AN INVESTIGATION INTO THE EFFECTIVENESS OF SYSTEMS THINKING APPROACH IN ILLUMINATING UNDERSTANDING OF POVERTY AS A COMPLEX SITUATION: A SOUTH AFRICAN CASE STUDY

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ABSTRACT

We are living in a world where academics and politicians seek to define the problem of poverty and where a range of policies and programmes have been introduced in response to one or other version of the problem. Over the years, academics, politicians, sociologists, economists and anthropologists have not come to an agreement on what poverty is or what should be done about it. They often talk about cross-purposes, the size and the seriousness of the problem. However, they agree on one thing: that poverty, wherever it exists, is a complex problem that requires sustainable and integrated policy responses.

Research of poverty in South Africa has traditionally been divided into a three-stage process: facts, causes and strategies. It is no longer acceptable to confine poverty research to only collecting data or analysing causes. Research should focus on finding ways and initiating programmes to prevent and cure the symptoms. The poor must be uplifted from their situation and have hope in the future.

This research adopts a different approach altogether. It draws on the theory of Systems Thinking to illuminate understanding of the different aspects of poverty in a holistic and integrated manner. A South African example is presented, which clearly shows the interrelationships between government departments and the gaps of the present poverty alleviation and eradication policies and programmes. It argues that for poverty to be understood and for proper measures to be put in place, one must understand the dynamics surrounding poverty, as well as the interconnections between them.

CHAPTER ONE INTRODUCTION

This chapter outlines the problem that this research attempts to address. It is an introduction dealing with the background to the research, the research objectives and the methodology implemented.

1.1 BACKGROUND

According to the Reconstruction and Development Programme (RDP) of 1994.

Poverty is the single greatest burden of South Africa's people, and is the direct result of the apartheid system and the grossly skewed nature of business and industrial development, which accompanied it. Poverty affects millions of people, the majority of whom live in the rural areas and are women. It is estimated that there are at least 17 million people surviving below the minimum living level in South Africa. Of these, at least 11 million live in the rural areas. For those intending to ferment violence, these conditions provide fertile ground.

African National Congress, 1994:14

Poverty in South Africa is an increasing concern for government and communities. The recent Growth and Development Summit identified poverty and unemployment as the greatest threats to social stability and development in South Africa. The three provinces most affected by poverty are the Eastern Cape, Limpopo (Northern Province) and KwaZulu-Natal (KZN). This research is going to focus on KZN because the case study is going to be in this area. In KZN 53% of the population live below the poverty line with 74% of the rural population living below the poverty line (eThekwini Municipality, 2002). The people and government of South Africa are therefore tasked with the mammoth challenge of addressing poverty.

National population statistics reveal that KZN has the highest number of people in South Africa, namely 9.4 million (21% of the population, according to the 2001 census). Provincial population studies reveal that the population in KZN is estimated to have increased from 8.4 million in 1996 to 9.4 million in 2001. The population growth rate in that province is expected to decline from 2.2% in 1996 to 0.02% in 2008 owing to the effects of HIV/Aids (eThekwini Municipality, 2002). Statistics South Africa (1997) has revealed that KwaZulu-Natal is one of the provinces experiencing high unemployment and chronic poverty.

According to the eThekwini Municipality Integrated Development Plan (2002), it is estimated that 23% of the eThekwini municipal area (EMA) suffer from extreme poverty (measured as per capita earning of less than R300 a month) and that 44% suffer from poverty (measured as earnings of less than R410 a month per person). Poverty in the EMA is concentrated among the black African population (67% classified as either suffering from poverty or extreme poverty). The Indian and coloured population is at 20% each, while the white population is at 2%. Poverty within the EMA is also concentrated among females classified as being poor (eThekwini Municipality, 2002). The above statistics are definitely a reason for concern. But the big question is: do the beneficiaries of the poverty alleviation programmes, decision-makers, policymakers and stakeholders understand the complex problem of poverty; its roots, its consequences and possible remedies; are there alleviation programmes in place, success factors, and most of all - do they understand all the causal links between the challenges surrounding poverty?

KZN has taken key steps to address poverty in the province and this endeavour is reflected in the eight provincial priorities, of which addressing poverty is the first priority (Poverty Consortium, 2003). The eight provincial priorities are as follows:

- 1. Eradicating poverty
- 2. Addressing the HIV/Aids pandemic
- 3. Providing provincial social security nets for the poor
- 4. Investing in infrastructure
- 5. Developing human capability
- 6. Strengthening governance
- 7. Promoting rural development and urban renewal
- 8. Investing in job creation and economic growth

When addressed simultaneously in an interactive manner, the priorities listed above can contribute significantly in alleviating poverty. It does not mean however, that these priorities addressed on their own will be sufficient to eradicate or alleviate poverty (Poverty Consortium, 2003). This justifies why poverty is commonly referred to as a complex multidimensional phenomenon that cannot be looked at from only one angle.

Leipziger (1981) defines poverty as the inability to meet certain basic human needs. He further states that it is characterised by hunger, malnutrition, ill health, lack of basic education and lack of safe water, sanitation and decent shelter. In advocating the basic needs approach to development, Leipziger states that development objectives must enable beneficiaries to have the purchasing power for the services that are in question. This is a crucial statement, which challenges the alleviation and eradication programmes that are in place, especially their degree of sustainability.

According to Coetzee et al. (2001), the culture of poverty is a sociological concept that argues that poor, oppressed people live in conditions that prevent them from being able to understand and change their lives. It is argued that the poverty engenders a fatalistic and a political attitude, where people accept their position in society as natural. In this situation

people are often unwilling to take the initiative to improve their lives and resort to escapist solutions, such as alcohol and drug abuse to address their problems. One can imagine, therefore, what damage can be caused if the government departments implement programmes that are not sustainable for the future and are just addressing the symptoms of poverty as opposed to the core of it. It is at this point that grassroots involvement plays a vital role. This refers to the necessity to get genuine participation, of involving as broad a spectrum of people as possible in the decisionmaking process around development (Coetzee et al., 2001). It refers to the involvement of the poorest of the poor, especially women and uneducated people in both rural and urban contexts. If the victims of poverty are accepting their misfortune at a psychological level, it calls for poverty programmes to be very systemic and holistic, and not to neglect the soft issues of the problem situation when intervening. Some level of mindset shift is required and hard, technical solutions only would not be enough for alleviating the problem of poverty.

Why have some geographic areas become pockets of poverty, while others have become islands of prosperity? There is undoubtedly a striking difference in the living standards of different regions and even between communities within the same regions. These disparities can be found in all countries and may be caused by a wide range of factors, including differences in agro-climatic conditions, endowments of natural resources or geographic conditions, particularly the distance to a sea outlet and centres of commerce as well as biases in government policies (Bigman and Fofack, 2001).

Studies of income inequality and poverty generally take the approach of the individualistic, human capital model, which explains differences in income and consumption between people by looking at differences in individuals and household characteristics (Bigman and Fofack, 2001). Disparities in living standards may persist because of obstacles to internal

migration, which in some countries are the result of deliberate government policies and in all countries are the result of economic, demographic and cultural factors. According to Bigman and Fofack (2001) other obstacles to migration are —

- large household sizes;
- poor health conditions;
- low levels of human capital; and
- in some countries "feminisation" of poverty (poverty rates are disproportionately high among women).

As wealthier and better-educated people leave the poor areas, the standard of living in those areas declines even further.

Bigman and Fofack (2001) suggest that pockets of poverty persist for other reasons as well, such as –

- the low quality of public services, particularly in education and health, further impeding the accumulation of human capital (thus earning capacity);
- the poor condition of rural infrastructure, which limits trade and retards local investment and growth;
- the low level of social capital in poor communities, which slows the diffusion and adoption of new farm technologies (thus reducing farmers' earning capacity); and
- the distance from the urban centres, which inhibits trade,
 specialisation in production and access to credit.

Because of these factors, households in poor areas are unfortunately less likely to escape the individual and community predicaments that keep them poor. The question is: what is being done, specifically by the government departments, to bring hope to the people living in this complex

poverty situation? The South African government has now begun to see the urgency of integrated development, which is still in its infancy. A lot of groundwork still needs to be done to reach a point where the decision-makers and recipients are fully aware that development should take place systemically (eThekwini Municipality, 2002).

It is apparent from literature that many existing poverty initiatives and programmes responded to the symptoms of poverty, lacking the understanding of the real issues affecting or causing poverty – in other words the core thereof. This brings to mind the controversial speech made by South African president Mr Thabo Mbeki in 2002 at the International Aids Conference in Durban when he related the HIV/Aids pandemic back to poverty (Mbeki, 2002). Most people did not understand the relationship between the two then; yet we know now that these two important issues are interconnected.

At present, most government departments have programmes in place for poverty alleviation and eradication, but these programs prove to be reactive instead of proactive towards poverty issues, because they are not systematic in understanding the interrelationships between the different aspects that are at play (Alcock, 1993). Skweyiya (2003) reported that the approach of the Ministry of Social Development and the sector has been one that supports the poor and vulnerable through direct income support and social welfare services, while placing emphasis on the empowerment of community organisations and families. He further emphasised that many families are under pressure to cope with the impact of poverty, HIV/Aids, unemployment and other social ills and this has a devastating impact on the most vulnerable – especially children (Skweyiya, 2003).

Most of the government departments tasked with putting the poverty alleviation/eradication programmes together have not yet managed to interact successfully with one another on the different angles they would employ in addressing poverty. The programmes are not integrated and therefore can even cause confusion to the end users. This research attempts to utilise Soft Systems Methodology (SSM) approach/tool (Systems Thinking approach) to see if it can help both the poor and the programme/policy makers in understanding this complex situation of poverty. According to Coetzee *et al* (2001) the systems theory traces the various relationships between parts and wholes to enable thorough understanding of complex situations. Flood and Jackson (1991) suggest that there are two complementary ways of understanding and enhancing the richness of the concept "system":

- According to the systems approach, the concept 'system' is not used to refer to things in the world, but to a particular way of organising our thoughts about the world and its issues.
- 'System' is seen as an organising concept: The systems
 perspectives recognise multifarious interactions between all the
 elements making up a complex and highly interlinked network of
 parts exhibiting synergistic properties.

The implication of this is systemness, meaning the whole is greater than the sum of the parts. Going back to the pockets of poverty highlighted above, a systems approach would look at all the variables holistically as opposed to individually, where at each level the means of combination is qualitatively different, and the outcome is qualitatively different. According to Coetzee *et al.* (2001), systems theorists call this qualitative shift in dimensions 'emergence'. Something new emerges, depending on the way the integration occurs.

Being a system, according to Coetzee et al. (2001), has a number of important implications. These implications will apply to poverty as well, as it is viewed as a system. These are as follows:

- Being a system means that the parts are interconnected and interdependent. Changes in one part necessarily ripple through to influence other parts.
- Systems are not homogeneous networks. They have powerful nodes that dominate the areas around them.
- The whole is greater than the sum of the parts.
- The whole emerges out of the way in which the parts are integrated.
- The most powerful individual, corporation or country is constrained by the system within which they operate. An actor's power operates within the context of the system's power.
- Systems can be seen to have subsystems and it is often difficult to decide where two or more parts become integrated into one encompassing system.

The argument of this dissertation is that the pockets of poverty are not being addressed to a great extent holistically, but in most cases in isolation. This causes the initiatives put in place to be ineffective. The South African President said, "one cannot build a hospital without making sure that: a) there is money to buy medicines, b) there is access to the hospital, c) there will be healthy food and clean water to give to the people" (Mbeki, 2003) This is where Systems Thinking comes in.

In attempting to apply systems engineering principles to business problems, Checkland developed Soft Systems Methodologies (SSM) in 1960 at Lancaster University. SSM is a way of applying Systems Thinking. Checkland found that fixing problems too early made investigators unlikely to see different – possibly more basic – problems (Checkland, 1999b). Rich pictures, causal loop diagrams and CATWOE (C = customers; A = actors; T = transformation processes; W = worldview; O = owners; and E = environmental constraints) are useful SSM tools that make understanding of the problem situation much easier and comprehensive.

These tools are extremely effective ways of summarising and aiding understanding of messy situations, particularly useful for thorough clarification in everyday life.

1.2 JUSTIFICATION OF THE PROBLEM

The main purpose of this dissertation is to understand the complex dynamics of poverty as a problematic situation; with the intention of designing poverty alleviation measures from a Systems Thinking perspective. This research looks at how the social ill of poverty can be understood and addressed accordingly without focussing on unsustainable short-term solutions. The study takes the view that this big challenge facing South Africa can well be addressed and understood by using Systems Thinking to a greater extent. At the end of the research, a systemic model in the form of a causal loop diagram will be drawn up, which shows all the different aspects of poverty and how they relate to one another. This will help most people who are interested in the alleviation and eradication of poverty to understand the problem in a systemic and holistic way.

1.3 HOW DOES THE PROBLEM RELATE TO THE BUILT ENVIRONMENT?

'Sustainable development' and 'integrated development' are the keywords of the era of transformation in South Africa. Both these terms are thought of as tools that can also help in alleviating and eradicating poverty. Integration is the process in terms of which the differentiated structures are united on a new basis. It takes the view that development cannot take place in isolation. Sustainable development, on the other hand, is about improving the human resource management of the natural base in order to maximise human welfare and maintain the environment now and in the future (Coetzee *et al.*, 2001). Two of the principles of sustainability are to –

- pursue quality in the built environment (where quality refers not only to high technical standards but also to the role of the construction industry in improving the quality of life); and
- promote social and economic development, development of human resources and, where possible, labour-intensive methods of construction (Goodland and Daly, 1993).

Checkland (1999a) suggests that the human activity systems influence and interrelate with the built environment systems. He further declares that it is often stated that hard Systems Thinking is appropriate in well-defined technical problems and that soft Systems Thinking is more appropriate in fuzzy ill-defined situations involving human beings and cultural considerations. The construction industry is a provider of approximately half the country's fixed investment (Construction Industry Development Board, 2004). Although it has not yet been established, logic makes one suggest that if the output of the industry is down, total investment is down and this may lead to poverty levels increasing. The built environment has been termed the "regulator of the economy" by many authors (Hillebrandt, 1974; Construction Industry Development Board, 2004; Yap, 1989). For instance, the instability of demand can lead to under- or over-employment of labour resources. One of the social principles of sustainable construction is to ensure secure and adequate provisioning of basic needs. which are food, clothing, shelter, health and education; and beyond that to ensure comfort, identity and choice (Yap, 1989). The construction industry has become the main vehicle to achieve these needs and as Gladwin et al. (1995) puts it, the first step in achieving this goal is poverty alleviation/eradication.

The construction industry is therefore expected to come up with other innovations in building technologies for affordable construction (accommodating the poor), thereby contributing to poverty alleviation/ eradication. These may include *inter alia* foundation systems for poor soil

conditions such as stiffened concrete rafts, water saving flushing systems for water closets; improved ventilated pit latrines, energy-saving instant hot water supply devices and cheaper electrical reticulation for low-cost housing.

With regards to addressing the previously disadvantaged individuals, the Construction Industry Development Board (CIDB) has begun to play an important role in ensuring that initiatives are put in place which will assist in alleviating poverty. Given that the construction industry is expected to double its output by 2010, the whole industry has an opportunity to alleviate as much of this problem as possible.

From the above it becomes apparent that all the people in the built environment construction industry need to understand the complexities of poverty better in order to make sure that the measures they put in place to alleviate and eradicate poverty are sustainable and well integrated.

1.4 THE PROBLEM STATEMENT

The problem identified in this study is that the programmes and initiatives put in place to eradicate and alleviate poverty in South Africa are only short term, addressing the symptoms and not the real core of the problem. For instance, it could be argued that giving the poor packages of food, direct income and grants are very good initiatives, but they are not lifting the poor out of their status of being poor. These initiatives are not sustainable and integrated, in the view of the writer. It could be argued that, instead, these programmes are even reinforcing the psychological gaps and attitudes of the poor not to change for the better.

It is suggested that the decision-makers themselves lack understanding of the complexity of the problem they are dealing with (i.e. poverty). What is the best way then of understanding a problematic situation like this? This study takes the view that the interactions and causal links between different parts that make up poverty should be examined and understood to enable the decision-makers and/or policymakers to understand the problem and decide what they are going to do about the problem, both in the short and long term. These parts, according to Systems Thinking, are interconnected and interdependent; therefore changes in one part ripple through to influence the other parts. This is why the problem needs to be looked at holistically – greater than the sum of the individual parts.

The formal problem statement is:

The poverty alleviation, reduction and eradication programmes put in place by some of the government departments are generally not implemented in an integrated, sustainable and holistic way. Hence they are ineffective in reaching the poor population that is intended to benefit from them.

(Because of lack of understanding of the complexities of poverty)

1.6 RESEARCH OBJECTIVES

The primary research objective of this study is to investigate how effective Systems Thinking theory can be in understanding the complex problem of poverty, thereby enabling decision- and policymakers to put proper alleviation and eradication programmes in place that are sustainable, systematic and integrated.

This objective can be achieved by the analysis of a series of supportive secondary objectives, which are –

- to identify all the parts that are interconnected and interdependent and that cause poverty;
- to take objective (i) further and examine the impact that each part has on another (in other words, the causal links between the parts);
- iii. to identify the programmes put in place by the key government departments for poverty eradication and alleviation and examine if they are addressing all the findings stated in objectives (i) and (ii) (the overall response to poverty by government will also be outlined); and
- iv. to present a systematic model in the form of a causal loop diagram, which will be used to see all the gaps that the writer believes are there; thereby enabling programme and initiative designers to understand the complexity of the problem and its core.

1.7 THE RESEARCH METHODOLOGY

This part of the research gives the reader an overview of the research methodology to be adopted. Chapter three will give detailed explanation of the research methodology.

The objectives of this research are achieved by employing the methodology described by Checkland and Holwell (1998), called 'action research', using the Systems Thinking theory. The essence of this research approach is that action is undertaken. Reflection on action yields insights that may support a deeper appreciation of what a problem might be. Insights are fed into current actions to improve them, and may be transferred to some other domain where another reflection-action cycle starts. This process continues to improve understanding of what is known about the contexts and how action may be undertaken within them (Flood,

1999). The research will be more qualitative, using a critical approach to try and understand the problem situation and thereby get a holistic picture of the situation as well as the inter-relationships. The aim is to enrich the understanding of the problem situation. Action research is summarised by Checkland and Holwell (1998) as –

- a collaborative process between researchers and people in the situation;
- a process of critical inquiry;
- a process that places the focus on social practice; and
- a deliberate process of reflective learning.

The objectives of this particular study are achieved by employing the following methodology:

- Literature survey of material identified as being pertinent to this research.
- An example of one particular community in the eThekwini area, Clermont, in order to form a clear picture of what poverty looks like. The human activity in this area during the day will also be observed, which will help to confirm whether poverty prevails there or not. (A tape recorder will also be used to interview some of the community members on their living conditions and their understanding of poverty.)

1.8 SCOPE AND LIMITATIONS

The scope of the research will be limited to the Clermont community (which is in the eThekwini metropolitan region). The responses from this area will offer sufficient insight to understanding the poverty dynamics. The research will only use SSM as one of the tools for understanding the

poverty dynamics. There are, however, other methods that could be used and the fact that this tool, like other tools, has its own shortfalls that can be complemented by using other approaches. Owing to time constraints, interviews will be conducted with one government department, namely the ministry of Social Development in KZN, as it is the one mandated to lead and deal with poverty initiatives. The senior managers of both a non-government organisation (NGO) and a community-based organisation (CBO) which are involved in the area will be interviewed as well.

