Role of Theories of Change and Programme Logic Models in Policy Evaluation

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ABSTRACT
This article assesses the contribution that theories of change and programme logic models can make to policy evaluation. The article starts by summarising the need for systematic evaluation to improve evidence-based policymaking. It then assesses the use of theories of change and the programme logic model in policy evaluation. It further highlights the important conceptual steps to be taken during the planning and implementation of a systematic policy evaluation project within the framework of the new South African National Performance Management System (NPMS).

INTRODUCTION
Evaluative thinking in human affairs is as old as mankind itself. Throughout the ages, there has been a strong belief that the social sciences and humanities have an important role to play in changing and improving human conditions. Although evaluation methods have been used for a long time, evaluation as a research method only became more formal and systematic during the early 1960s. These processes were mainly aimed at assessing the functioning and results of government with the objective of improving society. As Carol Weiss (1977:4) observed, evaluation was expected to bring order to the untidy world of government.

In the age of the audit society, where ordinary citizens hold government accountable for their decisions, evaluations have become an integrated part of information management systems. A number of authors have assessed the possible contribution of evaluation towards developing a more democratic society (see Chelimsky 2006; Greene 2006; House and Howe 1999; MacDonald 1976 and 1978; McTaggart 1991 and Ryan 2004). Today, it is widely accepted among scholars that applied evidence-based evaluation research has an important part to play in addressing the problems contemporary society faces.

While academic researchers frequently seek to identify and understand the nature and scope of societal problems and the details of governmental strategies to improve or counter them (i.e. new knowledge generation), evaluation researchers take these results further and...
assess whether prevailing insights into and actions to address problems have led to changes in the nature of those problems, and how these outputs of governmental agencies can be improved to address the perceived problems more effectively and efficiently. Thus, they tend to assess the internal activities and processes of public sector agencies. Furthermore, they evaluate how these attempts to convert resource inputs have been transformed into outputs that might have changed the status quo ante more in line with the initial goals of these interventions (therefore rather a problem-solving approach). Such systematic policy programme and project evaluations are therefore more applied research, with a clear focus on improving or transforming the status quo into a better status quo. Therefore, policy evaluation frequently tests to what extent the normative assumptions of policy-makers have been implemented appropriately, as well as to what extent these programme and project interventions have resolved or improved the problems that they were supposed to address. Evaluations can be undertaken on any aspect of a policy, programme or project. However, it must comply with the minimum criteria of validity for such evaluation design and methodology. This article attempts to find out what contribution theories of change and programme logic models can make to increase the scientific validity of evaluations.

THE NEED FOR EVALUATION IN EVIDENCE-BASED POLICY MANAGEMENT

The need for evaluation increases as democratic governance models are introduced. This is especially true in transitional societies, such as South Africa, where New Public Management models or multi-level governance models have been developed to replace old paradigms of state-centred services delivery. A “democratic function of evaluation is to help increase effectiveness and rationality in public policy and democratic governance” (Hanberger 2006:23).

According to Patton (1997:23 in Jacob 2008:6), programme evaluation is the systemic collection of information about the activities, characteristics and outcomes of programmes to make judgements about a programme, improve programme effectiveness, and/or inform decisions about future programmes. Utilisation-focused programme evaluation, as opposed to programme evaluation in general, is evaluation done for and with specific, intended primary users for specific, intended uses. This type of evaluation also supports communities in effecting policy change at the local, provincial and national spheres (W K Kellogg Foundation (1998) in Jacob 2008:9).

Performance of a policy programme or project can be measured according to its relevance, efficiency, effectiveness, sustainability and impact. There is a growing realisation among public sector managers that systematic policy evaluation is crucial to governments to ensure good governance processes and outcomes.

In the last decade good governance has emerged as one of the important factors on the African development policy agenda. Good governance has been identified as one of the most basic elements to fast track development in Africa (The World Bank 2000). In fact, many experts see good governance as a prerequisite for sustainable development. Monitoring and evaluation (M&E) have thus become an essential element within the broader governance framework that could be used in the interest of better decision-making to serve
the needs of our people (Development Bank of Southern Africa, the African Development Bank and the World Bank 2000:2).

