THE OUTCOMES OF EVALUATING DEVELOPMENTAL PROJECTS USING SUSTAINABLE LIVELIHOODS APPROACH: THE CASE STUDIES OF MASCO TUTORING PROJECT AND QEDIDLALA COMMUNITY GARDEN PROJECT

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Abstract

Evaluation is an important aspect of the project cycle. The evaluation results are used to determine new strategies of the programme as well as the future of the project. However, the problem is that most conventional evaluations are seen as external intervention because they often disregard the role project participants could play in the process of evaluation. Then there is sustainable livelihoods approach which is viewed as a holistic and participatory approach. Because the sustainable livelihoods approach is people-centred; is holistic; dynamic; builds on strengths; considers macro-micro links; and considers issue of sustainability, it could provide a framework with which evaluation could be conducted.

The objective of this study was to find out the outcomes of using the sustainable livelihoods approach as a tool for evaluating developmental projects. The theoretical framework for evaluating projects was designed using sustainable livelihoods and evaluation literature. The framework was tested using two projects in the area of agriculture and rural education. The research process guide was also designed and guided the process of data collection.

The study has shown that the sustainable livelihoods approach could be used to evaluate developmental projects. The opportunities and the challenges of evaluating developmental projects using the sustainable livelihoods approach in each step of evaluation process were discovered. Using SL framework to define evaluation programme revealed that projects could be viewed holistically though not covering everything. However, the volume of the data collected was large and required more time to analyse. The logical framework was useful in terms of planning the evaluation programme. On the downside, the logical framework was technical and required guidance from the researcher.

Establishing success indicators required the participants to negotiate the yardstick for measuring. The participants could not select data gathering methods because 1) the participants had no knowledge of the participatory methods and 2) the methods already used were not appropriate for the data collected. Reliance on participatory methods alone affected the robustness of the evaluation data collected. Thorough planning and capacity building are critical in interpretation

of evaluation results follow sustainable livelihoods approach guidelines. Further studies with more representative sample and with a longer time span are needed to refine the implementation of the evaluation of developmental projects using sustainable livelihoods approach.

Declaration

I herby declare that the research presented in this dissertation is of my own investigation and has not been submitted in any form for a degree or diploma in any university. Where use has been made of the work of others, this has been duly acknowledged in the text.

Signed _____ Date _____

M A Ramashala

As Supervisor, I agree to the submission of this dissertation for examination:

Signed _____ Date _____

S H Worth

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Abbreviations

AIDS	Acquired Immune Deficiency Syndrome
CEO	Chief Executive Officer
DAEA	Department of Agriculture and Environmental Affairs
GGP	Gross Geographic Product
HIV	Human Immunodeficiency Virus
IDP	Integrated Development Plan
MASCO	Maths, Science, and Commerce Organisation
MTP	MASCO Tutoring Project
PRA	Participatory Rural Appraisal
QCDP	Qedidlala Community Garden Project
RAAKS	Rapid Appraisal of Agricultural Knowledge Systems
RLC	Rural Local Council
SL	Sustainable Livelihoods
SSI	Semi-structured Interview
TLC	Transitional Local Council

Chapter 1
General introduction

1.1. Background of study

Evaluation is concerned about making judgement about programmes (University of Tasmania 2003). These judgements are about how the programme has achieved the set objectives. The decisions could include whether to change the course of action or to discontinue a programme. The conception, planning and implementation of evaluation should therefore be systematic (Patton 1997; Rossi & Freeman 1993 in Babbie & Mouton 2001; Freeman *et al.*1989).

Smith (2001) noted that in many projects evaluation are seen as externally motivated. It is also not helpful that most evaluations have become concerned with measurements in numeric terms. In this way evaluation becomes an end rather than a mean. The value of evaluation should therefore be emphasised to dispel the fears associated with measuring performance (Smith 2001).

Better ways to evaluate programme are needed in order to make evaluation process more accurate and the results more dependable. Evaluation should therefore be viewed as part of the broader component of development. In this way subjectivity is embraced as a necessary part of evaluation (Smith 2001).

The sustainable livelihoods (SL) approach is regarded as a holistic approach to development. It simultaneously interrogates a broad cross-section of various elements impacting on livelihoods. The aim is to look at the people's livelihoods as an aggregation of many elements which need to be understood in totality (DFID 1999). It is through understanding livelihoods dynamics that, perhaps alternative development opportunities could emerge. The SL approach has been used, among other things, to monitor and evaluate programmes (DFID 1999).

1.2. Importance or justification of study

The developmental issue which inspired this study was ensuring that community development projects are effective. The scientific inspiration was to develop evaluation tool to help the community development projects participants to reflect on the effectiveness of the projects.

The methodological starting point of this study was that evaluation process is neutral and does not reflect on the key challenges in development. Hence, SL approach was brought to guide evaluation process to address developmental challenges. This is because the SL approach is mindful of diversity of livelihoods; and perspectives and causes of poverty (Koziell 2001). So, when using SL approach the effectiveness of development activities increases (DFID 1999) and the results achieved are likely to last longer (Ashley & Carney 1999; Koziell 2001). Furthermore, Koziell (2001) argued that because of its flexibility and adaptability SL approach is uniquely positioned to address social and cultural diversity of the poor people. This means the SL approach can be designed to fit within a wide-ranging situation.

This dissertation has thus brought together the evaluation process and SL approach. The study therefore contributed to the pool of knowledge on the subject of evaluation and SL approach. This knowledge is of value to the community projects; development professionals; and government and non-governmental organisations.

1.3. Primary research question and secondary questions

This study investigated the use of the SL approach as a tool for evaluation. The primary question was: What are the outcomes of evaluating programmes using sustainable livelihoods approach?

Secondary research questions addressed what opportunities and challenges result from:

a) Defining evaluation programmes to using SL framework.
b) Planning evaluation programmes using the logical framework.
c) Establishing success indicators using SL approach checklists of success indicators.
d) Selecting evaluation data gathering method consistent with SL approach guidelines.

e) Collecting evaluation data using the SL approach guidelines.
f) Analysing and interpreting evaluation data using the SL guidelines.

1.4. Definition of terms

For the purpose of this study, there are terms and concepts used within a specific context. The following terms concepts used in this study have a specific meaning which is explained below.

Evaluation

Evaluation in this context would mean systematic analysis of the effectiveness and direction of the activities. It also involves making value judgement about the progress and impact of activities (Vernooy *et al.* 2003). It pays attention to the purpose; approach and process.

Livelihood

In this case livelihood refers to set of activities geared towards earning a living. It focuses on a variety of activities which has both economic and social dimension. The analysis of livelihoods therefore also includes developing social relations (Ellis 2000).

Participation

In the context of this study participation include any form of involvement in the evaluation activities (Vernooy *et al.* 2003). This definition takes into consideration that there is no right or wrong amount of participation (Vernooy 2005). Participation may therefore be limited by the capacity of the participants.

Programme

In this case the project will refer to aggregate activities connected through policy; institutions; and approach (DFID 2006).

Project

In this case the project will refer to individually planned activities designed to achieve a given objectives within a given time-frame (DFID 2006).

Sustainability

In this case sustainability refers to the ability of a system to ensure that resources are productive over a long time and should not be in conflict with other livelihoods (Ashley & Carney 1999). This includes economic; social; institutional; and environmental sustainability.

1.5. Overall approach

The theoretical framework was designed through building on the process of evaluation and the SL framework; principles; checklists; and guidelines. The theoretical framework consists of five step evaluation process guided by SL approach principles and guidelines including the SL framework.

The study complied with the five steps of evaluation: 1) defining and planning the evaluation programme; 2) establishing success indicators; 3) selecting data gathering method(s); 4) collecting evaluation data; and 5) analysing and interpreting evaluation data (See Chapter 2). In complying with these five steps SL principles and guidelines were used to shape each step of the evaluation.

In keeping with SL theory, the methodology was derived from implementing the SL principles: people-centred; holistic; dynamic; building on strengths; macro-micro links; and sustainability in the field. The SL framework elements: vulnerability context; livelihoods assets; transformation structures and processes; livelihoods strategies; and livelihoods outcomes were used as key attributes of evaluation programme. The SL checklists of indicators and guidelines on selecting data gathering methods; collecting data; and analysing and interpreting data were used to shape evaluation steps.

The data collection for the research study was collected from two projects situated Mokopane in Limpopo and Mpophomeni in KwaZulu-Natal. This was an iterative process. As steps were taken, information about what worked and what did not work was gathered and analysed to improve the overall process. In a nutshell the process of collecting data is characterised by plan; act; and reflect.

1.6. The limitations of the study

The study focuses on two case studies namely the Maths, Science and Commerce Organisation Tutoring Project (MTP) and Qedidlala Community Garden Project (QCGP). These projects were selected through purposive sampling. The projects are therefore not representative of the projects in the provinces of South Africa nor KwaZulu-Natal and Limpopo. Only projects which had the required attributes and those whose participants agreed to be part of the study were selected. Given the limited time and financial resources it was not possible to include many projects.

The timing of the study did not coincide with the period were each project is evaluated and therefore evaluation activities had to be done during the time which may not have been ideal for evaluation of the projects. The time which was available was also limited and therefore any activities which would have been lengthy were left out. The actual results of the evaluation of the two projects are not included in the study, except to the extent to which help understand SL as a tool for evaluation.

1.7. Outline of the dissertation

The dissertation is set out in eight chapters. The chapters were written with the intention for publication and were prepared as such. Thus the references are found at the end of each chapter.

Chapter two (2) is concerned with the evaluation literature. It presents an overview of the development of evaluation as academic field. The evaluation framework and processes are also discussed. The process of evaluation focus specifically on the following five steps: 1) defining and planning; 2) establishing success indicators; 3) selecting data gathering methods; 4) collecting evaluation data; and 5) analysing and interpreting evaluation data.

Chapter three (3) is concerned with the SL approach literature. An overview of the SL approach concepts is presented. The SL principles and framework are explained and discussed. Specific focus is on how the framework elements (i.e. vulnerability context; livelihoods assets;

transformation structures and processes; livelihoods strategies; and livelihoods outcomes) affect livelihoods systems.

Chapter four (4) bring together the evaluation and SL literature with the view of creating a framework for evaluating programmes. The framework developed draws from five evaluation steps (i.e. defining and planning; establishing success indicators; selecting data gathering methods; collecting evaluation data; and analysing and interpreting evaluation data) and SL framework; principles; checklists; and SL guidelines.

Chapter five (5) present the methodology used in the research. A brief overview of the evaluation and SL approach concepts which formed part of the core of the methodology is given. The background in terms of the intention; analysis; and the process of the methodology is explained. A step-by-step process of the methodology is also explained.

Chapter six (6) explains the activities done and the outcomes there-of and discusses the results of the evaluation activities conducted. The focus is on how the process unfolded in relation to the plans, the reflection made and the adaptation. The discussions draw from the field experience of evaluating the two projects (MTP and QCGP) using the SL approach as a tool for evaluation and the literature reviewed. The opportunities as well as the challenges of evaluation projects using SL approach are discussed in details.

Chapter seven (7) provide the summary of the study; the conclusions and recommendations made regarding the research. The conclusions bring together the field experience and the literature and bring perspectives into the study.

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Chapter 2
Programme evaluation literature

2.1. Introduction

Evaluation is a critical phase of a programme. It is during and after this phase had been completed that major decisions about the programme are made. The decisions could include whether to change the course of action or to discontinue a programme. The rationale is that evaluation assesses the programme worth and the improvements made (Patton 1997). The conception, planning and implementation of evaluation should therefore be thorough. If programme evaluation is flawed it could have serious implications on the decision made regarding the programme. An understanding of the process of evaluation process is important.

This paper briefly discusses the concept of evaluation. The purpose of evaluation is explained. The approaches to evaluation are also discussed to depict their role in the development of programme evaluation. These paradigms also shows different lenses used to view evaluation.

The framework and the process of programme evaluation are explained and discussed. The framework locates the focus areas for evaluation and the different types of programme evaluation. An overview of the five (5) types of evaluation located in the evaluation framework is presented. A five step programme evaluation process is proposed and discussed.

2.2. Conceptualisation of evaluation

There are numerous ways of defining evaluation. Robson (2000) defines evaluation as an assessment of the value or worth of a programme. Smith (2001) on the other hand defines evaluation as an orderly examination and assessment of functioning processes, experiences and results. Programme evaluation as explained by Rutman (1984) in Babbie and Mouton (2001) involves the application of scientific methods to assess the implementation and outcomes of programmes to aid decision-making processes. In a similar definition, evaluation is defined as a step-by-step application of social research methods to assess how programmes are conceived,

planned, implemented and utilized (Patton 1997; Rossi & Freeman 1993 in Babbie & Mouton 2001; Freeman *et al.*1989).

In reviewing the definitions of evaluation above it is noted that purpose, approach and process approach are central to the definition. The key issues noted in the above evaluation definitions are: evaluation is conducted for a specific purpose; it applies both scientific as well as social research methods; and it is implemented in a systematic order. It is clear that when undertaking evaluation, understanding its purpose, approach and process will be essential.

Smith (2001) noted that the systematic nature of evaluation qualifies it as a research process and that to be meaningful evaluation must consider stakeholders. This assertion is supported by Vernooy *et al.* (2003) who argued that identifying users and involving them in evaluation is key to the process of evaluation. In addition Smith (2001) argued that evaluation gives special consideration to aims, values, perceptions, needs and resources. Clearly, there are a number of factors to consider when conducting evaluation.

2.3. Purpose of evaluation

Generally, the purpose of evaluation should be to help an organisation achieve its goals (Calder 1994). The specific purpose of evaluation includes: generating knowledge about the programme; improving the programme; and judging the worth of a programme (Patton 1997). However, numerous authors (Smith 2001; Calder 1994; Morris *et al.* 1987) differentiate between two purposes of evaluation namely; summative and formative evaluation. Further, discussion will demonstrate that the summative and formative evaluations are located within judgement-oriented evaluation and improvement-oriented evaluation respectively. Three primary purposes of evaluation and the examples are contained in table 2.1.

2.3.1. Summative evaluation

Summative evaluation is mainly concerned with measuring the overall success or failure of a programme (Feuerstein 1986; Morris *et al.* 1987). The intention is to make conclusions on the

performance and efficiency of a programme (Calder 1994). Similarly, Smith (2001) argued that summative evaluation shows whether the objectives of a programme have been fulfilled. For this reason programme objectives are central to summative evaluation.

Table 2.1. Three primary uses/purposes of evaluation studies

Uses or purposes	Examples
Judge merit or Worth	Summative evaluation; Accountability; Audits; Quality control; Cost-benefit decisions; Decide a programme's future; Accreditation/licensing
Improve programmes	Formative evaluation; Identifying strengths and weaknesses; Continuous improvement; Quality enhancement; Being a Learning organisation; Managing more effectively; Adapt a model locally
Generate knowledge	Generalizations about effectiveness; Extrapolating principles about what works; Theory building; Synthesise patterns across programmes; Scholarly Publishing; Policy making

(Source: Patton (1997) p.76

However, Feuerstein (1986) argued that it is easy to show failure but it is difficult to show success. The reason is that different people may have different meaning of what success is (Feuerstein 1986). It is therefore important to clarify how success is measured when the purpose of evaluation is decided.

Summative evaluation could also show whether the required standard is achieved (Smith 2001). In essence summative evaluation gives a summary of a programme and judge whether it has achieved its objectives or not. Radical measures about the programme could therefore be taken as a result of summative evaluation reports. Subsequently, the evaluation should therefore be highly credible (Morris *et al.* 1987).

2.3.2. Formative evaluation

Formative evaluation is concerned with measuring the progress of a programme (Morris *et al.* 1987). The focus of formative evaluation as Calder (1994) argued is on improving activities of a programme. Likewise, Smith (2001) noted that formative evaluation enables judgments on knowledge, attitudes and skills. The objective is ultimately to understand the changes that have happened and to improve capability to assess learning and performance. Formative evaluation

basically assesses how the process is unfolding and what needs to be improved to make the process more efficient.

2.3.3. Knowledge-oriented evaluation

The intention of knowledge-oriented evaluations is to produce new ideas or knowledge about the programme (Babbie & Mouton 2001; Patton 1997). Specific knowledge might be to clarify the structure of a programme or its underlying theory (Patton 1997). General ideas might be: (*i*) to get a broad-based understanding of the programme; (*ii*) to inform the stakeholders; and (*iii*) to reduce risk or chances of failures (Babbie & Mouton 2001). The results of knowledge-oriented evaluation are not used directly in a programme, but influence how issues within the programme are conceived (Patton 1997). As a result, theories could be formulated as a result of knowledge-oriented evaluation studies. These theories could be used to differentiate between types of intervention or to inform policy changes (Patton 1997)

2.3.4. Overview of the purpose of evaluation

The discussions on the summative and formative evaluation suggest that these evaluations are located within judgement-oriented and improvement-oriented evaluation respectively. In addition, both judgement-oriented and improvement-oriented evaluations look at the programme's strengths and weakness (Babbie & Mouton 2001; Patton 1997). They assess the way in which the programme has been implemented, the constraints and the response from the programme beneficiaries. Generally the outcomes would lead to a change towards improving the programme.

It is noted that there are often some overlaps in the purpose of evaluation. One evaluation study could serve more than one purpose (Patton 1997). Evaluation studies conducted to produce new ideas could lead to an improvement of the programme. Therefore in such instances evaluation will serves more than one purpose.

2.4. Evaluation approaches

Evaluation can be traced back from the beginning of social research (Babbie & Mouton 2001). As Guba and Lincoln (1989) have put it, evaluation resulted from a trial and error process involving many interacting factors. The roots of evaluation are grounded in social science, which is an evaluative discipline (Evaluation Associates Ltd 1997). Coming from the social science background it is expected that evaluation would exhibit characters of social research.

Previously, evaluation formed part of the broader field of social research. However, it has grown and developed into an area of specialisation with its own professional bodies and publications (Evaluation Associates Ltd 1997; Smith 2001). These changes have brought about a range of theories about how evaluation should be conducted. These theories are discussed below.

The theories behind programme evaluation evolved from simple testing and measuring to incorporating stakeholder participation in the process of evaluation (Guba & Lincoln 1989). Two approaches to evaluation namely; quantitative, and qualitative evaluation are discussed. The notion of participatory evaluation is also reviewed.

2.4.1. Quantitative Evaluation

Quantitative evaluation is based on the assumption that social behaviours could be reduced to variables, which in turn could be measured (University of Tasmania 2003; Babbie & Mouton 2001; Patton 1997). Similarly, Smith (2001) argued that quantitative evaluation relies much on numerical measures. Incidents are described using cause and effect connection (University of Tasmania 2003). The emphasis evaluation from the above discussion is concerned with measuring any subject of evaluation in numeric terms.

The reliance on numbers could easily make evaluation to be conceived as end rather than the means (Smith 2001). The example of the quantitative approach is depicted through the administering of tests assess social behaviour and ultimately measuring the data collected in numeric terms (Guba & Lincoln 1989).

Quantitative evaluation is focused on objectivity and scientific approach. It also relies much on controlled experimentation (Smith 2001). Therefore, the design of studies and data analysis becomes scientific and technical (Herman *et al.* 1987). The resultant effect is that illiterate people would not understand the process and possibly its outcomes.

Smith (2001) argued that because quantitative evaluation approach reflects the main concern of evaluator, managerial influence becomes very strong. This is disempowering as programme participants rely on the evaluator to lead proceedings. Consequently, quantitative evaluation approach was criticised for being insensitive and superficial (Herman *et al*. 1987). However, University of Tasmania (2003) noted that it could be worthwhile to use numerical measures, but advises that quantitative evaluation be used with other approaches.

2.4.2. Qualitative Evaluation

Criticism of quantitative evaluation resulted in the development of a qualitative approach to evaluation (Babbie & Mouton 2001; Patton 1997). The qualitative approach put emphasis on the meaning of human behaviour and dynamics of interactions (University of Tasmania 2003; Patton 1997). Guba and Lincoln (1989) noted that qualitative evaluation is characterised by descriptions of patterns of strengths and weaknesses of a programme. Reflection therefore included the abstract aspects of the programme.

Perceptions and values of participants are included in search of a possible interpretation (University of Tasmania 2003). Measurement no longer represented the single means of judging evaluation (Guba & Lincoln 1989). This assertions show that there was a growing recognition that people have different and values which influence their perspectives on issues.

However, the qualitative evaluation failed to focus on the area where change is needed. This could be counter-productive in programme evaluation (University of Tasmania 2003). It is therefore important to note that when evaluation is required to focus on the areas of change, qualitative cannot help.

Nevertheless, Babbie and Mouton (2001) noted that qualitative evaluation can be used when:

- Background information is required before compiling final evaluation design
- Integrating the viewpoints; understanding; and values of the programme participants into design of the evaluation
- Describing the process of programme implementation
- Conducting formative evaluation
- Investigating programme interventions in its natural setting
- The measures used are not offensive
- Ensuring quality of programme evaluation through triangulation

2.4.3. Participatory Evaluation

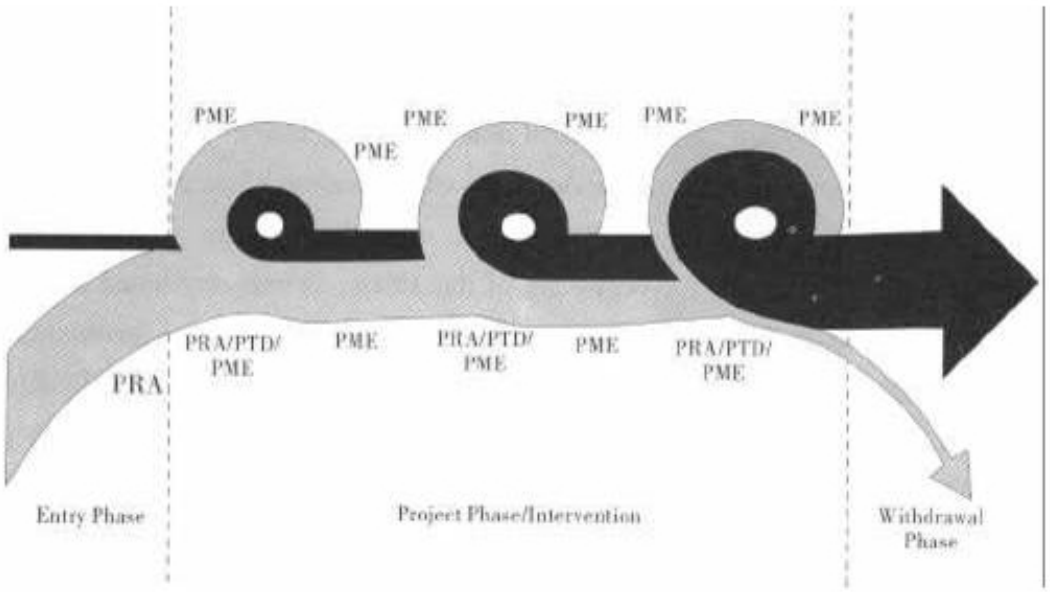
The participatory evaluation emerged because evaluation results were increasingly not used. The main reason was that many evaluations excluded key stakeholders in the design and the implementation of programme evaluation. Consequently, the excluded stakeholders could not identify with the findings of evaluation (Babbie & Mouton 2001). Participatory evaluation was developed to increases the opportunity for evaluation results to be utilised (Freedman 1998). Calder (1994) noted that how evaluation results are going to be used is often neglected.

The fundamental aspect of participatory evaluation approach is that it promotes knowledge sharing and evaluation capacity building among the stakeholders (Zukoski & Luluquisen 2002). This is done through building on the existing capability of the stakeholders (Feuerstein 1986). Accordingly, it is conducted in partnership (Zukoski & Luluquisen 2002).

It is the programme beneficiaries' and not the researcher's agenda that should be addressed (Freedman 1998). The role of the researcher is to facilitate, while the programme participants decide on timing; methods of evaluation; and the use of evaluation results (Babbie & Mouton 2001). Similarly, Zukoski and Luluquisen (2002) argued that stakeholders should participate at all stages of evaluation. This however should be mindful of the fact that there is no right or wrong amount of participation (Vernooy 2005a).

However, some stakeholders may be incapable to effectively participate in evaluation activities. Subsequently, Freedman (1998) suggested that beneficiaries be capacitated so that they could undertake evaluation process with guidance. This approach is in line with the process followed in one study in Vernooy *et al.* (2003). In this example the role of the facilitator is big in the beginning and then diminish as the participants learn to do things on their own (see figure 2.1). The dark lines shows the minimal control of the process by the participants in the beginning and gradually increases until they have full control of the process of evaluation (Vernooy *et al.* 2003).

Figure 2.1. The schematic presentation of gradual introduction of participatory evaluation to the participants



Source: Vernooy *et al.* (2003)

Participatory evaluation helps the stakeholders to see the programme in a broader context as well as taking action to improve any weaknesses (Feuerstein 1986). This makes participatory evaluation process to be both reflective and action oriented (Zukoski & Luluquisen 2002; Babbie & Mouton 2001). Subsequently, a learning process takes a centre stage in participatory evaluation (Zukoski & Luluquisen 2002; Babbie & Mouton 2001) rather than the results (Zukoski & Luluquisen 2002). Clearly, participatory evaluation is concerned about learning.

2.5. Programme evaluation framework and the types of evaluation

Drawing from numerous authors (Vernooy 2005b; University of Tasmania 2003; Vernooy *et al.* 2003; Coffmann 2002; Posavac & Carey 1992 cited in Babbie and Mouton 2001; Rossi and Freeman 1993 cited by Shadish 1998) evaluation framework, which identify six types of evaluation was identified. The six types of evaluation are: need evaluation; process evaluation; output evaluation; outcome evaluation; efficiency evaluation; and impact evaluation. The evaluation framework differentiates evaluation by the aspect of programme evaluated (see figure 2.2).

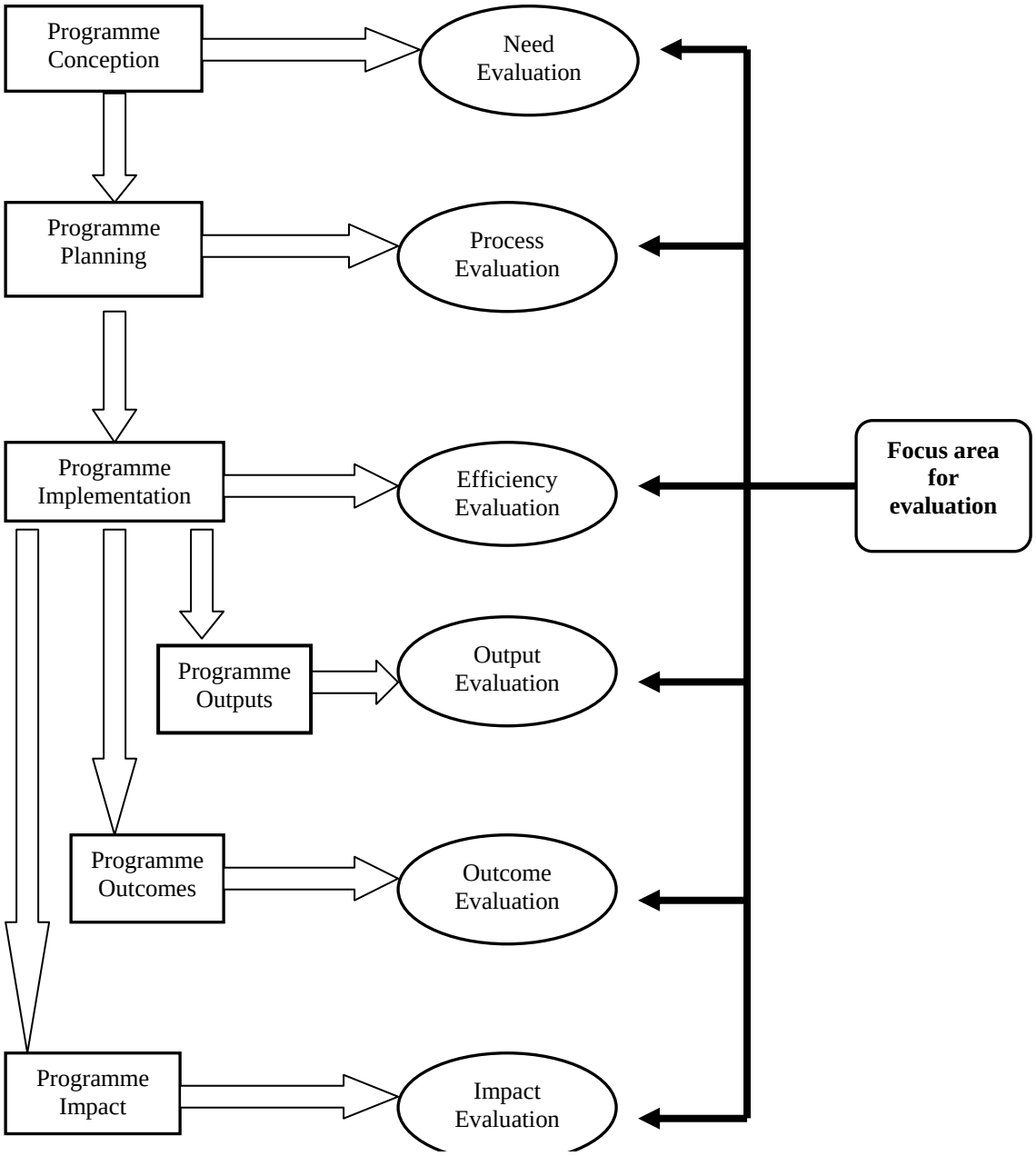
2.5.1. Need evaluation

Need evaluation begins with the conception of a programme (Babbie & Mouton 2001). Babbie and Mouton (2001) further argued that this type of evaluation establishes the attributes which the programme should focus on. When the area of focus has been established key issues to consider include: the strategies to be employed; and its affordability (Babbie & Mouton 2001). In short need evaluation is conducted at the beginning of the programme.

2.5.2. Process evaluation

Process evaluation assesses methods and the approaches used (Vernooy *et al.* 2003; Vernooy 2005b). It also ascertains whether the programme has been implemented as planned (Coffmann 2002; Babbie & Mouton 2001). Accordingly, this would help check whether the programme serves the intended beneficiaries; the set standards are maintained; and support structures and systems are in place (Babbie & Mouton 2001). Coffmann (2002) argued that this type of evaluation uses less resource. Regardless, that process evaluation does not capture the effects of the programme (Coffmann 2002).

Figure 2.2. Programme evaluation framework



Adapted from: University of Tasmania (2003) p.4

2.5.3. Output evaluation

Output evaluation assesses the evaluation activities as well as tangible products resulting from implementation of a programme. These may include number of people trained; new techniques;

reports or publications (Vernooy *et al.* 2003). Vernooy *et al.* (2003) further argued that outputs evaluation should go beyond checking whether outputs have been achieved and look at the quality of such outputs.

2.5.4. Outcome evaluation

Outcome evaluation assesses the intended and unintended results which in part could be attributed to the programme outputs (Vernooy 2005b; Babbie & Mouton 2001). Coffmann (2002) argues that the focus is on the effects of the programme on the intended beneficiaries. Coffmann (2002) and Babbie and Mouton (2001) noted that these effects could occur at the various levels which are: behavioural and attitudinal levels; service delivery level; and policy level.

Rossi and Freeman (1993) cited in Shadish (1998) caution that outcome evaluation is unsuitable to new programmes and may not be reliable for long-established programmes. New programmes are unlikely to have produced outcomes and would more likely be working on the programme conceptualization and implementation. Intended outcomes of long-established programmes may have been achieved by means other than the programme.

2.5.5. Efficiency evaluation

Efficiency evaluation considers the amount of time and resources used in relation to the outputs and outcomes (Vernooy 2005b). As Babbie and Mouton (2001) put it, this kind of evaluation is a result of demand by stakeholders to know whether the cost of the programme in relation to the benefits of the programme can be justified. This is done by comparing programmes of similar administration costs (Babbie & Mouton 2001). It is noted that this type of evaluation can help identify redundancy in a programme.

2.5.6. Impact evaluation

Impact evaluation gauges the long-term changes which occur as a result of programme implementation (Vernnoy 2005b; Vernooy *et al.* 2003; Coffmann 2002). These could include

sustainability of livelihoods and natural resources; decreased poverty etc. (Vernooy *et al.* 2003). Impact evaluation uses a huge amount of resources because large samples are required to observe the effects. Further, Coffmann (2002) argued that because impact should be the result of the programme activities and not any other intervention(s), this type of evaluation requires either experimental or quasi-experimental research design. So, it is therefore not always easy to tell whether the impact is the results of the programme alone (Vernooy *et al.* 2003).

2.6. Process of programme evaluation

Reflection on the processes of programme evaluation outlined by several authors (University of Tasmania 2003; Health Canada 1996) indicated that the various elements of evaluation could be consolidated around five steps. Thus a five-step process is proposed. This process consists of: 1) defining and planning the programme; 2) establishing success indicators; 3) selecting data gathering methods; 4) collecting evaluation data; and 5) analysing and interpreting the data.