It is important also to acknowledge that systems thinking and more specifically SSM requires a fundamental shift in the mind set of both the researcher and the participants and this cannot be adequately achieved in the time that is allowed for 48 credits.

1.9 THE STRUCTURE OF THE DISSERTATION

The dissertation is presented in a number of chapters, which logically develop the issues being addressed in relation to this investigation. The chapter breakdown is as follows:

Chapter two is a conceptual chapter. It discusses what Systems Thinking is; why the writer has chosen it to address and fill the gaps present in the current poverty eradication and alleviation measures. It further looks at poverty as a whole; what it means from an academic, individualistic and national perspective.

Chapter Three will give an overview of the initiatives and programmes being implemented by the relevant government departments to address poverty. **Chapter Four** provides an overview of the research methodology applied in the study. Systems thinking specifically SSM is thoroughly discussed in relation to poverty..

Chapter five will present the example (case study) of Clermont and its findings. It will interpret the data, reflecting the processes being implemented and incorporate proposals with regards to SSM. Diagrams and rich pictures will be used to emphasise some of the findings.

Chapter six presents the analysis of the findings from chapter five.

Chapter seven gives conclusion and the recommendations of the overall research. Criticism of the approach used both for the methodology and the tool to address the problem situation are highlighted in this chapter.

CHAPTER TWO SYSTEMS THINKING AND POVERTY

2.1 INTRODUCTION

Chapter two aims to build a theoretical foundation on which the research is based by reviewing the relevant literature. It is the conceptual chapter of this dissertation. This chapter discusses what Systems Thinking is, and why the writer has chosen this approach to try and fill the present gaps in the current poverty eradication and alleviation measures. It further looks at poverty as a whole from an international, national and grass-root perspective.

2.2 SYSTEMS THINKING

2.2.1 What is a System?

Ackoff (1974) defines a system as a whole that consists of a set of two or more parts. Each part is said to affect the behaviour of the whole, depending on the interaction between parts. Furthermore, the essential properties that define any system are properties of the whole, and none of the parts have those properties. To reveal how a system works, 'analysis thinking' is used to understand why the system works the way it does. In the analytical approach, where the focus is on smaller elements, knowledge grows. With 'synthesis thinking' understanding increases as the focus is on even larger wholes.

2.2.2 What is Systems Thinking?

Systems Thinking traditionally emerged in the 1940s as a response to the failure of Mechanistic Thinking to explain biological phenomena. It therefore developed as an alternative to Mechanistic Thinking (Flood and Jackson, 1991). The systems perspective recognises multifarious

interactions between all the parts wherein the whole is equal to the sum of the parts.

Senge (1990) defines Systems Thinking as a conceptual framework, a body of knowledge and tools that have been developed over the past decades to make the full patterns clearer and enables people to see how an effective change can be made. It is a discipline that sees wholes. It is a framework for seeing interrelationships rather than things; for seeing patterns rather than static snapshots. It is also a set of specific tools and techniques, originating in two threads: feedback concepts of cybernetics and servo-mechanism engineering theory dating back to the nineteenth century (Senge, 1990).

Systems Thinking is a discipline used to see the structures that underlie complex situations and for discerning high from low leverage change. It offers a language that begins to restructure how people think (Senge, 1990). According to Ackoff (1974), there are many ways of looking at Systems Thinking. He suggests that Systems Thinking offers not only a set of tools, but also a framework for looking at issues as systemic wholes. Some people look at it as a way of life; as a language that offers a way to communicate about dynamic complexities and interdependencies. This is an era where managers and decision-makers are confronted by the most vexing problems, caused by a web of interconnected, circular relationships (Ackoff, 1981).

The principles that characterise Systems Thinking, as outlined by Ackoff (1974), are –

- thinking about the "big picture";
- balancing short- and long-term perspectives;
- recognising the dynamic, complex and interdependent nature of systems;

- taking both measurable and non-measurable factors into account;
 and
- remembering that all people are part of the systems in which they
 function and that they influence those systems as they are being
 influenced by them.

The language of Systems Thinking offers a whole different way of communicating the way we see the world and the way we work together more productively to understand and solve complex problems. The unique qualities of Systems Thinking as a language, which make it a valuable tool for discussing and understanding complex systemic issues, are listed below (Ackoff, 1974):

- It emphasises looking at wholes rather than parts, and stresses
 the role of interconnections. It recognises that we are part of the
 systems in which we function, and that we therefore contribute one
 way or another to how those systems behave.
- It is a circular rather than a linear language. This means that it focuses on closed interdependencies where x influences y, y influences z, and z in turn influences x.
- It has a precise set of rules that reduce the ambiguities and miscommunications that can occur when we talk to others about complex issues.
- It offers visual tools, such as causal loop diagrams and behaviour-over-time graphs. These diagrams are rich in implications and insights. They also facilitate learning because they are graphic and therefore are often easier to remember than written words. Finally, they defuse the defensiveness that can arise in a discussion, because they emphasise the dynamics of a problem, not individual blame.

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 It opens a window on our mental models, translating our individual perceptions into explicit pictures that can reveal subtle yet meaningful differences in viewpoints.

Systems Thinking takes the view that to understand anything, one must be able to grasp the larger systems of which it is a part, although the complete explanation for everything cannot be reached. The better the system is comprehended, the wider and deeper one's overall understanding becomes.

Why has Systems Thinking been chosen as the tool to illuminate understanding of the complex problem of poverty in the South African context? All problems, according to Ackoff (1974), have systemic origins. Poverty is a systemic problem because –

- it is chronic and recurring;
- it has been around long enough to have a history;
- someone else has tried to solve the problem but the attempts stopped working after a while or did not work at all; and
- no-one has been able to identify an obvious reason for the patterns of behaviour over time.

Systems Thinking is needed more today than ever because policy- and decision-makers are becoming overwhelmed by complexities. The essence of Systems Thinking lies in a mind-shift, for example seeing interrelationships rather than linear cause-effect chains, and seeing processes of change rather than snapshots. Understanding the simple concept of feedback, which shows how actions can reinforce or counteract (balance) each other, is the start of the practice of Systems Thinking. It simplifies life by helping people to see the deeper patterns underlying the events and the details (Senge, 1990).

2.2.3 Approaches to Systems Thinking

According to Luckett (2004) Systems Thinking can be divided into hard systems thinking and (HST) also known as "first wave" and soft systems thinking (SST) also known as "second wave" which are also known as functionalist and interpretive systems respectively. Table 2.1 below shows some of the key differences between HST and SST.

Table 2.1: Key differences between the HST and the SST Source: Luckett (2004:11)

	Hard Systems Thinking	Soft Systems Thinking	
Assumptions about	Assumes that systems	Assumes that systems	
systems and the world	exist in the real world as	are subjective constructs	
	objective entities which	by an observer of	
	obey laws that can be	complex real world	
	discovered through	situations	
	scientific enquiry		
Purpose of an	To improve the	To facilitate learning of	
intervention	performance (efficiency	the participants about the	
	and efficacy) of a system. problematic situation		
	The purpose of the	Neither the problem nor	
	system is given.	the values underpinning	
		an improvement are well	
		defined.	
		The purpose of the	
		system (conceptual	
		system models) is	
		ambiguous, i.e., the	
		purpose is decided by	
		people who have a stake	
		in the system and	
		therefore dependant on	
		their interpretation of the	
		nature of the system.	

Nature of an intervention	Builds formal,	A learning process which
	representative models of	makes use of the
	the system to be	conceptual models
	improved.	relevant to the situation
		to be improved.
Role of an intervention	The task of the systems	The task of the systems
agent	engineer/analyst is to	practitioner is to facilitate
	improve the performance an inquiry process wh	
	of the system given the	enables the different
	predetermined measures	stakeholders to define a
	of performance, or, to	system which they
	design a system to	believe will improve the
	achieve a given purpose	problematic situation, and
		to implement that
		system.
Used in what cases	Used in cases of	Used for generating
	recognised systems	explanatory systems
Examples	Systems engineering,	Social Systems Science,
	Systems Analysis,	strategic Assumption
	Systems Dynamics,	Surfacing and Testing,
	Operational Research	and Soft Systems
		Methodology

According to Checkland (1999) the stance that the hard system thinker perceives the real world as systems that he or she can engineer and the soft systems thinker on the other hand perceives the world as complex and confusing but can organise exploration of it as a learning system. It often stated that hard systems thinking is appropriate in well-defined technical problems and that soft systems thinking is more appropriate in fuzzy ill-defined situations involving human beings and cultural considerations (Checkland, 1999).

The major challenge facing managers and management scientists who are seeking to use systems thinking is being able to choose the appropriate systems approach amongst a range of different systems approaches (Flood, 1996). The different systems approaches are listed below.

- 1. operational research
- 2. systems analysis
- 3. systems engineering
- 4. system dynamics
- 5. viable system diagnosis
- 6. general systems theory
- 7. socio-technical systems thinking
- 8. contingency theory
- 9. social systems design
- 10. strategic assumption surfacing and testing
- 11. interactive planning

12. soft systems methodology

13. critical systems heuristic

According to Flood (1996) each of the above mentioned approaches have been tried and tested and work well in some circumstances. The diversity of the different approaches should not yield confusion but should signal competence and effectiveness in a variety of problem situations. To uncover the basic assumptions underpinning the different systems approaches and to explore what view of problem contexts each methodology takes the problem contexts are categorised into two dimensions namely; systems and participants. The systems dimension refers to the relative complexity of the system that makes up the problem situation and within which other complex pluralist or coercive issues can be located. The participants dimension on the other hand refers to the relationship (whether in agreement or not) between the individuals or parties who stand to gain or lose from the intervention.

2.2.4 Grouping Problem contexts

According to Flood (1996) systems can be classified in a variety of ways. They can be classified as simple systems on one hand and complex systems on the other hand. Simple systems have the following characteristics according to Flood (1996):

- a small number of elements
- few interactions between elements
- attributes of the elements are predetermined
- interaction between elements is highly organised
- well-defined laws govern behaviour
- the system does not evolve over time
- sub-systems do not pursue their own goals
- the system is unaffected by behavioural influences
- the system is largely closed to the environment.

Complex systems pose some challenges to systems thinkers as they behave differently than simple systems. A complex system appears to have many variables, many factors at play and many semi-independent but interlocking components. The defining characteristics of complex systems (Ackoff, 1981) are as follows:

- They tend to be self-stabilising.
- They appear to be purposeful.
- They are capable of using feedback to modify their behaviour, thereby providing an opportunity for change and growth within the system, especially if the feedback is explicit and accessible.
- They can modify their environments.
- They are capable of replicating, maintaining, repairing and reorganising themselves.

In addition to the above characteristics, Flood (1996) characterises complex systems as follows:

Large number of elements

- Many interactions between the elements
- Attributes of the elements are not predetermined
- Interaction between the elements is loosely organised
- · They are probabilistic in their behaviour
- The system evolves over time
- Sub-systems are purposeful and generate their own goals
- The system is subject to behavioural influence
- The system is largely open to the environment

While complex systems have the potential to process large quantities of information, learn quickly and act flexibly, they also encounter four main problems namely –

- Conflicting goals;
- The centralisation vs. decentralisation dilemma;
- Distorted feedback; and
- Loss of predictability.

Generally simple systems will manifest easy problems and complex problem contexts which contain relatively complex systems will manifest difficult problems

The participants dimension is categorised according to relationships between the participants which could be unitary, pluralist and coercive. According to Flood (1996) the different relationships between participants can be defined as follows;

Unitary

- they share common interests
- their values and beliefs are highly compatible
- they largely agree upon ends and means
- · they all participate in decision making
- they act in accordance with agreed objectives

Pluralist

- they have a basic compatibility of interest
- their values and beliefs diverge to some extent
- they do not necessarily agree upon ends and means, but compromise is possible
- they all participate in decision making
- they act in accordance with agreed objectives

Coercive

- they do not share common interest
- their values and believes are likely to conflict
- they do not agree on ends and means and genuine compromise is not possible
- some coerce others to accept decisions
- no agreement over objectives is possible given present systemic arrangements

The two dimensions of problem contexts mentioned above (systems and participants) have a particular way of casting some light on the nature of problems found within them and therefore provide a fruitful way of characterising problem situations. The two types of systems (simple and complex) have been discussed. The overall grouping of the problem contexts brings the two dimensions together and this can be illustrated in Table 2.2 below. It must be noted however that in some cases it might be unrealistic to expect a particular problem context to fit into one box (Flood, 1996).

Table 2.2: Grouping of problem contexts Source: Flood (1996)

	UNITARY	PLURALIST	COERCIVE
SIMPLE	Simple-unitary e.g.	Simple-pluralist e.g	Simple-coercive
	 operational 	social	e.g.
	research	systems	• critical
	systems	design	systems
	analysis	strategic	heuristic
	systems	assumptions	
	engineering	surfacing &	
	systems	testing	
	dynamics		
COMPLEX	Complex-unitary	Complex-pluralist	Complex-coercive
	e.g.	e.g.	No systems
	 viable systems 	interactive	methodology
	diagnosis	planning	currently bases
	• general	soft systems	itself upon the
	systems	methodology	assumptions that
	theory		problem contexts
	socio-technical		are complex and
	systems		coercive. The
	thinking		"prison" metaphor
	 contingency 		helps understand
	theory		such problems.

According to Luckett (2004) there are two kinds of complexity: hard complexity and soft complexity. Hard complexity refers to that kind of complex problem which has a clearly defined and agreed upon resolution,

i.e. the goal is well defined. Soft complexity on the other hand involves not only many possible factors and courses of action, but also many possible interpretations of a given situation.

2.2.5 Soft Systems Methodology

The application of systems thinking to organisational management has generated several methodologies as mentioned earlier in this chapter (systems engineering, systems analysis, operational research, e.t.c.). Most of these methodologies were derived largely to solve engineering- type problems (Checkland, 1999). Such methodologies have limited applicability in situations where the human factor is a significant constituent. Consequently soft systems thinking emerged as an organised way of exploring human problem situations and has also generated a number of methodologies such as Interactive Planning, Community Cybernetics, Strategic Assumption Surfacing and Testing and Soft Systems Methodology.

Soft System Methodology (SSM) was developed by Checkland as a process of inquiry and action and action for improving unstructured problem situations where the issues of concern are vaguely perceived but not clearly defined. SSM can be summarised as:

"SSM is a methodology that aims to bring about improvement in areas of social concern by activating in the people involved in the situation a learning cycle which is ideally never-ending. The learning takes place through an interactive process of using system concepts to reflect upon and debate perceptions of the real world, taking action in the real world and again reflecting on the happenings using systems concepts. The reflection and debate is structured by a number of systemic models. These are conceived as holistic ideal types of certain aspects of the problem situation rather than as accounts of it. It is taken as given that no objective and complete account of a problem situation can be provided."

According to Checkland (1981) three main characteristics of SSM stemming out of the above summary are that:

- it is useful to consider the world to consist of a complex of interacting systems
- 2. human beings can always attach different meanings to the same social acts
- 3. SSM users learn by comparing pure models of purposeful activity with perceptions of what is going on in a real world situation

There is more than thirty years worth of experience and progress in the field of systems thinking and it is important to summarise the work that has been done. A book authored by Checkland (1981) titled "Systems Thinking, Systems Practice (STSP)" makes sense of systems thinking by viewing it as a way of avoiding reductionism of natural science and describes previous experiences where systems engineering was applied to areas outside the technical arena. The book also sets out the first development of the seven-stage process of inquiry. Following this Wilson (1984) authored a book titled Systems: Concepts, Methodologies and Applications (SCMA) which focuses on the functional logic of engineering and presents an approach which Holwell (1997) argues as a classic systems engineering with the transforming addition of human activity modelling. Another book titled "Soft Systems Methodology in Action was written by both Checkland and Scholes (1990) and it describes the use of SSM in both public and private sectors for limited and wide-ranging. The book moves beyond the seven-stage process of SSM to encourage practitioners to see it as a sense making approach. Checkland and Holwell (1998) wrote "Information, Systems and Information Systems (ISIS) which relates experiences based on a mature use of SSM to a fundamental conceptualisation of the field of Information Systems. It carries forward the discussion of SSM as a methodology in a less explicit way.

According to Checkland (1995) there are four key thoughts which dictated the overall shape of the development of SSM and the direction it took. These thoughts capture clearly the learning which accumulated with experience of using SSM and they make sense of its development. They are:

- Instead of viewing real world systems being in need of repair and improvement, focus has shifted to the fact that at a higher level, every situation undertaken by action research was a human situation in which people were attempting to take purposeful action that is meaningful to them.
- 2. Many interpretations of any declared purpose are possible when modelling purposeful activities to explore the real world.
- the thought that can be seen to have established the shape of SSM as an inquiring process and in turn established the hard and soft differentiation in systems thinking
- 4. Models of purposeful activity can provide an entry to work on information systems which is more relevant to ISIS.

By the time the first book on SSM was written in 1981, the seven stages or activities of the SSM were being presented in an engineering-like sequence of the 1972 paper organised as a circular action research process. According to Checkland (1999) the first two stages of SSM are about entering the problem situation, finding out about it and expressing its nature. Choices of relevant activity systems have to be made and these are expressed as root definitions in stage three and are modelled in stage four. Stages five to seven use the models to structure further questioning of the situation. Stage five compares the models with reality. Stage six looks at the changes meeting two criteria of "desirable in principle" and "feasible to implement". Stage seven takes the action to improve the problem situation, thus changing it and enabling the cycle to begin again..

Checkland (1999) suggests that the seven stage model of SSM has proved resilient as a sequence that unfolds logically which explains why it is easy to use. The model has three virtues according to Checkland (1999) which attracts most soft systems thinkers and these are:

- The more organic style (egg-shaped and curved arrows) of the model indicate that they are working models, relevant now and not permanent. They are also meant to look more human and natural as opposed to the straight lines and circles in science.
- 2. The size of the model of SSM process is manageable and therefore can be easily retained in one's mind.
- The distinction between "Constitutive Rules" which had to be obeyed and the "Strategic Rules" which allowed a number of options among which a user could choose from.

The 1988 two streams model of the SSM refers to the point where SSM was no longer just a logic-based stream of analysis but was presented as an approach that also took the political and cultural stream into consideration. This move enabled judgements to be made about the accommodation between conflicting interests which might be reachable by the people concerned and which would enable action to be taken. This model recognises the crucial importance of the role of history in human affairs. It reminds users of SSM that when working in real situations we are dealing situations that is perceived differently by different people and is continuously changing (Checkland, 1999).

The four main activities model of the SSM came to being when the seven stage model of SSM was viewed as no longer flexible use of SSM. The four main activities according to Checkland (1999) are iconic

(i.e. model is a miniature version of the real thing and is expected to reproduce or illustrate the behaviour of the real thing) rather than descriptive and are as follows:

- finding out about the problem situation including cultural and political considerations
- 2. formulating some relevant purposeful activity models
- 3. debating the situation, using the models and seeking from that debate both a) changes which would improve the situation and are regarded as both desirable and culturally feasible and b) the accommodation between conflicting interests which will enable action to improve to be taken.
- 4. taking action in the action to bring about improvement

According to Holwell (1997) the three necessary statements of principle or assumption when attempting to respond to the question: "what is SSM?" are that one must:

- accept and act according to the assumption that social reality is socially constructed, continuously;
- 2. use explicit intellectual devices consciously to explore, understand and act in the situation in question; and
- include in the intellectual devices "holons" in the form of systems models of purposeful activity built on the basis of declared worldviews

Once the concepts of SSM have been internalised by the users, another end of a sophisticated spectrum comes into play and the two ideal types of SSM use which define this spectrum are termed Mode 1 and Mode 2. SSM then became the way of thinking about coping with complexity in real situations amongst the users who had internalised it. Dimensions used to differentiate Mode 1 and 2 are illustrated in Table 2. 3 below.

