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TOTAL PERFORMANCE MEASUREMENT SYSTEM
FOR
PUBLIC ENTERPRISES: A FRAMEWORK

by

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TOTAL PERFORMANCE MEASUREMENT SYSTEM FOR PUBLIC ENTERPRISES

A Framework*

Nikhilesh Dholakia and Rakesh Khurana

In countries where public enterprises form a significant part of the national economy, the measurement of performance of such enterprises is of considerable interest to the public and its representatives. Being socially owned and controlled, it is generally felt that public enterprises are accountable for more than sound economic performance. According to Prakash:

Public accountability is the essence of a socialized enterprise. The criterion to be fulfilled is the responsiveness of public undertakings to the wishes of the people. There is no doubt that efficiency, in its technical connotation, and as measured by economic indicators, is of prime importance in the case of all business enterprises, whether public or private. But, over and above this basic minimum, public enterprises are expected to serve the deeper social objectives.¹

While the need for measuring total, social and economic performance is well recognised, there exists no consensus on whether such measurements are feasible and what their form should be.

In this paper, the need for a system for total performance measurement in public enterprises is highlighted. By Total Performance Measurement System is meant a uniform system of measuring and reporting the economic and non-economic performance of an enterprise in a well-defined, widely understood, and standard format. Though discussed in detail later, such a system would include indicators of employee welfare, quality of life, equality of opportunity, impact on the environment and the fulfilment of other specified national goals. Thus, a total performance system would measure the entire range of social benefits offered and the social costs incurred by a public enterprise.

*An earlier version of this paper was presented at the Research Conference held at the Indian Institute of Management, Ahmedabad, October 3-4, 1975

¹ Om Prakash, The Theory and Working of State Corporations, London: George Allen & Unwin, 1962, p.191.

The current state of public sector performance reporting and auditing in India is examined. The problem of total performance measurement is formulated at a conceptual level and the relevant literature bearing upon this problem, mainly from the social audit stream, is reviewed. The requirements for a Total Performance Measurement System suitable for public enterprises in the Indian context are laid down and the outline of such a system are discussed.

NEED FOR A TOTAL PERFORMANCE MEASUREMENT SYSTEM

There are several compelling reasons why performance measurement in the public sector cannot take the form of conventional economic and financial performance measurement. The arguments emphasising the need for a system of total performance measurement are outlined in the following paragraphs.

Multiple Preference Systems

A socialist economy, and by analogy the socialised sector of a mixed economy, operates under multiple systems of preferences.² Firstly, being public, a public enterprise is subject to the preferences of the public qua consumers. Thus, consumers expect good quality products, easily available at reasonable prices. Secondly, as a state-run organisation, it is subject to the preference system of the state. The state expects public enterprises to further national goals like self reliance, public health improvement, raising of educational levels, reduction of regional imbalances, etc. Finally, the preference system of the employees of the organisation also impinge on the enterprise. The employees (workers as well as administrators) expect housing, health and other social services, in addition to adequate remuneration. They also expect participatory and professional management procedures. Unlike a private enterprise, these multiple systems of preferences are not subservient to an overarching preference system of the stockholders.³ These preference systems are in constant and dynamic interaction. Hence, straightforward financial measurement and reporting of performance does not give a true picture of how a public enterprise is performing in accordance with the various preference systems impingent on it.

²Jan Drewnowski, "The Economic Theory of Socialism: A Suggestion for Reconsideration", Journal of Political Economy, Vol.69, August, 1961, p. 1.

³This point has been discussed in S.K. Bhattacharyya, "Performance of Public Undertakings: A Framework for Appraisal", Economic and Political weekly, Review of Management, Vol.3, May 25, 1968

Need for Interenterprise Comparisons

The comparison of performance of different public enterprises purely on the basis of financial performance is inadequate. Enterprises which make significant extra-economic contributions to society in areas like housing, health, human resources development, technology substitution, etc. are often unable to show outstanding financial performance. Conversely, enterprises with genuinely poor financial performance sometimes use the crutch of "social contributions" to mask administrative inefficiency. Even when enterprises do report financial as well as social performance, the quality, quantity, and format of data reported varies from enterprise to enterprise. The result is that an external observer has no way of comparing the relative performance of different enterprises. Unless a system of total performance measurement is instituted, the problems of inter enterprise comparisons will persist and probably be compounded in the future.

