Designing an effective evaluation model for the South African Department of Agriculture

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Abstract:
Governments are under increasing pressure to deliver results. Therefore, it is important to evaluate the effectiveness, efficiency and relevance of the public service in implementing policies and programmes for social betterment. Without such evaluations, it is difficult to ensure that evidence is integrated into policy and used in practice due to lack of generalizability and learning. This paper focuses on (1) the knowledge that is relevant to understand evaluation influence, (2) the possible conceptual frameworks that enable understanding of the evaluation implementation process, (3) possible models of the process of organizational evaluation, and (4) the main ways of intervening to increase influence. The context for analysis is the South African Department of Agriculture.

Key words:
Evaluation; Evaluation Influence; Policy; Programmes; South Africa.

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1. **Study Rationale and Aim**

Evaluations of programmes are valid ways for an organization to increase the quantity and quality of its service delivery. It is the contention in this study that the usefulness of evaluations is hindered by what we call the ‘black box’ problem. The problem is compounded by lack of knowledge about what makes evaluation more helpful to practitioners, programme planners and managers, and policy makers. The purpose of the study is twofold: to review the way evaluations are conducted in the South African Department of Agriculture (DoA), and to suggest an evaluation model and other procedures that will increase the usefulness of evaluations to the organization. The proposed organizational evaluation system is designed to inform policy, decisions and practice – the ‘evaluation influence’ nexus.

The interest of the study is in developing a model for more frequent, and more effective, use of evaluation processes to improve daily programme decision making and practice, and for use in making changes in policies. The study should enable the DoA to operate an evaluation system that is adequate, ideally located and appropriately configured (theoretically and practically). A framework and model are constructed through the identification and description of organizational evaluation mechanisms to help improve evaluation use in influencing policy and programme decision making and practice in the organization. The model should help measure and assess outcomes and impacts of socioeconomic development programmes or interventions implemented by the DoA.

2. **Background**

The rural economy of South Africa has fallen behind the urban economy, and reintegrating marginalized groups in rural areas is a priority of the post-1994 South African government. The United Nations (OHCHR, 2002) enshrines poverty reduction and the right to development as a human right, and policy makers and members of the public in South Africa are showing a growing concern over the cost and performance of governments (Schweigert, 2005:417). For these two reasons, the South African government is in the process of improving public service quality, efficiency and effectiveness to redress poverty and inequality (Government Gazette, 1997). However, targeted strategies and a concerted effort to improve service delivery by the government are needed to reduce poverty and inequality. The availability of timely and methodologically sound information is crucial for legislative oversight, organizational and programme management, and public awareness.

There are growing pressures in countries throughout the world to improve the performance of their public sectors (Kusak and Rist, 2001:14; Schweigert, 2005:416). In an environment of limited resources, the South African government should have to demonstrate its usefulness in specific ways if it is to continue to discharge socioeconomic development functions. Adding to this service delivery requirement, there is a perception that increasing the scale of investment in poverty reduction is associated with increasing uncertainty about the results of the investment (Schweigert, 2005:417). It is axiomatic that managers of public programmes and projects need to demonstrate significant and lasting changes (impacts) to prove their value and justify continued funding. According to Kusak and Rist (2001:14), one strategy being employed is the design and construction of performance-based monitoring and evaluation systems to be able to track the results produced by government programmes.

Given this central role of evaluation systems, a definition of evaluation is needed as a starting point, but settling on a single definition is difficult given the multifaceted nature of the concept. Evaluation is defined as ‘a study designed and conducted to assist audience to assess an object’s merit and worth’ (Mathison, 1995:469; Scriven in Henry, 2002:182; Stufflebeam in Hansen, 2005:448), but this is a deceptively simple definition.
Evaluation requires a careful retrospective assessment of merit, worth and value of management and operations, outputs and outcomes of government interventions. This need makes evaluation a matter of public law, requiring 1) accountability for resources consumed and outcomes delivered (i.e. to prove) and 2) learning for the betterment of future interventions and more effective socioeconomic development (i.e. to improve) (Crawford et al., 2004:175; UNFPA, 2004:1-2; Forss et al., 2006:129; Liverani and Lundgren, 2007:241). According to Greene et al. (2001:25) and Mark and Henry in Schwandt (2003:353), the practice of evaluation should be to help humans live intelligently and with the ultimate goal of contributing to ‘social betterment’. An evaluation culture is one of the avenues for improving the performance of government (Mackay, 2006:1). Sagerholm (2003:353) and Christie (2007:8) assert that the use of evaluation products or results is the central outcome of any evaluation; without such use, evaluation can not contribute to its primary objective of social betterment. That is, evaluation ties together transparency, accountability and learning (Crawford et al., 2000:176; Forss et al., 2006:129; Liverani and Lundgren, 2007:241); it also assists organizations to improve their plans, policies and practice (Winbush and Watson, 2000:303).

