CHAPTER II

PERFORMANCE EVALUATION CRITERIA

Public enterprises constitute an important segment of the economy in India. They have been assigned a place of prime importance in the planned economic development of the country. It is therefore vital to ensure that public enterprises produce the desired results continuously to help accelerate the process of bringing about the socio-economic transformation of the society. In order to judge whether these enterprises have performed well or not, there is need to develop a suitable framework for performance evaluation and relate it to the performance of public enterprises. The task of developing a performance evaluation criteria for public sector enterprise is much more difficult than in the case of the private sector. The test of profitability provides a ready index for private enterprises. But in the public sector, other conditions such as the fulfillment of non-financial, social and national objectives prescribed by the Government have to be taken into account by the management in addition to the criteria of profitability. It is, therefore, necessary to work out a proper set of criteria for evaluating the performance of the public sector.

There is no unanimity about the criteria for the evaluation of performance of public enterprises. A number of
researchers and agencies have suggested wide ranging measures to evaluate the performance. However, there is a need to have an integrated approach which may synthesise the different views and help in evaluating the performance of public enterprises comprehensively. This chapter is a step in this direction.

Administrative Reforms Commission\(^1\) in its report on public sector enterprises observed that the task of measuring the performance of the management in the public sector is much more difficult than in the case of the private sector. The criteria for evaluating the performance of any enterprise depends on its objectives and obligations. The main objective of a private concern is the maximization of profit. In case of public enterprises, the objectives are multiple and cover different aspects of its operations. Thus, the criteria for the evaluation of the performance of public sector enterprises have to be related to a complex set of objectives. The commission suggested to evaluate the public enterprises in terms of the success achieved by management in the order indicated below:

"(A) Furthering of the non-commercial objectives of the enterprise as specified by the Government;  
(B) Furthering of the commercial objectives of the  

enterprise and maximization of profits subject to and within the constraints of Government directives; (C) Improvement in the quality of products and services; and (D) Economy and efficiency in the use of resources (men, money, and materials)."²

Bakul H. Dholkia³ argues that to analyse the performance of public enterprise, we should use the criterion of growth of total factor productivity rather than net profitability. He is of the opinion that the net profitability criteria is static in its approach and regards the excess of the price charged by the enterprise to the consumer over the average cost of production actually borne by the enterprise to be the index of efficiency. Whereas the total factor productivity criteria is basically dynamic in its approach and regards the excess of the actual growth of output over the observed growth of total factor input as an index of changing efficiency with which the enterprise utilises the scarce productive resources during the course of its expansion. He is of the opinion that the performance of public enterprises in the manufacturing sector has been quite remarkable,

2. ibid., pp. 226-227.

especially compared to that of comparable private enterprise, if we use the criterion of growth of total factor productivity rather than profitability. "Thus, over the 15-year period, as a whole, the total factor productivity has increased by about 89 percent in public enterprise and by only 3 percent in the private enterprise." The author further points out that public enterprises in the manufacturing sector have been absorbing a fair amount of scarce national resources and utilising these resources with utmost efficiency. Therefore, the criticism of the managements of public enterprises on the ground of low profitability is misleading.

Glenn P. Jenkins in his paper says that although performance evaluation of public enterprises is difficult due to the fact that the governments create these enterprises with a number of short-term and long-term objectives and some of them are even conflicting. Yet there is need to find ways of evaluation. The author classifies the objectives of public enterprises into three categories: financial, economic and social. He emphasises the need to generate certain basic information and made available on a systematic basis. There should be an agreement between the individual undertakings.

and the central agencies that the performance evaluation exercise is going to be a part of the normal business activity. A joint effort is required to evaluate both the management practices of the enterprise as well as to measure the impact of the enterprise on the social objectives of the government.

Manas\(^6\) observes that public enterprises have been given certain socio-economic objectives to achieve. These objectives certainly affect the profits of many undertakings. Thus, public enterprises performance should not be judged on profit alone. He gives three tier evaluation system. The first tier includes items which can be expressed in monetary terms such as "value of total output; investment from internally generated resources; investment in research and development activities; welfare of employees in terms of LIC coverage, medical benefits, housing; ecological-pollution control; national-exports performance, import substitution; contribution to exchequer-taxes paid, excise duties paid etc."\(^7\) In the second tier, items which cannot be expressed in monetary terms but which can be measured in physical units have been included. The items are; "capacity utilisation;

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7. ibid.
distribution network; market share; total employment generated; employment and promotions for Scheduled Caste (SC)/Scheduled Tribe (ST) candidates; safety records: number of accidents, mandays lost due to accidents, etc. "The third tier comprises of usual analysis of the financial statement in terms of balance sheet, profit and loss account, financial ratios, etc".  

P.N. Singh\textsuperscript{10} highlights the need to establish different norms for performance evaluation of public sector undertakings. Public enterprises have been assigned socio-economic objectives as the overriding goals, with commercial viability and profitability being assigned subsidiary roles. The multiple socio-economic objectives given to the public sector ultimately affect the profitability of the public sector in financial terms. In view of this, managements of public sector undertakings should be judged not only on what profit they generate but also on what they do for the society. In order to measure the latter, there is an urgent need to develop social indicators which should form the basis for overall evaluation of the performance of public sector undertakings.

\textsuperscript{8} ibid.  
\textsuperscript{9} ibid.  
\textsuperscript{10} P.N. Singh (February 22, 1980), "Evaluating Sector Work", The Financial Express, New Delhi.
Minocha\textsuperscript{11} has analysed the performance of central level public enterprises on certain indicators. He is of the opinion that the following indicators may be considered to evaluate the performance of public enterprise: labour productivity, labour cost, capacity utilisation, absenteeism, frequency of accidents, mandays lost, the rate of inventory, profit/loss and rate of return on investment.

