PREPARING PROGRAM OBJECTIVES

Theory & Practice

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EXECUTIVE SUMMARY

Objectives are a central component within most program planning and evaluation today. In theory, objectives are useful for making the intended direction and focus of programs and projects transparent, and for enabling 'tracking' of the extent and nature of change affected by a given program or project. In practice, however, objectives pose a variety of challenges for program/project planners, staff, primary-users and evaluators. To help understand the scope of these challenges, this paper is divided into three related parts:

- Section one provides a general ***overview of programs objectives***, revealing the ambiguity surrounding the language of objectives, and the issues associated with conventional 'how to' practices.

- The next section focuses on the challenges involved in ***preparing objectives for international development programs***. Given the complex and oftentimes innovative character of development programs, there are unique difficulties involved in preparing objectives within complex systems and for innovative programs whose outcomes are, by definition, often uncertain.

- By highlighting some alternatives to the objectives-based approach, the last section explores potential ***'ways forward'***. Included is a brief discussion of the implications for 'network analysis', 'performance story', and 'mapping' approaches.

Part 1 - An overview of program objectives

The aim of this section is to reveal the ambiguity that is often associated with the language of objectives, as well as the implications of this ambiguity on the practice of preparing objectives. It therefore examines issues related to key concepts, different types and uses of objectives, and standard procedural guidelines for preparing program objectives.

The section begins by delineating 'projects' from 'programs' and 'objectives' from 'goals'; and in doing so, exposes the lack of any standard definition for each. While the literature tends to suggest a program to be a set of 'organized projects and/or activities', one finds that in practice the demarcation line between the two is not always clear. The terms 'project' and 'program' are often used interchangeably, or one is conflated into the other. What is more, a project in the eyes of one group may be perceived as a program in the eyes of another, and vice versa. This, in spite of evidence which shows that projects are often characteristically very different from each other, as are programs. This presents particular challenges when two parties share the responsibility and outcomes of the project/program, but do not share the same meaning – especially in the context of using objectives for evaluation in which there are strict methodological procedural standards and established guidelines for preparing objectives. Essentially, given that in theory and in practice programs and projects may be significantly distinct, the critical question

emerging from this section is: *Can a single standard set of procedures or guidelines for preparing objectives be applied to programs and projects alike?*

The remainder of the first section provides additional context relevant to the practice and theory of preparing objectives for development programs. It shows how the distinction between 'goals' and 'objectives' "is always a relative one" (Patton, 1986:101), raising related issues and challenges when trying to establish goals and objectives for projects and programs. Following this, several common 'types' of objectives are discussed, as well as the unique role of objectives in the field of evaluation research. And finally, this section highlights some of the concerns related to the 'how to' guidelines for preparing objectives. It points to the general difficulties involved in applying the SMART (specific, measurable, achievable, realistic, and time-bound) standards in the preparation of project and of program objectives. In particular, the principles of the SMART approach may, in some cases, be either unattainable or inappropriate. That is, in pursuing the SMART ideals, objectives may lose in meaning and usefulness what they gain in specificity and measurability. This raises another important question: *When do the drawbacks of the SMART objectives approach outweigh the benefits?*

Part 2 – Key issues and challenges in preparing objectives

The second section opens with a discussion of 'goal-free' evaluation, segueing into the general issues surrounding the uses and usefulness of objectives in evaluation research. This is meant to remind the reader that, particularly in the case of program evaluation, objectives are only one means of assessing change affected by interventions. Following this, a more detailed review of the key issues and challenges involved in preparing objectives within the international development context is presented.

Essentially, two significant characteristics of international development generate unique challenges when preparing objectives for programs: complexity and innovation. Development programs are typically embedded within complex systems in which 'outcomes' are seldom attributable to any single intervention, but are instead the result of a myriad of confounding social and non-social factors. As a consequence, adhering to the SMART objectives standards – preparing objectives that are clear, specific and measurable – may be both unfeasible and inappropriate. One finds that the temporal logic of development programs results in changes being evidenced 'far downstream' from the actual intervention. Thus, even though an intervention may be affecting change, objectives that are defined in specific and measurable terms may fall short of their target. An additional related problem is that of 'moving goalposts'. Given the myriad of influencing variables and a protracted timeline from intervention to 'outcome', objectives may have to be adjusted and redefined to meet changing circumstances.

Following this, section two discusses how 'innovation' affects the preparation and use of objectives for planning and evaluation. The oftentimes unfamiliar nature of the development context has meant that many programs have had to incorporate a degree of innovation. And, with 'uncertainty of results' being a central feature of innovation, this

presents unique challenges when preparing objectives for innovative programs. In particular, *how does one set specific, measurable, achievable, and time-bound objectives for programs whose results are – at least to some extent – inherently unpredictable?* What is more, the tension between the demand for accountability and the desire to attain 'ambitious' goals and objectives has exacerbated the challenges involved in preparing objectives for innovative programs. That is to say, the need to demonstrate attribution and accountability may have negative implications for programs in which objectives are designed to 'hit' manageable targets. Essentially, programs that are embedded within complex systems and that are characteristically innovative – both features of many international development programs – are therefore faced with unique issues when preparing objectives.

Part 3 – 'Ways Forward'

Given the various challenges involved in preparing objectives for development programs, the final section of the paper looks at possible 'ways forward'. In particular, section three presents a critique of the more established models of social change – specifically, the Logical Framework Analysis approach. And, in response to the limitations of traditional evaluation approaches, it offers several potential alternative models.

Drawing on the work of Rick Davies, a summary of the central problems associated with using traditional, 'logical' models to explain change processes within complex systems is presented. For many, these models are deemed inappropriate for explaining social change within complex systems; they are thought to provide a selective and, therefore, overly 'linear' and simplistic representation of the causal linkages of social change. As a result, they are likely to misrepresent social reality and neglect significant mechanisms in the change process. One suggested response is to incorporate a 'network analysis' approach in which the dynamics of the relationships between diverse social actors is plotted – facilitating a more complete understanding of the ways in which certain social arrangements and relationships constrain or enable opportunities for change. That is, network analysis aims not only to help explain *what* changes occurred, but more importantly, *how* and *why* specific changes came about. Additionally, network analysis promises to provide insight into unintended results, making it potentially suitable for evaluating innovative programs.

Other related strategies for dealing with the inadequacies of traditional models include 'performance story' and 'mapping' approaches. Like network analysis, the strength of these approaches is in their ability to provide a deeper level of understanding of the influence of a particular intervention. Approaches that incorporate 'stories' and 'mapping' tend to focus on narrative accounts of change, and they are often used in conjunction with more traditional models; thus, sometimes representing a turn towards a mixed-methods strategy. And, while none of these approaches is designed to be a substitute for 'objectives-based' evaluation, each has the potential for producing greater flexibility and understanding – two important qualities when seeking a means for explain the nature and extent of change within complex systems.

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BACKGROUND[1]

Program objectives have become a cornerstone in effective program planning and management, and an integral component within program evaluation. Still, a level of ambiguity associated with the concept has produced a variety of challenges for developing program objectives. In an effort to better understand current theory and practice of preparing objectives for international development programs, the following paper surveys 'state of the art' thinking on the topic. It examines the challenges associated with preparing objectives in the context of international development programs, and provides prospective responses to address these challenges and issues, as well as potential 'ways-forward'.

Searching the literature on the broad topic of 'program objectives', what becomes immediately apparent is the dearth of in-depth writing dedicated specifically to the subject, as well as the general homogeneity of that which is available. To be sure, there is no shortage of 'how to' and 'best practice' literature; however, critical discourse on the topic *per se* appears neglected. This should not imply that the subject is without controversy, or that those who are involved with program objectives (academics and practitioners alike) are entirely satisfied with the current thinking on objectives development.[2] Merely that, in the absence of alternatives, the evident abundance of writing on "SMART" objectives may be, in fact, both the source and outcome of the apparent uniformity of practice and thinking associated with program objectives today. That is, the widespread acceptance and perpetuation of the "SMART" objectives approach may be read as a broader statement on how program planning and evaluation has adopted and reiterated a few 'good ideas'. Keeping this in mind, the reader will be attentive to the fact that a portion of the following constitutes an exploration of mostly 'uncharted territory'. Leading experts and contemporary literature reveal the subtle dissention, restrained critique, and creative proposals that constitute original insights on the subject. Thus, the critical discussions which make up the core of this study on program objectives emerged through a degree of 'probing in the dark' and 'reading between the lines'.

The overall goals of this paper are therefore: to gain a better understanding of the current theory and practice of preparing objectives for international development programs; to shed light on the key challenges and issues surrounding the development and use of program objectives within the development context; and, to respond to these challenges and issues by highlighting several potential 'ways-forwards'. The following discussions have been organized accordingly:

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[1] In addition to the sources referenced in this paper, many of the ideas contained within are the synthesis of the comments and discussions that took place over several months between the author and various individuals working in the program evaluation and/or international development research fields.

[2] *The topic was introduced in several evaluation and development research 'discussion forums' on the internet, as well as presented to a number of institutes and organizations that are directly involved in developing objectives for social program. In addition to the various specific comments and recommendations put forth, the general consensus was that the area of program objectives development is an extremely complex one, with inconsistent views on how they should be developed and used.*

- In order to address the general issues and challenges involved in preparing program objectives, the first section presents *a detailed overview of the concept of 'program objective'*. To reduce the ambiguity that is typically associated with the meaning and function of objectives at the project and program level, programs and projects are delineated. Additionally, the relationship between goals and objectives is highlighted, and objectives are subdivided by level (immediate, intermediate, and long-term). In the end, these delineations provide insight into the complex meaning of program objectives, as well as the problem with 'simple' definitions. Finally, an overview of the 'best practices' and 'how to' strategies (in particular, the SMART objectives approach) is presented; and, the program objectives are discussed in terms of their specific relation to evaluation research.

- The second section exposes *the key issues and challenges associated with developing program objectives* specifically. By briefly revisiting the 'goal-free evaluation' perspective, this section begins with a somewhat philosophical reflection. However, its focus is on two themes in particular: developing program objectives within 'complex' and dynamic systems; and, developing objectives for 'innovative' programs. Topics that are discussed herein include: multiple confounding variables and the likelihood of uncertainty; 'up-stream' objectives, 'down-stream' results; multiple users, multiple objectives; and, SMART objectives and the avoidance of 'risk'.

- Finally, the third section responds to the challenges and issues of the previous section by offering *alternatives perspectives and approaches, as well as potential 'ways-ahead'*. It provides a critique of the 'logic' of traditional models of 'change processes', and presents several alternative views. Rick Davies' work on 'network analysis' provides a theoretically based alternative to conventional frameworks and methods. Correspondingly, in response to the limitations of traditional approaches, the 'performance story' and 'outcome mapping' approaches may offer pragmatic alternatives. Finally, the 'utilization approach' is revisited.

PROGRAM OBJECTIVES - AN OVERVIEW

In practice, the distinction between *program objectives* and *project objectives* is not always clearly defined. In many cases the two concepts are used interchangeably, adding to the confusion that surrounds their preparation and use. What is more, the demarcation of project and program is often a subjective one, adding to the ambiguity surrounding their meaning and application. That is to say, activities defined as a project by sponsoring organizations (or at the national level), may be viewed as a program by the affected communities (or at the local level), and vice versa. Given the definitional distinction between programs and projects, it would seem apparent that their respective *objectives* would also conform to different 'logics' of design and purpose. Therefore, as will be discussed, the subjective interpretation and defining of program and project has great implications for the preparation of objectives. Although apparently straightforward, it is useful to make clear the distinction between what is meant, within the literature, by *program* and *project.*

Programs & projects

While descriptions abound, consider the following clear-cut definition: A *project* refers to "a single, non-divisible intervention with a fixed time schedule and dedicated budget [and resources]" (European Commission, 1997). Some examples of projects could include: A single technological initiative to increase safe drinking water and decent rural sanitation in a particular community; or, the introduction of telecentres and community information services in selected rural and urban locations within a specific developing country. On the other hand, a *program* is typically characterized as "a set of organised but often varied activities (a programme may encompass several different projects, measures and processes) directed towards the achievement of specific objectives" (European Commission, 1997). Examples of programs include: A coordinated set of initiatives to support trade, employment and competitiveness in a developing country; and, a coordinated set of initiatives to encourage sustainable development of natural resources within a developing country. While a program is essentially a plan for exploring a specific area related to an organization's mission, a project is a select investigative or developmental activity sponsored by that program. A program is usually designed and initiated under the assumption (informed by theory and experience) that the project level activities that make up the program will influence change – whether in physical or social conditions, behaviors, attitudes, or policies. A program therefore consists of an organized set of projects or activities that strive to meet a defined set of goals and objectives.

The significance of the distinction between 'project' and 'program' evaluation is also highlighted in the work of Dr. William Trochim on *large initiatives*. Trochim defines large initiatives as:

> simply a collection of diverse programs that address a common theme or emphasis. Most often a large initiative involves a significant investment, typically budgeted in the millions of dollars annually. Because of the complex and multi-faceted nature of

> initiative activities and the size of the investment, evaluation is both a critical and challenging endeavor" (ERC, 2000).