In South Africa, the Government Wide Monitoring and Evaluation System (GWM&ES) has identified public service effectiveness as the key challenge, making monitoring and evaluation critically important (The Presidency, 2005:8-9; Fraser-Moleketi, 2005; Levin, 2006). The Presidency report on GWM&ES showed a gloomy picture of government evaluation systems as, under-developed, inadequate, and neither centrally nor ideally located. It further indicated the following positive attributes for future improvements: preparedness to improve and enhance systems and practice; advantage of ‘late coming’ learning from others’ experiences and international evaluation best practice; departments having some level of capacity (in strategic planning and budgeting systems units); and evaluation generally acknowledged as strategically important and useful.

3. Literature Review

3.1 Gaps identified

The literature highlights the range of different problems facing practitioners in the field of evaluation. Such problems make it difficult to formulate effective evaluation models, which is the aim in this study. According to Sawin (2000:232) there are serious problems and issues in evaluation. First, the field of evaluation is fractionated and the practice of evaluation is not unified. According to Winbush and Watson (2000:303); Greene et al. (2001:181), Demateau (2002:455), Tavistock Institute (2003:14) and Weiss (2005:1), it is because evaluation has varied roots, resulting in a diversity and complexity of theoretical models and different perspectives on what constitutes evaluation and what needs to be valued. Second, there is no generally accepted definition of the term evaluation (Shadish, 1994:348-351). This is due to the lack of a theoretical base to provide a generalized frame of reference (Levin-Rozalis, 2000:416). Third, the field has no accepted ‘core or centre’ (Sencrest, 1994:361), or unifying theory (Scriven, 1994:378-380; Shadish, 1998:9). Fourth, there are arguments and ideological splits between practitioners (Sencrest, 1994:226; Greene et al. 2001:181). Fifth, evaluation is characterized as a relatively new discipline (Cook, 2006:420); therefore, there is little experience, knowledge and understanding when calling for evaluations to be undertaken. Sixth, different evaluation models are presented (Hansen, 2005:447). Finally, there is confusion about the purpose of evaluation itself (Scriven, 1994:379) and evaluation use (Christie, 2007:8).

Some of the key questions raised include:

- Is evaluation only about drawing conclusions regarding the merit or worth of a policy, programme or other evaluand (Scriven 1999 cited in Sawin, 2000:232)?
• Should evaluation follow analytical or descriptive methodology (Scriven, 1998:64)? Also, what is the place of meta-evaluations (Cooksy and Caracelli, 2005)? That is, should there be emphasis on quantitative, qualitative or mixed methods (Scriven, 1997:170; Greene et al., 2001:26)?

• Are evaluative conclusions more important than learning (Nee and Monica in Sawin, 2000:232; Forss et al., 2006:129)? That is, what should be the focus of evaluation (Chacon-Mascos, 2002)?

• Should evaluators consider either formative (ex-ante) or summative (ex-post) evaluations more important than the other (Hansen, 2005:451; Reichardt, 1994 in Sawin, 2000:232; Patton, 1996; Chen, 1996a and b; Wholey, 1996)?

• Should an external or internal evaluator be used (Ray, 2006; Yang and Sheng, 2006)?

• Is participatory evaluation a different field and the best way to evaluate (Patton, 1994:313) through involvement of different stakeholders (Henry, 2002; Forss et al., 2006:128-129)?

• Is empowerment evaluation a different field and the best way to evaluate (Fetterman, 1994; Scriven, 1997; Sawin, 2000:232; Cook, 2006; Smith 2007; Miller and Campbell, 2007:297; Fetterman and Wandersman, 2007)? Again, is responsive evaluation a different field and the best way to evaluate (Abma, 2006:31)?

• To what extent should evaluation be driven by theory (Hughes and Traynor, 2000; Levin-Rozalis, 2000:416-418; Van der Knaap, 2004:16)?

There is a need to define clearly evaluation use and its expected outcome (which in this study can be broadly described as social betterment) to formulate effective evaluation model(s).

3.2 Theoretical context and point of departure

According to Alkin and Christie (2004:12), the theory of evaluation is built on a dual foundation of accountability (accounting for actions and resources) and social inquiry (a concern for employing a systematic and justifiable set of methods). Evaluation branches into: a process of information collection (methods); value judgment (valuing process); and its use in decision making, leading to action. That is, it involves three components: the process, the product and its use (Alkin and Christie, 2004:12; Demarteau, 2002). The focus of this study is on evaluation use. It is mainly concerned with mechanisms to improve evaluation use to influence legislative policy, organizational and programme decision making and practice, and for public awareness. Influence is defined as ‘the capacity or power of persons or things to produce effects on others by intangible or direct means’ (Kirkhart cited in Christie, 2007:9 and in Rebolloso et al., 2005:264).