2.6.1. Defining and planning the programme

Defining and planning the programme could broadly be referred to as establishing programme boundaries (Herman *et al.* 1987). As per the definition of evaluation, this stage includes deciding on the approach, purpose and the process to be followed. In brief, this step maps out the key attributes of a programme which will be evaluated (King *et al.* 1987; University of Tasmania 2003); and deciding how much supporting data will be required (King *et al.* 1987). Various programme documents could be used to focus evaluation and the shape it could take (Herman *et al.* 1987).

The goals and the objectives of the programme should then be identified (University of Tasmania 2003; Herman *et al.* 1987). The development of goals and objectives articulate what the programme wants to attain and provide a context in which the evaluation questions could be tackled (Health Canada 1996; Calder 1994). These should be measurable; time bound; and intended to bring change (Health Canada 1996). This assertion is supported by Feuerstein (1986) who argued that it is important that programme objectives are clearly stated and measurable.

Programme documents, interviews with the programme participants could help in developing the programme goals. However, programme documents sometimes get outdated and they only contain formal statements (Herman *et al.* 1987). In essence unwritten and unofficial statements or objectives are equally important and useful as the programme documents (Feuerstein 1986). Therefore if only formal and/or written statements are used in developing programme goals, valuable information could be missed.

Programme planning focus on the actions to be taken in order to achieve the goal and objectives of evaluation (University of Tasmania 2003; Feuerstein 1986). In addition, Stecher and Davis (1987) and Feuerstein (1986) noted that evaluation plan should respond to the following issues: elements evaluated; methods used; time limits; and the resources required. At the end of this step a road map of what would happen should be produced.

2.6.2. Establishing success indicators

In discussing how indicators are established the definition; types and the characteristics of indicators are tackled. These will help in guiding the process of establishing success indicators.

2.6.2.1. Definition of an indicator

The definition put forward by Taylor (2004) incorporates Rossi's (1989) idea of an indicator as an outcome; characteristic; and attribute of the subject of evaluation. On the other hand indicators are regarded as traces of information that mirror the status of larger systems (Redefining Progress & Earth Day Network 2002). An indicator is a pointer which show progress and help measure change (Feuerstein 1986). Drawing from the above definitions, indicators can be regarded as constructs created to reflect or measure concepts and phenomena.

In defining indicators as a concept, a number of qualifying issues are raised which help refine and clarify understanding:

- The measurement of something does not mean that the indicators are good (Cobb & Rixford 1998).

- Indicators help in outlining issues, but they cannot effect change, so stakeholders are responsible for change (Besleme *et al* 1999, Cobb & Rixford 1998).
- Developing strategic actions based on the chosen indicators will reinforce the indicators as an accurate measure of success (Redefining Progress & Earth Day Network 2002).
- It is difficult to integrate indicators into institutions effectively (Besleme *et al* 1999).
- Indicators are not value free, but considering the value behind indicators can lead to a balanced concept (Cobb & Rixford 1998).

2.6.2.2. Types of indicators

Four types of indicators have been identified from various authors (Taylor 2004; Horsch 1997; Shavelson *et al.* 1991) namely: input indicators; process indicators; output indicators and outcome indicators.

- Input indicators measure both the human and the financial resource invested in a project. They can also include measures of characteristics of the target group (Horsch 1997, Shavelson *et al* 1991).
- Process indicators measure the manner in which the programme activities had been implemented (Horsch 1997).
- Output indicators measure the quantity of the goods and services produced and how efficiently they have been produced (Horsch 1997).
- The outcome indicators may also measure the broader results or impact achieved through implementing the activities of the programme (Horsch 1997).

Indicators could also be expressed in a qualitative or quantitative manner. Qualitative indicators measure feelings and subjective decisions while quantitative indicators measure numerical data (Taylor 2004). Quantitative indicators could be expressed in percentages; rates and ratios (Feuerstein 1986).

Sustainable Measures (2004a) further differentiate between traditional and sustainability indicators. Traditional indicator measures changes in a single dimension. Sustainability indicators

reflect the reality that the economic, social and environmental segments are interconnected (Sustainable Measures 2004a). This differentiation helps in understanding the weaknesses and strengths of indicators.

2.6.2.3. Criteria for selecting indicators

Sustainable Measures (2004b) argued that indicators differ relative to of systems they monitor. However, although indicators are different they have common characteristics. These key attribute of indicators have been consolidated to include: validity; relevance; understandable; appropriateness; robustness; availability and accessibility; and manageability (Sustainable Measures 2004b; Armstrong & Francis 2002)

a) Validity

An indicator should reflect the phenomenon it is intended to measure (Sustainable Measures 2004b; Armstrong & Francis 2002; Redefining Progress & Earth Day Network 2002; Besleme *et al* 1999; Horsch 1997; King *et. al*. 1987; Morries *et al*. 1987). The validity judgement ascertains whether the instrument used is appropriate to what need to be measured (King *et al*. 1987). The justification as Sustainable Measures (2004b: 3) has put it is that "An indicator is only useful if you know you can believe what it is showing you". The appropriate barometer is therefore crucial in validating an indicator.

Where direct measure of a construct is not possible, indirect indicators could be used (Armstrong & Francis 2002; Horsch 1997). However, the use of indirect indicators can lead to gaps between what an indicator measures and the correct reflection of the construct (Armstrong & Francis 2002; Horsch 1997). These types of indicators should therefore be used with caution. The bottom line is that valid indicators should be able to be defended and justified based on logical or scientific basis (Redefining Progress & Earth Day Network 2002).

b) Relevance

Relevance of an indicator refers to logical link or relationship between an indicator and the concept that is measured (Sustainable Measures 2004; Armstrong & Francis 2002; Redefining Progress & Earth Day Network 2002). The indicator has to be defined the same way or be consistent overtime (Armstrong & Francis 2002; Horsch 1997; Morris *et al*. 1987). Likewise, the means of data collection should also be consistent (Horsch 1997).

A considerable amount of time should therefore be spent clarifying what is going to be measured (Cobb & Rixford 1998). However, consistency does not mean something is true (Morries *et al.* 1987). Some inconsistencies in indicators could be due to the change in the data collection tools (Besleme *et al.* 1999). This mean the relevance of indicators should be understood in context.

c) Understandable

The programme participants should be able to understand the indicator and what it is measuring (Sustainable Measures 2004b; Armstrong & Francis 2002; Redefining Progress & Earth Day Network 2002; Besleme *et al.* 1999; Horsch 1997). Otherwise efforts should be made to make them understandable. Understanding an indicator is particularly important where different tools are used to measure the same phenomenon (Sustainable Measures 2004b). Putting together many things could make indicators difficult to understand (Redefining Progress & Earth Day Network 2002). Simple indicators should therefore be used whenever possible to avoid misunderstanding.

d) Appropriateness

Indicators should portray the phenomenon being measured (Armstrong & Francis 2002; Horsch 1997). Appropriate indicators should provide a balanced view of the measure to convince both the supporters and the sceptics (Armstrong & Francis 2002; Redefining Progress & Earth Day Network 2002; Horsch 1997). This could be difficult in practice. However, as mentioned earlier indicator should be scientifically or logically acceptable as a measure of a construct.

e) Robustness

Robust indicators are based on reliable data and are comparable with other similar studies (Armstrong & Francis 2002; Redefining Progress & Earth Day Network 2002). Even though many indicators from different studies may not be equivalent, the essence of the indicators would be enough for comparison (Redefining Progress & Earth Day Network 2002). The point is that indicators should be comparable and where there are differences they should be justified.

f) Availability and accessibility

The availability and accessibility of indicators is determined by the timeliness of data to measure it (Sustainable Measures 2004b; Armstrong & Francis 2002; Besleme *et al.* 1999). Programmes are delimited by the data available and the absence of data may require changes in the programme. In Besleme *et al.* (1999) there was a programme which intended to include data from 1970 to 1985. However, data was only available up to 1983 and therefore the programme was adjusted accordingly.

g) Manageability

Armstrong and Francis (2002) argued that the manageable indicators are: accessible and available; and understandable. Furthermore, indicators are manageable when they can be analysed. Thus a manageable indicator should be understood and its data should be easily obtained and readily analysed. However, the data for sustainability indicators are often not available (Sustainable Measures 2004b). This could lead to a tendency of collecting easily identifiable indicators rather than the relevant ones (Calder 1994). In essence a balance between selecting manageable and relevant indicators should be sought.

2.6.3. Selecting data collecting methods

Health Canada (1996) argued that there is variety of data collection tools that can be used depending on the programme's evaluation needs. However, as a general principle several different methods should be used, in order to substantiate the findings (University of Tasmania (2003). "This is known as a process of triangulation – the use of multiple investigative methods or information sources to home in on the question in focus" University of Tasmania (2003: 21). This process could help to identify inconsistencies in the data captured and action to correct that could be taken.

Views on possible data collection methods vary. However, there is no prescription, on which method should be used.

- The Evaluation Associates Ltd (1997) identified: survey methods (questionnaires, telephone interviews, face-to-face interview, and case studies); experts' reviews; and metric methods as possible data collection methods.

- Health Canada (1996) identified five methods: written survey questionnaires interviews (face to face and telephone); focus group; programme diary; and programme documentation.

- The University of Tasmania (2003) identified among others; interviews; questionnaires; focus groups; and observation.

Herman *et al.* (1987) argued that the best feasible methods to measure the established indicators of success should be based on the programme context, processes and outcomes. The balance between what is best and what is feasible should be sought.

2.6.4. Collecting evaluation data

Health Canada (1996) argued that programme goals, objectives and success indicators help to determine the type of information collected. This means the data collected should answer the

evaluation questions and lead to the achievement of the programme goal and objectives. Whatever the source; a good data collection process is defined by it being useful; practical; collaborative; systematic; ongoing; accurate and ethical (Health Canada 1996). Similarly, Redefining Progress and Earth Day Network (2002) argued that data source should be consistent, reliable, and scientifically accurate.

Several sources of data for indicators are identified:

- The national census; academic institutions; the internet, libraries, newspapers, radio and television etc. (Redefining Progress & Earth Day Network 2002).

- Data could also be collected through; physical observation, surveys, interviews (Redefining Progress & Earth Day Network 2002).

- Consultants, target population, consumers, general public, programme sponsors, programme staff, and programme records (Health Canada 1996).

Regarding programme records, King *et al.* (1987) noted that they can create an incomplete picture. To find more information about the programme, the right source will be the people involved in the programme referred to as self-reports (King *et al.* (1987).

2.6.5. Analysing and interpreting the data

The analysis of the evaluation data begins with the review of all collected information to find the themes, patterns, categories and basic descriptive units using the key evaluation questions as a lead (Health Canada 1996; Patton 1987). Similarly, University of Tasmania (2003) argued that analysis involves checking whether the data is complete, preparing data for preliminary analysis (coding). Before beginning with the analysis, all the data collected should be complete (Patton 1987).

Evaluation Associates Ltd (1997) noted that most evaluation analysis requires frequency counts, averages and totals (Evaluation Associates Ltd 1997). However, (Health Canada 1996) argued

that this sort of analysis will be more suitable for quantitative data. Qualitative data can be expressed in terms of themes, ideas, events, personalities, history, etc. (Health Canada 1996). Redefining Progress and Earth Day Network (2002) argued that showing the trend of improvement or decline could be useful in analysing evaluation data. The analysis of data should ensure data is complete and that is grouped accordingly.

Interpreting evaluation data involves making sense of analysed data through explaining the grouped data and identifying connection that exists (Patton 1987). Interpreting the evaluation results should involve the people who have been involved in the evaluation project (Health Canada 1996). As evaluation is about value judgement and therefore the focus should be on the people who are going to use the evaluation results. The summaries of the findings should therefore be sent to the participants for their feedback and verification (Health Canada 1996). However, this is dependent on the capacity of stakeholders adequately interact with evaluation findings. More participatory methods could be employed to bridge incapacity of the stakeholders.

2.7. Summary

The literature reviewed indicated that purpose, approach and process approach are central to the defining evaluation. As a result it is crucial to understand the purpose, approach and process of evaluation when undertaking programme evaluation. The purposes of evaluation: generating knowledge about the programme, improving the programme (formative) and judging the worth of a programme (summative) were found to be overlapping.

Quantitative and qualitative evaluation approaches are complementary. Participatory evaluation is concerned with involving the programme participants in all stages of evaluation and thereby empowering them. It was also found to be helpful in increasing the usage of evaluation results as participants have ownership of the results.

The evaluation framework discussed differentiate between five types of evaluation: need evaluation, process evaluation, outcome evaluation, efficiency evaluation; and impact evaluation by the aspect of a programme evaluated. It was also noted that programme evaluation could be

completed in five steps: 1) defining and planning the programme; 2) establishing success indicators; 3) selecting data collecting methods; 4) collecting evaluation data; and 5) analysing and interpreting the data.

The first step of evaluation programme; defining and planning determines the scope of the programme as well as the questions, which programme evaluation, should answer. The expected outputs of the evaluation plans are a road map of how evaluation should unfold.

The second step of evaluation programme; establishing success indicators identifies the key measures (indicators) of success. An indicator can be defined as a construct created to reflect or measure a concept. In order for a measure to be regarded as an indicator it should be valid; relevant; understandable; appropriate; robust; available on time; and manageable.
The third step of evaluation programme; selecting the methods for collecting data identifies the methods which are going to be used to gather the data. There is no restriction as to which methods should be used. The kind of data that need to be collected could shed light of which methods would be relevant. Triangulation is important in checking the consistency of the data collected.

The fourth step of evaluation programme; collecting evaluation data involves the actual data collection. There are several sources where the data could be collected. Irrespective of the source, data collection process should be useful; practical; collaborative; systematic; ongoing; accurate; ethical; consistent; reliable; and scientifically accurate.

In the fifth step of evaluation programme; interpretation and analysis of data is done. Data analysis checks the completeness of data and groups it accordingly. Interpretation of the analysed data should consider the user of evaluation results.

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Chapter 3
Literature on Sustainable livelihood

3.1. Introduction

The sustainable livelihoods (SL) approach is regarded as a holistic approach to development. It simultaneously interrogates a broad cross-section of elements impacting on livelihoods. The aim is to look at the livelihoods as an aggregation of many elements which need to be understood in totality. It is through understanding livelihoods and its dynamics that, perhaps development activities could be made to have a lasting impact.

The concept of sustainable livelihoods is examined with a particular focus on what a livelihood is and how one knows a livelihood is sustainable. The principles which guide the implementation of the SL approach are outlined and discussed. The elements which constitute the SL framework are mentioned and deliberated upon.

The paper discusses the concept of vulnerability context which interrogates external factors affecting people's livelihoods. The paper further discusses the livelihoods assets which people use to make a living. The transforming structures and processes are discussed with the view of checking how they can support or inhibit attempts to achieve their livelihood goals. The paper also investigates how livelihoods strategies pursued could contribute to livelihoods outcomes. The relationships between the elements of the SL framework are highlighted as well.

3.2. Sustainable livelihood concept

A livelihood consists of the essential inputs needed to make a living (Chambers & Conway 1992 in CASE 2003). Expanding on this Ellis (2000) argued that livelihood is more than just earning an income. It was noted in Ellis (2000) that rural household derives their livelihoods from a variety of activities which has both economic and social dimension. Therefore analysis of livelihoods should go beyond looking at the economic activities. Other livelihoods activities

include developing social relations (Ellis 2000), which could be included in the analysis of livelihoods.

Following Chambers and Conway (1992) argument in CASE (2003), attributes of a sustainable livelihood were identified. They are: surviving and bouncing back from stresses and shock; enhance capability of assets to maintain livelihoods; and do not harm the environment. This is partly supported assertion made in Khosla (1999) that sustainable livelihoods do not cause destruction to the environment. Sustainable livelihood therefore is, '…a remunerative, satisfying and meaningful job that enables each member of the community to help nurture and regenerate the resource base' (Khosla 1999: 4). Based on this argument sustainable livelihoods considers environmental, economical, and social issues.

3.3. Sustainable livelihoods approach

The SL approach is one way in which developmental activities could be thought of, the eventual goal being to reduce or eradicate poverty (Ashley & Carney 1999; DFID 1999; Koziell 2001). The developmental activities are deliberately focused on the people and how they lead their lives (DFID 1999). Koziell (2001) argued that because of its flexibility and adaptability SL approach is uniquely positioned to address social and cultural diversity of the poor people. This means the SL approach can be designed to fit within a wide-ranging situation.

The SL approach is mindful of diversity of livelihoods; and perspectives and causes of poverty (Koziell 2001). So, when using SL approach the effectiveness of development activities increases (DFID 1999) and the results achieved are likely to last longer (Ashley & Carney 1999; Koziell 2001). In terms of or the arguments presented above, it is clear that the SL approach is neither a top down nor bottom up approach to development.

3.4.Sustainable livelihoods approach principles

The SL approach consists of sets of principles which are people-centred; holistic; dynamic; building on strengths; macro-micro links; and sustainability (DFID 1999). However, these

principles are implemented flexibly. Therefore the principles cannot be implemented in the same way in different situations.

3.4.1. People-centred

The SL approach puts people at the core of development activities (CASE 2003; DFID 1999; Ashley & Carney 1999). This argument is further echoed in Ashley and Carney (1999) assertion that eradication of poverty can be accomplished when strategies from outside development agents focus on what is important to the people. Likewise, CASE (2003) argued that the SL approach analysis should start with the livelihoods of the people. Moreover, the people should form part of the process (CASE 2003). This means that the people's perspectives on issues should be respected and taken into consideration throughout the development activities; that the development activities should revolve around the people and what they are doing. However, this cannot be understood to mean that outsiders cannot suggest innovative ways of doing things.

3.4.2. Holistic

DFID (1999) argued that the SL approach looks at the challenges people face in whole. This means SL approach does not look at issues in a narrow minded way (Ashley & Carney 1999; CASE 2003). Koziell (2001) pointed out that the SL approach recognises that livelihoods are as diverse as the people are and therefore different perspectives should be considered when undertaking SL analysis. In view of this the strategies to eradicate poverty will therefore look at a variety of prevailing views on issues.

The use of SL framework in the analysis of sustainable livelihoods acknowledges linkages that exist between various elements, which affect the livelihood (CASE 2003). This is because dividing development work into sectors and issues overlooks the cohesion and the relationships that exist among different issues and sectors (Helmore & Singh 2001). Consider this example 'Biodiversity plays a key role in the achievement of sustainable livelihoods, but is commonly considered to be primarily the domain of environmentalists and conservationists. In this way, it has become largely alienated from livelihoods and poverty reduction agendas…' (Koziell

2001:6). It is therefore important to recognise that people's livelihoods cannot easily be divided into sectors. Where a single sector approach is considered, the potential impact of other sectors should be considered.

3.4.3. Dynamic

The SL approach is not static and neither are livelihoods and institutions (DFID 1999). The dynamism of livelihoods is illustrated by assertion made in Khosla (1999) that the changes taking place within the society coupled with scientific development necessitate technology to play a big role in addressing problems. It is thus important that the SL approach interventions keep up with the changes taking place within communities so that it remains relevant. This could be achieved by making analysis and investigation of issues to be broader and ongoing (CASE 2003). Drawing from this argument, narrow and rigid analysis would not be able to deal wit the dynamic nature of livelihoods.

3.4.4. Build on strengths

The SL approach builds on the strengths of the people (DFID 1999; Koziell 2001; CASE 2003). This is acknowledgment that people have the potential to influence some aspect of their lives and surrounding. It is noted that because the SL build on the strengths of the people, it therefore give dignity and self-worth to the people, especially the marginalised (Khosla 1999).

Helmore and Singh (2001) argued that the SL approach start by analysing the wealth of the people. This in essence suggests that the strengths of the people lie in their assets. Then again, the SL approach aims to remove constraints which inhibit people from reaching their full potential (CASE 2003). Logically, this should help to enhance the strengths of the people.

3.4.5. Macro-micro links

The impact of the policies and institutions at the macro and micro level is acknowledged by the SL approach. The aim is to try to close the gap between what happen at the macro and micro

level (DFID 1999; Case 2003). DFID (1999) emphasised the influence of the macro level policies on the livelihood options for local people. It follows that there is a need to strike a balance between policy and practice. Pasteur (2001) argued that this could happen if the people are able to express their needs and influence the policy.

The lessons gained at the micro level should be used to inform policies at the macro level (DFID 1999). This is to help ensure that the policies are relevant and that the institutions are better informed and serve the communities. Helmore and Singh (2001) noted that the SL approach unpacks the multi-sectoral nature of issues, with the view of understanding and finding the better way of addressing these issues at the micro level. Connections and paths of the influence between macro and micro policies are critical for understanding policy (Pasteur 2001).

3.4.6. Sustainability

Helmore and Singh (2001) defined sustainability as a measure of success in development projects. This means development projects are partly judged based on their sustainability. Reason being the developmental activities should not rely on the means of livelihoods, which are not economically viable and with no institutional capacity for support (Ashley & Carney 1999; DFID 1999; CASE 2003). Similarly, CASE (2003) argued that any sustainable system should ensure environmental; economic; social and institutional sustainability. Sustainable livelihoods should therefore create sustainable technologies; enterprises; economies; and institutions of governance in order to have positive impact (Khosla 1999).

To be sustainable the livelihoods should ensure that resources are productive over a long time and should not be in conflict with other livelihoods (Ashley & Carney 1999; DFID 1999; CASE 2003). This is achieved through understanding elements which interact to attain livelihoods (Helmore & Singh 2001). Seemingly, sustainability of livelihoods is dependant upon meeting the needs of the people and helping them see opportunities while maintaining or improving the resource base.

In addition the SL approach is created in a manner that seeks to ensure livelihoods are resilient (Helmore & Singh 2001). To achieve this, trade-offs between the factors of sustainability is required (CASE 2003). The emphasis is on the right balance among the sustainability factors. Ashley and Carney (1999) argued that it is difficult to put this into action. Stakeholder need to be involved in analysing trade-offs.

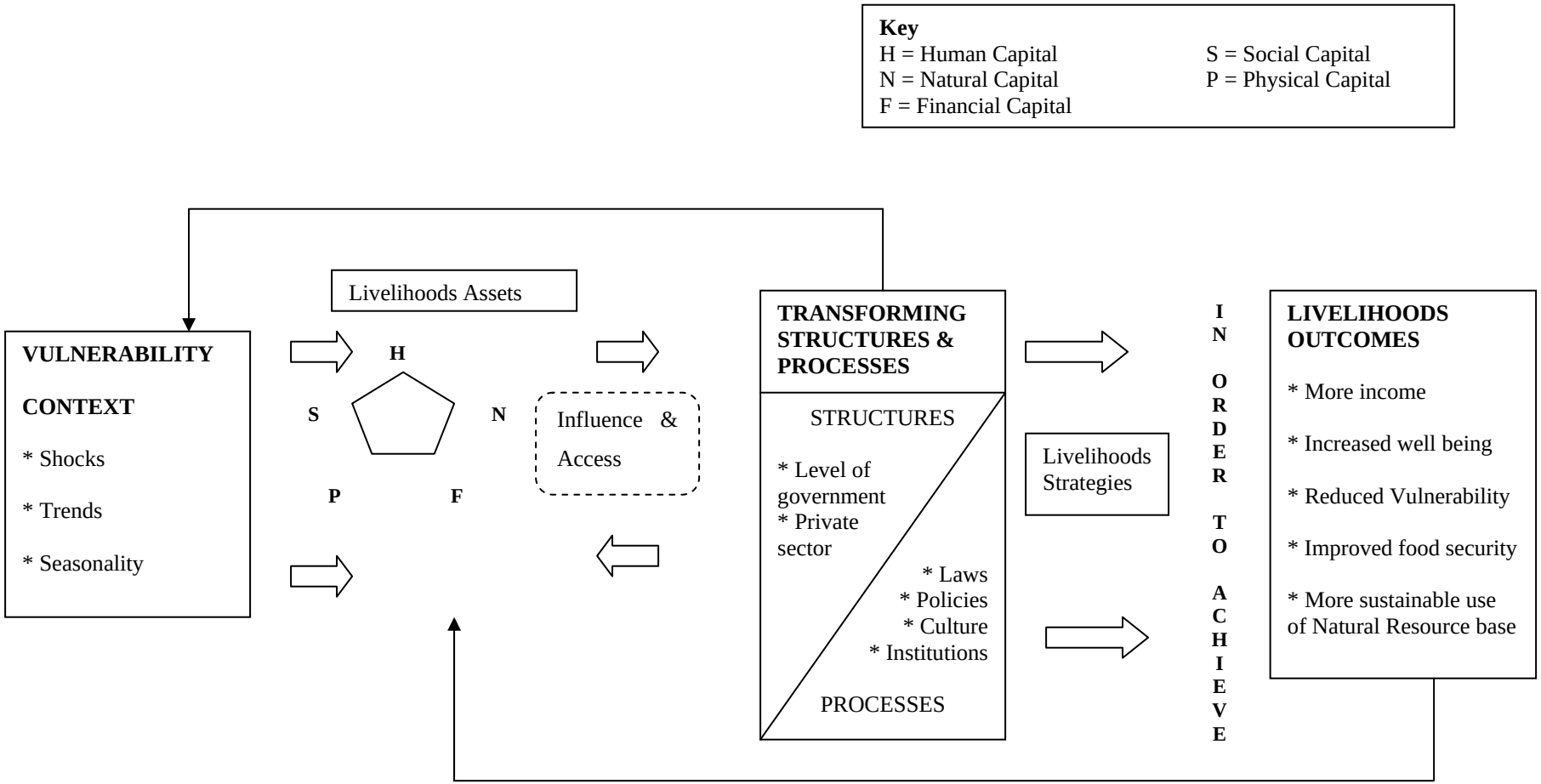
3.5. Sustainable livelihoods framework

Ashley and Carney (1999) argued that the SL framework helps to put together the factors that inhibit or improve the livelihoods opportunities. In addition the SL framework provides an entry point to addressing and supporting livelihoods (CASE 2003). The SL framework depicts the nature of the relationships between the framework elements. Thus, the SL framework provides a model that could be used to analyse and understand the issues central to livelihoods (de Satge *et al.* 2002). The purpose is to organise the framework elements in a way that they combine and interact to provide a coherent strategy to achieve sustainable livelihoods goals (Helmore & Singh 2001).

De Satge *et al.* (2002) argued that there is no right or wrong way to analyse and understand livelihoods. Moreover, it should be pointed out that the SL framework is not a blue print for analysing issues. Hence there are other frameworks developed specifically to analyse poverty; governance; local economic development etc. (de Sagte *et al*. 2002). Ashley and Carney (1999) pointed out that the SL framework may overlook some issue critical in development. Issues such as power imbalance, particularly at a household level are not directly analysed. It follows thus; SL framework would be more effective when used with other frameworks.

The SL framework elements are: livelihoods assets; vulnerability context; transforming structures and processes; livelihoods strategies; and livelihoods outcomes (CASE 2003; DFID 1999). The SL framework is captured in figure 3.1. The SL analysis can be done at both village level and national or international level (Scoones 1998).

Figure 3.1: Sustainable livelihoods framework



Source: DFID (1999)

3.5.1. The vulnerability context

Devereux *et al*. (2006) view vulnerability as an exposure to threats. The vulnerability context therefore refers to external factors that impact on livelihoods (CASE 2003; DFID 1999). They manifest themselves as shocks, trends and seasonality (DFID 1999). The sources of vulnerability identified in Devereux e*t al.* (2006) are: agricultural; economics; health; demographics; political, legal and social vulnerabilities. However, these sources of vulnerability fall under the broad classification of shock, trends and seasonality.

Vulnerability context can directly destroy the capital and the opportunities available to the people and the impact could be far reaching (DFID 1999). An example of a vulnerability context and its impact on the livelihoods is depicted in box 3.1. In this instance it is shown how a natural disaster could have an economic impact through causing disruption to livelihoods.

Vulnerability context affect different people differently (de Sagte *et al.* 2002). DFID (1999) argued that poor people are unable to control these factors in the short and medium term. Accordingly, it is important to identify indirect ways in which these factors can be neutralised (DFID 1999). This can be achieved through understanding how people forecast; address; and recover from shocks and stress (de Sagte *et al.* 2002).

CASE (2003) and DFID (1999) pointed out that the vulnerability context is not always affecting the people's livelihoods in the negative way. Nonetheless, it should be noted that the majority of the poor cannot cope with shocks and stresses, and are not well equipped to capitalise on the positive trends (CASE 2003; DFID 1999). Theoretically, people could survive vulnerability context factors provided they can forecast them in time and have resources to deal with such factors.

People are not always passive victims of the vulnerability context, but they devise coping strategies against the risks encountered (Devereux *et al.* 2006). This is also illustrated in box 3.2. The tobacco farmers predicted the seasonality of price fluctuation and react by holding an auction before the inflation took effect. Similarly, people may also turn a vulnerability context into an opportunity as illustrated in box 3.3. The seasonality of the migration of the sardines is turned into many opportunities including among others tourism. Devereux *et al.* (2006) refers to these coping strategies as resilience. Clearly, vulnerability context factors may cause problems and also present opportunities for people to improve their livelihoods.

Devereux *et al.* (2006) argued that vulnerability is the product of the threats and the ability to manage the threats (i.e. resilience). The illustration in box 3.1 suggests that the following factors: diverse climatic condition; topography; abject poverty; and ignorance as the product of vulnerability. The ability to manage the threats varies from corrective measures as illustrated in box 3.1 and preventative measures as illustrated in box 3.2. The article in box 3.1 suggests that corrective measures are costly as development funds are diverted to addressing the emergency. Hence Devereux *et al.* (2006) argued that the coping strategies need to be forward looking and dynamic as illustrated in box 3.2. In essence this means being able to predict what would happen by observing the trend so that appropriate coping strategies could be devised sooner, rather than later.

3.5.1.1. Shocks

Shocks are mostly unpredictable (CASE 2003; DFID 1999) and happen quickly (de Sagte *et al*. 2002). They include among others natural disaster, civil unrest etc. As an example of natural disaster, Speight (2001) pointed out that many locust species could erupt into plagues and destroy crops. The article in box 3.1 shows how shocks could destroy capital and require even more capital to rebuild livelihoods. Similarly, the cost of controlling the locust eruption could be enormous (Speight 2001). The illustration in box 3.1 further suggests that most if not all shocks affect people in a negative way. It would seem that

when it comes to shock the vulnerable group will almost always requires external help to prevent and or deal with the effects of shocks as shown in box 3.1.

Box 3.1: Country to Lose N38.4 Billion to Disasters

The National Emergency Management Agency (NEMA) has disclosed that the global economic losses by natural disasters will increase to $300million (N38,415,000,000) annually by 2050, if there are no substantial strategies and activities for disaster prevention and reduction.

Director General of NEMA, AVM Muhammed Audu.-Bida (rtd) made the disclosure while on a courtesy visit to the Kaduna State governor, Alhaji Ahmad Makarfi, as part of his advocacy visit to North-West Zone Operational Area of the agency at the weekend.

The duplicity of diverse climatic condition, topography, abject poverty and ignorance made Nigeria to be no less vulnerable to disasters both natural and man-made, he posited.

He also said natural disasters have tripled since 1960s destroying billions of Naira worth of property each year. It has through time constituted a major distraction to development process, he said.

He pointed out that "whenever it comes calling, lives are lost, social networks are disrupted, and capital investments are destroyed. Thus when development plans are rolled out and disaster strikes, development funds are diverted to contain the emergency. Additional aid is directed to relief and reconstruction needs to get the country back on track towards economic and social development".

These losses, he observed, may continue to increase unless we evolve a deliberate and conscious mechanism of reversing the vulnerability of the populace.

Source: Ugah (2007)

Trends impact on livelihoods in that they may commence unexpected or may not commence as anticipated (CASE 2003; DFID 1999). Nonetheless, the trends are more predictable and affect the rates of return for livelihood activities (CASE 2003; DFID 1999). They include such things as governance, international economy etc. (CASE 2003). When predicted well in advance, appropriate action could be taken to neutralize the impact of such trend as the case in point in box 3.2. In this instance the tobacco farmers pushed for early sales as the anticipated huge inflation which could nullify their profits. In essence the impact of the trends can be neutralised if predicted in time. However if they come unexpected, it could be difficult to deal their effect without external help.

Box 3.2: Tobacco Growers Push for Floors to Open Early

GROWERS of tobacco are pushing for an early opening of the tobacco auction floors, fearing rampant inflation could wipe off profits should the harvested crop stay in the barns for too long. Growers who spoke to business digest said they crop had been harvested between November and December last year. As a result, they said it was illogical to keep the harvested tobacco until the opening of floors in April because of rising interest rates on loans secured to finance tobacco growing. Most of the tobacco crop is irrigated.