But he also adds that "large initiatives are probably the most complex and demanding of evaluation contexts" (ERC, 2000).

From this delineation it is evident that a principal difference between programs and projects is one of scale. That is, while they may share a common focus and strategic direction, the move from program to project can be characterized as a move from 'comprehensive' to 'narrow' and 'general' to 'specific'. However, it is not merely that programs constitute an amalgamation of projects, or that projects are the single divisions of the program. In fact, a more thorough look into the traits of programs reveals that 'the whole is, in fact, greater than the sum of its parts'. The United Kingdom's Department for International Development explains that a program is "a logical construction from which separate coherent sets of activities, or projects, might be delivered. At the same time a programme is more than a set of projects. It is a system of activities delivering outputs, or merely facilitating or brokering complementary activities" (DFID, 2003). A conversation with Peter Meier of the Swiss Development Agency supports this depiction; he explains that, among other things, a program:

> is more than the sum of all individual projects; it works at different levels of intervention (micro, meso, macro); it looks for and consciously uses synergies; it increases the reach and sustainability of project benefits; it requires special type of management capacity; it focuses on outcomes and impact; can react to risk much better than a project; it can make use of opportunities by starting new projects; it can close projects and still keep going; it has more capacity to learn and apply 'learnings' in the future (Meier, 2003).

But he also acknowledges that these characteristics add to the 'challenges and complexity' associated with programs. As is discussed in the ensuing sections, the differences between programs and projects are particularly relevant to the challenges involved in developing program objectives that are *clear*, *specific*, and *measurable*

For now, it is worth noting the pervasiveness of this condition; it can be read 'between the lines' of philosopher-evaluator Michael Scriven's definition of a *program*: "The general effort which marshals staff and **projects** towards some (often poorly) defined goals" (Scriven, 1991:123).[3] Although he does not elaborate here, one reason why program goals are 'often poorly defined' relates to the 'comprehensive' and 'general' character of the programs. Daniel Stufflebeam expands upon this theme when he suggests that objectives are particularly appropriate at the project level: "the objectives-based approach is especially applicable in assessing tightly focused projects that have clear, supportable objectives" (2001). Implicit in this statement is that objectives are 'less' applicable at the program level. This theme – the difficulty in defining goals and objectives at the program level – is raised here because it is linked to so many other

[3] *Goals and* objectives *are distinguished by degree or scale; and thus, they are often found to be used interchangeably within the literature.*

challenges and issues associated with preparing objectives for development research programs.

Defining program objectives

Part of the difficulty, I am convinced, is the terminology: goals and objectives… Helping staff clarify their purpose and direction may mean avoiding use of the term 'goals and objectives'.[4]
- Michael Quinn Patton, 1986:93

A degree of ambiguity surrounds the language of objectives within program planning and evaluation. While the numerous program management and evaluation glossaries, as well as Michael Scriven's well known *Evaluation Thesaurus*, have helped in the translation and clarification of the language of program objectives, in practice, different organizations often employ different concepts to refer to essentially the same thing, and conversely, use the same concept to refer to different things. For example, what Canada's Office of the Auditor General refers to as objectives, the Treasury Board Secretariat refers to as Strategic Outcomes: "In July 2001, the Treasury Secretariat issued a lexicon of performance reporting terms and asked departments to use the term *strategic outcomes* for what we call objectives…" (Mayne, 2003:2).[5] This condition is further complicated by the diversity of terms used in association with program objectives:

> Articulating what a program is intended to accomplish is critical to good results management and reporting. A wide range of terms is used to describe these normative statements: objectives, goals, strategic outcomes, expected results, planned results, targets, and expectations to name a few (Mayne, 2003:2).

The difference between program and project objectives

With the level of ambiguity surrounding the concept, establishing a definition of a *program objective* that is acceptable to all is problematic; it is worth considering the possible basis for this ambiguity. Under 'program objective' in the *Glossary of Key Terms in Evaluation and Results Based Management* published by the Development Assistance Committee of the OECD it reads: "*Project or program objective*: The intended physical, financial, institutional, social, environmental, or other development results to which a program of project is expected to contribute" (OECD, 2002:31). For purposes of meaning, project and program objectives are frequently regarded as one and the same. This is not meant to single out the OECD; it is common to find single

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[4] *Although Patton refers almost exclusively to* goals *throughout his work, keep in mind his position on this distinction: "There is no absolute criterion for distinguishing goals from objectives; the distinction is always a relative one" (Patton, 1986:101).*

[5] The Office of the Auditor General defines objectives as the "general statements that set the direction of the overall intent of the program" (Mayne, 2003:2); whereas the Treasury Board Secretariat speaks *strategic outcomes* as "enduring, results-based promises made by departments and agencies to Parliament and all Canadians" (Treasury Board, 1997).

definitions for project objectives and program objectives throughout the literature. Yet, given the distinctness of the two, this conflation may be the original source of the vagueness and ambiguity surrounding the meaning of program objectives *per se*. But it is not only at the level of meaning that program objectives present confusion. As will be elaborated upon, the standard 'how to' and 'best practice' procedures for preparing objectives also commits the error of conflation; it is not uncommon to find a general set of practices for developing objectives – whether at the program and project level. Therefore, regardless of whether they are defined by the users as projects or programs, qualitatively different activities will require correspondingly different procedural logics. For example, preparing objectives for a set of activities – whether referred to as a project or a program – will likely involve different procedural considerations than preparing objectives for a single activity.

The difference between goals and objectives

In an effort to disaggregate the meaning of objectives in general, and provide a more intelligible and precise definition of program objectives specifically, several further delineations are useful. Although seemingly obvious, it is worth beginning by highlighting the difference between *goals* and *objectives*. Consider the following explanation:

> Objectives are interim measurable goals. Think of them as markers along the way to a goal. Though it may be difficult for you to know that you have achieved your goals, you should be able to measure whether or not you have accomplished your objectives. Whereas goals are broad and achieved over one or more years, objectives are clear, measurable, and can be achieved in much shorter periods of time. As you accomplish each objective, you will be closer to reaching your overall goal (Innovation Network, 2003).

Goals tend to be defined as statements, usually general and abstract, of a desired state toward which a program is directed; whereas, objectives refer to the specific, operationalized statements detailing the desired accomplishments of a program. Integral within the program planning process, objectives provide a bridge between goals and the implementation phase of an intervention. But, in practice, the point of demarcation between goals and objectives is often obscure:

> …the only dimension that consistently differentiates goals and objectives is the relative degree of specificity of each: Objectives narrow the focus of goals. There is no absolute criterion for distinguishing goals from objectives; the distinction is always a relative one (Patton, 1986:101).

Implicit in the above definition is the interconnection between goals and objectives. Understanding the two as related *parts* within a process may also help to clarify their respective design and purpose. Evaluation specialists Rossi and Freeman discuss this:

> [G]oals are generally abstract, idealized statements of desired outcomes …[G]oal setting must lead to the operationalization of the desired outcome; that is, the condition to be dealt with must be specific in detail, together with one or more

> measurable criteria of success. Evaluation researchers often refer to these operationalized statements as objectives (Rossi & Freeman, 1993: 112).

The authors stress the importance of this distinction, reiterating the key point: "goal statements must be refined and stated in terms that can be measured, that is, operationally defined" (Rossi & Freeman, 1993: 112). In practice, these 'operationalized definitions' appears in the form of objectives. Still, recognizing that objectives are 'born' out of goals does not completely eliminate the vagueness that tends to be associated with how they are defined in theory, and written in practice. Consider, for example, the following definition of goal: "The *higher-order* objectives to which a development intervention is intended to contribute" (Italics added – OECD, 2002:24). We might turn to Patton for a clearer and more useful differentiation between goals and objectives: "Goals are more general than objectives and encompass the purposes and aims of program subsystems… Objectives are narrow and specific, stating what will be different as a result of program activities. Objectives specify the concrete outcomes of a program" (Patton, 1986:100).

Types of objectives

To get to where you want to be, it is helpful to break that journey down into measurable steps. The process of establishing mileposts on the road to your goal is the process of setting objectives. As you achieve each objective, you move closer to your goal in the project. There are several possible types of objectives that can be developed, depending on the nature of the program itself.
- Chicago Public School, 2003

One way of distinguishing between the different 'types' of objectives is to consider their corresponding function within the evaluation research structure. For example, the literature commonly differentiates between ***process objectives*** and ***outcome objectives***. Process objectives relate to the completion of specific, immediate activities, while the latter refers to the longer-term impact of those activities. Thus, accepting that programs are 'organized sets of projects or activities', when we speak of program objectives, we are therefore usually referring to outcome objectives and less often to process objectives. Process objectives, on the other hand, are typically prepared to provide direction and monitor the outputs of a given project (CDC, 2003). A more refined delineation categorizes objective by level (operational or immediate, specific or intermediate, and general or long-term); the table below provides a brief descriptive overview of ***objectives by level***:

Table 1 – Types objectives by level

Type of Objective	Evaluation
Operational objective – Statements about the *immediate* outputs expected to be achieved or accomplished from the intervention.	**Output** –Relates to the activities, goods and services that the program produces; the immediate results.
Specific objective – Statements about the *intermediate* results that are expected to be achieved by the intervention.	**Outcome** – Relates to short/intermediate-term effects produced by the intervention's outputs.
General objective – Statements about the *long-term* effects that are expected to occur in which the intervention contributed.	**Impact** – Relates to the intended or unintended long-term changes that are 'attributable' to the program.

Similarly, the UK's Department for International Development (DIFD) maintains that: "It is normal to distinguish: (a) Wider (sector/national) objectives - broad strategic goals usually set in a long time frame; (b) Development (long term) objectives; and, (c) Immediate (project; short term) objectives - specific goals being addressed by a project" (DFID, 2003). Accordingly, immediate objectives (and in some instances intermediate objectives) correspond to the project level, while programs generally operate with intermediate and long-term objectives. This 'rule of thumb' is based on observation more than theoretical knowledge.

Another distinction, between ***absolute*** and ***relative*** objectives, is also worth noting. The former refers to objectives that entail an *absolute* change in conditions for *all* beneficiaries of a project or program. The complete eradication of 'child labor' in a specific community within a two year period may be an example of an absolute objective. On the other hand, a relative objective refers to a 'standard of achievement' or *relative* change in conditions for either *all* or a *proportion* of beneficiaries of the project or program. For example, the 50% reduction of child labor among children in a specific community within a two year period is an example of a relative objective. The particular values of program staff and beneficiaries, as well as the contextual history and conditions under which the intervention has been implemented, will help to determine whether to set an objective as absolute or relative (Rossi & Freeman, 1993: 113).

The above delineations are by no mean comprehensive, but merely provide a summary of the common 'types' of objectives prevalent within the literature. Much of the preceding description of program objectives has been in terms of how they relate to and differ from goals, as well as how they can be sub-divided depending on the level at which they are aimed. Given theses complexities, a simple and succinct definition of program objectives may not be practical. Before moving on to a review of the 'how to' and 'best practice' literature on developing program objectives, a short review of the relationship between program evaluation and objectives will help to contextualize the remainder of this paper.

Objectives-based evaluation

Formative evaluations typically "focus on ways of improving and enhancing programs not only in their initial development, but at any point in the life of a program" (Patton, 1986:66); whereas, summative evaluation are principally interested in determining a program's effectiveness. And, "at its simplest, *effectiveness* may be defined as the extent to which a development activity or programme has achieved, or is expected to achieve, its objectives" (Flint, 2001:4). Rossi, Freeman and Wright draw attention to the role of objectives within impact evaluation:

> An impact evaluation gauges the extent to which a program causes change in the desired direction. It implies that there is a set of pre-specified, operationally defined goals and criteria of success; a program that has impact is one that achieves some movement or change toward the desired objectives (Rossi, Freeman, and Wright 1993:41).

Evaluation research that emphasizes gauging the success of programs in achieving their objectives dates back to the mid-twentieth century work of scholar and evaluation maverick Ralph W. Tyler. The founder of objectives-based evaluation, Tyler was interested in education generally, and assessing educational performance specifically. The innovation that he brought about in the evaluation of educational performance rests in his departure from the conventional statistical testing and 'means distribution' approaches that were dominant at that time. Instead, Tyler suggested that evaluation should begin by setting objectives about what the program aims to accomplish; from there, performance towards set objectives could be measured. His objectives-based approach to educational performance evaluation represents the beginnings of the shift away from testing and proving to understanding and improving – a movement that is still ongoing within the field of program evaluation.[6] Today, most program evaluations operate with objectives, viewing them as essential components:

> …[I]f evaluators agree in anything, it is that program objectives written in unambiguous terms are useful information for any evaluation study. Thus, program objectives and specifications become an extremely important consideration when an evaluation study is constructed (Worthen & Sanders, 1997).