The link between good governance and monitoring and evaluation (M&E) is profound. An accountability framework can provide governments and citizens with valuable information on the effectiveness, efficiency and quality of government programmes. It also provides a basis for making public servants accountable to their administrative superiors, political representatives, and the general public, and provides the information to evaluate the performance of political leaders. An accountability framework can be an opportunity and an incentive for continuous learning, for both public servants and politicians (Development Bank of Southern Africa, the African Development Bank and the World Bank 2000:22).

According to the World Bank, developing evaluation expertise at the national level does not only involve the development of the necessary skills and the use of appropriate technology, but also meets the following complicated prerequisites of good governance (Development Bank of Southern Africa, the African Development Bank and the World Bank 2000:22):

- **Accountability**: It involves the performance of the public sector management. Importantly, it demonstrates how far a programme or policy has achieved its objectives; what benefits have been achieved; how the funding was spent; how well it has used its resources; and what has been its impact.
- **Transparency**: Governments should foster transparency through disclosure of information and public expenditure reviews, and should contribute to build capacity in public policy analysis and dissemination.
- **Combating corruption**: The focus should be on preventing and controlling corruption.
- **Participation**: Public policies should focus on stakeholder participation, partnership and co-operation in policy – and programme development.
- **Capacity development**: Involves changes in knowledge, attitudes and skills, as well as changes at the organisational and institutional levels.
- **Legal and judicial reform**: Creating and maintaining a predictable legal environment, with an objective, reliable and independent judiciary is a pivotal component of good governance (Development Bank of Southern Africa, the African Development Bank and the World Bank 2000:26).

Evaluation generates reliable evidence that has a direct impact on policy performance and effectiveness. This, in turn, could support democratic accountability which is fundamental to the principles of good governance. “An evaluation framework could therefore provide a critical link between good governance and monitoring and evaluation” (HM Treasury 2011:12).

Scientific information and evaluation findings support sound public management in at least three areas:

- Governments and citizens gain valuable information on the effectiveness, efficiency and quality of governmental programmes – the learning function of M&E.
- It supports Cabinet in terms of government’s decision-making and the setting of priorities – particularly the budget process.
- It provides the evidence that is necessary for governments to be accountable to civil society (Development Bank of Southern Africa, the African Development Bank and the World Bank 2000:3).
A good evaluation is an integral part of policy-making and effective government and is a powerful tool available to the policy-maker (Rabie and Cloete 2011:196). Therefore, a good monitoring and evaluation system could be regarded as a management tool that could promote good governance – especially for developing countries (Development Bank of Southern Africa, the African Development Bank and the World Bank 2000:3).

The main aim of an M&E system in policy development is to help decision-makers to assess whether and how successful new policies are and were over time. More specifically, policy evaluation is conducted to monitor the effects of the specific policy and for evaluating the policies in terms of necessity, efficiency and validity (Rabie and Cloete 2011:196-199). Effective M&E systems should assist in answering the all-important questions, and should respond to stakeholders’ growing demands for results. Just as governments need financial and human resources, as well as accountability systems, they also need good performance feedback systems. An effective monitoring and evaluation system can help provide this (Mackay 2007:3).

As representatives of the World Bank already stated in 1998:

No public sector can afford to overlook the importance of clearly defining its objectives and priorities, assessing performance against well-defined benchmarks, and changing the bureaucratic culture into one that stresses client service and achievement of results . . . evaluation now becomes a key instrument of good governance and institutional development within our client countries (Mackay 1998: ix).

According to the policy guidelines set out by the South African government, state reform is inextricably interwoven with community development. Therefore, other stakeholders in the system should also use the data to monitor performance. Ideally, civil society should also be part of this stakeholder group; not only to give feedback, but also to perform their own evaluations with support from Government (MacKay 2007:5).

M&E can provide useful information about the performance of government policies, programmes and projects. It is able to identify what works, what does not work, as well as the reasons why it works or why it does not work. M&E also provides information about the performance of a government, of individual ministries and agencies, as well as of managers and their staff. Furthermore, it provides information on the performance of donors that support the work of governments. More specifically, it should support policy-making, especially budget decision making; assist government ministries in their policy development, evaluation capacity-building; in their analysis of their monitoring and evaluation system; the accountability of decision-making and activities of different ministries (Mackay 2007:101).