Need for Multiple Measures of Employee Performance

Unlike a private firm, a public enterprise cannot and should not evolve employee performance standards - managerial or at the shopfloor level - which are a mere breakdown of the overall profit objective. If employee performance is measured solely in relation to the financial criteria, it would not be possible to motivate the employees to achieve the diverse goals of the enterprise. Therefore, a system of multiple performance indices for employee performance is needed. However, such a system cannot be developed unless the overall enterprise performance is monitored and reported according to a multiple index system.

Need for Public Scrutiny and Control

For enterprises in the public domain, it is essential that their performance be subject to public scrutiny and control. In addition to economic efficiency, the contributions to social welfare as well as the social and economic externalities are of interest to the public. A total performance measurement system would facilitate the public review of economic and social performance by interested agencies and set into motion processes which will influence the performance in desired ways.

In sum, there exist a number of internal and external reasons why the performance of a public enterprise should be monitored by a total measurement system rather than a purely financial one. In the next section, the current state of public sector performance reporting and auditing in India is briefly described. This is followed by an evaluation of the social audit approaches and their applicability to the public sector in India.

PRESENT STATE OF PUBLIC SECTOR PERFORMANCE AUDITING

The performance of public enterprises is monitored in several formal and informal ways. Some of the performance reviews are regular and periodic (e.g. Auditor General's review) while others are ad hoc and spontaneous (e.g. questions in Parliament). The major forms of review of public sector are the following:

1. Audits: Audits in accordance with the specifications laid down in the Companies Act are carried out by both professional accounting companies as well as one Auditor General. These audits are generally carried out with a view to avoiding or minimising inefficiency, impropriety and waste. Interpretive summaries and recommendations for improvements are rarely included in such audits.⁴ The audits essentially perform a watchdog function to prevent improper use of public funds. These audits are not geared to fully evaluate⁶ managerial or social performance of public enterprises.
2. Parliamentary Control: In addition to questions and debates in the House pertaining to the public sector, several committees of the House, such as Committee on Public Undertakings, Estimates Committee, and Public Accounts Committee monitor the performance of public sector enterprises. These committees rely mainly on audit data and occasionally generate special reports dealing with specific performance aspects of certain enterprises.⁶ These reviews fall short of the overall aim of integrated interenterprise comparisons on social as well as economic indicators on a regular basis.
3. Ministerial Control: Public enterprises are subject to the control of overseeing ministries regarding capitalisation, appointment of directors, and broad policy formulations. Also, the Bureau of Public Enterprises reports periodically on the performance of the public sector undertakings. However, such reporting is largely confined to financial performance.

⁴Laxmi Narain, Efficiency Audit of Public Enterprises in India, New Delhi: Orient Longman, 1972. - See especially Chap.4.

⁵Some efforts are underway to introduce statutory reporting on certain indicators like inventory-to-sales ratio.

⁶See, for example, Committee on Public Undertakings (Four Lok Sabha), Sixth Report, New Delhi: Lok Sabha Secretariat, 1967. This report deals with contracts entered into by Rourkela Steel Plant with Patnaik Mines.

Thus, there is no systematic effort at present to assess the total performance of public enterprises, i.e., the net give-and-take of such enterprises with respect to the economy, society, and polity.

