

# Using a Performance Measurement Framework to Overcome the Odds against Performance Management in the Public Sector

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## ABSTRACT

*The importance of measuring the efficiency and effectiveness of governmental programmes features prominently in almost every discourse related to programme monitoring and evaluation. Phrases like 'what gets measured gets done and if you cannot measure it you cannot manage it' attest to the significance attached to measuring the efficiency and effectiveness of governmental programmes. Despite the apparent appreciation of the benefit of performance measurement, how to measure the performance of governmental programmes continues to elude academics and practitioners of public management.*

*This article, informed by available literature on performance measurement in the public sector and the New Public Management paradigm, contends that measuring the efficiency and effectiveness of governmental programmes requires development of a performance measurement framework or logical model consisting of outcomes, outputs, activities and inputs for the programme. Performance indicators, that specify what to measure, should consequently be developed for each component in the results framework. Since performance measurement hinges upon availability of timely and reliable information, identification of the sources of information on performance indicators; determination of the methods and frequency of data collection; and assignment of the responsibility for data collection are stressed in discussion.*

## THEORETICAL AND CONCEPTUAL PERSPECTIVE

During the 1970s, the traditional model of public administration received sharp criticism from scholars and practitioners of public administration. The model was criticised for being

inefficient, costly, rigid, corrupt, unaccountable and unsuitable for an age seeking more dynamic models of social and economic development (Hughes 1998). Under the traditional model of public administration, the performance of programmes, and of programme managers, were largely judged on inputs and processes. Traditional bureaucracies would devote most of their time to processes and activities, and perhaps to outputs produced. They worked at trying to be more efficient at delivering what they were traditionally producing, with limited value and consideration to the value or appropriateness of their activities and outputs (Ruffner 2002). Thus, bureaucracies were wrestling with measurement of means rather than ends yet public sector programmes are instruments for achieving social goals; they are means to an end (Schacter 1999). Over-emphasis of inputs, processes and activities implied that traditional bureaucracies were focussing on how they *kept busy* and not on *how they made a difference* in the lives of programme beneficiaries. It must be made clear that emphasis on ends of governmental programmes does not mean that keeping track of means (as opposed to ends) is not important. Means of governmental programmes aid in monitoring the performance of programmes and may inform attendant remedial action. However, when performance measurement hinges heavily or exclusively on how much is spent- *inputs*-, or done-*outputs*- as opposed to impact on society-*outcomes*- the result is that public sector organisations lose sight of why they were created in the first place (Schacter 1999). Similarly, being obsessed with delivering outputs has limitations and may deflect the attention of public delivery agencies from the impact of their programmes.

The above criticisms against the traditional model of public administration paved the way for emergence of a new species or model of public administration with different incarnations such as *new public management*, *managerialism* and *post-bureaucratic model* (Sakar 2006). In this discussion, the new species of public management emerging from an antithesis of traditional public administration shall be referred to as New Public Management (NPM). Pollit (2001) conceptualises NPM as comprising several elements, the following of which apply to performance measurement: a shift in the focus of management systems and management effort from inputs and processes to output and outcomes; and a shift toward greater measurement manifesting itself in the appearance of batteries of performance indicators and targets. NPM should ordinarily translate into a shift in the thinking about performance management and measurement, that is, managers at all levels need to bear in mind that they are engaged in activities and producing outputs not for their own sake but in order to achieve *big picture* outcomes in line with the mission of the programme (Ruffner 2002).

Measuring the performance of governmental programmes has received scholarly attention in the last three decades. The popular adage that 'if you cannot measure it, you cannot manage it', and 'what gets measured gets done' comprehensively summarises the rationale for performance measurement in organisations. Osborne & Gaebler (cited in Southern Growth Policies Board 1996) give insight into the importance of performance measurement by observing that

*what gets measured gets done; if you do not measure results, you cannot tell success from failure; if you cannot see success, you cannot reward it; if you cannot reward success, you are probably rewarding failure; if you cannot recognise failure, you cannot learn from it; and if you can demonstrate results, you win public support.*



Performance measurement is an indispensable tool to render public service units accountable to the society they serve, lower level managers and employees to their superiors, intermediary public institutions to the public institutions that finance them, central government and local administration officials to taxpayers and fee payers. Governments hold themselves accountable to citizens through monitoring and reporting on the performance of programmes that they design and implement.

Measuring performance in the public sector is an entirely different case because the public sector exists for different reasons than the private sector. Unlike the private sector that exists to make a profit, the public sector aims at improving peoples' lives in ways that cannot be measured in terms of shillings and cents.