Policies are commonly implemented as programmes; therefore, for programmes to be implemented and to operate, government departments and other organizations spend taxpayers’ money. Programmes are one means of achieving policy goals and programme evaluation contributes to policy evaluation. The need to link policies with organizational programmes and specific interventions or projects is a perennial one (Winbush and Watson, 2000:303; Tavistock, 2003:11). Measuring the impact of socioeconomic programmes has a problem of causality and attribution, and the impact can be immediate or delayed, anticipated or unanticipated (Bhola, 2000:162). It is recognized that programmes are embedded in multi-layered social and organizational processes operating in a global, national and discipline context. Impact, again, would be shaped by the specifications of systems and structures within which it is actualized (Bhola, 2000:163). In short, the link between programmes and social betterment is crucial. Therefore, mechanisms within the ‘black box’ of the responsible organization should be known. The ‘black box’ is shown in Figure 1.
The ‘black box’ is defined as the space between the actual input and the expected output of an evaluation process (Stame, 2004:58). For this reason, evaluation use should receive substantial attention in the evaluation literature and empirical studies (Mark and Henry, 2004:36; Balthasar, 2006:353; Christie, 2007:8) to understand how evaluations wield their influence on the formulation of policies and programmes, and participant improvement. It is expected that evaluation information should feed into the decision-making process and influence the actions people take at the community level, staff level, and management level or in the higher reaches of policy making. The mechanisms that influence use should be studied in the DoA to provide study focus, context and relevance.

According to Stame (2004:58) and Hansen (2005:448-450), theory-based evaluations have helped open the ‘black box’ and build capacities in the public sector. According to Spicer and Sadler-Smith (2006:134), knowledge and capacity through organizational learning are important sources of competitive advantage. They further argued that collective learning enhances organizational efficiency and/or effectiveness. Learning in this context refers to processes of knowledge production that result in a better understanding or improved intelligence. A learning government is described as one that aims to improve policies (Van der Knaap, 2004:20) by correcting perceived imperfections.

The problem of the complexity of socioeconomic interventions makes generalization and attribution difficult (Bhola, 2000:161; Greene et al. 2001:25). To counter this problem, the theory of evaluation use gave birth to the ‘theory of change’ (ToC) (Masson and Barnes, 2007:151; Sullivan and Stewart, 2006:179). It is proving to be a popular approach for evaluations of complex social policy programmes (Masson and Barnes, 2007:151) by elaborating on assumptions, revealing causal chains and attribution, and engaging concerned stakeholders for tacit understandings (Stame, 2004:60). ToC is an approach designed to test the desired outcomes of programmes according to the timescale by which they are to be achieved,
together with a process through which the goals are fulfilled (Shaw and Crompton, 2003:193; Winbush and Watson, 2000:301; Cook, 2006:427).

Evaluations co-exist with ‘black box’ problems mystifying the understanding of what works better for whom in what circumstances, and why (Stame, 2004:58; Van der Knaap, 2004:17). This co-existence hinders the capacity of evaluation to improve policy decisions and practice (evaluation influence). Therefore, successful outcomes are unlikely to be delivered without attention to the quality of the intervention. This quality requires having a framework/system/model in place to define mechanism and practice.

For a long time now, there has been growing concern over the issues of low levels of evaluation and/or use of evaluation products (Weiss, 1973 in Chelimsky, 1987:6; Alkin, 1975 in Forss et al., 2006:129; Wholey, 1986:8; Mitchell, 1990:109). According to Rutman (1986:14), Chelimsky (1987:6), Weiss (1988:5) and Weiss (1998:23), there are limited examples of programme evaluation that directly influence policy, the operations and practices of managers in organizations or resource allocation decisions in a significant way. Kirkhart (cited in Christie, 2007:9 and in Rebollos et al., 2005:264) also asserts that evaluation influence should move beyond the term, use. According to Christie (2007:8), [evaluation] use is the ‘effect evaluation has on the evaluand – the thing’ being evaluated – and those connected to the evaluand’. There is a step beyond what was always thought of as use, that is, a step into actively bringing about change (Patton, 1988:92). Use is about change (Weiss, 1998:31).

In trying to improve use, Weiss (1998), Mark and Henry (2004:36), Weiss et al. (2005:13-14) and Balthasar (2006:354-355) identified four routes of influence of evaluations on policy, decision making and practice. The first type is where evaluation results are used for policy decision making and problem solving. This use is known as instrumental use. Use of evaluation used to mean use of results only for making programme decisions, but it currently has a larger domain (Weiss, 1998:21 and Kirkhart, 2000). Evaluation now includes a second kind of use – conceptual use – helping users to gain new insights, concepts, theories and ideas. The third kind of evaluation use – symbolic or political – is to mobilize support for a position that people already hold (perspectives) about the changes needed in a programme, legitimizing a course of action or position. The fourth kind of use is influence on other institutions and events beyond the programme being studied.

The starting point is to improve evaluation influence on decision making and practice. The need for this improvement stems from both the move to make performance measurement within the public sector more outcome orientated and the move to make policy making, decision making and practice more rational and evidence based. Three different frameworks (Figures 2, 3 and 4) are presented below to develop a better understanding of evaluation and evaluation influence, which serve as the conceptual framework of this study.