The growers said input costs had soared unabated, with the cost of fertiliser and chemicals having gone up 75% since December. They fear surging input costs could curtail preparations for the next season if they failed to buy the inputs early. Zimbabwe Tobacco Growers Association (ZTGA) president Julius Ngorima said stakeholders had agreed to have floors opened early because of the rate at which the local currency was losing value and the continuous increase of inputs. "Once a farmer harvests his crop, the next thing they want is to sell their crop, to prepare for the next farming season," Ngorima said. "They need money to pay back loans whose interest is rising. Input costs are rising weekly and so will be preparation of the land for the next season," Ngorima said.

The early opening of the auction floors comes at a time when the central bank was proposing zero balance foreign currency accounts for tobacco growers with local banks. Negotiations between tobacco growers and the bankers are said to have already commenced. The zero balance foreign currency accounts will allow growers, who are now expected to retain 15% of their earnings in foreign currency, to open the accounts without a deposit. TIMB deputy general manager Godfrey Buka said growers wanted to sell their crop early so that they could pay off their debts in time before accruing interest. "Growers as well as merchants want to recover their money now before it is eroded by hyper-inflation," said Buka.

Source: Nyakazeya (2007)

3.5.1.3. Seasonality

Seasonality is the main pressure the poor have to keep up with (CASE 2003; DFID 1999). Examples of seasonality are labour, price fluctuation, food availability etc. (CASE 2003). DFID (1999) argued that seasonality is closely related to rural economics and affect more acutely rural people than urban people. Furthermore, Campbell and Beardmore (2001) argued that seasonal changes in ecosystems could present opportunities for seasonal employment. This means some seasonality could be anticipated by the people and consequently presents opportunities. The example of seasonality in box 3.3 shows the multiple opportunities which may be created subsequent to the seasonal migration of sardines.

Box 3.3: Sardines bring droves of tourists

THE greatest migration on Earth, or rather in water, is gathering momentum off the Wild Coast and, if sea temperatures remain cold, could be just a week away from KwaZulu-Natal waters.And as the sardines turn towards KZN waters, so too are long-haul visitors, according to Tourism KZN which is predicting a bumper tourism season. As sea temperatures dropped to around 17˚C, the first sardines have been spotted off the Waterfall Bluff, Mboyti and Mtentu area, according to Natal Sharks Board deputy CEO Mike Anderson-Reade.

During June or July shoals of sardines migrate from the Cape Agulhas Banks up the coast towards Mozambique, with thousands of sharks, dolphins, Cape Gannets and assorted game fish in close pursuit. In KZN, netters catch the sardines providing food and jobs for coastal communities. Sardines are also used as bait for the game fish that pursue the shoal, kick-starting the annual shad run. This year, to complement this annual natural phenomenon, Tourism KwaZulu-Natal, in association with Ugu District Municipality and the Sharks Board have initiated an annual Sardine Festival, the first one which will be held from June 22 to July 15 on the south coast.

TKZN Marketing general manager Nomasonto Ndlovu said yesterday the festival includes marine, beach, cultural and music activities, including the South Coast Cultural Celebration, Shelly Beach/Mallards/Mercury Ski-Boat Festival, Powerade Sardine Half Marathon, Lions Show, Ugu Jazz Festival, Sardine Festival Multi-Sport Challenge and Mardi Gras. Ndlovu said the sardine phenomenon is a large tourism income generator that attracts tourists, media — including international film crews — and international marine professionals. In addition to accommodation and restaurant spending, the provincial economy is further boosted by the hiring of boats, small aeroplanes and helicopters used to maximise the sighting of the sardine run.

“The province has earned a reputation as a marine tourism destination both nationally and internationally. Research conducted after the 2005 sardine run, which was the run with the most marine activity in 30 years, found the event attracted 40% of its visitors from Gauteng. “Overall, 43% of visitors visited the south coast five to 10 times, proving that the event increases tourism returns. “Indications are that we are well on the way to achieving a higher tourism arrival figure than in previous years,” Ndlovu said.

Source: Bishop (2007)

3.5.2. Livelihoods assets

Ekins *et al.* (1992) argued that assets are range of resources that enables productivity to be undertaken. In order to pursue a variety of livelihood objectives, people assemble and accumulate a portfolio of assets (CASE 2003; Swanson 2001; DFID 1999; Scoones 1998). These assets could be used to develop the people’s potential so that they can lead a fulfilling life (Ekins *et al.* 1992). In essence the assets are at the core of making a livelihood.

The assets are classified into the human; social; natural; physical; and financial assets (DFID 1999; CASE 2003). One class of asset may result in many beneficial effects (DFID 1999). For an example 'Aquatic biodiversity contributes most significantly to the natural capital available to the poor. However, through transformation it also contributes to human capital through nutrition, financial capital through the market place, and physical capital through, for example, building materials. Relationships established through the joint exploitation of biodiversity can also enhance social capital.' (Campbell & Beardmore 2001: 200). In essence assets can be transformed from one class to the other.

DFID (1999) and CASE (2003) argued that the assets can be arranged in a particular sequence along with substituting each other. However, Ekins *et al.* (1992) noted that there is a limited scope for substitution. This is because of the unique quality of assets, particularly the natural assets.

Most often the livelihoods outcomes depend on the manner in which the different class of assets are combined (CASE 2003). This is what Ekins *et al.* (1992) refers to as wealth creation. Swanson (2001) argued that getting goods and services from mixed capital base is desirable. This point is further elaborated on the section of livelihood strategies.

It appears that by design SL theory does not provide guidance as to how the assets combination can be achieved or what optimal combination would be. If it did it would be prescriptive which is contrary to the SL principles. Swanson (2001) argued that getting a hypothetical optimal portfolio is part of a development process. This process of achieving optimal portfolio is dynamic, and is influenced by what happens at local as well as international level (Swanson 2001). Presumably, through trial and error the optimal assets combination could be found. Nonetheless, Ekins *et al.* (1992) noted that a wealth creation model should consider the multiple source of livelihood; consists of optimal value of each asset category; and is cautious of the feedback effects.

According to DFID (1999) assets could be destroyed or enhanced by the trends, shocks and seasonality. The emphasis is that when adequately prepared, poor people could take advantage of the positive trends and build a resistance to negative trends, shocks and seasonality. This mean being able to forecast the trends, shocks and seasonality and having the necessary skills and capital to take appropriate measures as depicted in box 3.2 is important to protect the assets.

The people perceive assets differently (DFID 1999). While some people may view livestock as purely financial investment, others may view it as a social investment. This is because values are social and political constructs, which depend on beliefs, needs desires and choices of the people (Bass *et al.* 2001). Different assets classes are discussed below.

3.5.2.1. Human assets

The human assets refer to the kind of skills and knowledge people acquired (de Sagte *et al*. 2002; DFID 1999; Scoones 1998). They also include the physical and heath status of the people which enable them to be able to perform activities that can sustain livelihoods. Education and health seem to be the core factors of the human assets (CASE 2003; DFID 1999). This is mainly because the SL approach is people-centred and it is difficult to imagine people without skills and in poor health contributing meaningfully to the creation of sustainable livelihoods.

Furthermore, Ekins *et al.* (1992) included motivation as a human asset. This is because apart from being skilled and healthy, people require motivation to be productive (Ekins *et al.* 1992). Clearly, people who lack in motivation would not be productive even if the have got skills and are in good health.

Okpara (1999) argued that indigenous knowledge systems have long being used to address poverty. These knowledge systems include the production; exchange; and consumption of goods and services which contribute to sustainable livelihood (Okpara

1999). Where necessary these knowledge systems could be combined with the scientific knowledge (Cromwell 2001).

It is important that human assets are renewed regularly (Ekins *et al.* 1992). This is because as Ekins *et al.* (1992) has argued, those who have developed and improved their capabilities will be more progressive. Therefore to be more progressive human assets need to be developed and improved.

DFID (1999) argued that although human assets are a means to achieve livelihoods outcomes, they could also become a livelihood objective. When people lack skills and have poor health status, skills improvement and improving health status may become livelihood outcomes (DFID 1999).

3.5.2.2. Social assets

The social assets among others consist of networks; social relations; common rules; norms and sanctions; and associations which are used pursue livelihood objectives (de Sagte *et al*. 2002; Pretty 2002; DFID 1999; Scoones 1998). Pretty (2002) argued that the notion of social assets embodies the idea that social bonds and social norms are needed for sustainable livelihoods. This supports Ekins *et al.* (1992) assertion that the structure and quality of relationships between the people is critical for progress.

Social assets can be developed by networking and connecting with other people to be able to access institutions. It could also be developed through obtaining membership of formal groups with rules; norms; and sanctions (CASE 2003; DFID 1999). The importance of social assets is demonstrated in the argument put in Ekins *et al.* (1992) that organisations are more than the sum of the people. Ekins *et al.* (1992) noted that organisations create their own habits; norms; procedures; traditions; cultures; and memories. However, these characters could either enable of inhibit the people in pursuing livelihoods goals. This is because logically these norms would not accommodate every individual.

De Sagte *et al.* (2002) suggested that social resources could be improved through a culture of human rights and democracy and the quality of governance systems. This effectively means that people should be treated equally; and rules applied with impartiality. Ekins *et al.* (1992) argued that organisations could enable people to be effective by fostering efficiency; motivation; dynamism; and creativity. In this way organisations could be important and necessary social assets.

With regard to social assets some authors (Case 2004; Pretty 2002; DFID 1999) noted that:

- Building trust relations and returning favours in order to reduce the cost of performing activities could be a way building social capital. This is because people are more likely to invest in collective activities if they know other will do same.
- Social resources are not always positive.
- Social capital are difficult to build and easy to break
- Those who do not fit in a group for one reason or the other will be disadvantaged
- Some networks may be limiting.

3.5.2.3. Natural assets

Solow (1974) in Swanson (2001) defined natural assets as naturally formed and not created by humans. Natural assets consist of tangible and intangible goods. Intangible goods include atmosphere and biodiversity and tangible assets include trees, land, rivers, mountains, etc. (CASE 2003; de Sagte *et al*. 2002; DFID 1999). Livelihoods can be derived from these assets (Scoones 1998).

However, some of the naturally occurring phenomena and/or organisms affect livelihoods in a negative way. DFID (1999) argued that most of the shocks are natural disasters (e.g. floods, storms, etc.) impact negatively on people's livelihoods. Similarly, Speight (2001) agued that while some insects like termites plays an important role in recycling nutrients,

other like mosquitoes and can cause suffering to the people. Tsetse flies and locusts can also be a source of trouble to animals and crops respectively (Speight 2001).

Nevertheless, natural assets are important because they provide resources that could be used to support livelihoods (CASE 2003). In most cases the natural assets constitute the large resource base for the poor peoples (Campbell & Beardmore 2001). Exclusion of poor people from using natural resources could deny livelihood strategies to the poor (Marongwe 1999). It is noted that degradation of the natural resources could result in poor health (CASE 2003; DFID 1999) and subsequently affect the people's ability to engage in livelihoods activities.

Livelihoods could be affected by changes in the natural resource base. Here is the illustration, 'Moving from more to less diverse production systems incurs additional risks from natural causes (e.g. disease in fish farming and cyclones), from markets (e.g. changes in demand or competitive supplies), and from adverse policies (e.g. a shift in government support from rural development to exports)' (Campbell & Beardmore 2001:219). These effects Campbell and Beardmore (2001) further argued are difficult for the poor to counteract. Consequently, more diverse production systems would be less vulnerable to changes.

Cromwell *et al.* (2001) argued that economic assessment of biodiversity is not simple. Hence, the true economic value of natural resources is mostly undervalued (de Sagte *et al*. 2002). Bass *et al.* (2001) noted that the value could be socially or politically motivated. These values are influenced by beliefs, needs, desires and choices (Bass *et al.* 2001). However, Bass *et al.* (2001) further noted that these values are dynamic and therefore could change from time to time.

3.5.2.4. Physical assets

The basic infrastructure and the tools and equipment used in producing goods are collectively called the physical assets (CASE 2003; DFID 1999). Physical assets enable

people to carry livelihood activities (de Sagte *et al*. 2002).Thus, lack of certain infrastructure is regarded as an indicator of poverty. For an example poor human health could be caused by lack of access to clean water and sanitation.
Appropriate tools and/or equipments (physical assets) for producing the goods and services are required in order to exploit the available human assets (CASE 2003; DFID 1999). Hence, growth is often attributed to this type of assets (Ekins *et al.* 1992).

The important factors of the physical assets are its accessibility, appropriateness and whether there are services to support its existence (CASE 2003; DFID 1999). This is because more savings are required to maintain physical assets (Ekins *et al.* 1992). Khosla (1999) also argued that lack of access to technology that is appropriate to the people's needs; skills; infrastructure; and institutional support systems worsen the poverty cycle. This would particularly be true where technological innovation is rapid and unaffordable.

3.5.2.5. Financial assets

The accessibility of cash or any means used to exchange goods and services is referred to as financial assets. The sources of financial assets include savings and regular inflows of money (CASE 2003; DFID 1999). Livestock could also be categorised as financial assets (de Sagte *et al*. 2002). The financial assets are important in that they can be converted into other categories of assets, depending on the available structures and processes (Case 2003; DFID 1999).

Financial assets could therefore be a force for change in alleviating poverty due to its versatility (DFID 1999). For example, financial assets could be used to achieve directly the livelihood outcome of food security by buying food (CASE 2003; DFID 1999). However, it is important that people have adequate knowledge and appropriate structure and processes to utilise this assets (DFID 1999). CASE (2003) and DFID (1999) maintain that financial assets could be used as a political tool and help people participate in structures and processes that affect the livelihoods of the poor. Support for building solid

financial assets can be done at the organisational level, institutional level and the legislative and regulatory reform level (CASE 2003; DFID 1999).

3.5.3. Transforming structures and processes

Transforming structures and processes refer to institutions; organisations; policies; and legislation which determine the manner in which livelihoods are pursued. These structures and processes operate from international levels down to household level. They also exist within the public and the private sectors. The transforming structures and processes have an impact on the access to assets; livelihoods strategies; and decision-making (CASE 2003; DFID 1999).

Transforming structures and processes have a lot of influence on the terms of exchange between various assets. They dictate the results of the livelihoods strategies. The transformation structures and processes can create the assets; determine who gets what, when and how; and influence the rate at which the assets could be accumulated (DFID 1999). Clearly, the emancipation of the people from hardships depends on the transformation structures and processes.

Khosla (1999) cautions that because of this influence, transforming structures and processes could be used as political tools. Therefore sustainable livelihoods would be better achieved if people develop a sense of ownership of the transformation structures and processes (Khosla 1999). So, it is important that poor people should have an influence on the working of transformation structures and processes in order to benefit from the assets which may be created. Hence, Cromwell *et al.* (2001) argued that the voice and power of the weaker stakeholders should be increased in order to create a more supportive social environment.

DFID (1999) noted that the analysis of transforming structures and process could focus on:

- The roles, responsibilities, rights and relations between governance and the individual structures
- The processes that impact on the livelihoods
- How these structures are formed
- Reflection on the policies and legislation

3.5.3.1. Structures

Structures comprise a range of organisations including organisations responsible for formulating policies and legislation; service delivery; trade etc. (DFID 1999). Structures also include community organisations (Okpara 1999). The family unit is also regarded as a structure which decides on the livelihoods objectives (Tacoli 1999; Okpara 1999). Tacoli (1999) argued that markets are more of a social institution than a perfectly competitive structure as they can be manipulated. The argument above suggests that the structures are diverse.

The transformation structures form the basis for implementing programme activities and driving various processes (Bennett 1999; DFID 1999). They also provide a space where people and the transformation processes interact (Pasteur 2001). Okpara (1999) also argued that the transformation structures can help to pass the indigenous knowledge systems from one generation to the other. However, it is noted that structures without processes are not helpful as they cannot function (DFID 1999). As such transformation structures should be linked to a particular process.

With the exception of family units, CASE (2003) argued that in rural areas transformation structures often do not exist or lack capacity. As a result development activities are likely to be negatively affected. Where the transformation structures exist, CASE (2003) argued that rural people do not know about them and that they supposed to serve them. Subsequently, the people could not hold the structures accountable.
Khan (1999) argued that it is easy to approach a community through dominant groups. However, major benefits are likely to be apportioned to those dominant groups. The

community as a whole may not take ownership or support such initiatives (Khan 1999). Accordingly, transformation structures should represent the poor; promote reforms within; and support joint forums for decision making and action (CASE 2003, DFID 1999).

3.5.3.2. Processes

The manner in which organisations operate or function is regarded as its processes (CASE 2003; DFID 1999). Processes can be categorised into policy processes; legislative processes; institutional processes; cultural processes; and power relation processes (CASE 2003; DFID 1999). The processes are a product of political; social and economic environment; and historical background (Pasteur 2001). The arguments above suggest that transformation processes are given a purpose by the people based on the material conditions they find themselves.

As mentioned earlier these processes cannot operate themselves and require transformation structures capacity. Logically, building capacity within the structures would be critical to ensuring the effective functioning of processes. This also means structures are critical in driving transformation processes.

Some processes could be less empowering and oppressive. Bennett (1999) argued that in Pakistan women's roles are reinforced and supported by laws and government directives. Among others, women are denied access to information; health; education; rewarding jobs; and political participation (Bennett 1999). Any process to address these will require mobilising the community to participate in policy initiatives aimed at improving the situation, because it is likely to result in such initiatives being sustainable (Khan 1999). Mobilising the community, Khan (1999) further argued is a meticulous process and therefore substance rather than form is important in social mobilisation approach.

Almaric (1999) noted the following characteristics of local communities in the process of strengthening their capacity to sustain livelihoods:

- Control of production and natural resources is democratic
- Local governance systems are highly democratic
- Production and consumption pattern ensures high level of reliance; allow the expression of cultural diversity; and respect and care for the nature

3.5.4. Livelihood Strategies

Livelihood strategies refer to an array and a mix of activities and choices made in order to achieve livelihoods goals (CASE 2003; DFID 1999). CASE (1999) further argued that choice; opportunities; and diversity are important to livelihood strategies if capacity to withstand shocks and stresses are to be realised. Diversifying can be regarded as a strategy to accumulate for those with more assets base and as a survival strategy for those with less assets base (Baker 1995; Bryceson 2000; Ellis 1998 quoted in Tacoli 1999). Campbell and Beardmore (2001) argued that diversity presents the opportunities for utilizing different types of technology, which could reduce conflicts regarding the assets. Evidently, diversifying effectively increase the opportunities and subsequently increases choices available.

It appears that choice; opportunities; and diversity require flexibility to be effected. ‘As a result of the rigidity of both private and state tenure systems…, resource-sharing arrangements, particularly between the state and private property, on one hand, and the communal farmers, on the other, have not been exploited’ (Marongwe 1999: 10). Subsequently, the communal people had forgone the available livelihood opportunities (Marongwe 1999). So, if the system under which the livelihoods are pursuit is rigid, the benefits offered by diversity and variety of choices and opportunities could be missed.

Communities need different activities; skills; and assets to meet their needs. The more assets the people have the greater the range of livelihoods strategies available (DFID 1999). In view of this, different livelihood strategy combinations depend on the available livelihood assets (Scoones 1998). As a result some strategies are geared towards maximising or pooling resources together in order to pursue the livelihoods strategies. In

one example poor farmer responded to the challenges by forming of co-operatives and borrowing through government schemes (Campbell & Beardmore 2001), while Marongwe (1999) proposed co-management of natural resources between the state and the local level institutions as a way of pooling resources together.

SL approach values social sustainability; inclusion and equity; and prioritises poor people. However it is important to recognise that there is no development intervention which can include all the people; it is inevitable that some projects will exclude some people (DFID 1999). DFID (1999) argues that this exclusion occurs in part because poor people themselves are competing against each other for resources and their needs are not necessarily similar.

3.5.5. Livelihoods Outcomes

Livelihood outcomes are the results of livelihood strategies (CASE 2003, DFID 1999). The livelihood outcomes are generally categorised into the following categories: more income; increased well-being; reduced vulnerability; improved food security; and sustainable use of the natural resource base (DFID 1999). A combination of any of the above could be targeted as outcomes. Hence, Campbell and Beardmore (2001) argued that poor people combine attempts to increase income and production with plans for minimising the risks.

Attainment of livelihood outcomes needs to be measured by indicators Scoones (1998). As a matter of principle, people should be involved in developing such success indicators (CASE 2003). Scoones (1998) further argued that in order to establish the indicators of livelihood outcomes, it is important to understand what sustainable livelihood is. Effectively it means the stakeholders should develop a similar understanding of sustainable livelihoods. However, in terms of developing a common understanding of sustainable livelihood it is not clear how a compromise is reached when there are different opinions (Scoones 1998).

3.6. Summary

The review of literature had established that livelihood is more that economic activities. Other livelihoods activities could be geared towards building social relation. The SL approach is regarded as flexible and adaptable enough to be applied in different situation.

The SL principles: people-centred; holistic; dynamic; building on strengths; macro-micro links; and sustainability are used to guide the implementation of the framework. The SL framework used to plan livelihoods activities holistically put together factors which inhibit of enable livelihoods to thrive, to create a model for analysing and understanding livelihoods.

The framework consists of the following elements; livelihood assets, vulnerability context, transforming structures and processes, livelihood strategies and livelihoods outcomes. The vulnerability context: trends; shocks; and seasonality impact on the assets and the opportunities for people to achieve livelihoods goal. However, the impact is not always negative.

Livelihood assets: human assets; social assets; natural assets; physical assets; and financial assets are used to pursue a variety of livelihood strategies. Livelihoods assets could be arranged in a particular sequence; or substitute each other in the quest of the best assets combination to make a living. The optimal combination of assets for achieving sustainable livelihood is dynamic.

The transforming structures and processes determine the manner in which the livelihoods are pursued. Because they control access to livelihoods assets, they could be used as a political tool to either exclude or include some people from accessing assets. Transforming processes require structure capacity to be effectively implemented.
Devising livelihoods strategies requires different activities; skills; and assets. As a result livelihood strategy combinations depend on the available livelihood assets. Choice; opportunity; and diversity are critical to a sustainable livelihood strategy.

Livelihoods outcomes could either focus on: more income; increased well-being; reduced vulnerability; improved food security; and sustainable use of the natural resource base. Success indicators could be used to measure the achievement of the desired livelihood outcomes. SL principles guides that people should be involved in developing success indicators. In order to establish the indicators of livelihood outcome it is important to have a common definition of sustainable livelihoods.

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Chapter 4
Using SL approach to evaluate programmes

4.1. Introduction

Evaluation is a critical stage in a programme. It is a point where the overall performance and worth of a programme are assessed (Patton 1997). On the other hand sustainable livelihood (SL) is regarded a holistic approach to development activities (DFID 1999). The SL approach therefore could be one way of holistically evaluating a programme. The paper explores the ways in which the SL approach can be used to evaluate programmes.

The paper is concerned about how SL approach in theory can be used to evaluate development programmes. The SL framework; principles; checklists; and guidelines are assessed on the extent to which they could guide the process of evaluation. The five steps of programme evaluation under spotlight are: Defining and the planning; establishing success indicators; selecting data gathering method(s); collecting evaluation data; analysing and interpreting evaluation data. The issues for consideration are raised and discussed.

4.2. The framework for the sustainable livelihood approach guided evaluation

Having reviewed the evaluation and SL approach literature, some convergence and divergence were noted. In terms of the evaluation literature, the purpose; approach; and process are central to how evaluation is defined (refer to chapter 2). These three aspects (purpose; approach; and process) are discussed below.

4.2.1. The purpose of evaluation and SL approach

In terms of the purpose, Patton (1997) argued that evaluation is done primarily to generate knowledge about the programme; improve the programme; and judge the worth of a programme. The purpose of the SL approach on the other hand is primarily to

understand the make-up of livelihoods in order to improve the design and implementation of development strategies (Ashley & Carney 1999; DFID 1999; Koziell 2001). There are no fundamental clashes between the purpose of evaluation and SL approach. The only divergence is that the SL is not designed to judge the worth of the programme. The summary of the comparison of the purpose of evaluation and SL approach are captured in table 4.1.

Table 4.1. A comparison of purposes of evaluation and SL approach

Evaluation	SL approach
1. Judge the worth of a programme	SL is not generally used to judge programmes.
2. Improve a programme	SL is specifically designed to work on improving (livelihood) systems, making them more sustainable.
3. Generating knowledge about a programme	SL is specifically designed to help stakeholders understand (livelihood) systems better to be more conscious of the factors that influence the sustainability of the (livelihood) systems.

4.2.2. The evaluation approach and SL approach

Both evaluation and SL approach support the use of both quantitative and qualitative approach (refer to chapter 2 and 3). The strengths of quantitative approach include being: concrete and systematic; ability to infer from small sample; and testing the significance of findings (DFID 1999). On the other hands qualitative approach is able to; provide background information for quantitative work; allows people to participate; could be done quickly; be used in social process and context; and explain causes of quantitative results (DFID 1999). In light of these arguments, the balance of using qualitative and quantitative approach in analysis would be ideal.

4.2.3. The evaluation and SL approach process

As per the evaluation literature the process of evaluation consists of: defining and planning the programme; establishing success indicators; selecting data gathering methods; collecting evaluation data; and analysing and interpreting the data (refer to chapter 2). The SL sequence of work as captured in table 4.2 cannot deliver on overall

evaluation expectations. However, it is able to deliver on the data collection aspect of evaluation. Summary of comparison between evaluation and SL is captured in table 4.2.

Table 4.2. A comparison of process of evaluation and SL

Evaluation process	The SL sequence of work
1. Define and plan evaluation programme	The site is chosen based on secondary data; existing partnerships; and activities
2. Establish success indicators	Where available secondary data is collected and analysed
3. Select data gathering methods	Interview key informants covering key components of the SL framework
4. Collect evaluation data	Hold one or more community meeting to obtain overview of strengths; constraints; institutions and widely held priorities for action
5. Analyse and interpret data	Conduct detailed participatory work to validate issues raised data collected
	When proposal are implemented, in-depth investigation may be required

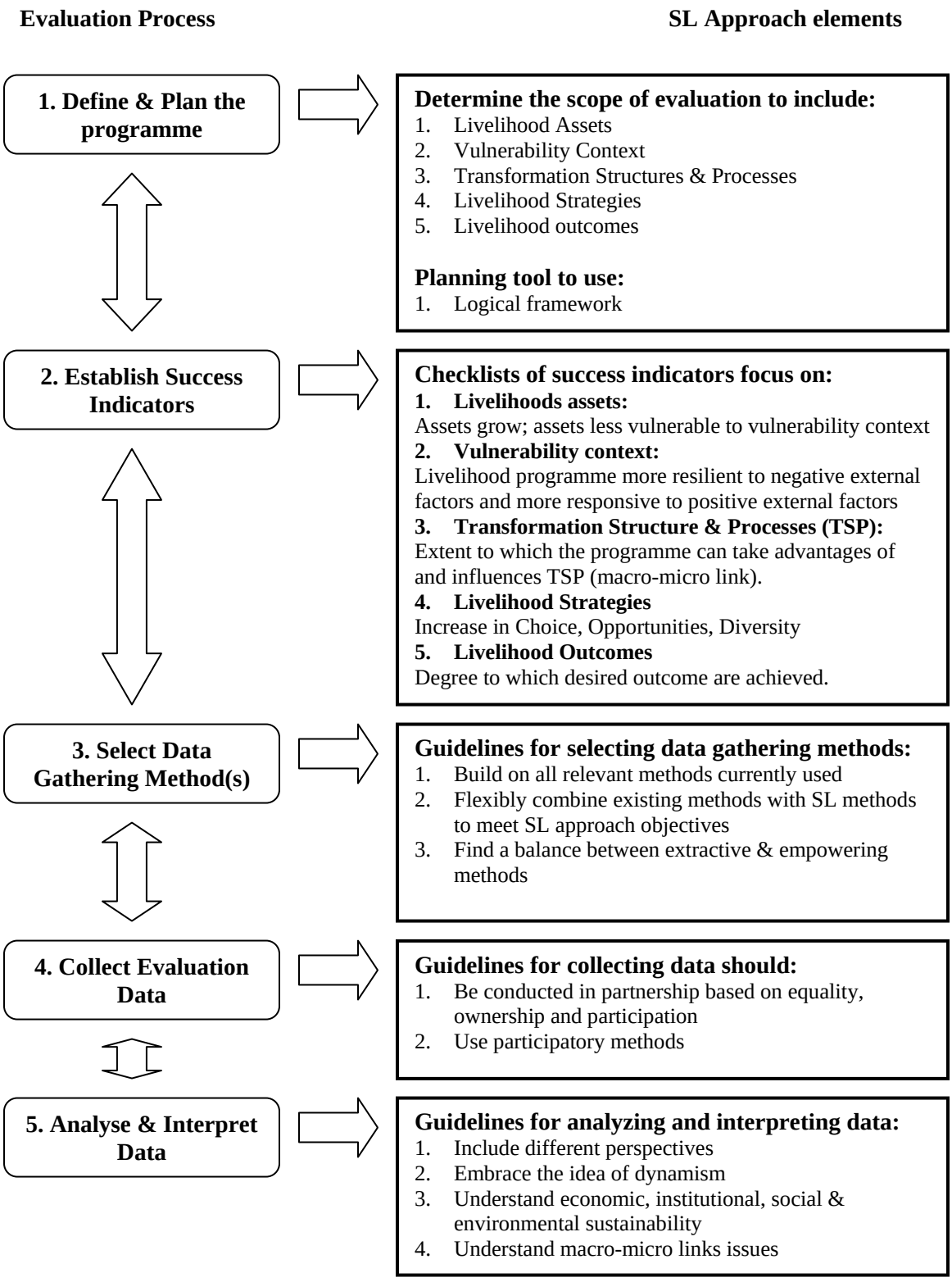
4.2.4. The framework for using SL approach to evaluate the programmes

Drawing from the evaluation and the SL approach literature the framework for evaluating programmes using the SL approach was designed (see figure 4.1). The framework draws from the five evaluation process steps. The process consists of the following steps: defining and planning the programme; establishing success indicators; selecting data gathering methods; collecting evaluation data; and analysing and interpreting the data. These steps were consolidated from numerous steps identified in evaluation literature (refer to chapter 2). These steps are implemented using SL framework; principles; checklists; and guidelines.

4.3. Defining and planning the programme

Defining and planning the programme is the first step in programme evaluation. It is referred to as establishing programme boundaries (Herman *et al.* 1987). This stage focus on the key attributes of a programme which will be evaluated (King *et al.* 1987; University of Tasmania 2003). In conventional evaluation programme documents could be used to draw boundaries of programme evaluation (Herman *et al.* 1987).

Figure 4.1: Framework for evaluating programmes using SL approach



4.3.1. Defining the programme

The SL approach analysis is defined by the SL framework which could be used to establish evaluation programme boundaries (DFID 1999). Ashley and Carney (1999) noted that SL approach can systematically define the whole programme and encourage a holistic analysis. However, the holistic nature of SL framework could result in a risk of including everything (as per the SL framework) in the analysis. The effect is that it could make the analysis to take longer.

The decision on the amount of the supporting data required is also taken at this phase (King *et al.* 1987). The SL therefore guide that no more data should be collected than it is necessary (DFID 1999). So, the information requirement will be guided by the scope of the programme. Consequently, evaluation can focus on one element or the entire SL framework elements depending on the scope of a programme evaluation.

The SL framework provides a model that could be used to analyse and understand the issues central to people's livelihoods (de Satge *et al.* 2002). However, de Satge *et al.* (2002) further argued that there is no right or wrong way to analyse and understand the people's livelihoods. This provides a space for creativity in evaluating a programme provided it is consistent with the SL theory.

4.3.2. Planning evaluation programme

Planning stage of evaluation also decide on how much supporting data will be required (King *et al.* 1987). As argued earlier, some elements of the SL framework may be left out depending on the data needs of programme evaluation. However, the SL approach focuses on the relationships between the elements of the SL framework and how they enable or enhance livelihoods (Ashley & Carney 1999). So, the decision to exclude one or more of the elements may be detrimental to the holistic aspect of the SL approach. DFID (1999) pointed out that the SL approach is prone to collecting too much

information due to its extensive nature. There is a need therefore to collect information according to the capacity of the programme (DFID 1999).

Planning starts with identifying the goals and the objectives of the programme (Herman *et al.* 1987; University of Tasmania 2003). In addition to programme documents, interviews with the programme participants could help in developing the programme goals (Herman *et al.* 1987). The SL approach uses logical framework for planning programmes (DFID 1999).

BOND (2003) explained a logical framework as a planning and management tool for development programmes. It summarise the logical steps taken in implementing a programme (DFID 2006). Logical framework can be adapted or applied to different situation (BOND 2003; DFID 2006). This means the logical framework is a flexible tool and therefore can be tailored according to the needs of the programme planned.

The outputs of the logical framework are: project goal; purpose; outputs; activities with success indicator and means of verification; as well as the assumptions the programme is making (DFID 2006; BOND 2003). DFID (2006) argued that because the logical framework anticipates the implementation process, it becomes easier to plan out activities. This means potential set-backs could be prepared for before they could be experienced. This point is supported by DFID (2006) when argued that logical framework should be designed in the beginning of the programme and not when activities had already been designed.