Given the indisputable benefits that accrue to organisations from performance measurement, the lingering question is: how can we, in practical terms, measure the efficiency and effectiveness of governmental programmes? To ensure that performance measurement focuses on efficiency and effectiveness, it is pertinent that these concepts are clearly defined. Efficiency refers to the ratio of input to output/outcome. A programme that achieves a given level of outcomes (and outputs) at a lower cost than an alternative programme can be said to be performing at a higher level of efficiency (Schacter 2002). Effectiveness relates to the extent to which the programme achieved its objectives/goals. A programme whose objective or goal was to reduce infant mortality by 50% can be said to have been 100% effective if it reduced infant mortality by 50%. However, if the same programme reduced infant mortality by 25%, then it can be said to have been 50% effective. From the foregoing, it can be inferred that one can be effective without being efficient but one cannot be efficient without being effective.

The effective measurement of performance in the public sector requires developing a performance measurement framework. The performance measurement framework is at times referred to as the logical model. In this article, the logical model and performance measurement framework are used interchangeably. A logical model is a depiction of the inputs, activities, outputs and outcomes of the programme. The logical model enables one to think through, in a systematic way, the objectives of the programme and the steps through which the programme will accomplish its objectives. The most important thing that a logical model does is to compel one to think about the ultimate outcomes to which a particular programme is supposed to be contributing. Ordinarily, the logical model must begin from bottom up, that is, it must begin with the outcome and end with inputs; one must identify the programme outcome (or impact) and then engage in discontinuous thinking. The visual representation of the links between the various elements of the model is a reminder that inputs, activities and outputs only make sense in relation to the outcomes they are supposed to be influencing (Schacter 2002). The logical model will help one to answer the question in relation to how the programme is going to *make a difference* in the lives of the intended beneficiaries. The model leads us, therefore, to the most fundamental principle of performance measurement: "you cannot do a good job of performance measurement in the absence of agreement on high level outcomes (impact) that drive the design of the logical model which in turn influences the selection of performance indicators" (Schacter 2002:13).

In view of the above description of the logical model, it is befitting that the key concepts in the logical model-outcomes, outputs, processes, activities and inputs are defined to avoid any conceptual difficulties relating to them.

## Outcomes

Outcomes have been defined by various concepts as benefits that arise from one's actions (Ruffner 2002); intended and unintended results from governmental actions (Christensen 2001); a direct or indirect consequence of outputs (Schacter 2002); the consequence of what the programme did or impact of outputs (Diamond 2005); and impacts, or consequences for the community, which are realised by the public management within the framework of its objectives (Eren & Durna 2008). Outcomes may be intended or unintended and stem from outputs. No outcome, whether positive or negative, can result unless outputs have been delivered. Outcomes further relate to how an agency makes a difference in the lives of people outside it. Thus, they are external to a government agency. In the context of governmental programmes, outcomes are normally intended to be changes for the better in the target group of the programme. Individuals in organisations have got no control over outcomes, but they can influence them. This implies that outcomes are within the organisation's area of influence and not control. To be meaningful, outcomes should have specific desirable characteristics. The outcomes should adequately reflect the government's objectives and priorities; be indicated by the impact on the community; be differentiated from the agency's strategies to which they contribute; clearly identify target groups, if so focused; be achievable in a specified time frame; be possible to monitor the achievement of outcome; identify the causal link between an agency's output and outcome; and have clarity in definition and description to be reported externally (Diamond 2005).

## Outputs

Outputs are activities completed by the organisation or products produced (Schacter 1999); goods or services which government bodies provide for citizens, business and/or other government bodies (Ruffner 2002). Outputs should bear particular characteristics which include being a good or service provided to individuals /organisations external to the agency; clearly identified and described; for final use and not for an internal process or intermediate output; able to contribute to achievement of planned outcomes; under the control (directly or indirectly) of the agency; able to generate information on attributes of performance, price, quality, and quantity; and generate information that is a basis for performance comparison over time or with actual or potential providers (Diamond 2005).

## Activities

Activities connote everything that is done to transform inputs into outputs. They also relate to the process.

## Inputs

Inputs are raw materials in the production process. Inputs may include people (the human resource), information, money, and vehicles.



## PERFORMANCE INDICATORS

Having identified the outcomes, outputs, activities and inputs, the next step in developing a performance measurement system is to develop performance indicators for every step in the logical framework. Performance indicators are measures that describe how well a programme is achieving its objectives. Whereas an objective or outcome identifies what a programme hopes to accomplish, indicators clarify specifically what to measure to determine whether the programme has achieved its objectives. Performance indicators are the heart of a performance monitoring system as they define the data to be collected to measure progress and enable actual results achieved over time to be compared with planned results. According to Schiavo & Tommasi (1999:334) performance indicators should be clear (precise and unambiguous); relevant (appropriate to the objective at hand and not used simply because they are available); economic (the data required should be available at reasonable cost); adequate (by themselves or in combination with others, the measures must provide a sufficient basis for assessment of performance); and monitorable (must be amenable to independent scrutiny). It must be emphasised that while performance indicators offer clues to the success or failure of the programme, they have to be interpreted and a comprehensive evaluation is required to confirm this.

