benefit studies grow in popularity, it is increasingly important to make proper allowance for losses or gains arising from changes in the incidence of death, disablement, or disease caused by the operation of new project or development. According to a project appraisal it is to find a way of comparing net benefit in one period and another. Feldstein surveys the general issue, arguing that market rates of interest are not an adequate guide to social time preference. In support of this view Sen puts forward a specific model, in which the welfare of the present generation is affected by its successors. This shows that, if


people are less 'selfish, for their heirs than for themselves, they may under-invest if investment is left to the free market. But, even if time preference are known in any factory there remains the problem that public investment may displace private. It savings are sub-optimal the money cost of public investment will then understate its social opportunity. Feldstein also argues strongly against the common practice of dealing with the opportunity-cost of capital problem by using a synthetic discount rate which is a weighted average of the rate of return on private investment and the social time preference rate. The Feldstein choosing between alternative time-streams of social benefits and costs is one of the most difficult and most important problems in the evaluation of public investment projects. The attention devoted to this subject in discussions of cost benefit analysis is justified by the practical realities of public investment decision making.


The most useful measure of project's desirability is the present value of the net addition to the consumption created by the project. Today, most economists have begun to recognise that in a mixed economy with market imperfections and multiple interest rates no single discount rate can be taken as a measure of the both time preference and the productivity of capital. Nevertheless, much cost benefit writing has been a search for such a single discount rate with normative significance for public expenditure decisions. Two types of discount rates have been advocated. (i) Social time preference (STP) and (ii) Social opportunity cost (SOC) A social time preference function assigns current values to future consumption : it is a normative function reflecting society's evaluation of the relative desirability of consumption at different points in time. The social opportunity cost (SOC) is a measure of the value to society of the next best alternative use to which funds employed in the public project might otherwise have been put. In a perfectly competitive world the opportunity cost of these funds could be represented by the market interest rate, but is our economy no single interest not or rate of return carefully measure the SOC of funds. The SOC depends on the
source of the particular funds and must also itself reflect the STP function (Social time preference).  

RATIONAL AND OBJECTIVES:

PE is expected to be the Principal agent for rapid economic and social transformation, by developing infrastructure in the core sector, and closing the gaps in industrial structure. Its dominant position in the financial field is intended to control and guide the private sector, wherever necessary. It is also likely to step in when private enterprise fails the economy and the economic growth via. PE will be adequately learned with social justice.

The objectives of establishing new enterprises and reasons for nationalising some existing ones are varied and often differ from case to case and from time to time. Perhaps, the only generalization possible in this regard is that PE for us is more a matter of necessity than of choice. It is not so much the ideology as the compulsion of the situation, which has led to the growth of PE in India. In fact, this is true of most of the developing countries. As

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stated in a UN resolution, PE plays an important and vital role in developing countries, in as much as it helps in capital formation, in fuller utilisation of natural resources, and in achieving a more equitable distribution of income and wealth.  

The production in PEs is not only an aim in itself but a part of the total public effort to telescope the development of countries in a period of a few decades and to transform a society which was colonial and structured into a modern industrial society of free and equal opportunities.

Here, a brief general statement about the need and role of PE in India is also contained in the statement of our late Prime Minister Mrs. Indira Gandhi that 'we advocate a Public Sector for three reasons':

i) to gain control of the commanding heights of the economy,

ii) to promote critical development in terms of social gain or strategic value rather than primarily on considerations of profit, and

23. Resolution of the Economic Committee United Nations Adopted on 26th November 1975. The resolution was moved by twelve nations including India.
iii) to provide commercial surpluses with which to finance further economic development.

Before independence major PEs were railways and posts and telegraphs. They were necessary for administrative and strategic reasons in a vast country like India. They also helped in opening up the Indian hinterland for having raw materials for British industry and to provide markets for British goods. Similarly, the pattern of broadcasting, being a State monopoly in UK, was used in India. Immediately after independence, the Government felt the great need to industrialise the country. This could be secured not only by establishing PEs, but also by providing all possible support to the private sectors. PEs in India today help private enterprises in various direct and indirect ways and have themselves taken up the onerous responsibility of creating the necessary infrastructure for industrial development. PE has been extended to areas where private management has failed to achieve the national objectives. PE is also meant to serve important social ends. The various objectives are discussed under the following heads:

A. General objectives;
B. Social objectives;
Perhaps the most important justification of PEs is the need for fast economic development. Till independence, we were badly lacking in basic industries, infrastructure and other inputs required for rapid growth. The private sector did not have the necessary financial resources, managerial skills and the enterprising spirit needed for the country's growth and self-sufficiency. The emphasis of the Government has been to establish basic and strategic industries or those in the nature of public utility service. It is sometimes argued that economic growth could have been secured by dissimilation of correct information and by providing the necessary help and finance to the private entrepreneur. The private entrepreneur often takes a narrow commercial view and is likely to ignore many broader and social aspects of growth. And once investment of decisions are left to him, it is very difficult to ensure the necessary social orientation and adequate regard for development priorities.