One of the more common evaluation models within the *objectives-based approach* is Logical Framework Analysis (LFA).[7] LFA is an analytical tool designed to summarize the hierarchical relationship between program inputs ('required resources' and 'activities undertaken'), outputs ('specific results upon successful implementation'), purpose ('intermediate objectives') and goals ('ultimate development impacts'). LFA identifies the assumptions (external risks) on which the program strategy is constructed, and provides

[6] *Madaus and Stufflebeam (1989) provide a comprehensive look at this approach in their edited volume of the classical writings of Ralph Tyler.*

[7] As Molly den Heyer points out, "Logical Framework Analysis (LFA) has become the standard framework in the management and evaluation of international development programs" (den Heyer, 2001:61).

an outline of how the project will be evaluated (what measurement criteria will be used) (Wiggins and Shields, 1995). Basil Cracknell defines three primary 'functions' of logframe approach: it helps to 'clarify objectives', 'establish indicators', and 'provide an account of the program's assumptions' (2000:108-112). He explains:

> The first main function of the logical framework is to ensure that the objectives of a project are clearly stated from the outset, and to make absolutely sure that the difference between outputs and objectives is clearly understood. For example, building a new road is not itself an objective but rather an output… All this may seem straightforward, but, after having run a hundred of so workshops on the logical framework, I can vouch for the fact that it is not always simple in practice to decide what is an output and what is an objective (Cracknell, 2000:108-109).

Annette Binnendijk explains the significance of the logical framework approach in relation to objectives: "Logframe solved a major evaluation problem by clarifying at the design stage the specific development objectives of the project, and how the elements of the project were hypothesized to affect those goals" (Binnendijk, 1990:167). And finally, the W.K. Kellogg Foundation points to the potential usefulness of the LFA model for evaluating the 'long-term', 'intangible', and often 'hard to measure' impacts of program initiative:

> Although logic models come in many shapes and sizes, three types of models seem to be the most useful. One type is an outcomes model. This type displays the interrelationships of goals and objectives. The emphasis is on short-term objectives as a way to achieve long-term goals. An outcomes logic model might be appropriate for program initiatives aimed at achieving longer-term or intangible, hard-to-measure outcomes. By creating a logic model that makes the connections between short-term, intermediate and long-term outcomes, staff will be able better to evaluate progress and program successes, and locate gaps and weaknesses in program operations (W.K. Kellogg Foundation, 1998:36).

With its 'logical' appeal, widespread applicability, and history of use, objectives-based evaluation generally, and LFA specifically, has become one of the most widely used approaches. It is premised on the simple idea that program objectives can be developed to reflect the desired outcome of a given program, and can be measured against the actual outcomes of that program. Its purpose is therefore straightforward: to promote synergy between what a program intends, and what it does. Of course, the 'art' of program objective development lies in the craft of matching the program context to the appropriate evaluation model. Still, at its simplest, objectives-based evaluation involves: "specifying operational objectives and collecting and analyzing pertinent information to determine how well each objective was achieved" (Stufflebeam, 2001:17).

It is important to keep in mind, however, that there are considerable challenges and issues associated with using the LFA approach to 'determine how well each objective was achieved'; consider the following for now:

> One of the dangers of the textbook logical framework analysis (LFA) is that it seems to imply a degree of orderliness and certainty about managing for development that

> often belies reality. At least superficially, the logic model assumes that there is consensus about the goals and objectives of the project and about the choice of strategies to achieve those goals and objectives. It also implies a linear chain of causality from inputs and activities to outputs and successive levels of outcomes… It suggests a degree of predictability that makes it possible to plan in advance and a capacity to measure outcomes that may be unrealistic in many cases.
> (Lavergne, 2002:18)

Despite these problems, objectives-based evaluation generally, and LFA specifically, are central to program planning and evaluation in many international development organizations today. And, their widespread use has been accompanied by an important dialogue about the 'best practices' for developing objectives. The following section will thus will look at some of the more prevalent 'best practice' approaches, and will present some of the more central issues and recommendations around the general practice of preparing objectives.

"SMART" objectives

Whether one is looking at the wider objectives or at the immediate objectives, assessing whether, and how efficiently, objectives have been achieved is not always as straightforward as it may seem. Often project objectives are not specified in any detail, or are described in a way that makes evaluation very difficult. Sometimes they may have been set out adequately at the appraisal, but have undergone change during implementation yet no one has thought to set out what the new objectives are. Sometimes the objectives are described in such abstract terms that it is impossible to monitor or evaluate progress toward achieving them.

- Basil Cracknell, 2000:134-135

The challenges involved in developing 'effective' and 'efficient' program objectives, and the pursuit of clarity, specificity, and measurability, has spawned a variety of practical guidelines. And, while different manifestations can be found in the literature, the most prevalent of these is the SMART objectives approach. Below is a description of this nearly ubiquitous approach.[8] While each of these models provides a set of useful parameters for preparing program objectives, they are often criticized for being overly simplistic and general. They advise that objectives be clear, specific, measurable, as well as attainable given particular conditions (time, relevance, and resources); but, they seldom offer detailed instruction on how to achieve these ideals. Therefore, following a description of the SMART approach, several recommendations about 'how to' develop clear, specific and measurable objectives will be presented.

In the context of program planning and evaluation, the SMART guidelines have become the 'golden standard' for preparing 'effective' objectives. Emerging during the 80's and

[8] *Although they pertain more to program management than evaluation, two other sets of guidelines are DORIP and ABCDE. DORIP refers to defining outcomes, requirements, issues and obstacles, and a plan; while ABCDE refers to audience, behavior, condition, degree, and evidence. While the former is quite similar to the SMART guidelines, the ABCDE model stresses target and measurement.*

90's, the SMART acronym refers to specific, measurable, achievable, relevant, and time-bound.[9] The approach was developed to provide useful criteria for preparing goals and objectives that are likely to achieve what they set out to (e.g., alter specific social and/or physical conditions, behaviors and attitudes). Brim explains: "[the] theory being that SMART parameters were good predictors of influential or effective goals" (2002). SMART guidelines are often presented as a set of question: Do the objectives *specify* what we want to achieve? Are we able to *measure* whether we are meeting our objectives? Are we able to *achieve* the objectives given resources and conditions? Are the objectives *relevant* to the beneficiaries and organization? And, within what *timeframe* do we want to achieve the set objectives? These guidelines are not merely broad parameters, but are, in some cases, very specific recommendation. For example, the use of 'strong' verbs and 'uncomplicated' language is suggested for increasing specificity and clarity; and, stating only one purpose or aim per objective, as well as specifying a single end-product of result per objective, is suggested to help ensure achievability and measurability. Figure 2 below provides a short description of each of the components of the SMART approach.

Table 2 – "SMART" objectives

SMART objectives	
Specific	An objective should address a specific target or accomplishment. Specific implies that an observable action, behavior or achievement is described which is also typically linked to an identifiable change in rate, number, percentage or frequency.
Measurable	A metric should be established that indicates that an objective has been met. That is, there should be a system, method or procedure for tracking and recording of the change in behavior or action upon which the objective is directed.
Achievable	Though not necessarily easy or simple, the objective should be feasible – that is, they should be capable of being achieved. Objectives should be limited to what can realistically be done with available resources.
Relevant	An objective should be significant to the people involved in the program (from beneficiaries to the program's sponsoring organization); and, the objectives should be capable of having an impact or make a change.
Time-Based	An objective should be achievable within a specific timeframe. Generally this takes the form of a start and end date.

Here again, the aim is to make it easier to identify precisely what the objective is intending to achieve and to whom it is directed; by doing so, it will be easier to track the extent to which the objective was reached. To be sure, in practice one finds different configurations of the above parameters, with 'specificity' and 'measurability' being the common denominator among most. However, a vital question remains: Are these guidelines to be applied similarly at the project and the program level? More precisely, given the different definitions presented above, do specificity and measurability mean the same thing at the project and program level? These questions will be explored in greater

[9] *Within the literature, some discrepancy exists about what each letter stands for; 'achievable' is sometimes discussed as 'accurate' or 'action-oriented', and 'relevant' as 'realistic'.*

detail in the ensuing section ('Preparing Objectives for Development Research Programs: Key Issues and Challenges').

'How to' & 'best practice' – developing clear, specific, and measurable objectives

[Evaluators should] avoid wasting time in the construction of grandiose complex models of program goals and objectives just because the folklore of evaluation prescribes that the first step in evaluation is traditionally identification and clarification of program goals in clear, specific, and measurable terms. In complex programs evaluators can spend so much of their time writing goals that they lose sight of whether or not full elaborations of goals and objectives serve any useful purpose.
- Michael Quinn Patton, 1986

Recurrent in the literature on 'how to' prepare program objectives is the theme of *clarity*, *specificity*, and *measurability*. However, while SMART guidelines help to reiterate the importance of these parameters, they often do not provide the kind of detailed recommendations necessary for developing objectives that are clear, specific and measurable. In practice, the rules of the SMART approach are typically used as a general reference, rather than a set of specific procedural guidelines. As a result, the SMART guide is not always a sufficient tool for developing clear and measurable goals and objectives; in practice, unclear and 'fuzzy' goals and objectives poses serious challenges for program planners and evaluators alike. The literature does provide some examples of the challenges involved in preparing clear, specific and measurable objectives for programs, as well as potential responses. Patton, for instance, provides an entire chapter on these challenges, along with useful strategies for clarifying goals and objectives (see Utilization Focused Evaluation chapter 5). Nonetheless, as Patton's above statement implies, even armed with the 'best practices' sometimes clear and measurable goals and objectives are neither attainable, nor desirable. To explore this idea, it is worth looking more closely at the meaning and implications of clarity, specificity and measurability.

Clarity

Since its inception, program evaluation has been defined as: "an examination of the extent to which programs achieve their stated goals, and goal clarification was seen as an essential first step in the assessment of program effectiveness" (Peled & Spiro, 1998:457). Goal clarification typically focuses on clarification of language. In practice, the notion of clear goals and objectives conjures an image of appropriate verb choice and vocabulary, grammar and syntax; this is nothing new. However, developing goals and objectives that are clear often means more than mere clarity of language.

Rick Davies explains that the evaluation language that is commonly employed to explain processes of change – in particular, logical framework analysis (LFA) – can result in a 'problem of readability'. This problem is both technical and theoretical. Technically, the LFA model tends to employ long compound sentences at the goal level, and short abbreviated sentences at the activity level. He explains that, "[the] story line from

activity to goal is disjointed" (2002:3), often resulting in an incoherent representation of the process of change (expressed as 'cause' and 'effect'). Given this, Davies explains:

> The short-term solution is to emphasize the need to use simple English (or whatever other language is being used). Long compound sentences should be banned, and every sentence in the narrative column should have a clear subject and object involved in the process or event being described. Perhaps the English expression of all completed Logical Frameworks should then be scrutinized by a school teacher. The test would be whether they could explain to their students the story line that is present in the consecutive stages of the Logical Framework! The failure rate could be quite high (Davies, 2002:3-4).

However, according to Davies, correcting the 'problem of readability' within the language of the LFA is only a 'short-term solution'. A more serious problem involves the structure of the LFA model itself. Davies explains that the 'linear' configuration of the language of LFA presents a model of selective social change that misrepresents reality. That is to say, the LFA model presents a constructed representation of social change in which linear 'causal' links – from intervention to outcome – are selectively (i.e., 'logically') identified and tracked. Thus, expected change (objectives) can be compared to actual change (outcomes). The problems with this technique are many, and warrant discussion in greater detail (to be elaborated in the following sections). Suffice it to say that the language employed to represent and explain change as a linear 'cause and effect' process has come under serious scrutiny in recent years, and the language of program objectives has not been exempt.[10]

In addition to language that is technically unambiguous and 'logically' sound (i.e., accurately represents reality) clear objectives should be ideologically transparent. As sociologist Max Weber pointed out over a century ago, research is never 'value-free'; researchers often choose to study particular projects based on their personal values. What is critical, however, is that those values are made public, and that the researcher is sensitive to the influence of those values, and does her/his best to 'bracket them out' of the research. Patton revisits this notion when he expresses the importance of making the language of goals and objectives transparent: "Conceptually, a goals statement should specify a program direction based on values, ideals, political mandates, and program purpose. Thus, conceptually, goals make explicit values and purpose" (Patton, 1986:95). This is especially important within comprehensive programs where multiple values will enter into the equation. By making values and purposes transparent, goals and objectives will not only be less ambiguous, but will also encounter less conflict from the different perspectives. Therefore, ensuring that objectives are clear involves three levels: technically clear language, 'logically' legitimate language, and ideologically transparent language.

[10]For an introduction to the issues associated with linear representations of social change, see Andrew Abbot's *Transcending General Linear Reality* in Sociological Theory, 1988, 6:169–86.

