

MEMORANDUM OF UNDERSTANDING AND OTHER PERFORMANCE IMPROVEMENT SYSTEMS— A COMPARISON

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WHENEVER A new system is introduced in any organisation, it is often met with skepticism from all quarters. This is true for both public and private sectors. However, it appears to be particularly true for the public sector in India. This cynical attitude is a result of a long series of perceived failures in the implementation of various performance improvement systems. The latest policy initiative in this series happens to be the policy of Memorandum of Understanding (MOU). Naturally, people are wondering as to how this system is different from various other systems that have been tried in the past. The purpose of this article is to respond to this concern by comparing and contrasting the system of MOUs with other seemingly similar systems, such as Management by Objectives (MBO), Zero Base Budgeting (ZBB), Performance Budgeting (PB), Production and Profit Improvement Management System (PPIMS) and Conventional Budgeting Systems. Each one of these systems have been tried in the public sector, at some point of time. Indeed, some continue to co-exist with MOUs.

Although performance improvement of public enterprises is the aim of each one of them, they follow different paths to achieve this common objective. Some of them—like the conventional budgeting systems, ZBB, MBO and performance budgeting—focus on the internal organisation, MOUs and PPIMS try to improve performance by managing the government-public enterprise interface. Thus, though similar, they are quite different in their methodology, thrust, focus and mode of implementation. Most of them can co-exist in an organisation, without contradicting, supplementing each other. As we go along, we will clarify the underlying concepts and show how they can all be used together for improving the performance of public enterprises.

MEMORANDUM OF UNDERSTANDING (MOU)

The concept of MOU is a very simple one.¹ It is an agreement between a public enterprise and the Government, represented by the administrative

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¹The focus in this section is on recent changes in the MOU policy. Readers interested in the
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ministry in which both parties clearly specify their commitments and responsibilities. The need for this device arose because no one, including the public enterprises, knew what was expected of these public enterprises. Different agencies of the Government--Planning Commission, Finance Ministry, Parliament, Auditor General, administrative ministry, etc.,--have different and often conflicting expectations from these enterprises. The MOUs were recommended by Arjun Sengupta Committee as an instrument to reconcile these multiple objectives in one document and send a consistent signal to the public enterprises. Further, once the tasks of public enterprises have been specified in the MOU, these enterprises were to be evaluated only against these.

The idea behind MOUs is to simultaneously increase accountability and autonomy, move towards Management By Objectives instead of control through procedures. All this sounds seductive on paper, but in reality there were many problems. In 1988, eleven public enterprises entered into MOUs and, by most accounts, they were generally considered a waste of time. They were hastily prepared documents with the major objective being the signing of the MOU to satisfy the formalities of the system. No one in the Government knew what they should look like or who should evaluate what and why? The result was another paper exercise on top of all others that were already in existence.

Since 1989, much has changed and we will try to highlight only the major changes. One of the major complaints against the old system was its inherent unfairness. It was argued by chief executives of public enterprises that how can one party to a contract be also the judge. That is, how can the Secretary of the administrative ministry, who signs the MOU, also evaluate its implementation. It was pointed out that there is a potential conflict of interest involved in this process as the Secretary has to pass judgement on his own ability to meet his own commitments laid down in the MOU.

In response to this, the Government constituted a High Power Committee (HPC) chaired by the Cabinet Secretary to monitor performance of both parties to the MOU. This committee consists of only those Secretaries who are not signing an MOU themselves, such as Secretaries of Finance, Planning Commission, Programme Implementation, Chairman of the Public Enterprise Selection Board, and Chairman of Bureau of Industrial Costs and Prices. The

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history of MOUs as well as their structure should see: Prajapati Trivedi, "Theory and Practice of the French System of Contracts for Improving Public Enterprise Performance", *Public Enterprise*, Vol. 8, No.1, Yugoslavia, Ljubljana, January, 1988, pp. 1-120; "Performance Evaluation System for Memoranda of Understanding", *Economic and Political Weekly*, Vol. XXIV, No.21, May 1989; Also reprinted in the *Institute of Public Enterprise Journal*, Vol. XII, No. 2, June 1989; Suresh Kumar, *et al.*, "Public Enterprise Performance, Evaluation System in Korea: Report of the Government of India Delegation to Seoul, South Korea", November 1988; Young C. Park, "A System for Evaluating the Performance of Government-Invested Enterprises in Korea", Public Sector Management Division, World Bank, 1986; L.P. Jones, "Towards Performance Evaluation Methodology for Public Enterprises: With Special Reference to Pakistan", Paper presented at the International Seminar, "Economic Performance of Public Enterprises", Islamabad, November 1981.

Committee is assisted by an Ad Hoc Task Force consisting of eminent management experts, professor and chartered accountants. They help the HPC during the approval process at the beginning of the year and in the evaluation at the end of the year. This group is expected to bring in objectivity, fairness and expertise which was missing in the previous round of this exercise.