Evaluation influence happens in different ways in an organization. A prominent issue is the appropriate mechanisms governing the outcomes of evaluation. Kirkhart (2000), Henry and Mark (2003), Mark and Henry (2004), Weiss et al. (2005:14) and Christie (2007:9) posit that a set of theoretical categories – mediators and pathways – exists through which evaluations can exercise influence. This framework is used because the people embedded in the ‘black box’ makes things change (Stame, 2002:7; Stame, 2004:62). For evaluation to have influence it should have consequences at the individual, interpersonal and collective (organizational) levels, as shown in Figure 2. In general, leverage (biggest pay-off for time, effort and money invested) for improvement and innovation is greatest at the systems and organizational level (Kim, 1999).
Henry and Mark (2003) and Mark and Henry (2004) discuss in detail the mechanisms in the framework. First, at the individual level, they refer to changes that occur in an individual’s knowledge, attitudes, opinions or actions as a result of the evaluation process or its results. At this level, six mechanisms and measurable outcomes are identified: attitudinal change, salience, elaboration, priming, skill acquisition, and behavioural change. Second, the interpersonal level describes changes that occur as a result of interactions between individuals. Here, five mechanisms are identified: justification, persuasion, change agent, social norms, and minority-opinion influence. The third level, the collective, depicts the ‘direct or indirect influence of evaluation on the decisions and practices of organizations, whether public or private’ (Henry and Mark, 2003:298). Four mechanisms further define this level: agenda setting, policy-oriented learning, policy change, and diffusion. In this study, the focus is on the organizational level of the mechanism framework, with special attention to diffusion as the mechanisms to influence evaluation use at this level. According to Rogers (2003:5), diffusion is the ‘process by which innovation is communicated through certain channels over time among the members of a social system [or an organization]’. An innovation – here, evaluation or evaluation products – is an idea or practice that is perceived as new by the unit of adoption (Cain and Mittman, 2002:6).

Use of the following two frameworks is based on the premise that measuring impacts is complex and clear causal relationships are difficult to establish (Rebbien, 1996:2; Bhola, 2000:161; Greene et al., 2001:25; Ekins and Medhurst, 2006:486). Therefore, the complexity requires a heuristic model, as an instrument to support and focus thinking. The first framework, depicted in Figure 3, has two levels. The top level captures the essential elements of how public policy, organization or programme operates or is implemented (inputs, process and outputs). It clearly shows the logic of how the policy, organization or programme outputs will influence people’s outcomes in the desired way (impact) The bottom level shows the importance of context and mechanisms (programme theory) that are important for evaluations. The framework allows better understanding of the processes that contribute to observed impact.
Figure 3: A possible conceptual framework for South African Department of Agriculture programme implementation; adapted from Gage et al. (2005:12) and de Boer (2001)
First, at the top level of the model, according to Gage et al. (2005):

- **Inputs** refer to the human and financial resources, physical facilities, guidelines, and operational policies that are core ingredients of socioeconomic programmes.

- **Process** refers to the multiple activities carried out to achieve the objectives of socioeconomic programmes, and includes the management, administration and operations of resources.

- **Outputs** refer to the results of these efforts (inputs and process) at the programme level, with two identifiable types of outputs:
  1. A functional output is the number/quantity of activities conducted in each functional area of socioeconomic development service delivery, such as behavioural change communicated, commodities and services delivered and commodity and service delivery logistics, management of projects, extension service advice, programme/projects supervision and training.
  2. Service outputs refer to the quality of services provided to the programme’s target population, as well as the adequacy of the service delivery system in terms of access, quality of delivery and programme image/beneficiary satisfaction.

- **Outcomes** refer to changes measured at the population level in the programme’s target population, some or all of which may be the result of a given programme intervention. These outcomes cover knowledge, behaviours and practice on the part of the intended beneficiaries, such as knowledgeable and informed farmers, changes in production practice/system, increased use of provided infrastructure/equipment/resources and changes in income realized/production cost incurred that are clearly related to the programme. They are expected to change over the short-to-intermediate term and contribute to a programme’s long-term goals. Outcomes also involve coverage and socioeconomic performance.

- **Impact** refers to the anticipated and/or unanticipated end results of a programme – for example, reducing poverty incidence, improving quality of life and environmental status, and institutionalization (network of social structures and partnerships).

Functional and service outputs in the results chain (the causal sequence for a socioeconomic development intervention) contribute to the realization of outcomes. After a given time, outputs will have an impact on the lives of programme and/or project beneficiaries enhancing sustainability. Socioeconomic development without sustainability becomes a partial process lacking finality.