Measurability

The other component in the 'how to' strategy for developing effective goals and objectives is measurability. Like clarity, measurement of the extent to which stated objectives have been reached is not only deeply entrenched in the history of program planning and evaluation, but also a hallmark of 'good' objectives. Rossi and Freeman suggest that "the closer the objectives are to outcomes that can be directly and reliably measured, the more likely it is that a competent evaluation will result" (Rossi & Freeman, 1993: 117). Thus, where clarity and specificity are essential for reducing ambiguity of meaning, measurability is generally considered to be fundamental in operationalizing and 'tracking' the goal or objective – i.e., determining the degree to which the objective was achieved. But, as is the case with goal clarification, developing goals and objectives that are 'measurable' has encountered serious critique. In his assessment of what he describes as the 'dominant rationalist-modernist paradigm', Sanderson explains how too often within evaluation research knowledge is subjugated for measurement:

> …we need clearly defined objectives and intended outcomes, reliable ways of measuring them and sound methodological designs for identifying the effects attributable to policy interventions. …[T]the experimental design is seen as the gold standard of evaluation and 'it is not necessary to understand how a social programme works in order to estimate its net effects through randomized experiments'(2000:437).

And, while the 'rationalist-modernist' paradigm (often labeled 'positivist' or simply 'quantitative') has in recent years loosened its monopoly over what is considered 'good' research, current economic and political conditions have resulted in a partial 'quantitative turn'. That is to say, the general scarcity of resources within the development setting has generated increasing demand for demonstrating results and being accountable. The response to this demand has been a renewed interest in quantifiably measurable program objectives. The implications of overemphasizing quantitative measurability are not new:

> The demand to show impact and the pressure of accountability may tempt program leaders to call for quantitatively measurable objectives in individual plans of work. Pressures to express both objectives and results in numbers may have negative effects on agents and organizational accomplishments. There's a distinct possibility that agents will aim their objectives to safely meet administrative expectations and commitments they made in stating program objectives (Deppen, 1978:28-29).

Deppen also suggests that, placing such value on quantitatively measurable objectives may unintentionally and detrimentally affect of the entire organization (or program). Demanding "quantitatively measurable objectives would be seen as a signal of change in organizational attitude," resulting in increased rigidity and diminished autonomy in program planning (Deppen, 1978:28-29). Additionally, she points to several serious problems that are likely to follow: "(1) tendency to neglect aspects that aren't easily quantifiable, (2) placing too much emphasis on measurable results, (3) encouraging the cover up of poor performance, actual falsification of data, and setting low goals because of overemphasis on measurable factors" (Deppen, 1978:28-29).

It is important to keep in mind, however, that the issues raised here are not so much about measurement *per se,* but reflect concern over how measurement tends to be defined. Essentially, most criticisms are leveled at the narrow definition in which measurement and quantification are treated synonymously. Insofar as measurement at its most basic means "to estimate or appraise by a criterion" (Merriam-Webster, 2003), it is the criterion used to estimate and appraise that people most often take issue with. And, Patton extends this problem of 'appropriate criteria' to each of the components of the 'good' objective: "Clarity, specificity and measurability are not clear, specific, and measurable criteria, so each evaluator can apply a different set of rules in the game!" (Patton, 1986:86). What is more, not everyone agrees on the necessity of clear, specific and measurable goals. Early on, Weiss remarked:

> Fuzziness of program goals is a common enough expression to warrant attention… [T]here is… a sense in which ambiguity serves a useful function: it may mask underlying divergences in intent… glittering generalities that pass for goal statements are meant to satisfy a variety of interests and perspectives (Weiss, 1972:27).

Others, such as Cronbach (1980), have gone further to suggest that, in order to accommodate multiple views and interests, program goals should be made deliberately vague. This theme is drawn out and explained in greater detail in Patton's discussion of the strategies undertaken in the *goal clarification game*.

Patton describes the preparation of goals and objectives as the g*oal clarification game*: program staff are asked by the evaluator to write down goal statements in clear, precise language and review and revise the statements repeatedly until some degree of consensus is established. However, "[i]t may be possible (likely!) that different characters in the situation have different objectives and would like different outcome measures" (Patton, 1986:85). Thus, the 'game' typically generates considerable disagreement over which objectives to use, let alone the meaning of any single objective. As such, the 'goal clarification game' seldom ends with clear and specific goals and objectives. Instead, in most cases either program staff 'give-in' resulting in goals that may not reflect their perspectives; or, the evaluator 'gives-in' resulting in goals and objectives that are vague and immeasurable (Patton, 1986:86-87). Patton also describes a number of 'counter-strategies' that evaluator-facilitators have developed in response to the resistance that they frequently encounter when trying to define and clarify goals and objectives.[11]

Given the plurality of views, most agree that the preparation of clear, specific and measurable objectives is best accomplished when the various interests and perspectives of those associated with the program are incorporated in the process. Again, Patton suggests that the preparation of objectives must begin with the simple question: *Whose goals?* That is, who decides what the goals or objectives of a program are or should be? *"The*

[11] *See chapter 5* – Beyond the Goals Clarification Game – *in Patton's Utilization-Focused Evaluation for a detailed description.*

evaluation question of what goals and objectives will be evaluated cannot be answered until a prior issue is settled: Whose goals and objectives for the program will be evaluated?" (Patton, 1986:110). As long as there are multiple users of a program, any given goal or objective will have multiple interpretations, and, as a result, risks being ambiguous or, as Patton says, 'fuzzy'. In theory, Patton's response to this challenge is simple: 'primary users'[12] should be identified and involved in the development of goals and objectives. Doing so would have several important potential outcomes: there would be a greater general understanding and increased likelihood of consensus over the meaning and purpose of the objectives – including clarification of whether they are project or program objectives; and, the process can potentially encourage 'buy-in' and foster use. Patton explains that: "Intended users are more likely to use evaluations if they understand and feel ownership of the evaluation process; they are more likely to understand and feel ownership if they've been actively involved" (Patton, 1997:22).

Interestingly, in the early days of program planning and evaluation, objectives were typically "mandated by the client, formulated by the evaluator, or specified by the service providers" (Stufflebeam, 2001:17). Today, collaborating with 'stakeholders' in the evaluation process is commonplace; the 'participatory approach' emphasizes this by promoting multiple perspectives and partnership. As Aubel explains, a participatory evaluation means that "the evaluation coordinator collaborates with program 'stakeholders' to define the evaluation objectives, to develop the evaluation methodology, to collect and interpret information and to develop conclusions and recommendations" (Aubel, 1999:11). And, most agree that "an early task for the evaluator is often to collaborate with planners, project managers, and sponsors to transform ambiguous or contradictory goals into clear, consistent, operational statements of objectives" (Rossi & Freeman, 1993: 116). The role of the program planner and evaluator in this situation is as negotiator and facilitator.

The collaborative preparation of program objectives is far from uncomplicated. With multiple, often conflicting, viewpoints and interests, the practice of clarifying goals and objectives collaboratively involves skillful negotiation. What is more, programs that emphasize capacity-building and incorporate a participatory approach into their planning and evaluation will find the challenge of balancing conflicting objectives to be especially difficult:

> A further complication is introduced by the emphasis on local ownership and participation that are fundamental to successful capacity development. Since different actors bring different values, expectations, world views, capacities and vested interests to the table, and respond to different incentives, there may exist wildly different viewpoints about what should be accomplished and what will be required to achieve those outcomes. Although efforts to secure a higher level of

[12] The primary users of the evaluation are those individuals or groups who are the main users of the evaluation results. They have a 'stake' or vested interest in the project or program being evaluated, and in the results of the evaluation. Depending on the program, they may include program funders and organizations, program participants, staff, administrators, clients, collaborating groups, and community members, et cetera.

> consensus on the goals and logic of a particular initiative are important to the search for effectiveness, and merit the expenditure of both time and money in the search for shared understanding, differences will remain and are better recognized than papered over. Indeed, it may be desirable to build strategies for managing differences explicitly into the project, and to recognize increased capacity for managing differences as a desirable outcome… This would be particularly important in projects requiring broad-based local participation (Lavergne, 2002:18).

At the stage of deciding on and developing objectives, the options for dealing with multiple viewpoints and interests are few. As mentioned earlier, one approach might be to purposefully develop 'fuzzy' goals and objectives, thereby providing enough ambiguity to satisfy multiple interpretations. On the other hand, most agree that "[t]he basic solution to multiple and conflicting goals is establishing priorities. The usual criterion for prioritizing goals is a ranking or rating in terms of *importance"* (Patton, 1986:103).[13] Cracknell also acknowledges the problem of having to deal with mutually incompatible objectives, and suggest that the logical framework may help to deal with the situation:

> It helps to clarify what the primary objectives and the secondary objectives are, and places the evaluator in a better position to weigh one against the other… When faced with conflicting objectives, the evaluator has to draw attention to this fact. However, evaluators are best advised not to attempt any system of 'weighing' on their own account but simply to report the results, positive or negative, and let the reader form a judgment as to how these relate to each other in the final analysis (Cracknell, 2000:135).

The problems inherent in 'weighing' objectives are succinctly summarized by Patton when he asserts that, in the end, the decision over what goals and objectives are most important "remains an intrinsically subjective one" (1986:110).

Whether left to the evaluator or done through collaboration with the primary users, it should be clear from the above that the practice of goal/objective clarification involves a degree of risk. On the one hand, a professional evaluator may be experienced at developing goals and objectives that are SMART, but they may not be useful or meaningful to primary users. On the other hand, a participatory approach may generate meaningful (if 'fuzzy' and difficult to measurable) goals and objectives, but runs the risk of producing multiple, conflicting objectives, or disagreement over which goals and objectives are important. Although Patton advocates *meaning* and *use* over *clarity* and *measurability*, the choice of what approach to use in the clarification game may require prioritizing meaningfulness and SMARTness.

By now, one may get the impression that, although difficult to achieve, clear and measurable (i.e., SMART) objectives are the *sine qua non* of program planning and evaluation. However, as proposed in the opening statement of this section, 'too much time spent writing and clarifying goals can result in goals that are of little use' (Patton,

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[13] *Here again, Patton references several theoretically based approaches designed specifically for decision-making given multiple viewpoints.*

1986). It is important to carefully weigh both the benefits *and* the drawbacks of the objectives-based approach generally, and of SMART objectives specifically. By considering what is gained *and* what is lost when SMART objectives are the rule, it becomes evident the business of developing program objectives is not clear-cut. For instance, Patton explains that program staff often have to choose between 'clear, specific and quantitatively measurable objectives' that may have little to do with the program, and 'broad, general and "fuzzy" objectives that meaningfully reflect the program but can only be described with "soft" data (Patton, 1986:95). Of this situation, his perspective is clear:

> For my part, *I prefer to have soft or rough measures of important goals rather than have highly precise and quantitative measures of goals that no one cares about*. In too many evaluations, program staff are forced to focus on the latter (meaningless but measurable goals) instead of on the former (meaningful goals with soft measures) (Patton, 1986:95).

Given the challenges involved in preparing SMART objectives generally, and particularly within complex programs, Patton suggests that the focus should be on preparing objectives that are more 'useful' and meaningful than SMART. The 'utilization-focused' approach suggests that "evaluators should facilitate the evaluation process and design any evaluation with careful consideration of how everything that is done, from beginning to end, will affect use" (Patton, 2002). It is premised on the idea of 'intended use for intended users'; and, regarding objectives, it stresses meaningfulness over measurability. The view has gained considerable support in recent years, especially where complex social programs are involved. Gariba corroborates: "The challenge of development evaluation is to facilitate effectiveness in pursuit of development goals, rather than mechanics simply of measurement – the meticulous, sometimes expensive enterprise of calculating quantities of indicators" (Gariba, 2003:3).

PREPARING OBJECTIVES FOR DEVELOPMENT PROGRAMS - KEY ISSUES & CHALLENGES

It is unwise for evaluation to focus on whether a project has 'attained its goals'. Goals are a necessary part of political rhetoric, but all social programs, even supposedly targeted ones, have broad aims. Legislators who have sophisticated reasons for keeping goal statements lofty and nebulous unblushingly ask program administrators to state explicit goals. Unfortunately, whatever the evaluator decides to measure tends to become a primary goal of program operators.
- Lee Cronbach, 1980

By now it should be clear that the topic of program objectives is far from uncomplicated; ambiguity surrounding their meaning and discord over the criteria for developing them present obvious practical challenges. Within the context of international development, the preparation of objectives for programs is no less problematic. While the specific issues and challenges involved in preparing objectives for development programs are many and varied, two themes in particular encapsulate these challenges and issues: preparing objectives for complex and dynamic development programs (i.e., 'complex systems'), and the innovative character of development research and the challenges of incorporating 'risk' into the preparation of program objectives. Before exploring each of these areas, it is worth considering the very real possibility of going 'objective-free'.[14]

Goal-free evaluation

In the early 1970s, Michael Scriven proposed the controversial idea of a 'goal free evaluation'. Essentially, Scriven argued the dangers of focusing too narrowly on stated program goals and objectives, in which case the evaluator runs the risk of missing the most important positive and negative effects of a program. In Scriven's own words:

> It seems to me that consideration and evaluation of goals was an unnecessary but also possibly contaminating step. I began work on an alternative approach – simply the evaluation of *actual* effects against a profile of *demonstrated* needs. I call this goal-free evaluation… The less the external evaluator hears about the goals of the project, the less tunnel-vision will develop, the more attention will be paid to *looking* for *actual* effects (rather than checking on *alleged* effects) (Scriven, 1972:2 in Patton, 1986:112).