Performance indicators measure the changes caused by the programme, but should not indicate the direction of the change, for example, an indicator for a programme aimed at reducing infant morbidity may have a performance indicator like infant morbidity rate and not reduction in infant morbidity rate which indicates the direction of the change. Once information gathered on the performance indicator(s) is interpreted, inferences would have to be made on the direction of the change as a result of the governmental programme; whether the morbidity rate is increasing or decreasing. This, therefore, implies that performance indicators have to be interpreted in order for them to make sense to those measuring the efficiency and effectiveness of governmental programmes. While using performance indicators, one has to bear in mind that *what you measure is what you get*. If one uses wrong performance indicators, he or she measures a wrong product/service and gets wrong results. For one to have a comprehensive view of performance against each of the elements in the logical model, a minimum of two and a maximum of three performance indicators are needed since a single performance indicator can be overtly deceptive, for example, one cannot conclusively infer that a person is rich by merely focusing on that person's assets. To be able to conclude that a person is rich, one must comprehensively examine the assets and liabilities of that person. Performance indicators are indispensable when it comes to monitoring the performance of governmental programmes and/or measuring their efficiency and effectiveness. Admittedly, without performance indicators, performance measurement becomes mere guesswork and an exercise in futility.

Performance indicators should be developed for all the elements in the logical model (inputs, activities, outputs and outcomes). Input performance indicators address the question of the quantity of resources needed to provide a particular programme or service (Eren & Durna 2008). These resources include funding, equipment, and human resources. Output performance indicators measure outputs produced by the programme. In a programme aimed at reducing the infant mortality with outputs like children immunised and mosquito nets distributed, the appropriate performance indicators may include, among others,

number of children immunised as a percentage of total eligible children; and cost per child immunised. Number of children immunised as a percentage of total eligible children measures effectiveness while the cost per child immunised measures efficiency. Outcome performance indicators describe the results achieved compared to the intended purpose, or progress towards achieving the objective, to the extent, which a service or activity has impacted on its audience (Eren & Durna 2008).

Outcome performance indicators are used to measure the state of society in areas where the government is trying to bring about change, that is, they focus on the desired results of government actions (e.g. reduced maternal mortality rate, crime free society and a more literate population). It ought to be noted that indicators at input, activity and output level in the logical model tell little, if any, about whether a governmental programme is assisting to *make a difference* to the public. Indicators at outcome level give a fair reflection of whether the programme is *making a difference* to society.

Having developed the performance indicators for the different elements in the logical model, the next step is to identify the sources of information on performance indicators DEVE, the methods of data collection, frequency of data collection and assignment of the responsibility for data collection and determining the form in which data should be reported.

## **DEVELOPING A LOGICAL MODEL OR PERFORMANCE MEASUREMENT FRAMEWORK FOR A GOVERNMENTAL PROGRAMME**

Under this section, it will be illustrated using the Millennium Development Goals (MDG) of reducing child mortality, how one can develop a performance measurement framework and accordingly measure the efficiency and effectiveness of a governmental programme. A government committed to the above MDG may develop a programme aimed at reducing child mortality. In this case, reduced child mortality constitutes the desired outcome (impact) or objective of the programme. This outcome depicts how the governmental programme would make a positive difference outside the government ministry or department of health. A performance indicator should be developed and should inform the setting of the target for the programme. Ideally, outcome targets should be attached to the identified performance indicators. Informed by the available baseline data, government may set a target of reducing by two thirds the mortality rate among children under five. Apart from the setting of outcome targets for the programme, baseline data should also serve as the basis upon which the impact of the governmental programme (or lack of it) can be comprehensively measured.

After identifying the outcome for the programme, the programme developers or managers should systematically progress to identifying the programme outputs that contribute to the attainment of the desired outcome (reduced child mortality). While the outcome of reducing infant child mortality constitutes how the programme would make a difference outside the government ministry or department, outputs signify how that government ministry or department would keep busy. In the case of the above MDG the likely outputs may include, among others, children immunised and mosquito nets distributed. These outputs are premised on the assumption that the high infant mortality stems from prevalence of preventable diseases. Any intervention to address the causes of high child mortality must