While all this sounds eminently sensible, there has been some concern with regard to some of these changes. Initially, the new format of MOUs generated some heat between Bureau of Public Enterprises and a few enterprises. This makes one wonder, what is it in the new MOU format that caused so much fuss? Essentially, the 1989 format differs from the 1988 format in four major ways. First, the list of criteria included to evaluate the performance of public enterprises is quite different in the two issues. In 1988, MOUs emphasised what may be called static operational efficiency. That is, the efficiency in the use of resources at one's disposal at a given point in time. Even in this, they concentrated on the quantitative aspects of performance and, thus, the list of criteria included only the easily measurable financial and physical targets.

Even in the private sector, such narrow focus on static efficiency is considered unwise. In public enterprises it borders on being meaningless. To judge Indian Airlines performance by looking at the financial parameters is hardly justified. If the plane is late by four hours or the crew is rude, we have no choice: Indian Airlines gets our money but we don't get our money's worth. Happily, the new Indian Airlines MOU for 1989-90 includes five qualitative aspects of performance like "On-time Performance" and "Customer-satisfaction".

In addition, most MOUs include measures of dynamic efficiency as well. They include those aspects where the cost is incurred today but benefits accrue in the future. Items included in this category consist of "Preventive Maintenance", "Corporate Planning", "Human Resource Development", and so on.

The second difference this year relates to the introduction of criteria weights. The Government and public enterprise have to not only decide which criteria to include but also what would be their relative weights. Till 1988, MOUs contained only a list of criteria and the target figures. The difficulty involved in holding a public enterprise accountable using this list can be seen easily. Suppose at the end of the year, a chief executive comes to the Government and claims to have done extremely well because he achieved 18 of the 22 targets listed in the MOU. It is possible that Government may say that the four targets he failed to achieve were the really important ones. In the absence of an explicit understanding at the beginning of the year on relative weights, it would be difficult to resolve this impasse in a 'fair' and 'objective' way.

Another difficulty with the previous MOUs related to making a judgement on deviations from the target. As we know, management is not an exact science. Therefore, it is reasonable to expect that most of the times

some targets will be met and there will be a shortfall in others. Simply assigning weights does not solve our dilemma. Imagine profit has been given a weight of 40 per cent and the target for 1989 is Rs. 97 crore. Now in 1989 we find that the actual profit turns out to be Rs. 95 crore. What are we to make of it? Should we give full 40 per cent to the enterprise because the achievement is close to target or take out some points? If so, how many? In the absence of an explicit agreement regarding how deviations from the targets are to be treated, the whole exercise becomes subjective and, hence, ineffective. The new MOUs specify a 5-point scale, clearly indicating what is considered "excellent", "very good", "good", etc.

Finally, the new MOUs have been drafted in a manner that the performance of a public enterprise on various fronts can be added up and a 'composite' score arrived at. The value of the 'composite' score would always lie between 1 and 5, former being high and latter low. In common sense terms, if an enterprise achieves one for every criterion, that is, it does exceedingly well on all fronts, it will get '1'. On the other hand, if it does miserably on all fronts, it will get '5'. Any combination of 'good' and 'bad' performance will give a score between one and five.

This will enable the Government to compare performance of essentially dissimilar enterprises. While the list of commitments for each public enterprise is different, and can't be compared, their ability to meet these commitments is certainly comparable. The composite score above, measures this ability. The existence of this composite score provides the potential to create competition among monopoly organisations without necessarily privatising them. And, that to our mind, is the most revolutionary aspect of the current MOU exercise.²

CONVENTIONAL BUDGETING SYSTEM

While other methodologies are not statutory requirements for public enterprises in India, having a budgetary control system is a compulsory requirement for all the public enterprises in India.³ As a consequence, each year, public enterprises in India, spend a lot of time and energy in preparing the annual budget documents. The exercise starts well before the beginning of the new financial year. This budget is an elaborate document which contains detailed plans of the enterprise in both physical and financial terms. The first draft of the budget is submitted to the administrative ministry, which, in turn, consults the other relevant ministries, like the finance, planning, etc. After a series of negotiations, the final budget is approved by the administrative ministry in a joint meeting, normally presided by the

²Prajapati Trivedi, "Methodological Issues Relating to Recent Changes in the MOU Policy", *Indian Management*, 1990. (forthcoming)

³For further details, see Bureau of Public Enterprises and Standing Conference of Public Enterprises, *Government Policy for Management of Public Enterprises*, Vol. I, New Delhi, 1985, pp. F 85-102.

minister in charge. At the year end, the actual achievements are measured against the targets. Here, the concerned administrative ministry evaluates public sector undertaking (PSU), which enterprise keeps sending monthly reports to facilitate monitoring by the administrative ministry.⁴

Similarities with the MOU System

These are as follows:

1. In both MOUs and the budgets, the indicators and the performance targets are clearly mentioned.
2. The targets are fixed after mutual negotiation between the administrative ministry and the enterprise.
3. As both the enterprise and the administrative ministry are signatories to the budget documents, both of them share the responsibility for achieving the performance targets.