Table 2.3: Differences between Mode 1 and Mode 2 of the Ideal Types of SSM Use

Source; Checkland, 1999: A36

MODE 1	MODE 2			
Methodology-driven	Situation-driven			
Intervention	Interaction			
Sometimes sequential	Always iterative			
SSM an external recipe	SSM an internalised			
	model			

It must be noted however that there will never be a generic version of what happens in "near-Mode 2" studies because they are driven by the situation and maybe the best way to understand d internalised SSM in action is through examples Checkland (1999).

In bringing the study to some sort of conclusion, Checkland (1999) suggests that an emerging pattern can be discerned in which two common foci of the later stages of SSM, are apparent. The first one is that of SSM being an action-oriented approach which seeks accommodation to enable action to improve the situation to be taken. The second focus is that of SSM as a sense-making approach which enables users to make sense of the complex situations. This area of focus has grown significantly in the last decade of SSM development as concepts such as organisation; function; profession; and career have all become adaptable.

It is important to highlight that SSM is one of the methodologies that formally operate the learning cycle based on the theory that learning is rooted in two dialectic processes involving four modes of learning which are:

- Concrete experience
 abstract conceptualisation
- Reflective observation (RO) ⇔ active experimentation

Kolb (1984) defines the first dialectic process as taking hold of the experience in the world which he calls perceiving and the second as the transformation of what is perceived. He further takes the view that knowledge is the result of the combination of the two dialectics. Kolb's experiential learning theory can be depicted in a conceptual model below where the different knowledge forms are placed in appropriate quadrants.

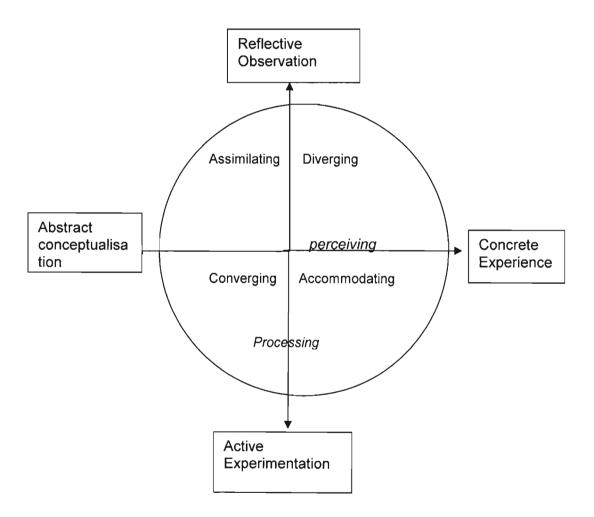


Figure 2.1; Structural dimensions of the process of experiential learning Source: Luckett, 2004:9

Kolb (1984) summarises experiential learning and knowledge in six propositions which are as follows:

- learning is best conceived as a process and not interms of the outcomes
- 2. learning is a continuous process grounded in experience
- 3. the process of learning requires the resolution of conflicts between dialectically opposed modes of adaptation to the world
- 4. learning is a holistic process of adaptation to the world
- 5. learning involves the transactions between the person and the environment
- 6. learning is the process of creating knowledge

Checkland (1991) takes the view that any approach to rational intervention of human affairs has to accept that in trying to bring change or improvement in the human situations, it is not simply a matter of setting to discover laws governing the phenomena in question. This means that the intervener in the human affairs should appreciate that such an intervention requires a steady interaction between theory and practice in a process of inquiry. According to Checkland (1991) an effective inquiry process involves four learning styles associated with each of the quadrants shown in the figure 2.1 above. When facing a new situation we need to cycle through all four modes of learning namely:

- Divergence: where one is involved in the situation with an open mind and is aware of the meaning and values in the situation; views the situation from different perspectives; and generate alternative ideas relevant to the situation.
- Assimilation: assimilate disparate observations into integrated explanations; make connections with existing theories/models and create new theories/models
- 3. Convergence: apply theories /models; debate and decide on possible courses of action based on what is considered to be

important.

4. Accommodation: carry out planned courses of action in order to improve the situation.

Whilst the model may suggest that it is orderly, simple and straight forward, it is important to highlight that in reality people move back and forth through the different phases, and that people experience strong feelings like frustration, excitement, pleasure, fear and even anger. The learning cycle model can be summarised as involving four stages of observing or acting in the world; connecting what has happened as a result of an action (reflecting); deciding what to do as a result of the reflections; and then implementing the decisions.

The above mentioned characteristics of complex systems also apply to poverty. This study is mainly attempting to bring about an approach that will help people to understand poverty in a holistic way without treating it or dealing with its different dimensions in isolation. Alcock (1993) emphasises that poverty is not a simple phenomenon that can be defined by adopting the correct approach. Rather it is a series of contested definitions and complex arguments that overlap and at times contradict each other. Depending on who and how poverty is being viewed poverty can either be both a big phenomenon and a small phenomenon; a growing issue and a declining issue; an individual problem and a social problem. Therefore, to understand poverty one needs to understand how these different visions and perceptions overlap, how they interrelate and what the implications of different approaches and definitions are (Alcock, 1993). Integrating these different perceptions by using Systems Thinking will enable people to see poverty as a whole, not as parts; and will enable them to appreciate the seriousness of the matter better and with a clearer understanding.

2.3 POVERTY

2.3.1 Definitions of Poverty

According to Becker (1967) there is no universal definition of poverty. It is relative to time and place. Those labelled poor today would certainly not be poor by the standards of 1870. This implies that what is referred to as poverty is related to the conditions and possibilities of the society. The poverty line is determined by prevailing standards of what is needed for health, efficiency, nurturing of children, social participation and the maintenance of self-respect and the respect of others. As a society changes in terms of the quantity and kind of production, and in terms of the prevailing standards of life, the definition of poverty changes too.

Any discussion about the problem of poverty and progress in the elimination thereof is greatly affected by the choice of a definition of poverty. Different definitions give quite dissimilar views of the nature of the problem, the appropriate policies to remedy it and the effects of past economic and social conditions and of government policies targeted at the poor (Plotnick and Skidmore, 1975). Before giving an overview of the wide definitions of poverty, it is important to highlight two concepts of poverty. namely absolute poverty and relative poverty. According to Brinkerhoff and White (1988 pg. 607) absolute poverty is "the inability to provide the minimum requirements of life". Gordon and Spicker (1998) define it as a condition characterised by severe deprivation of basic human needs. including food, safe drinking water, sanitation facilities, health, shelter, education and information. It depends not only on income but also on access to social services. Relative poverty, on the other hand, is the inability to maintain what one's society regards as a decent standard of living (Brinkerhoff and White, 1988). It defines poverty in terms of its relation to the standards that exist elsewhere in society (Gordon and Spicker, 1998). Relative poverty has two main elements. The first is the

premise that poverty is socially defined, and the second element is the use of comparative methods to determine poverty in contrast to others in the society who are not poor.

Many definitions of poverty comprise the term 'basic needs' and it is important to highlight what these basic needs are. Basic needs are said to include two elements, according to Gordon and Spicker (1998), namely:

- Certain minimum requirements of a family for private consumption, for example adequate food, shelter and clothing, as well as certain household furniture and equipment.
- ii. Essential services provided by and for the community at large, such as safe drinking water, sanitation, public transport and health, education and cultural facilities.

It is suggested that the concept 'basic needs' should be placed within the context of national independence, the dignity of individuals and people and their freedom to chart their destiny without hindrance (Gordon and Spicker, 1998).

Poverty is not knowing where your next meal is going to come from, and always wondering where the council is going to put your furniture out and always praying that your husband must not lose his job. To me that is poverty" said Mrs Witbooi, Philipstown, Karoo.

Wilson and Ramphele, 1989:48

According to Alcock (1993) poverty means falling short materially, socially and emotionally. It means spending less on food, heating and clothing than someone with an average income. Above all poverty takes away the ability to build a better future. It steals the opportunity to have a life unmarked by sickness, decent education, a secure home and a long retirement.

The KZN developmental economists Poverty Consortium (2003) define poverty as:

A multidimensional phenomenon whereby individual citizens, households and communities within the Province are unable to meet their short and long term basic needs, safety and do not have socially acceptable levels of well being.

Poverty Consortium, 2003:7

This definition highlights the multidimensional nature of poverty and the long- and short-term components of it.

It is apparent from the definitions above that poverty has both social and cultural ramifications that go beyond the disputed definitions of inadequate income. It is linked to many other forms of deprivation, including inadequate access to health care; housing, educational services and employment opportunities. Measuring these variables and unravelling their complex connections is frustrating and difficult. Their combined impact on the quality of people's lives and their social relationships, however, can be devastating.

2.3.2 International view

Poverty is about more than inadequate income ... it is about lack of fundamental freedom of action, choice and opportunity.

Wolfenson, 2002:12

Poverty has many dimensions; it is not simply a lack of income. In practice poverty means poor health, lack of education, lack of access to basic services like water and sanitation, powerlessness, poor treatment by government institutions and society and vulnerability to ill health, natural disasters and economic and political shocks.

Forstater et al., 2002:27

Faced with the reality of poverty, the international community set itself some goals in attempting to reduce poverty internationally. These goals are referred to as the Millennium Development Goals and were set by the member states of the United Nations. These goals reflect the multidimensional nature of poverty and the need to attack it on all fronts. They are listed below (Forstater *et al.*, 2002:27):

- To halve the proportion of the world's people whose income is less than US\$1, the proportion of people who suffer from the proportion of people who lack safe drinking water.
- To ensure equal access or both boys and girls to all levels of schooling and preferably have primary and secondary education by 2005 everywhere.
- To reduce maternal mortality by three-quarters and under five years children by two thirds.
- To stop and begin to reverse the spread of HIV/AIDS, malaria, and other major diseases.
- To integrate the principles of sustainable development into country policies and programs, and to reverse the loss of environmental resources.

Internationally, the view about the cause of poverty is that nations, communities and individuals are poor because they lack the assets to generate sufficient and sustainable income and to overcome unplanned external shocks such as natural disasters and macroeconomic trends. The assets are grouped as human capital, social capital, natural capital, physical capital and financial capital (Forstater *et al.*, 2002).

The extent to which the initiatives for poverty reduction can succeed depends on the result of the choices and policies made by governments, organisations and individuals. According to Forstater *et al.*, (2002) the factors that prevent the poor countries and poor people from building and benefiting from their asset base are –

lack of access to knowledge, technology and social networks;

- weak governance, infrastructure and legal framework (which deter investment);
- inequitable terms of trade, protectionism by OECD countries;
- discrimination (e.g. by ethnic group or gender);
- corruption;
- wars and natural disasters;
- unsustainable use of resources; and
- lack of adequate social protection and services.

2.3.3 National View

In the South African context, most people perceive poverty as profoundly a political issue because of the apartheid regime that the country was under for decades. Before 1990 few people dreamed that the old pattern of political power (with the whites in control of legislature, the army and the budget) would change in the foreseeable future. Surprisingly, 1990 saw the unbanning of the African political organisations and political leaders being released. In 1984 the Prime Minister, PW Botha, virulently attacked a major scientific conference on poverty in South Africa. President Nelson Mandela then led the government of national unity in 1994. His primary commitment was to **eliminate poverty**, which is expressed by the Reconstruction and Development Plan (RDP).

Since poverty is regarded as a political phenomenon, it is important to highlight that, in South Africa, research on poverty can be divided into four time zones (Oyen *et al.*, 1996) namely –

- before the 1980s;
- the decade where the shift took place and the balance of power became manifest, though few people expected power transfer;
- the extraordinary period between President De Klerk's speech in
 1990 (announcing the beginning of fundamental political change)

and the inauguration of President Mandela in the wake of South Africa's first democratic elections in 1994; and

the period of democratic government since 1994.

From a national perspective poverty is defined as the inability of individuals, households or entire communities to command sufficient resources to satisfy a socially acceptable minimum standard of living. The poverty and inequality report developed for the then South African Deputy President in 1998 stipulated the poor characterised their poverty in the following manner:

- Alienation from the community: they are isolated from the institutions of kinship and from the community.
- Food insecurity: the inability to provide sufficient or good quality food for the family.
- Crowded homes: the poor are perceived to live in crowded conditions and in homes in need of maintenance.
- Use of basic forms of energy: the poor lack access to safe and efficient sources of energy.
- Lack of adequately paid jobs.
- Fragmentation of the family: many poor families are characterised by absent fathers or children living apart from their parents.

2.3.4 Provincial View - KwaZulu-Natal

The vision adopted for addressing poverty in KZN is: "A province without poverty". The vision presents a challenging mandate for government. It aims to eradicate poverty and promote social and economic stability within the province. The vision is one that has been adapted from the vision of the World Bank, namely: A world without poverty. The vision has informed the approach to the strategy and focuses on a holistic approach to poverty. This entails not only focusing attention on the symptoms, but also on the

underlying causes of poverty. Therefore the vision seeks to implement short-, medium- and long-term strategies to address poverty. It is imperative that the strategy addresses all aspects of poverty and concentrate on the community's needs. The strategy therefore has to be innovative and practical in nature and provide an all-encompassing initiative that addresses poverty and that complements the vision (Poverty Consortium, 2003).

2.3.5 Poverty Status of KwaZulu Natal

52% of the people in KZN are under the age of 15. 48% represents the economically active population. Unemployment has increased over the past decade. The implication of this is an increased number of people living below the breadline and increased dependency by residents on the state for grants to support themselves (Poverty Consortium, 2003).

As with the national profile, there are more women than men in KZN. The 2001 census suggested that 47% of the population were men and 53% were women. 47% of females living in KZN are unemployed. The poverty rate is very high, leading to an increase in the demand for basic health care (Poverty Consortium, 2003).

2.3.6 Differences in Poverty Regarding Race and Gender

Poverty Consortium (2003) indicates that the unemployment rate differs between race and gender. Unemployment among men increased from 15,9% in 1995 to 31,3% in 2001. The unemployment rate among women (especially among African women) is higher than the national average. This indicates that unemployment is perhaps one of the most important problems in KZN, which further accelerates the rate of poverty. The historically marginalised communities, i.e. the African and female component of the marginalised grouping, are experiencing poverty at a

much more intense level than the other racial groupings owing to the lack of employment and sustainable income (Poverty Consortium, 2003).

Educational qualifications are also an important indicator of poverty. In 1996, 19,52% of the population in KZN had no education and only 3,4% had tertiary qualifications. In fact, more than 70% of the population did not have matriculation in 1996, which limited their employment chances. The majority of people who did not have access to schools were predominately from the African community. The twofold reason for this is that access to schools is limited and the payment of school fees in light of no sustainable income is a deterrent (Poverty Consortium, 2003).

Electricity for lighting, cooking and heating is unevenly distributed among the population groups, both nationally and in KZN. According to the 1995 October Household Survey conducted by Statistics South Africa in KZN, 43% of African households use electricity for lighting, compared to 99% of Indians and 100% of white households. The use of electricity for lighting varies by urban and non-urban areas (Statistics South Africa, October 1995).

The 2001 census information indicates that African households tend to be more informal in both non-urban and urban areas than whites, Indians and coloureds. It also indicates that historically disadvantaged communities continue to face the challenges of economic stability and the generation of sustainable income.

2.3.7 Spatial Differentiation of Poverty

43% of residents in KZN live in urban areas, with the remaining 57% living in rural regions. The census 2001 data indicates that 49% of the workforce is unemployed, while 84% of the population are not economically active.

This has a major implication on poverty in the province. The delivery of services and access to these services is an important step in addressing poverty and identifying poverty in communities in a spatial dimension (Poverty Consortium, 2003).

The Poverty Consortium (2003) suggests that spatially, access to infrastructure and services in the rural areas presents a challenge to those communities and creates further hurdles for assisting these communities in combating poverty. Mapping indication of the spatial distribution of poverty has been prepared. The census 2001 data indicates that 61% of the population in KZN use electricity as a source of lighting with 35% using candles and 3% being reliant on paraffin. With regards to sanitation, 38% of the population have flush toilets while 28% use pit latrines (without ventilation), 9% have ventilated pit latrines and 16% have no access to any of the above, including chemical toilets or bucket latrines. Poor sanitation facilities and access to electricity are prevalent in rural areas as opposed to the facilities of urban areas in the province. This is indicative of the disparity in terms of access to services in rural areas and contributes to poverty related illnesses, for example cholera, and opportunistic illness. This has the potential to plunge communities and individual households that are facing the challenges of poverty into chronic poverty (Census, 2001).

2.4 WHY IS POVERTY SIGNIFICANT?

According to Wilson and Ramphele (1989) there are four reasons why poverty has a significant impact:

- i. It inflicts damage upon individuals who must endure it.
- ii. Its sheer inefficiency in economic terms. Hungry children cannot study properly, malnourished adults cannot be fully productive as workers and an economy where a large proportion of the

population is very poor and has a structure of demand does not encourage the production and marketing of the goods that are most needed.

- iii. The consequences it has for any society where poverty is also the manifestation of great inequality the existence of too great a degree of inequality makes human community impossible.
- iv. Poverty in itself is in many societies symptomatic of a deeper malaise. It is often the consequence of a process that simultaneously produces wealth for some while impoverishing others. Poverty is the carcass left over from wealth acquisition.

2.5 DIFFERENT PERSPECTIVES ON POVERTY

Poverty is a complex problem, approached from a number of perspectives, among other the sociological, anthropological, economical and political. These perspectives are interconnected and to understand these interrelationships, Systems Thinking comes into play. Without devaluing these different perspectives, this study follows the Systems Thinking approach and SSM, which are designed to act in situations and not only to understand them.

Anthropologists view the primary definition of poverty to be the condition of being in want of something that is needed, desired or generally recognised as having value. A reflection of concepts like indigence, penury and destitution makes it clear that there are variable degrees of poverty. According to them, poverty varies in terms of recognised values. Starvation, death from exposure and loss of life owing to total lack of resources are the only absolute forms of poverty. The state of poverty is thus a continuum rather than a point on an absolute scale. The condition is always defined in relation to a variety of quantitative and qualitative criteria that change societies and cultures. Anthropologists say the essence of poverty is inequality and that the basic meaning of poverty is relative

deprivation. The poor are deprived in comparison with the comfortable, the affluent and the opulent (Valentine, 1968).

According to Oscar Lewis, anthropologists have a new role in the modern world: to serve as students and reporters of the great mass of peasants and urban dwellers of the underdeveloped countries (who constitute almost 80% of the world's population). They ought to give a voice to the people who are rarely heard (Valentine, 1968).

From a sociological perspective, the earliest theories of poverty were perhaps the simplest because they placed the blame of poverty on the poor themselves. Those who suffered from low income did so because they were unable and unwilling to provide adequately for their own well-being. In some countries poverty is still attributed to laziness. Few sociologists agree with this individualistic explanation of the poor. Sociologists see a family or a community and not a characteristic of individuals. Most sociologists argue that it is the inadequacy of the welfare state or the structure of society itself that is responsible for the existence of poverty in the midst of affluence (Haralambos, 1980).