Pankaj Kumar Mandal\textsuperscript{12} has reviewed the document entitled "Performance Aims and Financial Targets of Central Public Enterprises," published by Bureau of Public Enterprises. This document was published in early eighties after an important exercise by the Bureau towards evolving some acceptable performance criteria and targets. This was done through a series of workshops in collaboration with the Indian Institutes of Management, Ahmedabad and Calcutta, in which over 50 chief executives of public enterprises, a dozen permanent secretaries and administrative ministers and selected academicians participated. "The workshop recommended though tentatively the following rates of return attainable by 1983-84: Steel-10 to 12 percent; Coal-6 percent; Fertilizers - 12 to 16 percent; Chemicals-13 to 25 percent; cement -14


\textsuperscript{12} Pankaj Kumar Mandal (February 15, 1983), "Performance Norms for State Units", \textit{The Financial Express}, New Delhi.
percent; Zinc and copper - 16 percent; petroleum-50 percent, shipping transportation-12 to 16 percent; shipyards-10 to 12 percent; Air corporations - 20 percent; State Trading Corporation 50 percent; engineering and manufacturing - 16 percent; construction companies 16 percent and aluminum-14 percent. Besides financial targets in terms of required rate of return (RRR), the document also contained targets on capacity utilisation; production; sales; exports; profits; R&D and training of personnel".13 According to consensus reached at the workshops, these models were tentative in nature and the final criteria were to be fixed by the individual enterprise in consultation with its administrative ministry.

Arjun Sengupta Committee14 for the purpose of performance evaluation classified public enterprises into three categories namely (a) core sector enterprises (b) financially viable enterprises in the non-core sector and (c) loss making units. The committee, while recognizing that public enterprises pursue multiple objectives, feels that there are certain common objectives which these enterprises are to achieve and should become the basis for general performance. "Public enterprises pursue a number of

13. ibid.
objectives simultaneously and a single measure of performance is difficult to specify. However, there are certain objectives which are common and these should form the basis for general performance criteria." 15 "The Committee recommended the following four criteria: for the performance evaluation system of public enterprises: 1. Financial performance 2. Productivity and cost reduction. 3. Technical dynamism. 4. Effectiveness of project implementation. The financial performance can be evaluated with the help of (i) Gross margin on assets (for all enterprises) (ii) Net profit on net worth (for core sector and profit making enterprises) (iii) Gross profit on sales (for service enterprises). 16 "The performance on the basis of productivity and cost reduction can be evaluated by examining the direction of change in the indicators like capacity utilisation, raw materials costs (at constant prices) per unit of output, value added per rupee of wages, etc." 17 The third group of indicators relate to technology development namely product or process innovations introduced; the quality of R&D; technology adaptation; quality control; reduction in cost of production as a percentage of its total cost, efficiency level of the

15. ibid., p.28.
16. ibid., p.29.
17. ibid.
product; export competitiveness; sale of know-how etc. In order to assess the performance on the basis of project implementation the following indicators can be used namely "(a) percentage utilisation of plan funds (b) weighted average slippage in ongoing projects, the weights for average being defined by the cost of each project and (c) percentage cost revision for the approved investment programme relative to the previous year."18

A. Nag19 is in complete agreement with the criterion suggested by the Arjun Sengupta committee for performance evaluation of public enterprise. He says that performance evaluation should be commensurate with goals or objectives. Goal setting may be done through proper deliberations between the state enterprises and the administrative ministries concerned. If more than one objective is to be fulfilled, relative prioritisation of goals should also be specified. These should be contained in a 'contract' or a 'Memorandum of Understanding'. The performance of state enterprise should be judged with reference to the contract.

In a report20 of the seminar on public enterprise

18. ibid.
management for Europe, Middle East and North Africa (EMENA) region, jointly organised by the International Centre for Public Enterprise in Developing Countries and Economic Development Institute of the World Bank in Yugoslavia tried to develop an appropriate criteria for evaluating the performance of public enterprise. It gave importance to the public enterprise goals in order to evaluate the performance. To evaluate the commercial goals, profitability test is the obvious choice. Apart from commercial goals, there is need to evaluate the performance in terms of economic goals and social goals. For economic goals, there is need to know whether the public enterprise is functioning economical and effective or not. Special attention should be drawn to the efficiency of public enterprises, i.e. the relationship between goals and services produced and resources used to produce them. To measure the effectiveness, such indicators like capacity utilization, inventory, ratios, consumption coefficients, labour standards, etc. should be used. The social goals can be evaluated on the basis of development of under developed regions, the creation of new employment possibilities, the provision of infrastructure for the development of other industries, improved income distribution among citizens, import substitution and export promotion.

The report emphasises that though the achievement of social goals is very important, it is desirable for these
goals to be identified in advance and incorporated into the corporate strategy and plans of the public enterprises. The social objectives should not become an ex-post rationalisation of results, but should be an ex ante declaration of intent.

Praxy Fernandes\textsuperscript{21} has pointed out that unless there is an agreement on what constitutes good performance, there can be little hope of improving the performance of public enterprises. He opines that evaluation criteria is to be linked with the objectives. "We begin by advancing a straightforward proposition: evaluation criteria are predetermined by corporate objectives."\textsuperscript{22} As public enterprises are asked to pursue multiple objectives, there is need to have a comprehensive evaluation system. It must include financial and commercial performance; production and productivity performance; marketing and service performance; developmental and social performance and growth performance. Further in order to analyse the financial performance, it suggests that pre-tax returns on total capital employed along with some intermediate financial ratios such as gross profits/sales; sales/capital employed; sales/fixed assets; sales/current

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\item 22. \textit{ibid.}, p.176.
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The production and productivity performance can be measured by using various indicators namely level of production; capacity utilisation, consumption co-efficients and work hours required to do a particular job. To evaluate the market performance, the author suggests market share; prices and quality of goods and services can be used. In order to evaluate the social performance, three approaches have been given viz. social cost-benefit analysis; the OMEGA (Orientation, Macro National Objectives, General to Specific, Action and Appraisal) Approach\(^{23}\) and the SIGMA (Satisfy, Interest, Groups, Maximise, Appreciation) Approach.\(^{24}\) Lastly, growth performance can be measured both quantitatively and qualitatively. "Viewed quantitatively the growth of the enterprise is revealed by the expansion or contraction of: goods and services produced; sales; profits; employment; exports; reserves and net worth. Qualitatively one would look at; utilisation of capacity; input-output ratios; capital output ratio; cost of production; diversification of product mix; improvement in quality of products; diversification of markets; technological innovation; system improvement; industrial

\(^{23}\) ibid., p. 187.