Some economists argue that industrialisation is not the best or the proper way to secure economic development in developing countries. The developing

countries can better concentrate on agricultural products and raw materials, the production of which needs low capital investment and much less complex production technology. These developing countries can purchase their requirements of manufactured goods at prices for below their own cost of production and in turn can supply their raw materials and primary products to industrialised countries, where they are much in demand.

It is also argued that industrialisation for the backward countries not only means production of goods at a higher cost or at a much lower level of efficiency, but it also brings with it. "The class struggle, ugly urban agglomerations, the disruption of traditional social arrangements, disturbances in the distribution of political power, brash cultural imitativeness as well as the economic diseases of inflation and unbalanced foreign accounts."  

There is no doubt that most of the developing countries have paid and continue to pay a heavy price of hasty industrialisation effected without adequate preliminary studies and without realising that industrialisation makes certain demands for its success.

But under-developed countries know that in the world of power politics industrialised nations have an important role to play. As observed by professor Hanson, these countries are conscious of their nationhood and are anxious to make their mark in the international affairs. For them industrialisation means strength. They have learnt the lesson that an exclusively agricultural country, destined to sell primary products in order to obtain manufactured products is condemned to remain in a subordinate position.

SOCIAL OBJECTIVES :

Public Enterprise in general has a large element of social purpose. Some of these purposes are quite pronounced, such as the employment of certain backward communities on a compulsory basis. A few aspects of social objectives are as follows :

a) Avoidance of concentrations of wealth and means of Production : PE helps to promote the national objectives as laid down in the constitution of India article 39(b) and (c) that the ownership and control of the material resources of community does not result in concentration of wealth to the common detriment.
The extent of PE in the national economy, both through nationalisation and through entrepreneurial activity of the government, coupled with other regulatory measures has largely led to the achievement of the objective. As a part of its policy, PE is expected to develop small and not so established dealers and suppliers.

b) Reduction of disparities in income:

By treating the labour generously and by putting a comparatively low ceiling on the salaries and benefits at the top level, PE has helped in reduction of disparities in income over a large area of employment.

In any sphere of activity, efficiency is the ratio of the results achieved to the means used. It is the ability to produce the desired effect with the minimum of effort, expense or waste. In the first quarter of the present century, proponents of modern management, like Taylor and Fayol, laid special emphasis on engineering and commercial aspects for achieving results in industry. But in the second, and more so, in the third quarter of this century, stress is being laid on the social contribution of business. The efficiency of business is no longer confined to
achieving certain physical and financial norms and adoption of certain management techniques, but other considerations have become extremely relevant and important.

Efficiency is basically an input-output relationship. For various inputs, standards of output to be secured are laid down and compared with actual performance. It is also possible to have output as a fixed factor and input as a variable one. Laying down of standards for output or input is a tough task. The appropriate level of labour, materials and overheads which go into a job or task will depend upon a host of factors which operate in specific situations. The input output relationship may itself change with different processes, procedures and practices. A better management of resources and an improved technology may completely change the ratio. It may be a matter of dispute whether the norms fixed are with reference to the best managerial practices and most efficient management of resources in a given situation.  

In most situation, efficiency is a relative concept. The achievable standard is with reference to

a particular situation with certain specific factors of production. A firm may set its own standards of output for each input and norms of behaviour for various other achievements, but whether the level of standard or norm is right is not easy to ascertain. It becomes necessary to compare one situation with a similar situation in other places or in the same place over a period of time.

CONCEPT OF SOCIAL OBLIGATION:

Social obligation could be defined as intelligent and objective concern for the welfare of the society. Therefore, any organism that operates in society should do so in accordance with objectives defined by it, as a social unit, for society is the ultimate consumer which uses the resources produced by such a unit. Thus, it is obvious that without society there can be no business unit. A business, therefore, should as a necessity, adapt to the overall parameters defined by society, through profit making as a major objective of business can not be denied.