Self Reporting by Enterprises

Several public enterprises report about their social performance in their annual reports. Table 1 shows the reporting of performance by some leading public enterprises in five areas of concern relating to the well-being of employees. The table is prepared on the basis of the annual reports for the 1973-74 period. It is seen that all enterprises do not report in all the areas. This does not necessarily mean that the non-reporting enterprises are not providing the concerned social services. For example, enterprises with an urban location (e.g., Air India, ITDC, etc.) may not report on health and housing facilities because these corporations may give allowances rather than provide townships and clinics. For such corporations, the relevant social contributions may form a part of the wages and salaries rather than be listed as a separate item.⁷ The voluntary and non-uniform reporting of social expenditure does not:

- (a) facilitate interenterprise comparisons.
- (b) present a cohesive picture of the overall social and financial performance of the enterprise.
- (c) give an indication of the effectiveness of such expenditures.
- (d) take into account the external costs (economic and non-economic) imposed by enterprises on the environment such as the pollution and depletion of natural resources.

Since the reporting system ignores indicators of social performance, it provides little incentive to work towards implicit but critical social objectives of public enterprises.

⁷Faced with this reporting problem, some U.S. corporations are highlighting in their annual reports those items in the financial statements which pertain to social expenditures. For an analysis of the reporting practices of 450 companies, see Steven C. Dillely "External Reporting of Social Responsibility", MSU Business Topics, Vol. 23, Aug., 1975.

Table-1: Self Reported Social Performance in Some Major Areas of Employee Wellbeing

Company	Health facilities	Company housing	Training	Employee loans/benefits	Staff welfare/sports/games/recreation
1. Hindustan Teleprinters	x	/	/	/	/
2. Minerals & Metals Trading Corp. of India	x	/	x	/	x
3. ITDC	x	x	/	/	/
4. Air India	x	x	x	/	/
5. National Projects Construction Corp. Ltd.	x	x	/	/	/
6. HSL	/	/	/	/	/
7. BHEL	/	/	/	/	/
8. FCI	/	/	/	/	/
9. STC	/	x	/	/	/
10. Mogul Lines	/	x	/	/	/

Source: Annual Reports, 1973-74.

The conventional systems of measuring and reporting the performance of public enterprises provide only a partial view of the social and economic performance of the enterprises. These systems do not facilitate interenterprise comparisons. Under the present system of audit, the enterprise managers and workers do not have guidelines to improve social performance. Similarly, concerned external groups such as consumer associations, etc. do not have comparative data to evaluate the total performance of the enterprise and to influence its working.

THE SOCIAL AUDIT APPROACH

The conceptual apparatus for monitoring and reporting of total performance of enterprises has recently been developed in the form of a loosely structured approach called "social auditing." While there is some ambiguity and disagreement as to what social audits are all about, the basic underlying principles are quite unambiguous.⁸ The following assumptions constitute a sort of axiomatic underpinning of the social audit approach:

1. Enterprises interact with, and are, therefore, responsible to, a number of contributor - claimants or "stakeholders."
2. Various stakeholders have different interests and expectations regarding the enterprise. These interests are not always economic.
3. It follows that the performance of the enterprise also has dimensions other than economic - social, ecological, etc.
4. The performance of the enterprise on all its dimensions can be measured consistently, uniformly, and unambiguously. Also, both the costs and returns can be measured so that measures of social efficiency can be developed.

Several approaches of social audit have been proposed. A detailed comparison of three such approaches is presented in Appendix I. The major characteristics of these approaches are outlined below.

Clark Abt has suggested the use of social balance sheets and social profit and loss accounts.⁹ He recommends the monetisation

⁸It should be noted that the proposed "social audit" reporting requirements for public and private sector companies under the Companies Act are different from the social audit approach discussed here. The former deal mainly with measures of physical performance and managerial efficiency.

⁹Clark Abt, "Managing to Save Money While Doing Good", Innovation No.27, 1972.

of all social benefits and costs by making the assumption that "a thing is worth what it costs or what people are willing to pay for it". The problem with this approach is that monetisation of benefits and costs does not reflect their intrinsic utility or disutility. For example, a particular safety programme might cost very little but its worth in terms of accidents prevented may be very high. In the Abt approach, all the market distortions get reflected in the social account. Lessem tries to obviate these problems by recommending the use of physical, social, and psychological units of measurement.¹⁰ His approach entails the creation of multiple accounts rather than a consolidated account. However, operational details are not provided.