The logical framework also helps to organise thinking as well as achieving consensus among the stakeholders (DFID 2006). BOND (2003) noted that the logical framework should be designed in order to make changes when they occur. Because the logical framework does not explain everything in details the project could be easily summarised (BOND 2003). Therefore it becomes easier to share, due to the reduced volume of data. However, the logical framework should not be seen as an end in its self as it is not the only planning tool.

BOND (2003) noted that most designs of the logical framework were not done in a participatory method. As such the project beneficiary do not always identify with the logical framework although they may identify with the factor which are important for the success of the project prevalent in the logical framework. In an ideal situation the logical framework will be designed using participatory tools (BOND 2003).

4.4. Establishing success indicators

DFID (1999) argued that the SL approach provides a checklist of success indicators based on the elements of SL framework (see figure1). However, it is not easy to measure changes in the livelihoods using the checklist as they do not have benchmarks (Ashley & Carney 1999). It is therefore important to negotiate indicators with stakeholder.

Since sustainability is used as a success indicator to measure development projects (Helmore and Singh 2001), establishing success indicators for the projects should reflect a measure of sustainability. This is achieved through understanding elements which interact to attain livelihoods (Helmore & Singh 2001). For this to be realised trade-offs between the factors of sustainability is required (CASE 2003). Ashley and Carney (1999) argued that it is difficult to put this into action.

4.4.1. Success indicators for the vulnerability context

In terms of the vulnerability context the SL approach gauge the success of a programme on the extent to which it can withstand the negative external factors and also its ability to take advantage of the positive external factors. The justification is that the vulnerability context outlines the external environment in which programme pursue it activities. The vulnerability context factors could create or destroy the assets and therefore the options available to pursue goal (DFID 1999).

Based on these arguments it is noted that when the programme is not resilient to the negative external factor, its productive activities could be compromised as a result of

exposure to negative external factors. Similarly, when the programme is not equipped to take advantage of the positive external factors opportunities to maximise productive activities could be missed (CASE 2003; DFID 1999). When the programme is insulated against the negative external factor and that it has the capacity to take advantage of the available opportunities indicates that the programme is sustainable.

4.4.2. Success indicators for the programme assets

Concerning the assets, the SL approach measure success in terms of whether the assets are growing; and are less vulnerable to negative external factors (DFID 1999). In order for the assets to sustain production or livelihoods activities they should be replaced through investing some of the production generated. When this cannot happen it means the livelihoods will be unsustainable in the long-term (Ekins *et al.* 1992). Similarly, assets which are vulnerable to the negative external factors cannot be relied upon to sustain livelihoods.

The underlying assumption of ensuring that the assets grow is that strong and sustainable assets base is inherently empowering (Bartlett 2004 in Mancini 2006). This measure reveals the importance of assets in undertaking productive or livelihoods activities. However, simply focusing on growing the assets could overlook how the assets are used (Dorward *et al.* 2001 in Mancini 2006). In essence growing assets should be focused on the assets which are critical in achieving livelihoods.

4.4.3. Success indicators for the transformation structures and processes

The measure of the success for transformation structures and processes are shown by the extent to which the programme can take advantage of and also influence the transformation structures and processes both at the macro and micro level (DFID 1999). Since the transformation structures are responsible for driving the implementation of the programme activities (Bennett 1999; DFID 1999), they should be linked to the appropriate processes to function (DFID 1999). The indicator checklist in essence,

gauges whether the programme can effectively utilize the structures (both macro and micro) and processes and also influence how structures operate in future.

4.4.4. Success indicators for the programme strategies

Regarding the livelihoods strategies checklist, the success is indicated by increase in choice, opportunities and diversity (DFID 1999). This is because choice, opportunities and diversity are important in withstanding shocks and stresses. Diversifying livelihoods activities could be used as a strategy to accumulate more assets or simply as a survival strategy (Baker 1995; Bryceson 2000; Ellis 1998 quoted in Tacoli 1999). As a result more opportunities are created and more choices become available.

4.4.5. Success indicators for the programme outcomes

The degree to which the livelihoods outcomes are achieved is a checklist used to measure success (DFID 1999). Livelihood outcomes categories are; more income, increased well-being; reduced vulnerability; improved food security; and sustainable use of the natural resource base (DFID 1999). Any combination of the above could be targeted as outcomes (Campbell & Beardmore 2001). In essence it is possible to focus on more than one category of outcome.

4.4.6. Overview on establishing success indicators

Recapping from the evaluation literature, Sustainable Measures (2004b) argued that indicators are as different as the types of systems they monitor. However, effective indicators though different have common characteristics. The key attribute of indicators have been consolidated to include: validity; relevance; understandable; appropriateness; robustness; availability and accessibility; and manageability (Sustainable Measures 2004b; Armstrong & Francis 2002). Based on this argument, therefore any indicator should possess these attributes to be regarded as effective.

4.5. Selecting data collecting methods

Health Canada (1996) argued that there is variety of data collection tools that can be used depending on the programme evaluation needs. However, as a general principle several different methods should be used, in order to substantiate the findings (University of Tasmania (2003). The SL approach supports the flexible combination of different methods (DFID 1999). However, there is no prescription on which method should be used (Ashley & Carney 1999).

Herman *et al.* (1987) argued that the best feasible methods should be based on the programme context, processes and outcomes. For an instance Vernooy (2005a) noted that if the goal of research is social transformation, it would be important that the participants get as much control as possible. The methods used would thus be those which give the participants opportunity to discover and change. Similarly, the SL approach guides that the methods used should build on all relevant methods currently used (DFID 1999).

Ultimately a balance should be found between extractive and empowering when selecting data collection methods (DFID 1999). Therefore, it should be noted that methods which are used just to collect data are not empowering (Conwall & Pratt 2003). Adaptation in which methods to be used may be required (Ashley & Carney 1999) in order to allow for data to be collected as well as empower the participants.

The SL approach also advocates for the use of participatory methods (DFID 1999). Blaney and Thibault (2003) highlighted the importance of developing rapport with the participants when using PRA methods. And developing a rapport with project participants takes time. As Blaney and Thibault (2003) argued people need time to judge the trustworthiness of the facilitator or researcher. Therefore sensitive data is questionable when collected without building rapport with the people (Blaney & Thibault 2003). Participants may give the researcher the answers they think the researcher is looking for (Vernoor 2005a). It is thus critical to consider all these when collecting sensitive data from the participants.

Qualitative data is valuable in spotting the trends (Blaney & Thibault 2003). However, participatory methods are unable to capture statistical data. Participatory methods had also been criticised for being subjective. This often makes data collected through participatory methods not accepted outside the project. This is particularly true to intangible than tangible aspect of a project (Mascarenhas *et al*. 1991). Therefore a way to take advantages of the positives and reduce the negatives of extractive and empowering methods should be found.

4.6. Collecting evaluation data

SL approach requires that data collection be conducted in partnership based on equality, ownership and participation (DFID 1999). The SL approach as argued before encourages the use of participatory methods (DFID 1999). When using participatory approach it is important to assess how and why participation takes place and if it does not take place what are the inhibiting factors (Vernooy 2005b). Participation requires a two-way communication pathway (SEDAWOG 2003). Communication between the researcher and the participants is thus crucial in facilitating participation.

Some practitioners think PRA should be empowering, though few practices leave up to that expectation. Other practitioners argue that debating whether PRA is empowering or extractive is beside the point. However the purpose of PRA is to change the how the professionals and the ordinary people relate to each other. Therefore it is the attitude and behaviour of the professional when doing the PRA activities with the community that is important (Cornwall & Pratt 2003). The Professionals should therefore regard the communities as partners.

Chambers (2003) argued that a standard process for collecting data tend to be more extractive; less empowering; and less accommodating to participants. Therefore, flexible processes should be used whenever possible. However, Chambers (2003) further argued that less standardised process makes it difficult to measure the results. The balance between standard and flexible process should thus be found. This is because flexibility is very important as rigid plans may not fit in with the realities (SEDAWOG 2003).

As argued earlier SL can be prone to information overload (DFID 1999). However, when using participatory methods it is important to know what is not worth knowing. This will help in prioritizing the issues to be evaluated and focusing on the relevant data. Furthermore the quest should not be gathering data with more accuracy than is needed to understand the priority issues for evaluation (Chambers 1993 in Vernooy *et al.* 2003). The evaluation programme goals and objectives would be important to guide what is prioritized and relevant.

4.7. Analysing and interpreting the data

DFID (1999) argued that interpreting evaluation data based on the SL principles should include different perspectives. This is because multi-sectoral collaboration is an integral part of the SL approach (Ashley & Carney 1999). Moreover, there are many theories for a given body of facts. However, it is important to note that perspectives are not value free (Vernooy 2005a). So different perspectives should be understood in context and the values or value system underpinning various perspectives acknowledged.
McAlliater (1999); and McAllister and Vernooy (1999) quoted in Vernooy (2005a) identified a variety of factors which influence the construction of knowledge, they are:

- Local culture and society; resource issues; and rights
- Research questions and research methods
- Researcher's attitudes and abilities
- Research capacity and experience of the participants

Vernooy (2005a) noted that the researcher's ability to anticipate the above mentioned dynamics will help understand the results of activities. This means the nature of the research and the capacity of the participants will dictate the manner in which the research activities proceed.

The SL guidelines further urge that the idea of dynamism should also be embraced (DFID 1999). The SL approach interventions should keep up with the changes taking place so that it remains relevant. This could be achieved by making analysis and investigation of

issues to be broader and ongoing (CASE 2003). Drawing from this argument narrow and rigid analysis would not enhance the dynamism of analysis.

The interpretation of evaluation data should strive to understand economic, institutional, social & environmental sustainability (DFID 1999). This is because development projects are partly be judged based on their sustainability (Helmore & Singh 2001). As such developmental activities should not rely on the means of livelihoods, which are not economically viable and with no institutional capacity for support (Ashley & Carney 1999; DFID 1999; CASE 2003). Similarly, CASE (2003) argued that any sustainable system should ensure environmental, economic, social and institutional sustainability.

Further macro-micro links issues should be understood (DFID 1999). This is because the transformation structures are responsible for driving the implementation of the programme activities (Bennett 1999; DFID 1999). The macro-micro links therefore reflect coordination of structures in driving the processes.

4.8. Summary

This paper has examined the theoretical possibility of using the SL approach as a tool of evaluation. It has attempted to establish to what extent it is possible to achieve evaluation objectives while adhering to the principles and practices of SL.

Literature indicates that the purpose, approach and process are central to how evaluation is defined. This has framed the way in which SL theory can contribute to evaluation and the way in which evaluation can fulfil the aims of SL. It terms of the purpose there is no fundamental divergence between evaluation and SL purposes.

In terms of the approach the SL support a mixture of qualitative and quantitative approach and therefore a balance is important. In terms of process the SL sequence of activities was unable to deliver on evaluation objectives, but delivered on the data collection step.

The theoretical framework for evaluating programme using SL approach was designed. It consists of the five step evaluation process (i.e. defining and planning the programme; establishing success indicators; selecting data gathering methods; collecting evaluation data; and analysing and interpreting the data); guided by the SL framework; checklists and SL guidelines.

The SL guided evaluation uses the SL framework to define evaluation programme. The SL framework could be applied flexibly. SL framework is holistic; it can also make the management of data a lengthy process due to the volume of data produced. However, focusing on one aspect of the framework as a way of reducing volume of data could sacrifice the holistic nature of the analysis.

In the planning phase the SL approach uses logical frame for planning programmes. The logical framework summarises the logical steps taken in implementing a programme. It is an adaptable tool and the results are easier to share.
The SL guided evaluation uses checklist of indicators to establish success indicators. However, it is not easy to measure changes in the livelihoods using the checklist as they do not have benchmarks. The success indicators are therefore negotiated with stakeholder.

Various methods could be used to collect data depending on the needs of the evaluation programme. Several methods need to be used to substantiate the results. The SL approach supports the flexible combination of different methods. The best feasible methods should be based on the programme context, processes and outcomes.

The SL approach advocates the use of participatory methods. However, this requires that rapport be developed between the researcher and the participants. Furthermore, a balance should be found between extractive and empowering when selecting data collection.

SL approach requires that data collection be conducted in partnership based on equality, ownership and participation. This requires assessing how and why participation takes place. Two-way communication will help facilitate participation. The process of data collection should be flexible in order to fit in with the realities.

Most participatory methods can analyse the data into trends, diagrams, themes etc. To interpret the collected data consistent with the SL guidelines different perspectives should be included; idea of dynamism be embraced; economic, institutional, social and environmental sustainability understood; and macro-micro links issues understood as well.

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Chapter 5
Research methodology

5.1. Introduction

This chapter is concerned with describing the methodology used to carry out the research in the two case studies: MASCO tutoring project (MTP) in Mokopane and Qedidlala community garden project (QCGP) in Mpophomeni. The methods and the tools used in each project are explained and the justification for using them is given.

5.2. Methodology Overview

The purpose of the methodology was to find out the outcomes of using SL approach to evaluate programmes. This approach expands on the similar work done by Mancini *et al.* (2006) which included the livelihoods assets only to frame evaluation programme.

As discussed in Chapter 1, the primary research question was: What are the outcomes of evaluating programmes using sustainable livelihoods approach? The sub-questions addressed the opportunities and challenges of:

a) Defining evaluation programme to include vulnerability context; programme assets transformation structures and processes; programme strategies; and programme outcomes.
b) Planning evaluation programme using the logical framework.
c) Establishing success indicators using SL approach checklists of success indicators.
d) Selecting evaluation data gathering method consistent with SL approach guidelines.
e) Collecting evaluation data using the SL approach guidelines.
f) Analysing and interpreting evaluation data using the SL guidelines.

The research agenda was developed by the researcher. The flexible plan which guided the research process is attached in appendix 1. Since the goal of the research was not social transformation, it was not necessary to give the participants greater control on the

processes of the research (Vernooy 2005). The researcher controlled the process to ensure the research objectives are realised. At the same time the researcher took the role of a facilitator throughout the process of investigation.

The role of the researcher was to introduce and explain different steps and how the project participants should carry on the process. Since participatory methods were employed, the researcher gave participants instructions and then allowed participants to take the lead in showing their knowledge about the projects. The participants took a lead in identifying and analysing issues that affected projects. The researcher ensured that all participants were actively involved and that different views were expressed.

It is important to clarify that this study is not intended to evaluate the projects on which evaluation was carried out to test the use of SL approach as an evaluation tool. It is the methodology that is being examined. There will be some discussion about the individual projects and the results from the evaluation process. However, this will not be in detail. It is the capacity of SL approach to deliver on evaluation expectations that is being studied.

5.3. Sample selection

The projects studied were selected using purposive sampling. The key attributes which guided the selection of the projects were: the project should be rurally based and focusing on either agriculture or rural education. These issues were considered as they are important to rural development and extension. Therefore, projects which matched the two key attributes mentioned and whose members agreed to be part of the study were selected by the researcher. Some projects were left out because project members did not want to form part of the study.

MTP is a rurally based project which focuses on education within the context of rural areas. QCGP is also a rurally based project which focuses of the agriculture. Both, projects had the attributes which were needed for the sample. Moreover, the participants

were willing to be part of the study. There were other projects which had the attributes which were needed but the participants were not keen to be part of the study.

5.3.1. Description of MASCO tutoring project

Maths; Science; and Commerce Organization (MASCO) was established in 1999 by young graduates and students of various universities. The main aim was to contribute to the development of science and commerce. The objective was to educate the youth and by passing over skills to the communities around Limpopo.

MASCO tutoring projects include among others educational camp. The camps are held on school vocational days at Mmekwa private school centre in Bakenburg. Learners are taught and given tutorials in: Maths; Physical science; Biology; Accounting; Economics; Business economics; English; Afrikaans; Sepedi; and Agriculture. Motivation and life skills are also offered during the camps.

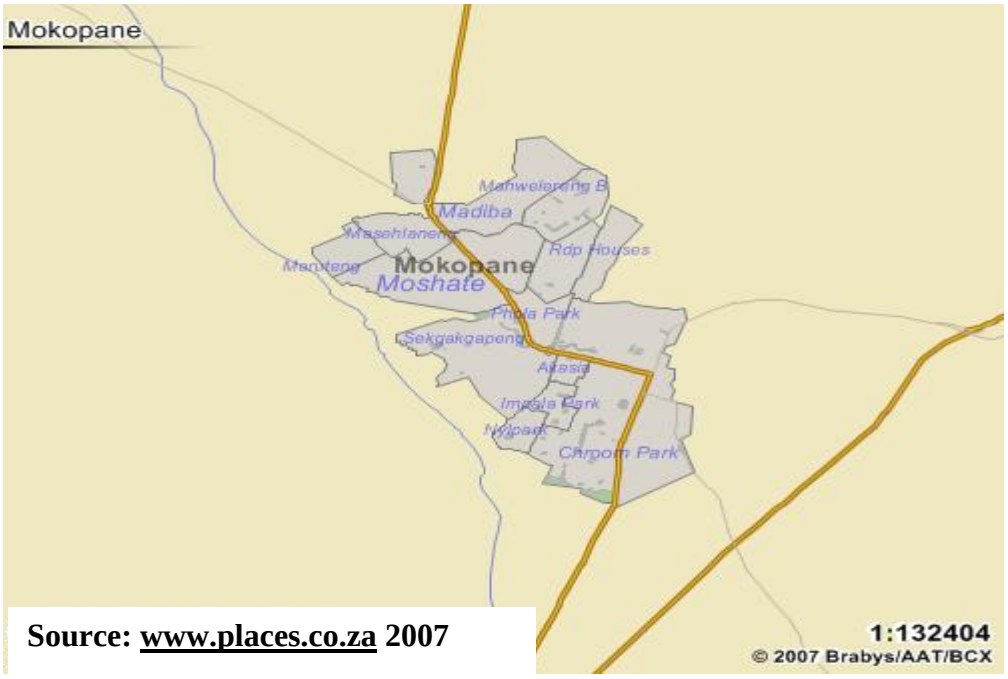
Figure 5.1. MASCO Jet Community Award certificate

MASCO had been recognised for their good work by principals, parents, teachers and learners. Moreover, MASCO has been recognised and rewarded for the good work through being awarded the Jet Community Award and the Premier award. See figure 5.1 for the Jet Community Award certificate.

5.3.2. Description of Mokopane area

Mokopane (previously Potgietersrus) is situated at the intersection of N1 and N11 highways. It falls under Mogalakwena local municipality which is one of the municipalities in Waterberg district municipality. Mogalakwena local municipality covers approximately 6 000 square metres (Mogalakwena Management Support document 2001 in Roefs 2001). Mogalakwena municipal area includes former Greater Potgietersrus transitional local council (TLC); Bakenburg rural local council (RLC); and Koedoesrand-Rebone (RLC). The municipality is categorised as B municipality with a collective executive system and a participatory ward system (Roelfs 2001). The map of Mokopane is captured in figure 5.2.

Figure 5.2. Map of Mokopane area



Source: www.places.co.za 2007

The estimate of Mogalakwena population size is 298 440 (see table 5.1). Some estimates goes well above 300 000 people (Roelfs 2001). The population size of Mogalakwena varies with season as many residents migrate to work in other areas.

Table 5.1. Population of Mogalakwena by age and gender

	0-4 YRS	5-14 YRS	15-34 YRS	35-64 YRS	65+ YRS	TOTAL
MALE	15 972	41 928	46 966	25 697	6 457	137 020
FEMALE	16 064	41 665	53 718	37 001	12 972	161 420
TOTAL	32 036	83 593	100 684	62 698	19 429	298 440

Source (Census 2001 in Mogalakwena IDP review 2004)

The source of economic development is mainly from the mining and tourism sectors. Mining provide employment to many people around Mogalakwena local municipality. The gross geographic product (GGP) has increased on average by 3,9% since 1996 to 2001 (see table 5.2).

Table 5.2. Average annual growth in GGP by kind of economic activity 1996-2001 (%)

Municipality / Economic Sector	Mogalakwena Local Municipality	Waterberg District Municipality
Agriculture	0.7	0.8
Mining	7.7	3.9
Manufacturing	6.1	5.3
Electricity and Water	2.5	-0.2
Construction	6.3	6.5
Trade/Catering	5.6	5.8
Transport/Communication	8.4	10.1
Finance/Real estate	9.6	12.6
Community services	0.3	0.3
TOTAL	**3.9**	**3.9**

Adapted from Mogalakwena IDP review 2004

5.3.3. Description of Qedidlala community garden project

Qedidlala community garden project is situated in Mpophomeni. The project was formed after Sarmcol retrenched many people. Unemployment drove the people to come together and start a community garden as an income generating activity. The increasing number of death caused by HIV/AIDS left many children orphaned. As a result there was also a

need to supply HIV/AIDS patience with fresh vegetables. On the other hand Masibumbane HIV/AIDS mission had already started working on the garden project for the HIV/AIDS affected families. Subsequently, the cooperation with Masibumbane HIV/AIDS mission was formed.

The project currently, consists of seven members. Organic vegetables are produced on approximately two hectares of land. Each member of the project is allocated a plot measuring approximately 50 square metre. Each member keeps the proceeds of the produce and pay R30.00 every year towards the project funds. These funds are used to buy petrol for the water pump.

Figure 5.3. Map of Mpophomeni area

Source: www.places.co.za 2007

5.3.4. Description of Mpophomeni area

Mpophomeni is situated on the outskirts of Howick and can be found on the R617 route (See figure 5.3). The area falls under uMngeni municipality. uMngeni municipality include the former Howick and Hilton transitional local councils (TLC); World'd view

area; small towns and settlement of: Nottingham Road; Lidgetton West; Lions River; Balgowan; Fort Nottingham; Dargle and Curry Post; and substantial farmland area. The area size of the municipality is 1 564 square kilometres (uMngeni IDP 2002).

Table 5.3. uMngeni municipality key municipal demographic information 2001 and 1996

	2001	1996
Total Population	73 896	69 741
Male	36 499 (49%)	33 848 (49%)
Female	37 397 (51%)	35 893 (51%)
Number of households	20 486	15 489
Average household size	3,6	4,6
Number of persons employed	22 194	20 219
Number of persons unemployed	11 536	8 358
Percentage of persons unemployed	34%	29%

Source (uMngeni Integrated Development plan 2002)

The unemployment level of uMngeni municipality stands around 34%. The significant number of the persons employed is in Agriculture/forestry/fishing sector. The distribution of the employment by sector is in table 5.4.

Table 5.4. uMngeni municipality: Employment per sector 2001and 1996

	2001	1996
Agriculture/Forestry/Fishing	6 057	3 103
Community/Social/Personal	4 007	3 106
Construction	851	965
Electricity/Gas/Water	163	275
Financial/Insurance/Real Estate/Business	1 397	1 043
Manufacturing	2 273	1 840
Mining/Quarrying	36	29
Private Households	2 616	3 450
Transport/Storage/Communication	588	666
Undetermined	1 858	4 093
Wholesale/Retail	2 351	1 722
Total	22 197	20 292

Source (uMngeni Integrated Development plan 2002)

5.4. General approach to the study

The data collection was conducted over a period of approximately two (2) months: October to November 2007. As discussed in chapter 4, it is theoretically possible to use

SL approach to evaluate programmes. The research for this study was designed to test this in practice. The methodology used has been developed by drawing from both the evaluation and SL approach literature. It consists of five step evaluation process guided by SL approach principles and guidelines including the SL framework. The methodology follows the process of evaluation and is guided by the SL approach principles; framework; checklists of indicators and guidelines (See figure 4.1 in chapter 4).

The study complied with the five steps of evaluation: 1) defining and planning the evaluation programme; 2) establishing success indicators; 3) selecting data gathering method(s); 4) collecting evaluation data; and 5) analysing and interpreting evaluation data (See Chapter 2). In complying with these five steps SL principles and guidelines were used to shape each step of the evaluation.

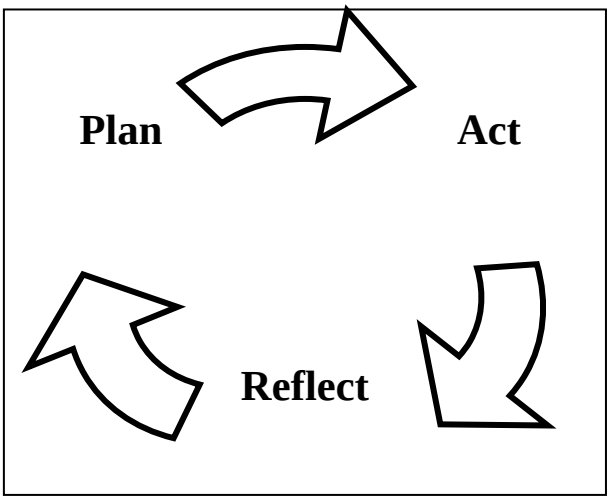
In keeping with SL theory, the methodology was derived from implementing the SL principles: people-centred; holistic; dynamic; building on strengths; macro-micro links; and sustainability in the field. This was an iterative process. As steps were taken, information about what worked and what did not work was gathered and analysed to improve the overall process. In a nutshell the process of collecting data in each evaluation step constituted the following steps: plan; act; and reflect (see figure 5.4).

The SL framework elements: vulnerability context; livelihoods assets; transformation structures and processes; livelihoods strategies; and livelihoods outcomes were used as key attributes of evaluation programme. This was in accordance with DFID (1999) assertion that SL approach analysis is defined by the framework. Moreover, SL checklists of indicators and guidelines on selecting data gathering methods; collecting data; and analysing and interpreting data were used to shape evaluation steps.

DFID (1999) argued that when selecting data gathering method for SL analysis efforts should be made to build on the relevant methods currently being used; flexibly combine the existing methods with the SL methods; and find a balance between extractive and empowering methods. Data collection should be conducted in partnership based on

equality, ownership and participation; and participatory methods should be used (DFID 1999). The following guidelines would be applied in analysing and interpreting data: include different perspectives; embrace idea of dynamism; understand economic, institutional, social, and environmental sustainability; and macro-micro links issues (DFID 1999).

Figure 5.4. Iterative process of data collection



5.5. Process of data collection

Figure 4.1 in chapter 4 depicts the overall methodology used to design and implement evaluation activities at the two research sites. Each of the five steps will be discussed in greater detail showing how SL and evaluation theory were combined. As the nature of the research was iterative, it was not possible to decide beforehand which methods were going to be used to collect data. However, a list of the methods used was compiled into a table at the end of the study (see appendix 2). The guiding principle was that participatory methods should be used and that there should be a balance between extractive and empowering methods as argued in DFID (1999).

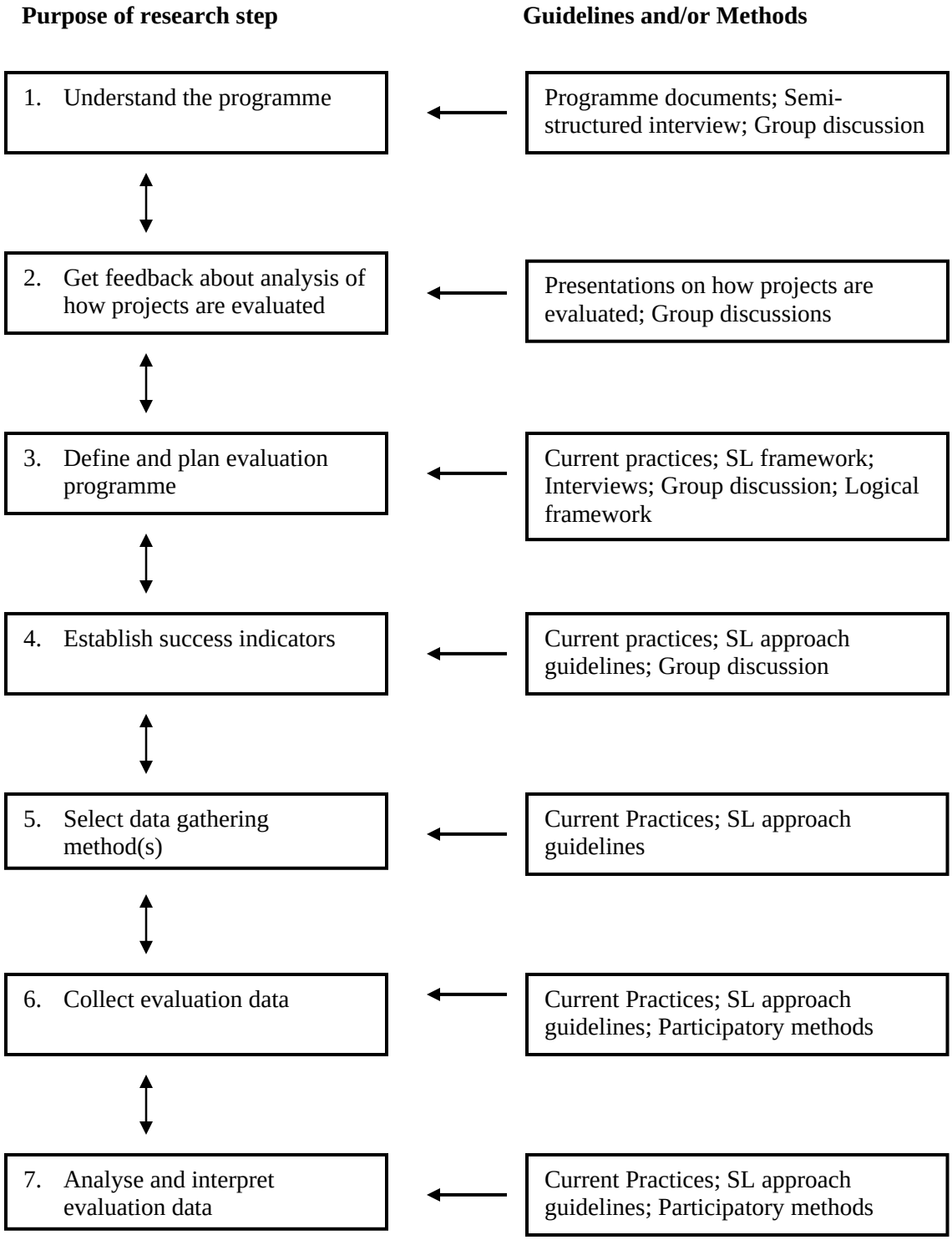
In addition to the general methodology as shown in figure 4.1, a research process guide was designed (see figure 5.5). The process started with getting background information about the two projects. The purpose was to establish how evaluation is conducted in each project in order to allow the researcher to understand the two projects better. This was followed by getting feedback from the participants about the process of evaluation as captured in on the first step of research process. The evaluation and SL concepts were explained to the participants. This was to enable participants to have an idea of what and how things will be done. Thereafter, the five step evaluation process was implemented.

5.5.1. Getting the background information of the projects

The background information was collected by reviewing the existing project documents. The MTP documents reviewed are: MASCO profile (see appendix 3) and MTP risk and safety assessment and response plan (see appendix 4). There were no project documents to review in QCGP. Semi-structured interview (SSI) was also conducted to ascertain that things which are not contained in the projects documents are captured as well, as King *et al.* (1987) noted that programme documents on their own can create an incomplete picture.

Semi-structured interview was conducted with MASCO Chief executive officer (CEO) Mr Molatelo Maremane for the MTP. In the case of QCGP semi-structured interview was conducted with two members: Mr Robert Zuma (group leader); and Mr Michael Thabede. The SSI questions which were used to guide the interviews are attached in appendix 5. The response was captured using the digital recorder, to give the researcher time to focus of listening and probing rather than writing response. The summaries of written results of the interviews are captured in appendix 6 and 7 for MTP and QCGP respectively.

Figure 5.5. Research process guide



The data collected from the SSI was used to establish if there are any unofficial or unwritten statements made about the projects. Herman *et al.* (1987) has noted that some

programme documents can get out dated and only contain the formal statements. Feuerstein (1986) argued that unofficial and unwritten objectives are just as important as official and written statements.

The outcomes of this step of data collection were an understanding of: how the projects (MTP and QCGP) started; projects objectives; and how projects are evaluated. This step concluded by contrasting process of evaluation followed in the two projects (MTP and QCGP); with the conventional evaluation process; and the SL guided evaluation. This was to check how the evaluation of projects (MTP and QCGP) compares with conventional and SL guided evaluation (see appendix 8 and 9 for MTP and QCGP contrasts respectively).

5.5.2. Getting feedback and explaining evaluation and SL concepts

The researcher presented the process of evaluation project to both the participants of both projects (MTP and QCGP) as captured through SSI. The participants confirmed that the manner in which the researcher captured evaluation process was correct.

In the case of MTP a joint decision by the participants and the researcher was made to form a planning team consisting of two people from the MASCO. The CEO and one member of MASCO Mr Happy Beetha were selected to work with the researcher on designing evaluation programme (which included the following steps: defining and planning; establishing success indicators; and selecting data gathering methods).