Second, at the bottom level of the framework, realistic evaluation places a particular focus on generating theories and mechanisms underlying programme design through detailed analyses (Greene et al., 2001:29; Befani et al., 2007:172; Van der Knaap, 2004:17), in order to identify what the programme is about and what might produce change. An important characteristic of this approach is that it stresses what the principles of a good programme theory should be: context (C) and mechanism (M), which account for outcomes (O) (Befani et al. (2007:171, Winbush and Watson, 200:301; Hansen, 2005:450; Schwandt, 2003:353). These principles provide an insight into what works for whom and under what circumstances. The CMO configuration acknowledges that the outcomes of a programme depend on the conditions under which they occur. It provides an opportunity to measure and trace how outputs and outcomes were influenced by the programme or/and policy within a given context.
Therefore, it is necessary to describe and understand the evaluation mechanism and practice in order to propose better practices and to contribute to developing quality programmes (Demarteau, 2002:471). According to Befani et al. (2007:174), the CMO framework solves the difficulty of generalization in evaluation associated with complexity of socioeconomic interventions.

Figure 4 shows the implementation conceptual model (within the organization and also applying to programme or project) to help establish and to structure different evaluation criteria (Kautto and Simila, 2005:57; Tavistock Institute, 2003:45; Ekins and Medhurst, 2006:486).

Using Figure 4 as a foundation, the criteria for evaluation should include:

- **Relevance** refers to the appropriateness of the explicit objectives of the programme in relation to socioeconomic problems. Do the goals of the policy instrument or programme cover the key problems of socioeconomic development policy or programme? To what extent are the policy or programme objectives justified in relation to needs? Do objectives correspond to local, national, African and world priorities?

- **Effectiveness** refers to the degree of correspondence between achieved outcomes and intended policy or programme goals and objectives. That is, to what extent have the objectives been achieved? Have the interventions and instruments used produced the expected effects? Could more effects be obtained by using different instruments?

- **Efficiency** entails an evaluation of whether the objectives been achieved at the lowest cost, or whether better effects could be obtained at the same cost.

- **Utility** entails judgment whether the impacts obtained by the programme meet broader societal and economic needs (improving quality of life). That is, are the effects globally satisfactory from the point of view of beneficiaries?
**Sustainability** refers to the extent to which the outputs and outcomes of the intervention are durable (future continuance of benefits). This criterion checks if the outcomes and impacts (including institutional changes) are durable over time. That is, will the impacts continue if there is no more public funding?

A comparison between objectives and the actual and planned outputs and outcomes indicates the **effectiveness**; between outputs and the costs (inputs) indicates the **efficiency**; and the extent to which the outputs, outcomes and impacts are sustained following the end of the programme indicates the **sustainability** of the programme. The relationship between the outputs, outcomes and impacts of the programme and the context and baseline indicators relating to the perceived needs give an indication of the **relevance** of the organization or programme, while the change in the context and baseline indicators due to the organization’s or programme’s outputs, outcomes and impacts indicates the **utility**.

Figures 3 and 4 clarify organizational and evaluation complexity. They incorporate elements important for policy, organization or programme to realize outcomes, impact, utility and sustainability. Therefore, an influencing evaluation framework should include elements related to relevance, effectiveness, efficiency, utility and sustainability.

Many authors now argue for participatory evaluations (e.g. Patton, 1994 and 1997; Greene, 1998), empowerment evaluation (e.g. Fetterman *et al.* 1996; Chacon-Moscoso, 2002; Smith, 2007; Miller and Campbell, 2007; Fetterman and Wandersman, 2007), responsive evaluation and involvement of various stakeholders to increase use. For this reason, Chacon-Moscoso (2002:417) asserts the need to identify potential users of evaluation results. Table 1 show groups of stakeholders identified by Winbush and Watson (2000:304-305) and Taylor-Powell *et al.* (1996:4) that organizations planning or undertaking evaluations should consider for maximizing use.

**Table 1: Stakeholder analysis in evaluation use for influence**

<table>
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<tr>
<th>Who uses evaluation?</th>
<th>Information needed</th>
<th>How will evaluation be used (influence)?</th>
</tr>
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| Political (policy makers and strategy planners) | • Benefits of organizational programmes  
• The extent to which the government is contributing to social betterment | • To judge effectiveness and to make decisions about budget allocations or future actions (policies) |
| Organization | • If socioeconomic development programmes meet political and public needs | • To determine whether to continue, align/discontinue investments/strategies  
• To satisfy the needs of Parliament and civil society (Learning and Accountability) |
| Administrators | • If programme achieves its expected outputs, outcomes and impact  
• How effective, efficient, relevant and sustainable the socioeconomic programmes are | • To justify extension of programmes and ensure financial support (accountability)  
• To make decisions about investments (Learning and Accountability) |
| Managers (budget holders) | • If programme is meeting public needs  
• If efforts and mechanisms are effective | • To make decisions (investments and programme mechanisms) about modifying the programmes (Learning and Accountability) |
All these users complicate the process of evaluation and the usage of evaluation results in such a manner that they influence the degree of use. Sullivan and Stewart (2006:180) argue that the involvement of stakeholders extends ownership of the intervention, assists implementation and supports evaluation.