\(^{24}\) ibid., p. 188.
peace, management development and public image."\(^{25}\)

Victor Powell\(^{26}\) underlines the need to establish the operational objectives for public enterprises. He identifies eight "Key Result Areas" namely profit requirements; financial resource utilisation, physical resource utilisation; market share; innovation; productivity and quality; human resources and social responsibility. These should become the basis of and agreement between the corporation and the government. Further, he emphasizes that "the enterprise performance can be classified into six groups i.e. (a) General performance indices (b) Management performance (c) Financial performance (d) Investment performance (e) Costs breakdown (input coefficients) (f) Physical performance (i.e. resource use)."\(^{27}\) In addition to this, the author suggests number of ratios in each group to measure the performance of public enterprise.\(^{28}\)

Abdul Hafeez Shaikh\(^{29}\) has reviewed the development

\(^{25}\) ibid., p. 190.


\(^{27}\) ibid., p. 37.

\(^{28}\) ibid., pp. 38-39.

of signalling system, a new system of performance evaluation for industrial public enterprises in Pakistan. He has tried to determine whether the system is providing socially desirable signals to the management of public firms; measure the impact of the introduction of the system upon observed performance and to draw lessons from its design and implementation. The author is of the view that the implementation of performance evaluation system is possible only by a commitment from the highest levels of government. Further, it is suggested from the Pakistan experiences that there should be co-ordination between the designers, implementors and policy makers so that consensus can be generated on key aspects of the system.

R.K. Mishra\(^{30}\) in his paper is of the view that the performance evaluation of a public enterprise can be satisfactory if its objectives are determined clearly and communicated to the management of the enterprise as a basic document. The government should lay down the broad socio-economic and financial objectives of public enterprises in general and detailed socio-economic and financial objectives for each enterprise in particular. The author suggests that at the macro level, the performance evaluation criteria

should be manifold viz. national, economic, financial and social. For micro-evaluation of performance, the criteria should differ from enterprise to enterprise and within an enterprise from time to time. For this, it would be appropriate to divide the public enterprise into certain categories and then performance criteria may be indicated accordingly. The various categories mentioned are: (i) Infrastructure, Development, Public Utilities and Transportation. (ii) Manufacturing, Mining, Agro-Processing and Construction. (iii) Trading, Export/Import, Domestic Trade and Distribution, Insurance and Banking.

Suresh Kumar in his paper examines the relevance of the concept of memorandum of understanding for the Indian Public Sector Enterprises. He is of the view that the problem of Public Enterprises can be best described by "NOT ME" syndrome. The public enterprises blame the government for too much interference and too many government institutions who do reviewing and monitoring. These agencies have different and sometimes conflicting expectations and their priorities to the various items also vary. The "MOU" is supposed to be a freely negotiated performance agreement between the government acting as the owner of the company and the Public Sector

Enterprises (PSE) in which both parties clearly specify their intentions, commitments and responsibilities. Public Sector Enterprises know what they are expected to do and they are judged only on the basis of pre-agreed set of criteria which are included in their respective "MOUs".

Prahlad Kumar Basu\textsuperscript{32} is of the view that the difficult task in performance evaluation for performance improvement is to clarify the objectives of public enterprise. He further says that this responsibility is not only of the Government as is often erroneously assumed, but equally that of the public enterprise. As public enterprises are expected to pursue both profit as well as non-profit objectives, their performance will suffer unless clear-cut and attainable targets derived from the objectives are set. The problem of multiplicity of objectives can be reconciled by institutionalising a criteria of public enterprise efficiency which public enterprise and government may discuss and agree upon. The efficiency criteria could be worked out on the basis of the perception of public enterprises, what their performance indicators are, "how and what" they are evaluated upon. The author suggests that apart from profit, other indicators can be production capacity utilisation,

productivity, product mix, technology upgradation/modernisation, diversification, reduction of production and distribution-cum-sales cost, market share, management development efforts, R&D, etc. The establishment of an appropriate backward linkage of "performance" to "policy" would not only improve public enterprise performance but also make monitoring of performance by Government as the owners and by public enterprises as the managers, more meaningful.

Prajapati Trivedi\textsuperscript{33} in his paper points out that it is for the first time in the history of public sector enterprises that the true spirit of Industrial Policy Resolution of 1956 is implemented through the current MOU system. Unfortunately, the tragedy is that the self-appointed experts on public enterprises have missed the central point of this silent revolution. The author is of the opinion that most of the commentators find it difficult to accept the distinction between different types of public sector losses. There are "explicit" versus "implicit" losses. The former are those that show up as such in the financial statement of an enterprise. The "implicit" losses, on the other hand, represent the difference between the maximum possible profits and the existing level of profits. The key to effective

performance evaluation of public enterprise lies in making a distinction between various kinds of losses. The system of MOU makes this distinction.

Rajeswari Kurup\(^{34}\) has pointed out that the concept of memorandum of understanding has not been accepted whole heartedly by the public sector enterprises. He is of the opinion that the tendency to view MOUs as a magic wand a single swish of which will clear away the numerous problems that have played the PSEs for years be avoided. The author is critical of the way the system of MOU is structured in the country. While ministerial decisions are entangled in miles of red tape, PSEs are starved of freedom. Under these circumstances, it is a matter of conjectures as to whether the system of MOU will ever take-off in India.