Differences between the MOU system and Conventional Budgeting

These are as follows:

1. Conventional budget is "details oriented" while the MOU document deals with aggregates. Due to the orientation towards details, in practice, budgetary control system reduces the autonomy of the managers.
2. In the conventional budgeting system, year-end evaluation is done by the administrative ministry while in the MOU system, it is done by the HPC. Hence, a more objective assessment of the performance of both the parties becomes possible.
3. Conventional budgeting system does not provide for third-party vetting of the budget before it is finally accepted, while in the case of MOU system, *ad hoc* task force vets the MOU documents before they are signed.
4. There is only one value indicated for each of the performance criteria in the budget documents and, hence, it becomes difficult to pass judgement on deviations from the targets.
5. Relative importance of various criteria are not mentioned in the budgets. The MOU takes care of this by giving weights to various criteria.
6. In conventional budget, targets are primarily quantitative in nature, while the MOU targets could be either qualitative or quantitative in nature.
7. In the case of dynamic indicators, conventional budget tries to control by comparing the expenses incurred in a particular year with

⁴For details on budget preparation, see *Ibid.*

that of the targets, whereas, MOU has other measures, such as "percentage of project completed".

PERFORMANCE BUDGETING

The concept of performance budgeting started with the First Hoover Commission Report in 1949 in the USA which recommended its introduction throughout the Federal Government--a recommendation not followed completely, but which did affect the Budget and Accounting Procedures Act, 1950. There are two other techniques which are very similar to performance budgeting and are called "Performance and Programme Budgeting" and "Planning, Programming, Budgeting System". Though there are differences between these techniques, the underlying principles are the same. Hence, for the purpose of this article, we have considered only the techniques of Performance Budgeting, which is, perhaps, the most comprehensive of all these techniques.⁵

The performance budgeting system arose in response to budgeting for those departments where the traditional budgeting system of setting limits on allowable expenditures was proving counter productive. This was especially true of those departments where there was no way of relating outputs to input, e.g., irrigation, public works, hospitals, etc. Differences between performance budgeting and other similar budgeting approaches is best brought out in the following figure. The differences between these approaches have been explained later in this section, through an example.

TYPES OF BUDGET

	Commercial Sector	Non Commercial Sector		
		Appropriation Budget	Programme Budget	Performance Budget
FOCUS OF CONTROL	Return on Investment or Profit	Actual Expenditure Vs. Budgeted Expenditure	Actual Physical Output Vs. Budgeted Output	Actual Output/ Actual Input Vs. Budgeted Output/ Actual Input

What the performance budgeting system propped to do was: (a) Programme and activity classification of the agency; (b) Performance

⁵A. Premchand, "Performance Budgeting in Public Sector", *Economic and Political Weekly*, February 1969.

measurements, and (c) Performance reporting. Various steps involved in the process of designing and implementing a performance budgeting system are given below:

1. Decide on objectives of the agency,
2. Identify various programmes or projects which help the agency achieve its objectives,
3. Do a cost-benefit analysis for these programmes and select the most suitable programmes,
4. Decide on performance criteria for various programmes,
5. Prepare long-term physical and financial plan,
6. Prepare the annual budget,
7. Assess performance of each programme, and
8. Periodically review the programmes and their success in the light of subsequent events and make modifications as required.

The performance budget (PB) is a structured document. It provides a descriptive account of the tasks and work plan for each agency. Sometimes, an agency can be a department (say, a department of Government) or a part of a department. In the PB terminology, the agency is also referred as the Function. A 'function' is a distinct and major area of service to people.⁶ However, we will use the term agency for easy understanding. Then, the agency selects various programmes to be implemented during a particular period, normally a year. Programmes are subdivided into activities. An activity is the smallest unit for planning and execution. Each activity has performance targets. Based on a detailed cost-benefit analysis of the activities, the programmes to be implemented are chosen. Periodic review is done to monitor the progress. At the end of the year, evaluation of the progress is made. Then, the performance indicators are modified in the light of the experience gained.

Let us take an example to understand the concepts behind this system. Consider, for example, Malaria Eradication Programme (MEP) of the Department of Health. Here, the Department of Health is the agency and its objective is to improve the health of the citizens. One of the programmes of this agency will be malaria eradication. Now there may be other programmes, like educating the people about various aspects of prevention of various diseases, etc. But, to decide as the programmes to be chosen, one has to do the cost-benefit analysis. Let us say, the department has selected malaria eradication as a programme, after doing a cost-benefit analysis of various activities which constitute these programmes. Now, for each of these activities, individual performance budgets are drawn up.