This was because it was a common practice regarding evaluation in MTP. The participants also felt that the process will be more efficient when few people are involved. Moreover, most people were involved in other activities and had little time available. The rest of the group then joined the planning team at the implementation phase (collecting evaluation data and analysing and interpreting data).
Before beginning the evaluation process the researcher explained the five step evaluation process to be followed and the SL approach theory and principles to the participants

(refer to chapter 2 and 3). This was to enable participants understand what is going to be done and the direction the research is going to take. This is in line with what Vernooy (2005) had suggested that researcher should be honest and open to the participants about the purpose of the research and what will be done.

5.5.3. Defining and planning evaluation programme

The process of defining programme evaluation began through using SL framework to define evaluation. The scoping tools currently used in the projects were also incorporated. The SL framework attributes used are: vulnerability context; livelihoods assets; transformation structures and processes; livelihoods strategies; and the livelihoods outcomes. These were used as SL framework enabled the evaluation programme to be holistic (DFID 1999). The outcomes were the opportunities and challenges of defining evaluation programme using the SL framework elements together with the tool used in the projects (MTP and QCGP) to define evaluation programme.

The logical framework was used to plan evaluation programmes in a participatory manner. This is consistent with DFID (1999) argument that the planning of SL activities should be as participatory as possible. The researcher facilitated the process of planning the evaluation programmes using the guidelines for completing the logical framework (see appendix 10). The projects participants contributed information used for planning.

5.5.3.1. Defining evaluation programme for MTP

A brainstorming session was conducted to identify the vulnerability context factors using the following categories as guide for vulnerability in agriculture; economic shocks and processes; health and nutrition risks; demographic risks; and political, legal and social vulnerability. The researcher facilitated the session, while the planning team contributed information. The risk and safety assessment and respond plan table was expanded by incorporating the items identified through brainstorming and completed the missing blocks.

The project assets were also identified through brainstorming session. The following categories were used to guide the identification of assets: human assets; natural assets; financial assets; physical assets; and social assets. A brainstorming session was conducted to identify the transformation structures and processes; project strategies; project outcomes. To incorporate the MTP tasks and responsibilities the researcher asked the planning team to list those as there were no records.

5.5.3.2. Defining evaluation programme for QCGP

The researcher conducted the transect walk around the project site with Mr Robert Zuma and Mr Michael Thabede. The purpose was to learn as much as possible about the projects (i.e. vulnerability context; assets; structures and processes; strategies and outcomes). The researcher asked the group leaders questions randomly based on what the researcher was observing and the response given. Discussion was also incorporated into this exercise.

5.5.3.3. Planning evaluation programme for MTP

To design evaluation programme plan the guidelines for designing a logical framework were used (see appendix 10). The participants were asked the following guiding questions: For the programme goal the question was what is the broad objective which the evaluation programme will contribute? The purpose of evaluation programme was framed by asking the participants; what are the specific objectives the evaluation programme seeks to achieve? For the outputs the participants were asked; what are the deliverable results from the programme which will contribute to achieving the programme purposes? The researcher helped the participants to frame the outputs in a manner that is consistent with the logical framework.

The question to guide the identification of the assumptions of the programme purpose was; what are the conditions not in control of the project necessary in order for the project purpose to achieve the goal? For the outputs the guiding question was; what

factors outside of the project control could restrict the outputs from achieving the purpose? The assumptions for the project goal were not identified because for the purpose of this research the focus as up to the project goal and not beyond.

After long questions and answers discussion evaluation plan was designed. Activities which need to be done to in order to ensure outputs are achieved were also generated with columns for participatory methods; resources; and responsibility generated.

5.5.3.4. Planning evaluation programme for QCGP

Evaluation programme was planned using logical framework in a participatory manner. The participants were Mr Robert Zuma; Mr Michael Thabede; Ms Beatrice Manamatela; and Ms Clementine Dlamini. The researcher facilitated these through asking questions to the participants and encouraging discussion among the participants.

To design evaluation programme plan the guidelines for designing a logical framework were used (see appendix 10). The participants were asked the following guiding questions: For the programme goal the question was what is the broad objective which the evaluation programme will contribute? The purpose of evaluation programme was framed by asking the participants; what are the specific objectives the evaluation programme seeks to achieve? For the outputs the participants were asked; what are the deliverable results from the programme which will contribute to achieving the programme purposes?

The question to guide the identification of the assumptions of the programme purpose was; what are the conditions not in control of the programme necessary in order for the programme purpose to achieve the goal? For the outputs the guiding question was; what factors outside of the programme control could restrict the outputs from achieving the purpose? The assumptions for the programme goal were not identified because for the purpose of this research the focus as up to the programme goal and not beyond.

After long question and answer discussion evaluation plan was designed. Activities which need to be done to in order to ensure outputs are achieved were also generated with columns for resources; participatory methods; and responsibility generated.

5.5.4. Establishing success indicators

As noted in Ashley and Carney (1999) it is not easy to measure changes in a programme using the checklists as they do not have benchmarks. Consequently, the benchmarks were negotiated with the projects participants. The expected outcomes were the opportunities and challenges of establishing success indicators using the SL checklists of indicators.

5.5.4.1. Establishing success indicators for MTP

To establish success indicators the planning team was asked; what is the quantitative or qualitative measure which could be used to judge the timed achievement of goal; purpose; and outputs respectively. The SL checklist of indicators (captured in figure 4.1) was also used as a guide to establish success indicators for the attributes of the SL framework. However since the SL checklist of indicators did not specify hard numbers. The benchmark of success indicators were negotiated with the participants.

5.5.4.2. Establishing success indicators for QCGP

To establish success indicators the participants were asked; what is the quantitative or qualitative measure which could be used to judge the timed achievement of goal; purpose; and outputs respectively. The SL checklist of indicators was also used as a guide to establish success indicators for the attributes of the SL framework. However since the SL checklist of indicators did not specify hard numbers. The benchmark of success indicators were negotiated with the participants.

5.5.5. Selecting data gathering methods

The data gathering methods were then selected also as part of planning. The SL approach guidelines were used to select the methods for selecting data. The guidelines are as follows: methods used should build on the relevant methods currently used; flexibly combine the existing methods with the SL methods in order to meet SL objectives; find a balance between extractive and empowering methods; and use participatory methods (DFID 1999).

5.5.5.1. Selecting data gathering methods for MTP

To identify the means of verification the planning team was asked; what methods and sources could be used to gauge indicators. The researcher identified participatory methods which could be used to assess the indicators. This was because the planning team did not have any knowledge of participatory methods and there were no existing methods used except observation. The researcher ensured that at least two methods where necessary are used per output in order to substantiate the results.

5.5.5.2. Selecting data gathering methods for QCGP

To identify the means of verification the researcher identified the methods which could be used to assess the indicators. This was because the participants did not have any knowledge of participatory methods and there were no existing methods used except observation. The researcher ensured that at least two methods where necessary are used per activity in order to substantiate the results.

5.5.6. Collecting evaluation data

The evaluation data were collected using the SL guidelines. The guidelines stipulate that data collection be conducted in partnership based on equality, ownership and participation; and that participatory methods should be used (DFID 1999). The data collection focused on the elements of SL framework and other attributes used to define evaluation programme (the methods used to collect data are captured in appendix 4). The

expected outcomes were the opportunities and challenges of using SL guidelines to collect evaluation data.

5.5.6.1. Collecting evaluation data for MTP

At this stage of evaluation the rest of the participants were called to participate in data collection. The planning team shared the logical framework to the rest of the group. Then data collection began. Data collection could only be collected data using the participatory methods. More participants: Mr Elliot Moleba; Mr Johannes Mabusela; Ms Enny Baleseng; and Ms Mahlatse Mamabolo joined the two members of the planning team.

Time trend was used to create a picture of how the MTP tasks and responsibilities had been performed over the years. The participants were asked to assess the improvements made with regards to the identified project aspects in the last five years. The scale of 1 (least) to 5 (most) was used to guide the trend setting. The researcher drew a table with the tasks and responsibilities and years was drawn on the board. Matrix ranking was then done to cross check the data collected using the time trend. The researcher asked the participants to rank the project aspect which they thought improved the most. The researcher drew a table on the board with the list of tasks and responsibilities and the box for ranking for each. There were six participants and each participant was allowed eight votes (corresponding to the number of items ranked) to distribute among the project aspect they thought improved the most compared to the others.

Data for the vulnerability context factors was collected using the time trend. The analysis focused on the risks the project had to cope with. The participants were tasked to estimate the rate at which each identified vulnerability context factors had occurred in the three camps hosted in 2007. The researcher drew a table with the vulnerability context factors and years was drawn on the board. The scale of 1 (low) to 5 (high) was used. The matrix ranking was also used to triangulate the data collected using the time trend. The researcher asked the participants to estimate which single vulnerability context factor had the most impact on the project in 2006 and 2007. The researcher drew a table was drawn

on the board with the list of vulnerability context factors and the column for ranking. There were six participants and each participant was allowed ten votes (corresponding to the items ranked) to distribute among the vulnerability context factor they thought had the most impact on the project compared to the others.

Time trend was used to collect the financial assets. The analysis was focused on the remittance obtained from the learners and the donations received. The researcher tasked the participants to assess the growth of the financial assets from 2004 to 2007. The researcher drew a table with financial assets and the column for years. The scale of 1 (least) to 5 (most) was used. Seasonal calendar was used to cross check of the results of the time trend. The participants were asked to show the distribution of learners' remittance per camp for 2006 and 2007. The researcher drew the table with list of financial assets and column for the camps. A scale of 1 (least) to 5 (most) was used.

Venn diagram and matrix ranking were used to assess relative value of MTP social assets. The researcher tasked the participants to draw the circle on the chalk board. The middle circle represented MTP and then other circles (representing social assets) were placed next to the central circle. The size and distance from the inner circle represented the relative importance of the asset to the project. The participants were then asked to estimate the average contacts made with each organisation on a monthly basis. Number of contacts was placed inside each circle. The number in the circle for the constitution represents the numbers of amendments made this year (2007).

The time trend was used to collect data for the human assets. The MASCO members had not attended trainings. So, the focus shifted to the practical experience the members had using the skills. The participants were asked to assess the average months of practical experience using the skills from 2006 to 2007. The researcher drew a table with list of human assets and the column for the years. The security and catering skills were left out as they were outsourced. Matrix ranking was also used to collect data for the human assets. The participants were asked to rank the asset they thought recorded the most

improvement in 2006 and 2007. Six participants were given four votes each (corresponding to the number of items ranked) to rank the assets.

The time trend was used to collect data for the physical assets. The participants were tasked to assess the growth of each physical assets identified for the period 2003 to 2005 by specifying the number of physical assets owned or had access to. The researcher drew a table with list of physical assets and the column for years. The participants counted the number of physical assets owned. The borrowed or rented assets were denoted by the letter A. The stationery was not evaluated as the participants explained that stationery is bought according to the need of the projects. Matrix ranking was also used to collect data for the physical assets. The participants were asked to rank the asset they thought recorded the highest growth in value from 2006 to 2007. Six participants were given six votes (corresponding with the number of items ranked) to rank the assets.

Data for transformation structures and processes was collected using rapid appraisal of agricultural knowledge system (RAAKS) tools (Prime mover septagram; task analysis matrix; linkage matrix; and impact analysis sheet). The prime mover septagram was used to check within MASCO which structure is the most influential. This exercise analysed the rights and responsibilities of the structures within the programme. The researchers drew the septagram diagram on the chalk board with the names of the identified structures. The participants were asked to place a mark. The scale of 1 (less influence) and 5 (strong influence) was used.

The task analysis sheet was done to gain insight on the functions of the various actors within the MTP. The researcher asked the participants to list tasks carried out by various structures within MASCO. The researcher then drew a table on the chalk board with list of tasks and the columns for the structures. The participants were then tasked to identify which task is performed by each structure. YES was used to denote that the structure is performing the task and NO for not performing the task.

Linkage matrix was done to identify linkages that exist among the identified structures. The researcher drew a table on the chalk board with list of structures and the columns for the structures. The researcher asked the participants to identify linkage they observed among the structures identified. The following indicators were used: One (1) = link is limited and informal; two (2) = link is strong and formal or informal; three (3) = the link is formal but limited.

Impact analysis sheet was used to assess the impact different structures within MASCO are making. The participants were asked to list the skills required to successfully run the programme. The researcher then drew a table with list of the structures and the columns for the skills. The participants were tasked to assess which skill and in what quality of do people within those structures possess.

Matrix ranking was used to collect data for the programme strategies. MTP strategies for implementing the tutoring programme were ranked looking at the extent to which they increase diversity; choice; and opportunities. The researcher drew a table on the chalk board with a list of strategies and the columns for diversity; choice; and opportunities. The participants were then tasked to rank various strategies used in pursuing the programme outcomes in terms of the above mentioned qualities. Time trend was used again to check the changes in project strategies from 2006 to 2007. The participants were asked to assess the changes in the strategies over that period. The researcher drew a table on the chalk board with list of strategies and the columns for the years. The scale of 1 (least changes) to 5 (most changes) was used to assess the programme strategies.

Data for the project outcome were collected using the time trend. The participants were tasked to assess and rank the extent to which the outcomes are achieved. The researcher drew a table on the chalk board with list of outcomes and the columns for the years. The scale of 1 (least) to 5 (most) was used. Matrix ranking was also used to collect data for the project outcome. The participants were asked to rank the most achieved project outcome. The researcher drew a table with list of outcomes and the columns for ranking. Six participants were allowed two votes each (corresponding to the items ranked) to rank.

5.5.6.2. Collecting data for QCGP

In the data collection stage participatory methods were used to collect data. The participants were Mr Robert Zuma; Mr Michael Thabede; Ms Beatrice Manamatela; and Ms Clementine Dlamini. The researcher facilitated data collection exercises through giving participants instruction on doing various activities done. The probing questions were asked were necessary and discussion among the participants was encouraged.

Data for the vulnerability context was collected using the time trend. The participants were tasked to estimate the rate at which each identified vulnerability context factors had occurred in the last two planting seasons (July-November and December-May). The researcher drew a table was on the flip chart with the list of vulnerability factors and the columns for planting seasons. The scale of 1 (least) to 5 (most) was used. The matrix ranking was then done to substantiate the results of the time trend. The participants were tasked to rank the vulnerability context factor which had the highest impact on the project. The researcher drew a table on the flip chart with the list of the vulnerability context factors and the column for ranking. Four participants were each given six pebbles (corresponding to the number of items ranked) to rank the vulnerability context factors.

Time trend was used to collect data for the financial assets. The participants were asked to estimate the growth rate of the financial assets from 2006 to 2007. The researcher drew a table on the flip chart with list of sources of finance and the columns for years. The scale of 1 (least) to 5 (most) was used. The matrix ranking was used to cross check the findings of the time trend. The participants were asked to assess which source of financial assets contributed the most in terms of value. The four participants were given three pebbles each (corresponding to the number of items ranked) to rank the value of each financial source.

Time trend was used to collect data for the natural and physical assets. The participants were asked to assess the conditions of the physical assets as well as the supply of water throughout the year (2007). The researcher drew a table on the flip chart with list of both

natural and physical assets and a column for a year. Using the scale of 1 bad) to 5 (good) were used. The matrix ranking was used to cross check the findings of the time trend. The participants were asked rank physical asset they thought is in a good condition compared to others. The four participants were each given four pebbles (corresponding to the number of items ranked).each to rank the conditions of each asset.

Venn diagram and Matrix ranking were used to assess the growth of QCGP social assets. The researcher drew the on the centre of the flip chart which represented QCGP. The participants were then asked to draw the circle next to the square. The size and distance represented relative importance of the relations with mentioned organisation. The estimated number of contacts made on a monthly basis was put in each circle.

The time trend was used to collect data for the human assets. The researcher drew a table with the list of skills and a column for a year. The participants were asked to estimate the number of training the attended in 2007.

Data for transformation structures and processes was collected using rapid appraisal of agricultural knowledge system (RAAKS) tools. The prime mover septagram was used to check which structure is the most influential. This exercise analysed the rights and responsibilities of the organisation within the ambit of the community gardening project. The organisations were identified during the discussions done with transect walk.

The researchers drew the septagram diagram on the Flip chart with the names of the identified organisations. The scale of 1 (less influence) to 5 (more influence) was used. The participants were asked to place a mark on the each of the three organisations they thought has strong influence and on one for the structure they thought was less influential.

The task analysis sheet was done to gain insight on the functions of the various actors within the programme. The researcher asked the participants to list tasks carried out by various organisations in QCGP. The researcher drew a table with list of structures and the

columns for tasks. The participants were tasked to identify which tasks each structure performs pertaining to the project. YES was used to denote that the structure is performing the task and NO for not performing the task.

The matrix ranking was used to collect data for the project strategies. QCGP strategies were ranked looking at the extent to which they increase diversity; choice; and opportunities. The researcher drew the table with list of strategies and the columns for diversity; choice; and opportunities. The participants were then tasked to rank various strategies used in pursuing the programme outcomes. The seasonal calendar was used to triangulate the results of the strategies. The researcher drew a table with list of strategies and the columns for months. The participants were then asked to identify the times in which they cultivate the crops.

The time trend was used to collect data for the project outcomes. The researcher drew a table with the list of outcomes and a column for years. The participants were asked to estimate the extent to which the project outcomes are achieved in 2006 and 2007. The scale of 1 (least) and 5 (most) was used.

5.5.7. Analysing and interpreting data

The collected data was then analysed and interpreted using the SL guidelines. The guidelines stipulate that: different perspectives should be used; idea of dynamism should be embraced; interpretation of evaluation data should strive to understand economic, institutional, social and environmental sustainability; and that macro-micro issues should be understood (DFID 1999). The expected outcomes were the opportunities and challenges of using SL guidelines to analyse and interpreting evaluation data.

5.5.7.1. Analysing and interpreting data for MTP

Analysing evaluation data was done on the data collected through participatory methods. Participatory methods simultaneously collect and analyse data. So, the data was already grouped. Interpretation of data was then done.

On including different perspective the participants were asked to identify other stakeholders which may be interested in the outcome of the programme with a view of incorporating their views. The idea of dynamism was not embraced due to the scope of the project.

On understanding economic; institutional; social; and environmental sustainability, the matrix ranking was done. The participants were asked to rank the project on economic, institutional, and social. The environmental sustainability did not apply to MTP. The scale of 1 (least) and 5 (most) was used. The results of this exercise are captured in appendix 51. The idea of macro-micro link was incorporated through reflecting on the data captured through linkage matrix.

5.5.7.2. Analysing and interpreting data for QCGP

Analysing evaluation data was done on the data collected through participatory methods. Participatory methods simultaneously collect and analyse data. So, the data was already grouped. Interpretation of data was then done.

On including different perspective the participants were asked to identify other stakeholders which may be interested in the outcome of the project. The idea of dynamism was not embraced due to the scope of the project. No reflection on sustainability of the project was made. The macro-micro link was not incorporated as the linkage matrix exercise could not be done

5.6. Analysis of research data

The literature reviewed was used to analysis the data collected. The field experience was analysed using both evaluation and SL literature as base. However, where necessary the field experience was used to question some of the theoretical arguments in the literature.

Reflection on the participation of participants in the process of data collection was made through observation. This however considered that there is no right or wrong amount of participation (Vernooy 2005). Through participation the researcher and the participants had the opportunity to learn as the process of data collection was unfolding. This was done through sharing experiences and information and participating in discussion. This is in line with assertion made in SEDAWOG (2003) that participation requires a two-way communication pathway.

The matrix ranking was used to get the views of the participants on: using the SL framework to define evaluation programme; planning evaluation using the logical framework; selecting data gathering methods using the SL guidelines; collecting evaluation data using the SL guidelines; and analysing and interpreting evaluation data using the SL guidelines. The importance of this exercise is shown by Vernooy's (2005) assertion that there are various forms (i.e. indigenous and scientific) of knowledge which are all important and justifiable. Vernooy (2005) further argued that a mixture of local and scientific knowledge is essential in improving practices.

The use of matrix ranking to get the participants was done with MTP participants and not with the QCGP participants. This exercise required the participants to reflect on the methods used and the contribution they made. The QCGP participants were unable to understand what was required of them during this exercise and therefore if was abandoned. In doing this it was noted that the capacity of the participants in terms of level of education and skills would influence how the research is done (Vernooy 2005).

5.6.1. Participants view on using the SL framework to define evaluation programme

The matrix raking was used to get the views of planning team on using SL framework as a tool for defining evaluation programme. The planning team was asked to identify the attributes considered in choosing a tool for defining evaluation programme. The attributes identified are: ensuring smooth process of evaluation; learning; and improving the programme.

The SL framework was ranked against the common practice of defining the MTP evaluation programme. The researcher drew a table on the chalk board with list of attributes and the columns for the tools. The planning team was then asked to rank the extent to which each tool delivers on the attributes listed. The scale of 1 (poor) to 5 (excellent) was used.

5.6.2. Participants view on using logical framework to plan evaluation programme

The matrix ranking was used to get the views of the planning team on using the logical framework. The researchers tasked the planning team to identify attributes considered when deciding on the planning tool. The following attributes were identified: ability to maintain order; make implementation simple; easy to share; and flexible.

The researcher drew a table on the chalk board with list of attributes and the columns for the tools. The team was then required to rank the logical framework and the MASCO planning table based on these attributes. The scale of 1 (poor) to 5 (excellent) was used.

5.6.3. Participants view on establishing success indicators using the SL checklists

The matrix ranking was used to get the views of the planning team on using the SL checklist of indicators to establish success indicator was used. The researcher asked the planning team to identify the attributes considered when establishing success indicators.

The attributes identified are: useful; practical/realistic; feasible/attainable; measurable; and ongoing. The researcher drew a table on the chalk board with list of attributes and the columns for the tools. The scale of 1 (poor) and 5 (excellent) was used.

5.6.4. Participants view on using SL guidelines to select data gathering methods

The matrix ranking was used to get the views of the planning team on choosing data collection methods. The team was tasked to identify attributes on which data selection is based. The attributes identified are: depend on the data need; based on the programme context; based on the programme process; and depend on the outcomes. The researcher drew a table on the chalk board with list of attributes and the columns for the tools. The scale of 1 (poor) and 5 (excellent) was used.

5.6.5. Participants view on using participatory methods to collect data

Matrix ranking was used to get the participants view on the process of collecting evaluation data. The researcher asked the participants to identify the attributes considered when collecting evaluation data. The attributes identified are: manageable; and simple. The researcher drew a table on the chalk board with list of attributes and the columns for the tools. The participants were then asked to rate participatory methods and MTP methods. The scale of 1 (poor) and 5 (excellent) was used.

5.6.6. Participants view on using SL guidelines to analyse and interpret data

Matrix ranking was used to get the participants view on analysing and interpreting evaluation data using SL guidelines. The researcher tasked the participants to rank the importance of each of the SL guidelines for analysing and interpreting data. The scale of 1 (less important) to 5 (very important) was used.

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Chapter 6
Results and Discussion

6.1. Introduction

This chapter presents the results of the research conducted on the two projects – MTP and QCGP. The results are also discussed. Literature and the observation of the researcher are incorporated into the discussion to give meaning to the findings.

6.2. Getting the background information

In the case of MTP the MASCO profile (see appendix 3) and the risk and safety assessment and response plan (see appendix 4) were reviewed. However, the risk and safety assessment and response plan was incomplete. The reason given was that the administrative capacity of the organisation was weak. In the case of QCGP there were no programme documents to be reviewed. The copy of the constitution could not be found. The project evaluation activities are not documented due to the lack of capacity.

The SSI in MTP generated more data about the background of the projects as well as the evaluation activities than the project records. It turned out there is a lot of information about the projects which is not documented. However, through using SSI the information gap was filled.

Since some of the project records (MTP risk and safety assessment and response plan shown in appendix 4) were incomplete, SSI proved to be a useful tool to get the background information as it captured what is happening as opposed to what is written about the evaluation project goal and objectives. The SSI responses are captured in appendix 6 and 7.

In the case of the MTP, SSI augmented documented information. They exposed a basic knowledge and understanding on the part of the members about evaluating their

programme. In addition to generating additional information, the SSI process also created an awareness of and an appreciation for having a more methodical and systematic approach to evaluating their project.

In the case of the QCGP, the process was more extractive. In that there was no documentation for the project, SSI actually initiated the process of documentation. However, the results (appendix) show that the responses were not very detailed and were superficial. The researcher observed that the QCGP members struggled to engage with the SSI process. While they were able to answer the questions, they struggled with terminology and with concepts. Unlike the MTP, the QCGP did not come away with an increased awareness of or appreciation for the value of structured evaluations.

The importance of conducting SSI to augment the project records is illustrated by arguments posited by Herman *et al.* (1987) that programme documents sometimes get outdated and they only contain formal statements. Moreover, Feuerstein (1986) also argued that unwritten and unofficial statements or objectives are equally important and useful as the programme documents. The SSI results from MTP confirm these findings. However, the SSI results from QCGP are less confirming.

There were a number of differences between the two projects interviewed:

- It was noted that there was a marked difference in education and training between the two groups. MTP members had either completed matric or were currently studying at a tertiary institution. QCGP members were illiterate to semi-literate and had little or no formal education. MTP members were more able to engage with the abstract concepts than were the QCGP member.
- The SSI session with MTP was conducted in a language common to the participants and the facilitator. The QCGP SSI session was conducted with the use of an interpreter.
- The lack of written documentation at QCGP was to be expected because of the low levels of literacy.

Reflection on these facts and the SSI results raised the following points:

- SSI is a participatory methodology and should be able to be applied to any situation irrespective of the level of education of the participants. If difficulties arise, it is more likely to be an issue of facilitation. To be effective, SSI requires excellent facilitation skills to accommodate different levels of conceptual skills.

- If conducted correctly and with skill, SSI could be used as a foundation for formalising a process of documentation which uses both static information such as reports and dynamic information obtained though participant dialogue in SSI sessions.

- If, as in the case of QCGP an interpreter is used, then it would be advisable to agree in advance on the vernacular words to be used to convey abstract concepts.

6.3. Getting feedback and explaining evaluation and SL concepts

After the background information about the two projects (MTP and QCGP) was collected, a comparison of the evaluation approaches used in these projects were done to check how they contrast with the conventional evaluation process; and the SL guided evaluation. This was to check how the evaluation of projects (MTP and QCGP) compares with conventional and SL guided evaluation (see appendix 8 and 9 for MTP and QCGP contrasts respectively).

The tables of contrasts were presented to participants from both MTP and QCGP who confirmed that the researcher had correctly captured the way evaluation process conducted. There were no additions or changes suggested. This paved the way forward for the researcher to continue with the research process.

Explaining the five step evaluation process to the MTP participants occurred without difficulty. However, explaining SL theory and concepts posed some challenges. The MTP participants struggled to conceptualise the SL framework. Learning from this

experience the evaluation and SL concepts were never explained to the QCGP participants. Moreover, the education level of QCGP participants was lower compared to the MTP participants. The MTP participants were the youth who matriculated, while the QCGP participants were older persons with little or no formal education.

This has been echoed by Ashley and Carney (1999) assertion that explaining SL concepts poses some challenges particularly when local languages are used. However, Ashley and Carney (1999) further argued that explaining these concepts is necessary if SL concepts are to be shared with the participants. Vernooy (2005) argued that there is no need to give the participants greater role when the objective of the research is not social change. The objective of the research was to find out the outcomes of using the SL approach as a tool for evaluating projects. In this case it was not compulsory for the participants to understand concepts used.

However, the lessons learned with the SSI process regarding facilitation and interpretation would also apply to conveying evaluation and SL concepts.

6.4. Defining and planning evaluation programme

Programme evaluation was defined using the SL framework. In case of MTP the tasks and responsibilities were also incorporated to define evaluation programme. The planning of the evaluation programme was done through logical framework. In case of MTP the planning table was incorporated. The opportunities and the challenges of using SL framework to define and plan evaluation programme we noted. These are also discussed below.

6.4.1. Opportunities of defining evaluation programme

Using brainstorming in MTP helped to get data quicker. The information was generated quickly without debating the merits and demerits of information, which saved time. The vulnerability context factors were categorised into: vulnerability in agriculture; economic

shocks and processes; health and nutrition risks; demographic risks; and political, legal and social vulnerability to guide the identification of the vulnerability context factors as in Devereux *et al*. (2006). This proved to be effective in grouping the vulnerability context factors and giving the brainstorming a direction. The use of brainstorming has shown that the tool needs a good facilitator because without restriction the volume of data collected can be unmanageable as shown in MTP. However, the use of the SL framework required that many issues be identified, which could have contributed to the voluminous data collected.

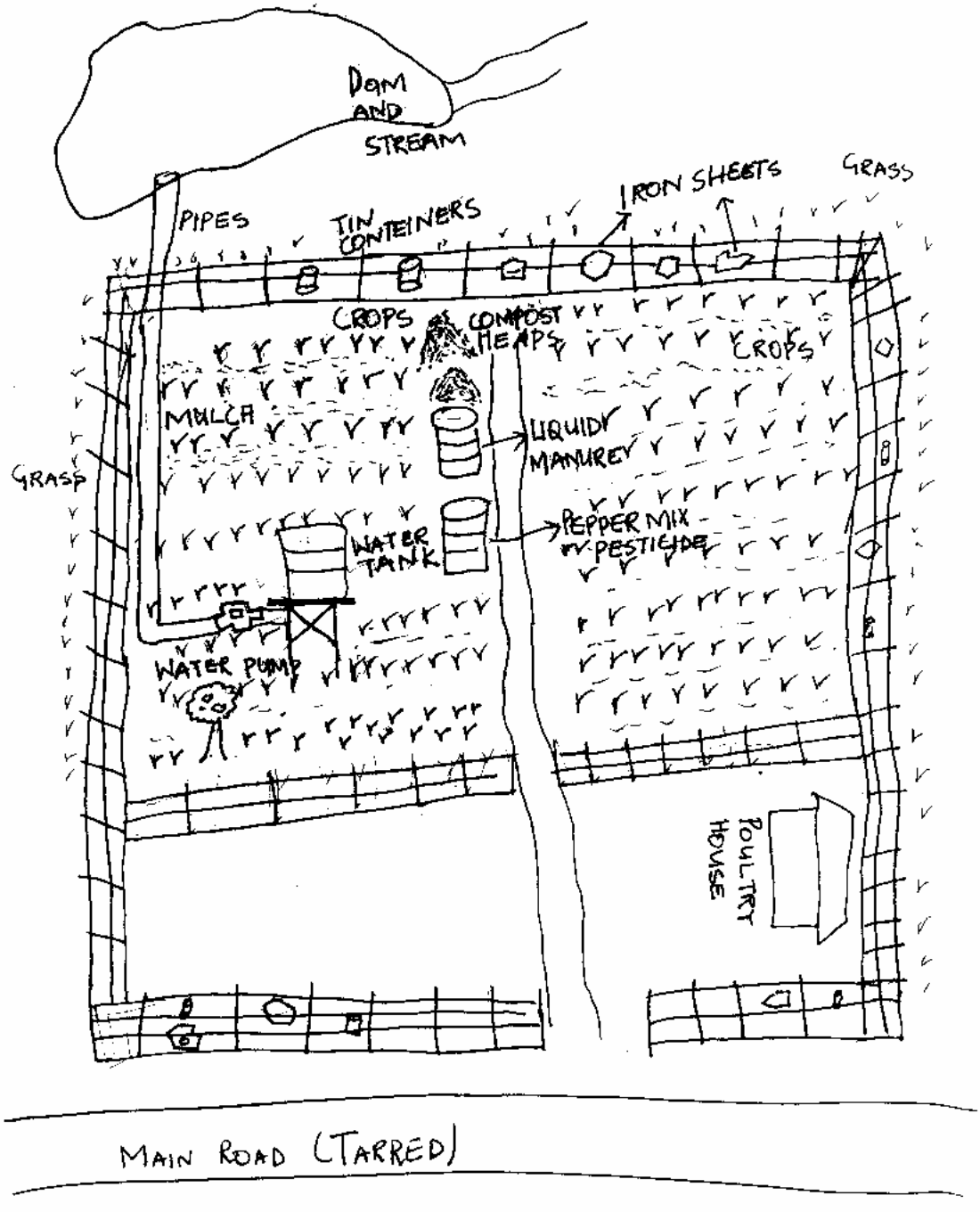
The transect walk was used to collect data for defining evaluation programme in QCGP. This tool was more focused than the brainstorming as the focus was on only observable items which were relevant to the project. This supported the argument made by Chambers (1993) in Vernooy *et al.* (2003) that when using participatory methods it is important to know what is not worth knowing. The SL framework helped in prioritizing the issues to be evaluated and focusing on the relevant data.

Using SL framework elements to define the evaluation programme of MTP enabled the scope to cover, vulnerability context; project assets; transformation structures and processes; project strategies; and project outcomes. The focus of MTP evaluation was previously on project tasks and the vulnerability context factors. The SL framework elements and the MTP tasks and responsibilities included to define the evaluation programme boundaries. The attributes for defining evaluation programme in MTP are captured in appendix 11. This has shown that tools which are currently used in evaluating a programme could be incorporated into the SL framework.