Both the above approaches can be termed "accounting" approaches because they adhere to the principles of double-entry accounting. However, some "inventory" type approaches have also been proposed in which the social performance of the enterprise is "inventoried" under predefined categories. Preston and Post suggest a method in which corporate social performance is measured under categories derived from national goals.¹¹ The performance in each category is compared with community and industry norms. The problem with this approach is that it does not give an indication of the cost at which the performance reported is achieved. Measures of social efficiency are difficult to develop, except with reference to the norms.

While none of these three methods is a completely satisfactory way of gauging total performance of public enterprises, these methods provide an adequate conceptual basis on which a Total Performance Measurement System suitable for the Indian public enterprises can be developed.

OUTLINE OF A TOTAL PERFORMANCE MEASUREMENT SYSTEM

It was stated in the beginning of the paper that a Total Performance Measurement System (TPMS) is desirable, even necessary, if public enterprises are to operate with public accountability and satisfactory interenterprise comparisons are to be made.

¹⁰ Ronnie Lessem, "Accounting for an Enterprise's Wellbeing", Omega, Vol.2, No. 2, 1974.

¹¹ Lee E. Preston and James E. Post, "Measuring Corporate Responsibility", Journal of General Management, Vol.2, Spring 1975.

From the discussion on social audit approaches, it is clear that the conceptual ingredients for developing such a system are available. In the context of Indian public enterprises, it appears that a TPMS should satisfy the following broad requirements:

1. The financial performance should be separated from social performance. This is necessary if the arguments regarding one type of performance compensating for the other are to be resolved.
2. The system should be uniformly applicable to all enterprises. This will facilitate comparison of enterprises in different industries, different geographical locations, and enterprises with different input-intensities. Also, standard auditing procedures can be evolved under such conditions.
3. Since the system would be applied to public enterprises, reporting categories corresponding to national goals must be incorporated. This will serve to operationalise national goals at the enterprise as well as subenterprise level.
4. It should be possible to administer the system with existing skills and resources.
5. The system should be fair, easily understandable, and motivate employee performance towards both economic and social goals.

Outline of the Proposed TPMS

In view of the above requirements, a three-tiered system of monitoring and reporting performance is proposed. This system attempts to conform to the general procedures of public sector audit as they presently exist.¹²

In the first tier, the financial performance should be reported in the usual manner (e.g. balance sheet, profit and loss account, sources and uses of funds, financial ratios, etc.)¹³. However, all items pertaining to social investments and expenditures should be excluded. For example, the investments and expenditures of a social nature such as housing, health, training, recreation, education, etc. should be excluded from tier-1 accounts. This would facilitate the computation of the net financial return on economic assets.¹⁴

¹²The details of these procedures are provided in Chap.4 of Laxmi Narain, ibid.

¹³For an illustration, See Appendix III, ibid.

¹⁴Economic assets equal total assets less assets generated out of

In the second tier, those items of social benefits and costs, which can be monetised in unambiguous terms, should be reported. A sample list of the items which could be included in the second tier is given in Appendix-2. Both the natural units (e.g. square metres, parts per million) and equivalent monetary units should be reported. These items should be normalised to an appropriate base (per employee, % of sales, etc.) and relevant norms (by industry, by location, etc.) should be specified. The norms should not be mere averages but goals which reflect desirable and achievable standards as determined by experts. Indices generated in this manner can be used for inter-enterprise comparisons in areas such as housing, health care, training, etc. For example, consider the performance in the housing area. The total housing expenditure of the enterprise is computed. For companies with townships, this would consist of township maintenance expenditure, depreciation, and interest on township outlay, less rent receipts. For urban companies, this would consist of total house rent allowance. The expenditure can be normalised by converting it to rupees per square metre or rupees per employee and this normalised figure can be compared with the appropriate township or urban norm to evaluate the effectiveness of social expenditure in the housing area.