[14] Although seldom discussed outside of university classrooms and theoretical texts, the idea that programs and organizations have 'goals' has provoked fierce debate. Essentially, early organizational sociologists and psychologists cast doubt on whether it makes sense to talk of organizations as institutions which 'have' and 'pursue' goals. Rather, while people may have goals, organizational goals (and program goals) are mere *reifications*: something abstract that is regarded as 'real'. See Patton (1986:118-121) for more detail on goal-reification.

The emphasis of the goal-free method is on the 'actual effects' of the program. In doing so it claims to offer several advantages over goal-centered evaluation: on the one hand, by concealing the goals and objectives of a program from the evaluator, the possibility of 'bias' would be greatly reduced; and on the other hand, evaluating without knowledge of the goals and objectives would increase the likelihood of uncovering the unintended effects of the program (Hellström and Jacob, 2003:65).

It is no coincidence that goal-free evaluation emerged at the same time that 'grounded theory' was gaining recognition within the social sciences. Like goal-free evaluation, the grounded theory approach argued that research should be conducted without prior theoretical assumptions, allowing the research to be free of the potentially 'biasing' effects of an imposed theory.[15] Instead, it was suggested that theory would emerge through observation – in effect, from the 'ground up'. Both grounded theory and goal-free evaluation signify attempts to reduce preconception and bias; and essentially, they are attempts to present a more accurate account of the subject under investigation. To be sure, both approaches have promoted a methodological and epistemological awareness that has benefited social research generally; however, critics have been quick to point out the drawbacks of each.

For instance, Shepard explains that "goal-free evaluation might be particularly difficult in the assessment case since a number of persons will want to talk about goals…" (1977:21). But she also admits: "A compromise which Scriven agrees to is that evaluators may begin goal-free and later switch to a goal-based approach. This would allow detection of unintended as well as intended effects. Then the evaluator could pursue program purposes and intents" (Shepard, 1977:21). A more serious appraisal of the goal-free approach is that it is, in fact, it is not goal-free at all. Instead, some have argued that "…goal-free evaluation simply substitutes the evaluator's goals for those of the project…" (Patton, 1986:114). To clarify:

> Goal-free only appears to get rid of goals. The only goals really eliminated are those of local project staff. Scriven replaced staff objectives with more global goals based on societal needs and basic standards. The real cunning in this gammon is that only the evaluator knows for sure what those needs and standards are… (Patton, 1986:113).

This brings us back to Patton's initiating question in the goal-preparation game: *Whose goals are being evaluated?* From a 'utilization' perspective, the goal-free approach is less than adequate. What is more, from the program planning point of view, goal-free would likely be unproductive and ill-advised. Consider the following sardonic proposal:

> If evaluators need not know where a program was headed to evaluate where it ended up, why should program staff? They can work backwards as easily as evaluators can. Program staff need only wait until Scriven determines what the program has accomplished and then proclaim those accomplishments as their original goal (Patton, 1986:116).

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[15] *See Glaser, B. G., & Strauss, A. L. 1967. The Discovery of Grounded Theory: Strategies for Qualitative Research. New York: Aldine Publishing Company.*

Still, it is important to acknowledge that goal-free evaluation can potentially reduce researcher bias and facilitate the discovery of unintended effects. Of which Stufflebeam reiterates: "This technique is powerful for identifying side effects, or unintended outcomes, both positive and negative, also for describing what the program is actually doing, irrespective of its stated procedures" (Stufflebeam, 2002).

'Difficult' programs: preparing objectives in complex & dynamic systems

How can aid organisations represent the complex processes of change that they are engaged with, at local, national and international levels, along with a host of other actors, many of which do not share the same objectives? In 1956 Ashby proposed his Law of Requisite Variety, which stated that a model can only model something to the extent that it has sufficient internal variety to represent it.[16] *The question then is are the ways in which aid organisations seek to represent change sophisticated enough to given the nature of the change processes they are involved in? Are there some ways of representing change that can only work up to a certain scale, in the same way that central planning within firms and states has its limitations. Or are there some ways of representing change that are scalable, from the village to global level?*

- Rick Davies, 2002:2

If the general practice of preparing program objectives is fraught with challenges and obstacles, those challenges are only exacerbated within the environment of 'complex systems'. Understanding what is involved in preparing objectives for comprehensive social programs requires an examination of the characteristics of such programs, as well as of the 'complex systems' within which they typically are implemented – that is, those features that often confound the intended 'logic' of the program's design.

Development programs are embedded in and affected by 'complex systems' characterized by multiple confounding variables and unknown 'causal' connections. Predicting the direction and extent of change – or, more specifically, the effect of a given intervention – within such systems is, therefore, a highly complicated task (Dixon, 1996). Conventional 'wisdom' concerning comprehensive programs within complex systems acknowledges that "a program is only one of many influences on an outcome. In fact, deciding how much the outcome is truly attributable to the program, rather than to other influences, may be the most challenging task in evaluation study (Treasury Board of Canada, 2003:24). Whyte corroborates this view stating: "Projects implemented in [complex] systems are likely to have unexpected and decidedly stochastic outcomes" (Whyte, 2000:6). What is more, a comprehensive development program will be

[16] Sociologist Bob Jessop elaborates: "As initially introduced into cybernetics, this law states that, in order to ensure that a given system has a specific value at a given time despite turbulence in its environment, the controller or regulator must be able to produce as many different counteractions as there are significant ways in which variations in the environment can impact on the system (Ashby 1956)… Because of the infinite variety of perturbations that could affect a system in a complex world, one should try to maximize its internal variety (or diversity) so that the system is well prepared for any contingencies" (Jessop, 2002).

influenced by its association with diverse local, national and international development agencies and program affiliates; thus, as Davies explains: "In development practice there is not always a neat hierarchical correspondence between specific activities and specific objectives… In this setting comparing the achievements of two projects within the same country programme becomes more difficult because they are expected to address different combinations of objectives" (Davies, 2002:12). And, in addition to those 'organized influences' (i.e., the various 'aid' related contingencies) the development setting tends to present unique 'environmental' challenges. John Rickard describes the kinds of concrete conditions that typically challenge program planners and evaluators of international development research:

> There is a myriad of internal and external factors affecting our ability to plan and coordinate: poor or unreliable local infrastructure, rapidly changing market conditions, poor communications and security, fluid population movements, over-worked staff, short donor lead-times for proposals, donor regulations, institutional memory, inter-agency relations, staff turnover, staff capacity, and so on. These factors do make it difficult for managers to plan and coordinate. The problem is that in response, rather than review those elements that we can control, managers tend to de-prioritise the whole planning and coordinating process (Rickard, 2003).

Given the comprehensive character of development programs generally, and the complexity of the settings within which they tend to be implemented, it should come as no surprise that the preparation of program objectives involves serious challenges. To explore them, it is useful to consider in more detail two related themes: developing program objectives in the face of uncertainty and multiple confounding factors; and, setting program objectives when 'results' typically occur far 'downstream' from the implementation.

As indicated above, development program outcomes are not easily attributable to a given implementation alone. Various factors beyond the reach of the program's activities – from other government actions and programs to economic and social trends – will have an impact on a given situation and have an influence on outcomes. The difficulties in managing and evaluating large programs are familiar:

> Federal programs operate in a complex environment. They often have to deal with a diverse and uncertain number of external factors and other players with similar or competing objectives. Moreover, they do not operate in a stable environment; change is now the norm. Furthermore, programs are trying to accomplish broad public objectives reflecting the public interest, which sometimes can be a challenge to measure (Office of the Auditor General, 1997).

And Gilbert adds that "in most instances social interventions are embedded in environments that are too complex and dynamic to allow evaluators to determine cause and effect relationships" (1995:334).

Therefore, developing program objectives within the inherently unpredictable and frequently variable setting of international development presents serious challenges; and, the dynamics of social, political and economic instability further complicates the practice.

This is especially the case when objectives serve an accountability function. That is to say, faced with the increasing pressures of accountability and demonstrating results, the task of preparing clear, specific and measurable objectives may be both frustrating and counter-productive. In circumstances in which the preparation of objectives is being accomplished collaboratively, those involved will be sensitive to the likely influence of confounding factors, and the uncertainty of 'outcomes'. As a result, they often face limited options when deciding how to select the program objectives: on the one hand, they might choose to develop objectives that represent "the most ambitious result in a particular program area that a team and its partners can materially affect and for which it is willing to be held accountable" (Garoute, 2003).[17] However, they will be aware of the likelihood of extraneous variables influencing the relative success of achieving their stated objectives, thus placing at risk their commitment to being accountable. On the other hand, objectives might be designed less 'ambitiously', so that they are more assured of 'hitting their targets' – an apparently common strategy with potentially detrimental results for program recipients. Thus, the burden of accountability is more than simply a political and administrative issue. Within the context of international development programs, the demands of accountability place in question the authority of programming staff and their ability to manage and adapt their programs, and significantly influences the way that program objectives are developed.

Another condition which adds to the challenge of preparing objectives for comprehensive programs involves the temporal character of the relationship between the intervention and the outcome. Given that "…it can take considerable time for project effects to become evident…" (Perrin, 2002:15), the length of time required for a program's effects to become apparent will likely be much longer. Unlike project level interventions in which specific, measurable objectives have distinct timeframes and may be designed to achieve immediate outputs and intermediate outcomes, at the program level it is much more difficult to track extent to which the objectives have been reached. The seriousness of this situation is highlighted by Perrin who explains that, "…a lively topic of debate at recent UK Evaluation Society conferences has been the extent to which short-term pilots provide sufficient time for meaningful evaluation of significant social reforms" (2002:15). Within complex systems, programs comprised of multiple, ongoing, coordinated projects are likely to bring about results both sporadically and extended over a long period of time. Therefore, program objectives that try to conform to the specification of the SMART approach face the very real possibility of missing their 'target'. Or, the program objective might 'hit its target' but so far 'downstream' from the program intervention that it only provides 'terminal information' – neither timely nor useful for improving the program.

Still another challenge involves the length of a program's life. Given the duration of program interventions relative to single projects, it is likely that program goals and objectives will change, perhaps several times, throughout their course. Program planners and evaluators refer to this condition are 'moving-goalposts'. And while Cracknell suggests that "[a] change in the objectives may be perfectly reasonable, and indeed it is

[17] *This definition of 'strategic objective' is borrowed from USAID.*

often desirable when a process approach is being used…"[18], 'moving-goalposts' may present complications from the accountability point of view (2000:136). Others have pointed out the serious nature of this problem, and the inadequacies of the widely used LFA model for dealing with them:

> Over time, these objectives might have changed or become irrelevant, or never have been realistic and appropriate in the first place… The focus on stated objectives also meant that data on unintended impacts might not be collected. In any case, the logical framework provided little guidance as to what type of unintended impact to search for, and where and how to do so (Kleemeier, 1996:5).

To reiterate, the complex setting of international 'aid' presents numerous practical challenges for the preparation of program objectives. Indeed, multiple confounding variables and a protracted timeline from intervention to outcome make the process of selecting program objectives difficult. Yet, another paradoxical condition underlying the operating protocol of development programs further complicates the process. Many development programs today emphasizes capacity-building and local ownership; and therefore, a degree of flexibility and autonomous decision-making at the local level. At the same time, the increasing demand from donor agencies and governments to demonstrate results and be accountable often means that local agents (i.e., primary users) must conform to the 'logic' of the SMART objectives approach – whether or not SMART objectives are realistic and desirable. Consider the following: "Increased flexibility at the local level can limit efforts to set national goals and standards or create obstacles for ensuring accountability. In other cases, the program may focus on a limited set of activities which in turn are used for multiple purposes by many distinct stakeholders. Establishing performance measures for these types of programs can be challenging" (OMB, 2003:11). It is important to keep in mind that the challenges associated with preparing objectives for comprehensive programs within complex systems are intricately linked to the different perceptions of what the objectives should be as well as their purpose. That is to say, the different views on the purpose of the objectives can result in tension between the various groups (primary users and donor agencies). On the one hand, from the local perspective the key function the objectives may be to articulate the intended direction and anticipated effect of the program; while on the other hand, for donor and political agents the objective may be more of a tracking tool, measuring the extent to which the objectives were, or were not, achieved. Once again, this alludes to an inherent tension within the structure of program planning-evaluation.

Innovation & the avoidance of 'risky' objectives

Most attempts at innovation, by definition, must fail. Otherwise they are not truly innovative or exploring the unknown. However, the value comes from that small proportion of activities that are able to make significant breakthroughs, as well as from identifying what can be learned from 'failures'.
- Burt Perrin, 2002:25

[18] Cracknell finished this sentence: "…but clearly the evaluator needs to establish what the new objectives are, and should also examine how and why they came to be changed" (2000:136).