In QCGP the attributes used to define programme evaluation using were the SL framework elements (i.e. vulnerability context; project assets; transformation structures and processes; project strategies; and project outcomes), as it was not feasible to include their customer as it is normally done. The attributes for defining evaluation programme in QCGP are captured in appendix 13. Contrary to the MTP, the QCGP's attributes which

were already used could not be incorporated into the SL framework. However, the challenge was the feasibility of including the attributes.

Figure 6.1: Resource map of Qedidlala community garden project



The data generated through the SL framework was useful to systematically collect and organise the data for scoping evaluation programme in both MTP and QCGP. This is also supported by the argument put forward by Ashley and Carney (1999) that the SL framework could systematically define the project. Using the SL framework elements and incorporating the current practises (as in MTP) helped in ensuring the evaluation is focusing on the broad range of issues. The MTP planning team also scored the SL framework higher in terms of helping them to improve and learn about the programme as well as allowing evaluation to run smooth as shown in table 6.1.

Table 6.1.Matrix ranking: MTP planning team's views on using SL framework to define evaluation programme.

Tool **Attributes**	**SL framework**	**MTP framework**
Smooth process of evaluation	4	2
Learning	5	4
Improving the programme	5	4

Although the field experience has shown that though the SL framework covers broad range of issues it is not exhaustive (see appendix 11 and 13). One participant in MTP also questioned why the SL framework was limited to only five elements. This point is explained by Ashley and Carney (1999) in that the SL framework may overlook some issue critical in development. This is further argued by de Sagte *et al*. (2002) that though the SL framework provides a coherent approach to analysing and understanding developmental challenges, it is not a blue print for analysing developmental issues. There are other frameworks developed specifically to analyse poverty, governance, local economic development (de Sagte *et al*. 2002), which could complement the SL framework.

6.4.2. Challenges of defining evaluation programme

The volume of data collected in both projects (MTP and QCGP) was large (as shown in appendix 11 and 13) and therefore required longer time to analyse. In the case of QCGP this turn interfered with the daily schedule of the participants. There was also no mechanism of deciding which factors should be included or left out during brainstorming session. This confirmed DFID (1999) assertion that the SL analysis is prone to information overload. As stated in earlier section (6.4.1), the information collected was in part the requirements of the SL framework.

The transect walk was used to collect data for defining evaluation programme in QCGP. Although this tool was more focused than the brainstorming, the volume of data remained large. This reinforces the argument that the requirements of the SL framework to focus on the five elements could be the reason for voluminous information.

The transect walk failed to raise issues which could not be observed in the garden. As such the researcher had to ask questions about, structures; project strategies; and the project outcomes and include them in the discussions. The transect walk on its own could not cover all the SL framework elements. Therefore a complementary tool such as discussion can be used together with the transect walk as shown in QCGP. The resource map was drawn by the researchers and presented to the QCGP participants after the transect walk exercise (see figure 6.1) to show the SL framework elements identified.

Clearly, the extensive nature of SL framework could be both the strength and a weakness. As shown in both projects the SL framework helped to cover a wide rage of issues (the strength when a broader view of issues is necessary). However, the time required to focus on all the issues required a longer time (a weakness if you do not have time).

6.4.3. Opportunities of planning evaluation programme

Through the use of the logical framework evaluation goal was produced (see appendix 14 and 16). This showed the broader objectives of evaluation. The purpose served to clarify why evaluation was done. The outputs revealed what need to be delivered by the project. The evaluation programme activities (see appendix 15 and 17) showed the exact actions which were going to be taken in order to achieve the outputs (BOND 2003). This is important in order to ensure that overall programme objectives are clearly stated and measurable (Feuerstein 1986).

In MTP and QCGP the goal and objectives of programme evaluation before the logical framework was used were not clearly stated and therefore difficult to measure. According to the MTP planning team the logical framework helped to maintain order; simply implementation process. Moreover, it was said to be more flexible and easy to share (see table 6.2).

Table 6.2.Matrix ranking: MTP planning team's views on using logical framework for planning evaluation programme

Planning tool **Attributes participants look for in a planning tool**	**Logical framework**	**MTP risk and safety assessment and response plan**
Maintain order	5	5
Simplify implementation	5	3
Easy to share	5	5
Flexibility	5	2

Designing the logical framework in a participatory manner helped the planning team to reach consensus about the evaluation plan as noted in DFID (2006). However, in MTP not all the participants were involved at this stage (because of the process of evaluation they follow). Nevertheless the consensus were reached later were the plan was shared with other participants. The fact of the matter is that whenever it happened, it was before the plan was implemented.

Activities to be done in order to achieve outputs were also generated. These were helpful in charting the way forward towards achieving the goal and objectives of evaluation as argued in (University of Tasmania 2003; Feuerstein 1986). In both MTP and QCGP the activities needed to achieve the outputs were not clearly stated before the logical framework was used.

The assumptions (see appendix 14 and 16) helped in checking external factors which could impact on the progress of the project. This was useful in anticipating the implementation process and therefore made planning activities predictable as noted in DFID (2006). This was a new thing to both MTP and QCGP.

The logical framework matrix summarised the evaluation programme with fewer words (as shown in appendix 14 and 15). Since it was developed in a participatory manner, the views of the participant were incorporated into the evaluation programme plan. This means consensus is reached on the evaluation programme plan. At the end the participants knew exactly what was going to happen and the roles where clear.

6.4.4. Challenges of planning evaluation programme

Designing the evaluation plan using the logical framework was challenging. It forced the participants to align themselves with the guidelines for completing the logical framework matrix (as captured in appendix 10), which they did not have time to understand. However, the inability to comprehend the logical framework cannot sorely be attributed to the incapacity of the participants. The capacity of the researcher (though not an area of focus in this study) to facilitate the use of logical framework to plan programmes could have had an impact on the overall outcomes.

However, DFID (2006) and BOND (2003) argued that the logical framework is adaptable and can be used in different circumstances. Nevertheless, it was noted that the guidelines were not flexible and were technical for participants to understand. This is because as a

planning tool the logical framework is concerned with producing plans which are designed in a specific way (BOND 2003).

Despite ranking the logical framework highly (as shown in table 6.2) the MTP planning team commented that the logical framework was technical and that they could need some guidance to do it again. As planning team had put it, the high ranking was based on the potential of the tool rather than what they could do it or not do with the tool. Therefore, it would seem that although the logical framework has potential to make planning simple, but capacity building would be necessary.

In the case of MTP it was challenging to explain the logical framework matrix to the other members who were not part of the planning team. Identifying assumptions was challenging to all participants. Most of the assumptions needed input from the researcher. It took time and guidance to help them understand what is required on the assumptions. Sometimes the researcher had to suggest ideas to them. This could be attributed to lack of capacity as argued in McAllister (1999); and McAllister and Vernooy (1999) quoted in Vernooy (2005).

6.5. Establishing success indicators

As the SL checklists of indicators used to guide the process of establishing success indicators do not have benchmarks, the benchmarks were negotiated with the projects participants. The opportunities and challenges of using the SL checklists of indicators were noted.

6.5.1. Opportunities of establishing success indicators

Involving participants in negotiating the standards for success indicators helped to focus on local indicators as opposed to national of international standards. The involvement of participants ensured the indicators are acceptable and understood. This was empowering as the participants' knowledge of the project and how things are done was incorporated

into the project plans with guidance from the researcher. The participants' knowledge is also important to be considered as it is as important as the scientific knowledge (Vernooy 2005).

Through the guidance of the SL checklists of indicators (as captured in figure 4.1) reflection was made on the SL framework elements. Vulnerability context factors were then evaluated to check the extent to which the project can withstand or take advantage of them as argued in DFID (1999). This is important to consider whether the project is sustainable in the long run (CASE 2003; DFID 1999). The project assets are important as they are used in productive activities within the project (Ekins *et al.* 1992). There is a need to check if assets are growing or replaced through investment, otherwise they eventually decline (Ekins *et al.* 1992). This was helpful to both MTP and QCGP they never evaluated the some vulnerability context and assets. The MTP evaluation programme evaluated some vulnerability context (see appendix 4). Both MTP and QCGP never evaluated the assets.

The significance of assessing transforming structures and processes is because of their impact on the access to capital, project strategies and decision-making (CASE 2003; DFID 1999). So, MTP and QCGP could reflect on the impact structures and processes have on access to capital, how strategies are designed and the overall process of decision-making. The importance of assessing project strategies is because they consists of the range of activities employed to achieve the project outcomes as explained in (CASE 2003; DFID 1999). The project also evaluated the extent to which the projects outcomes are achieved as suggested in (DFID 1999). This gave the broad picture of where the projects are heading to in terms of achieving the desired outcomes. The success indicators did not reflect of these elements before in both projects. The use of checklist of indicators therefore, was helpful in this regard.

6.5.2. Challenges of establishing success indicators

SL checklist of indicators does not specify definite numbers. In both projects there were no existing standards to measure the indicators. This made generating definite numbers for success indicators challenging. The process of deciding what measure is realistic and attainable was a painstaking process. Moreover, it was challenging for all participants to identify indirect indicators. The MTP planning team also ranked the SL checklists of indicators 4 out of 5. Although, this is high it was lower than other attributes (sees table 6.3). This further confirmed that they

Table 6.3. Matrix ranking: MTP planning team's view on using the SL checklist of indicators to establishing success indicators.

Tool **Attributes of indicators**	**SL checklist of indicators**	**MTP indicators**
Useful	5	5
Practical/realistic	5	5
Feasible/attainable	5	5
Measurable	4	5
On going	5	1

It was also challenging when assessing sustainability as it is used as a success indicator to measure development projects (Helmore & Singh 2001). Since establishing success indicators for the projects needed to reflect a measure of sustainability, elements which interact to attain livelihoods needed to be understood (Helmore & Singh 2001). For this reason the participants struggled to decide on the definite standards. This is because balancing elements of sustainability takes time whereas the participants had little time to look at the elements of sustainability.

6.6. Selecting data gathering methods

In selecting data gathering methods the SL guidelines were used. The guidelines are as follows: methods used should build on the relevant methods currently used; flexibly combine the existing methods with the SL methods in order to meet SL objectives; find a

balance between extractive and empowering methods; and use participatory methods. In using these guidelines, the opportunities and challenges are discussed.

6.6.1. Opportunities of selecting data gathering methods

The application of SL guidelines for selecting data collection ensured that participatory methods are used. In both projects evaluation data has never been collected using the participatory methods. The reason was that they do not know any participatory methods. The methods used to collect data in the projects are documents (i.e. security cards; financial statements; complaints records etc.) and observation.

The application of SL guidelines for selecting data collection ensured that participatory methods are used as recommended in DFID (1999). Two methods were used in most instances to substantiate results as suggested in University of Tasmania (2003). Some participatory methods selected were used in an empowering manner, while some where used in extractive way.

6.6.2. Challenges of selecting data gathering methods

When selecting data gathering methods the methods suggested by participants (methods already used in the projects) required a good record keeping, which was not the case in MTP and QCGP. As a result it was not possible to build on the methods currently used or to flexibly combine them with the SL methods. In QCGP, only observation method was used, but it could not be used as activities for data collection were held at a community centre and not the gardens and therefore not appropriate for the data which was collected. This was in line with the argument in Herman *et al.* (1987) that the best feasible methods should be based on the programme context, processes and outcomes.

The field experience showed that the timing of evaluation had an impact on what methods would be appropriate. Because of the timing of the study the methods already used (e.g. security cards) in MTP could not be used as the educational camps were

already ended. The MTP planning team felt the SL guidelines for selecting data gathering methods were not good in responding to the outcomes they would like to achieve. Though not lowly ranked in this regard (4 out of 5) it was below all other attributes (see table 6.4). However, they could not produce any evidence to show their point.

Table 6.4. Matrix ranking: MTP planning team's view on using the SL guidelines on selecting data gathering methods.

Tools / **Attributes**	**SL guidelines**	**MASCO guidelines**
Depend on the data need	5	5
Based on the programme context	5	5
Based on the programme process	5	5
Depend on the outcomes	4	5

All participants had no knowledge of participatory methods and therefore could not contribute to choosing the methods used for gathering data. The researcher had to take charge of selecting data gathering methods. McAllister (1999) and McAllister and Vernooy (1999) quoted in Vernooy (2005) argued that the kind of information produced through participatory action research activities is the product of the research capacity and experience of the participants. So, it seems the participants would need to be capacitated in participatory methods before they could participate in choosing the methods (participatory) used in collecting data.

6.7. Collecting evaluation data

The evaluation data were collected using the SL guidelines. The guidelines stipulate that data collection be conducted in partnership based on equality, ownership and participation; and that participatory methods should be used. The opportunities and challenges were noted and discussed.

6.7.1. Opportunities of collecting evaluation data

Participants from both MTP and QCGP were actively involved in collecting data and therefore shared their knowledge with the facilitator. As a facilitator the researcher also shared some knowledge and skills with the participants. It was necessary as two-way communication pathway is needed to facilitate participation (SEDAWOG 2003). This is also consistent with DFID (1999) assertion that data collection should be conducted in partnership based on equality, ownership, and participation.

The participatory methods were also able to bridge the information gap as most project documents were either not available or incomplete. For an example the security reports were not available in MTP, but time trend (see appendix 20) and matrix ranking (see appendix 21) exercises were done do bridge the gap. The process of collecting data using participatory methods was never used before and therefore it was an opportunity for participants to learn and empower themselves. The use of two methods to substantiate results showed that the results were consistent. This had been observed in the two projects, for example in the assessment of: MTP tasks and responsibilities (appendix 18 and 19); MTP vulnerability context (appendix 20 and 21); QCGP physical assets (appendix 41 and 42) etc. Participatory methods were also flexible to be used in both an empowering and extractive way. For an instance most matrix ranking and time trends exercises were done in an empowering manner, whereas exercises like the prime mover spectagram were done in an extractive manner.

Participatory methods were adapted to suit the condition of each project. In MTP the assessment of physical assets looked at the trend over two years (see appendix 27) and in QCGP looked at the trend over twelve months (see appendix 41). Ashley and Carney (1999) argued that adaptation in the methods to be used may be required in order to allow for data to be collected as well as empowering the participants. This was useful as rigid plans (which are associated with most quantitative methods) may not fit in with the realities as argued in SEDAWOG (2003). Qualitative data was also valuable in spotting

the trends as the data suggest (see appendix 18, 20, 22, 25, 27, 34, 35, 37, 39, 41, 44 and 49) and as argued in (Blaney & Thibault 2003).

6.7.2. Challenges of collecting evaluation data

Some project documents in MTP were incomplete (e.g. the risk and safety assessment and response plan as captured in appendix 4) and some were not available (e.g. security reports). The challenge posed by scenario described above was how to fill the information gap. Completing the safety and safety assessment and response plan was less challenging (see completed risk and safety assessment response plan in appendix 12). However, on assessing the security situation, it was not possible to go back and collect data using security reports as the educational camps had ended. As a results data collection had to rely on participatory methods.

Table 6.5. MTP participants view on the process of collecting evaluation data

Tools / **Attributes**	**Participatory methods**	**MTP methods**
Manageable	4	4
Simple	3	4

Using participatory methods alone missed on the statistical data quantitative methods could have provided (Mascarenhas *et al*. 1991). The data generated lacked statistical precision of quantitative methods (see appendix 18 to 49 for evaluation data). The data collected using participatory methods only would not be comparable with other projects. This is also highlighted in Mascarenhas *et al*. (1991) that participatory methods had been criticised for being subjective. This often makes data collected through participatory methods not accepted outside the project. Using participatory methods alone impact on the robustness of the data generated. As Armstrong and Francis (2002); and Redefining Progress and Earth Day Network (2002) argued that robust indicators are based on reliable data and are comparable with other similar studies. The MTP participants felt that the participatory methods were not simple to facilitate (see table 6.5), although they

ranked them 3 of 5. This could be attributed to the fat that they had not capacity in participatory methods.

The research was done without building rapport with the participants of QCGP. This limited the collection of sensitive data. In QCGP the project income and personal income could not be easily be separated. So, it became more difficult to get such sensitive data in QCGP, hence the researcher decided not to collect such sensitive data, as Blaney and Thibault (2003) argued that such data may be questionable.

6.8. Analysing and interpreting evaluation data

The collected data was then analysed and interpreted using the SL guidelines. The guidelines stipulate that: different perspectives should be used; idea of dynamism should be embraced; interpretation of evaluation data should strive to understand economic; institutional; social; and environmental sustainability; and that macro-micro issues should be understood. The opportunities and challenges were noted and discussed.

6.8.1. Opportunities of analysing and interpreting data

The MTP participants were able to reflect on the economic; institutional; social; and environmental sustainability of the project; and the macro-micro links between MASCO structures working together in achieving the project outcomes. This was done through using matrix ranking (see table 6.6). This broadly looked at the key elements of sustainability and helped to identify the elements which were not sustainable.

Table 6.6. Matrix ranking: assessment of the sustainability of MTP

Sustainability element	Ranking
Economic	**6**
Institutional	**4**
Social	**8**

Macro-micro links between MASCO structures working together in achieving the project outcomes were assessed. This was done by reflecting on the linkages matrix (see

appendix 31) exercise done in MTP evaluation. The MTP participants ranked SL guidelines on analysing and interpreting evaluation data high in all respects (see table 6.7). They felt that all these guidelines were important in analysing and interpreting evaluation data.

6.8.2. Challenges of analysing and interpreting data

Including different perspectives was not possible. In MTP different perspectives could not be included in the analysis due to logistical reason. The stakeholders (parents and learners) whose perspectives could have been incorporated were too far and scattered. The stakeholder (Masibumbane HIV/AIDS mission) whose perspective could have been incorporated could not participate in the study due to other commitments.

It seems that incorporating different perspectives when interpreting evaluation results requires planning on how the other perspectives could be incorporated as observed in the two case studies (MTP and QCGP). However, such plans would need to be feasible. For an instance the in MTP the learners who attend MASCO educational camps and their parents were scattered all over the Limpopo province, which means more funds would be required to include their perspective. In QCGP the challenge was that Masibumbane HIV/AIDS mission stakeholder did not have time to participate in evaluation process which makes it difficult to include their perspective.

Table 6.7. Matrix ranking: MTP participants view on analysing and interpreting evaluation data following SL guidelines

SL Guidelines	Ranking
Include different perspectives	5
Embrace idea of dynamism	5
Understand economic, institutional, social and environmental sustainability	5
Understand macro-micro issues	5

Embracing the idea of dynamism posed some challenge. The nature of the study (which was a once off research) did not require the analysis to be broad and ongoing as it a precondition for a project to be dynamic. As CASE (2003) argued that the idea of

dynamism could be achieved by making analysis and investigation of issues broad and ongoing. In QCGP the linkage matrix was not done and therefore reflection on the institutional and social sustainability and assessing the macro-micro link could not be done.

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Chapter 7
Conclusions and recommendations

7.1. Introduction

This chapter draws conclusions on the results collected from the two projects – MTP and QCGP. The conclusions are based on the evidence from the research experience. The recommendation for the future studies are given as well as suggestion for the improvements of the two projects.

7.2. Getting the background information

SSI could be used to obtain the background information. The field experience suggests that the SSI could be used to obtain background information about the project, irregardless of the availability of unavailability of the project documents. In MTP there were some project documents although incomplete and in QCGP the project documents were not kept. Where project documents are available the SSI could be used to check whether the project documents are up to date or if there are any unofficial statements made. Field experience also suggests that the success of SSI is influenced by facilitation skills and preparation where interpretation into vernacular languages is required.

7.3. Getting feedback and explaining evaluation and SL concepts

Explaining SL theory and concepts related to the research could be guided by the objectives of the research and by the participants' level of education and understanding. The field has shown that understanding the SL theory and concept is not a pre-condition for using the SL framework when the objective of the research is not social transformation. In QCGP the concepts were not explained, but the research was completed. However, this demands that the facilitator lead the research throughout. This approach is not empowering to the participants.

In MTP the researcher explained the SL theory and concepts with some challenges. However, the failure of the participants to conceptualise the concepts cannot sorely be attributed to their capacity. The researcher's capacity to facilitate is also a factor although it was not evaluated in this study. Therefore, the research objectives and the participants' capacity (in terms of educational level) could be used to determine whether the explaining research concepts would be necessary as shown in the study, bearing in mind the researcher's capacity will also play have an impact in explaining concepts..
As with the findings from the SSI process, success in conveying evaluation and SL concepts is related to facilitation skill and preparation where interpretation is required.

7.4. Defining evaluation programme

SL framework is useful in guiding the systematic collection of data to define evaluation programme. This was demonstrated tables of lists attributes (appendix 11 and 13) in the two projects evaluated (MTP and QCGP). The end product of the exercise of defining evaluation programme was clear attributes to focus on. Collecting the data using the SL framework elements helped to ensure the projects are evaluated in a holistic manner, though not exhaustive.

The SL framework is extensive, and therefore prone to producing voluminous data as shown by the results scoping exercises (appendix 11 and 13). While the participatory methods (such as transect walk) could be used to prioritise evaluation issues and focusing on the relevant data. On their own cannot reduce the volume of data collected. This was demonstrated in QCGP were the transect walk was used, but the volume of data collected remained large.

It would seem the volume of data could be reduced by focusing evaluation programme on one element of the SL framework done another research in Mancini *et al.* (2006). In this research the evaluation focused on evaluating the assets. This option would reduce the volume of data and the time required to analyse data. However, the holistic view of the project would not be achieved.

So, clearly the extensive nature of the SL framework presents opportunities and also poses some challenges at the same time. In one hand, when all elements of the SL framework are evaluated the opportunity of viewing the projects in a holistic manner is presented, although more time is required to analyse the data. On the other hand, when evaluation focuses on one element of the SL framework there is a potential to reduce the volume of data and time required to analyse the data, though sacrificing the holistic view of the projects.

Moreover, the tool to prioritise vulnerability context factors and should be developed over time. The assessment of the vulnerability context in MTP as well as QCGP showed that some of the vulnerability context factors had not changed frequently. Elements which do not change frequently and those which change frequently could be grouped together and focus more frequently on those which change frequently.

7.5. Planning evaluation programme

The logical framework is helpful in producing programme evaluation plan with: goal; purpose; outputs; activities; success indicators; means of verification; and assumption. This was shown by the logical framework matrix developed for both MTP and QCGP and the literature and as noted in literature (appendix 14 and 16).

Designing evaluation programmes using the logical framework requires appropriate guidance for the participants as shown in both projects. In MTP the participants were given explanation on how to develop evaluation plan using the logical framework and with some guidance from the researcher developed the plan. In QCGP the participants had to rely on the researcher to lead the process to develop the plan. So, it would seem as observed in the two projects (MTP and QCGP), that the educational level of the participants impact on the level of involvement of the facilitator.

The logical framework could be facilitated in a flexible manner. This was demonstrated in MTP where participants were active and in QCGP where the participants simply contribute information to help develop the evaluation plan without understanding the details of the logical framework. This was informed by what the participants were able to do. Therefore it follows thus participants' capacity determine how logical framework could be used to develop evaluation plans.

7.6. Establishing success indicators

Success indicators should be negotiated with participants as a matter of principle. This allows for the local indicators which are more understandable and appropriate to be used as demonstrated in the two studies. However, this is challenging when there is no established benchmark.

7.7. Selecting data gathering methods

Incorporating methods already used depend on the whether the methods are relevant as shown in the QCGP case study. The observation method was not relevant in collecting some data. The timing of evaluation programme also had an impact on whether methods already used could be incorporated. In MTP the security cards report for an example could not be used because the educational camps had ended. It therefore seems the relevance of methods and the timing of evaluation are determining factors on what methods could be incorporated.

It is imperative that a balance between empowering and extractive methods should be struck. The empowering methods are participatory in nature as observed in the two studies. Participatory methods should therefore be used. However, it was also shown in the two projects that participatory methods lacked the statistical precision. Using participatory methods alone would therefore affect the robustness of data.

7.8. Collecting evaluation data

Participatory methods should be used in collecting evaluation data. The participatory methods are useful in encouraging participation. As observed in the two case studies (MTP and QCGP), participants were actively involved in gathering evaluation data. More over participatory methods can spot trends as shown in the data collected in the two case studies and the literature. The two studies also showed that participatory methods can be adapted to suit different situations. However, quantitative methods should be used together with participatory methods. This is because participatory methods lack the statistical precision of the quantitative methods which could be used to substantiate data collected through participatory methods. Using two methods is helpful in substantiating the results.

Lack of rapport between the researcher and the participants makes it difficult to approach sensitive issues as shown in QCGP. Therefore it is important to first build rapport before attempting to collect sensitive data. Without rapport the sensitive data collected is likely to be questionable.

7.9. Analysing and interpreting data

Ensuring that the analysis and interpretation of evaluation data incorporate different perspectives requires good timing and good planning. Embracing the idea of dynamism requires a project which has a longer life span as noted in the literature. When the project is done over a short period of time it becomes challenging to embrace dynamism as observed in the two case studies.

Understanding macro-micro link issues when interpreting evaluation data is similarly complex. In MTP the linkage matrix was used as a tool to help reflect on this aspect of a project and it proved to be useful. Therefore, appropriate methods could be used to reflect on the understanding of macro-micro issues.

7.10. Recommendations

The two case studies have shown that SL approach could be used in practice to evaluate developmental projects. The opportunities and the challenges discovered has presented lessons on evaluating projects using SL approach and helped to refine the theory. More studies could be done using different sampling methods to check how they would affect the results. If more a more representative sample is included, generalisation could be made about the opportunities and the challenges of using the SL approach as a tool for evaluating projects.

It is also recommended that the future studies could be done over several cycles of evaluation. The process is captured in figure 2.1. In this process the researcher initially assume a greater role in evaluation process and then gradually withdraw as the project participants are capacitated to implement evaluation process on their own. This will address many challenges highlighted in this study including: capacitating project participants; building rapport; etc.

Other studies could focus on evaluating one element of the SL framework at a time. The advantage of this approach is that evaluation could be done quickly as the volume of data will be reduced substantially. The disadvantage would be the holistic nature of the SL framework will be loss. However, if clarity in one aspect of the programme is sought, then this could be beneficial.

The one of the weaknesses identified in the two projects is weak project record keeping. Lack of project records and incomplete records made evaluation of the projects more challenging. Therefore it is recommended that the project record keeping should be improved to make evaluation simpler.

APPENDICES

Appendix 1: Research process guide

Steps in the process of data collection	Key Questions	Guidelines and/or Methods	Expected Results - Programme (A) and Research (B)
Understanding Project Background	How are programme evaluation boundaries set and how is evaluation programme planned? How are success indicators established? How is data gathering method(s) selected? How is evaluation data collected? How is evaluation data analysed and interpreted?	Secondary data (Programme proposal, programme reports and other programme statements) Semi-structured Interviews	Understanding the way the programme operates. Understanding the way the programme operates and what the best possible approach would be.
Get feedback about the analysis of project evaluation	Did the project evaluation process captured correctly? Is there anything that needed to be added or removed?	Presentations on how the project is evaluated Group discussions	The background information captured is correctly. The background information captured is correctly and participants have an idea of what and how things will be done
Steps in the process of data collection	**Key Questions**	**Guidelines and/or Methods**	**Expected Results - Programme (A) and Research (B)**
Define & plan	What does SL suggests about	The SL approach guides that evaluation	Boundaries of evaluation programme are

evaluation programme	setting the evaluation programme boundaries? How can the current practices be incorporated into the SL approach scoping guidelines?	programme boundaries could focus on any of the following: Livelihood Assets Vulnerability Context Transformation Structures & Processes Livelihood Strategies Livelihood outcomes Combine current practices with SL framework.	set The opportunities and challenges of setting the evaluation programme boundaries to include: Livelihood Assets Vulnerability Context Transformation Structures & Processes Livelihood Strategies Livelihood outcomes And existing tools for scoping the programme
	What does SL suggests about planning evaluation programme? How can the current practices be incorporated into the SL approach planning tools?	Possible SL approach planning tools: Logical Framework and/or any tool used	Evaluation programme is planned showing goal, purpose, outputs, actions with indicators, means of verifications and assumptions The opportunities and challenges of planning evaluation programme using logical framework and other tools used.
Steps in the process of data collection	**Key Questions**	**Guidelines and/or Methods**	**Expected Results - Programme (A) and Research (B)**
Establish Success	How are success indicators	Sustainable Livelihoods checklists of	Success indicators established

Indicator	currently established? How can the current practices of establishing success indicators be done to reflect the SL objectives?	indicators guides that success indicators should evaluate: Whether programmes are resilient to negative and responsive to positive external factors Whether assets grow and are less vulnerable The extent to which the programme can take advantage and influence transformation structures and processes Whether livelihood strategies increases choice, opportunities and diversity The degree to which desired outcome are achieved Negotiate benchmarks with project participants	The opportunities and challenges of establishing success indicators using SL checklists of indicators
Select Data Gathering Method(s)	What does SL approach guides on selecting data gathering method(s)? How can the data gathering method(s) be selected using current practice and SL approach guidelines?	SL approach guides that: Build on the relevant methods currently used Flexibly combine existing methods with SL methods Find a balance between extractive and empowering methods	Data gathering methods are selected The opportunities and challenges of selecting a data gathering method(s) using the SL guidelines
Steps in the process of data collection	**Key Questions**	**Guidelines and/or Methods**	**Expected Results - Programme (A) and Research (B)**
Collect Evaluation Data	What are SL approach's guidelines on collecting evaluation data?	SL approach guides that: Be conducted in partnership based on equality, ownership and participation Use participatory methods	Evaluation data is collected The opportunities and challenges of collecting data using the SL guidelines

	How can the current methods of data collection be flexibly combined with more participatory methods to increase participation and ownership?	Use participatory methods	
Analyse & Interpret evaluation data	What are SL approach's guidelines and methods of analysing and interpreting evaluation data? How can evaluation data be analysed and interpreted using current practices and SL approach methods?	SL approach guidelines: Include different perspectives Embrace the idea of dynamism Understand economic, institutional, social & environmental issues and sustainability Understand macro-micro links issues Combine current practices with SL approach guidelines	Evaluation data analysed The opportunities and the challenges of analyzing evaluation data using the SL guidelines. Evaluation data interpreted The opportunities and the challenges of interpreting evaluation data using the SL guidelines.

Appendix 2: Brief explanation of the methods used

Method	Purpose	Description
Semi-structured interviews	Get background information about the establishment of a programme and how evaluation is conducted	A guided interviewing in which only some of the questions and topics are determined before the interview. Questions arises during the interview which is casual and informal
Brainstorming	Identify list of SL framework elements within the project	Members of the group freely contribute information on a given topic without judging them
Transect walk	Identify assets and vulnerability context	Systematic walks with key informants through an area of interest. The activities include observation; asking; listening; looking; identifying; and seeking problems and possible solution
Time trend	Establish trends of various aspects of a project evaluated	Participants are asked about the changes in various issues identified. Explain how the decrease and increases will be shown.
Matrix ranking	Help participants identify priorities; preferences; trends; on the issues	List the issues to be ranked. Participants are then asked to rank the issues in the columns. Pebbles or sticks could be used to rank and the numbers of pebbles or stick could be added together to get the overall score.
Venn diagrams	Find out the overall importance of	Using the circles to represent people; groups; and institutions. The size and distance from the central circle represent the overall importance of the institution
Seasonal calendar	Explore seasonal constraints and opportunities	Ask participants to use diagrams; tables; etc. to represent quantities and patterns of activities within the project
Task analysis sheet	Identifying functions performed by identified actors within the project	Asking the participants to identify the various functions performed by identified actors in a project. The activity include noting the gaps as well as the overlaps in functions performed
Prime mover septagram	Identify the actors which have more influence in the project	Asking the participants to describe the strength of influence exerted by different actors within the project
Linkage matrix	Linkage between internal and external project structures	Asking the participants to describe the systematic linkages that can be observed between pairs of actors
Impact analysis sheet	Assessing the impact of the of the projects structures on the project	Compares the expected skills the actors need to succeed with the training the actors had in each skill category
Group discussion	To share the information and to discuss issues among the participants	A facilitator guide the discussion and encourages two way communications

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Appendix 3: The profile of MASCO

What is MASCO
The Maths, Science and Commerce Organization is a nonprofits organization established by young graduates and students of various universities with the aim of contributing to the development of science and commerce by educating the youth and by passing over skills to the communities around Limpopo.

Since our formation in 1999 we have reached more than 2000 learners from various background and schools. We receive positive feedback from principals, parents, teachers and learners passing their subjects with flying colours. Our learners are happy learners and this is because of good performance at school. We have contributed to the development of the learners in many other ways that give them advantage in life in general.

A number of our learners are today learners and graduates of various universities and are working in various professional fields. They continue to give the community by passing skills and gathering resources for our organization.
Our vision
Our vision is to be a leading community education provider and solution generator on matters of scientific and commercial concern.
Mission statement
Our mission is to educate African people and to improve the level of Scientific and Technological awareness and the readiness of Africans to be involved in Scientific and technological developments that serves the purpose of solving African problems.