In the third tier, those items of social benefits and costs should be included which cannot be monetised in unambiguous terms, but are amenable to measurement in natural (physical) units. A sample list of such items is given in Appendix-3.

While the monitoring and reporting of tier-1 items can be accomplished by marginal modifications in the current performance reporting systems, new methods of measurement have to be developed for the other two tiers. However, this should not pose any significant problems because statistics for most tier-2 and tier-3 items are collected in different contexts and hence the relevant skills, measuring instruments, and norms do exist.

Table-2: General Format of the Proposed TPMS

Tier-1

Financial Performance

- Return on economic assets
- Economic profit and loss
- Other financial ratios

Tier-2

Social Performance (Monetised)

Item	Measure			Norm
	Natural unit	Monetary unit	Normalised	
-	-	-	-	-

Tier-3

Social Performance (Other)

Item	Measure		Norm
	Natural unit	Normalised	
-	-	-	-

IMPLEMENTATION ISSUES

The preceding section, together with Appendices 2 and 3, provides an outline of a Total Performance Measurement System which can be used by public enterprises. The implementation of such a system would require certain adjustments in reporting procedures. In this section, the adjustments which might be needed in the reporting systems of public enterprises are discussed. The possible uses of TPMS data for internal control purposes and by concerned external agencies are examined.

Implementation Problems

It is evident that the introduction of the proposed TPMS would require data on various indicators of social performance given in Appendices 2 and 3. Information corresponding to these indicators is usually available with the production, personnel, and publicity departments of the enterprise, although the format may not correspond to what has been suggested. The problem of obtaining data, therefore, reduces to the problem of setting up an information system by which the relevant data in appropriate format can reach the organisational unit responsible for corporate performance reporting. The responsibility for such reporting usually rests with the accounting department of the enterprise. In the proposed system, the accounting department can continue to exercise this responsibility, although for tier-3 items it might seek assistance from cost accountants, production engineers and personnel managers.

Inter-enterprise comparability which has been mentioned as one of the central aims of a TPMS, would be feasible only if TPMS reporting employs standard formats. The Bureau of Public Enterprises, being an agency responsible for the coordination of public enterprises, can undertake the preparation of standard reporting formats in consultation with various public sector units. The auditing of TPMS accounts can be entrusted to the existing auditing bodies except in the case of tier-3 items where technically competent auditing personnel might be nominated by a central body, such as the Bureau of Public Enterprises.

The introduction of TPMS reporting systems cannot be achieved overnight. Considerable preparatory work, both by the individual enterprises and the coordinating body, is necessary. For a planned phasing-in of such a system, it might be desirable to conduct TPMS reporting exercises for two to three years. These exercises may not be used for evaluative purposes, but mainly to train reporting personnel in the use of the new system and to debug operational problems. The coordinating body can provide active consulting support to the individual enterprises during this preparatory period.

Use of TPMS Data

The data generated by a Total Performance Measurement System can be used internally for the purposes of monitoring the economic and social performance of the enterprise. Efficiency measures based on TPMS data can be used to assess the efficiency of social expenditure and investment. Such efficiency measures can also become a part of a management control system designed to channelise individual performance toward overall enterprise goals.

Since the TPMS data (which includes conventional financial performance) will be public reported, this data can be used by external agencies having a stake in enterprise performance for evaluative purposes. For example, the Planning Commission can monitor enterprise performance vis-a-vis national goals. This could be a natural extension of Planning Commission's role in project evaluation and in monitoring of project implementation activities in the public sector. The administrative ministry for an enterprise can continue to scrutinise the financial performance reported in tier-1. It can supplement the financial review with a review of performance in the social arena. Items pertaining to employee welfare (reported in tiers 2 and 3) will be useful to the ministry of labour, trade unions, and other public agencies in assessing the relative performance of various public sector enterprises in this area. Similarly, the items pertaining to ecological performance can be utilised by environmental agencies or citizen groups concerned with pollution.