The concept of social obligation becomes important all the more in view of the business viz., shareholders, workers, creditors, debtors, government and so on. This transition of basic thinking of
achieving profit maximization to that of discharging social obligations has been a result of several environmental forces. Strong consumer movements and spread of education have made it obligatory for a business to fulfil its social obligations. While making out a case for meeting of social obligation by business, we do not propose in any way that business should become a charitable organisation. Profit making will continue to remain a strong motivating force for the businessman. At the same time, by establishing and maintaining a good reputation, business will benefit in the long run. A good reputation in the market will bring the business more satisfied customers and more profit automatically. A good public image is a result of business serving public interest with rationality. Expenditure on meeting society's needs is indirectly a solid long term investment. TATA group is a fine example which has been flourishing and at the same time meeting society's expectations. When a business accepts that it has social obligations to be discharged the government regulations and control, imposing various checks and controls on normal business activities, may also get minimised. This will provide business more freedom of action. Society has also entrusted business with national resources for
their proper utilisation and generation of wealth. It is important for business to utilise these resources as per society's expectations. It can also be a beneficial and important part of the society. In this way business will not only ensure its survival but also its future growth.

SOCIAL EFFICIENCY:

If an enterprise produces goods and services at the cost of society, it can not be called efficient. Generation of pollution, neglect of things like labour welfare, import substitution, preservation of natural resources, inadequate attention to R&D and to other national and social priorities and values makes for inefficiency, however productive and profitable it may be. The efficiency, thus, becomes a relationship between inputs and total contribution. Peter Drucker had stated over decades back that in American business if there is one development during the last ten years that stands out above all others, it is the eagerness with which business has embraced social responsibilities.27

But the fact of life is that in private enterprise social responsibilities are not taken sincerely and seriously. It is more a facade and decoration. It is mostly a means or an expedient for increasing the rate of return. In PE, social considerations are not neglected. They are built into the system. Even a broad understanding about the extent and quantum of social obligations that the government had taken so long to lay down social and economic obligations of PEs, as a result of which their performance continued to be judged by a variety of vague objectives and considerations and affords scope for uniformed criticism, which makes for dilution of managerial accountability. Social obligations of PE's should not eclipse their economic mobility which, in itself, is an important social purpose.28

The extent of social obligations is different from industry to industry. Enterprises in the nature of public utility service would have a large public bearing. The importance of an industry in the economic life of the nation is also an important factor which would add to its public responsibilities. Only rarely are social obligations stated by the legislature.

Mostly the government expresses its desire or opinion about the obligation which PEs are expected to take up on their own consistent with their commercial obligations. To sum up, most PEs have social as well as commercial obligations. In fact, the very purpose of establishing PEs is to use them as instruments of social policy.

SOCIAL VALUES AND BUSINESS ETHICS:

If we go by the dictionary meaning of the term 'value' it is a benchmark set for any field of activity such as business, art, culture etc. It is something which is considered to be good and desirable for everyone, though, not what may really be desired such values as influencing decision making in an organisation may be grouped as follows:

i) Individual values, i.e. values cherished by individuals which guide and control their actions.

ii) Group values, i.e. values held by informal and formal groups which guide and control the actions of both individual members of the group, and of the group as a whole.

iii) Organisational values, i.e. values held by an organisation as a whole, which is a combination
of individual, informal and formal groups, but still having identity and values of its own.

iv) Environmental values i.e. values of the components of the society which come in direct contact with the organisation.

v) Social values i.e. values held by the society as a whole.

SOCIAL VALUES: The business concerns are an important constituents of society. Social values have to be reflected in business values, such as, where, what goods are to be produced, by whom in whose interest and for whose benefit. Such factors have been important elements of business values as determined by society from time to time. In a traditional capitalistic society owners of the means of production have the right to use these resources irrespective of their social and human effects. But, in a socialistic society, private ownership of the means of production private enterprise and private profits are discarded and in its place public ownership of the means of production and public control over production and distribution processes are prescribed.

The other side of values is ethics. The word ethics is derived from the Greek work ethos. It mean
character, guiding beliefs, standards and ideas of any group, community or people. Business ethics refers to code of conduct for business. Businessman is not allowed to do certain things, which are not in line with the society's expectation or professional practices. The purpose of business ethics is to guide and persuade managers in following an ethical behaviour while performing in general as well as with special reference to a particular business group or institution. In general the business activities should not harm the society in any way. Specific codes of ethics exist for professionals, viz. doctors, members of ICA etc.²⁹

The initiative for identifying social obligations can be taken by PEs or by the Government. But quantification of social obligations must be the responsibility of the government because these matters go beyond the area of interest of a PE and affect social, economic or other public interests for which

the government is primarily responsible. Secondly, value judgements about the public interest are to be made by the government and not by the PE concerned, which is quite naturally likely to be biased. Thirdly, as the obligation may have to be financed out of public funds, responsibility for deciding it should be with those responsible for these funds. Finally, parliament is closely concerned with all public interests and social considerations and decisions on such matters should therefore be taken by those answerable to parliament. Within the Government, it would be desirable that common techniques and common criteria for evaluation of benefits are used by all departments, as the concerned department is likely to be too closely involved in the process.