Let us say, cleaning of water tanks is one of the activities of the MEP. For this activity, we need to determine the operational targets. At the end of

⁶S.S. Viswanathan and A.V. Chaturvedi, *Application of Performance Budgeting in Central Public Works Department*, New Delhi, Indian Institute of Public Administration, 1972.

the time horizon, the performance in this activity will be evaluated on the criteria of number of water tanks cleaned/cost incurred. In the case of appropriation budget, the total budgeted cost of cleaning a given number of tanks will be compared with that of the actual cost incurred in cleaning the same number of tanks, while in Programme Budget, the evaluation will be done only on the basis of number of water tanks cleaned Vs. the budgeted number of water tanks to be cleaned. In the case of performance budgeting, both the number of water tanks cleaned and also the cost of cleaning one water tank will be used for evaluating the performance of the agency, in this case, the Department of Health, with respect to the activity of cleaning of water tanks. This process is reviewed at the end of each year. This method is best applied when the emphasis is more on achievement of a certain physical target. It has not been used in commercial sector in a major way.⁷ Although the concept of performance budgeting is clearly different from the concept of MOU, a lot of people tend to look at MOUs as a modified version of performance budgeting as both of them deal with physical quantitative indicators.

Similarities with MOU

These are as follows:

1. Both systems have a high degree of clarity of objectives.
2. In both the cases, there is an evaluation at the end of the time horizon. Normally the time horizon is one year.
3. Performance budgeting system can also provide for both static and dynamic indicators.
4. Both systems require a good information base for them to succeed.

Dissimilarities with the MOU System

These are as follows:

1. While there are physical and financial parameters in both cases, the emphasis in performance budgeting is still on physical targets.
2. Performance budgets have only one value for each of the targets. Thus, it becomes difficult to evaluate the deviations from the targets.
3. There is no prioritisation amongst the various activities. Hence, if only a few of the targets are achieved, then, as pointed out earlier, the evaluation at the end of the year becomes quite subjective.
4. There is no third-party evaluation at the end of the year.
5. Performance budgeting does not provide for qualitative indicators, unlike the MOU system.

⁷A. Premchand, *op.cit.*

MANAGEMENT BY OBJECTIVES

Performance budgeting was succeeded by MBO, which was formalised as a management approach by Peter Drucker in 1954. This came after the skepticism and disenchantment which followed the introduction of performance budgeting in the US Government.⁸

The main principle behind this system is that the managers perform best when they are clearly told as to 'what' is expected of them.⁹ The technique used in the MBO process is called Key Result Area Technique or the KRAT. Broadly, there are three stages in the process of MBO. They are, setting of objectives, action planning and performance review. There is also a fairly standard way of implementing these stages. However, there are variations in the way the MBO is implemented in organisations, although the basic methodology remains the same.¹⁰

There are essentially six basic steps in the design and implementation of the MBO process as follows (which cover the first two stages, namely, the setting of objectives and action planning):

1. Definition of the mission statement or purpose or "What the organisation stands for".
2. Determination of the Key Result Areas or KRAs derived from a SWOT analysis.
3. Fixing up of Objectives--Time, Measurement, Cost and Quality dimension.
4. Detailing out an Action Plan for each objective.
5. Control information for feedback.
6. Authority limits to be given to the subordinates for achieving the objectives.¹¹

The process starts with the clear definition of the mission of the organisation. Once, the missions is finalised, it remains stable for a long-time, normally about 10 to 15 years. Hence, it becomes very important to have the mission statement properly defined. Then, each individual departmental manager does a SWOT (Strength, Weakness, Opportunities and Threats Analysis) and comes up with Key Result Areas for the particular area he is managing. This is followed by the group of managers getting together to decide the KRAs for the next higher level. Sometimes, the objectives for the Chief Executive is decided first. Normally, this is done by the Board of Directors of the enterprise. For facilitating smooth implementation of the entire MBO system, enterprises employ external consultants, who are

⁸ A. Premchand, *Government Budgeting and Expenditure Controls, Theory and Practice*, Washington DC, International Monetary Fund, 1983.

⁹ Bureau of Public Enterprises and Standing Conference Public Enterprises, *op.cit.*

¹⁰ B.L. Maheshwari, *Management by Objectives*, New Delhi, Tata McGraw Hill, 1980.

¹¹ S.K. Chakraborty, *Management By Objectives-An Integrated Approach*, Macmillan, 1976

normally known as the MBO advisers. They help in a big way, in arriving at the list of objectives or KRAs for the chief executive. Then the whole process percolates down to the lowest rung of the manager. When the MBO is implemented, the first step is the determination of the KRAs for the individual managers. These are decided by the manager sitting with his immediate higher authority. Thus, the whole process goes up to the chief executive. In the case of private enterprises, the chief executive's KRAs are decided in consultation with the Board of Directors. In the case of public enterprises, it may be done in consultation with the administrative ministry. From the KRAs, the objectives are determined. Suitable time, quality and other dimensions are decided for each of these objectives, for proper evaluation at the end of the year. From the available literature, only quantitative dimensions are used for measuring the performance against each of these objectives. Wherever qualitative indicators are to be used, some suitable quantitative proxy has been found. For each manager, the objectives are fixed based on his KRAs. In the MBO terminology, objectives refer to the combination of criteria value of the MOU vocabulary. It is emphasised that these parameters are fixed jointly by the superior and the subordinate together.