V.V.Ramandham\(^{35}\) says that evaluation has been realised as an imperative need for no other reason than the poor financial returns of public enterprises. According to him, evaluation should be conducted at four levels: "A- evaluation of the performance of the managers; B - evaluation of the performance of the enterprise; C -

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34. Rajeswari Kurup (January 3, 1991), "MOUs- No Panacea for All Ills", in ibid., p.12.
evaluation of the outcomes of the enterprise operations for the society; and D-evaluation of the comparative advantage possessed by the enterprise." Further, he is of the opinion that the most important condition for the success of evaluation of public enterprise is that the government ought to feel obliged to take an over-defensive role in their favour.

The Bureau of Public Enterprises in its Annual Survey of Central Level Public Enterprises evaluates their performance based on the following indicators; (1) percentage of gross margin to capital employed (2) percentage of gross profit to capital employed (3) percentage of net profit to capital employed (4) dividend declared (5) profits retained (6) value added (7) export earnings and (8) capacity-utilisation.

M.K.Kolay in his paper examines the traditional concept of return on investments (ROI) and extends its scope to reflect organisational performance.

36. ibid., p. 225.
38. ibid.
more appropriately. Besides profit, it is conceptualized that the returns should include the contributions towards the social gains in the areas of concern of the consumers, the national economy and the society at large. The investments, besides the plant assets base, should include the human resource of the organisation and also the suppliers, the customers and the public image asset bases of the organisation. The methodology to implement such a concept in practice has been suggested. The author is of the opinion that such an extended measure in terms of the overall achievement level of corporate objectives in relation to the total asset bases would reflect the total performance of the organisation. The author is hopeful that the extended concept of ROI would facilitate development of different asset bases so also the inter-firm comparison.

From the above analysis it is clear that selection of relevant performance evaluation criteria is a complex task. Though there is an agreement that the criteria should be linked with the objectives of the public enterprises, however the difficulty lies in the operationalization of these objectives. As public enterprises are asked to pursue social objectives along with commercial objectives, the evaluation criteria has to be a mixture of indicators measuring these diverse aspects. Thus, an ideal performance evaluation system must include the following aspects:-
(1) Financial performance;
(2) Economic performance; and
(3) Social performance.

1. Financial Performance:

The criteria for financial performance is important as public enterprises are expected to play an important role in the mobilisation of resources and they can do so only if they are financially viable. It is necessary for the public enterprises to have a positive financial result i.e to have a profit. Profit represents the difference between revenues and costs. Various ratios may be used for assessing the profitability of public enterprises such as return on capital employed; return on assets employed; profit as a percentage of sales and costs; etc. Along with this, in assessing the profitability of public enterprises, one has to have in mind other effects which a public enterprise has on the budget. Namely, these are important transfer payments between public enterprise and budget, such as payments of taxes, import duties, and the like. These transfer payments must be taken into account. Another important financial area is the analysis of the liquidity position of the public enterprise. The financial position of an enterprise does not depend entirely on the profitability. It is determined by its financial structure i.e by the debt-equity ratio and also by the structure of the debt (whether such debt is a long term
or short-term one). Therefore a very important criterion for the evaluation of financial performance is the liquidity. If public enterprise has an adequate financial structure and operates with profits, it will maintain its liquidity and will therefore be self reliant. At the same time, it will enable other enterprises to maintain their financial liquidity, as it will be able to meet its obligations.

2. Economic Performance:

The second aspect in the evaluation system of public enterprise is the economic performance. The starting point of this exercise is the assessment of performance based on the level of production achieved. These can be compared to targets and to the previous years production. The actual figure, by itself, is not necessarily a measure of productive efficiency, but it does reveal the accuracy of targeting and the improvement or otherwise over the past years' performance. Further, the output are often inputs for other activities in the economy and shortfalls cause dislocation and even may compel the governments to use scarce foreign exchange for importing the gap. Along with this, much attention should be paid to productive efficiency of public enterprise i.e efficient utilisation of all the factors of production. Capacity utilisation is the principal measure of the effective use of equipment and technology. Consumption co-efficients indicate the productive
use of raw materials and energy. Human effort is measurable in terms of various labour productivity ratios such as hours worked related to output; production per employee over the years; absenteeism; sales turnover per employee etc. In other words, various input-output ratios should be developed depending upon the character of the public enterprise.

3. Social Performance:

The third aspect in the evaluation process is the social performance. Though, financial profitability and efficiency of public enterprises represents an important criterion for evaluating its performance, public enterprises performance can not be evaluated without looking into its social performance. The social performance is most difficult to quantify but it is of vital importance for the country.

Public enterprises are asked to pursue objectives which are social in nature. Common examples are that the government wants the public enterprise to assist in increasing the income of the poor in the country, or it may want to provide more employment opportunities to recent university graduates, or it may wish to develop underdeveloped regions, or it may like to make provision of infrastructure for the development of other industries. In the process of achieving these objectives, public enterprises are forced to spend huge expenditure
resulting in financial loss to the enterprise. However, the losses incurred by the enterprise are gains for the society at large. There is need to quantify the benefits generated by the enterprise. Then we can compare the return in the form of social benefits of the enterprise to the social opportunity cost of public funds. If the enterprise generates a social return greater than this opportunity cost then it is both efficient in terms of the use of resources, and cost effective in its distributional activities. Alternatively, if the social rate of return of a particular public enterprise is less than the social opportunity cost of capital it may or may not be financially and economically attractive, but we will know that it is not a cost efficient instrument to bring about the desired social objectives. Further, it is important to mention here that although the achievement of social goals is very important but these goals should be identified in advance and incorporated into the corporate strategy and plan of the public enterprise so that discharging of social objectives should not used as an alibi for poor performance either in financial or efficiency terms by public enterprises.

The present study has been initiated with the twin objectives of (a) to evaluate the performance of state level public enterprises in Haryana in general and (b) to evaluate the performance of Haryana Agro-Industries Corporation in specific. The performance of the public sector has to be
linked with its objectives. The major objectives of public sector in Haryana include:-

(a) Resource mobilisation for development purposes;
(b) Balanced regional development;
(c) Provision of basic goods and services on subsidised rates;
(d) The surplus generation by an adequate return on investment;
(e) Social justice through income redistribution; and
(f) Employment generation.