4. Methodology

To restate, the aim of this study is to construct a framework and model through the identification and description of organizational evaluation mechanisms to help improve evaluation use in influencing policy and programme decision making and practice in the South African Department of Agriculture. Achieving this aim entails four broad steps. The first step is to establish an analytical framework for the study, synthesised from the different theoretical perspectives and descriptions of policy and programme evaluation practice and evaluation use as outlined above.

It is implicit in the above literature review that policy making and programmes are embedded in the organization. To confront the problem of evaluation use, in the second step an assessment is to be made of the current evaluation processes instituted by the DoA. The study will: 1) explore evaluation report documents to extract issues such as who commissions evaluations, their purpose (terms of reference) and methods used; and 2) observe the evaluation configuration, that is, the organizational structure, processes and activities related to evaluation practice and use.

In the third step, in response to the call to engage stakeholders in evaluations, the study will employ a continuous improvement and innovation (CI&I) process to satisfy the calls for agenda setting, participatory and empowerment evaluation and socialization of tacit knowledge, policy change and diffusion, as in Figure 5. According to Bessant et al. (1994) and Robinson (1991, cited in Hyland et al., 2000), continuous improvement supports organizational structures and/or processes for improvement and better delivery. Figure 5 reproduces Figure 1 to include the CI&I process (Figure 6) as the central and unifying component. According to Timms and Clark (2007a and b), CI&I is used to allow individuals to focus thinking and action on improvement and innovation of current practices, processes, systems, products and services in use in an organization.

The premise of using this CI&I process emanates from two perspectives. The first perspective is embedded in the organizational and behavioural theories of engaging people (Winbush and Watson (2000; Chacon-Moscoso, 2002; Smith, 2007). Any continuous improvement and innovation effort is fundamentally a change and innovation effort (Timms and Clark 2007b:1), and change is difficult (Margolies and Hansen, 2002:277-278). ‘Change’ defined as a transformation from one state to another (Timms and Clark, 2007b:6).
The ‘black box’ is occupied by people (Stame, 2002:7; Stame, 2004:62). Change in a system of human activity is achieved by people changing their decisions and practices, and a purposeful change requires a process specifically designed for that purpose, i.e. to achieve the required outcomes (Timms and Clark, 2007b:18). Therefore, when designing CI&I initiatives (here an evaluation model) it is important to assess the ‘context’ of the situation or system and the current use, followed by ways to ensure implementation and assessment of outcome from the effort.

![Figure 5: The ‘black box’ in the context of socioeconomic development integrating the use of CI&I](image)

- **World Poverty**
  - Right to development
  - Millennium Development Goals

- **South African Poverty**
  - Pre 1994 policies

- **Political**
  - Policy, Strategies formulation and financial inputs

- **Impact**
  - The 5 Livelihood capitals or
  - Sustainability
  (The triple bottom line approach)

- **Public (Farmers)**
  - Outputs, Outcomes and Impact measures

- **Organizational Level**
  - (Department of Agriculture)
  - Programmes and people imbedded inside

- **Body of Knowledge**
  - Discipline theories
  - International Bet Practices

- **Black Box**
  - (Study focus)

Figure 5: The ‘black box’ in the context of socioeconomic development integrating the use of CI&I
Second, getting a new idea adopted is difficult. Many innovations require a lengthy period to be widely adopted, even when it has obvious advantages (Rogers, 2003:1). Therefore, there should be a way to speed up the diffusion of an innovation. Diffusion is a kind of social change, with alteration occurring within the structure and function of social system (Rogers, 2003:6); hence the use of CI&I in the study.

In the first step of CI&I – situation analyses – structured interviews and/or focus group sessions will be conducted with key informants to analyse the mechanisms within the organization and the CMO configuration. Hansen (2006:453), citing Minzberg (1983), argues that the characteristics and environment of an organization are the premises for structural design and process modelling. This will be done in accordance with the framework proposed by Sagerholm (2003), as in Figure 7 and Table 2.

Figure 6: The six steps of the CI&I process and the questions used to focus thinking and action (Timms & Clark, 2007a: 76)
A description and analyses of DoA and its environment include the political system, which provides inputs (policy and resources), and the public (programme beneficiaries – farmers). This framework of studying evaluations in a national and/or state setting will promote a more comprehensive understanding of processes – the first step in CI&I process. According to Sagerholm (2003:354), ‘it highlights the forces that shape an evaluation process as well as knowledge claims that come with it’. Its use is to identify what restricts or enables evaluation (mechanisms) at the DoA, creating a better understanding of the phenomenon and practice of evaluation as part of the situation analyses.

In the second step of CI&I, opportunities will be analysed to determine which ones have most impact in relation to evaluation and its use. This step will be done in organised focus group sessions. The purpose of impact analysis is to enable participants to: (1) ensure resources are invested in those opportunities that will make a real difference to achieving the focus and fulfilling the needs for improvement and innovation; (2) identify those opportunities for action that will have most effect or pay-off and that they can influence; and (3) avoid investing time and effort in opportunities beyond their control (Timms and Clark, 2007a:39).