Burt Perrin defines innovation as: "novel ways of doing things better or differently, often by quantum leaps versus incremental gains" (2002:13). And, in the context of program planning and evaluation, he characterizes innovation as being inherently 'risky', as well as "unpredictable in terms of which particular activity or intervention will work or prove useful; who will benefit; when benefits, if any will occur; under which particular set of circumstances an innovative approach would be applicable; [and], whether the discovery and application will be as intended or of quite a different nature" (2002:14). He explains that whether an innovative project 'succeeds' or 'fails', we can learn things from innovation that we might not discover without 'taking risks'; innovation can be extremely valuable in that it promotes learning through 'failure'. "That's learning. Admitting uncertainty. Trying things. Making mistakes…" (Meadows, 2000 in Perrin, 2002:14).

As stated, the dynamics of tradition and culture, and the potential instability of political and economic structures within the development context, generates a degree of uncertainty.

> Complicating factors such as these imply a considerable increase in uncertainty regarding what is achievable and how to achieve it. Often, it is only in the doing that the nature of the task at hand, the challenges to achieving it, and the time necessary to achieve desired outcomes become fully valued (Lavergne, 2002:18).

For development programs, innovation is not only inevitable, it is desirable. And, given the uniqueness of the setting in which 'aid' programs are typically implemented, new and innovative initiatives may be necessary. That is to say, where 'successful' international development programs have yet to be established, 'aid' programs may indeed require a degree of innovation. By attempting 'novel ways of doing things better or differently', the outcomes of innovative programs may be uncertain; but such attempts may also generate new or more complete understandings of the program area.

In practice, innovative programs present a variety of challenges – specifically, in relation to program funding and accountability. Whether or not the program itself is innovative, resource scarcity and the demand for accountability may be enough to dissuade program staff from developing innovative program objectives. Instead, objectives might be designed and written to reflect attainable targets. In such cases there may be a tension between the want to prepare objectives that reflect the innovativeness of the program (i.e., uncertain outcomes), and the pressure to conform to the demand of resource scarcity (i.e., funding) and accountability (i.e., attribution).

For program objectives to be effective, they must somehow reflect that innovativeness, if it is an element of the program. This is perhaps one of the more challenging issues involved in the preparation of objectives for innovative development programs. Perrin explains the problem:

> Given that innovation by definition is unpredictable, it is not possible to identify meaningful objectives or targets in advance. Evaluation approaches largely based upon assessing the extent to which programmes have achieved pre-determined objectives ipso facto are not open to double-loop learning, and can penalize

> programmes that go beyond or demonstrate limitations in these objectives. Furthermore, true gains, including the identification of what can be learned from 'failures' as well as from 'successes', can be difficult or impossible to quantify. …[P]erformance indicators and evaluation-by-objectives by themselves are rarely suitable for evaluating any programme, innovative in intent or not (Perrin, 2002:18).

Additionally, Mayne acknowledges the importance of 'setting out clear statements of what is to be accomplished' (2003:1), but recognizes the challenge involved in setting such statements for innovative programs: "An exception might be cases of programs that are experimental in nature – usually pilots – where the intervention is expected to be beneficial but there is perhaps little experience to date and hence concrete expectations may not be practical, or are expected to emerge as understanding of the program's contribution is gained" (Mayne, 2003:1n). But, Mayne concludes that in time, as a more comprehensive and complete understanding of the 'innovative' program's contributions emerges, and as the impact of that program becomes more predictable, "concrete expectations could be developed" (2003:3n).

Perrin points out the interest in, and investment toward, innovation within many leading research organizations:

> [L]eading corporate research organizations typically leave some portion of research budget and researcher time for projects that do not fit into established categories… often up to 25 percent of the research budget is left open to ideas that do not conform to existing categories (e.g. Buderi, 2000). The European Commission is considering a similar approach to provide for funding of 'blue sky' research proposals. 3M is an example of a corporation, known for its innovation, that lets its researchers devote 10 percent of their time to activities of their own choosing (Shaw et al., 1998) (2002:23).

The need to incorporate sound strategies for evaluating innovation is reinforced by the acknowledgement of the value of innovation within development programs. When asked about innovation in the context of the evaluation of international development programs, several of the professional evaluators interviewed for this paper suggested that, as has been the case for 'capacity building', 'policy influence', and 'institutional learning', innovation should also be considered integral for development programs. But, they recognized that innovation may be better situated within the program's 'higher level' goal, mission or vision statement, particularly in cases where innovation is one of the central values of the organization as a whole, or program area. Positioning innovation at this level – incorporating it into the mission or vision statement –may also resolve the paradoxical challenge of trying to write clear, specific and measurable objectives for programs whose results possess an inherent degree of 'uncertainty'.

Perrin's perspective is compatible with this view; he recommends a process-oriented evaluation approach that can identify and monitor the extent of innovation of projects and programs: "Perhaps a related evaluation question might be the extent to which innovation is being managed, e.g. to encourage the identification and application of innovative ideas and approaches" (Perrin, 2002:22). According to Perrin, a methodological approach to evaluating innovation must be able to:

> get at the exceptions, including unintended consequences, given that research approaches just based upon counting and summations are not relevant and will hide true achievements; provide an understanding of the complex processes involved as well as help identify learning and implications, from 'successes' and 'failures'; [and] be flexible enough to be open to serendipity and unexpected findings, which, particularly with innovations, can represent the key outcomes (Perrin, 2002:23-24).

To do so, Perrin acknowledges that a mix of qualitative *and* quantitative methods would be most appropriate; in particular, the case study approach "would permit exploration in detail of both apparent 'successes' and 'failures', to identify what it is that does or does not make them work and what can be learned in either case" (2002:24).

'WAYS FORWARD'

I don't care what kind of evaluator you are, to be effective you need the flexibility to evaluate with or without goals.

- Michael Quinn Patton, 1986:92

The most appropriate approach… is one that recognizes more explicitly the reality of development work as one involving not just risk management, but also judgment and ongoing negotiation in the face of uncertainty, incomplete information and divergent interests.

- Réal Lavergne, 2002:19

By now it should be evident that the theory and practice of preparing objectives – for programs generally and development programs specifically – is anything but clear. From the onset, inconsistencies over meaning and purpose generate substantial ambiguity around the concept. Furthermore, in practice, empirical contingencies present serious challenges for the preparation of program objectives.

A theme that underlies each of these challenges is the inextricable link between program planning and program evaluation. Generally speaking, from the planning perspective objectives are designed to provide direction for the program; whereas, from the evaluation point of view objectives are used to 'track' the extent to which the program has 'maintained its course'. And, as has been explained, this functional duality tends to generate tension in the preparation of program objectives – between developing objectives that reflect 'the most ambitious results' that a program can bring about, and developing objectives that reflect results that 'a team and its partners are willing to be held accountable for'. Raising the question: *How intelligent is it to place such a strict emphasis on SMART objectives?*

In many situations, clear, specific and measurable objectives will not only be appropriate, but also most useful. This is particularly the case when planning at the project level and evaluating non-complex, or 'simple', systems.[19] However, as described above, SMART objectives for program level planning and outcome evaluation may be both less appropriate and less useful. Growing awareness of the challenges involved in preparing objectives for programs – and in using objectives to measure performance – has placed in question the authority of the objectives-based approach. As Kleemeier describes, "an impact evaluation no longer necessarily implied the textbook definition of looking at progress toward stated objectives. In fact, the original objectives could be evaluated, rather than simply accepted as the standard against which to judge progress" (Kleemeier, 1996:5-6). Without necessarily going completely 'goal-free', program planners and evaluators have come to recognize that objectives are not always most useful or appropriate. Early on, Smith exclaimed that, "[o]ne can conduct useful evaluation without ever seeing an objective" (Smith, 1980:39). And Patton follows-up on this, suggesting that: "Focusing on goals is one important option in utilization-focused

[19] *The term 'simple systems' is often employed to refer to non-human/non-social environments.*

evaluation – but only one option" (1986:91-92). Nevertheless, the objectives-based approach (and in particular, SMART objectives) predominate planning and evaluation. Of this, Patton warns that "the goals clarification process can become so formalized in the minds of many evaluators as the primary basis for evaluation that they automatically begin every evaluation with specification of clear, specific, measurable goals" (1986:91-92)

The following will explore several alternatives to the 'conventional' program objectives methods. While they do not necessarily reject the use of objective, they raise some issues concerning the meaning, use, and preparation of program objectives within the development context. It begins with Rick Davies' re-assessment of the 'logic' of traditional models of 'change processes', and offers a summary of a few viable alternatives. Additionally, the growing interest in 'narrative' and 'mapping' approaches will be highlighted – in particular, 'Performance Stories' and 'Outcome Mapping'. And finally, it will revisit the familiar theme of 'useful evaluation' and remind the reader that program planning and evaluation is as much 'craft' as it is 'science'. To be sure, the following brief summaries are neither complete nor comprehensive, but are meant to raise attention to some potential alternative approaches.

Modeling change in complex systems

In order to better understand the problems associated with the objectives-based approach generally, and with SMART objectives specifically, one must first understand the paradigm of social change within which objectives are typically designed. The social sciences generally, and evaluation specifically, historically have emphasized 'linearity' when attempting to explain change processes. As a result, program planning and evaluation has come to rely heavily of the 'logical framework' as a model of causal explanation. However, in recent years, growing criticism has been directed towards the logical framework's 'linear' representation of causal change. It is not within the scope of this paper to explore these criticisms in detail; however, the key critiques suggest that 'linear' representations of change often do not accurately reflect social reality, and do not adequately account for such things as 'feedback loops, synergies, vicious or virtual circles and other features that cannot be linearly described" (Lavergne, 2002:19).

Moreover, the stages of program planning and evaluation are often depicted as "a one-way trajectory, from activities to outputs to purpose to goal. There is no place for feedback loops back to processes that are re-iterated" (Davies, 2002:15). And, absent from linear expressions of change is "the possibility in theory and probability in fact that most change is a two way process" (Davies, 2002:17). In sum, within complex systems, the traditional 'linear' model of change represents an oversimplification. This oversimplification is overtly reflected in the predominance of SMART objectives which, by design, neatly correspond to the 'logic' of linear change; in the context of complex and oftentimes 'non-linear' change, SMART objectives find it difficult, if possible, to adapt to the dynamic and uncertain conditions within which the program is implemented.

Davies' work explores the limitations associated with conventional models of change processes. Beginning with the 'logical framework', he responds to the limitations and weaknesses of each approach by adjusting the model, until finally a multifaceted, 'network model' evolves which is able to more accurately represent the intricacies of change processes within complex system.[20] From the network analysis perspective, "how an individual acts is tied to the larger web of social connections... [and] the success or failure of societies and organizations often depends on the patterning of their internal structure" (Webster, 2001). Essentially, 'social network analysis' maps and measures the relationships and flows between people, groups, organizations, or other information-knowledge processing entities.

Network analysis graphically represents human and organizational relationships as nodes (individuals and groups) and links (relationships or flows between the nodes). Its primary aim is, "the construction of a network plot, a map of the given network structure that visualizes the complex linkages between actors" (Beidernikl & Paier, 2003:5). As opposed to highlighting the patterns and congruencies in the characteristics of individuals', "network analysis concentrates on the regularities in the patterning of relationships among social actors" (Webster, 2001), and focuses on understanding the ways in which the patterns of social structure affects these relationship and resultant behaviors.

This 'relational' approach "recognizes that ties among network members differ in direction, strength, and content… That individuals do not form relationships with one another completely independently" (Webster, 2001). According to network analysts, understanding the position of individuals and groups within social networks – and more importantly understanding the nature of their relationship to each other – helps to explain how social position affects opportunity and choice. That is, network analysis provides information about the constraining and enabling character of different kinds of relations within networks; it goes beyond simply demonstrating what choices were made to effect specific outcomes, to explain *why* choices were made. It has been seen as useful in the context of complex social programs insofar as it has the potential to contextualize behavior at both the micro level (i.e., individual and local) and macro level (i.e., organizational and national/ international) by exposing the ways that a particular social network influences the opportunities and choices of social actors (both individual and group). Although it emphasizes quantification and typically uses complex computer programs for data organization and analysis, network analysis allows for the use of both quantitative and qualitative data making it particularly flexible for studying complex systems of micro and macro arrangements.

Davies elaborates on the potential usefulness of the 'network analysis' approach for explaining the 'impact' of development interventions, and in particular, for situating objectives within the broader, complex network of social change:

[20] See also Gerd Beidernikl & Dietmar Paier's *Network Analysis As A Tool For Assessing Employment Policy, 2003.* Center for Education and Economy, Graz, Austria.

> A network perspective also has implications for how monitoring and evaluation activities can lead to cumulative results within a wider population of projects and organisations. Firstly, it suggests that evaluations of individual projects should not be free-standing assessments of performance according to objectives. They should be linked in with other evaluations, through connections between the people involved and between the documents being shared. But linked in what way? The literature on the "small-world" phenomenon indicates that a mixture of local and distant links is needed to ensure complete connectivity within a large system of actors... If these conditions of inter-connectedness exist then we might expect that the system as a whole to evolve over time, through mutual adaptation. That process can be facilitated if there are mechanisms for facilitating such linkages (Davies, 2002:25).