Cost-benefit analysis is used for qualification of social obligations. This method involves attaching a money value wherever possible to external costs and benefits which do not accrue to the industry. For this purpose, the externalities arising at different points in time are discounted to base year values by a given interest rate. Attempts should be made not only to qualify the social benefits of projects and services that are not commercially
justifiable but also the social costs of commercially profitable projects and services. It is essential to look at net social benefits in conjunction with the net commercial costs of benefits of the obligations, and social obligations should not be allowed to submerge the strictly commercial arguments.

To compensate for social obligations, it is preferable to give a direct subsidy or grant out of the money noted for a particular department. This could be given either to the concerned PE, or directly to the beneficiaries of the service. It is also possible to reduce the financial obligation of an enterprise in lieu of its social obligations. Cost benefit considerations are a very important factor. No company of any size can willingly incur costs which would jeopardise its competitive position. While companies may well be able to absorb modest costs and undertake some activities on a break-even basis, any substantial expenditure must be justified in terms of the benefits tangible and intangible that are expected to be produced. Since major corporations have especially long planning horizons, they may be able to incur costs and forego profits in the short run for social improvements that are expected to enhance profits or improve the Corporate environment in the
long run. The substantial investments in social improvement have to contribute to earnings and the extent of such earnings will be a major factor in determining the mix of a company's commercial and social activities.  

The majority of business corporations are agreed probably with the means expressed by the study group on business' social responsibility although the costs, however assessed, should not be regarded as the sole determinant of a company's social policy for several reasons. Keith Davis (1965) insists that costs, however computer, are not the sole determinants of a company's social role. In his words, (i) Economic progress is important but there are social responsibilities in achieving it. If the countries of the world dissolve freedom and depreciate social values in a head long desire for material gain, it may be like materialistic Esau who sold his birth right for a mass of poltage and had nothing left but an empty bowl. And if management contributes to this by ignoring its public role, it may, like Esau, lose its birth right of freedom to manage.

ii) The cost of social responsibility may be high though not all social programmes involve expenditure. While policies such as pollution control, investment for quality control and design improvements and pursuing generous employment policies can cost the company vast sums of money; programmes, such as increasing the degree of employee participation in such a way as to cost the company virtually nothing and may even lead to greater productivity, increased efficiency and profits.

iii) With a view to assessing the cost of social responsibility, it is important that all costs, social as well as human, must be taken up simultaneously. But the problem lies in social and human costs which are difficult to qualify and measure. However, the analysis of such cost benefit would guarantee that such type of costs are taken into account. Due to lack of responsibility a company may also incur cost so these opportunity cost must be assessed to reach a particular decision.31

SOCIAL RESPONSIBILITY OF INDUSTRY:

The process of industrialization almost depends on the economic, political and socio-cultural milieu which leave their own imprints on the

industries. The emergence, nature and the course of labor welfare services in industry are rather governed by the size, location and manufacturing process, nature of main power supply and social background of the workers.\textsuperscript{32}

A single factor may be responsible for different services and vice versa. However, the role that industry plays in a planned economy depends on the general social concept of the community. India has decided to stand by the ideals of a welfare state as enshrined in the Directive Principles of State Policy of our constitution. Social goals of industry as assigned include more benefits and facilities to the worker. In new social order, the major role of an undertaking is to produce goods without creating any social imbalances in various factors of production. Every industry is not only given option but entrusted certain responsibilities of when the first and foremost leads towards the welfare of the workers.

The Industry is bound by Statutes to be responsible for Health, safety and welfare of workers. Guaranteed minimum wage, rationalisation without

tears, industrial housing, cash allowance to neutralise the rising cost of living, medical care, provident funds, lay-off and retrenchment compensation are a few of the many responsibilities of industry towards its workers.

Public policy in relation to labour welfare aims at developing certain basic health and welfare norms within the plants, establishing statutory obligations, for the most part on employees, and occasionally on the State and trade unions, to promote services for group or industrial workers with special needs arising out of their working situations; laying down measure for the protection of women and children; creating conditions wherein the employees and unions are encouraged to develop housing services, etc.