As a matter of fact, the performance of public sector in Haryana has to be evaluated in the light of the above mentioned objectives. However, due to data constraint, this study confines to only four objectives namely; (a) Resource mobilisation for development purposes; (b) Provision of basic goods and services on subsidised rates; (c) The surplus generation by an adequate return on investment; and (d) Employment generation.

(a) Resource Mobilisation for Development Purposes

In developing countries like India, capital is very scarce and it is one of the important objective of public sector to mobilise resources for investment. The growth of investment in public sector over time indicates the extent of resources mobilised by it for development purposes. An effort has been made to see how much has been done in this
direction by the state level public enterprise in Haryana and its performance has been evaluated on this basis.

(b) Provision of Basic Goods and Services on Subsidised Rates:

One of the important rationale behind the creation of public sector is provision of basic goods and services on subsidised rates. This measure also helps in controlling the inflationary tendencies in the country. The analysis of growth of turnover could act as a good indicator to show the better performance or vice-versa on this front by the public sector in Haryana.

(c) The Surplus Generation by an Adequate Return on Investment:

The public sector is expected to generate surpluses which is possible if it is run on commercial lines. In order to evaluate the undertaking on this front, it is important to see whether, the organisation is utilising its capital efficiently or not. The following indicators may be used for the purpose: (a) Profit/loss position; (b) Accumulated losses; (c) Accumulated losses to paid up capital; and (d) Rate of Return. Profits earned and losses incurred during a financial year reflects the financial working of the enterprise. Further, the analysis of the ratio of accumulated losses to paid up capital reveals whether the undertaking has
been able to keep the net worth intact or not. The rate of return is a ratio which can be calculated by dividing net profits with the total capital employed indicating the extent of efficient utilisation of the capital. It is important to point out here that the rate of return should be set differently for different sectors, "The SLPEs in commercial category could normally earn a rate of return of at least 12 percent per annum as do their counterparts in the Private Sector."40 "The norm for the optional rate of return in the case of development and promotional enterprises has been suggested in IPE studies as 9 percent per annum."41 The welfare enterprises are expected to earn a profit to provide efficient service to the weaker sections of the population.

"Assuming that the funding to these enterprises is extended on the basis of 1:1 debt-equity ratio, the profit before tax could be fixed at 5 percent as they need not declare dividend on equity and would be required to pay to 10 percent interest on the concessional loans".42

(d) Growth of Employment:

India is a labour surplus economy and one of the

41. ibid.
42. ibid.
important national goal is employment generation. It is the responsibility of the public sector to generate more and more employment opportunities and act as a model employer. In this context, an attempt would be made to analyse the performance of public sector in Haryana in terms of growth of employment generation.

**Performance Evaluation Criteria for Haryana-Agro Industries Corporation**

The evaluation of the performance of Haryana Agro-Industries has been done on the basis of the following criteria:-

A. **The Financial Performance**

Financial performance is one of the important as the public enterprises are expected to mobilise resources and that can be done only if they are financially viable and getting an adequate return on investment. However, the financial stability and adequate return on investment depends upon number of compulsions. Firstly, the Corporation must have an adequate financial structure as the financial position of an enterprise is determined by it. A financial structure of a company comprise of equity capital and loan/capital. Loan capital is advantageous in case the rate of earnings are higher than the rate of interest payable on the loan capital. Equity capital represents risk capital on
which divided is declared at the discretion of the management. The capital structure decision has great significance for an enterprise. In light of this, the capital structure of Haryana Agro-Industries has been analysed. The ratios namely debt-equity ratio and interest coverage ratio have also been calculated.

1. **Debt-Equity Ratio:**

Debt-Equity Ratio indicates how much of the company assets are financed by debt and equity. This ratio influences the profitability of the enterprise considerably. If the proportion of debt is more than equity, and if an enterprise make large amount of profit the equity gets a higher return as only a fixed rate of interest is to be paid on loans. And if the profit is low or if there is loss, the enterprise would either lose or lose heavily because of interest obligation. This ratio is calculated as total debt divided by share holders equity.

\[
\text{Debt-Equity Ratio} = \frac{\text{Total Debt}}{\text{Shareholders Equity}}
\]

For the purpose of this ratio "equity" means paid up capital plus share application money/deposits received. "Debt" means loan capital for the purpose of debt-equity ratio. "Analysts differ on whether short-term debt should be
included in the capital structure ratios. One group reasons that accounts payable and similar short items allow a temporary use of assets (notably inventories) but are not really a form of borrowing to finance the firm's resources. In other words, current liabilities are not a permanent part of the capital employed by the firm. For our purposes, current liabilities are included in the debt-equity and debt-assets ratios. Our reasoning is that careful management of the short-term debt accounts allows the firm to take advantage of inexpensive (and frequently free) funds that it would otherwise have to borrow at higher rates. Also, short-term debt represent obligations of the firm. If capital structure ratios measure a degree of financial risk by showing how much the firm owes, they should reflect all debt owned by the firm."43

"A ratio of 1:1 is considered to be satisfactory though there can not be rule of thumb or standard norm for all types of business."44 A high ratio indicates that large amount of funds are made available by the creditors as against the shareholders and resulting in large claims against the assets of the enterprise. A low ratio reveals a small claim of creditors.