The significant advantage of the network approach would be that it would provide a greater number of stages to represent change than the 'simpler' models. Davies argues that theories which possess more stages – linking diverse and often marginally situated groups of people with more centralized agents – will provide a more accurate representation the process of change; and, they therefore will be more effective than simpler change models (Davies, 2002:6). Furthermore, applying a network approach in the evaluation of development programs means that the "chain of events from offices in capital cities to poor rural households will be much longer" (Davies, 20025-6). Of this Davies is optimistic:

> This is likely to be a net positive, in two respects. The more identifiable stages in a theory of change, the more likely the theory will be described in more tangible and observable terms. The more of these there are the more disprovable the theory will be. This should be seen as a positive feature. Secondly, this change would help re-direct attention away from the validity of individual indicators of a specific change, to the validity of the theory of change a whole, as expressed through the predicted sequence of events. My experience is that the former is typically over-emphasised, relative to the latter. Thirdly the more steps there are in a theory of change, the more precisely that progress can be measured along the path of change (Davies, 2002:5-6).

In addition to these advantages, some have suggested that a network approach may help resolve the challenges associated with assessing innovative programs. Temel explains that, while policy analysts and decision-makers tend to sanction practical frameworks for predicting the outcome of policies and programs, "[w]ith the method introduced in this study [network approach], they should be able to identify the existing cause-effect pathways, detect leverage points and mismatches, and develop alternative scenarios to release the constraints on innovative performance of the system concerned" (Temel, 2001:2). Temel's 'network analysis' of an innovative agricultural program offers a positive conclusion: "[Network analysis] promises wide applications among policy makers who are interested in assessing alternative innovation policies and/or programs by identifying effective pathways of interactions between the components and the constraints that hinder these interactions" (Temel, 2001:17).

To be sure, the network approach is somewhat novel to program planning and evaluation, and has yet to produce a substantial body of experience and knowledge. In practice,

applying a network approach may encounter some resistance: costs, time, knowledge and skills may exceed the budgets and capacities of some organizations. However, a more serious immediate challenge involves the epistemological 'break' that the network approach may require:

> Network analysis is hard because it goes against our traditional philosophy of science. We grow up being taught that science is about breaking things up. We are taught that we can understand things by understanding their parts and their mechanisms. Network analysis won't tell us these things, but it gives us a holistic view in which we can study things like adaptability, stability, and complexity. These things are very hard to study using traditional science (Zorach, 2001).

Also, while network analysis may generate a more detailed and potentially more accurate representation of change, in practice the challenge remains one of moving "beyond descriptions of such networks, to theoretical explanations of why networks (that is, social structures) take particular forms" (Collins, 1997:415).

Clearly, the approach provides insightful responses to the limitations of conventional models of change, but it also raises some practical questions about its future role within the program planning and evaluation structure. Davies offers these concluding remarks: "Behind this networking approach is a much more decentred view of the role of development agencies than that encouraged by the Logical Framework. Development agencies are not the centre of the world, but rather one of many actors seeking changes in world around them" (Davies, 2002:26).

Tracking program influence: 'stories' & 'maps'

General awareness of the challenges involved in objectives-based evaluation and planning, as well as growing sensitivity to theoretical problems involved with simple, linear representations of change, have brought about several significant developments in practice. Like the advances offered through the network approach, program planners and evaluators are devising strategies that are better able to represent and explain the complex and dynamic relationships between interventions and 'outcomes'. As a result, theses approaches provide new insight into 'how to' prepare objectives for development programs, and may replace existing 'best practices'.

One approach, the '*Performance Story'*, provides a much more detailed and contextually sensitive representation of the complex sequence of events from intervention to outcome, than does the logical framework or 'results-chain' approach alone.[21] Used in conjunction with the more 'rigid' results-chain model, the performance story is meant to compliment and corroborate. In essence, it represents a movement towards a mixed-methods approach.

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[21] *The performance story is a central component of John Mayne's 'performance-expectation chart'. For more detail, see* Reporting on Outcomes: Setting Performance Expectation and Telling Performance Stories. *2003. Office of the Auditor General*

> Reporting on performance requires reporting what was achieved in relation to what was expected, as well as what was learned. Reporting on outcomes therefore involves reporting on what was achieved in relation to the results-expectations chart set out. It involves more than simply reporting against several specific performance measures or target previously set out. It involves telling a credible **performance story** about the results-expectations chart – that is, presenting evidence on the extent to which the results-expectation chart in fact reflects reality (Mayne, 2003:13).[22]

Mayne explains that the performance story is meant to addresses several themes: It provides a clear and detailed *context*; it sets out meaningful, clear and concrete statements of what *results* are expected, and at what *cost*; it provides an account of *actual accomplishments*, positive and negative, unintended or not; describes what was *learned* and what future plans will be taken; and, it addresses the *verity* of the data (2002:14). Furthermore, Mayne explains that these 'elements of the performance story' are told through a combination of narrative accounts and quantitative data. "A performance story sets out to convince a skeptical reader that the activities undertaken have indeed made a difference" (Mayne, 2003:13), whether that 'difference' was intended or not.

Therefore, Mayne's approach does not relinquish the specificity and measurability afforded by the more fixed 'performance-expectation chain' (a modification of logical framework approach), but juxtaposes its 'logical' sequence against the contextually rich data that is garnered from the performance story. As such, it has the ambitious goal of both increasing validity and knowledge – of 'proving' and 'understanding'.

To be sure, the contextually grounded narratives that the performance stories provide may not represent the kind of 'epistemological shift' generated by the network approach (if it can actually be said that network analysis represents such a shift). Nonetheless, Mayne's approach does recognize and begins to address some of the limitations of conventional methods. As he explains: "…[T]he aim is not to definitively prove that the program has made a difference but to build over time a convincing case of plausible association between the results observed and the activities and outputs of the program, as more and more evidence is gathered. Presenting a case that is reasonably accepted is a more realistic aim" (Mayne, 2003:14).

Another approach (thematically similar to network analysis and performance story) has made its way into evaluation and planning in recent years. Where a 'blueprint' was once an acceptable representation of the 'logical' pathways between activities, outputs and outcomes, more and more evaluators are demanding better navigational tools. Detailed by experiential narrative accounts, 'mapping' has become one means of plotting complex social landscapes, such as that of development programs, from intervention to outcome. Within "the private sector a large amount of time has been invested by many companies to what has been called *process mapping* (and other terms)" (Davies, 2002:16), and in the evaluation field "Outcome Mapping" represents a significant shift in this direction.

[22] Mayne defines 'performance expectations' as the "more concrete statements specifying what is to be accomplished over a time period"; whereas objectives are those "general statements that set the direction of the overall intent of the program" (Mayne, 2003:2).

As the title implies, Outcome Mapping focuses on outcomes – defined as "changes in the behaviours, relationships, activities, or actions of the people, groups, and organizations with whom a program works directly." And, "[t]hese outcomes can be logically linked to a program's activities, although they are not necessarily directly caused by them" (Earl et al., 2001:1). Like the 'performance story' approach, outcome mapping provides a level of detail that traditional approaches often lack – detail that fosters deeper understanding of the processes within complex systems, and ultimately of the 'contributions' of development interventions. It recognizes the inherent limitations of models that attempt to establish 'attribution' (between intervention and results), and it does not attempt causal explanation: "By using Outcome Mapping, a program is not claiming the achievement of development impacts; rather, the focus is on its contributions to outcomes. These outcomes, in turn, enhance the possibility of development impacts — but the relationship is not necessarily a direct one of cause and effect (Earl et al. 2001:1).

While a comprehensive explication of the procedures involved in 'outcome mapping' is beyond the scope of this paper, it is important to note that, when considering it as an alternative to the objectives-based approaches, there are some caveats. On the one hand, outcome mapping focuses on 'changes in behaviors, relationships, activities and actions of the people, groups, and organization with whom it works directly', and therefore may not be appropriate for all evaluations situations. Additionally, it is not exempt from challenges involved in evaluation at the program level. Indeed, at the program level outcome mapping suggests subdividing programs into more manageable activities. Earl explains: "At too high a level of generality, it is difficult to identify who will change and how they will change, thereby reducing the likelihood of success" (Earl et al., 2001:15). Nonetheless, not only are 'mapping' approaches becoming an increasingly viable alternative to conventional frameworks, they also hold great potential for organizations that value and emphasize learning. Davies explains:

> An increasing amount of effort is being expended by development programmes in attempts to identify and document "lessons learned" to date. Much of what has been produced is disappointing and takes the form of "motherhood and apple pie" clichés that one would have expected to have been learned many years ago. …[P]rocess mapping offers the possibility of capturing accumulated knowledge of how to do things in a much more practical and replicable form (Davies, 2002:16).

To reiterate, the practice of preparing objectives for programs is not without challenges. From the planning perspective, objectives hold the promise of keeping us on 'on track' and helping us meet 'ambitious aspirations'; from the evaluation perspectives, objectives act as 'mileposts' allowing us to gauge the extent of program's 'success' or 'failure'. And, while both planners and evaluators may wish to develop meaningful goals and objectives, 'meaningful' often means something different to each. Because of the tremendous emphasis on measurement and specificity, some believe that "[t]he goal clarification process has become… an end in itself, rather than a means to the end of focusing program efforts and determining what information is needed for program improvement and decision making" (Patton, 1986:91-92). Moreover, according to Patton

the conventional practice of preparing program objectives that are specific, measurable and clear, has usurped the most important qualities of any 'good' objective: meaningfulness and usefulness. 'Utilization' implies 'intended uses for intended users' and stipulates that, if an objectives-based approach is going to be taken, objectives should be meaningful and useful to the intended users of the program. By de-emphasizing specificity and measurability "the skillful evaluator can move away from goals to the issue of what information is needed for future decision making" (Patton, 1986:91).

What is more, the evaluation practice may be best understood if considered as both an 'art' and a 'science'. It embodies the precision and rigor of science, but requires the creative flexibility characteristic of art. Mastery of the 'craft' of evaluation research requires a balance of knowledge, skill, and creative innovativeness. The practice of developing 'useful' program objectives must also be seen as art and science, especially within the context of complex systems. Albeit lengthy and somewhat dense, it is worth considering Sanderson's advice on the evaluation of programs within complex systems:

> It requires us to challenge some basic assumptions that underpin traditional approaches to evaluation, concerning how we can gain access to and analyse social processes, how policies to change such processes are formulated and implemented, and how such policies 'work' in promoting change. It requires us to recognize that evaluation is necessarily itself a highly complex endeavour if we accept the realist notion of a multi-layered social reality, the applicability of the concept of dissipative systems and the force of hermeneutic accounts of the role of human agency. It requires us to see evaluation essentially as a craft or 'practice'. This is not the application of 'techniques' to well-defined policy contexts which will provide a definitive answer to the question 'are our objectives being achieved?'. Rather, it is more an exercise in crafting an approach comprising a range of methods appropriate to particular circumstances which will provide some understanding of the wider appropriateness of policy initiatives (Sanderson, 2000:450).

CONCLUSION

While objectives are an integral component of program planning and evaluation, a number of conditions make the practice of preparing objectives for programs especially challenging, and place in question their usefulness.

A fundamental obstacle that program planners and evaluators must overcome when preparing objectives is the ambiguity surrounding the language of objectives. This is particularly challenging given that, in theory and in practice, the preparation of objectives for projects and programs alike is often guided by a single set of procedural standards. If programs and projects are characteristically different – and where a fundamental difference is one of scale – it may not be realistic to expect that they should both be governed by the same guidelines. Therefore, especially where there is a plurality of parties involved, an initial step may be to clarify concepts and terminology. As has been discussed, one means of attaining this might be to commit to, and extend the reach of, the participatory process. Following which a collaborative decision might be reached as to the feasibility of developing SMART objectives for the project or program in question.

While the issues associated with language are broad and affect planning and evaluation generally, a more specific challenge involves preparing objectives for innovative programs and/or programs that are embedded in complex systems. To be sure, 'complex systems' and 'innovation' are not absolute terms; in actuality, the 'systems' or contexts within which programs are implemented will range in degree of complexity, and programs themselves will range in innovativeness. Simply put, some programs will be embedded in systems that are more complex than others, and some programs will be more innovative than others. What is more, it might be said that complexity and innovation are directly related to the degree of challenge associated with the preparation of objectives – the more complex the implementation environment, and/or the more innovative the program, the more difficult it will be to prepare SMART objectives. And, depending on the level of complexity and degree of innovation, objectives may be either ineffectual or, in some instances, disadvantageous to the program. The significance of these limitations is particularly pronounced for international development programs in which complexity and innovation are often the norm. Therefore, when considering objectives for development programs, an initial question may be: *How will the complexity of the implementation setting and/or the degree of program innovativeness affect the preparation and use of objectives?*

In some situations, the challenges and limitations associated with preparing objectives may demand alternative strategies for explaining the effects of a given program. When the complexity of the implementation environment confounds the explanatory logic of 'traditional' approaches, it may be useful to adopt alternatives such as 'network analysis', 'performance stories' and 'outcome mapping'. In essence, these strategies represent a shift toward a more context-focused approach for explaining social change; as such, they are more interested in explaining *how* and *why* a given intervention influenced change, than they are in attributing 'cause' and 'effect'. Perhaps the more significant advantage is

their capacity to provide a more complete and comprehensive portrait of change – of both the intended and unintended results of a given intervention. This makes them particularly well suited for evaluating development programs where the direction and nature of influence is often uncertain.