Next comes the stage of action planning. Once, the KRAs for various managers are determined, strategies for achievement of these objectives are planned. For this, what is called the Key Result Involvement Matrix (KRIM) is made. In the KRIM, primary responsibility for achievement of a particular objective is fixed. The primary responsibility for the achievement of an objective always rests on one person. Others have either secondary responsibility or tertiary responsibility. However, one person can have primary responsibility for achievement of more than one objective.

The boss and the subordinate then decide on the control information that needs to be provided for periodic monitoring. The true spirit of MBO expects that the information needed by the subordinate must be provided to him first. The boss is expected to give periodic and objective feedback. During the negotiation phase, the subordinate also asks for clear authority limits to achieve the objectives. These may or may not be laid down as the rules of the organisation, but at least the authority limits agreed to by the boss are clearly put down on paper and form part of the MBO documents.

The last stage in the MBO process is the performance review at the end of the time horizon, normally a year. Here, the boss and the subordinate sit together and review the performance of the subordinate (evaluate the performance of the subordinate, to use the MOU terminology). Judgement on any deviation, from the agreed targets, is passed jointly by the boss and the subordinate. Based on the performance review, the subordinate's incentive is determined.

Similarities with the Present MOU System

These are as follows:

1. Mission statement is clearly defined at the beginning of the exercise

- in both systems.
2. Targets are determined jointly by both the parties to the agreement. However, it has to be noted that in the case of MBO, there is no formal agreement though the commitments are binding.
 3. In both the cases, the authority limits are clearly specified.
 4. Both systems have an year-end evaluation only.
 5. Performance incentives are linked to the achievement of the targets in both systems.
 6. Both systems try to improve performance by clarifying the objectives right at the beginning.
 7. Management by Results' is the key phrase in both approaches.

Differences with MOU System

These are as follows:

1. MBO system concentrates on the internal management to achieve the results while the MOU system deals with the government-public enterprise interface.
2. In the MBO approach, the fixing of targets goes down the hierarchy, whereas in the MOU approach the targets are mentioned for the enterprise as a whole. One may look at these targets as the objectives of the chief executive.
3. One of the major difference in the two system is in the evaluating agency. In MBO, the evaluation is done by both the superior and the subordinate, while in the MOU system it is done by the HPC.
4. In the case of MBO, as in many other systems, there is only one value for any performance indicator. Whereas, in the MOUs, each parameter has a range of targets, which facilitates evaluation of deviations of achievement from the targets.
5. The MOUs have weights attached to each of the objectives, so that their relative importance is clearly brought out. This is missing in the MBO system.
6. Normally, qualitative indicators are not used in the MBO approach while in the case of MOUs, almost every MOU has one-or more qualitative indicator(s).

ZERO BASE BUDGETING

Zero Base Budgeting (ZBB) had its origins with the Carter Administration in the United States. Prof. Phyrri of the Harvard University is considered to be the father of this methodology,¹² which was primarily meant for government departments. True to the name, each activity is budgeted from the zero base. That is, it is assumed that no historical data

¹² For details see A. Peter Phyrri, "Zero Base Budgeting", *Harvard Business Review*, 1970.

exists and the entire budgeting activity has to start from a scratch. It implies that one has to justify the particular activity in terms a fresh cost-benefit analysis. Government of India started adopting this system for its various departments in 1985.¹³ The main aim was to take a fresh look at all the major heads of expenditure. It was subsequently decided to extend the system to public enterprises also.

The basic steps in ZBB are: (a) Describe each discrete company activity as a decision package, (b) Evaluate and rank all these packages by cost-benefit analysis, and (c) Allocate resources accordingly.

The first step in ZBB is to determine the decision package. A "decision package" is the basic building block in ZBB. It is normally a project or an activity for which a clear cost-benefit analysis can be made. Once the decision package is identified, then a comprehensive cost-benefit analysis of it is made, starting from a scratch. Even if the activity is an ongoing one, still a fresh analysis is made for it. Likewise, all the activities are grouped into various decision packages and detailed cost-benefit analysis is carried out for each one of them. Then, these are all ranked in the order of their net benefits. Finally, we start accepting the decision package with the highest benefit-cost ratio. Acceptance here refers to the commitment of resources for that activity. Then the next one is accepted and the resources are allocated to it. We proceed this way, till we exhaust all the available resources. Thus, it can be seen that it is primarily an optimal resource allocation procedure.