This mission shall be achieved by:

Involving all educated Africans in projects that carry out this mission.
Cooperating with various government departments and societies and organizations that uphold similar visions in Africa or abroad.
Research into African problems; carry out the interventions for them to do so and to serve assistance therefore.
Our Services
Tutoring Projects
MASCO tutoring projects are enrichment classes aimed at supplying skills, values and knowledge to learners in grade 10, 11 and 12. They are supplementary programs that augment what learners achieve in the classroom during normal schooling.

Tutoring programs are done in the form of weekend classes, every Saturdays and educational camps in April, June and September school holidays.

Weekend classes
Weekend classes are held on Saturdays and on other non school days that comes during the school period. Learners are kept busy with problem solving, motivation and life skills.

Educational camps

Camps are held on school vocational days at Mmekwa private school center in Bakenburg. Learners are involved in various educational activities including tutorials in maths, physical science, biology, accounting, economics, business economics, English, Afrikaans, Sepedi, and/or agriculture and motivation and life skills.

Laboratory Projects

A laboratory project is a program aimed at providing scientific skill of performing physical science and biology experiments. There are laboratory facilities at Mokopane i-community projects centres. Learners from various schools will visit in groups and be assisted with laboratory work.

e-Learning centres

e-learning centres are centres equipped with computer and computer resources to enhance learning in science and commercial subjects. These resources include internet, Master Maths, Brainline and other multimedia interactive computer resources. About 10 such centres are expected to assist about 10 000 learners a year throughout Mogalakwena municipality.

Finishing School

A finishing school is a centre for people who could not finish their matric in their time or who could not get satisfactory result that can allow them access into university or other institutions of higher learning. This centre provides learners with an opportunity to rewrite their matric and train them to do well. The centre caters only for science and commercial streams.

Counselling and development

Many learners experience problems in their families, among pears and in society at large that cause them to underachieve or even lose a sense of sense of direction and purpose. Our counselling and development help provide a motivation, support and skills learners need to stay focused in their studies. Our counselling services are available to our learners at all times during the day. A group of our counsellors are always ready to give out their cell phone number and to avail themselves for listening to learner problems and to give advice. We also provide motivational talks and career guidance to learners at various schools during our visits to schools.

Learners who attend our classes are trained on the following aspects: Study skills, conflict management, stress and depression, relationship problems, time management, career planning, communication skills, failure management and change strategies, positive attitude assertiveness skills and other life skills such as HIV/AIDS management techniques.

Our counsellors are young men and women chosen on the basis of their self achievements and positive attitude towards life. We scan our counsellors very carefully through vocational tests and interviews and train them extensively on the above aspects.

Achievements

FNB Lifestart student accounts
In 2004 we invited the FNB to open bank accounts to matriculants in seven schools around Mahwelereng and Madiba villages in Mokopane. Through this effort we managed to assist about 600 learners from different backgrounds.
Take 5
Our project was showcased on the 11th and the 12th (repeat)of September 2006 on SABC Education's take 5 program where it attracted thousands of supporters. It was evident as a repeat was even requested by the viewers and was shown on the 25th and the 26th of September 2006.
2000 beneficiaries
We have up to now helped more than 2000 learners who received various life skills and technical skills that will continue to be useful in life.
MASCO Website
We have launched www.masco.co.za website where we showcase our projects and developments.
Premier's Awards
Our CEO and founder Mr. Molatelo Maremane won the premier's award Platinum price (1st position) under the education category in Limpopo province. This award recognized the excellence in community service and is directly related to the work that he does for MASCO. Mr. Maremane is also contending for the national Presidential Awards.
Jet community awards
On the 27th of August 2007 we were awarded the Jet Community Awards regional awards for region 6 (Covering Swaziland and South Africa's Limpopo and Mpumalanga provinces). We are currently contenders for the overall awards for these awards covering six regions (including five countries viz. South Africa, Lesotho, Swaziland, Botswana and Namibia). We also contended in the overall award covering South Africa, Botswana, Lesotho, Swaziland, and Namibia.

Appendix 4: MTP risk and safety assessment and response plan

Broad Risk Area	**Specific Source of risk**	**Possible Impact**	**Solutions**
Property	Learners, intruders and staff	Damage Theft	
Catering	Food	Food poisoning Allergy Death by Poisoning	
Sexually related	Learners, staff and intruders	Rape Sexual harassment Pregnancy HIV/AIDS	
Health and illness	Chronic illnesses, whether, bacteria, food.	Systemic- Flu Allergies Asthma Epilepsy Ulcer Sinus Food related	
Drugs and alcohol related	Learners and staff	Misconduct Illnesses	
Laboratory related	Chemicals, learners and staff	Explosion Theft Breakage	
Electricity	Electric Power	Electric shock	
Natural Disaster	Storm, fire,	Death and injury Damage to property Shock and distress	
Legal Obligations	Funds raised, human resources, partnership	Court cases Prison CCMA and Labour court	

Appendix 5: Semi-structured interview guiding questions

Understanding the process of programme evaluation

Programme background

Give us a background of the programme: how it started? Why it was initiated? What are the overall project goal and purpose?
Who is funding the programme? What do they expect from the programme?
What support structures and/or services are accessible or provided to the programme?
How often and why do you conduct programme evaluation?

Defining and planning evaluation programme

Defining evaluation programme

Explain the process followed when defining the evaluation programme.
What key attribute of the programme are used to scope evaluation programme? How are they chosen? Why?
Who is responsible and who participates in this process? And why?

Planning evaluation process

Explain the process followed when planning the evaluation programme.
What tools are used to plan evaluation programme? Why are you using those tools?
Who is responsible and who participates in this process? Why?

Establishing success indicators

Explain the process followed when establishing success indicators.
How are standards established? Why?
Who is responsible and who participates in this process? Why?

Selecting data gathering method(s)

Explain the process followed when selecting data gathering method(s).
Who is responsible and who participates in this process? Why?

Collecting evaluation data

Explain the process followed when collecting evaluation data.
What methods are used? Why are you using those methods?

Who is responsible and who participates in this process? Why?

Analysing and interpreting evaluation data

Analysing evaluation data

Explain the process followed when analysing evaluation data.
What methods are used to analyse evaluation data if any? Why?
Who is responsible and who participates in this process? Why?

Interpreting evaluation data

Explain the process followed when interpreting evaluation data.
What methods are used to interpret evaluation data if any? Why?
Who is responsible and who participates in this process? Why?

Appendix 6: Summary of the SSI results with MASCO CEO – Mr Molatelo Maremane.

Understanding the process of programme evaluation

Programme background

Maths, science and commerce organisation (MASCO) started in 1999. University students got together to form an organisation. Most of the students who started the organisation were based at the University of KwaZulu-Natal (then University of Natal) and were mostly from Limpopo province. They recruited other students from Limpopo who are studying at other institutions.

The initial goal and objectives was to find a way to give back to the communities around Limpopo province. Helping grade 12 learners was initially proposed, but now there are several other projects the organisation is involved with (see appendix 4).

The organisation does not have a sponsor. The educational camps are funded by remittance from learners who register and attend the tutoring project. The department of social development helped with how MASCO can get registered as non-profit organisation. Other than that, MASCO forms partnerships and relations with other organisations in pursuing their objectives. MASCO conduct evaluation of their programmes after the end of each programme.

Defining and planning evaluation programme

Defining evaluation programme

The tasks and responsibilities, as well as the risk are looked at. Evaluation checks whether the tasks and responsibilities had been executed properly and ensures the necessary measures are in place to avoid the potential risks that could disrupt the programme.

The representatives of the governing board members; administrators; and tutors would do the evaluation in a meeting set-up. The idea is to have each group of representatives articulating things that need to be given attention.

Planning evaluation process

The representatives of the governing board members; administrators; and tutors would do the evaluation in a meeting set-up. The idea is to have each group of representatives articulating things that need to be given attention. The planning tables are used. The administrators under the leadership of the Chief Executive Officer (CEO) will be tasked to do planning tables. The justification is that it is difficult to have many people involved in planning and it could make meetings longer.

Establishing success indicators

The manner in which the tasks; responsibilities; and the risks and safety measures are implemented constitutes indicator. The standard or what success is or should be is not pre-determined. The consensus will hopefully emerge in meetings. The representatives of the governing board members; administrators; and tutors are involved in this stage in a meeting set-up.

Selecting data gathering method(s)

Since the planning is done by the administrators lead by the CEO, how the data is collected will be decided during planning. The methods used are those they are familiar with.

Collecting evaluation data

The data is collected from various programme documents (e.g. learners' attendance register; administered tests; filled application forms; contracts etc.). The administrators under the leadership of the CEO are responsible for most of the data collection from programme documents. The justification is that the administrators are responsible for compiling most programme documents. The tutors are responsible for administering the learners' attendance register.

Analysing and interpreting evaluation data

Analysing evaluation data

The tables would be done to show averages and trends. The administrators under the leadership of the CEO are responsible.

Interpreting evaluation data

The administrators at the end of evaluation compile a report. The interpretation of data is based on whether the tasks; responsibilities; and risks had been dealt with effectively.

Appendix 7: Summary of the SSI with QCGP members Mr Robert Zuma (group leader) and Mr Michael Thabede

Understanding the process of programme evaluation

Programme background

The project was started after Sarmcol retrenched many people. Level of unemployment increased. The project was therefore started as a way of generating income in order to reduce poverty.

There are currently seven members in Qedidlala community garden project. Each member has a plot to grow crops. The crops are sold to Masibumbane HIV/AIDS mission; local store as well as the community. Masibambane HIV/AIDS mission also supply Qedidlala project with seedlings. Each member contributes thirty rand to the project for maintaining the water pump and other things.

The programme is self funded. Masibambane HIV/AIDS mission supply the project with the seedlings and buy the crops from the project. There is no one to help in the Department of Agriculture as the extension workers are not knowledgeable in organic farming. There is no formal evaluation. However, the group leader does some observation on customer satisfaction about the supply of crops.

Defining and planning evaluation programme

There is no formal evaluation. However, the group leader does some observation on customer satisfaction about the supply of crops. Since there is no formal evaluation the planning is ad hoc.

Establishing success indicators

When customers come to buy in the garden they should find whatever they want.

Selecting data gathering method(s)

Observation method is used to arrive at a conclusion

Collecting evaluation data

Data is collection is done by the project leader through observation.

Analysing and interpreting evaluation data

Analysis and interpretation of evaluation data is done by the project leader in an Ad hoc manner.

Appendix 8: Contrasting MASCO tutoring project[3] evaluation with both Conventional[1] and SL guided[2] evaluation

Phase of Evaluation	**Guidelines/Methods/Tools**	**Participation**	**Outcomes/Outputs**
Defining and Planning	Programme Documents; Interviews with programme participants[1]	Normally lead by an expert evaluator, but programme participants may be interviewed[1]	Boundaries established; Decide on the approach, purpose and process; Roadmap with goals and objectives; Methods to be used and resources required[1]
	Use the SL framework in consultative process[2]	Done in consultation with the stakeholders in a participatory manner[2]	Establish boundaries to include: Vulnerability context, livelihood assets, transformation structures and processes, livelihood strategies and livelihood outcomes;
	Use Logical framework[2]	As participatory as possible	Detailed plan with goal, purpose, outputs, actions with indicators, means of verifications and assumptions[2]
	Tasks and responsibilities and the risks and safety assessment and response plan[3]	Governing board members, administrators and tutors[3]	Decision on the approach, purpose and process are not explicit. Boundaries do not include programme assets; transformation structures and processes; programme strategies; and programme outcomes[3]
	Planning tables[3]	Administrators[3]	No roadmap with goals and objectives; Methods to be used not specified and resources required not mentioned[3]

Phase of Evaluation	**Guidelines/Methods/Tools**	**Participation**	**Outcomes/Outputs**
Establishing Success Indicators	Success indicators should be: Valid; relevant; understandable; appropriate; robust; available and accessible; manageable[1] Checklist of success indicators focus on[2]: Vulnerability context: Programme more resilient to negative external factors and more responsive to positive external factors Livelihoods assets: Assets grow; assets less vulnerable Transformation Structure and Processes (TSP): Extent to which a programme can take advantage and also influence TSP. Livelihood Strategies: Increases in Choice, Opportunities, Diversity Livelihood Outcomes: Degree to which desired outcome are achieved. Framed by the how the programme activities have been implemented. Standards emerge during discussions[3]	Normally lead by an expert evaluator, could be participatory or non participatory[1] Checklist of success indicators done in consultation with the stakeholders[2]. Committee members, administrators and tutors[3]	Success indicators are: valid; relevant; understandable; appropriate; robust; available and accessible; manageable[1] Checklist of success indicators which reflect on : Vulnerability context; livelihoods assets; transformation structures and processes; livelihoods strategies; and livelihoods outcomes[2] Indicator are not explicitly spelt out[3]

Phase of Evaluation	**Guidelines/Methods/Tools**	**Participation**	**Outcomes/Outputs**
Selecting Data Gathering Methods	Use several methods to substantiate the results[1] Feasible methods should be based on the programme context, processes and outcomes[1] Build on relevant methods currently used[2] Flexibly combine existing methods with SL methods to meet SL approach objectives[2] Find a balance between extractive and empowering methods[2] Use participatory methods[2] Use methods proven to be working in the past evaluation[3]	Discretion of an expert evaluator, could be guided by the kind of data collected[1] Done in partnership with stakeholders[2] Committee members, administrators and tutors[3]	Multiple investigating methods[1] Data gathering methods developed based on the current methods combined with participatory methods and are empowering[2] Use quantitative methods and not triangulation[3]

Phase of Evaluation	**Guidelines/Methods/Tools**	**Participation**	**Outcomes/Outputs**
Gathering Evaluation Data	Data collection process should be: Useful; practical; collaborative; systematic; ongoing; accurate; ethical[1] Data source should be: Consistent; reliable, and scientifically accurate[1] Be conducted in partnership based on equality, ownership and participation[2] Use participatory methods[2] Programme documents (attendance register, signed application forms, Learners reports; contracts etc.)[3]	Normally lead by an expert evaluator, could be participatory or non participatory[1] Conducted in partnership with stakeholders and in participatory manner[2] Administrator and Tutors[3]	Collected is: Useful; practical; collaborative; systematic; ongoing; accurate; ethical[1] Data source used is: Consistent; reliable, and scientifically accurate[1] Data gathered through partnership and using participatory methods and ownership of results[2] Data gathered in non-participatory manner[3]

Phase of Evaluation	**Guidelines/Methods/Tools**	**Participation**	**Outcomes/Outputs**
Analyse and Interpret Data	Analysis should show: Frequency counts; averages; totals; themes; ideas; events; personalities; history; trend[1] Interpretation should: Make sense of analysed data; identify connection[1] Include different perspectives[2] Embrace the idea of dynamism[2] Understand economic, institutional, social & environmental sustainability[2] Understand macro-micro links issues[2] Tables (averages and trends); graphs (increase and decrease) [3]	Normally lead by an expert evaluator, summaries of findings could be sent to programme participants for feedback. Done in partnership with stakeholders[2] Administrators[3]	Review collected data and establish; frequency counts; averages; totals; themes; ideas; events; personalities; history; trend and make judgement[1]; Analysis and interpretation should be inclusive of different perspectives; dynamic; reflect on sustainability and the macro-micro links[2] Data reviewed and establishes trends, averages; no judgement made[3]

Appendix 9: Contrasting Qendindlala community gardens project evaluation with both conventional and SL guided evaluation approaches

Phase of Evaluation	**Guidelines/Methods/Tools**	**Participation**	**Outcomes/Outputs**
Defining and Planning	Programme Documents; Interviews with programme participants[1]	Normally lead by an expert evaluator, but programme participants may be interviewed[1]	Boundaries established; Decide on the approach, purpose and process; Roadmap with goals and objectives; Methods to be used and resources required[1]
	Use the SL framework in consultative process[2]	Done in consultation with the stakeholders in a participatory manner[2]	Establish boundaries to include: Vulnerability context, livelihood assets, transformation structures and processes, livelihood strategies and livelihood outcomes;
	Use Logical framework[2]	As participatory as possible	Detailed plan with goal, purpose, outputs, actions with indicators, means of verifications and assumptios[2]
	Supply of produce and feedback from customers[3]	Group leader[3]	Boundaries set, but does not include vulnerability context, programme assets, transformation structures and processes, programme strategies and programme outcomes. No decision on approach, purpose, process[3]
	Ad hoc planning[3]	Group leader[3]	No roadmap with goals and objectives; Methods to be used not specified and resources required not mentioned[3]

Phase of Evaluation	**Guidelines/Methods/Tools**	**Participation**	**Outcomes/Outputs**
Establishing Success Indicators	Success indicators should be: Valid; relevant; understandable; appropriate; robust; available and accessible; manageable[1] Checklist of success indicators focus on[2]: Vulnerability context: Programme more resilient to negative external factors and more responsive to positive external factors Livelihoods assets: Assets grow; assets less vulnerable Transformation Structure and Processes (TSP): Extent to which a programme can take advantage and also influence TSP. Livelihood Strategies: Increases in Choice, Opportunities, Diversity Livelihood Outcomes: Degree to which desired outcome are achieved. Whether the project succeed in supplying vegetables to the hospice and local store[3]	Normally lead by an expert evaluator, could be participatory or non participatory[1] Checklist of success indicators done in consultation with the stakeholders[2]. Group leader[3]	Success indicators are: valid; relevant; understandable; appropriate; robust; available and accessible; manageable[1] Checklist of success indicators which reflect on : Vulnerability context; livelihoods assets; transformation structures and processes; livelihoods strategies; and livelihoods outcomes[2] Indicator s are not explicitly spelt out

Phase of Evaluation	**Guidelines/Methods/Tools**	**Participation**	**Outcomes/Outputs**
Selecting Data Gathering Methods	Use several methods to substantiate the results[1] Feasible methods should be based on the programme context, processes and outcomes[1] Build on relevant methods currently used[2] Flexibly combine existing methods with SL methods to meet SL approach objectives[2] Find a balance between extractive and empowering methods[2] Use participatory methods[2] Use observation method[3]	Discretion of an expert evaluator, could be guided by the kind of data collected[1] Done in partnership with stakeholders[2] Group leader[3]	Multiple investigating methods[1] Data gathering methods developed based on the current methods combined with participatory methods and are empowering[2] Use observation method only[3]

Phase of Evaluation	**Guidelines/Methods/Tools**	**Participation**	**Outcomes/Outputs**
Gathering Evaluation Data	Data collection process should be: Useful; practical; collaborative; systematic; ongoing; accurate; ethical[1] Data source should be: Consistent; reliable, and scientifically accurate[1] Be conducted in partnership based on equality, ownership and participation[2] Use participatory methods[2] Observation	Normally lead by an expert evaluator, could be participatory or non participatory[1] Conducted in partnership with stakeholders and in participatory manner[2] Group leader[3]	Collected is: Useful; practical; collaborative; systematic; ongoing; accurate; ethical[1] Data source used is: Consistent; reliable, and scientifically accurate[1] Data gathered through partnership and using participatory methods and ownership of results[2] Data gathered in non-participatory manner[3]

Phase of Evaluation	**Guidelines/Methods/Tools**	**Participation**	**Outcomes/Outputs**
Analyse and Interpret Data	Analysis should show: Frequency counts; averages; totals; themes; ideas; events; personalities; history; trend[1] Interpretation should: Make sense of analysed data; identify connection[1] Include different perspectives[2] Embrace the idea of dynamism[2] Understand economic, institutional, social & environmental sustainability[2] Understand macro-micro links issues[2] Reflection on the supply of produce[3]	Normally lead by an expert evaluator, summaries of findings could be sent to programme participants for feedback[1] Done in partnership with stakeholders[2] Group leader[3]	Review collected data and establish; frequency counts; averages; totals; themes; ideas; events; personalities; history; trend and make judgement[1]; Analysis and interpretation should be inclusive of different perspectives; dynamic; reflect on sustainability and the macro-micro links[2] Some interpretation done by the group leader[3]

Appendix 10: Guidelines for completing the logical framework matrix

Objectives	**Measurable Indicators**	**Means of verification**	**Important assumptions**
GOAL Wider problem the project will help resolve	Quantitative or qualitative measures for judging timed achievement of goal	Methods and sources which gauge indicators	
PURPOSE The specific objectives which are going to be achieved by the project	Quantitative or qualitative measures for judging timed achievement of purpose	Methods and sources which gauge indicators	External conditions which are necessary to enable project purpose to achieve project goal
OUTPUTS The deliverable results expected from the project to achieve the purpose	Quantitative or qualitative measures for judging timed production of outputs	Methods and sources which gauge indicators	Factors out of the project control which could restrict outputs to achieve project purpose
ACTIVITIES These are the tasks to be done to produce the outputs	**INPUTS:** Necessary means required to implement the activities	Sources of information about the process of the project	The conditions necessary for the implementation of activities

Adapted from Bond 2003

Appendix 11: List of SL attributes used to define evaluation of MTP

SL framework element	**Categories**	**Risks identified**
Vulnerability context	Economic shocks and processes	Financial mismanagement; affordability of the camps to learners; excessive bank charges; undiversified income
	Health and nutrition risks	Food poisoning; Illnesses;
	Demographic risks	Sexually harassment; rape
	Political, legal and social vulnerability	Drugs and alcohol consumption; theft; damage to property; governance and management risks; contractual risks
	Technical risks	Fire; electrical shocks; laboratory accidents
SL framework element	**Categories**	**Assets identified**
Livelihood assets	Human assets	Teaching; general management; security; catering; interpersonal; managing learners residence
	Social assets	Registration with the Department of Social development as non-profit organisation; relations with Mokopane fm, department of social development, local schools, Fundisizwe (NGO – offering different skills training), Harry Oppenheimer (private school),

		Mmekwa private school
	Natural assets	N/A
	Financial assets	Learners remittance; donations
	Physical	Computer; printer; access to a car; access to classes and learners residence; stationery; access to flipcharts stands
SL framework element	**Categories**	**Structures and processes identified**
Transformation structures and processes	**Structures**	MASCO Governing board; Administration; Organising committee; teaching staff; Disciplinary committee
	Processes	Governing; Administration and management; Organising the programme; Teaching; Disciplinary matters
SL framework element	**Strategies identified**	
Livelihood strategies	Marketing strategy; fundraising strategy; security strategy; strategy for maintaining discipline; teaching strategy; data collection strategy for planning and evaluation	
SL framework element	**Outcomes identified**	
Livelihoods Outcomes	Preparing the learners for the grade 12 final examination; preserving and enhancing the reputation and integrity of the programme	

Appendix 12: Completed MTP risk and safety assessment and response plan

Risk Area	**Source of risk**	**Possible Impact**	**Solutions**
Property	Learners, intruders and staff	Damage Theft	Would include disclaimer in the contract Police will deal with it
Catering	Food	Food poisoning Allergy Death by Poisoning	Hire professional caterers Give medication otherwise take to clinic Inform police
Sexually related	Learners, staff and intruders	Rape Sexual harassment Sexual activities	Inform police Inform police Separate boys and girl and do spot check from time to time
Health and illness	Chronic illnesses, weather, bacteria, food.	Flu Allergies Asthma Epilepsy Ulcer Sinus	Take to the clinic
Drugs and alcohol related	Learners and staff	Misconduct Illnesses	Ban drugs and alcohol in the premises and spot checks; Take disciplinary measures
Laboratory related	Chemicals, learners and staff	Explosion Theft Breakage	Monitoring during practical in the laboratory Ensure nothing is taken out of the lab Replacement by the culprit
Electricity	Electric Power	Electric shock	Ensure that the is no exposure to open cables
Natural Disaster	Storm, fire,	Death and injury Damage to property Shock and distress	Have emergency numbers ready and have fire extinguisher (Orientate learners about the use of fire extinguisher and what to do during disaster)

Risk Area	**Source of risk**	**Possible Impact**	**Solutions**
Legal Obligations	Funds raised, human resources, partnership	Court cases Prison CCMA and Labour court	Ensure all legal documents are followed. Hire project manager to oversee the project.
Economic risks	Registration fee Parents socio-economic status	Unaffordable to poor learners. Reduces the number of learners registering	Fundraising and subsidise all learners to make it affordable Make preparations (budgeting study previous trends) for the worst case scenario
Demographic risks	Racial and ethnic segregation Adolescence teenagers	Some learners could lose focus and possible court cases Possible experimentation sex, drugs, alcohol, other disturbance	Draft race and ethnic segregation policy Disciplinary policy to be enforced

Appendix 13: List of SL attributes used to define evaluation of QCGP

SL framework elements	**Categories**	**Risks identified**
Vulnerability context	Vulnerability in Agriculture	Pests attacking crops; Risk of fire destroying the crops
	Economic risks	Increasing petrol and oil price
	Health and nutrition risks	No toilet in the garden
	Political, legal and social vulnerability	Theft of fence and crops
SL framework elements	**Categories**	**SL classification**
Livelihood assets	Human assets	Skills in growing crops; making organic manure; making organic pesticides
	Social assets	Relations with Masibambane HIV/AIDS mission; Department of Agriculture (provincial); local store
	Natural assets	Water from the river
	Financial assets	Money from sales of crops
	Physical assets	Water tank; Water pump; Fence; Land

SL framework elements	Categories	Examples
Transformation structures and processes	**Structures**	Masibumbane; Provincial Department of Agriculture
	Processes	Buy produce; supply seedlings; General support; Training
SL framework elements	**Strategies identified**	
Livelihood strategies	Crop Cultivation strategy; Crop sale strategy; Security strategy	
SL framework elements	**Outcomes identified**	
Livelihoods Outcomes	Generate income	

Appendix 14: Logical framework matrix for evaluation of MTP

Project Description	**Key Indicators**	**Means of Verification**	**Assumptions**
Goal Programme has improved	100% implementation of all the suggested improvement of the previously identified planning and implementation mistakes in the next programme	Programme plan and programme evaluation report	
Purpose Programme management errors reduced	Number of programme planning and implementation mistakes decline by at least 50% at the end of the programme	Programme evaluation report	The programme participants would learn from the mistakes

Project Description	Key Indicators	Means of Verification	Assumptions
Outputs **Masco's evaluation approach**			
Financial performance and management of the programme improves	100% of learners has paid before attending classes 100% of records are accurately kept all the time 100% of monies spend on what was intended all the time	Journals (Time trend; Matrix ranking)	The lesson learnt will be applied in a project
Hot water in residences are satisfactory	90% of learners satisfied with hot water for the duration of the camp	Recorded number of electricity outage experienced; Complains from the learners and questionnaire (Time trend; Matrix ranking)	
Learners regularly attended classes	100% of classes learners are attended classes every day	Attendance register and reports from learners (Time trend; Matrix ranking)	

Project Description	Key Indicators	Means of Verification	Assumptions
Outputs **Masco's evaluation approach**			
Learners are safe and are disciplined in the residence	No single intruder had gained access to the premises for the duration of the camp	Daily spot checks, complains from learners (Time trend; Matrix ranking)	
Learners are disciplined in the residences	No boys or girls crossed over to the girls or boys residence during the night for the duration of the camp	Complaints from learners and staff and security report cards (Time trend; Matrix ranking)	
Learners and staff satisfied with the food served	100% learners had not eloped from the premises for the duration of the camp	Daily spot checks and reports from other learners (Time trend; Matrix ranking)	
	95% of learners and staff satisfied for the duration of the camp	Reports from the learners and staff and catering questionnaires (Time trend; Matrix ranking)	

Project Description	Key Indicators	Means of Verification	Assumptions
Outputs **SL approach (Vulnerability context)**			
Cases of vandalism had been reported and resolved	All vandalism cases are reported and resolved for the duration of the camp	Security report card (Time trend; Matrix ranking)	The lesson learnt will be applied in a project
Cases of theft had been reported and resolved	All theft cases are reported and resolved for the duration of the camp	Security report card (Time trend; Matrix ranking)	
Health risks cases had been addressed appropriately	All the health risk cases had been attended to and resolved for the duration of the camp	Health and medical cases register (Time trend; Matrix ranking)	
Drugs and alcohol had not been consumed in the	No drugs and alcohol had be used and consumed in the premises for the duration of the camp	Record of misbehaviour related to drugs and alcohol; disciplinary hearing results (Time trend; Matrix ranking)	

Project Description	Key Indicators	Means of Verification	Assumptions
Outputs **SL approach (Vulnerability context)**			
Laboratory accidents risks had been reduced	There is less than 5 minor laboratory accidents for the duration of the camp	Lab rules; sign and procedure visible in the lab; register of lab incidents Security report card (Time trend; Matrix ranking)	
Electrical shock risks had been reduced	There is no incident of electric shock for the duration of the camp	Inspection of electric power sockets (Time trend; Matrix ranking)	
Fire risks had been reduced	There is no incidence of fire for the duration of the camp	Fire extinguishers in place and working order; Workshop on how to extinguish fire; Procedures for using fire extinguisher pasted next to the extinguisher (Time trend; Matrix ranking)	

Project Description	Key Indicators	Means of Verification	Assumptions
Outputs **SL approach (Vulnerability context)**			
Contractual disputes had been avoided	There had been no contractual dispute for the duration of the camp	Inspect contracts (venue and accommodation, catering; security; stationery supplier; study materials); Employment contracts; Disclaimer in case of injury or death (Time trend; Matrix ranking)	

Project Description	Key Indicators	Means of Verification	Assumptions
Outputs **SL approach (Vulnerability context)**			
Tutoring project had been affordable to learners from poor background	20 learners from the poor background had been allowed to attend for free in each camp	Municipal statistics; Programme records (Time trend; Matrix ranking)	
The bank charges had been low	MASCO use the financial package which offers the lowest bank charges	Bank statements (Time trend; Matrix ranking)	
There had been no financial mismanagement	There is no single incidence of financial mismanagement for the duration of the camp	Audits report; income and expenditure statements (Time trend; Matrix ranking)	
Project Description	**Key Indicators**	**Means of Verification**	**Assumptions**
Outputs **SL approach (Financial Assets)**			
Remittance from learners had grown	The value of remittance from learner has grown each year	Financial statements (bank statements and office records) (Time trend; Matrix ranking)	
Donations to MASCO had grown	Increase in number and value of donations received every year	Proposals (letters for donations); Financial statements (bank statements and office records) - (Time trend; Matrix ranking)	

Project Description	Key Indicators	Means of Verification	Assumptions
Outputs **SL approach (Social Assets)**			
MASCO had continued to be registered with the Department of Social Development	Registration certificate	Observation	
The constitution had improved	Number of amendments made every year	(Venn diagrams; Matrix ranking)	
Relations with Mokopane fm had grown	There are at least two contacts every for month	(Venn diagrams; Matrix ranking)	
Relations with the Department of Social Development had grown	There are at least two contacts every month	(Venn diagrams; Matrix ranking)	
Project Description	**Key Indicators**	**Means of Verification**	**Assumptions**
Outputs **SL approach (Social Assets)**			
Relations with local schools had grown	There are at least two contacts every month	(Venn diagrams; Matrix ranking)	
Relations with Fundisizwe had grown	There are at least two contacts every month	(Venn diagrams; Matrix ranking)	
Relations with Harry Oppenheimer private school had grown	There are at least two contacts every month	(Venn diagrams; Matrix ranking)	
Relations with Mmekwa private school had grown	There are at least two contacts every month	(Venn diagrams; Matrix ranking)	

Project Description	Key Indicators	Means of Verification	Assumptions
Outputs **SL approach (Human Assets)**			
Teaching skills had grown	There is at least one training and at least two months equivalent of practical experience for the members of MASCO every year	(Time trend; Matrix ranking)	
Management skills had grown	There is at least one training and at least two months equivalent of practical experience for the members of MASCO every year	(Time trend; Matrix ranking)	
Security skills had grown	There is at least one training and at least two months equivalent of practical experience for the members of MASCO every year	Check the qualification of security personnel (Time trend; Matrix ranking)	
Project Description	**Key Indicators**	**Means of Verification**	**Assumptions**
Outputs **SL approach (Human Assets)**			
Interpersonal skills had grown	There is at least one training and at least two months equivalent of practical experience for the members of MASCO every year	(Time trend; Matrix ranking)	
Catering skills had grown	There is at least one training and at least two months equivalent of practical experience for the members of MASCO every year	(Time trend; Matrix ranking)	
Residence management skills had			

grown	There is at least one training and at least two months equivalent of practical experience for the members of MASCO every year	(Time trend; Matrix ranking)	
Project Description	**Key Indicators**	**Means of Verification**	**Assumptions**
Outputs **SL approach (Physical Assets)**			
Computer had been in a good condition	Computer had not broken down throughout the year	(Matrix ranking; Time trend)	
Printers had been in good condition	Number and Printers had not broken down throughout the year	(Matrix ranking; Time trend)	
Access to borrowed car maintained	There is a good chance of extending access	(Matrix ranking; Time trend)	