HISTORICAL DEVELOPMENT:

With a view to tracing the history of labour welfare movement, it is necessary to study the development since 1787-1870. The first industrial undertaking in India was established in 1854. During the following fifteen years considerable progress had been made in jute and coal, cotton textile, industries and railways and a sizeable work force had been
employed. Indian industry had emerged as a clearly defined economic activity. But on the other hand their industrial progress has also dehumanised human condition of work and wreaked utter exploitation on men, women and children Major Moore in his report on the administration of Bombay Textile Department in 1872 for the first time drew the peoples' attention towards the pitiable condition on industrial employees.

For the welfare of the industry employees at Bombay eight might schools were established by the Brahmosamaj preacher Mr. P.D. Mujamdar.

The other Brahmo Samaj preacher who established a working man mission in 1878 in Calcutta established nine schools for workingmen and the depressed people. With a view to improving the social conditions of the industry employees. Miss Carpenter, a founder of National Independence Association visited India in 1874, The strong pursuasion from such resources led the government of India to take up practical steps for the welfare of the workers. Keeping this in view, a Factory Commission was set up in 1875 and the Factories Act, 1881 was enacted. But
the Act proved ineffective as it did not guarantee the protection for the children and women.

PROGRESS OF VOLUNTARY ACTION:

During three decades following the first Factory Act in 1881, voluntary action in the field of labour welfare also made considerable progress and moved from individual to organised group efforts. The Amalgamated Society of Railway Servants of India and Burma, formed in 1897, and printers Union, Calcutta Postal Union Bombay, organised in 1905 and 1907 respectively, introduced mutual insurance schemes, night schools, educational stipend and funeral allowance for their members. The partition of Bengal and the Swadeshi movement in 1905 provided sufficient stimulus for generating voluntary action and solidarity in the ranks of workers. The workers welfare Association was established in Bombay in 1910 to help workers in a variety of ways. The most important amongst its welfare functions was the payment of compensation for accidents to industrial workers and improving labour housing conditions.

Industrial activity increased manifold during the First World War with a corresponding increase in
the size of industrial workforce. The overall rise in prices compelled workers to ask for wage increases and the 'cost of living' or 'dear food' allowances in Bombay and Ahmadabad to neutralise the price increase.33

The emergence of the Labour Party and the British Trade Union Congress in Britain, the new orientation of the freedom movement under Mahatma Gandhi's leadership, the increase in industrial activity and the size of workforce and the militant mood of organised labour were the most important factors that influenced and gave shape to the labour welfare movement.

The leading companies made the beginning of labour welfare activities during 'Twenties' which yielded significant development. A number of English Companies besides their benefits to British employees extended their considerable facilities and benefits to the Indian employees also.

The Royal Commission on Labour, 1931 recommended convenient and shorter working hours for

women and children, health, insurance, maternity benefits, creaches, elaborate health rules, labour welfare officers, minimum wages etc. A significant development was the legislation to regulate recruitment, transport and repatriation of workers employed in plantation in Assam.\footnote{34}

In the sphere of voluntary action, the Bombay Labour Institute was set up to train welfare personnel to conduct adult literacy campaigns amongst workers, etc. Sir Dorab Tata School of Social Work, now known as Tata Institute of Social Sciences, was established in Bombay in 1936. Thus, the period between the two World Wars saw an increase in the volume of health, welfare administration, establishment of norms of industrial health, welfare safety and wages and collection and compilation of voluminous economic and social statistics necessary for policy formulation. Voluntary action in the field of labour welfare received a setback primarily due to the fact that leaders from the field as assumed positions in the Government.\footnote{35}


The Second World War proved to be a boon to the development of Indian Industry and to the labour welfare movement. The strikes and lockouts were prohibited. The government took initiative and actively promoted welfare activities for industrial employees to induce them to produce more. In 1942, the Central Government appointed Labour Welfare Advisor and a few Labour Welfare Officers in the Department of Labour. There were a number of provisions for the establishment of canteens, creches, rest rooms and ambulance rooms in establishments by amending the Factories Act, 1934. Labour Welfare funds were started in establishments run by various Government Departments. In 1942, a special officer was appointed in the department of Labour to draft a scheme of health insurance for factory workers. Maternity benefits, pithead baths and creches were introduced in the mining industry. Encouraged by the Government and guided by the possibility of higher labour productivity, the educational and recreational facilities, fair price shops, medical care for workers provident funds and some measure of housing became a common feature of working conditions managed by older and known industrialists. The Rege committee resurveyed conditions of labour all over the country.
and submitted its report in 1946. It made detailed recommendations on welfare and health needs of workers. 36