The proposed objectives of the Government of India in introducing Zero Base Budgeting in India were:

1. Identification and sharpening of objectives,
2. Examination of various alternative ways of achieving these objectives,
3. Selecting the best alternative through a detailed cost/benefit analysis,
4. Prioritisation of objectives and programmes,
5. Switching off resources from low priority areas to high priority, and
6. Identification and elimination of activities which have outlived their utility.¹⁴

A decision package contains the following items:

1. *Objectives*: What are the likely achievements of this decision package?
2. *Programme*: How the objectives are to be realised?
3. *Benefits*: What benefits accrue by the achievement of the objective?
4. *Incremental Activities*: What are the additions that could be made to the decision units to improve them?

¹³ Government of India, D.O. No. F.11(5) W & M/87 dated 2nd July, 1987, Ministry of Finance, Department of Expenditure.

¹⁴ *Ibid.*

5. *Alternative*: Whether the objectives could be fulfilled in any other manner?
6. *Costs*: What is the funding required for this programme and what are the costs of non fulfilment of this objective?

Some of the major benefits of this system were that it eliminated the expenditures on items which had outlived their utility. By making people take a fresh look at the routine activities, it brought in welcome changes in the way of functioning of certain activities.¹⁵

Similarities with MOU

These are as follows:

1. It is similar to the MOUs to the extent that it requires clarity of objectives.
2. ZBB also prioritises the various objectives, though indirectly, by ranking the various "decision packages".
3. An evaluation of various activities is done in both cases, but in ZBB, it is done by the enterprise managers.
4. Both require a good information base for successful implementation.

Differences Between the MOU and the ZBB

These are as follows:

1. Primary objective of ZBB is optimal resource allocation while the thrust in the MOU is performance improvement through increased autonomy and accountability.
2. Zero Base Budgeting is normally used within the enterprise for evaluating various investment alternatives. However, in the case of government departments, the Finance Ministry is involved in the exercise towards the end.¹⁶
3. ZBB tries to improve performance by adopting the best alternatives and eliminating items which have outlived their utility, while MOU tries to improve performance by clarifying the performance criteria and the targets.
4. In the MOU system, the focus is on the organisation as a whole, i.e., how the organisation achieves the objectives is primarily left to the chief executive while the ZBB methodology is activity-oriented.
5. There is, of course, no evaluation at the end of the year in the case of ZBB, while year-end evaluation is a major component of MOUs.

¹⁵ P.L. Joshi and V.P. Raja, *Techniques of Zero Base Budgeting—Text and Cases*, Bombay, Himalaya Publishing House, 1988.

¹⁶ GOI, *op.cit.*

6. ZBB is not a system of agreements or contracts and, hence, there are no two parties.
7. There is no formal incentive scheme attached to ZBB, but a good performance incentive scheme is an integral part of a good MOU system.

PRODUCTION, PROFIT IMPROVEMENT MANAGEMENT SYSTEM (PPIMS)

This system of performance improvement for public enterprises was introduced in April 1982. It was first introduced in the Department of Steel and Mines and later extended to the enterprises under other ministries as well. The main features of this system were as follows:

1. The enterprises submitted an annual operational plan along with an annually updated five year projections. They were also required to submit various other information which were asked of them.
2. After submitting the annual operational plan, the enterprise managers discussed various physical and financial performance targets and significant project implementation targets with the administrative ministry. Based on the discussions, the administrative ministry approved the targets after making necessary modifications. It must be noted here that the criteria for evaluation were the same for all the enterprises.¹⁷
3. The administrative ministry monitored the progress of the agreed operational plan. Expected results were compared to actuals on three-monthly basis, but all the enterprises were expected to send monthly telex messages about their performance. Sometimes, the review was done on a fortnightly basis.
4. Monitoring groups were formed in Bureau of Public Enterprises, which made detailed recommendations on the management of the enterprises.

For the enterprise, it enabled the identification of the principal bottlenecks and impediments to profitability. For the Government, it highlighted the economic impact of projects and activities, the investments and complementary actions required and key weaknesses in both enterprise management and on the Government side.

Unfortunately, very little has been written on this system. The only systematic comment on it points out that the "main drawback was that it made no break with the strictly hierarchical and a *priori* control system which characterises the government- enterprise relationship in India. The

¹⁷ For details, see: Bureau of Public Enterprises, *Performance Aims and Financial Targets of Central Government Public Enterprises, 1984-85 & 1985-86*, New Delhi, Ministry of Finance, May 1984.

degree of state intervention in both strategy and operation was anything but strengthened by the highly detailed monitoring procedures. This led to reduced rather than increased autonomy for enterprise management and consequently to the substantial and widespread resistance which impeded the generalisation of the system and caused it eventually to be abandoned".¹⁸

Similarities with the MOU System

These are as follows:

1. PPIMS was designed as a performance evaluation and improvement methodology like the MOU system.
2. Both the PPIMS and the MOU system tried to improve performance by managing the government-public enterprise interface without interfering in the details of enterprise management.
3. Both the systems had physical and financial performance indicators.
4. In both systems, targets were set after mutual negotiations.