In the third step of CI&I – action design – participants in focus group sessions will help enable the study to: (1) ensure the most effective and efficient actions are designed to achieve organizational need for improvement and innovation of evaluation use; (2) focus actions to achieve specific
evaluation targeted outcomes; (3) identify and specify critical success factors (CSFs) for achieving evaluation use, (4) identify and specify key performance indicators (KPIs) in achieving their evaluation use; and (5) identify and specify key practices (KPs) to implement an effective evaluation model.

The use of the remaining CI&I steps (Figure 6) in the study will allow the DoA to: (1) implement actions to improve evaluation influence (step 4); (2) track the effects of actions taken in the effort to improve evaluation influence (step 5); and (3) draw from their experiences to create and synthesize new knowledge and thinking about achieving improvements and innovations (step 6). This returns us to the evaluation influence nexus.

By the use of CI&I it is planned to avoid producing an evaluation model that the evaluand (DoA) will not be able to use or, even worse, treat as irrelevant. McDonald et al. (2003:10-11) argued that evaluation supply (focusing on documenting and developing skills, tools and resources available to produce evaluations) is not as crucial as its demand (focusing on use of evaluations). Therefore, it is important to understand and have the capability to undertake evaluations within an organization. In part, the CI&I process will help socialise the understanding and use of evaluation and its products for influence in policy, management and operation decision making and practice.

Finally, after configuring an evaluation process at an organizational level, in the fourth step the study will design the evaluation model(s) that will allow the holistic and coherent measuring of programme outcomes and impact at the implementation level. The model(s) produced will measure the current effect of the DoA socioeconomic policy and programmes as secondary outputs of the study. A coherent impact measure can not be designed and indicated through the empirical studies in all agricultural industries. Therefore, a case study approach is considered by choosing an industry, or a few industries, possessing key attributes of the problem being addressed: the coherent measurement of impact.

5. Study Hypotheses and Research Questions

The guiding hypotheses of the study are that: (1) the DoA has made insufficient use of policy or programme evaluations and evaluation products to inform the socioeconomic interventions it has implemented; (2) where evaluations have been undertaken, they have been insufficient to effect policy change or to improve organizational or programme decision making and practice; and (3) evaluation of those interventions focuses on outputs rather than outcomes and impacts. Research questions are framed at three levels: primary, secondary and tertiary.

The primary research question is:

- What type of evaluation system can be designed and implemented for the DoA for evaluation influence on policy making, management and operational decisions and practice, and capable of coherently measuring outcome and impact at the level of implementation?

The secondary research questions are:

- What are the underlying assumptions of evaluation theory and best practice?
- How is evaluation structured, resourced and practised at the DoA?
- What are the current evaluation processes in evaluation and evaluation use, and considerations for evaluation influence at the DoA, in terms of mechanisms?
o How can evaluation be improved and structured to maximize its influence at the DoA, in terms of framework and model?

o What is the net economic benefit of any changes to the current practice that are proposed and effected?

o How can impact be measured coherently and holistically at the implementation level?

Investigating the tertiary questions, shown in Table 2, the first step of the CI&I process – situation analyses – will help in the construction of a unified organizational evaluation framework and model. These questions will make sure the framework and model reflect the priorities of the DoA, stakeholders and takes into account the needs at all environment levels (international, political, organizational, programme and beneficiary) within political and organizational structures.

**Table 2: Check-list of tertiary questions to investigate the status of evaluation in the DoA** (adapted from Sagerholm (2003))

<table>
<thead>
<tr>
<th>Organizational Context</th>
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<tbody>
<tr>
<td>• How is evaluation work structured within the organization?</td>
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<td>• What values are attached to evaluations?</td>
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<tr>
<td>• What is the organizational culture, in terms of practices for internal and/or external evaluation?</td>
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<tr>
<td>• What is the evaluation competence of actors?</td>
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<tr>
<td>• What is the familiarity with current trends or best practices in evaluation?</td>
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<tr>
<td>• What is the organizational design (e.g. budget, regulations, divisions)?</td>
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<tr>
<td>• What are the internal power relations, who has what power and which conflicts can be detected in relation to evaluation?</td>
</tr>
<tr>
<td>• How well does the current evaluation system fit in the organizational setting?</td>
</tr>
<tr>
<td>• What socioeconomic-political factors inhibit or contribute to evaluation success?</td>
</tr>
<tr>
<td>• What are given and what can be changed in the organizational setting?</td>
</tr>
<tr>
<td>• Who else works in similar concerns, is there duplication, and who are co-operators and competitors?</td>
</tr>
<tr>
<td>• What needs are addressed through evaluation and for whom (with reference to evaluation stakeholders)?</td>
</tr>
<tr>
<td>• What are the characteristics of the evaluation unit in terms of functions, degree of autonomy, mandates and guidelines?</td>
</tr>
<tr>
<td>• What assets/personnel can be built on in the organization?</td>
</tr>
<tr>
<td>• What are the current practices?</td>
</tr>
<tr>
<td>• What changes do people see as possible or important?</td>
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<tr>
<td>• Is a pilot evaluation scheme appropriate?</td>
</tr>
</tbody>
</table>
### Evaluation Cycle

**Initiation**
- Decisions/discussion to evaluate: Who makes decisions; who participates; when is the decision to evaluate made; what events trigger the decision; and are motives and process open or concealed?
- Aim, purpose and motive: What are the reasons for evaluation and when is the decision made?
- Ideas on implementation: How is evaluation planning and management done?
- Procurement and negotiations: How is contracting and tendering done and is it internal or external?
  - Which important skills/qualifications are required?
  - Are users of evaluation results identified beforehand?