**Table 1** Depiction of the logical model for a programme aimed at reducing child mortality

Step in the logical model	Examples relating to the step in the logical model and the attendant target	Performance indicators for each step in the logical model
<b>Outcome</b>	<p><b>Outcome:</b> Reduced child mortality</p> <p><b>Outcome Target:</b> To reduce by 2/3 the mortality rate among children under five by 2015</p>	<ul style="list-style-type: none"> <li>• Under five mortality rate</li> <li>• Proportion of children dying from malaria and immunisable diseases</li> <li>• Under five morbidity rate</li> </ul>
<b>Outputs</b>	<p><b>Outputs:</b></p> <ul style="list-style-type: none"> <li>• Children immunised</li> <li>• Mosquito nets distributed</li> </ul> <p><b>Output Target:</b></p> <ul style="list-style-type: none"> <li>• To immunise 2 000 000 children under five years by end of 2009</li> <li>• To distribute 3 000 000 insecticide treated mosquito nets by end of 2010</li> </ul>	<ul style="list-style-type: none"> <li>• Number of children under five immunised as a percentage of the total eligible number</li> <li>• Immunisation coverage</li> <li>• Unit cost per child immunised</li> <li>• Number of mosquito nets distributed against the target</li> <li>• Cost per mosquito net distributed</li> <li>• Malaria prevalence rate among children under five</li> </ul>
<b>Activities</b>	<p><b>Activities</b></p> <p>Dispatching the vaccines and mosquito nets, identifying the immunisation centres and communicating them to the population, sensitising parents and guardians, and mobilising communities</p>	<p>Amount of vaccines dispatched, number of designated immunisation centres, average distance from a homestead to the nearest immunisation centre, number of mosquito nets dispatched to the distribution centres, number of parents and guardians sensitized, community awareness level about causes of high child mortality rate, etc</p>
<b>Inputs</b>	<p>Vaccines, syringes, mosquito nets, people (the human resource), refrigerators, vehicles and money.</p>	<p>Number of syringes, number of mosquito nets, health worker child ratio, etc</p>

be assumed to contribute to realisation of the programme outcome. This is premised on the philosophy that a problem is solved not by removing it, but by weakening what sustains it. For the output of children immunised, the relevant performance indicators may include: number of children immunised as a percentage of total eligible children; immunisation coverage; and unit cost per child immunised. Number of children immunised and immunisation coverage would assist to measure whether the programme was effective at output level while unit cost per child immunised would assist to measure whether minimum input was used to immunise the children.

Having identified the outputs, one should sequentially move to identifying activities for the programme. The activities, if successfully implemented, should contribute to programme outputs. For two outputs identified for the programme, the activities may include dispatching the vaccines and mosquito nets; identifying the immunisation centres and communicating them to the stakeholders; and sensitising parents and guardians. Performance indicators for activities should also be identified (see table1 for the appropriate performance indicators).

Lastly, the programme inputs should also be identified. In relation to the above outputs and activities, the relevant inputs may include vaccines, syringes, mosquito nets, people (the

human resource), refrigerators for storing vaccines, vehicles and money. As with the other steps in the logical model, performance indicators should be identified for activities.

To enable effective monitoring of the programme and measuring the efficiency and effectiveness of the same, the sources of information on the performance indicators must be identified, the methods of data collection determined and the responsibility for collecting data assigned. The sources of information may include individuals, organisations and reports while the methods of data collection may include interviews, questionnaires and documentary reviews. The responsibility for collecting data, the frequency of reporting and the format in which information has to be reported must accordingly be determined. This is important as performance information is vital since it aids in comparing actual performance against the planned performance and baseline information.

## Logical Model assisting in overcoming the odds against performance measurement in the public sector?

As already observed performance measurement in the public sector is *devilishly difficult* but can be made *breathtakingly simple* by using a performance measurement framework (Schacter 2002:2). A logical model or performance measurement framework makes measurement of governmental programmes simple because:

- It informs the programme manager of the results to expect and through performance indicators, provides a signal that progress is being made towards the achievement of those results. Indicators further provide a means of measuring actual results against planned or expected results in terms of quality, quantity and timeliness at output and outcome level.
- Since governmental programmes are means to an end, the logical model enables programme managers and designers to consider issues beyond inputs, activities and outputs of the programme to the goal of the programme. In this way, government officials do not lose sight of the purpose of governmental programmes which are *making a difference* to the public and not merely *keeping busy* even though *keeping busy* can contribute to *making a difference*.
- The performance indicators, which are developed for the different elements in the logical chain, define what data to collect to measure progress and enable actual results achieved over time to be compared against planned results. Without performance indicators, measuring the efficiency and effectiveness of governmental programmes and reporting on performance of governmental programmes can prove to be a challenging task.

## CONCLUSION

Governments, at whatever level, exist to ensure sustainable socio-economic development through the provision of efficient and effective services to the public. To this end, governments will continue to design programmes with a view to contributing to socio-economic development. A performance measurement framework that has been presented and discussed can serve as an invaluable tool for measuring the efficiency and effectiveness of such programmes.





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