Differences Between the MOU and the PPIMS

These are as follows:

1. In the case of PPIMS, same set of indicators were used to evaluate all the enterprises, while in the MOU system, different enterprises have different sets of indicators for measurement of their performance.
2. PIMS had only four indicators, two financial and two physical. The MOUs do not have any fixed number for indicators. They vary from enterprise to enterprise.
3. In the case of PPIMS, year-end evaluation was done by the administrative ministry, whereas, in the case of MOUs, the annual evaluation is done by the HPC.
4. In the PPIMS, the physical and financial indicators (especially "return on capital employed" and "capacity utilisation") were highly correlated, and hence led to double counting of benefits for the enterprise. While this is a possibility in the case of MOUs also, the HPC tries to minimise such duplication by asking the enterprises to modify the MOUs before they are finally signed. Technical inputs are provided to the HPC by the ad hoc task force.
5. The monitoring done for PPIMS by the administrative ministry and the BPE was too frequent. The MOU system recommends only a half yearly monitoring system and an annual evaluation exercise.

¹⁸ For further details see: World Bank, *Report on Public Enterprises in India*, (Draft), Washington, 1988; and R. Ramaswamy Iyer, "Past Experiences With Public Enterprise Performance Evaluation Systems In India: Lessons for MOUs", Paper presented at the International Workshop on MOUs, organised by the Bureau of Public Enterprises and the Indian Institute of Management Calcutta, New Delhi, March 1989.

6. PPIMS also suffered from the drawback of having only one value for each of the performance targets, thereby making the judgement on deviations from the target a difficult task. The MOUs have a range of values for each of the targets to facilitate evaluation of deviations.
7. In PPIMS, as in many other systems also, the relative importance of the performance criteria was not specified. The MOUs have weights attached to each of these criteria and, hence, one can have a more meaningful and objective evaluation.
8. The PPIMS did not provide for dynamic indicators as in the case of MOUs.
9. PPIMS did not provide for qualitative criteria either, whereas the MOU system does so.
10. There was no linkage with the incentive schemes in the case of PPIMS, while such a linkage is recognised as a pre-requisite for a good MOU system.
11. The information base with the Government was not adequate to determine whether the PPIMS targets were soft or hard, whereas the government is augmenting its information base for determining the softness or otherwise of MOU targets.

SUMMARY OF THE COMPARATIVE ANALYSIS

Let us now briefly look at comparisons of the various approaches on some specific aspects and the differences among them.

1. *Formulation:* Performance budgets and the conventional budgets are in the nature of planning and budgetary control exercises. The MBO is formulated jointly by the boss and the subordinate. The ZBB's formulation is in the nature of cost-benefit analysis of various projects. In the case of PPIMS, performance criteria were predetermined. In fact, the same set of four criteria was used to evaluate all the enterprises. The MOU is formulated as a freely negotiated performance contract or agreement between the government and the public enterprise.
2. *Implementation:* In almost all the cases, the implementation of the systems is the responsibility of the enterprise's management. In the case of MBO, there is a structured procedure for implementation. For this purpose, most of the enterprise engaged consultants called MBO advisers. In the case of PPIMS, the implementation was monitored from above by the administrative ministry. The enterprise management is absolutely free to decide on the methods of achieving the MOU targets subject, of course, to the laws of the land.
3. *Antecedents:* The antecedents of performance budgeting as well as conventional budgeting are in scientific management principles,

measurement of profitability concept, where inputs must be related to outputs, concepts of standard setting, etc. The MBO has its antecedents in motivation theories, behavioural sciences, participative management principles and human relations. The concept of ZBB stemmed from the need for rejustifications of various projects of Governments in the USA and England. The PPIMS had its origin in the desire and zeal of some of the top experts on public enterprises, who were with the Government of India, to make use of the wealth of information that was available with the Government on public enterprises. The MOU has its antecedents in the French system of contracts as modified in the cases of South Korea and Pakistan. It combines both the motivational theories and scientific management principles.