Political approaches to poverty and welfare differ and these differences are within the broader political theories that offer quite different, competing accounts of both the problems of and the solutions to socio-structural issues. These can be categorised into four, namely neo-liberalism, conservatism, social democrats and revolutionary society (Haralambos, 1980).

The business perspective takes the view that it has contributed positively to the equation of poverty reduction because it is the key generator of economic and technological development, wealth and jobs. With the challenge of poverty, businesses are becoming increasingly aware that they need to integrate broader societal issues into corporate strategies for

more direct business reasons. The most important contribution that companies can make is to conduct their business in poor countries in such a way that explicitly contributes to sustainable development and addresses the central elements of poverty reduction in terms of peace, equity, participation, security and environmental protection (Fostater *et al.*, 2002).

Poverty poses the single greatest challenge of our time. It is a complex and multidimensional phenomenon (Fostater *et al*; 2002). According to Alcock (1993) people do not agree on what the problem of poverty is and thus, not surprisingly, the actions they wish to encourage to solve the problem are not the same. Most people, of course, claim that their understanding of poverty is the correct one, based on logical argument or scientific research. There is not one correct, scientifically agreed upon definition, because poverty is inevitably a political concept and thus inherently a contested one (Alcock, 1993). Poverty is not just a state of affairs, it is an unacceptable state of affairs, and it implicitly contains the question: what are we going to do about it?

2.6 THE CAUSES AND ISSUES OF POVERTY

An understanding of the nature and causes of poverty lies at the heart of designing economic and social strategies for development (Robb, 1999). According to Robb, much of the analytical work on poverty (critical for understanding) has treated the poor as an object of inquiry. For instance, empirical investigations have been conducted to explain outcomes for the poor in terms of their characteristics, the environment in which they live and the policies of governments and other agents toward them. This tradition has been critical in deepening people's comprehension of poverty and of the options to alleviate it. She further states that for many years, poverty assessments have used income and consumption indicators, education levels and health status to determine levels of poverty. Recently, policymakers started using participatory poverty assessments (PPA) to

sharpen the diagnosis of poverty and better understand the needs and priorities of the poor.

The causes of poverty have been categorised into three groups, related to (i) economic, (ii) social and (iii) governance causes. The categorisation of the causes assists in addressing the causes of poverty at a fundamental level and therefore assists in the identification of the issues. HIV/Aids have been identified as an important factor contributing to poverty and perpetuating the cycle of poverty in KZN. The table below indicates the causes and issues of poverty and the results of research into poverty experienced by the people of KZN (Poverty Consortium, 2003).

Table 2.4: Causes of Poverty

Source: Poverty Consortium KwaZulu-Natal Poverty Reduction Strategy,

2003:7

CAUSES	ISSUES			
1. Economic (assets)	Alienation from society			
Lack of land	 Food insecurity 			
 Capital 	Crowded homes			
Human capital	Basic resources			
2. Social fabric	Unpaid jobs			
Migrant labour	 Lack of skills 			
 Forced removals 	 Fragmented families 			
 Poor education 	 Inequality 			
Gender	Mobility (social)			
HIV/Aids	 Vulnerability/risks 			
3. Governance	Ineffective programmes			
Lack of transparency	Gender inequality			
Accountability	Accumulation of capital			
Misappropriation	Poor education			

2.7 WHO ARE THE POOR?

According to Alcock (1993) it is important to know who is experiencing poverty and to examine whether particular social groups with particular social circumstances are more or less likely to suffer from it. It is also important to be able to see whether this distribution of poverty is similar or different in different societies and whether it varies over time within one society. It is not just a matter of sociological interest to identify particular individuals or groups; a disproportionate experience of poverty may suggest that policies should be focused on or targeted at those groups in particular.

Categories of potential hopeful workers experience unemployment disproportionately. The sick and disabled find it difficult to secure work because it may be assumed that they cannot perform effectively. All these groups experience particular problems of poverty. According to Brinkerhoff and White (1985), poverty cuts across several dimensions of a society. It is found among whites as well as other races; in rural areas as much as in urban areas; in families as well as in single households.

In the 19th century discussions on the poor mainly concerned those who were employed but lived under dire circumstances. Inadequate wages caused poverty. In the 1930s the discussions of the poor fundamentally concerned the unemployed: large numbers of urban and rural people who had no economic support in a society with meagre welfare arrangements. Today, the poor are more clearly a mixed group, and it is important to delineate the diversity of the poor if we wish to have effective policies to reduce poverty (Brinkerhoff and White, 1985).

Pilisuk and Pilisuk (1976) suggests that in linking the cultural, family and economic variables, four categories of the poor can be outlined as follows:

- i. The **stable** poor, who are living somewhat below the poverty line and have a stable family unit.
- ii. The **strained**, who have painful economic circumstances but have a stable family condition.
- iii. The **skidders**, who are close to the economic level of the stable poor but suffer a good deal of internal family conflict.
- iv. The unstable poor, who are in great economic and family difficulty.

2.8 THE CULTURE OF POVERTY

The theory of culture of poverty was developed from the studies of Oscar Lewis from 1964 to 1968 in Mexico, Puerto and New York. Lewis (1969) uses the term **culture of poverty** to explain why the poor remain poor. He argued that in rich societies, people who are poor develop a set of values that protects their self-esteem and maximises their ability to get enjoyment out of dismal circumstances. He further defines this culture of poverty as a set of values that emphasises living for the moment rather than thrift, investment in the future and hard work.

Lewis (1969) summarised some of the major characteristics as follows:

i. On the family level the major traits of the culture of poverty are –

- the absence of childhood as a specially prolonged and protected stage in the lifecycle;
- early initiation into sex;
- free unions or consensual marriages;
- a relatively high incidence of the abandonment of wives and children;
- a trend toward female or mother-centred families;
- a lack of privacy;
- verbal emphasis on family solidarity, which is only rarely achieved because of sibling rivalry; and
- competition for limited goods and maternal affection.

ii. On the individual level: the major characteristics are –

- a strong feeling of marginality, of helplessness, of dependence and inferiority;
- a high incidence of maternal deprivation;
- confusion of sexual identity;

- a lack of impulse control;
- a strong present-time orientation with relatively little ability to defer gratification and to plan the future;
- a sense of resignation and fatalism;
- a widespread belief in male superiority; and
- a high tolerance for psychological pathology of all sorts.

2.9 POVERTY AND EXCLUSION

As far as exclusion refers to problems associated with poverty, there seems to be little effective distinction in the approach that is called for. The idea of exclusion goes beyond the concept of poverty. It is argued that the experience of exclusion is different to that of poverty. Gordon and Spicker (1998) define exclusion as a process that blocks all social, community or societal change. In this case one could say that some poor people are not excluded, as one will find populations that have incomes who could feel or be considered socially excluded. Poverty excludes people from society just as other things, such as disability, illness and personal characteristics do.

Gordon and Spicker (1998) argue that poverty is a narrow concept dealing with problems that are directly related to economic resources, while the exclusion deals with a broad range of questions on individuals' integration into the society. They also argue that poverty is a static phenomenon, dealing solely with people's economic situations at one point in time, while social exclusion represents a dynamic perspective focusing on the processes that lead to a situation of exclusion and, for that matter, poverty (Gordon and Spicker, 1998).

2.10 POVERTY STATISTICS

2.10.1 Statistics of Poverty Globally

According to Forstater *et al* (2002) in a global population of six billion people, the statistics on the poor worldwide are as follows:

- 4 billion people live on under US\$4 per day
- 2,8 billion of them live on under US\$2 per day
- 1,2 billion of these people live on under US\$1 per day

2.10.2 Statistics of Poverty in SA

Since the mid-1960s the South African economy has suffered a prolonged deterioration in real growth, domestic savings and employment creation. As a result, the distribution of income-earning opportunities remains largely unchanged, with extremely limited prospects for the South African population. By 1995, the combined outcome of these trends resulted in an economy with very high income inequality, widespread poverty and high levels of unemployment as shown below (Wilson *et al.*, 2001).

Table 2.5 Poverty, inequality and unemployment, 1995 Source: Statistics South Africa, 1997

INDICATOR	%	ESTIMATED		
		POPULATION		
Poverty rate total	49,9	19 700 000		
Poverty rate in non-urban areas	70,9	13 700 000		
Poverty rate in urban areas	28,5	6 000 000		
Poverty share of non-urban areas	71,6	Unknown		
African poverty rate	60,7	18 300 000		
White poverty rate	1,0	44 000		
Unemployment rate	29,3	4 250 000		
Income share of poorest 40% of	11,0	Unknown		
households				
National Gini Coefficient	0,52	Unknown		

Approximately half of South Africa's population can be categorised as being poor. The table above shows that most of the poor live in rural areas. Unsurprisingly, 61% of the African population is poor and only 1% of the white population is poor. The distribution of this poverty is by no means even across the provinces as shown below (Wilson *et al*, 1995).

Table 2.6: Provincial distribution of poverty, 1995 Source: DBSA, 1998 and Statistics South Africa)

Province	Households	Individuals	Poverty gap	Poverty	Population
	living in	living in	(Rand	gap as %	that is non-
	poverty (%)	poverty	million)	of GGP	urban (%)
		(%)			
Eastern Cape	40,4	50,0	3,303	11,4	63,4
Free State	56,8	64,0	3,716	15,7	31,4
Gauteng	29,7	41,0	917	0,6	3,0
KwaZulu-Natal	36,1	47,1	1,159	2,0	56,9
Mpumalanga	33,8	45,1	968	3,1	60,9
Northwest	15,4	21,1	1,551	7,3	65,1
Northern Cape	38,2	48,0	257	3,2	29,9
Northern	61,9	69,3	2,948	21,4	89,0
Province					
Western Cape	14,1	17,9	529	1,0	11,1
South Africa	35,2	45,7	15,348	4,0	46,3

According to the New Agenda Report (2002) poverty statistics in South Africa reveals the following:

- 45% of the population (18 million people) live on less than \$2 a
 day (a poverty line suggested by the World Bank).
- 25% of African children are stunted (short for their age).
- 10% of Africans are malnourished (underweight for their age).
- 60% of the poor receive no social security.

Poverty leaves its traces on many levels of society. These manifestations are the observable consequences of poverty on individual, community, and national level, in the economy and in the socio-political structure of the society.

2.11 GEOGRAPHY OF POVERTY

One concrete way of studying the incidence of poverty is by observing the places where people tend to be rich or poor; in other words the geography of poverty. It is, to some extent, precisely because poverty has a geography (that it is present in some places but not others) that it can remain out of mind. Poverty has a crucial geography: it is the constant reality of poor places where poverty is concentrated; to the fact that these places are all too often invisible in debates and policy making; to the details of how poverty becomes entrenched in these places; and to the reasons why some places and not others slip into poverty, perhaps because the very wealth of some places may be causally linked to the poverty of others (Bigman and Fofack, 2001).

Despite the very political, social and economic contexts, there are striking similarities in the experiences of poor people. The common theme underlying poor people's experiences is one of powerlessness. Powerlessness consists of multiple and interlocking dimensions of ill-being or poverty. Narayan *et al*, (2000) describes powerlessness as the inability to control what happens, the inability to plan for the future and the imperative of focusing on the present. Poor people want to be able to take the long view, but unfortunately they cannot. Having to live "hand-to-mouth" is not a choice, but an immensely frustrating necessity. They experience daily anxiety; having to eat the moment they receive food or money (Narayan *et al*, 2000).

2.12 CONCLUSION

A brief outline of the concepts of Systems Thinking has been given in this chapter, as well as some theories on poverty. One can appreciate the fact that Systems Thinking as a tool is commonly used for solving and illuminating a holistic understanding of messy, complex problems and can contribute positively in untangling the complexities of poverty.

To provide further context to the study, the next chapter will deal with the poverty alleviation and eradication programmes put in place by the government departments, at the same time highlighting the gaps present in them.

CHAPTER THREE POVERTY ALLEVIATION, REDUCTION AND ERADICTION PROGRAMMES IN A SOUTH AFRICAN CONTEXT

3.1 INTRODUCTION

This chapter looks at the importance of poverty alleviation and eradication programmes in South Africa. This part of the study critically reviews the current poverty alleviation and eradication programmes and initiatives of the Department of Social Development and Welfare, the relevant nongovernmental organisations (NGOs) and the community-based organisations (CBOs), and analyses the gaps that prohibit their effectiveness. The study further looks at other poverty alleviation and eradication programmes put in place by other government departments, which are strongly linked to poverty issues. The specific departments are the Department of Education, the Department of Housing, the Department of Health and the Department of Agriculture. By doing this it will be able to establish whether there is any integration of these programmes by the different departments or not.

It is important to clarify the differences between the terms 'poverty alleviation', 'poverty reduction' and 'poverty eradication', as they will be used in this study. The poverty Consortium (2003:12) defines the terms as follows:

Poverty alleviation means making poverty manageable by treating its symptoms. It has a broad base aimed at mitigating the short-term effects of poverty. As such it focuses on the symptomatic effects of poverty.

Poverty reduction means to manage poverty in such a way that its levels are reduced significantly. It is a medium-term measure or policy that enhances the potential ability of the poor to participate in economic

activities and thereby reduce the levels of poverty.

Poverty eradication/elimination means to get rid of poverty completely, to uproot it. Poverty eradication strategies should ensure sustained growth and development. Pro-poor policies target the poor either as a means of alleviating, reducing or eradicating poverty in the society or the country as a whole.

As stated earlier, poverty is not a new phenomenon in South Africa. In 1906, a government commission was appointed to look into the matter of "indigence". Their report was fatally flawed because its terms of reference limited it to consider only the indigence of whites, with very little attention to blacks (Oyen *et al.*, 1996). In 1928, the Carnegie Commission set the scene for the development of a range of political strategies focusing exclusively on white poverty. The National Party manipulated these strategies in 1948 when it came to power and used them as anti-poverty programmes for whites only (Alcock, 1993).

Poverty is a basis for action or policy. Social policy flows from poverty and debates about poverty have provided a central basis for the development of social policy in Britain and, of course, other countries like South Africa. Fundamentally, understanding the problem of poverty requires a focus on the relationship between poverty and anti-poverty policies and the impact that these have on broader patterns of inequality (Alcock, 1993). This is what this dissertation is attempting to contribute to poverty research.

3.2 POVERTY ALLEVIATION/ERADICATION PROGRAMMES

Because we are one another's keepers, we surely must be haunted by the humiliating suffering which continues to afflict millions of people. Our nights cannot but be nights of nightmares, while millions of our people live in conditions of degrading poverty. No night can be restful when millions have no jobs, and some are forced to beg, rob and murder to ensure that they and their own do

There has been considerable rethinking of South African urban policy in general and urban poverty issues in particular over the last decade. Urban poverty enjoyed a degree of prominence during the 1980s, within the NGO sector and, in the early 1990s, ANC policy documents. The ANCs Reconstruction and Development Programme (RDP) document places considerable emphasis on the poor within the conceptual framework of an integrated and sustainable programme; the first of such programmes being "meeting the basic needs" (Wilson *et al*, 2001). The RDP sought a developmental programme for the country that emphasised a new paradigm, which would crosscut stale debates emanating from the apartheid era.

According to Alcock (1993) the concept of poverty in South African research has been expanded into a three-stage process: facts, causes and strategies. He further asserts that it is no longer acceptable to confine poverty research to just collecting data or analysing causes. Research should also focus on finding ways of preventing and curing the syndrome. These ways must proof to be sustainable and integrated. Just as it was not enough to reduce the complex phenomenon of poverty to a single number or characteristics, so was it difficult to focus just on one cause such as apartheid. Other people may argue on why states spend or should spend lots of money to find out what they already know. Alcock (1993) gives two reasons for this:

- i. The particularity of what it means to be poor, combined with accurate information about the extent of that poverty, raises consciousness in society in such a manner as can generate or strengthen action to try and deal with the problem.
- ii. The planning of any strategy against poverty is facilitated by the

existence of detailed map of the terrain.

This research is only going to look into five main issues around poverty in South Africa and programmes or policies targeting the areas of concern. These are housing, social welfare, health, education and infrastructural services. Below are brief backgrounds on each of the crucial aspects around poverty and the current initiatives put in place to reduce and eradicate poverty in those areas.

3.3 HOUSING

According to Wilson and Ramphele (1989) there is far more to housing than just family shelter. Housing must include ready access to work, schools, recreation centres, shops and service centres such as post-offices, banks and clinics. Housing is an overall environment where human beings can live rich lives without fear of murder, rape, armed robbery or frequent hit-and-run accidents, which may impact negatively on children who have nowhere else to play but busy streets. Whether one is simply looking at units of shelter or considering the living environment as a whole, the housing situation in South Africa is so bad that it is difficult to convey with mere statistical analysis or verbal description (Wilson and Ramphele, 1989).

The international experience confirms that housing is a critical asset for the urban poor. Poor people's vulnerability is increased by a situation of insecure housing whereas secure housing is a productive asset that can serve to cushion the poor against the crushing impacts of poverty. Housing does not only provide shelter and a space for human development, but its security also encourages households to invest further in it. There is, however, one fact that is obvious: historically South African housing has not been performing well. According to Wilson *et al.* (2001) problems of the housing sector, both from the supply and demand side are —

- underinvestment in terms of the share of national budget;
- the limited capacity of the construction sector;
- institutional bottlenecks and the fear of risk among financial institutions;
- the design of South Africa's cities is wasteful, inefficient, inequitable and costly to manage;
- apartheid policies had significant effects in terms of African housing demand;
- affordability constraints owing to low incomes;
- high unemployment;
- circular migration;
- a history of prohibition on African home ownership;
- spatial inefficiencies of high transport costs; and
- limited access to credit from the formal finance sector.

According to Goodlad (1996) severe inequality is an outcome that characterises South Africa's underperforming housing sector. Currently, the urban poor reside in a diverse range of shelter conditions, including hostels, backyard shacks, garages and outbuildings, spontaneous informal settlements, planned site-and-service schemes and upgrading projects, state-owned rental housing, inner city flats and employer-owned housing. Of these, informal housing is the most prevalent.

Smit and Williamson (1997) therefore take the view that overall it is clear that the housing situation in South Africa does not offer the poor an asset that can reduce their vulnerability and promote their socio-economic development. They further suggest that in order to address circumstances of poverty and inequality in housing, it is important to have a framework that is robust and flexible enough to accommodate variety and provide a set of programmes that address specific concerns.

3.3.1 Housing Strategies and Government Interventions

Goodlad (1996) states that housing issues featured strongly in the reconstruction and development commitments of South Africa's first democratic government. He further summarises the national housing vision as follows:

Government strives for the establishment of viable, socially and economically integrated communities situated in areas allowing convenient access to economic opportunities as well as health, educational and social amenities, within which all South Africa's people will have access on a progressive basis to: a permanent residential structure with secure tenure, ensuring privacy and providing adequate protection against the elements; and potable water, adequate sanitary facilities, including waste disposal and domestic electricity supply.