Given the unique context and characteristics of any given intervention, the fundamental questions emerging from the preceding are therefore: *Is an objectives-based approach viable and most useful, and under which conditions?* If it is determined that an objectives-based approach is both viable and useful, then a crucial first step will be to vigilantly clarify the 'language of objectives'. If, on the other hand, the context and character (i.e., complexity of setting and innovativeness of program) renders the objectives-based approach unfeasible and ineffective, then alternatives strategies may, in fact, turn out to be the 'best practice'.

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REFERENCES IN TEXT

Abbot, Andrew. 1988. *Transcending General Linear Reality*. Sociological Theory 6:169–86.

Aubel, Judi. 1999. *Participatory Program Evaluation Manual*.

Beidernikl, G. & D. Paier's *Network Analysis As A Tool For Assessing Employment Policy, 2003.* Center for Education and Economy, Graz, Austria.

Binnendijk, Annette. 1990. *Donor Agency Experience with the Monitoring and Evaluation of Development Projects*. In Finsterbusch, Kurt, Jasper Ingersoll and Lynn Llewellyn (eds.), Methods for Social Analysis in Developing Countries. Westview Press, Colorado.

Brim, Rodney. 2002. *A management by objectives history and evolution.*

CDC. 2003. Practical Evaluation of Public Health Programs. Centre for Disease Control. http://www.cdc.gov/eval/workbook.pdf

Chicago Public School. 2003. *A School Grantwriter's Guide to Planning Competitive Proposals*. Office of External Resources and Partnerships.

Collins, Randall. 1997. Theoretical Sociology. Harcourt Brace Jovanovich, New Delhi.

Cracknell, Basil Edward. 2000. Evaluating Development Aid: Issue, Problems and Solutions. Sage Publications, New Delhi.

Cronbach, L et al. 1980. Toward Reform of Programme Evaluation. Aims, Methods, and Institutional Arrangements. Jossey-Bass Publishers, London.

Davies, Rick. 2002. *Improved Representations Of Change Processes: Improved Theories Of Change*.

den Heyer, Molly. February, 2001. Literature Review From: The Development of a Temporal Logic Model. Master's Thesis, University of Guelph.

Deppen, Marion R. 1978. *Quantitative Objectives: Boom or Bust*. Journal of Extension.

DFID. 2003. *Glossary of Terms and Abbreviations*. Department for International Development, http://www.dfid.gov.uk.

Dixon, Thomas Homer. 1996. *Strategies for Studying Causation in Complex Ecological-Political Systems*. The Journal of Environment and Development: A Review of International Development Policy. Vol.5(2):132-148.

Earl, Sarah, Fred Carden and Terry Smutylo. 2001. Outcome Mapping: Building Learning and Reflection into Development Programs. International Development Research Centre, Ottawa.

Evaluation Resource Centre. 2000. *Evaluation of Large Initiatives (ELI)*. http://omni.cornell.edu/ncievaluation/ELI/ELI.htm

European Commission. 1997. EVALUATING EU EXPENDITURE PROGRAMMES: A GUIDE - Ex post and Intermediate Evaluation.

Flint, *M. et al.* 2001. *How Effective is DFID?* Development Effectiveness Report, DFID.

Gariba, Sulley. 2003. *Collaborating for Development Evaluation: "IDEAS" Shaping a New Global Effort*. International Development Evaluation Association, DAC-OECD.

Gilbert R.A.; Julian D.A.; Jones A.; Deyo D. 1995. *Open systems evaluation and the logic model: program planning and evaluation tools*. Evaluation and Program Planning. vol. 18, no. 4, pp. 333-341(9)

Glaser, B. G., & Strauss, A. L. 1967. The Discovery of Grounded Theory: Strategies for Qualitative Research. New York: Aldine Publishing Company.

Hellstrom, T. & M. Jacob.2003. *Knowledge without Goals? Evaluation of Knowledge Management Programmes***.** Evaluation. vol. 9, no. 1, pp. 55-72(18). Sage Publications

HRDC. 1998. *Quasi-Experimental Evaluation*. Evaluation and Data Development Strategic Policy.

Innovation Network. 2003. Glossary. Innovation Network: Transforming Evaluation for Social Change http://innonet.org/resources/glossary.cfm

Jessop, Bob. 2002. *Governance and Metagovernance: On Reflexivity, Requisite Variety, and Requisite Irony*. Lancaster University.

Kleemeier, L. 1996. *Collaboration between CDR and Danida on Aid Impact Research: A Case Method Approach to Discussing the Issues*. (CDR Working Paper No. 96.4). Copenhagen: Centre for Development Research.

Lavergne, Réal. 2002. Results-Based Management and Accountability for Enhanced Aid Effectiveness. CIDA Policy Branch.

Mayne, John. 2003. Reporting on Outcomes: Setting Performance Expectation and Telling Performance Stories. Office of the Auditor General.

Madaus, G. & D. Stufflebeam. 1989. Education Evaluation: Classic Works of Ralph W. Tyler. Boston: Kluwer-Nijhoff.

Meadows, D. 2000. *A Message to New Leaders from a Fallen Giant.* The Global Citizen.9 Nov. http://www.sustainer.org

Meier, Peter. 2003. Personal correspondence.

Merriam-Webster. 2003. Online Dictionary. http://www.m-w.com/home.htm

OECD-DAC. 2002. Glossary of Key Terms Evaluation and Results.

Office of the Auditor General. 1997. *Reporting Performance in the Expenditure Management System*. Responsible auditor: John Mayne.

OMB (Office of Management and Budget). 2003. *Performance Measurement Challenges and Strategies*. www.whitehouse.gov/omb/part/challenges_strategies.pdf

Patton, Michael Quinn. 1986. Utilization-Focused Evaluation. Sage Publications, California.

Patton, Michael Quinn 1997. Utilization-Focused Evaluation: The New Century Text, 3rd ed., Sage Publications.

Patton, Michael Quinn. 2002. *UTILIZATION-FOCUSED EVALUATION (U-FE) CHECKLIST*. http://www.wmich.edu/evalctr/checklists/ufechecklist.htm

Peled, E. and S. SPIRO. 1998. *Goal Focused Evaluation: Lessons from a Study of a Shelter for Homeless Youth*. Evaluation. Vol 4(4): 455–468. Sage Publications, London.

Perrin, Burt. 2002. *How to – and How Not to – Evaluate Innovation*. Evaluation. Sage Publications, London, Vol 8(1): 13–28

Rickard, John. 2003. *A Logistician's Plea*. Aid Workers Exchange. http://www.aidworkers.net/exchange/20030903.html

Rossi, Peter H. & Howard E. Freeman. 1993. Evaluation: A Systematic Approach. Sage Publications. London.

Sanderson, Ian. 2000. *Evaluation in Complex Policy Systems*. Evaluation. Vol 6(4): 433–454. Sage Publications, California.

Scriven, Michael. 1991. Evaluation Thesaurus. Fourth Edition, Sage Publications, California.

Shepard, Lorrie A. 1977. *A Checklist for Evaluating Large-Scale Assessment Programs*. University of Colorado.

Smith, Nick. 1980. *Studying Evaluation Assumption*. Evaluation Network Newsletter.

Stufflebeam, D. 2001. *Evaluation Models*. New Directions for Evlaution. Volume: 2001, Issue: 89.

Stufflebeam, D. 2002. *CIPP EVALUATION MODEL CHECKLIST* http://www.wmich.edu/evalctr/checklists/cippchecklist.htm.

Temel, Tugrul. 2001. *Systems Analysis by Graph Theoretical Techniques: Assessment of the Agricultural Innovation System of Azerbaijan.* International Service for National Agricultural Research, The Netherlands.

Treasury Board of Canada. 2003. *Strategic Outcome Database*. http://www.tbs-sct.gc.ca/rma/krc/so-rs_e.asp

Webster, Cynthia. 2001. *Social Network Analysis.* (http://etu.utu.fi/papers.html).

Weiss, Carol. 1972. Evaluation Research Methods of Assessing Program Effectiveness. Prentice-Hall, New Jersey.

Whyte, A. 2000. *Assessing Community Telecentres: Guidelines for Researchers.*

W.K Kellogg Foundation. 1998. W.K. Kellogg Foundation Evaluation Handbook. Michigan.

Worthen, B. & Sanders, J. 1997. Educational Evaluation. Second Edition. Longman, Inc.: White Plains, N.Y.

Zorach, Alexander C. 2001. *Why Is Network Analysis Hard? www.cazort.net/systems/hard.html*

OTHER REFERENCES

Armstrong, J. & Anne Whyte. 1998. *Learning Partnerships: A Review of IDRC Secretariats*. Centre for Strategic Management.

Binnendijk, Annette. 1989. Donor Agency Experience with the Monitoring and Evaluation of Development Projects. Evaluation Review vol(13), no.3:06-222.

CIDA. January 2000. Evaluation Guide. Candian International Development Agency – Performance Review Branch.

Donaldson, Stewardt & Michael Scriven, edt. 2003. Evaluating Social Programs and Problems: Visions for the New Millenium. Lawrence Elbaum Associates, Publishers, New Jersey.

Earl, Sarah, Fred Carden and Terry Smutylo. 2001. Outcome Mapping: The Challenges of Assessing Development Impacts. International Development Research Centre, Ottawa.

European Commission (author Laurie Effron). 2002. 2002 Annual Report on Operations Evaluation. The World Bank, Washington, DC.

European Commission. 2000. EVALUATION OF THE IMPLEMENTATION AND RESULTS OF SEM 2000 and its contribution to the overall management reform of the Commission.

Gasper, Des. 2000. Evaluating the 'Logical Framework Approach' Towards Learning-Oriented Development Evaluation. Public Administration and Development. Vol.20:17-28. John Wiley and Sons, Ltd.

Gillespie, Byron. 2003. Intent to Influence Policy in IDRC Programs and Projects. IDRC Evaluation Unit.

House, Ernest. 1993. Professional Evaluation. Sage Publication, London.

IDRC-EU. 2000. Evaluation Unit: Evaluation Strategy 2000-2005. International Development Research Centre.

McDonald, Diane. 1999. *Developing guidelines to enhance the evaluation of overseas development projects. Evaluation and Program Planning*. Vol.22:163-174.

Morris, Lynn Lyons, and Carol Taylor Fitz-Gibbon. 1978. How to Deal with Goals and Objectives. Sage Publications, Beverly Hills, CA.

Office of the Auditor General. 2003. Rating Departmental Performance Reports. http:/www.oag-bvg.gc.ca/domino/reports.nsf.

Olsen, S., J.Tobey and L. Hale. PROGRESS TOWARDS THE GOALS OF ICM: WHAT ARE THE IMPACTS AND WHAT ARE WELEARNING? Coastal Resource Center, University of Rhode Island

Pawson R. 2002. *Evidence-based Policy: In Search of a Method*. Evaluation. vol. 8, no. 2, pp. 157-181(25) Sage Publications.

Pawson R. 2002. *Evidence-based Policy: The Promise of 'Realist Synthesis'*. Evaluation. vol. 8, no. 3, pp. 340-358(19). Sage Publications.

Patton, Michael Quinn. 1990. Qualitative Research and Evaluation Methods. Sage Publications, California.

Perrin, Burt. 1998. Effective Use and Misuse of Performance Measurement. American Journal of Evaluation. Vol.19(1):367-379.

Perrin, Burt. 1999. Performance Measurement: Does the Reality Match the Rhetoric? A Rejoinder to Bernstein and Winston. American Journal of Evaluation. Vol.20(1).

Posavac, E.J. & Raymond G. Carey. 1992. Program Evaluation. Pentice Hall, New Jersey.

Roche, Chris. 1999. Impact Assessment for Development Agencies: Learning to Value Change. Oxfam, United Kingdom

Sander, C. 1998. Development Research Impact: Reach. International Development Research Centre.

Sander, C. 1997. Pllanning Monitoring and Evaluation of Programme Performance: A Resource Book. International Development Research Centre.

Swiss Agency for Development. 1999. Key questions and indicators. SDC.

The World Bank. 2003. 2003 Annual Review of Development Effectiveness: Achieving Development Outcomes. The World Bank, Washington, DC.

The World Bank. Evaluation Approach. http:/www.worldbank.org/oed/eta-approach.html

The World Bank. Strategic Objectives. http:/www.worldbank.org/oed/eta-objectives.html

The World Bank. Designing Project Monitoring and Evaluation

USAID. 2003. *Glossary of Terms*. http://www.usaid.gov/pubs/bj2001/glossary.html

Wiggins, Steve, and Dermot Shields. 1995. *Clarifying the 'logical framework' as a tool for planning and managing development projects*. Project Appraisal. vol.10(1):2-12. Beech Tree Publishing, Surrey, UK.