An evaluation system should be designed in such a manner that it could help to answer all-important questions, and respond to stakeholders’ growing demands for efficiency, accountability and citizen participation. However, this is not always the case, since the way evaluation is done often does not account for the complexity of policy and programme development, the difficulty of implementing interventions, and the long-term nature of the change process needed for policy development and implementation (Auspos and Kubisch 2004:7).

The World Bank (2000) emphasises the importance of identifying the existing barriers to building an M&E system. These barriers include a lack of:
- genuine demand and ownership;
- a culture of evidence-based decision-making and accountability (due to issues of ethics or corruption);
- evaluation, accounting or auditing skills; and
- quality, credible financial and other performance information.

Evaluation capacity development (ECD) is a way of attaining more efficient and effective development delivery and results (see Figure 1). In the same way, efforts should be made to strengthen the national ECD according to the unique circumstances of the country concerned. A diagnostic guide has been prepared to analyse a country’s environment and to identify the most feasible options for evaluation capacity development (ECD). The guide also contains detailed checklists of issues that can be addressed when undertaking such a diagnosis (Mackay 2007). There are specific considerations that need to be addressed when preparing an ECD strategy and action plan for each country. In particular, it is important to undertake a detailed diagnosis of the country’s circumstances, in order to identify clearly

**Figure 1 Results chain for evaluation capacity development**

<table>
<thead>
<tr>
<th>Civil Society</th>
<th>Government</th>
<th>Impact</th>
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<tbody>
<tr>
<td></td>
<td>Government</td>
<td>Reduction in poverty</td>
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<td></td>
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<td>† Improved development effectiveness</td>
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<td>† Improvements in soundness of government</td>
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**Government uses M&E findings for:**

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<th>Accountability</th>
<th>Resource allocation</th>
<th>Learning</th>
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<tr>
<td>Civil society assesses government performance and inputs freely to policy debates</td>
<td>Availability of M&amp;E findings facilitates accountability</td>
<td>M&amp;E findings feed into budget decision-making</td>
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**Impact**

**Outcomes**

**Government initiates/strengthens M&E capacities, functions and institutions**

<table>
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<th>Processing</th>
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<tr>
<td>Civil society – Parliament, NGOs, think-tanks, universities – strengthens its M&amp;E and policy analysis capacities</td>
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<tr>
<td>Ownership and Awareness raising – build demand</td>
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**Source** Adapted from Mackay 2007:76
and realistically the opportunities and constraints that exist (Development Bank of Southern Africa, the African Development Bank and the World Bank 2000:1).

In order to ensure that government programmes add value to the status quo and improve it effectively, policy issues and problems must be identified in an accurate, appropriate fashion and feasible policy transformation goals must be drafted. Furthermore policy change programmes, which are based on an appropriate theory of change and implementation strategies that are based on appropriate programme logic, must be developed to help transform an unsatisfactory status quo into more desirable future conditions.

DEVELOPING A THEORY OF CHANGE

The theory of change approach was suggested for the first time in a 1995 publication, New Approaches to Evaluating Comprehensive Community Initiatives, by the Aspen Institute Roundtable on Community Change (Weiss 1998:11). Carol Weiss, a member of the Roundtable’s steering committee on evaluation, argued that a key reason why complex policies and programmes are so difficult to evaluate is because the assumptions that inspire them are poorly articulated or in some cases not even identified at all. This leads to confusion as to how the process of development and implementation will unfold and therefore places little attention on the evaluation of early and mid-term indicators (formative evaluation) that need to be implemented in order to reach a longer-term goal. Weiss suggested an alternative type of evaluation, namely theory-based evaluation, where outcomes-based evaluation was based on theories of change that underlie the evaluation (Weiss 1998:11). A theory of change is also called the programme’s theory of action (Patton 2008:352).

Theories of change are based on theoretical assumptions made on why the policy or programme will be successful (reach its outcomes), or not. Notably, theories of change form the backbone of systematic policy analysis. They explain why specific types of job creation should work better than other types; why visible police patrols might be more effective to reduce crime than heavy penalties for certain crimes; and why outcomes-based education is supposed to produce better educated entrants for the marketplace.