Goodlad, 1996:62

The Department of Housing views housing as a variety of processes through which stable and sustainable public and private residential environments are created for households and communities. Of great importance, it recognises that the environment within which a house is situated is as important as the house itself in satisfying the needs and requirements of occupants (Wilson *et al.*, 2001). The policy framework is articulated around several substantive areas and programmes highlighted below:

The subsidy scheme

The national subsidy scheme is the department's most farreaching and important programme, which is administered through provincial housing boards. It provides a once-off capital subsidy for land, housing and infrastructure to those beneficiaries earning less than R3 500 a month. The subsidy scheme represents a compromise between popular demands for the state to deliver complete houses for all and a concern to spread housing benefits widely. An initial maximum lump sum of R15 800 since 1994 for a 20 square metres which was increased to R25 800 was insufficient to cover the costs of a serviced site and a 40 m² top-structure. the subsidy amounts have recently been increased to R36 528 for the year 2006/2007 for a 30 square metre house.

The subsidy is also concerned with ensuring that private sector delivery agents are not squeezed out by "unfair competition" from the public sector. There are a variety of approved routes through which housing subsidies can be accessed, namely individual subsidies, a project-linked route and an institutional route such as a housing association. There are also funds available through the Discount Benefit Scheme to allow beneficiaries to purchase their government-owned houses and a hostel redevelopment programme (Wilson et al, 2001).

Expansion of housing credit

According to Wilson *et al.*, 2001 this intervention concerns an expansion of housing credit to the poor through making the enormous resources in the financial sector available to the majority of the public. The most significant risk interventions are –

- the creation of a mortgage indemnity scheme;
- the formation of Servcon, which endeavours to normalise the existing lending environment by offering special arrangements to those who defaulted on loan repayments;
- the Product Defect Warrant Scheme in which housing developers must provide guarantees against a defect warrant scheme;
- the National Urban Reconstruction and Housing Agency,
 which uses guarantee funds to mobilise bridging and end-

- user finance for purposes of low-income housing;
- the National Housing Finance Corporation that was launched to mobilise wholesale finance for the housing sector with a special focus on facilitating the activities of the non-traditional lending sector; and
- housing support centres that are put in place to provide a range of support activities such as training, material production and consumer education. This centre recognise the fact that the subsidies are insufficient on their own to allow the building of a formal house on a serviced site and, given that formal finance is unlikely to be given to those earning less than R1 500 per month, much housing activity will be incremental and will require support.

One of the positive things about the evolving policies and programmes is that they allow for a considerable variety of housing delivery systems that, if carefully selected and well managed, can assist in addressing the diverse needs and aspirations of the poor. From a poverty and inequality perspective, an evaluation of current housing initiatives points to its success in at least four major respects (Wilson *et al.*, 2001):

- i. It represents a significant departure from previous subsidy policies that favoured the relatively affluent whites and males to a point where intended beneficiaries are earning less than R1 500 a month are being reached.
- ii. There is a direct impact on the poor, providing them with a basis of shelter that is secure and ensures basic standards of health and safety.
- iii. The poor are being provided with a tangible asset that will furnish a buffer against poverty and reduce their vulnerability to changing circumstances.
- iv. The pace of housing delivery is beginning to accelerate although

government's housing programme started at a slow rate owing to capacity problems and long lead times.

Unfortunately, according to Wilson *et al.* (2001), besides the above achievements, there are certain identifiable areas where a consideration of policy and an improvement in existing programmes can be effected, such as:

- The overwhelming emphasis placed on rapid delivery obscures other aspects that are essential in addressing poverty and inequality.
- ii. Attention needs to be given to the question of providing protection against a danger of "downward-raiding" of low-income subsidy beneficiaries by higher-income groups.
- iii. The contemporary policy must be more aggressive with regards to ensuring access to land for the poor. This can be the most critical element for overcoming poverty in South Africa. It is necessary to guard against the reproduction of apartheid along class as opposed to racial lines.
- iv. The issue of rental housing has been overlooked in South Africa's national housing programme.
- v. There is a danger that the current housing programme is being driven by developers who are attracted to building houses on cheap, uncontested land far from jobs and social services (Tomlinson, 1994).
- vi. It is important to ensure that the functioning of the present housing subsidy scheme is monitored, particularly in the light of alternative suggestions for modifying the subsidy and integrating it into formal financial markets.
- vii. The South African government should consider a proactive rather than a reactive approach to the issue of the high numbers of immigrants in the urban poor South Africa. There is therefore a

need for clear policies regarding non-citizens.

3.4.4 HEALTH

The RDP explicitly recognised that health care is only one way in which the overall health status can be improved. Raising the standard of living conditions through improved income-earning opportunities, sanitation, water supply, energy sources and housing make up the overall strategy for improving health. The RDP (ANC, 1994) set specific targets to ensure that there is improvement in the mental, physical and social health of the entire population namely –

- ensuring that 90% of pregnant women receive antenatal care;
- ensuring that 75% of deliveries are supervised and carried out under hygienic conditions by 1996 and that 90% of deliveries be supervised by 1999;
- providing these services at no charge at government facilities by 1997;
- ensuring the right to six months paid maternity leave and ten days paternity leave;
- providing an expanded and more effective programme of immunisation that would achieve a coverage of 90% by 1997;
 and
- retraining 25% of district health staff by the end of 1995 and 50% by the end of 1997 on the primary health care approach (ANC, 1994).

According to the White Paper for the Transformation of the Health System in South Africa (1997), policy has focused on reducing the cost of health care to the least well off, while increasing their access to health facilities. It emphasised four processes, namely –

i. increasing access to care through building or upgrading health

facilities, through deploying health staff to underserved areas and most importantly through the introduction of free care for certain health services and categories of patients;

- ii. reducing the costs of health care by reducing drug costs and through the establishment of National Health Insurance system;
- iii. improving health service delivery through an expanded immunisation programme, the promotion of maternal health, including the termination of pregnancy and treatment of TB; and
- iv. strengthening programmes for nutrition like the Integrated Nutrition Programme, hygiene and occupational health, thereby improving preventive health care.

The policy of free health care has made a significant impact on improving access to health services for the poor to date (Wilson *et al*, 2001). When evaluating the free health-care policy, the Poverty and Inequality Report (PIR) found that health service used by the poor, especially the rural poor, had increased substantially and pregnant women had started visiting antenatal clinics at early stages of their pregnancies. Generally, PIR concluded that the existing policies and programmes provide an excellent basis for addressing the challenges facing the health sector. Practical steps have been taken to redress health sector iniquities and to address poverty. The Department of Health has managed to strike the balance between service delivery and internal transformation better than other departments (Wilson *et al*, 2001).

While the 1996 extension of free primary health care improved the financial accessibility, the PIR asserts that it does not directly address the geographic and other aspects of access to primary care services and the quality of care. Accessibility and quality of care improvements would include providing integrated, comprehensive primary care services; longer service hours; ensuring the routine availability of essential medicines; and empathetic staff attitudes. The Presidential Review Commission states

that there is a need for a more effective communications strategy at the Department of Health. An inadequate implementation strategy, which may be attributed to the eagerness to make rapid changes, is one of the reasons that impede the success of the policies. Other shortcomings are inadequate management capacity; structural obstacles and constraints; staff and other resource shortages; few nurses; bed linen and medicines in short supply owing to pilfering (Mail and Guardian, 26 February 1999).

3.5 WELFARE

The Department of Welfare, recently renamed the Department of Social Development, endeavours to create a better life for the poor, vulnerable and excluded people of a society. Its task is to develop and monitor the implementation of social policy that both creates an enabling environment for and leads to the reduction of poverty (Department of Social Development Strategic Plan, 2002/2003). The welfare budget is the fourth largest vote in the government's budget, accounting for close to 10% of the total budget. Welfare services and social security programmes form an integral part of the government's strategy for responding to poverty and inequality (Wilson *et al.*, 2001).

The provincial departments of social development and NGOs deliver many of the social development services. Some of the direct services provided by the national department to the public include –

- payment of relief to victims of declared disasters:
- registration of non-profit organisations;
- payment of subsidies to national councils;
- poverty relief programmes;
- home-based/community-based HIV/Aids projects; and
- a national call centre for social grants enquiries Department of Social Development, 2002).

The welfare policies and programmes are also designed to address the transient poverty (in the short term), temporary (or seasonal) poverty, and chronic poverty (which is long term or structural). At the macro-economic level the GEAR strategy acknowledges that social security, social services and related social development programmes are investments that contribute to social and economic gains and growth (GEAR, 1996)). According to the Department of Social Development (2002), the challenges faced by this department are the following:

- It must manage growth in expenditure of social security entitlement programmes while strengthening funding of discretionary and developmental welfare services.
- The PIR concludes that the welfare provision still bears the marks of apartheid inequalities, with people in disadvantaged and rural areas having very limited or no access at all to the services of either government or welfare NGOs.
- A bigger staff compliment is required.
- Financial constraints are seen in the restriction of the flagship
 programme of the department to those who are not receiving any
 other forms of state assistance and the controversy over the
 replacement of a more generous but restrictive state maintenance
 grant, with the more widely available child support grant.
- Lack of coordination and difficulty in implementing initiatives undertaken by different government departments.
- There are large numbers of needy people who are forced to cope without the state's assistance because they fall outside the categories eligible for the specific benefits that are available.

The department has put in place grants to help the poor. These include disability grants, child-care support grants, grants for the elderly, grants for the families of people infected with HIV/Aids and maintenance grants.

3.6 EDUCATION

The RDP has placed considerable importance on the development of South Africa's human resources through all forms of education and training, and the provision of schooling for children is the largest component of the government's responsibilities with respect to education. Among others, the RDP has set the following measurable targets (ANC, 1994):

- Government must enable all children to go to school for at least ten years.
- Classes should not exceed forty students.
- The structure of the education system, curricula and certification should be aligned with the national qualification system.
- The need for school buildings must be addressed by improved use of existing facilities and a school-building programme.
- Issues of equity in education must be addressed through curriculum development that pays attention to the education of African children, especially in the areas of science, mathematics, technology, arts and culture.

While education is relatively well resourced, at least in monetary terms, it does not appear to have succeeded in delivering quality education on a broad basis (Wilson *et al*, 2001). Uneven quality of teaching has resulted in ongoing marked racial differences in basic literacy and numeracy. The Presidential Review Commission describes the situation in the Department of Education as being "near-crisis". Reasons given for this apparent lack of delivery by the department are mostly concerned with structural limitations. These include inadequate coordination, the impact of erratic restructuring and apparently dysfunctional actions at some levels.

3.7 THE POVERTY ALLEVIATION, REDUCTION AND ERADICATION STRATEGY

The poverty alleviation, reduction and eradication (PARE) strategy has emerged as the result of the various issues. It provides a framework for comprehensive analysis and understanding of the approach to arrest and manage poverty. The strategic framework assists in this endeavour by offering a three-prong and -phase approach of poverty alleviation, poverty reduction and poverty eradication. The core goals are adapted from the PARE thrusts and strategies that follow.

In order to achieve the goals, all government departments and stakeholders have to take joint responsibility and work towards the following core objectives (Poverty Consortium, 2003):

- Strengthening the mechanisms for poverty alleviation, reduction and eradication.
- Promoting and protecting democracy and human rights by developing clear standards of accountability, transparency and participative governance.
- Promoting the development of infrastructure, agriculture, health, welfare and education.
- Promoting the role of women in social and economic development by reinforcing their capacity in the domains of education and training.
- Revitalising and extending the provision of education, technical training and health services (with priority to HIV/Aids, malaria, etc).
- Restoring and maintaining macro-economic and socio-economic stability by developing standards and targets for provincial fiscal and monetary policies and appropriate institutional frameworks.
- Instituting transparent legal and regulatory frameworks for private companies to participate in socio-economic development through social responsibility programmes; and therefore to be encouraged.

 Building the capacity at local municipal levels to ensure that the poorest of the poor are reached.

The Poverty Consortium (2003) has formulated the following six strategic thrusts to address poverty in KZN.

3.7.1 Sustainable Pro-Poor Growth

The focus of sustainable pro-poor growth is on the economic component of capacitating communities and individuals who are considered poor. Economic growth should therefore be encouraged, as it is a precondition for poverty reduction. It is recognised throughout the strategic interventions that the driving force for growth will be the coordination of programmes. The economic growth support offered by the government, NGOs and donors is focused on economically empowering the poor and supporting small, micro and medium enterprises (SMMEs) and sectors where the poor are active. Such support however, is not sufficient to generate the level of economic activity necessary for sustainable poverty reduction and lessening dependence on donor financing. Therefore the strategy does not neglect the crucial role of the large-scale private sector in generating investment, employment, tax revenue and foreign exchange. The role of the private sector as a development partner in achieving pro-poor growth is to offer assistance in asset base accumulation, income and employment opportunities, infrastructure and promoting sustainable environment (Poverty Consortium, 2003).

3.7.2 Human Capital Development

Human capital is the key to poverty reduction in KZN. A healthy and educated province leads to increased productivity, better income distribution and an improved standard of living in general. A deteriorating health situation undermines the ability of individuals to lift themselves out

of poverty and leads to a general decline in productivity. Functionally, the major economic sectors of agriculture and industry demand an educated, skilled and healthy workforce to take on the new challenges and aspirations of the sectors. At the same time, with appropriate human capital, the public and private sectors, civil society and poor people themselves will be able to positively influence and impact on processes and outcomes of the entire poverty reduction strategy (Poverty Consortium, 2003). The strategies for the development of human capital are education, skills training and development and improving health care and social services. These strategies prove fundamental in improving skills and expertise while keeping people healthy and ensuring that efficient support systems are in place to provide care when required.

3.7.3 Reducing Vulnerability

The Poverty Consortium (2003) suggest that reducing vulnerability provides a safety mechanism to ensure that the quality of life of the vulnerable is improved and maintained at an acceptable level by providing moderate support to the transient poor and substantial support to the chronically poor. Strategies for reducing vulnerability are social security, disaster management and improving justice in the province (Poverty Consortium, 2003).

3.7.4 HIV/Aids Focus

KZN is currently experiencing the detrimental impact of HIV/Aids, which threatens all developmental efforts. There is a clear link between the pandemic and poverty and it is believed to be one of the major factors driving the disease (Mbeki, 2001). People living in poverty tend to be more vulnerable to HIV infections owing to a number of factors. One of these is that they have poor access to health care facilities, both because they cannot afford to pay for good quality care and because the general health care services are inadequately resourced. This leads to the risk of HIV infection progressing to Aids. There is a serious need to put safety nets

and support systems in place for individuals and communities who are handicapped by HIV/Aids (Poverty Consortium, 2003).

3.7.5 Spatial Development

The Poverty Consortium (2003) suggests that poverty and the environment are linked in a complex, cyclical relationship. High levels of illiteracy, population growth and poverty lead to environmental degradation, forcing the poor to depend on natural resources for survival. Successful delivery of infrastructure such as roads and telecommunications are identified as important spatial concerns for expanding access to education, transport networks, health and economic opportunities (Poverty Consortium, 2003).

3.7.6 Good Governance

Without good development-oriented governance it is impossible to reduce poverty. Good governance consists of three elements, namely political will and mind-set; security and justice; and responsive and effective public institutions. The strategies to improve governance and facilitate cooperation are participatory development, responsive and effective public institutions and stakeholder alignment (Poverty Consortium, 2003).

3.8 CONCLUSION

While the different sectors have their own programmes aimed at reducing and alleviating poverty and are successful to a certain extent, none of the sectors seem to be interacting with one another to improve and enhance the programmes to achieve maximum reduction of poverty.

Most countries in the world are in a situation where the poverty alleviation programmes and poverty reduction programmes have not realised their objectives as were originally conceived, namely poverty amelioration and redistributive justice. Instead, rural poverty continued to

rise. It is time therefore to declare the death of poverty alleviation/reduction programmes and the inauguration of **poverty eradication programmes**, which should emphasise the role of the poor themselves in the process (Wilson *et al.*, 2001). Poverty reduction programmes should be used as a launching pad for the actual eradication programmes.

Chapter four deals with the methodology that this research paper attempted to adopt to achieve the research objectives mentioned in chapter one.

CHAPTER FOUR THE RESEARCH METHODOLOGY

4.1 INTRODUCTION

This chapter seeks to give an overview of the research methodology applied in this study. A thorough explanation of the methodologies is given. The Systems Thinking approach in relation to poverty will also be discussed.

The major part of poverty research is concentrated on measuring the extent of poverty. This is mainly the income or cost of living of the individuals and the households. The choice of poverty measurement leads to different results (Oyen *et al*, 1996). The objective of poverty research is to pursue the intricacies of measuring and to develop and refine measuring tools. On the other hand, there seems to be beliefs that it is important to know how many people are poor and how poor they are (Oyen *et al.*, 1996). Somehow, it is taken for granted that the more precise the numbers can be stated; the better equipped interested parties will be to combat poverty. The following fundamental questions have to be thought through when dealing with the challenge of poverty:

- For whom is it important to know how many people are poor?
- Does the knowledge of an exact number have an impact on poverty alleviation?
- Does this knowledge have more of an impact on poverty alleviation than other kinds of poverty research?
- Is the information on the number of the poor always used to the benefit of the poor?
- Who is asking for numbers rather than a broader picture of the complex problem of poverty?
- Why is it functional to present poverty as a set of numbers collected

over time?

 Who are the actual users of those head-count numbers that researchers have struggled to come up with?

The users of the above information are the policymakers and bureaucrats who need to reduce the poverty levels to a few manageable variables. The poor people who deserve help have to be identified so as to ensure fair allocation of resources. This research study is not focused on the numbers of the poor. How people research poverty depends to a large extent on what they want to know about poverty.

4.2 WHAT IS IT THAT THE STUDY WANTS TO KNOW OR INVESTIGATE ABOUT POVERTY?

This research study seeks to investigate poverty alleviation, reduction and eradication programmes that are put in place by the government, as well as its interventions/strategies. The interest of this study is in the dynamics of those programmes in operation. The question is: are they meeting their objectives; and if not, why not? What are the issues around their ineffectiveness? Why do we still see a great number of poor people locked in poverty? What are the gaps?

According to Oyen *et al.* (1996) many research works focused on poverty alleviation/reduction programmes have observed the following gaps that are responsible for programme failures and ineffectiveness:

- Poor programme design and delivery systems
- A lack of commitment from sponsors, policymakers and staff
- Inadequate resource allocation

 An incomplete understanding of complex issues that impinges on poverty and the socio-political contexts in which the poor live.

The direct results of poverty research include an increasing emphasis on participation and ethics in decision-making: better governance, empowerment of the disadvantaged and other vulnerable groups; the demystification of poverty and an improvement in our understanding of poverty and the poor. Of the four gaps in poverty alleviation programmes highlighted above, this research is mostly concerned with the last one, which is incomplete understanding of the complex issues that impinges on poverty and the socio-political contexts in which the poor live. The research takes the view that one of the significant gaps is that the people involved in putting the programmes together and poverty researchers must first emphasise the need to understand the complex phenomenon of poverty in a holistic manner.

The perspective that this study hopes to bring to poverty research is a systemic understanding of what is happening in those poverty alleviation/eradication programmes. A Systems Thinking approach is used, because it is a dynamic model of research that allows us to engage with the complex problem situation. This study confirms and shares the reality that poverty and poverty reduction are highly complex problems as illustrated in chapter two.

Systems Thinking practitioners have developed research processes, which are dynamic in themselves and the most fundamental of these is the action research cycle. The objectives of this research paper are achieved by employing the methodology described by Checkland and Holwell (1998), called **action research** (AR) using Systems Thinking theory. The essence of this approach is that action is undertaken. Reflection on action yields insights that may support a deeper appreciation of what a problem

may be. Insights are fed into and improve current actions, and may be transferred to some other domain where another reflection-action cycle gets underway. This process continues to improve understanding of what is known about the contexts and how action may be undertaken within them (Flood, 1999).