The labour welfare movement acquired a new perspective after Independence. The Indian National Congress had many commitments to industrial workers. The labour Department of the Central Government worked out a five year programme in 1946. This was followed by three Five Year Plans. The Government established minimum wages for workers employed in sweated industries, revised the then existing welfare legislation and made it more comprehensive, started health insurance for factory workers, stepped up industrial housing programmes, introduced a workers education scheme, promoted industrial cooperation etc. All these steps were taken to develop programmes in addition to those that were already in existed in 1947. This survey of labour welfare work reveals that there had been two main streams in the movement, namely, the voluntary efforts to develop programmes with a view to minimising hardship of workers and the agitation for better legislative measures for health and welfare

of workers. 37

Modern business functions on the principles drawn from the Western perspective on the nature of man and society. A business enterprise is designed primarily to help man realise that he wants; what man wants is a matter of basic human nature, his goals and life styles help him realise these goals. Adam Smith in his famous book, The wealth of Nations (1776) spelled out the proposition that it is not from the benevolence of the butcher, the brewer or the baker, that we except our dinner, but from their regard to their own interest (p. 67). This famous quotation exemplifies in the model of the Western man, who is conceived to be a rational individual, always seeking to maximise his gains while minimising his costs. The same approach was extended to business enterprises, which too were designed as instruments to maximise the profits, and minimise the cost of means of making such profits then the overall benefit to society will be maximised.

This purely economically rational approach has been questioned even in the West. There is not enough evidence to confirm that Man is a self seeking

organism interested only in maximising his gains. In fact, quite often, man is found to be capable of spontaneous pro-social compassion for his fellow beings. He is known to undermine his own potential gain in order to promote the well-being of his fellowman.38

In the modern-day world, corporations, as a group, need to utilise their resources with the objective of maximising their profits within the broad framework of benefitting the entire society. The task of management vis-a-vis a business enterprise is to provide security of employment with fair wages and equal opportunity to all members of the organisation. This necessarily is the objective of efficient management, and a cherished goal of social justice. In this connection, reference needs to be made to the fact that business which refers to the total 'enterprise' of the country engaged in manufacturing industry, finance, banking and commerce irrespective of the form and manner of ownership and management (Ghosh & Kapoor, 1984), has a big responsibility towards the society in general (Healed, 1970).

Individual responsibilities lie in the spontaneous ability to respond to a human situation through committed involvement, which is a prerequisite for timely and just action. Respect for man's true being requires the society to function in such a way as to allow scope for the individual to develop to express his spontaneous response to problems faced by the society. The traditional concept of a business enterprise was simply that of an institution for the purpose of earning profit or making money. The concept of the social responsibility of business came to the force in the early 20th century. This traditional way of looking at business was to produce a product or provide a service, and to make profit at any cost, and by any means (Sharplin, 1985). Maximisation of profit was the only guiding factor. There was one and only one, responsibility of business, and that was to use its resources engaged in activities designed to increase its profit (Friedman, 1963). The basic responsibility of business was to produce wealth for its own survival (JP Narayan, 1969).³⁹

A business enterprise has an inherent self interest of minimising the social costs by the impact of its actions. Otherwise, society tends to curb its actions with stringent rules that require payment of the costs in question. By the 1920s the word 'Service' had become the slogan of innumerable business enterprises. Executives were becoming conscious of the reality that the social responsibility was an integral part of the business venture. The correlation of profit with service modified the values of business executives.

SOCIAL RESPONSIBILITY OF BUSINESS:

The 'Social Responsibility of Business' was written by Bowen in 1953, and with this book he initiated the modern debate on the subject of social responsibility, and its application to business. The book described the social and economic benefit that are likely to result from the recognition of broader social goals in business discussion. When a business enterprise behaves as if it has a conscience, it is said to be socially responsible. When people talk about social responsibility of business they are thinking in terms of the problems that arise when a
business enterprise casts its shadow on the social scene, and of ethical principle that ought to govern the relationships between business and society. At any given time, there is likely to be a gap between business performance and social expectations, that may be caused by certain business actions, or the changing social scenario. Business must strive to narrow the legitimacy gap to claim its share of society's physical and human resources, and maximise its discretionary control over its internal decision making and external dealing. Business behaviour in response to market forces has been defined as social obligation.