4. *Goal Setting:* In the cases of MBO, PPIMS, conventional budgets and the MOUs, goal setting is a participative affair. Whereas in performance budgeting, it is not. In the case of ZBB, the concept itself is so different that there is no goal setting involved. In most of these systems, the goals of the organisations are taken as given.
5. *Control:* In performance budgeting, control is imposed through the need to meet the performance targets. In MBO, control up to lowest employee is through agreed objectives. In the conventional budgeting, the control is in the form of budget figures and various periodic reports. In ZBB, the control is in the form of expenditure control. But, the real control will be result only when the decision package came up again for scrutiny. In PPIMS, the control was by monthly monitoring by the administrative ministry. In MOU, the control is incorporated in targets set and it is management's responsibility to achieve those targets. Control is, thus, through results and not through procedures.
6. *Coverage:* Almost all the systems, except the MOUs, covered only the quantitative indicators. There is no literature available as to whether qualitative parameters could be covered by systems like MBO, Performance Budgeting and Conventional Budgeting Systems. The PPIMS covered only four indicators, two physical and two financial. Wherever this was not possible, those parameters were left out. For example, one of the physical parameters was capacity utilisation. This was very difficult to measure in the case of Indian Airlines. Hence, Indian Airlines had only one physical indicator for measuring its performance.¹⁹ Amongst all these systems, MOUs have the widest coverage, as it provides for both qualitative and quantitative indicators, as well as, static and dynamic indicators.
7. *Thrust:* Each of the performance improvement systems had its own thrust areas. Performance budgeting focuses on improving the total

¹⁹ BPE, *Performance Aims and Financial Targets of Central Government Public Enterprises*, op.cit.

output to total input ratio, while the MBO emphasises on achievement of targets, which have been fixed after mutual agreement. In conventional budget, the thrust is on achieving the budget figures, in the case of expenses, it is not exceeding the particular figure. The PPIMS tries to improve performance by very frequent monitoring. The thrust in ZBB is the choice of the best decision packages and total elimination of others. In MOUs, the focus is on improving the overall performance as indicated by the composite score.

8. *Evaluation:* The administrative ministry plays the role of the evaluator in the case of performance budgeting, PPIMS, and conventional budgeting systems. The MBO has not really been tried at the level of government-public enterprise interface, but conceptually, the administrative ministry and the enterprise together will evaluate the performance. In ZBB, there is no evaluation at the end of the time period, except when the decision packages come up for scrutiny. However, one would expect the Ministry of Finance to be the final evaluator in this case. The MOU is the only system with an objective evaluation by a third party in the form of the HPC.
9. *Managerial Performance vs Enterprise Performance:* The MOU and MBO systems make a distinct difference between the managerial performance and the enterprise performance. By managerial performance, we refer to the performance of the managers on those things over which they have control. That is, managerial performance is arrived at by adjusting the enterprise's performance adjusted for the items which are not under the control of the managers. The PB, ZBB, PPIMS and conventional budgetary systems emphasise enterprise performance, while MBO and MOU focus on managerial performance.

CONCLUDING REMARKS

Let us now see how each of the above systems mesh with the systems of MOUs. Although all of them have performance improvement of public enterprises as their ultimate objective, they are not substitutes for each other. That is, perhaps, the reason why many of them continue to co-exist with the introduction of new ones. One exception to this rule of co-existence is, of course, PPIMS and this has been given a go by for reasons mentioned earlier in this article. The MOU system incorporates all the positive aspects of PPIMS, while correcting its not so positive aspects. In fact, most of these systems complement each other very well. For example, without a good budgetary control system, none of the others can have any meaningful existence. We can look at the MOU system to be at the top, *i.e.*, the chief executive has to improve his composite score. Then he has all the other

methodologies available to him for achieving the MOU targets. These various systems can be looked at as strategies available to the chief executive for meeting his MOU commitments. In fact, MBO could be one of the ways of implementing the MOU down the line in the organisation. The ZBB can be used to identify and eliminate wasteful expenditure. Conventional budgets, of course, will form the primary documents for preparation of the MOU itself. Thus, a judicious mix and use of one or more of the above mentioned systems will go a long way in helping the chief executive to improve the overall performance of the enterprise as indicated by the composite score.

COMPARATIVE STATEMENT BETWEEN MOU, ZBB, PERFORMANCE BUDGETING, MBO, CONVENTIONAL BUDGETING AND PPIMS

ITEM	ZERO BASE BUDGETING	PERFORMANCE BUDGETING	MBO	CONVENTIONAL BUDGETING	PPIMS	MOU
Focus Clarity of Objectives of the PE	Organisation Low	Organisation Medium	Organisation High	Organisation Low	Govt-PE interface Low	Govt-PE interface High
Relative importance between the Objectives	Not given	Not given	Not given	Not given	Not given	Given
Evaluator	CEO	Government	Boss-Subordinate	Administrative Ministry	Administrative Ministry	High Power Committee
Incentive	No	No	Yes	No	No	Yes
Linkage Periodicity	Yearly	As required	As pre-determined	As pre-determined	Monthly (Fortnightly also)	Quarterly (or Bi-annually)
Involvement of Other Ministries	Yes	No	No	No	No	Yes
Correlation Between indicators	NA	High	High	High	High	Low
Main thrust	Investment planning	Control by result	Control by Objectives	Control by Procedures	Control by Monitoring	Control by Results
Linkage with MOU	No	Internal control Mechanism	Aggregates as MOU targets	Coterminous with MOU	No	NA