Carr and Kemmis (1986) define AR as a form of self-reflective enquiry undertaken by participants in social (including educational) situations in order to improve the rationality and justice of –

- their social or educational practices;
- their understanding of these practices, and
- the situations in which these practices are carried out.

As a method of exploring and solving problem issues, AR can be applied equally to large-scale enquiry. Kurt Lewin, the man who popularised the term AR, used this method for improving relations in industrial situations. He then discovered that this sort of participatory procedure is much more effective in solving problems of human interrelationships than an imposed, structured process, into which people were expected to fit. The action of AR, whether on a small or large scale, implies change in people's lives and therefore in the system in which they live (McNiff, 1988). Action research is systematic; it involves a self-reflective spiral of planning, acting, observing, reflecting and re-planning. The AR learning cycle is the core process of a systems approach known as Soft Systems Methodology (explained below)

It can help researchers to build a better, more free society by not passing ownership of the project to researchers, but to the society that is intended to benefit from the project or programme. People feel more responsible and become free to contribute different ideas and opinions that will result in fruition. According to Greenwood and Levin (1998) AR refers to the conjunction of three elements, namely –

- research (AR is considered to be one of the most powerful ways to generate new knowledge);
- ii. participation (A strong value is placed on democracy and control over one's life situations. AR is a participatory process where people establish the agenda together, generate the knowledge necessary to transform the situation and put the results to work); and
- iii. **action** (AR aims to alter the initial situation of the group, organisation or community in the direction of a more self-managing, liberated state).

Unless all these elements are present, the process cannot be called AR. They further emphasise that AR aims to increase the ability of the involved community or organisation members to control their own destinies more effectively and to keep improving their capacity to do so (Greenwood and Levin, 1998).

AR is summarised by Checkland and Holwell (1998) as -

- a collaborative process between researchers and people in the situation;
- a process of critical inquiry;
- placing focus on social practice; and
- a deliberate process of reflective learning.

Looking at this summary of AR and considering the problem of poverty that this study is concerned with, it becomes apparent that this method is an appropriate one if effective and systemic results are to be expected. It is important then to highlight that while academics and politicians are capable of defining and identifying poverty, their views may not necessarily coincide with the views of those people who are identified as being poor.

This has led some to suggest that poverty should be identified and defined only by poor people and presumably only as far as they wish to present themselves as being poor (Alcock, 1993). This justifies the importance of adopting the AR approach to this problem.

4.3 SYSTEMS THEORY AND ACTION RESEARCH

One stream of scientific ideas and concepts directly relevant to AR comes from an integrated field known as General Systems Theory (GST). At the core of GST is a set of holistic concepts about the way that the world is organised. GST views the world as composed of interacting systems whose processes differently integrates the same basic matter of the universe to produce the immense array of things we encounter in the world of experience. In GST, a system is largely understood by a combination of its open or closed properties and then by the history of the processes occurring within it or affecting it from the outside (Greenwood and Levin, 1998). The only hope of understanding any particular thing is then by placing it in an appropriate system context and following the processes by which it acts. Senge (1990) argues for the ability to understand how elements and subsystems interact, forming a total situation.

4.3.1 Why is Systems Theory Relevant to Action Research?

The systems approach underlies AR in all its manifestations. They both rely heavily on the holistic view of the world (where human beings are understood to exist only within social systems) and these systems have properties and processes that condition human behaviour and are in turn conditioned by that behaviour (Greenwood and Levin, 1998). Some AR practitioners equate increased openness with democratisation (Flood and Romm, 1996). GST is then one thread leading in the direction of, or supporting the development of AR.

4.3.2 Systems Methodology

Systems methodology is the orientation of systems research that is primarily devoted to the study and development of methods used in facilitating the interplay between nature and people (Cavallo, 1982). According to Jackson (1991) systems methodologies are not social theories; they are not accounts of what the real world is like, but an attempt to set out the principles of a method which systems researchers follow when they seek to learn about and especially intervene in real-world complexities.

Werner Heisenberg, a Nobel prize-winning physicist in physics and philosophy, suggests that a view towards science has developed, which places emphasis on science and scientists as separate from nature, and whose goal is simply to describe and explain nature (Haralambos, 1980). He further argues that this view can change, although it has proved to be extremely useful and fruitful for many classes of problems. Today, many problems and situations that face the world and demand attention are not susceptible to this orientation. Arguments in terms of complexity, scale or uniqueness of major problems seem to hinge at one point or another on problems associated with the involvement of human elements (Cavallo, 1982). Haralambos (1980) emphasises the fact that the "human element" cannot be excluded – even from the study of the simplest of systems.

The attempt to develop formal, abstract and specifiable modes of investigation that constitute useful working algorithms and that at the same time not only deny but also accept the inherent vagueness of reality, is a dominant feature of systems methodology. These features, according to Cavallo (1982), promises to compensate for tendencies developed in the 1940's, which seem to be deterrent to progress on many important problems of complexity. The basic goal is to allow problems to determine solution procedures rather than the other way around.

From readings on Systems Thinking methodology of research approach, the study has further selected a Soft Systems Approach. This approach has been chosen because it helps people to make sense of the rough day-to-day affairs; therefore it is a conceptual framework that can be incorporated in everyday thinking. Soft systems research has developed a particular approach to AR. Therefore, the study will be able to interact with people involved in drawing up programmes and to articulate the perspectives they are bringing to the problem and how they are developed in their actions based on these perspectives.

4.3.3 Emergence of Soft Systems Methodology

Jenkins and Checkland researched the application of hard methodology (Systems Engineering) to less-defined problems – the kind that managers of all kinds and at all levels try to cope. Their view was that they could develop this new subject by interaction with the real problem situations in an "action research" mode. AR requires involvement in a problem situation and a readiness to use the experience itself as a research object about which lessons can be learned by conscious reflection (Flood, 1999).

When Systems Engineering failed to cope with anything other than well-structured problem situations, the fundamentals of Systems Thinking had to be re-visited and re-thought. According to Flood (1999) the following are an account of Systems Thinking needed to understand SSM:

- i. Systems Thinking takes seriously the idea of a whole entity that may exhibit properties as a single whole with emergent properties which have no meaning in terms of the parts of the whole.
- ii. To use Systems Thinking is to set some constructed abstract wholes (systems models) against the perceived real world in order to learn about it. The purpose of this may range from engineering some part of the world perceived as a system to seeking insight or

illumination.

- iii. Within Systems Thinking there are two complementary traditions.

 The hard tradition takes the world to be systematic. The soft tradition creates the process of enquiry as a system.
- iv. SSM is a systematic process of enquiry, which also happens to make use of systems models. It subsumes the hard approach.
- v. SSM uses a holon called human activity system. This is a set of activities connected to a purposeful whole.
- vi. Because of the human ability to interpret the world in different ways, it is important to create several models of human activity systems and to debate and so learn their relevance to real life.

4.3.4 Soft Systems Methodology

Peter Checkland developed the SSM in 1960 at Lancaster University. This methodology arose after attempts to apply hard systems theory to business problems. The hard systems theory takes the view that it is relatively easy to establish clear objectives for the system in which the problem resides (Jackson, 1991). On the other hand, Soft Systems **Thinking** can attend to problems set in systemic pluralist problem contexts (Ackoff, 1981 and Checkland, 1999a). According to Checkland (1999), formal methods usually begin with problem statements and he argues that fixing a problem too early makes the investigators unlikely to see different. possibly more basic problems; hence the method itself restricts what could be found. The key feature of SSM is the advice to keep the project vague and wide ranging for as long as possible, as the process is more important than the outcome (Flood, 1999). SSM is a way of applying Systems Thinking; it is an organised way of tackling messy situations in the real world. It is based on Systems Thinking, which enables it to be highly defined and described. It is also flexible in use and broad in scope. Human beings' readiness to attribute meaning to what they observe and experience characterise them, thus implying that they cannot abide in meaninglessness.

Checkland was fully aware of the fact that SSM is not a method that can be laid out in steps to follow systematically when he formulated the seven-stage diagram to act as an academic tool to put forward SSM principles (Flood, 1999). Researchers are advised to use the diagram as a learning cycle. The seven stages are regarded as mode one of soft systems methodologies and are listed below:

- Stage 1: A problem situation that makes people uncomfortable may arise and they respond with an attitude of wanting to improve the situation.
- Stage 2: The expression of the problem situation is done at this stage.

 Rich pictures are considered the most suitable means of expression. They are cartoon-type representations that allow people to express their experiences and emphasise points that stand out in their minds.
- This stage deals with systemic thinking in the real world. Stage 3: Possible human activity systems that may offer insight into the problem situation are named. This outlines the activities that people need to undertake in order to pursue a particular purpose. Root definitions are developed here and built around the worldview that states the constitutive meaning underpinning the purpose of a human activity system. Checkland uses the mnemonic CATWOE to describe the human activity and its situation: a certain transformation in process а certain atmosphere (worldview). The transformation is performed by actors for clients (those who more or less benefit directly). The activity is eventually controlled or paid for by owners, and occurs within an environment. Some of these categories may overlap. While Checkland recommends that CATWOE analysis becomes the first step in working out a root definition, others might see

it useful during problem expression. This means that one must be aware not to jump to conclusions about who is important in the process.

- Stage 4: This stage elaborates on the root definition by drawing up conceptual models. These are the minimum set of verbs necessary to describe the actions of the human activity system, which was seeded in the relevant system and grown in the root definition.
- Stage 5: The conceptual models above, which are the result of systemic thinking about the real world, are taken into the real world at this stage where they are compared to the problem situation (expressed in stage 2). The participants put change proposals on the table after debate.
- Stage 6: The change proposals are thought through on the basis of discussion of the desirability of human activity system, captured in the systems mode, and feasibility issues explored in the context of problem situation, attitudes and political interactions that dominate.
- Stage 7: Possible accommodation between contrasting opinions and interests is sought. It is important to highlight that while Checkland seeks accommodation, Senge (1994) seeks consensus. How practical is Senge's view? It can be argued that Checkland's view is more practical in that in any social problems it should be acknowledged that all human beings are unique and perceive life differently. Complete consensus can never be reached, especially when dealing with large numbers of people.

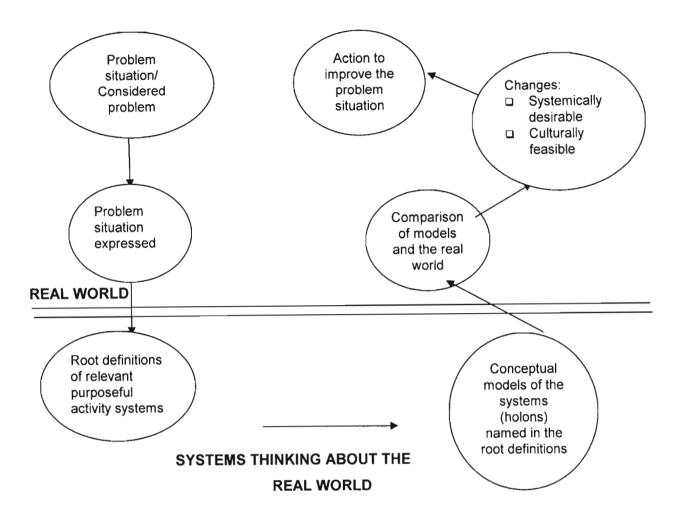


Figure 4.1: The conventional seven-stage model of SSM Source: Flood, 1999

According to Flood (1999) SSM is not just about intervention; it can also help people to make sense of the rough day-to-day affairs. Soft Systems Methodology Mode 2 is a conceptual framework to be incorporated in everyday thinking. There are two equally important strands of analysis that feature Mode 2 SSM. They are —

- the logic-based stream of analysis that encourages practitioners to investigate the situation they are in; to look for new opportunities and to seek ways to achieve accommodation between people; thereby closing the gap that exists between them; and
- the stream of cultural analysis that is an intertwined inquiry into the

intervention itself. It is both social systems analysis and political systems analysis. This stream focuses on three things, namely –

- i. the intervention itself where the role of the client, problem-solvers and problem-owners are explored;
- ii. social systems analysis, which looks at the roles, norms and values as they influence behaviour; and
- iii. political systems analysis, which investigates political interaction, coalitions and the use of power as it influences decision-making.

After the seven-stage model, the enquiring/learning cycle of SSM was developed, and it dealt with the following aspects:

- In the real world there are complexities and relationships that are of concern.
- Relationships explored via models of purposeful activity are based on explicit worldviews.
- Enquiry structured by questioning perceived situation using the models as a source of questions.
- Action to improve based on finding accommodations (versions of the situation that conflicting interests can live with).
- Enquiry in principle is never-ending; best conducted with a wide range of interested parties; the process is given to people in the situation.

Cavallo (1982) summarises SSM as a methodology that aims to bring about improvement in social areas by instilling a learning cycle that is never-ending for the people involved in the situation. This learning is accomplished through an iterative process of using systems concepts to reflect upon and debate different angles to the problem.

There are two main reasons why the opted to use SSM as opposed to

other methodologies are that the problem of poverty relates to organisational culture (i.e. motivation, purpose, roles, and values) and that participatory learning can be easily understood by the people in the situation and enables improvement of the situation.

4.4 CAUSAL LOOP DIAGRAMS

Causal loop diagrams (CLDs) enable people to explore dynamic interrelationships among set variables that might not have been considered before. They also allow one to hypothesise about solutions to problems and test them (Ackoff, 1974). The main components of CLDs, according to Ackoff are –

- one or more feedback loops that are either reinforcing or balancing processes;
- cause and effect relationships among the variables; and
- delays.

A CLD consists of two or more variables connected by links, which usually take the form of arrows. A feedback loop is made up of a closed circle of variables. The diagrams are valuable because they help to simplify the dynamics of the system they depict, and they make complex dynamics accessible to newcomers in the field.

There are three methods of drawing the CLDs according to Ackoff (1974), namely:

- **Method 1**: Draw the diagram by beginning at the start of the story.
- **Method 2** Start with the problem symptom and work backward to assemble the loop diagram.
- Method 3: The back-and-forth method is the most helpful because in real life systems, stories are not so neatly composed and

simple. Bits and pieces of method 1 and 2 are used. This method is good and useful for diagramming complex stories that have many variables and loops.

The agenda of the inquiry will basically be to interact with the members of the community and different groups in the field to –

- see where the gaps are in the current poverty reduction/eradication programmes;
- understand poverty from a grassroots level (where it is occurring),
 which will enable us to see poverty at a close range and not just to hear about it;
- get members of the community to be co-researchers and to be committed to the research in hand, thereby empowering their own community; and
- get community members to contribute different kinds of knowledge and actions to their joint effort to reduce poverty and eradicate it.

This chosen methodology aims to break away from the bureaucracy where the governments, decision- and policymakers develop a criteria for classifying clients and problems in such a way that the allocation of public resources is beyond the reach of personal choice. The bureaucrats set themselves apart from other people by doing this and use their rational minds to solve problems that others react to personally and emotionally. This research rejects the framework on theoretical, methodological, political and moral grounds. It takes the view that those who face social problems (in this case those who live in poverty daily) have much more information and analytical capacity needed to solve the problem of poverty than anyone else. The knowledge of the local people is taken to weigh much more than orthodox researchers. Professional knowledge is not more important than the other forms of knowledge.

Once in the area of action, rich pictures will be drawn. These reflect the problem situation in reality; in other words a clear picture of the *status quo* will be captured and presented. Having interacted with the community members and shared the local knowledge, the rich pictures will be drawn again, now showing interventions, gaps in poverty reduction programmes, delays, reinforcement and balancing feedback. The other subsystems to the problem situation will be looked at separately (in the form of causal loop diagrams) and then they will be linked with the broader picture. For instance, if we take education in that area, we look at its current status, what can be done to improve it, what is causing it to be ineffective, are there enough teachers, affordability issues, etc. The same will be done with other major aspects around poverty such as health, housing, social development and agriculture (urban areas in this case).

The study will use the CATWOE as explained earlier in this chapter to identify different responsibilities of different people affected by the problem. Checkland and Holwell (1998) researched **historical root definitions** and suggested that well-formulated root definitions should be prepared by consciously considering the elements (shown below in figure 4.2).

С	Customers:	The victims or beneficiaries of the transformation process
Α	Actors:	Those who would do the transformation process.
Т	Transformation process: The conversion of input to output	
w	Worldview:	Makes the transformation process meaningful in context
0	Owners:	Those who have the power to stop the transformation
		process.
E	Environmental constraints: Elements outside the system that it takes as	
		given and impacts on the system.

Figure 4.2: The CATWOE mnemonic Source: Flood, 1999

Having identified the above role-players, the root definitions need to be elaborated. The root definitions express the core purpose, which is always expressed as a transformation process in which some entity, the **input**, is transformed into some new form of that same entity, the **output**. From here the conceptual models (that will come forth as a result of Systems Thinking about the real world) will be taken into the real world and compared with the problem situation expressed above. Intensive discussions will take place among all the participants coming from different backgrounds and their change proposals will be put on the table for debate and thorough thought. Finally, possible accommodation of conflicting ideas and opinions will be sought.

4.5 QUALITATIVE RESEARCH

As mentioned earlier, for the purposes of gathering adequate information from the community, qualitative research methodology will also be used in this study. According to Patton (1990), qualitative inquiry typically focuses in depth on the relatively small samples selected purposefully. In qualitative research, sampling is driven by the desire to illuminate the questions under study and to increase the scope or range of data exposed to uncover multiple realities. As with poverty, there are a number of realities that could still be overlooked, and this type of enquiry would be of great help in unearthing those realities. The methodology allows for development of theory that takes into account local conditions. In qualitative inquiry, the initial question or problem allows for preliminary decisions about the boundary of the investigation. This research will concern questions like:

- What data sources are information-rich?
- Whom should I talk to or look at first?

As theory develops, additional questions arise, such as: Which data sources may –

- confirm my understanding;
- challenge my understanding; and
- enrich my understanding?

Qualitative inquiry generally begins with a theory or understanding that has to be modified and confirmed in the context of the study. While quantitative data is presented in a numerical form (for example official statistics on crime, suicide and divorce rates), qualitative data is presented in words. These can be a description of a group of people living in poverty, providing a full, in-depth account of their way of life. Compared to quantitative data, qualitative data is usually seen as richer, more vital, as having greater depth and as more likely to present a true picture of a way of life; of people's experiences, attitudes and beliefs.

4.5.1 Gaining Entry to Study Area

In order to gain entry to the study area, an appointment with the councillor in charge and his co-workers was secured. A description and explanation of the problem situation of the study were given. Their ideas on how they think the proposal should be presented to the residents were sought. Once the intention of the study was communicated to the community, introduction formalities took place. This was done because, although they already knew, they still wanted to hear from the researcher. The researcher used honest, jargon-free, down-to-earth explanations to avoid alarming them with too much detail. This explanation was passed to other members of the community easily. Beyond the above introductions, it was important that the researcher approached the community with caution, because she was not known and was not familiar with the routines and rituals of the area. According to Patton (1990), the researcher cannot determine what is considered offensive or what roles are appropriate at

that stage. In addition, trust was not yet established. It would therefore work to the advantage of the researcher to –

- be more of the observer than participant;
- be transparent about the aim of the study;
- play down his or her expertise and be unassuming;
- be a reflective listener in order to build rapport and also learn the language of the inhabitants; and
- be self-revealing and discuss common interest and life experiences;
 thereby opening a door to a more trusting relationship and avoiding limited acceptance.