Business owes its responsibility towards society:

(i) as a result of the impact of its own operations;
(ii) as unit of society in which it operates.

Hence, social responsibility refers to the businessmen's decisions and actions taken for reasons at least partially beyond the firms direct economic or technical interest (David, 1960). According to Andrews (1971), social responsibilities means an intelligent and objective concern for the welfare of society that
restrains individual and corporate behaviour from ultimately destructive activities. A business has social facets, which consist of the human relationships of the organisation's employees, groups and society in general. The relationship between an organisation and the society is basically based upon ethical values (Sharplin, 1985). In fact, social responsibility is a very broad term, encompassing such concerns as world poverty, consumerism, ecology, civil rights, as well as physical and psychological well-being of workers (Luthans and Hodgets, 1972) The substance of social responsibility arises from the institutions' ethical obligation to evaluate the effects of its decisions and action on the whole social system.

BUSINESS ETHICS: The terms 'ethics', morality, social responsibility social responsiveness and social obligations' have a tendency to overlap. Nevertheless, they may all be defined differently. Ethics is a practical scene designed to last logically. The right to wrong of human act (Walton, 1969, Johnson, 1961). The morality is a behaviour which is governed by beliefs or feelings of what is right or wrong,
regardless of self interest or consequences a decision to do, or not to do, specific things under particular condition (Barnard, 1958). But the term ethos, has been defined as more than ethic or morals. In philosophical or social evaluation Ethos, therefore, is conceived as a continuous value, comprising the all embracing field within different types of values (religion, ethical, socio-economic and cultural) are found Walton, 1969.

Social obligation is prospective in nature, whereas the concept of social responsibility is perspective in nature and social responsiveness is considered anticipatory and preventive by nature (Sethi, 1975). Votaw and Sethi 1973 remarked that the term social responsibility had been used in so many different contexts that it had lost all meaning.

BUSINESS/CORPORATE SOCIAL RESPONSIBILITY:

Social responsibility refers to an obligation, a liability social consciousness, corporate legitimacy, charitable contributions, dogoodism, managerial enlightenment and so on (Votaw, 1972, 1973).
In pre- and early industrial era, people worked within the family, and all family members used to work together. However, industrialisation required people to leave their families, migrate to places where new factories were established, thus alienating the people from their social system. The new factories disturbed the ecological balance by tampering with nature. Hence, environmental degradation, as well as social disruption, have often been caused by an industrial enterprise. It is often argued that industrial activity brings more resources to an area, and raises the living standard of the people. Thus, it is a mixed blessing as brings material affluence and, at the same time, disrupts social life, it is a positive sign that enterprises have now become more and more aware of their responsibilities in this vital sphere of industrial activity. Business can help local community and society at large in a variety of ways. It can provide needed assistance to government's programmes of poverty alleviation, rural & urban development, housing, education, health, agriculture, family planning, environmental upgradation, forestry and so on.

Social responsibilities of business include not only purely economic value, but the larger human
values as well.

AREAS OF SOCIAL RESPONSIBILITY :

The social responsibilities by Steiner (1975) has put across the ideas for business. There are following three bases:

i) Business enterprises are created by society and should respond to the demands of the society. Business managers tend to respond to public opinion so as to maintain a proper image of their company in the public mind.

ii) A business organisation can not effectively discharge its responsibilities to shareholders unless it also behaves responsibility towards its employees, customers, and government agencies.

iii) As concerned and responsible citizens, businessman need to participate in the development of a better social structure.

In other words business responsibilities may be grouped as (a) external and (b) internal. Internal responsibilities signify meeting the interests of the stock holders, managers and workers. The shareholders interest lies in the return on their capital, which
means that it is the responsibility of a business enterprises to earn reasonable amount of profit. Social responsibilities to staff—means reasonably good conditions of working, adequate managerial system, and norms so that managers can discharge their duties without experiencing undue stress and dissatisfaction; social responsibility to workers covers wages good quality of work life, welfare etc. The social responsibilities of business towards the consumer and community at large require that it pays proper attention to the price and quality of goods and refrains from hoarding in times of shortage of a product. Business houses hold some social responsibilities towards the Government also. They are as follows:

a) To be a law abiding organisation;
b) To pay its dues honestly;
c) To maintain fair trade practices;
d) Not to indulge in corruption; and
e) Avoid giving support to political parties to make profit by unfair means.

As against these responsibilities, a business house has certain expectations from the Government, which include:
a) Clear and prompt administrative decision;
b) Clear and workable law;
c) Reasonable stability in legislation and administrable and fiscal policies and;
d) Rational tax structure.