Project Description	Key Indicators	Means of Verification	Assumptions
Outputs **SL approach (Physical Assets)**			
Access to hired classes with furniture maintained	There is a good chance of extending access	(Time trend; Matrix ranking)	
Access to hired accommodation with furniture maintained	There is a good chance of extending access	(Time trend; Matrix ranking)	
Stationery had grown	There is a good chance of extending access	(Time trend; Matrix ranking)	
Access to hired flip charts was maintained	There is a good chance of extending access	(Time trend; Matrix ranking)	

Project Description	Key Indicators	Means of Verification	Assumptions
Outputs **SL approach (Transformation structures and processes)** The project has taken advantage of the structures and processes and had influenced how the structures and processes function **Structures** Governing board; Administration staff; Teaching staff; Organising committee; Disciplinary committee **Processes** Governance; Administration; Teaching; Organising a project; Disciplinary hearings	The roles; responsibilities; relations and rights of the: Governing board; Administration staff; Teaching staff; Organising committee; Disciplinary committee in relation to the gardening project	(Prime mover septagram; task analysis matrix; linkage matrix; impact analysis sheet)	

Project Description	Key Indicators	Means of Verification	Assumptions
Outputs **The SL approach (Programme strategies**			
Marketing strategy had been diverse; increased choice and opportunities	There is more than one way of marketing the project throughout the year	(Time trend; Matrix ranking)	
Fundraising strategy had been diverse; increased choice and opportunities	There is more than one way raising fund for the project throughout the year	(Time trend; Matrix ranking)	
Security strategy had been diverse; increased choice and opportunities	There is more than one way of providing security to the learners throughout the camps	(Time trend; Matrix ranking)	

Project Description	Key Indicators	Means of Verification	Assumptions
Outputs **The SL approach (Programme strategies)**			
Strategy for maintaining discipline strategy had been diverse; increased choice and opportunities	There is more than one way of disciplining learners throughout the camp	(Time trend; Matrix ranking)	
Teaching strategy had been diverse; increased choice and opportunities	There is more than one way of teaching the learners throughout the camp	(Time trend; Matrix ranking)	
Project Description	**Key Indicators**	**Means of Verification**	**Assumptions**
Outputs **SL approach (Programme outcome)**			
Learners had been prepared for the final grade 12 examination	95 % of the learners had passed the tests given at the end of the camps	(Matrix ranking; Time trend)	
The reputation and integrity of the project had been preserved and enhanced	There has been at least one positive story in the local media about the project every year	(Matrix ranking; Time trend)	

Note: Only participatory methods were used

Appendix 15: Activities for the evaluation of MTP

Activities	**Resources**	**Participatory Method (s)**	**Responsibility**
Evaluate the vulnerability context	Flipchart; Markers	Time trend; Matrix ranking	Researcher: facilitate Project members: participates in contributing information and sharing knowledge
Evaluate the programme assets	Flipchart; Markers	Time trend; Matrix ranking; Venn diagrams; Seasonal calendar	Researcher: facilitate Project members: participates in contributing information and sharing knowledge
Evaluate the transformation structures and processes	Flipchart; Markers	Prime mover septagram; task analysis matrix; linkage matrix; impact analysis sheet	Researcher: facilitate Project members: participates in contributing information and sharing knowledge
Evaluate programme strategies	Flipchart; Markers	Time trend; Matrix ranking	Researcher: facilitate Project members: participates in contributing information and sharing knowledge
Evaluate programme outcomes	Flipchart; Markers	Time trend; Matrix ranking	Researcher: facilitate Project members: participates in contributing information and sharing knowledge

Appendix 16: Logical framework matrix for evaluation of QCGP

Project Description	**Key Indicators**	**Means of Verification**	**Assumptions**
Goal The programme had improved	All identified problems can be addressed by the project participants or referred to the relevant structures for assistance	Observation	
Purpose Smooth running of a programme ensured	The are less than 5 problems pertaining to the project which cannot be resolved immediately throughout the year	Observation	Smooth running of a programme will lead to its improvement
Project Description	**Key Indicators**	**Means of Verification**	**Assumptions**
Outputs **SL approach (Vulnerability context)**			
The crops had not been stolen	None of the crops had not been stolen until they are sold	Observation (Time trend; Matrix ranking)	Assessment will reveal the challenges facing the programme
There had been low rate of pests infestation	Low rate of pest infestation per planting season	Observation (Time trend; Matrix ranking)	
The fire had not burnt the crops	None of the crops had not been burnt until they are sold	Observation (Time trend; Matrix ranking)	
Toilet is built	There are plans to decide what the way forward will be towards building the toilet in the next three months	Decision taken	

Project Description	Key Indicators	Means of Verification	Assumptions
Outputs **SL approach (Vulnerability context)**			
Petrol and oil price had not been detriment to the programme	The increase in the contribution fee by each participant every year	Observation (Time trend; Matrix ranking)	
The fence had not been stolen	The fence is intact throughout the year	Observation (Time trend; Matrix ranking)	
Project Description	**Key Indicators**	**Means of Verification**	**Assumptions**
Outputs **SL approach (Financial Assets)**			
Money from vegetable sales had increased	The money from the sales of vegetables increases every year	(Time trend; Matrix ranking)	
Outputs **SL approach (Natural Assets)**			
Water supply from the river had been uninterrupted	The water supply is uninterrupted throughout the year	(Time trend; Matrix ranking)	

Project Description	Key Indicators	Means of Verification	Assumptions
Outputs **SL approach (Social Assets)**			
Relation with Masibumbane HIV/AIDS mission had grown	The is at least one contact every month	(Time trend; matrix ranking)	
Relations with Department of Agriculture had grown	The is at least one contact every month	(Time trend; matrix ranking)	
Relations with Municipality had grown	The is at least one contact every month	(Time trend; matrix ranking)	
Project Description	**Key Indicators**	**Means of Verification**	**Assumptions**
Outputs **SL approach (Human Assets)**			
Skills in growing crops had grown	There is at least two trainings a year	(Time trend; matrix ranking)	
Skills making organic manure had grown	There is at least one training a year	(Time trend; matrix ranking)	
Skills in making organic pesticides had grown	There is at least one training a year	(Time trend; matrix ranking)	

Project Description	Key Indicators	Means of Verification	Assumptions
Outputs **SL approach (Physical Assets)**			
Water tank had been in good condition	Water tank had been in good condition throughout the year	(Time trend; Matrix ranking)	
Water pumping machine had been in good condition	Water pump had been in good condition (not broken down) throughout the year	(Time trend; Matrix ranking)	
Fence had been in good condition	Fence had been in good condition throughout the year	(Time trend; Matrix ranking)	
Land had been in good condition	The soil had not eroded throughout the year	Observation	
Project Description	**Key Indicators**	**Means of Verification**	**Assumptions**
Outputs **SL approach (Transformation structures and processes)**			
The project has taken advantage of the structures and processes and had influenced how the structures and processes function. **Structures:** Masibumbane HIV/AIDS mission Department of Agriculture	The roles; responsibilities; relations and rights of the project and Local Municipality; Masibumbane HIV/AIDS mission; and the Provincial Department of Agriculture in relation to the gardening project	(Prime mover septagram; task analysis matrix; linkage matrix; impact analysis sheet; impact analysis sheet)	

Processes: Buying produce Supplying seedlings Training; Providing general support			
Project Description	**Key Indicators**	**Means of Verification**	**Assumptions**
Outputs **The SL approach (Programme strategies**			
Cultivating strategy had been diverse, increased choice and opportunities	There are more than one way of cultivating crops every planting season	(Seasonal calendar; Matrix ranking)	
Crop sales strategy had been diverse, increased choice and opportunities	There are more than one place to sell crops every harvesting season	(Seasonal calendar; Matrix ranking; Time trend)	
Security strategy had been diverse, increased choice and opportunities	There are more than one way of providing security to crops and fence through out the year	(Seasonal calendar; Matrix ranking; Time trend)	

Project Description	Key Indicators	Means of Verification	Assumptions
Outputs **SL approach (Programme outcome)** The income had been generated	Participants had enough cash to maintain the households	(Matrix ranking; time trend)	

Note: Only participatory methods were used

Appendix 17: Activities for the evaluation of QCGP

Activities	**Resources**	**Participatory Method (s)**	**Responsibility**
Evaluate the vulnerability context	Flipchart; Markers	Time trend; Matrix ranking	Researcher: facilitate Project members: participates in contributing information and sharing knowledge
Evaluate the programme assets	Flipchart; Markers	Time trend; Matrix ranking; Venn diagrams	Researcher: facilitate Project members: participates in contributing information and sharing knowledge
Evaluate the transformation structures and processes	Flipchart; Markers	Prime mover septagram; task analysis matrix; linkage matrix; impact analysis sheet	Researcher: facilitate Project members: participates in contributing information and sharing knowledge
Evaluate programme strategies	Flipchart; Markers	Matrix ranking; Seasonal calendar	Researcher: facilitate Project members: participates in contributing information and sharing knowledge
Evaluate programme outcomes	Flipchart; Markers	Time trend; Matrix ranking	Researcher: facilitate Project members: participates in contributing information and sharing knowledge

Appendix 18: Time trend: How MTP tasks and responsibilities had been performed from 2002 to 2007

Years / **Programme aspect**	**2004**	**2005**	**2006**	**2007**
Record are accurately kept	**2**	**3**	**3**	**3**
Learners paid before the attending classes	**4**	**4**	**5**	**5**
Expenditure list adhered to	**3**	**3**	**4**	**4**
Satisfaction with hot water	**-**	**-**	**3**	**4**
Learners attendance	**3**	**3**	**5**	**5**
Learners safety in residence	**-**	**-**	**5**	**5**
Learners discipline in residence	**-**	**-**	**4**	**4**
Food satisfaction	**-**	**-**	**4**	**5**

(-)= data not available

Appendix 19: Matrix ranking: MTP aspect which had improved the most

Programme aspect	**Ranking**
Record are accurately kept	**8**
Learners paid before the attending classes	**12**
Expenditure list adhered to	**8**
Satisfaction with hot water	**6**
Learners attendance	**8**
Learners safety in residence	**8**
Learners discipline in residence	**6**
Food satisfaction	**8**
TOTAL	**64**

Appendix 20: Time trend: rate of vulnerability context factors occurred in MTP 2006 and 2007 camps

Years / **Vulnerability context**	**2006**	**2007**
Vandalism	1	1
Theft	2	2
Health risks	3	3
Drugs and alcohol consumption	2	2
Laboratory accidents	1	1
Electrical accidents	1	1
Fire accidents	1	1
Contractual disputes	1	1
Less affordability of fees	3	3
Excessive bank charges		
Financial mismanagement	2	2

Appendix 21: Matrix ranking: estimates of vulnerability context factor which had the most impact on the MTP in 2006 and 2007

Vulnerability context	**Ranking**
Vandalism	6
Theft	6
Health risks	11
Drugs and alcohol consumption	4
Laboratory accidents	4
Electrical accidents	6
Fire accidents	6
Contractual disputes	4
Less affordability of fees	7
Financial mismanagement	6
TOTAL	100

Appendix 22: Time trend: the growth of MTP financial assets from 2004 to 2007

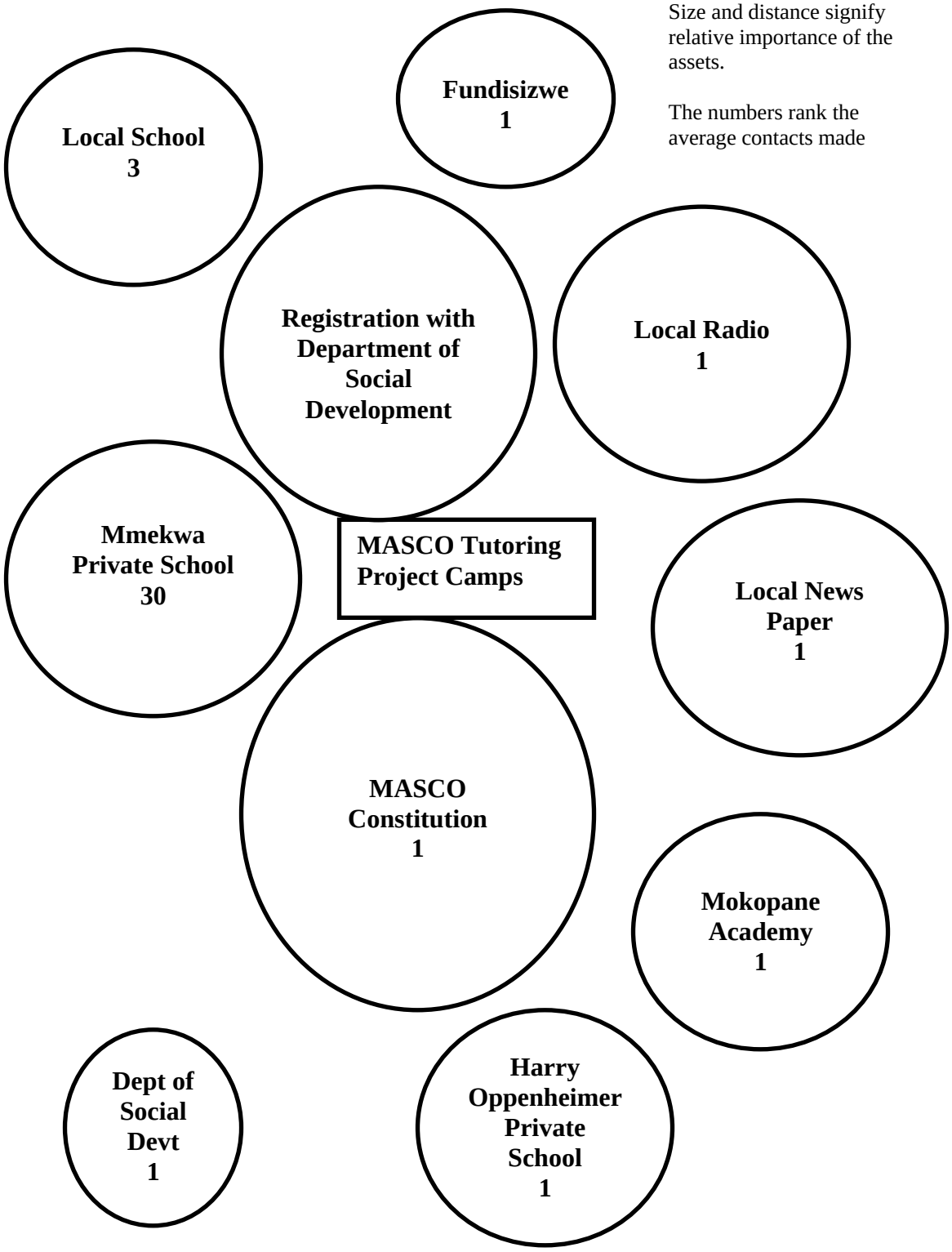
Years / **Source of financial**	**2004**	**2005**	**2006**	**2007**
Remittance from learners	2	3	3	4
Donations	-	-	-	-

Appendix 23: Seasonal calendar: the distribution of learners' remittance per camp

2006 Camps / **Financial aspect**	**Easter**	**Winter**	**Summer**
Remittance from learners	3	5	3
Donations	-	-	-

2007 Camps / **Financial aspect**	**Easter**	**Winter**	**Summer**
Remittance from learners	3	5	3
Donations	-	-	-

Appendix 24: Venn diagram: relative importance of the asset to the MTP and number of contacts made with organisations identified



Appendix 25: Time trend: average months of practical experience MASCO members had using the skills

Years	**2006**	**2007**
MASCO human assets		
Teaching skills	6	9
Management skills	4	4
Interpersonal skills	4	4
Residence management skills	2	2

Appendix 26: Matrix ranking: MTP human assets which recorded the most growth rate over the two year period

MASCO human assets	**Ranking**
Teaching skills	8
Management skills	6
Interpersonal skills	6
Residence management skills	4

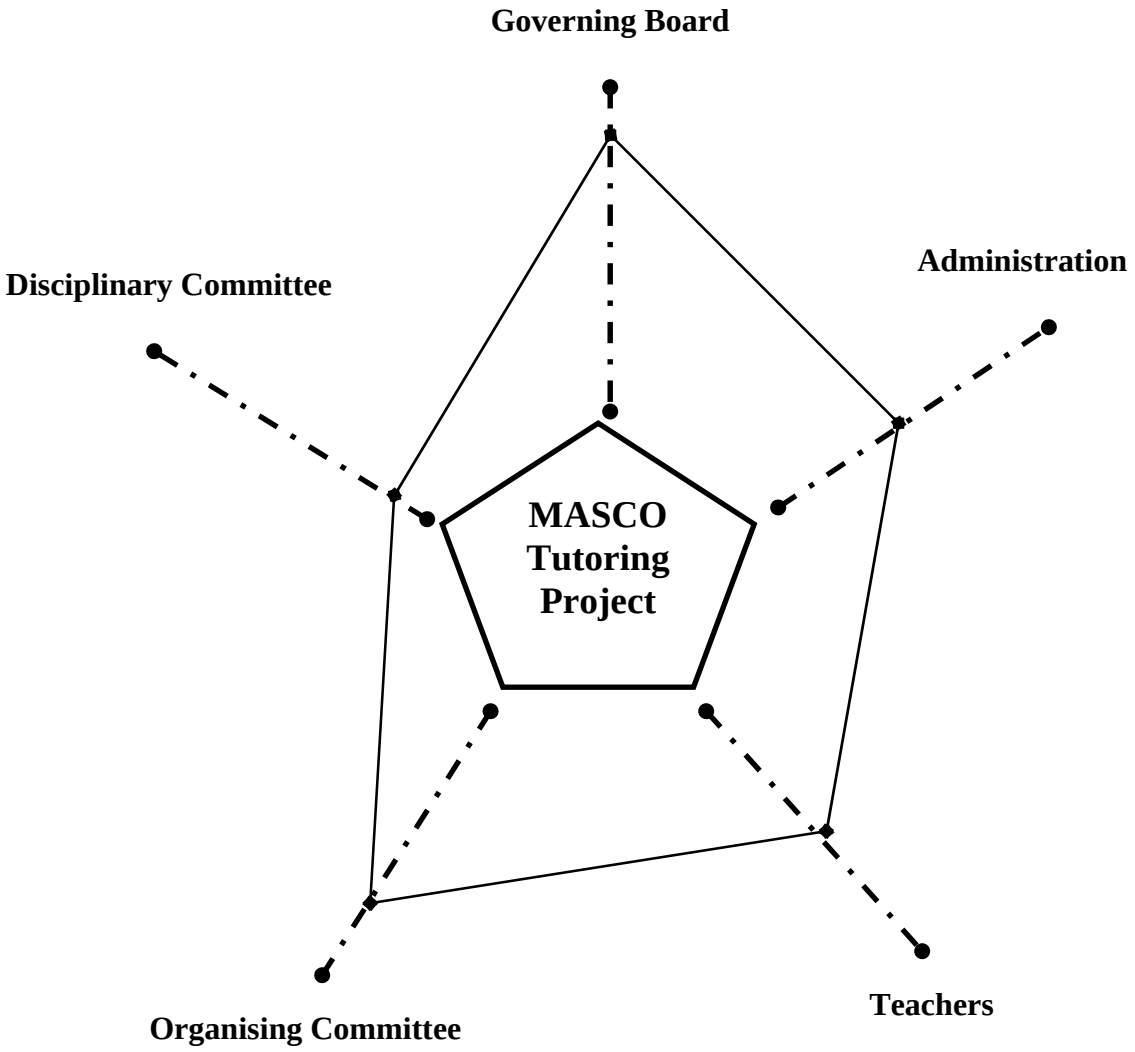
Appendix 27: Time trend: the growth of MASCO physical assets

Years / **MASCO physical assets**	**2006**	**2007**
Computer	A	1
Printer	A	1
Classrooms	A	A
Residence	A	A
Car	A	A
Flip charts stand	A	A

Appendix 28: Matrix ranking: MTP physical asset which recorded the highest growth in value from 2006 to 2007

MASCO physical assets	**Ranking**
Computer	8
Printer	8
Classrooms	5
Residence	5
Car	5
Flip charts stand	5

Appendix 29: Prime mover septagram showing MASCO structure with strong influence on the project.



Appendix 30: Task analysis sheet: functions of the various actors within MTP

Tasks **Actors**	**Governing**	**Programme Administration**	**Teaching**	**Organise Camps**	**Maintain Discipline**
Governing Board	**YES**	**YES**	**NO**	**YES**	**YES**
Tutors	**NO**	**YES**	**YES**	**NO**	**YES**
Organising Committee	**NO**	**YES**	**NO**	**YES**	**NO**
Administrators	**NO**	**YES**	**NO**	**YES**	**YES**
Disciplinary Committee	**NO**	**YES**	**NO**	**NO**	**YES**

Appendix 31: Linkage matrix: linkages between MASCO structures

Actors	**Governing Board**	**Tutors**	**Organising Committee**	**Administrators**	**Disciplinary Committee**
Governing Board		**2**	**2**	**2**	**2**
Tutors	**2**		**1**	**2**	**3**
Organising Committee	**2**	**1**		**2**	
Administrators	**2**	**2**	**2**		**2**
Disciplinary Committee	**2**	**3**		**2**	

1 = Limited informal linkages; 2 = Strong formal or informal linkages; 3 = Limited formal linkages; Empty box = no link

Appendix 32: Impact analysis sheet: impact MASCO structures are making on MTP

Skills type **Actors**	**Leadership**	**Project management**	**Teaching**	**General management or administration**	**Conflict management**	**Negotiation**
Governing board	1	1	1	1	1	1
Administrative staff	1	1	1	1	1	1
Teaching staff	1	1	1 & 2	1	1	1
Organising committee	1	1	1	1	1	1
Disciplinary committee	1	1	1	1	1	1

Appendix 33: Matrix ranking: the extent to which MTP strategies for implementing the project increase diversity; choice; and opportunities

SL approach standards / **Strategies**	**Increase in diversity**	**Increase choice**	**Increase opportunities**
Marketing strategy	4	4	4
Fundraising strategy	1	1	1
Security strategy	2	2	2
Teaching strategy	3	3	3
Discipline maintaining strategy	2	2	2

Appendix 34: Time trend: changes in MTP strategies from 2006 to 2007

Years	**2006**	**2007**
MASCO strategies		
Marketing strategy	3	4
Fundraising strategy	1	1
Security strategy	2	3
Teaching strategy	1	1
Discipline maintaining strategy	1	1

Appendix 35: Time trend: the extent to which MTP outcomes are achieved

Years	**2006**	**2007**
Programme aspect		
Learners prepared	4	5
Programme reputation and integrity enhanced	5	5

Appendix 36: Matrix ranking: the most achieved MTP outcome.

Programme aspect	**Ranking**
Learners prepared	5
Programme reputation and integrity enhanced	7

Appendix 37: Time trend: rate at which vulnerability context factors had occurred in the two planting seasons at QCGP

Years / **Vulnerability context factors**	**Planting season 1 (July to November)**	**Planting season 2 (December to May)**
Pests	2	2
Fire	1	1
Petrol and oil price		
Theft of fence	3	3
Theft of crops	3	3

Appendix 38: Matrix ranking: vulnerability context factor which had the highest impact on QCGP

Vulnerability context factors	**Ranking**
Pests	3
Fire	1
Petrol and oil price	5
Theft of fence	4
Theft of crops	4
Lack of toilet	7

Appendix 39: Time trend: estimated growth rate of the financial assets of QCGP from 2006 to 2007.

Years	**2006**		**2007**	
Sources of finance	**Harvest season 1 (March; April and May)**	**Harvest season 2 (November and December)**	**Harvest season 1 (March; April and May)**	**Harvest season 2 (November and December)**
Sales to Masibumbane	2	2	3	3
Sales to the local store	1	1	1	1
Sales to the community	1	1	1	1

Appendix 40: Matrix ranking: QCGP source of finance which contributed the most in terms of value

Sources of finance	**Ranking**
Sales to Masibumbane	6
Sales to the local store	3
Sales to the community	3

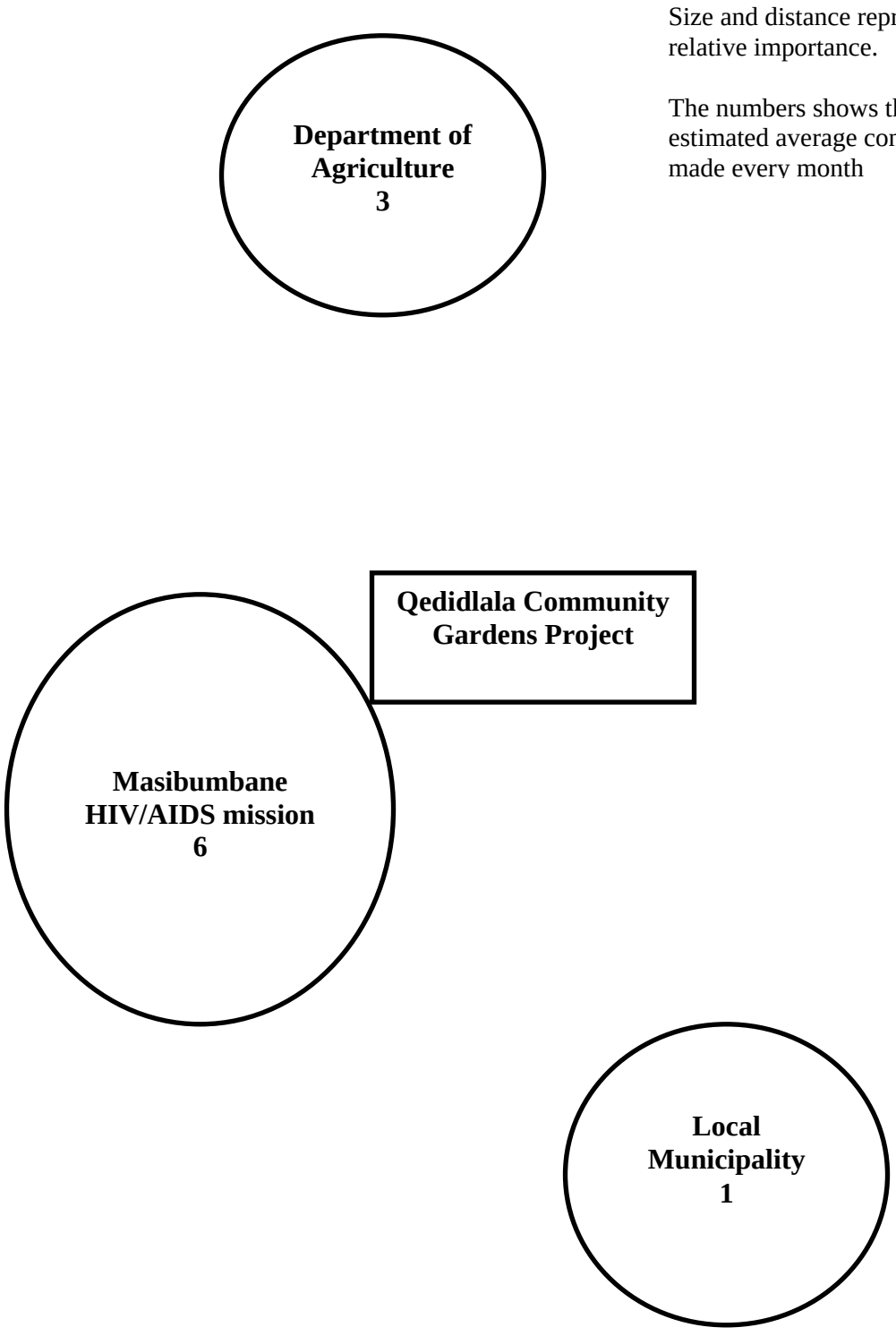
Appendix 41: Time trend: conditions of the physical assets and the supply of water throughout the year (2007)

Months / **Assets**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**
Water supply	5	5	5	5	4	4	4	4	5	5	5	5
Water tank	5	5	5	5	5	5	5	5	5	5	5	5
Water pumping machine	5	5	5	5	5	5	5	5	5	5	5	5
Fence	5	5	5	5	5	5	5	5	5	5	5	5
Land	4	4	4	4	4	4	4	4	4	4	4	4

Appendix 42: Matrix ranking: current physical condition of physical and natural assets of QCGP

Assets	**Ranking**
Water tank	5
Water pumping machine	4
Fence	4
Land	4

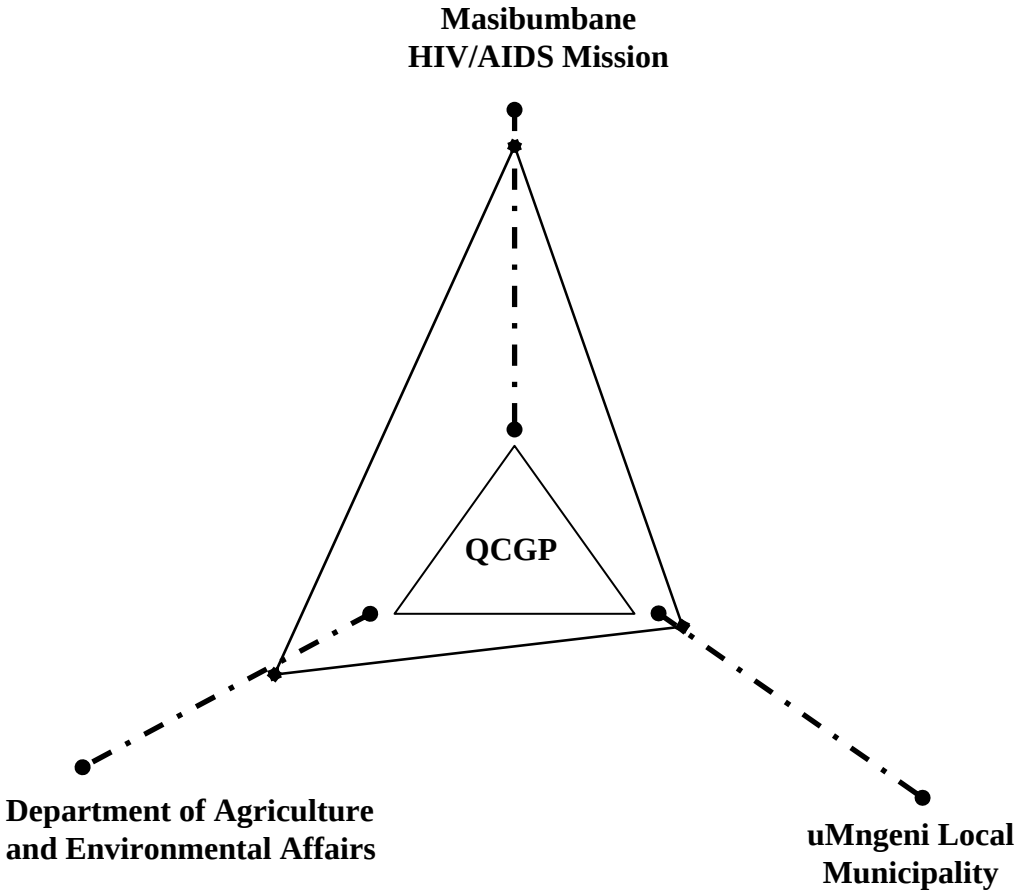
Appendix 43: Venn diagram - growth of QCGP social assets and estimated number of contacts made on a monthly basis with identified organisation



Appendix 44: Time trend - estimated the number of training the attended by QCGP members in 2007.

Year	**2006**	**2007**
Human assets		
Skills in growing crops	0	1
Skills in making organic manure	0	0
Skills in making organic pesticides	0	0

Appendix 45: Prime mover septagram: structure with strong influence on the QCGP



Appendix 46: Task analysis sheet: functions of the various actors in QCGP

Tasks / Actors	Training	Buy produce	Supply seedling	General support
Masibumbane	**NO**	**YES**	**YES**	**YES**
Department of Agriculture	**YES**	**NO**	**NO**	**NO**

Appendix 47: Matrix ranking: the extent to which QCGP strategies for running the garden project increase diversity; choice; and opportunities

SL approach standards / **Strategies**	**Increase in diversity**	**Increase choice**	**Increase opportunities**
Planting strategy	4	4	
Crop sales strategies	4	4	
Security strategy	2	2	

Appendix 48: Seasonal calendar: time when crop cultivation in QCGP

Months / **Crops**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**
Spinach												
Cabbage												
Carrots												
Green beans												
Green pepper												
Chillies												
Beetroot												
Maize												
Butternut												
Pumpkin												
Turnip												
Leeks												

Appendix 49: Time trend: extent to which the QCGP outcomes are achieved

Year	**2006**	**2007**
Project outcome		
Generate income	2	2

Pictures

Picture 1: Building where MASCO offices are housed

Picture 2: MTP Participants

Picture 3: MTP participants during one of the activities

Picture 4: Overview of QCGP project site

Picture 5: QCGP participants in one of the discussions

Picture 6: Community centre where some QCGP research activities were conducted