According to Naoum (1998) the interview technique is more appropriate if research requires you to conduct case studies. The study adopted the interview technique and the example (case study) would be presented. Case studies can be used to develop more general theoretical statements about the regulatory in social structure and process (Haralambos, 1980). The case study involves a detailed examination of a single example of something. It can be used to study a single institution, community or social group, an individual person or a particular historical event. Its aim is to arrive at a comprehensive understanding of the group it studies. A case study of a particular society can be used to falsify a general theory about social life. They are useful for generating new hypotheses, which can be tested against data or in later studies. The major drawback of case studies is that generalisations on the basis of findings are possible. It is impossible to determine how far the findings of a case study into one example of social phenomenon can be applied to other examples (Haralambos, 1980).

There were no non-responses due to the fact that all the relevant parties needed from the different organisations were able to represent their departments. The respondents were selected randomly from the sections dealing with poverty programmes within the different departments.

4.6 QUESTIONNAIRES

The questionnaire is in the form of structured questions, both open-ended and closed questions. According to Naoum (1998) **open-ended questions** give the respondent the opportunity to express their views. Once the respondent understands the theme of the investigation, he or she can let the thoughts roam freely; unrestricted by the prepared set of replies. They are easy to ask and more appropriate to construct for interview purposes. During the interview, the interviewer has a great deal of freedom and probes various areas and raises specific questions during the course of the interview. They are easy to adopt where sensitive information is required from the respondent.

Closed questions, on the other hand, often require short responses in the form of yes or no; agree or disagree. They are easy to ask and quick to answer. They require no writing by either the respondent or the interviewer. The major drawback is that they may introduce bias, either by forcing the respondent to choose from given alternatives or by offering the respondent alternatives that might not otherwise have come to mind.

A copy of the formulated interview questionnaire is attached in Appendix 1. The questionnaires were compiled mainly to guide the researcher through discussions and to ensure that the participants stayed focused. Different questionnaires were compiled for different target audience i.e. Departments of Health, Education, Social Development and Housing as well as the community, NGOs and local businesses. In instances where there was no adequate representation of the community in the workshops arranged, Clinics, schools, markets and businesses were visited randomly where nurses, doctors and patients were targeted for interviews; with the intention of getting information on the health situation in Clermont. In the same manner, teachers and students were interviewed to get an idea of

the education situation, and then of course the public and business people. It is expected that this is where more informed ideas would come about in terms of poverty itself and the merit of the poverty reduction and eradication programmes in place.

At an academic level, government officials were interviewed, specifically on the programmes in place and the strategies for a way forward using the questionnaire in Appendix 1. One of the key aspects carried out through the interviews with government officials was to map out Checkland's mnemonic CATWOE mentioned in Chapter 2 and these are detailed in Appendix 2. The main government departments that were approached were the Department of Social Welfare, the Department of Housing, the Department of Health and the Department of Education.

4.7 THE INTERVENTION

According to Checkland (1999) a widely accepted method in SSM is the three analyses namely the intervention itself, the culture of the community and the politics (power relationships) of the community. Although Checkland (1999) recommends the cultural and political analyses, he devotes very little attention to how they maybe done. The core group workshops were arranged to facilitate the intervention analysis. Both random visits and organised workshops were conducted to probe the community's culture and politics, and this analyses was also enriched by the researcher's observations while driving through the streets and interacting with different community members.

4.7.1 The Core Group Workshop

The core group workshop consisted of eight people: the researcher, one Councillor and one1 official from the municipality, one nurse, one single mother infected by HIV and two women (both ex teachers) who are doing volunteer work with the elderly and HIV/Aids infected people who cannot

help themselves. This group started of by agreeing on the objectives of the intervention, time frames (workshops spread over a period of five months), and the methodology as explained by the researcher. Because there are other structures where politicians, the elderly, women empowerment support group, youth meetings at church, staff meetings in schools, the group attended some of these meetings.

4.7.2 The Community Workshop

The core group was responsible for facilitating the workshop with the community. The people who attended were mainly identified by this group and word of mouth proved to be efficient through the nurses, teachers, and politicians. Three half day workshops were held at the municipality and on average a minimum of 50 people attended the meetings. This was a good number and most of the people who attended unfortunately attended because they hoped to get job opportunities.

The objectives of the intervention were shared with the participants and upon agreement were requested to brainstorm the problematic situation in their community and assisted in the development of the rich picture (see figure 5.1). The group was divided into five groups where each group was balanced in that it was represented by say a teacher, nurse, politician, and an ordinary community member. For each stage of the seven-stage SSM, each group wrote their ideas on yellow stickers and stuck them on the walls to be discussed as a whole group at the end of the working sessions.

One of the most emergent issues that came out of the exercise was the dependence on government by the majority of the group to put everything right for them. The women empowerment support group came out to be the most creative in terms of initiating programmes that would assist in alleviating poverty issues.

According to Luckett *et al.*, (2001) any research that involves people in processes that aim to improve a problematic situation is necessarily value-laden. Some values will be overt, while others will be hidden. The role of the core group in the community workshop therefore was also to surface these hidden values thereby enabling the participants to make ethical choices and inputs into the process. Lather (1991) stresses that PAR should be underpinned by an emancipatory commitment and that if the participants differ in their values, the facilitator should declare her or his own commitment to emancipatory values.

4.8 CONCLUSION

The view of this research study is that the objectives will be realised having undertaken the above mentioned methodology of SSM, AR, Qualitative and interviews guided by questionnaires

The next chapter presents the case study selected for this research. The SSM will be put to practice as well as other systemic tools mentioned in this chapter A reflection of the poverty situation using SSM will be given.

CHAPTER FIVE PRESENTATION OF THE CASE STUDY AND THE ANALYSIS OF DATA USING SSM

5.1 INTRODUCTION

This chapter seeks to present the case study. It gives the background of Clermont and presents the application of Checkland's SSM to the project area. As mentioned in chapter three, this method is used in complex situations. It aims to bring improvement in areas of social concern by activating a learning cycle in the people involved in the complex social problem (Checkland and Scholes, 1990).

Community participation is used to inform the decision- and policymakers of the views of the poor people of Clermont with regards to policies and programmes affecting them.

5.2 BACKGROUND OF CLERMONT

The freehold African township of Clermont was founded in 1931, 12 km inland from the centre of Durban, not far from the main highway to the interior and next to the white municipalities of New Germany and Westville. It occupies about 1 600 acres, comprising with hills and ravines of the Umgeni River Valley, once belonging to the Lutheran Berlin Missionary Society known as the Christianenburg Mission. Its population has been estimated in recent years between 75 000 and 150 000 (Swanson, 1986).

Clermont grew rapidly after 1933. In 1935 the company secretary reported about 250 families in residence, some 200 of them having come from Durban. Many others had purchased plots, but had not yet taken up

residence for lack of means to build houses. About 1 450 plots were sold by 1937. Population was estimated at 1 100 in 1936, double that in 1938, and approximately 3 000 in 1939, of which the surprising figure of 1 500 were thought to be children (surprising because it means that 50% of the population were children and that the birth rate was high). Although the majority were expectably Zulus, there was a mixed community of people from many places, including the Transkei, Lesotho and Johannesburg. Most of the residents were employed in Pinetown and Durban and some on farms in the district (Swanson, 1986).

In the late 1960s and 1970s a heavy squatter or shack settlement developed in Clermont, reflecting the attraction of industrial development, especially textile mills, in the Pinetown-New Germany area. This unregulated growth became an object of great concern to neighbouring communities with public health and civil order being the major issues cited. Similar concerns surrounded the early days of rising Clermont and affected its development. The slum condition of Clermont has been abated since the late 1970s by the creation, under the central government's Department of Corporation and Development, of a controlled township called KwaDabeka adjoining it. Consequently, Clermont has resumed its more distinctive character as a town of stable and permanent occupancy and ownership as opposed to the initial setting where people stayed there temporarily for work purposes only with no intention of residing permanently (Swanson, 1986).

Housing in Clermont was originally owner built and varied from shacks to decently built cottages, the majority being a very poor type and mainly of wood and iron. The houses in this area are mostly substantial dwellings and vary in style, finish and position reflecting the individual preferences, purposes and resources of the owners and builders. Single-family dwellings predominate, with occasional multi-unit apartment buildings. The hilltops were occupied first, and then the houses spread down the slopes.

Householders maintain numerous small gardens and many keep poultry, while a few goats and cattle (considered a nuisance by the township management) wander around. Near the entry of the main road from Pinetown and New Germany a closely built-up commercial area gives Clermont the atmosphere and focal point of a viable and self-contained urban community (Swanson, 1986).

A town planning survey in 1977 indicated that the town consisted of 3 800 demarcated individual plots, with 2 840 houses built to authorised standards and some 3 000 informal structures, largely comprising the shack settlements. These were removed and its inhabitants were resettled in KwaDabeka. There was no rail service, but two public buses and several private bus lines, as well as a fleet of 46 licensed taxis provided public transport. There were 59 registered commercial premises, a post office, a government health clinic, a community hall seating 400 people, a stadium and several other playing fields for 83 soccer clubs and 2 500 players. There were 28 churches and a number of schools, including a day nursery, two lower primaries, three higher primary, one junior secondary and one high school (Swanson, 1986).

5.2.1 Historical Phases

The history of local authority in Clermont features three periods or stages of increasing government involvement and control. In the beginning, the township was merely a private development under the lax attention of the land company that had purchased the mission property. The rapid industrial development stimulated the rise of Clermont's shack settlements. Property holders there developed accommodation for a huge influx of people in this way, building or allowing shanties to be built on vacant lots and on their premises, often reaping substantial rental income, but also responding to the needs of these people (Swanson, 1986).

Studies of informal urban settlements in various parts of the world have

suggested the essentially creative and socially viable aspect of this phenomenon as a response to social transformation on a large scale. Nevertheless, disorder or the appearance of disorder, the menace of crime and the presumed threat of disease galvanised the government into taking control of Clermont in 1974 under the Department of Bantu Administration for the South African Bantu Trust, thereby inaugurating the third and current phase of its development in conjunction with KwaDabeka. Clermont had the aspect of the "squatter" or informal shack towns that were appearing everywhere in the Durban metropolitan region. The crucial difference was that, as time went on, many property owners began to capitalise on their investment and on rising land values by taking mortgage loans to build more substantial houses (Swanson, 1986).

5.2.2 Clermont Today

To date, Clermont has developed a great deal with four wards registering about 10 000 people each; resulting in a population of approximately 40 000 people. The houses still vary in terms of size, style and quality. The big houses that were built many years ago by the first settlers are still standing, but are now surrounded by the squatters or shacks. This part of Clermont shows a mix of the poor and the well off. The big houses are mostly rented out as communal property by the owners (who are now staying in the suburbs or in the other part of Clermont that is new and well-built) (Swanson, 1986). Even the shacks that are in a bad state in terms of their structure are being rented out.

Small businesses are conducted from steel containers. The businesses range from the selling of fruits and vegetables, hair salons, tuck shops known as "spaza shops", selling meat, intestines, fat cakes ("magwenya"), traditional medicine and brewed beer. The streets are ever busy, day and night, with people going up and down. One of the odd things is that around 10:00 (or even 9:00) there are students in school uniforms strolling in the streets. As one drives through Clermont you witness a significant

characteristic – the nappies hanging on the washing line of almost every second house. This implies that the birth rate in Clermont is high.

The observations of the **social pattern** made over a period of time, which show that most of the community is poverty-stricken, is given below. These social patterns are based on observations made during the walk and drive through Clermont and interacting randomly with the community members for weeks (No particular paths were selected; the intention was to drive and walk through the different sections of Clermont to gather as much information as possible):

- Women go to nearby suburbs on the days that refuse is collected and pick up anything that may be of use to them. They collect things like old appliances, plastic juice bottles with lids (which they use to keep water in). Cardboard boxes are always collected and they use these for sleeping on, as windows, for making fires, baby cots and as cupboards for keeping their groceries in.
- During the day, small children who are expected to be in preschools are running around half naked in the streets. Even children of seven and older are found in the streets during school hours. Adults, especially men, sit around and play "moraba-raba" (a Sotho word referring to a type of gambling). Women dressed in distasteful ways are seen standing at street corners. The men show no urgency of rushing somewhere for any purpose at all. There are always lots of people going about till the late hours of night.
- Sex is seen as a hobby, a stress reliever and is practiced absolutely without meaning. People do not even take its consequences seriously, hence the high birth rate (justified by the nappies on the washing lines). The mothers are not pressured by who will look after their babies, as they do not work. With regards to their survival, the attitude is that they have survived to date so

the babies will be fine. HIV/Aids is another serious and growing dilemma resulting from this state of affairs. Some of the victims, surprisingly, blame these issues on unemployment but at the same time their reaction to the situation is making their situation worse.

- There are crowds of gangsters, mainly in the middle of Clermont, who specialise in drugs and stealing cars for resale. About twelve men will surround one car; spray-painting it, changing its number plates, wheel caps and everything that they can to disguise the original identity of the car. The drug lords, on the other hand, manipulate the small children to sell drugs for them in return for money.
- Drunkenness is witnessed throughout the day among men and women, young and old, employed and unemployed. One cannot miss seeing them in the streets, as they often sing church hymns when they are drunk. The bar owners benefit a lot from these people. The employed customers buy liquor on credit through the month and when they get their wages, all the money goes to the bar owners.
- Most of the families are headed and supported by teenagers for different reasons, such as that the parents died, are divorced or have separated and are both involved in other relationships or marriages.
- Under the pressure to make ends meet, some people resort to being traditional healers, which they claim they inherit through family generations. They sell the medicine and herbs for different types of illnesses and fortunately for them the clientele is good.

Over and above these patterns, one will still witness those members of the community who have made a decision not to be trapped by poverty. They sit at the taxi ranks (the busiest place in Clermont) selling all sorts of things, such as cellular phone covers, sunglasses, cooked and raw meat and traditional food like sheep or cow intestines.

There are areas, however, where one can clearly observe that the income levels are high. Here there are no people during the day (meaning that the majority is at work and at school or even at their businesses).

5.3 APPLICATION OF CHECKLAND'S SSM ON CLERMONT SITUATION

This part of the research seeks to apply the seven-stage process of Checkland's SSM as mentioned in Chapter four. According to Checkland (1999b) making drawings to indicate the many elements in any human situation is something that has characterised SSM from the start. The rationale behind it lies in the fact that human affairs are complex and consist of multiple interacting relationships. Pictures are a better medium than linear prose for understanding relationships. Pictures can be taken in as a whole and help encourage holistic rather than reductionist thinking about a situation.

SSM contains two kinds of activity. Stages 1, 2, 5, 6 and 7 are "real world" activities, necessarily involving people inside the problem situation. The language of these stages will be whatever "normal" language is in the problem situation. Stages 3 and 4 are "Systems Thinking" activities, which may or may not involve those inside the problem situation depending on the individual circumstance of the study. Here the systems language is used, for this is where the real complexity is unravelled and understood as a result of translation into a higher-level language of systems (Checkland, 1999b).

5.3.1 Stage 1

This stage is about the problem situation that arises and makes people uncomfortable. People respond to the problem with an attitude of wanting to improve. In "soft" systems, which include most human activity systems considered at a level higher than that of physical operations, there would always be many possible versions of the system to be engineered or improved and systems boundaries and objectives may well be impossible to define.

In this research the problem situation that arose is as follows:

The government programmes that are put in place to alleviate and eradicate poverty are not reaching the people who are in the poverty situation and are not integrated and sustainable. In other words, they are not taking the poor out of poverty.

At this stage one must highlight that the problem identified here might change as the process continues. Checkland (1999b) advises researchers in SSM to keep the problem vague and not to fix it too early – because this can channel the investigations to see a certain view and not the other. While this is an excellent means to avoid biases on certain facets of the project, it could also be impossible to be vague for too long, especially when working and co-researching with communities that have expectations for service delivery.

5.3.2 Stage 2

Stage 2 is the expression phase during which an attempt is made to build up the richest possible picture, not of the problem but of the situation in which there is perceived to be a problem. The initial expression is the building up of the richest possible picture of the situation being studied (as shown below in figure 5.1). This picture enables a selection to be made of a viewpoint(s) from which to further study the problem situation. One of the

first things to do at this stage, according to Checkland (1999b), is to collect as many perceptions of the problem as possible from a wide range of people with roles in the problem situation such as the community members, departmental officials, politicians e.t.c.

The different perceptions drawn from the situation are:

- The government departments impose poverty alleviation and eradication programmes on people without adequate consultations, therefore the programmes are not as effective as they are intended to be.
- Poverty exists because the economy is in the hands of the capitalists; therefore high levels of unemployment exist, which is the major cause of poverty.
- Social development can only happen along social and economic lines (processes).
- People are remaining in poverty because the poverty programmes are not reaching the people who are supposed to benefit from them.
- The poor are not empowered enough to get themselves out of poverty.
- The poverty alleviation, reduction or eradication programmes are not taking the poor out of poverty; they are short term, disintegrated and unsustainable.
- The poverty situation in South Africa has nothing to do with the government's strategies and programmes for poverty reduction and eradication; it has everything to do with the apartheid system, which is going to take time to be wiped out completely.
- The plans with the poor are failing or ineffective because they are made in isolation, without considering the manpower to carry them out.

 The monitoring and evaluation programmes and systems, if any, in place are not being used.

For the purposes of bringing more clarity and reality to the problem situation, the research has opted to use pictures of the real situation. As mentioned in chapter four, the main focus of the study is on the poverty alleviation and eradication programmes put in place by government departments (the Department of Education, the Department of Health, the Department of Housing and the Department of Social Development and Welfare). The SMME will also be looked at as businesses contributing a significant percentage to the overall economic growth of a country.

In figure 5.1 below, a certain family is poor. The mother and father are not working, as is the case with the extended family. Their children also have children. Only one of the children is working. Both parents are HIV positive and their youngest three children aged ten, seven and four are also HIV infected. This is a perfect scenario to display the relevance and roles of the different government departments (health, education, social development and housing) to this situation. The whole family should have the right to basic needs, like water, food, shelter and proper sanitation.