Second; the external nature of social responsibilities is the need for taking appropriate steps to prevent environmental pollution and preserve the ecological balance, rehabilitating the population displaced by the operation of the business.

A business is not only influenced by its employees and the government in power but also by the society where the business is established, as well as other business organisations and social groups. Hence, it becomes the responsibility of the business to take their interests into account while formulating policies and taking decisions, and not have such expectations from the business which may affect the venture adversely.

At the plant level, the social responsibilities of an industry would be to look after the requirements of the employees, such as adequate wages, good working conditions, job security, speedy redressal of grievances etc. social responsibilities of
an industry at the community and national level have much wider implications. At these levels, such responsibility not only encompasses those who are directly linked with the business organisation, such as employees, shareholders and customers, but also those indirectly linked with the industry. At the social and national levels social responsibilities of business cover not only those living in the vicinity of the industry, i.e. the local community but also those residing in remote villages in totally different parts of the country.

SOCIAL COST-BENEFITS IN INDIAN CONTEXT:

The long spell of the British rule and the partition of the country weakened the country's economy. Although the growth of the economy had increased after the independence, poverty, unemployment and over population continue to be the stumbling blocs in the path of planned national economic progress. Poverty is a social bane, and a large section of the society is unable to meet even its basic necessities of life. Indian has also been passing through a critical juncture of population explosion. The astronomical increase in the population of the country has changed the complexion of Indian
cities, and many cities in India have come to be known as cities of slums.

India has 15.4 per cent of the total world population, but surprising, little more than 1 per cent of world GNP and 70 per cent of our population is dependent upon agriculture, while its contribution through agriculture to the national income is only 32 per cent. At the time of Independence (1947), around 80 per cent of all industrial activities were confined to cotton, jute, textile and coal. There was only one major iron and steel factory, that was Tata Steel. The Indian Iron and Steel Company, Burnpur, was quite small in this respect. Even the coal industry was under-developed. Although the first coal mine was opened in 1815, most of the mines at the time of independence were open and shallow, and were operated manually and unscientifically. After independence, successive Five Year Plans attempted massive industrialisation by giving the Public Sector a dominant role. Both Private & Public Sectors were called upon to play a strategic role in nation-building, which was conceived as growth with social justice. Although the blue print of industrialisation was imported from the West, Tata Steel was inspired by the Gandhian concept of Trusteeship.
Tata Steel has shown splendid performance in carrying out its social responsibilities at the plant level. In the book entitled "Human Side of Tata Steel", a detailed account of Tata Steel towards social responsibilities at the plant level has been examined. Some of the welfare schemes adopted by Tata Steel in this direction are unique. These have been adopted voluntarily and at a time when they were usually unthinkable in the industrially advanced countries. The Eight hour working system introduced in Tata Steel as early as in 1912, the free Medical Scheme in 1915, Worker's Provident Fund in 1920, are oft-quoted to illustrate the company's pioneering role in the sphere of workers welfare.

Tata Steel's tradition of serving the Society even pre-dates the first steel ingot that rolled out in the steel works in 1912. The genesis of the Tradition can be traced to the genius of its founder, JN. Tata Jamsetji, who lived way ahead of his times and realised the necessity of industry being socially responsible. The Social Audit Committee (1980) on Tata Steel's role in this field, declared in its report that at a time when Max Weber, the great German sociologist was advocating this theory of transforming
a traditional society into a modern one through industrialisation and modern management. Little did he know that in the jungles of Bihar, Jamsetji Tata had already planned the establishment of the first Steel city, not a mere factory. The city would be developed in such a manner that the community living in it would thrive in the most idealistic conditions provided by the steel company.

Tata Steel's approach to its social responsibilities can be best encapsulated in JRD Tata's words that to create good working conditions, to pay the best wages to its employees and provide decent housing to its workers are not enough for the industry: the aim of an industry should be to discharge its overall social responsibilities to the community and the society at large where the industry is located.

SOCIAL COST BENEFIT IN SAIL:

After having extensively reviewed the varied aspects and facet, of the concepts of social cost benefit, it has been observed by the Researcher that the definition provided by UNIDO and OECD seems to be more appropriate to measure the social cost benefit in SAIL. They advocate that social cost benefit in an
organisation should be measured in terms of social cost benefit to employees, social benefits and cost to community and social benefits and costs to general public. In the succeeding chapter, an analytical study as regards social cost benefit in SAIL is presented in terms of the above mentioned parameters.