Concluding Remarks

For the efficient and socially accountable functioning of public enterprises in India, Total Performance Measurement Systems are desirable and necessary. The present practice of measuring and auditing focuses mainly on economic variables - it does not give a complete picture of how well a public enterprise is performing in relation to the preference systems impinging on it. Using the concepts of social audit, it is possible to develop a more comprehensive system of performance measurement.

The TPMS outlined in this paper would yield a vector of performance indices, economic and non-economic, measured in financial or nonfinancial terms. The vector of results so

obtained can be used by internal and external stakeholders to evaluate and influence performance. The provision of norms for social account items would act both as an internal motivator and external pressure for enterprises to meet and exceed these norms.

The outline of TPMS presented here is far from a detailed, operational system. However, the feasibility of developing and implementing such a system does not appear to be a problem, provided further research of an operational nature is undertaken.

Appendix-1: Comparison of Three Social Audit Approaches

Dimension of Comparison	LESLIE approach	ABT approach	PRESTON & POST approach
Conceptual Basis	<p><u>Quality of life accounting:</u> an amalgam of items, some of which can and some of which cannot be represented in financial terms. However, the essential principle of double-entry book-keeping is observed.</p>	<p><u>Social audit approach:</u> Monetisation of social income, costs, assets, liabilities at market-value, Social programme can then be devised to maximise social benefit at a given cost or minimise costs to achieve a target level of social benefits.</p>	<p><u>National goal accounting:</u> Specification of national goal and examination of corporate performance vis-a-vis these goals in the form of certain indicators. Assessment of performance in comparison with community or industry norms.</p>
Categories of Measurement	<p>Quality of life categories. Examples:</p> <p><u>Category</u> <u>Major Element</u></p> <p>Economic standard of living</p> <p>Social Interpersonal satisfaction.</p> <p>Psychological Esteem, actualisation</p>	<p>Social costs and benefits in categories pertains to employee's economic and social welfare, equality of opportunity, environmental impact, and community services.</p> <p>Monetary valuation of these in terms of actual or imputed market value.</p>	<p>National goals and indicators derived from these. Example:</p>
Units of Measurement	<p>Physical, social, and psychological units (i.e. appropriate scales) are used in addition to monetary units. Survey and scaling methods recommended for measurement</p>	<p>Monetary values (actual or imputed)</p>	<p><u>Goal</u> <u>Indicators</u></p> <p>Health & safety Life expectancy on job, safety indices, mental health indices</p> <p>Appropriate physical, social, or monetary units applicable to the indicator being examined.</p>

Appendix-1: (contd.)

Dimension of Comparison	LESSEM approach	ABT approach	PRESTON & POST approach
Format of Presentation	Physical, social and psychological currents and capital accounts are developed to supplement the financial accounts.	Social profit-and-loss statements and social balance sheets are developed based on the monetary values of social costs/benefits.	Company performance is presented on various social indicators (derived from national goals) and relevant comparison norms are presented alongside.

Appendix-2: List of Items Where Performance Can be Measured in Monetised Terms

Item	Measure			Norm
	Natural Unit	Monetary Unit	Normalised	
<u>Employee-related</u>				
Earnings in real terms:				
(a) Current year level	No. of employees (NE)	Rs.	Rs. per capita	National Norm
(b) Increase over last year	No. of employees benefiting (NEB) in earnings	Rs. increase	% age increase	
	Percentage of employees benefiting (PEB)			
Life insurance coverage:				
(a) Current year level	No. of employees covered	Rs.	Rs. per capita	National norm for Industrial Workers.
(b) Increase over last year	NEB	Rs. increase in coverage	%age increase	
Disability Coverage:				
(a) Current year level	No. of employees covered.	Rs.	Rs. per capita	Relevant industry norm
(b) Increase over last year	NEB	Rs. increase in coverage	%age increase	

contd.....

Appendix-2: (contd.)