A basic, fundamental theoretical and practical understanding of the social problem to be addressed is needed to develop a theory of change. Therefore, theory of change needs to be grounded in, or at least be informed by, both prior basic research evidence and knowledge of good practice. In this sense, basic research should act as the foundation for applied science (Auspos and Kubisch 2004:7). In this way policies could be built on a solid knowledge base on what the stakeholders perceive to be working in both theory and practice.

Theoretical ideas, as well as practical knowledge (or practice wisdom) could be linked to explain underlying assumptions. Importantly, assumptions are the conclusions reached on the basis of stakeholders’ state of knowledge and experience about the problem or situation at a given moment before the new policy intervention is started. Differently stated, this is the theory or set of coherent underlying beliefs about how a programme or policy will work and why it is designed and implemented in a specific way. These assumptions are validated by means of knowledge gained from basic research and practice wisdom (University of Wisconsin Undated).
DEVELOPING A PROGRAMME LOGIC MODEL

A theory of change leads policy designers and implementers to develop a programme logic model to explain the activities and processes of the intervention that will have to be made, in order to achieve the transformation goals set. These are the desired effects, or outcomes and impacts, of the envisaged policy. The programme logic of the theory of change is therefore its action or business plan, or its implementation strategy. An evaluation focuses on what activities have been decided upon, how they have been implemented and what their consequences were. This will shed light on the aspects of the policy or programme that are working, and those that are not working and why they have failed to reach their goal. These evaluation insights can inform future decisions on maintaining, terminating or adapting the policy in question, in order to improve its efficiency and effectiveness in future (Bichelmeyer and Horvitz 2006:1). It is therefore important to frame the problem(s) or issue(s) to be addressed within a sound theoretical framework of change. If this basic research homework is not done, a defective understanding of the nature of the problem is possible. This leads to the development of a policy programme or project to resolve or improve the problem that is based on incorrect assumptions. Therefore, it is doomed to failure.

The programme logic model is generally accepted as the most useful way to unpack the practical implementation of the theory of change. The origins of the programme logic model are traditionally traced to Suchman (1967), Weiss (1972), Bennett’s (1976) hierarchy of evidence, as well as Wholey’s (1979) evaluation techniques. The programme logic model is an analytical tool that is used to plan, monitor and evaluate projects. It derives its name from the logical linkages that are set out by the planner(s) to connect a project’s means with its ends (University of Wisconsin Undated). The main links are among inputs, activities, output and outcomes. Generally, the programme logic model will identify the following elements of a policy intervention:

- issues being addressed and the context within which the policy takes place;
- inputs or resources (money, time, people, skills) that are being invested;
- activities that need to be undertaken to achieve the policy objectives;
- initial outputs of the policy;
- outcomes (short- and medium-term results);
- anticipated impacts (long-term results); and
- assumptions made about how these elements link together that will enable the programme to successfully progress from one element to the next.

The programme logic model has been adopted in South Africa in the form as shown in Figure 2

The programme logic model assumes sequential, linear cause and effect relationships. A leads to B leads to C. For example, capacity building could reflect the following dynamics: training (A) leads to increased knowledge (B), which leads to employment (C). This approach offers a format for connecting levels of impact with evidence and begins by requiring specification of the overall goal and purposes of the project. Short-term outputs are linked logically to those purposes. Activities are identified that are expected to produce outputs (Patton 2008:340). The language of the programme logic model can be confusing. Some proponents of the logical framework also refer to the term goal as mission, while purposes are
called objectives or outcomes and outputs are short-term, end-of-project deliverables. For every goal, purpose, output and activity, the framework requires specification of objectively verifiable indicators, means of verification (types of data), as well as important assumptions about the links between activities and outputs, outputs to purposes and purposes to goals (Patton 2008:152-153).