2. **Interest Coverage Ratio:**

The interest coverage ratio is used to test the enterprise's debt servicing capacity. It reveals how many times the interest charges are covered by funds that are ordinarily available to pay the interest charges. It is calculated by the sum of net profit before interest and taxes divided by interest charges;

\[
\text{Interest Coverage Ratio} = \frac{\text{Net Profit before Interest & Taxes}}{\text{Interest Charges}}
\]

A high ratio is desirable, but too high ratio indicates that the enterprise is very conservative in using debt and it is not using credit to the best advantage of shareholders. A low ratio indicates excessive use of debt or inefficient operations. "Financial experts prescribe 3:1 as ideal interest coverage ratio."\(^{45}\)

Secondly, the Corporation must have an adequate size of working capital. Although, it is very difficult to measure the adequacy of working capital, in practice, it is judged in terms of its relation with the enterprise's current debt. In order to establish this relationship, both current ratio and quick ratio have been calculated in case of Haryana

3. **Current Ratio:**

It is a very popular financial ratio employed to measure the ability of an enterprise to meet its current obligations. The current ratio is calculated by dividing current assets by current liabilities:

\[
\text{Current Ratio} = \frac{\text{Current Assets}}{\text{Current Liabilities}}
\]

The current ratio is a measure of the organisation's short-term solvency. It indicates the availability of current assets in rupees for one rupee current liability. The current ratio can be classified into negative and positive current ratio. In the first category, the current liabilities are more than the current assets. This is not desirable as an organisation with a negative ratio would not be able to meet its current obligations from out of its current assets. The positive current ratio means the current assets are more than

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46. Current assets include cash and those assets which can be converted into cash within a year, such as marketable securities, debtors and stock (inventories). Prepaid expenses should also be included in current assets as they represent costs that will have to be made by the enterprise in the near future.

47. Current liabilities include creditors, bills payable, accrued expenses, bank overdraft, income tax liability and long term debt maturing in the current year. All obligations maturing within a year are included in current liabilities.
the current liabilities. Even though a positive current ratio of more than 2:1 is considered a favourable ratio, whether it is a favourable ratio depends upon how liquid the current assets are. The more quickly the current assets are reliable the more favourable such a ratio can be considered. The very fact that the current ratio is favourable in terms of figures may not be so in practice sometime, even a positive ratio of less than two may be more than sufficient to meet the current obligations if the composition of current assets is such that they mostly consist of cash or near cash. Thus, the current ratio should be interpreted with great caution by keeping in mind the nature of current assets.

4. **Quick Ratio**:-

The quick, or acid-test ratio is a more refined measure of the enterprise liquidity than current ratio. It is calculated by dividing the total of quick assets\(^{48}\) by current liabilities (excluding provisions).

\[
\text{Quick Ratio} = \frac{\text{Quick or Liquid Assets}}{\text{Current Liabilities}}
\]

This ratio places more emphasis on immediate conversion of assets into cash than does the current ratio. The range of

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48. Quick assets include cash and book debt (debtors and bills receivables) only. Inventories and pre-paid expenses are excluded as these can not be converted into cash immediately.
ratios here are divided into three categories—negative, positive and favourable. Negative ratio means that current liabilities are more than quick assets, positive ratio indicates that there are more quick assets than current liabilities. However, if the ratio is 1:1, it is considered favourable as it reveals that there is every rupee of quick assets for every rupee of current liability. "For this purpose, a quick or acid test ratio is employed and generally a ratio of 1:1 is considered to represent a satisfactory current financial position of an enterprise"49 "As a guideline, a 1:1 quick ratio has traditionally been deemed adequate for most firms. A high ratio may have several meanings. It could indicate that the firm has excessive cash or receivables, both signs of lax management. It could indicate that the firm is too cautiously ensuring sufficient liquidity. A low ratio is usually an indication of possible difficulties in prompt payments of future bills."50

5. Profit and Loss Position:

The financial working of an enterprise is reflected by the profits earned or losses incurred during a financial year. The undertaking should generate profits i.e. revenue


receipts of the organisation should exceed expenditure. An attempt has been made to analyse the financial working of Haryana Agro-Industries Corporation on the basis of profits generated or losses incurred.

In addition, an effort has been made to examine the profit/losses generated over the years in the form of accumulated profit/losses. The relationship between accumulated losses and net worth and fixed assets has also been examined. In addition to this profitability ratios such as gross profit margin; return on assets and return on capital employed has also been calculated.

6. **Gross Profit Margin:**

An enterprise should be able to produce adequate profit on each rupee of sales. If sales do not generate sufficient profits, it would be very difficult for the organisation to cover operating expenses and interest charges and, as a result, will fail to earn any profits for the owners. The gross profit margin ratio is calculated to measure the operating efficiency of the company. "This ratio shows the profits relative to sales after the direct production costs are deducted. It may be used as an indicator of the efficiency of the production operation and the relation between production costs and selling price."\(^{51}\) It is calculated by dividing the

\(^{51}\) *ibid.*, p.134.
gross profit by sales:

\[
\text{Gross Profit Margin} = \frac{\text{Sales} - \text{Cost of Goods Sold}}{\text{Sales}}
\]

or

\[
\text{Gross Profit Margin} = \frac{\text{Gross Profit}}{\text{Sales}} \times 100
\]

A high gross margin relative to the industry average implies that the enterprise is able to produce at relatively lower cost. A low gross profit margin ratio reflects a higher cost of goods sold due to the enterprise inability to purchase at favourable terms, inefficient utilisation of plant and machinery or over investment in plant and machinery resulting in higher cost of production. The ratio will also be low due to fall in prices in the market, or market reduction in selling price by the enterprise in an attempt to obtain large sales volume, the cost of goods sold remaining unchanged.

7. **Return on Assets:**

This ratio measures the profitability of all financial resources in the company's assets. It is calculated by dividing net profit after taxes plus interest by total assets.

\[
\text{Return on Assets} = \frac{\text{Net Profit After Taxes} + \text{Interest}}{\text{Total Assets}}
\]
This ratio evaluates the use of total funds without any regard to the sources of funds.

8. Return on Capital Employed:

The return on capital employed ratio is computed by dividing net profit after taxes plus interest by capital employed.

\[
\text{Return on Capital Employed} = \frac{\text{Net Profit Taxes + Interest}}{\text{Capital Employed}}
\]

This ratio helps in understanding the overall efficiency of an enterprise. As this ratio indicates how well management has used the funds supplied by creditors and owner. The higher the ratio, the more efficiently the company is using the funds entrusted to it.