Medical expenditure:									
(a) Current year level	No. of employees	Rs.	Rs. per capita						National norm
(b) Increase over last year.	NMB PEB	Rs. increase	%age increase						
Training expenditure on employees:									
(a) Current year level	NMB PEB	Rs.	Rs. per employee trained						Relevant industry norm
(b) Increase over last year	NMB PEB	Rs.	%age increase						
Educational expenditure on employee dependents:									
(a) Current year level	No. of students	Rs.	Rs. per student						National norm
(b) Increase over last year	No. of students benefiting	Rs.	%age increase						
House rent allowance and/ or township expenditure (depreciation, interest, maintenance):									
(a) Current year level	NMB, PEB	Rs.	Rs. per capita						Relevant urban or township norm
(b) Increase over last year	NMBDB, PEB	Rs.	%age increase						
Daycare and food services:									
(a) Current year level	NMB, PEB	Rs.	Rs. per capita						Relevant industry norm
(b) Increase over last year	NMB, PEB	Rs.	%age increase						

Appendix-2: (contd.)

Recreation & vacation benefits:
 (a) Current year level
 (b) Increase over last year

Rs.
 Rs.
 Rs. per capita
 %age increase
 ()
 ()
 ()
 National norm

Ecological

Expenditure on pollution control:

(a) Current year level
 (b) Increase over last year

Rs.
 Rs.
 Percentage of sales.
 %age increase
 ()
 ()
 ()
 Relevant industry norm

Environmental improvement expenditure (landscaping, etc.):

(a) Current year level
 (b) Increase over last year

Rs.
 Rs.
 Percentage of sales.
 %age increase
 ()
 ()
 ()
 Relevant industry norm

National-goal Fulfilment

Purchases from small scale units:

(a) Current year level
 (b) Increase over last year

Rs.
 %age of purchases
 Relevant industry norm

Export substitution performance:

(a) Current year level
 (b) Increase over last year

Rs. worth
 F.B. saved
 Rs.
 %age of imported purchases
 %age increase
 ()
 ()
 ()
 Relevant industry norm

Export performance:

(a) Current year level
 (b) Increase over last year

Rs. worth of exports.
 Rs.
 %age of sales
 %age increase
 ()
 ()
 ()
 Relevant industry norm

Appendix-3: List of Items where Performance Should be Reported in Natural Units

Item	Measure		Norm
	Natural unit	Normalised	
<u>Employee-related</u>			
Employee safety record (no. of accidents - fatal, major, minor):			
(a) Current year level	No. of accidents	No. per capita	Relevant industry norm
(b) Decrease from last year	No. of accidents	%age fall	
Employees successfully com- pleting courses by level:			
(a) Current year level	No. per level	No. per capita, each level.	National income
(b) Increase over last year	No. per level	%age increase	
Work space provision (production & office):			
(a) current year level	sq. metres	sq. metres per employee	National/ industry norm
(b) Increase over last year	sq. metres	%age increase	
Air quality in plant:			
(a) Current year level	ppm of various pollutants	ppm of various pollutants.	Relevant industry norm
(b) Change from last year	ppm of various pollutants	%age change	

Appendix-2 (contd.)

Accounting level in plant	Decibel	Relevant industry norm
Additional employment generated	No. of jobs	%age of total empl't. Relevant industry norm
Net promotions (promotions less demotions)	No.	%age of total empl't. Relevant industry norm
Employment Security (involuntary terminations)	No.	%age of total empl't. Relevant industry norm
<u>Ecological</u>		
Pollution level:		
(a) Current year level	ppm. of various pollutants	0 0 0 National norm
(b) Decrease from last year	ppm of various pollutants	%age decrease
<u>National-goals achievement</u>		
SC/ST Employment:		
(a) Current year level	No.	0 0 0 National norm
(b) Increase over last year	No.	%age of total employment %age increase
SC/ST Advancement (net promotions)	No.	%age of overall net promotions Ratio National norm
Disparity index (highest-to-lowest pay, average-to-lowest pay)	Ratio	National norm
Inventions	No. of patents	No. per capita R&D employees