When a government’s evaluation system is mainly based on a linear design of cause and effect, where the main links are between inputs, activities, outputs and outcomes (see Figure 1 as an example), a reductionist approach is followed. However, this assumption of linear relationships between causes and effects has a restricted utility. Many public sector programmes are multi-dimensional and span across many sectors, which makes it difficult to isolate sectoral programme effects from one another. Hovland (2007:4), for example, argues that focusing purely on the separate elements of the programme logic model (resource inputs and activities, outputs, outcomes and impacts) is not sufficient for policy development. Nevertheless, any complex system consists of a rich interaction among simple variables that one can evaluate at smaller scales. An important new methodology to evaluate larger complex systems have also started to emerge, which supplements the over-simplistic programme logic model summarised above (Patton 1997,1990, 2008).

Evaluators who were considering better ways to measure causality, evaluate the impact of a programme and assess the accuracy of theories of change have developed various specific implementation monitoring models in the form of logical framework templates (also known as log frame templates) as measuring tools (Weiss 1997). The use of this logic matrix as a planning and monitoring tool allows for precise communication about the purposes and components of the project, as well as the sequence of activities and the expected accomplishments to be achieved (McCawley Undated). The log frame template is therefore

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**Figure 2 Key performance information concepts**

![Diagram](source: National Treasury 2010:3)

- **OUTCOMES**: The development results of achieving specific outcomes
- **OUTPUTS**: The medium-term results for specific beneficiaries that are the consequence of achieving specific outputs
- **ACTIVITIES**: The processes or actions that use a range of inputs to produce the desired outputs and ultimately outcomes
- **INPUTS**: The resources that contribute to the production and delivery of outputs
- **IMPROVEMENT**: Manage towards achieving these results

The plan, budget, implement and monitor phase of the framework is essential for achieving the desired outcomes.
normally designed in the form of a matrix that combines inputs, outputs and outcomes with
time frames, budgets and responsible agencies or persons (Figure 2). Most donors in the
international arena use some or other version of a log frame template for this purpose. The
version developed by the United States Agency for International Development (USAID) could
be regarded as the most popular one for this purpose (Taylor-Powell and Henert 2008:1).

However, as indicated earlier, the programme logic model, or its implementation plan
in the form of the log frame matrix, should only serve as a broad systematic framework
for evaluation. They guide the evaluator to collect data that helps to determine what has
to happen and what actually happened during the intervention (Bichelmeyer and Horvitz
2006:1).

The task of evaluation is to explore the causal linkages along the programme logic
results chain, from activity to impact, and involves several phases: For the purposes of this
assessment, the major phases of the policy process that the evaluation may focus on can be
classified in three conceptual categories: Firstly, the policy programme or project-planning
phase (a stakeholder analysis, the formulation of the problem/issue, the conceptualisation
and development of a theory of change, setting objectives, and deciding on the preferred
implementation strategy). Secondly, following this, the evaluation may focus on the
policy programme or project implementation phase, where the conversion of resources
through various activities and processes are transformed into concrete products or outputs.
Here the focus is on issues of efficiency, the programme’s short-term effectiveness and
project management processes. Lastly, the evaluation may also focus specifically on the
consequences of the policy programme or project, by investigating their medium-term
sectoral outcomes and/or long-term integrated impact.

In all cases, the evaluation itself has to go through the same planning, design,
implementation and assessment stages than a normal policy programme or project. For
these purposes, there needs to be a systematic formulation of evaluation questions; setting
of evaluation goals and objectives; planning of evaluation activities; conceptualising the
measurement of outcomes; developing of the evaluation design; and data gathering and
analysis methods to compile the most suitable hard evidence and interpreting it by using
the theory of change as a guideline. The details that an evaluation of each of the above
categories has to consider can be summarised as follows:

POLICY PROGRAMME/PROJECT PLANNING AND DESIGN

The aim of evaluating this phase is to get clarity on the policy programme or project problems
identified and their relevance. Furthermore, the aim is to identify the core problem, its
causes and effects and to gain an understanding of the way stakeholders perceive the policy
programme or project. This is a wide-ranging preparatory and agenda-setting stage of the

Stakeholder analysis

Stakeholders (beneficiaries, funders and decision makers) are directly or indirectly influenced
by and have an influence on the situation that needs to be addressed (Örtengren 2004:9).
Ideally, as described in much of the literature that sets out the logical framework approach (Patton 2008:61-66), this process of programme planning, development and evaluation rests on fundamental principles. One of the most important principles as noted before is identifying the stakeholders and their involvement in the entire evaluation process. Evaluators must therefore work actively, reactively and adaptively with these specific stakeholders in order to realise their decisions about the focus, design, methods, analysis, interpretation and dissemination. Important aspects of this analysis include the following:

The principal stakeholders should be identified and their roles, interests, relative power and capacity to participate should be investigated. The extent of cooperation or conflict in the relationship among stakeholders should also be determined. The findings of the problem analysis must be interpreted and defined in terms of how it should be incorporated into policy and/or programme design. The stakeholders should be identified and empowered to work with the evaluator, participate fully in the process and to share ideas about the proposed evaluation.

According to Örtengren (2004:9), “The different stakeholders’ combined knowledge about the situation is a key to the identification of appropriate solutions”. The evaluator and the intended users should focus the evaluation by developing a theory of change and by making assumptions about the success factors of the policy or programme. The first step would be to draw on the understanding and knowledge of stakeholders to develop the intended policy or programme.

Secondly, all critical issues regarding the planning, monitoring and evaluation of the programme, such as inputs (available resources), outputs, outcomes and impact should be addressed. Feasibility assessments, appraisals or viability studies are different forms of formative evaluations that can determine the nature and future of the project concerned. Formative evaluation typically focuses on input and output indicators, while summative evaluation focuses on outcome indicators. Formative evaluation therefore provides evidence of progress towards the identified outcomes, while summative evaluation shows whether the desired outcomes have been reached.

The policy situation analysis

A situation analysis describes the context within which the problem exists and is addressed. The core of this step in the process is to

- get clarity on the problems identified and their relevance;
- identify a core problem;
- identify the causes and effects of the problem and their relationship to each other; and
- gain an understanding of how a problem influences the different parties involved (such as stakeholders and target group members). A problem tree tool could be used to achieve this (see Cloete and Meyer 2011:88).

A situation statement or problem statement is the foundation for logic model development. It is vital to understand the situation correctly, since misunderstanding it will affect all further steps in policy and programme development and evaluation (University of Wisconsin Undated).

A situation statement should include the following:
What is the main focal problem? (Why is the intervention needed?).
A statement of the problem. (What are the causes? What are the social, economic, and/or environmental symptoms of the problem?).
What effects does the problem have? (Why is it important to solve the problem? What are the likely consequences/effects if nothing is done to resolve the problem? What are the actual or projected costs?).
A description of who is affected by the problem. (Where do they live, work, and relax? How are they important to the community? Who depends on them – families, employees and organisations?).
Who else is interested in the problem? Who are the stakeholders? What other projects address this problem? (see Jacob 2008).

It is important to note that, “evaluation and program success rely on the fundamentals of clear stakeholder assumptions and expectations about how and why a program will solve a particular problem, generate new possibilities, and make the most of valuable assets” (W.K. Kellogg Foundation 2004:5). The focus here is on the problem or issue and the reasons for proposing the solution suggested by the policy approach. The Kellogg Foundation (2004:10) documented that

the Noted evaluator and program theorist Carol Weiss (1998) explains that for program planning, monitoring, and evaluation, it is important to know not only what the program expects to achieve but also how. We must understand the principles on which a program is based, a notion not included in evaluation until recently. Discussions about the whethers, hows, and why’s of program success require credible evidence and attention to the paths by which outcomes and impacts are produced” (Kellogg Foundation 2004:10).

The stakeholders must do a risk analysis to identify all the factors that could affect the possible resources that the policy or programme has available to help achieve its objectives. An analysis of possible critical external and internal factors/risks gives the stakeholders an opportunity to assess the conditions that the project is working under. After completing a risk analysis, the stakeholders need to develop a risk management plan – a plan of how to avoid the potential risks (Örtengren 2004:17).

**Policy programme/project goals, objectives and strategies**

The policy purpose is the reason why the policy is needed. The purpose/objectives describe the expected results of the policy that rests on particular assumptions. Notably, the policy purpose and the results must be specific, measurable, realistic, time bound and approved by the stakeholders (Roux and Cloete 2011:100; Örtengren 2004:14). “The results or outputs are the direct results of the activities that are implemented within the framework of the project. Outputs are actual, tangible results that are a direct consequence of the project’s activities” (Örtengren 2004:14).