9. Internal Resource Generation:

The chief source of finance for a commercial enterprise should be its own operations and this is a recognised practice in the private sector. Public enterprises are also expected to ensure that their operations yield adequate surplus not only for replacement and renewal of their assets, but also to meet the needs of expansion and growth. The major problem in generating internal resources for expansion is the basic nature of most of our public enterprises, where prices are required to be kept low due to social, political and overall economic considerations. A large part of the
internal resources is at present generated through provision for depreciation and through profits. "There can be no two opinions as to the desirability of building up adequate reserves so as to finance the replacement of assets as also the needs of expansion and growth of government companies". Large reserves left with government companies provide them the freedom to re-invest their surpluses within the framework of national priorities, carry out minor replacements and expansion without waiting for government approval and augment employee's benefits including housing and other social expenditures. However, this also involves the danger of government companies incurring extravagant expenditure on office buildings, guest houses, recreational facilities, etc.

Thus an effort has been made to analyse the performance of the Haryana Agro-Industries Corporation on this front.

10. Contribution to the State Exchequer:-

The public enterprises are expected to generate financial resources for the national economic development. This fact has been highlighted in the Industrial Policy

Resolution of 1956 which states that public enterprises would augment the resources of the state and provide resources for further development in fresh fields. The Committee on Public Undertakings\textsuperscript{53} have also agreed that in assessing the performance of public Undertakings the financial profit or loss should not be the sole criterion and the contribution to the public exchequer should be given due weightage. With increased turnover and higher profitability, the contribution of the public enterprises to the budgetary resources of the Central Government has grown steadily over the years. This contribution comprises of (i) dividends (ii) interest payment on loans (iii) income tax and (iv) excise and other duties. Both income tax and excise duties are central levies but their net proceeds (gross tax collected minus expenses incurred in the recovery of tax) are distributed between the Centre and the States. Thus, an emphasis would be placed to analyse the amount transferred to the government in the form of dividends, interest on loans taxes and duties while evaluating the performance of Haryana Agro-Industries Corporation.

B. The Economic Performance

The economic performance throws light on how an

\textsuperscript{53} Committee on Public Undertakings 40th Report (40th Report on Role and Achievements of Public Undertakings), Government of India, New Delhi, p.135.
undertaking is utilising its inputs to produce an outputs. In examining the economic performance in terms of outputs, as the Corporation under study is engaged in the manufacturing, trading and servicing activities there is need to use different indicators for different activities. Thus, the overall efficiency of trading activities has been analysed on the following: (a) Growth of overall sales turnover; (b) Itemwise sales turnover of the Corporation; (c) Sales to capital employed; (d) Sales to fixed assets; and (e) Sales per employee.

1. The Economic Performance of Trading Activities:-

(a) Growth of Sales :-

Every business enterprise, whether in private or public sector, must pay due attention towards effective marketing of its products. The efficiency and success of a public enterprise engaged in trading activities depend upon how effectively goods or services have been disposed off. It requires carefully integrated and concerted efforts to be made by the management in demand creation and in organising a sound marketing structure. Thus, the growth of sales is one of indicator which measures the efficiency of the marketing management in a public enterprise.

(b) Sales to Capital Employed Ratio:-

This ratio helps in examining the ability of the
management to utilise its capital effectively. It is calculated by dividing net sales by capital employed:

Sales to Capital Employed Ratio = \( \frac{\text{Sales}}{\text{Capital Employed}} \)

The relationship between sales and capital employed is one of the important factors which influences the relative returns on sales to capital employed is one of the fundamental factors that indicates the efficiency of an enterprise and also its profitability. The more the sales in relation to capital employed, the more the effectiveness of capital.

(c) Sales to Fixed Assets Ratio:

The fixed assets turnover ratio measures the efficiency with which an enterprise is utilising its investment in fixed assets. It is calculated by dividing sales with net fixed assets.\(^{54}\)

\[ \text{Sales to Fixed Assets} = \frac{\text{Sales}}{\text{Net Fixed Assets}} \]

The concept of sales to fixed assets is an improvement over sales to capital employed in the sense that capital employed is different from fixed assets. Capital employed implies effective capital employed in terms of assets, which

\(^{54}\) Net fixed assets means depreciated value of fixed assets.
is arrived at by deducting depreciation from gross block and adding working capital. In terms of liabilities it means equity plus loans plus reserves minus fictitious assets. The term fixed assets would show the degree of effective utilisation of gross block when compared with effective capital employed. This ratio should be compared with the past ratios and also with the ratios of the similar enterprises and the industry average.

(d) Growth of Sales Per Employee:

"Sales divided with number of employees reflects the efficiency of manpower in terms of sales". The increase in this ratio reveals the effective utilisation of labour force and vice versa. This ratio should be compared with the past ratios of the enterprise and with the ratios of the similar enterprises and the industry average.

2. The Economic Performance of Manufacturing Activities:

In the case of manufacturing activities, the efficiency of various inputs used such as plant and machinery, inventories has been analysed. In order to know whether the Corporation is utilising its plant and machinery efficiently or not, two indicators namely, overall production and

capacity utilisation has been used.

(a) The Analysis of Production Performance:

In order to analyse the performance on the basis of production, various ratios used by Bureau of Public Enterprise in its Annual Reports and by Indian Audit and Accounts Department to review the performance of individual public enterprise, have been used. The various ratios discussed here are:

(i) Value of Production to Total Assets;
(ii) Value of Production to Net Worth;
(iii) Value of Production to Capital Employed; and
(iv) Production Per Employee.

(i) Value of Production to Total Assets:

In order to assess the efficiency of total assets, this ratio is computed by dividing the value of production during a period by the total assets utilised. For the sake of convenience and uniformity, the value of total assets is considered as the total assets side of the balance sheet.

56. Value of Production = Sale of goods manufactured and assembled + closing stock of finished goods, work in progress and goods on consignment - opening stock of finished goods, work in progress and goods on consignment.

57. Net worth represents paid up capital plus reserves and surplus less intangible assets.
(ii) Value of Production to Net Worth:

The percentage of value of production to net worth shows the effective utilisation of owner's equity in terms of production. A higher value of production with lesser owner's equity indicates a very sound performance while a decreasing ratio indicates the inefficient utilisation of owner's equity.