**Implementation**
- What are the objectives of the impact evaluations?
- What impact evaluation questions are asked?
- Which designs and methods are used, and how are they important?
- How is evaluation undertaken?
  - What does the evaluation consist of – activities, events?
  - Who participates in which activities?
  - Who carries out evaluation and how well they do so?
  - What is the role of DoA, and what are the contributions of others?
  - What resources and inputs are invested?
- Which programme assumptions in a political and organizational context are challenged or interrogated?

**Results**
- What kinds of results are put forth and, conversely, what kinds are not – and to whom?
- How are results communicated, presented and made public?
  - Importantly – what qualitative/quantitative indicators are used?
- How do stakeholders value the results of the evaluations?
- Is there conflict about which results are reported?

**Use**

**Questions in the use phase consider impact relating to commissioners, actors at all levels of the public system and the general public as well as questions relating to evaluation use.**
- Did any changes in the programme, reform, organization or policy occur due to the evaluation process or its results?
- Why were such changes carried out?
- At what levels can use and impact be detected?
- What kind of use and impact can be discerned*?
- Who proposes what changes and for what reason?
- What do people do differently as a result of the evaluations?
- Who benefits and how?
- Are stakeholders satisfied with what they gain from evaluations?
- Are accomplishments of evaluations worth the resources invested (net social benefit)?
- What do people learn, gain or accomplish?
- What are the social, economic and environmental impacts (positive and negative) of evaluations?
- How well does the evaluation function respond to socioeconomic betterment?
- How effective, efficient and relevant are the programmes (as per Figure 3)?
6. Conclusion

The overall aim of evaluation is to assist government and organizations to improve their policies, decisions and practices on behalf of the public. The current South African agricultural policy and programme environment needs better designed and orchestrated evaluation processes to account for and learn from current socioeconomic interventions. The situation is acute because of: (a) multiple and overlapping policy initiatives; (b) the emphasis on partnership-funded initiatives and inter-agency collaboration; (c) the need to account to parliament and to the public; (d) underdeveloped, inadequate, and not centrally located or ideally configured, existing processes; and (e) a tenet that agriculture is an important primary component in the national economy and for the South African poor, especially those living in rural areas. There is a need for reliable and accurate information on organizational progress and performance to guide the development of policies, strategies and performance, as well as in the allocation of resources, and to prompt interventions. In part, it is required by the Millennium Development Goals of the United Nations and by the South African government national priorities on poverty reduction, putting pressure on agriculture as one of the main vehicles to implement a pro-poor growth strategy. These demands place the DoA at the centre of improving the poor and rural occupant’s lives.

To achieve this, evaluation in the DoA should be closely tied to policies, decision making and practices as the organization houses programmes that affect the lives of the most poor and the destitute. To contribute to social betterment through poverty reduction and development, evaluations should influence the day-to-day work of programmes. For evaluation to serve its purpose, greater efforts need to be devoted developing, strengthening and improving practices suited to the organizational situation in South Africa. The evaluation model(s) developed should provide accurate and reliable information that allows users to assess the impact achieved to encourage and promote policies and strategies where necessary.

The GWW&ES requires that, within the DoA: (1) decision makers need access to regular and reliable information that contributes to the management process by revealing which practices and strategies are working well and which need improvement; (2) indicators defined in each programme are reported and assessed on an ongoing basis; and (3) good governance prevails that encourages the public to participate in the policy-making process, calling for a coherent yet practical model. This will enable the DoA to: (a) operate an evaluation system that is adequate, ideally located and configured (theoretically and practically); and (b) make continuous informed statements regarding the impact of government interventions in the agricultural sector.

The value of this system will flow over to other areas, such as the use by: (1) other government departments, state agencies and non-governmental organizations tasked with solving social and economic issues; and (2) centres of government, like Parliament, National Treasury and Public Service Commission, in assessing the progress made by the DoA within its socioeconomic development mandate.

In summary, evaluation creates value only when lessons are drawn and this happens when the evaluation process influences policy formulation, organization or programme management, and decision making and practice. Again, inability to report impact hinders the ability to make effective claims for additional poverty and other socioeconomic interventions and further funding.
5. References


Cook, T. 2006. Collaborative action research within development evaluation: Learning to see or the road to myopia? Evaluation. Vol. 12 No. 4: pp418-436