In this step the problem statement is developed further into goals or objectives that are aimed at reaching the desired results by restating the problems as objectives. During the objectives analysis, the project planning group should set three levels of objectives:
transformative goals (outcomes and impacts);
short-term objectives (outputs); and
resource conversion processes (inputs and activities).

The highest goal of the project states the transformative direction the policy or programme will take. This is the long-term vision of the policy. Indicators will not be developed on this level (Örtengren 2004:14). Therefore, this can be regarded as the general direction of the overall programme in long-range terms. Goals are more general than objectives and encompass the purposes and aims of the programme (Patton 2008:231).

The log frame and objectives tree can be used in conjunction to generate goals and objectives. The objectives tree is viewed as the positive mirror image of the problem tree. It is usually necessary to reorder the position of objectives as you develop the tree. The objectives tree can also be considered as an ends-means diagram. The top of the tree is the end that is desired and the lower levels are the means of achieving the end (see UNEP Internet source Undated Logic framework analysis).

Planning of activities

Activities are the means to achieve the objectives and therefore to eliminate the causes of the focal problem (Örtengren 2004:14). The activities are therefore focused on the causes/reasons for the focal or core problem(s) – the roots of the tree. The success of the policy not only depends on the development phase, but also on its implementation.

When planning activities, provision should also be made for the planning and utilisation of resources. Resources that are needed to implement the policy include human capacity, expertise, funds and time. Very often an elaborate policy is set out on paper that is hard or impossible to implement in practice. The overriding concern, as in all parts of the process, is utility. Will the results that are obtained from these methods be useful – and will they actually be used? These issues have to be assessed within the framework of good programme and project management as an important part of policy implementation (see Van Baalen & De Coning 2011:170 and Brynard, Cloete and De Coning 2011:135).

Development of indicators

Once a programme or policy has been described in terms of the logic model, priorities can be set and critical performance measures can be identified. These measures are called indicators (cf. Rabie and Cloete 2011:204). An indicator can be identified as a “quantitative or qualitative factor or variable that provides a simple and reliable means to measure achievement, to reflect the changes connected to an intervention, or to help assess the performance of a development actor” (Central Research Department 2006). Developing appropriate and measurable indicators during a programme’s planning phase is the key to a sound evaluation. It is vitally important to identify accurate indicators for change at critical times during the development and implementation of the policy (Frectling 2004).

Once indicators have been developed, means of data collection or verification (MOV), for example questionnaires and interview schedules, should be established for each indicator. Outcomes, inputs and outputs need to be developed in order to demonstrate whether the
policy is a success. In the Logical Framework Approach, an evaluation is seen as a causal element that is linked to a sequence of events. These are described at the levels of activities, outputs, purposes and goals (NORAD 1999).

**POLICY PROGRAMME/PROJECT IMPLEMENTATION**

The implementation phase of a policy commences when intended activities are implemented and planned actions are taken (cf. Brynard, Cloete and De Coning 2011:135). Activities are geared towards achieving the expected outputs/results. A detailed plan of action or work plan should guide the implementation of the project (Van Baalen and De Coning 2011:170). The work plan should consist of elements, such as activities, resources needed, training requirements and responsible person(s) (Anon Internet source Undated Logic framework analysis). Ongoing evaluation can establish whether the programme or project is efficient and can answer questions, such as whether the programme is in time, in budget, on schedule and of an adequate quality.

**POLICY PROGRAMME/PROJECT CONSEQUENCES**

The evaluation may only focus on the consequences of the policy intervention, namely the medium-term sectoral outcomes, or the longer-term integrated policy transformation impacts (Rabie and Cloete 2011:210). Outcome and impact evaluations are summative evaluations that are undertaken after the programme or project is completed to determine the degree of success of the programme or project in terms of goal achievement.