(iii) Value of Production to Capital Employed:

The percentage of value of production to capital employed indicates the efficiency of capital employed in production activities. A high percentage indicates the effective utilisation of capital in production activities while a low percentage indicates the inefficient utilisation of capital employed.

(iv) Production Per Employee:

This ratio indicates the efficiency of manpower on production front. It is calculated by dividing the value of production during a period by dividing the total number of employees at the end of that period. In general, a low ratio indicates inefficient utilisation of manpower while a high ratio indicates higher productivity of manpower resources.

(b) Utilisation of Capacity:

In a capital scarce economy like India production
performance of public enterprise in terms of optimum utilisation of resources in the form of raw materials and machinery is of paramount importance. The economics of public sector operation and real benefits accruing from it greatly depend upon the efficient operation of the manufacturing enterprises. One of the important indicators of their efficient operation and profitable performance is the capacity utilisation. If the public enterprise can not utilize their installed capacity fully, the capital utilised therein would be dead or idle to the extent of non-utilisation. Further, the under-utilisation in public enterprises also leads to locking up of resources, high cost of production, obsolescence of plant and equipment etc. Thus, the optimum level of capacity utilisation is matter of great concern to the governments, legislature and people at large. The Committee on Public Undertakings rightly pursued the consequences of under-utilisation of capacities in the following words. "The under-utilisation of production capacities not only leads to locking up of scarce resources but also results in wide spread repercussions in linked industries and heavy avoidable imports. It has also the effect of inflating the cost of production adversely affecting the financial results of the undertakings. Besides, it means that the plant and machinery may become obsolescent and even unprofitable because of technological obsolescence before
full value of investment had been derived.\textsuperscript{58}

(c) \textit{Inventory Management:—}

One of the important problems in the working of public enterprises is excess inventories maintained by them. It has serious economic implications for public enterprises and to the nation at large, because it invites unnecessary locking up of funds, which is a cost to the public sector undertakings and the wastage of national resources. In the words of Committee on Public Undertakings, "The reduction of inventories can help in releasing the capital so scarce in the country and in conserving valuable foreign exchange. Any avoidable locking up of capital in inventories deprives some other essential project or programme of finance. Further, inventories also cost a good deal by way of interest charges, cost of storage and handling, deterioration and obsolescence cost. Even on a conservative estimate, the cost of carrying inventory is estimated at a minimum of 15 percent per annum. To the extent that there are excessive inventories, the cost of production as well as the profitability of a concern is affected.\textsuperscript{59}" Among the areas where standards of cost control need to be applied most strictly is that of the control of inventories. Apart from costing a good deal of

\textsuperscript{58} Committee on Public Undertakings, 40th Report, \textit{op. cit.}, p.145.

\textsuperscript{59} \textit{ibid.}, p.5.
money in avoidable purchase, surplus inventories load additional liabilities on an enterprises by way of carrying costs.  

Inventories for the purpose of this study can be classified into four categories, viz, raw materials, work in progress, stores and spares and finished goods. In order to examine the size of investment in inventory in a relative manner, the ratio of inventory to current assets can be used. In addition to this, the ratio of each component of inventory, viz raw material, work in progress, finished goods and stores and spares, to the total inventory can be used to check whether over stocking existed in any of these components. Further, the position of inventories is studied in relation to the following:
(i) Gross sales;
(ii) In terms of number of months of consumption; and
(iii) In terms of number of months of cost of production.

(i) Inventories to Gross Sales:—

The requirement of inventories depends upon the volume of sales, as the latter influences (and is also influenced by) the volume of production. As the volume of production plays a vital role in the inventories so does sales. Hence, a

study of inventories in relation to sales assumes importance.

(ii) Inventories in Terms of Number of Months of Consumption:

Another way of looking at the holding of inventories is that inventories in stock in terms of number of months consumption. Ordinarily, inventories may be stocked upto six months consumption requirements. If the inventories in terms of number of months consumption is more than six-it may be inferred that there is over stocking resulting in locking up of funds.

(iii) Inventories in Terms of Number of Months of Cost of Production:

Inventories in terms of number of months cost of production would give an idea of the cost of carrying inventories. A reasonable level of inventories in terms of number of months cost of production may be assumed to be six on an average. When the holding of inventories exceeds six months cost of production it may be said that there is unnecessary locking up of capital.

3. The Economic Performance of Servicing Activities:

As the Haryana Agro-Industries Corporation is engaged in providing goods and services to the farmers on subsidised
rates. In addition to this, they are providing an after sale service on sale of tractors during the warranty period of one year. It is pertinent to analyse the level of satisfaction of the customers towards the goods and services being provided by the Corporation. A questionnaire has been administered to the sample population in order to know their level of satisfaction. The responses of the customers have been analysed about quality of the products; availability of the products; prices; mode of payment; location of the showroom; basic public amenities available at the showroom; availability of the salesman; behaviour of the sales man; size, quantity and packing materials of the products; after sales service and facility to express dissatisfaction/complaints at the showroom.

C. The Social Performance

Public enterprises are expected to meet certain social obligations which are in the form of national goals adopted by the State. These goals vary from country to country as they are related to the national orientation and to the prevailing ideology. In case of India, the major social obligations include removal of poverty; development of backward areas; social justice through income redistribution; generation of employment; and provision of inputs to target groups at subsidised rates. Public enterprises which function in different economic sectors respond to these social
obligations quite differently.

The Corporation under study was created with the twin objectives of assisting the farmers and promoting the agro-based industries in the state. The following objectives of the Corporation are in tune with social obligations:

(a) Providing agricultural inputs such as fertilizers, pesticides, tractors, seeds, agricultural implements, spare parts, tyres-tubes, etc. to the farmers on subsidised rates; and

(b) Employment generation.

An attempt has been made to examine what efforts are being made by the Corporation to achieve these national objectives.