*Figure 3 Elements of the policy research framework design*
In South Africa this monitoring and evaluation system is made up of “a set of organizational structures, management processes, standards, strategies, plans, indicators, information systems, reporting lines and accountability relationships which enables national and provincial departments, municipalities and other institutions to discharge their M&E functions effectively. In addition to these formal managerial elements are the organisational culture, capacity and other enabling conditions which will determine whether the feedback from the M&E function influence the organisation’s decision-making, learning and service delivery” (The Presidency 2007:4). Figure 4 shows how the NPMS is supposed to contribute to achieving its intended outcomes. It contextualises the implementation of the programme logic model in the South African governmental system.

**Figure 4 Outline of the South African Government’s Evaluation Programme logic**

1. **An issue becomes identified as a public concern and a policy on it is developed**
2. **A programme to implement the policy is designed**
3. **Its programme logic clearly shows how undertaking specific activities that have calculated outcomes will lead to the achievement of the intended policy impacts.**
4. **Ways of checking if those activities, outcomes and impacts are happening is also chosen.**
5. **These are indicators.**
6. **The legislature provides funding and the public officials do the activities described in the programme**
7. **As implementation rolls out, works get done and records are kept.**
8. **The logic’s process flows and the performance indicators send managers and officials clear signals about what they should do (“Doing the right things”) and what is important (“Doing things right”).**
9. **The records are captured, verified and analysed into reports.**
10. **Reports are compared to plans and benchmarks such as international best practices**
11. **Accountability is improved**
12. **Success is identified and replicated**
13. **Challenges are highlighted and addressed**
14. **Evidence based decision making around resources is facilitated**
15. **Affected stakeholders are involved extensively and consistently**
16. **Public services become more effective and poverty is eradicated.**

Source: The Presidency 2007:6
All sectoral theories of change in the South African public sector have to be unpacked in the above programme logic format. This provides a systematic framework to assess the degree to which outcomes have been achieved.

CONCLUSION

Programme evaluation is fundamentally different from more basic academic research in terms of the purpose of data collection and the standards for judging quality. Basic scientific research is generally undertaken to discover new knowledge, test existing theories, establish truth and to make generalisations across time and space, whereas programme evaluation is undertaken to inform decisions, clarify options, identify improvements and to provide information about policies and programmes within the contextual boundaries of time, place, values and politics (cf. Patton 2008:125-126).

Over the past decades there have been major changes in evaluation research and the way it is implemented (Anon Internet source Undated Guide to the Evaluation of Socioeconomic Development). The most important changes include the emergence of new evaluation methodologies, the heightened role of theory and a stronger emphasis on the use of systematic programme evaluation logic as an integral part of policy programme development. As a result, there is a growing appreciation for the value of using applied research findings or evidence to improve policy content and processes (Hovland 2007:5).

Using a theory of change as part of the process of developing a policy, as well as the programme logic to unpack the different stages of the policy process, makes it easier to develop and implement policy. Each step (from the ideas behind it, to the outcomes it hopes to achieve, to the resources needed) are clearly defined within the theory and displayed within the logic model (Auspos & Kubisch 2004:3). There are a number of reasons why logic models are vital to the success of an evaluation. By grounding a policy or programme in the transformation theory that it is supposed to implement, public officials can be better assured that their policies and strategies achieve the desired outcomes.

In studying the elements of the results chain for evaluation capacity development, it becomes clear that a logical framework design could be used very effectively to evaluate policy development and implementation. According to Hovland (2007:4), the log frame matrix provides a common approach for integrating planning, implementation, evaluation and reporting of policy development and implementation. However, the logical framework itself should only be regarded as the scaffolding for the planning, as well as the M&E of a policy or programme. “It creates an illustration of all the various moving parts that must operate in concert to bring about a desired outcome” (Anderson 2004:3). Although a log frame matrix is sometimes used on its own, it is clear that total programme development incorporates much more than merely completing a log frame template. In this respect, the underlying theory of change of a programme is crucial to help understand why a policy intervention is made and what it is supposed to achieve.

It is clear that applied evaluation research is playing an increasingly important role in determining if government programmes and policies are achieving their objectives, and whether they are effective or not (AEA Evaluation Policy Task Force 2009). This is also true for new democracies, such as South Africa (The Presidency 2007). As stated in the policy
framework for M&E in the South African Government: “Government’s major challenge is to become more effective” (The Presidency 2007).

REFERENCES


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**ENDNOTE**


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