The most urgent priority facing government is to ensure that every human being gets sufficient food to eat every day. When this family has managed to buy food (from the income of the one child who is working), the next step for them is to let the children attend school. The children are admitted to the schools, but the parents do not pay the school fees. This results in the children being expelled from the schools (school fees are R160 a year). One of the conditions that the children can be taken back to school is if they get a letter from a social worker that visited the family and verifies that the family being investigated is indeed in no position to afford the school fees. This condition presents a problem, because there are only two social workers for the whole of Clermont. One works with children who

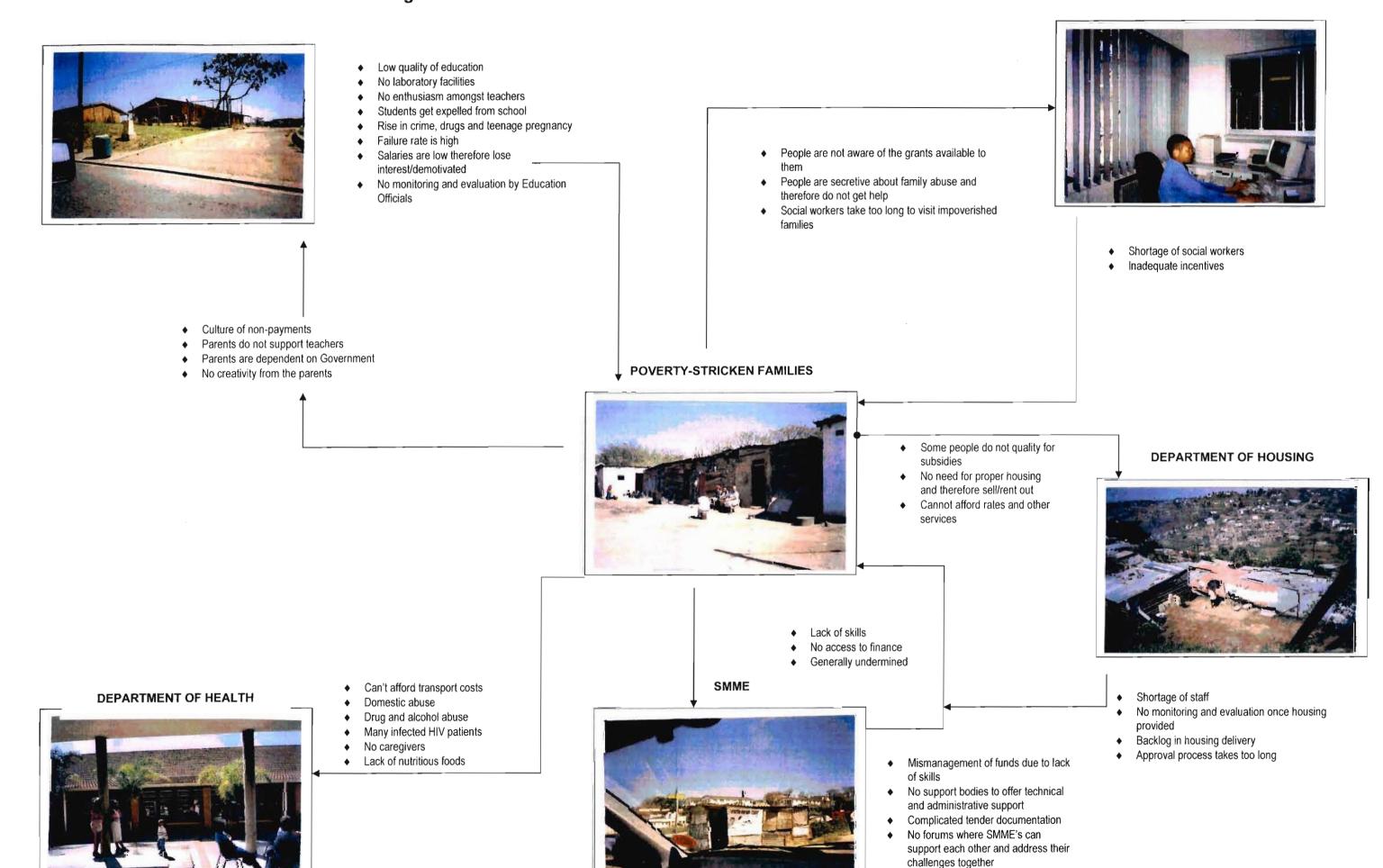
are seven years and younger, the other works with those from eight years to adult. With a population of about 40 000, this means it will take long before that family is visited. This further implies that the children will not be able to return to school. The obvious problem, given the scenario, is that the social development department is seriously understaffed.

One then questions the role of the Department of Education in a situation like this. Is expelling the children the only solution for them? What is the objective of the department with regards to children coming from poverty-stricken families? These questions will be answered in the next stage. When the family goes to the Department of Social Development to apply for the relevant grants, they do not succeed because they cannot afford South African identity books and/or they do not have the transport money to get to the offices. When the family members are not feeling well, they go to the Clermont clinic where they get almost everything for free. The HIV-infected family members receive vitamins and special medication when it is available. The problem is that they need to eat nutritious food, which they cannot afford. Which of the different governments departments should be taking care of this particular aspect?

Once the viewpoint(s) for further study are selected, one or more particular system relevant to solving the problem are defined, which will be part of a hierarchy of systems (Checkland, 1999b). From the problem situation presented here, the viewpoint selected from the perceptions mentioned above as the system relevant to problem solving is the following:

The poverty alleviation, reduction or eradication programmes are not taking the poor out of poverty, they are short-term, disintegrated and unsustainable. The function of stages 1 and 2 is to display the situation so that a range of possible and, hopefully, relevant choices can be revealed. Checkland (1999b) suggests that it is in achieving as neutral a display as possible that the concepts of "structure" and "process", and the relation between the two, have been found useful. **Structure** refers to the physical layout, power hierarchy, reporting structure and pattern of communication, both formal and informal. **Process** is examined in terms of the basic activities of deciding to do something, doing it, monitoring how well it is done and its external effects, and taking corrective action. The relationship between structure and process has frequently been found to be a core characteristic of situations in which problems are perceived.

Figure 5.1: Rich Picture of the Problematic Situation in Clermont



Survive as street vendors

5.3.3 Stage 3: Root Definitions of Relevant Systems

This stage deals with systemic thinking in the real world. Possible human activity systems that may offer insight into the problem are named here. The question here is: what notional systems seem relevant to the problem from the analysis phase; not what system needs to be engineered or improved. Root definitions, therefore, have the status of hypotheses concerning the eventual improvement of the problem situation by means of implemented changes, which seem to be feasible and desirable, both to system analysts and problem owners. To propose a particular definition is to assert that the view of the analyst, taking this to be a relevant system, making a conceptual model of the system, and comparing it with present realities is likely to lead to illumination of the problems and therefore to their solution or alleviation. Root definitions should be a concise description of a human activity system, which captures a particular view of it. Checkland (1999b) researched historical root definitions and suggested well-formulated root definitions should be prepared by consciously considering the elements that make the mnemonic CATWOE. The root definitions are formulated below.

• C: Clients or customers

The customers in the Clermont case study are the victims or the beneficiaries of transformation. This would be the community at large. The community comprises everyone who lives in Clermont, whether poor or wealthy, educated or uneducated, young or old, sick or healthy. In any given situation there could be multiple customers, as in Clermont. There are the people who might have a greater influence on processes, and therefore possess more power. The people living in poverty are the most important customers, as they are also the victims of the problematic situation. If the poverty programmes in place do not reach them or are not beneficial to

them as is intended, they will remain in their unfortunate state for a long time. They are the reason why the programmes were put in place. The politicians, councillors and mayor will be at a loss if they do not bring the poverty programmes to fruition to benefit the poor. Votes will be lost through non-delivery. The different government departments also stand to benefit if they ensure that they reach the poor in their everyday efforts. The departments will gain if delivery takes place, because the yearly budget allocations are based on the spending and the number of projects they manage to deliver each year. If development does not take place and results in the poor being locked in their state, they will receive poor or negative publicity in that they would be associated with non-delivery.

A: Actors

The actors are those people performing the transformation. In this case the implementers are the different government departments, the community, the politicians and the business entrepreneurs. Politicians both at local and higher levels would be considered as the most important actors, because if projects do not have the political backup, they will struggle to be completed smoothly. The NGOs, the CBOs and the volunteers are also important actors.

T: Transformation process

According to Flood (1999) a root definition expresses the core of the purpose of a purposeful activity system. That core purpose is always expressed as a transformation process in which some entity (the "input") is changed or transformed into some new form of that same entity (the "output"). Transformation in this case is simply the conversion of inputs into outputs.

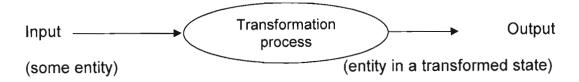


Figure 5.2: The transformation process

For any relevant purposeful activity there will always be a number of different transformations by means of which it can be expressed, derived from different interpretations of its purpose and different worldviews. For the purpose of this research, the poverty alleviation and eradication programmes are the input and these programmes reaching its objectives or benefiting the poor would be the output. In order for the transformation process to achieve the best results, active participation and engagement of all stakeholders is imperative if the problems facing the Clermont community are to be contained and/or eradicated.

O: Owner(s)

The owners refer to those people who have the power to stop the transformation process. Both the community and the government are the owners of the transformation process and development at large. If the community does not own the development proposals or if their requirements are not addressed by development planning, they are unlikely to look after the services provided and the services may stand the risk of being vandalised and abused. Furthermore, it is important to ensure that there is sustainability in every development. Ownership of any development process by the end user (beneficiaries) will always yield the best results and sustain the project on a long-term basis. The government, on the other hand, is responsible for providing the budget (for the output to be achieved). They have more power to stop the transformation

process. At the same time they also stand to loose more if they decide to stop the process.

W: Worldview

The worldview makes the transformation meaningful in context. The United Nations (UN) is the biggest international organisation, concerned with the well-being of people around the world. Internationally, a shift has taken place from the Organisation of African Unity (OAU) to the African Union (AU). The AU seeks to build Africa through social and economical development. The citizens must change their mindset. The AU is important for changing views; as the rest of the world does not look at South Africa as an independent country, but only in comparison to the rest of Africa. For instance, when they see the poverty situation in Zimbabwe, they connect South Africa to that as well.

E: Environment

This refers to the environmental constraints. It could be the elements outside the system, which is taken as given. In terms of Systems Thinking, Clermont is the subsystem, South Africa is the system and the world is the supra-system.

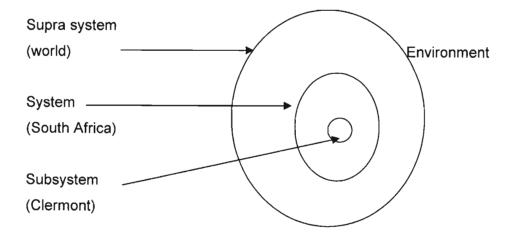


Figure 5.3: Illustration of the system of systems

The environment involves a number of internal and external factors. Politically, the apartheid system, which resulted from certain policies, caused development that is segregated. The government adopted the top-down approach. The shift of political power, which is inclusive, has just taken place and it is going to take long to wipe out the damage done by the previous government policies. This implies that delivery will not run as smoothly or take place overnight as many people would expect it to. The era of colonialism had a significant impact on the development of South Africa. The countries that colonised distributed according to what they would benefit in return. Economically, certain races still have advantages regarding access to financial assistance and therefore potential business people are restricted in terms of their standards of living.

Delays will always be apparent with regards to service delivery unless the different government departments realise the need to work together in striving towards poverty alleviation and eradication programmes. The communication flow is another factor that can affect the transformation. At the moment, although it is indicated on paper that the communities will be consulted on development plans their representation has not brought fruition. Feedback from the high authorities does not take place the way it should.

5.3.4 Stage 4: Making and Testing Conceptual Models

This stage elaborates on the root definitions mentioned above (in stage 3) and will present a minimum set of verbs necessary to describe the actions of the human activity system. Root definitions may be viewed as a description of a set of purposeful human activities conceived as a transformation process. In this stage, a model of the activity system needed to achieve the transformation is described in the definition. The

model is built to accomplish what is defined in the root definition. While the definition is an account of what the system is; the conceptual model is an account of the activities that the system must do complete in order to be the system named in the definition (Checkland, 1999b). Apparently, the step from root definition is the most rigorous in the SSM. Nothing needs to be included in the model that cannot be justified by reference to the root definition. The modelling will respond to questions like what activities, in what sequence, have to occur in order to achieve the improved output. The roles of the different actors and stakeholders are listed below.

i. The Department of Education: There are three key features that characterised education and training under apartheid. First, the system was fragmented along racial lines, and was saturated with the racist and sexist ideology and educational doctrines of apartheid. Second, there was a lack of access or unequal access to education and training at all levels of the system. Vast disparities existed between black and white provision and the large numbers of people. Third, there was a lack of democratic control within the education and training system. Students, parents, teachers and workers were excluded from the decision-making processes. The unfortunate part is that these problems are still apparent in democratic government and it is likely going to take some years before the past system is corrected. The role of this department is to ensure that as many children as possible are able to attend school. As the RDP stresses, an integrated system of education and training that provides equal opportunities to all irrespective of race, colour, sex, class, language, age, religion, geographic location and political or other opinion must be developed. There should, however, be a balance in the budget between the building of new schools and the upgrading of old schools. At the moment all the schools in Clermont are in a very bad state. The windows are broken, there are no laboratories, and

there are not enough facilities. Teachers are also not motivated; they lack enthusiasm because they are excluded from decision-making. They are also unhappy with the evaluation and monitoring by the department. One school principal mentioned that two years ago the Minister of Education visited their school after the bad Grade 12 results and promised to bring some officials who will visit the school every two weeks. To date no official has been sent to monitor and evaluate the situation at that school. Measures should be put in place by the department that cater for the children who cannot pay school fees, instead of expelling them from school.

- ii. The Department of Health: The community of Clermont is generally happy with the health care delivery. The free consultations at clinics and free medication are helping a lot of people. The department should carefully look at the budget, especially when it comes to HIV patients they do not only need medication, they also need to eat nutritious food, which they cannot afford. The Department of Health should therefore work together with the Department of Social Development to deliver food to these patients. While the government supplied food at some point, they stopped doing this and the situation is now worse.
- iii. The Department of Housing: Every family deserves to have shelter. As mentioned earlier (in the background of Clermont), squatters dominate housing in Clermont. Most of these shacks are in such a dilapidated state that it is almost the same as having no shelter at all. This situation should be considered when drawing the budget for housing and the department must work together with the Department of Health, as there is a high risk of unhygienic living standards. In Clermont, some of these shacks are being rented out. How does this happen when there is free housing for

those who qualify? Why would people opt to live in places like that? It is clear that the involvement of the councillors is very important. They need to motivate and make a change; they are the ones who can change people's mindsets and their culture of poverty.

- The Department of Social Development: This department has iv. come up with important measures of alleviating poverty through the grants systems. The types of grants are: old age grants, disability grants, war veteran's grants, care dependency grants, foster child grants, child support grants, grants-in-aid and social relief of distress grants. Some people are very happy about the grants - they receive them and are able to use the little money wisely to the extent that they even start their own small businesses, like selling vegetables. But some have applied years ago and have not received any grant yet. Some people know about the grants and they qualify, but they are not showing any initiative to benefit from the available grants. Other people do not even know about the grants. The department should set out poverty relief programmes that will deal with the poorest of the poor by -
 - dealing with the lowest social group that is unable to meet its food requirements all year round (especially the child-headed families as a result of high HIV/Aids occurrences as they are amongst the most vulnerable groups);
 - dealing with those structures in the society that is taking care
 of the people infected by HIV/Aids;
 - providing social support to the youth in order to redirect their energy away from social crimes;
 - targeting groups and individuals who have been or wish to be involved in income-generating businesses;

- making the elderly people more active and useful in the communities and linking them with children;
- seeking to involve the disabled in all the relevant areas mentioned above by increasing their accessibility to them;
- linking the target groups with social financing to create a culture of saving; and
- recognising the need to have strong and developmentoriented capacities in the organisation if the department is to run all these aspects of the programme.
- v. Entrepreneurship (SMMEs): Most poor people are not employed in the formal sector, but make their living as self-employed farmers, artisans, traders, labourers and casual workers for other small and micro businesses. However, such businesses are often not profitable enough to raise people out of poverty. Unsurprisingly, the factors that contribute to poverty are also the factors that deter investment in poor areas. The bottom-line here is that the state should go the extra mile to ensure that a viable environment is created for potential business people who are currently locked in poverty because of barriers that prevent entry to the business world. The government should assist the local SMMEs by unlocking some these barriers to empower them and enable them to grow in a sustainable way.
- vi. The community at large should get to a point as well where they take ownership of all development initiatives and stop feeling pity for their unfortunate state. Most of the community members have an attitude of expecting the government to spoon-feed them while they are not interested in participating in the overall development planning. The onus is also on the community to fight any type of corruption among government officials. For example, there are concerns that the pension cashiers cheat pensioners by issuing

them receipts without cash.

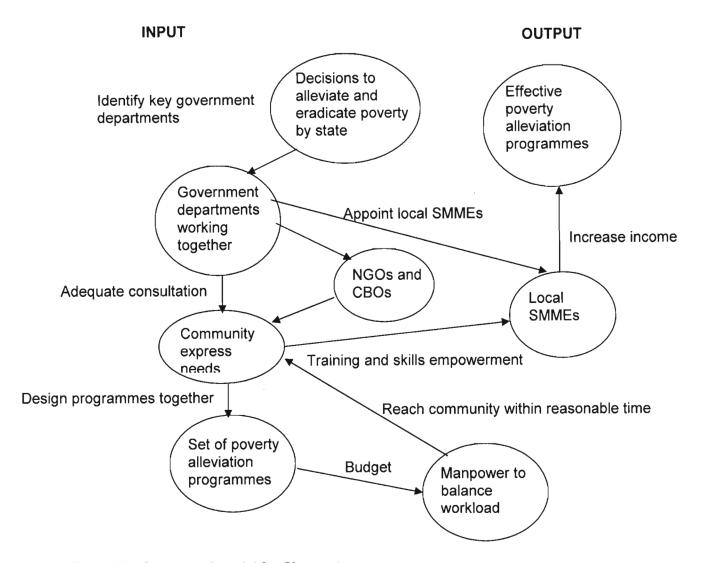


Figure 5.4: Conceptual model for Clermont

Figure 5.4 above depicts the conceptual model derived from the situation in Clermont. According to Checkland (1999b) this technique assembles the minimum number of verbs covering the activities that are necessary in a defined system. Below is a list of these verbs:

- Define the critical departments that have the power to make a transformation.
- Consult thoroughly with the community.

- Provide both short- and long-term programmes for poverty alleviation and eradication and integrate them at departmental levels.
- Identify those members of the community who are intended to benefit from the programmes.
- Boost and empower the community so that they can improve the situation by appointing local businesses for service delivery.

5.3.5 Stage 5: Comparing Conceptual Models with Reality

This is called the comparison stage because it is where parts of the problem situation (analysed in stage 2) are examined alongside the conceptual models. This should be done with the concerned participants of the problem situation with the object of generating a debate about the possible changes that can be introduced in order to alleviate the problem situation. The comparison is the point at which intuitive perceptions of the problem are brought together with the systems constructs. The systems thinker then asserts these constructs and provides an epistemologically deeper and more general account of the reality beneath surface appearances. This stage, which embodies the basic hypothesis of systems concepts, provides a means of teasing out the complexities of reality. The key question in this stage is: what features of the conceptual models are especially different from present reality and why?

In comparing the information in stage 4 with the problem expressed in stage 2, the following differences become apparent:

i. The poverty alleviation and eradication programmes of different government departments are not integrated in stage 2. Each department is working in isolation where poverty is concerned, yet it is not a problem that can be dealt with in isolation because of its complex nature.

- ii. The communication and feedback loops that are present between the different role-players in stage 4 are not there in stage 2.
- iii. Regular awareness forums about these programmes are put in place for the community in stage 4.
- iv. The results of the implementation shown in stage 4 are optimistic and those in stage 2 display a helpless situation.
- v. Volunteers are incorporated in service delivery in stage 4 where they are not allowed to participate in stage 2.

From the workshop discussions between the different stakeholders, observations and random discussions with the community members, it becomes apparent that the problem is not really the programmes that are short term, but the fact that they are not reaching the targeted group. This is also attributed to the following reasons:

- The programmes were planned in isolation, without considering
 the manpower that would ensure the transformation. The biggest
 challenge is the lack of staff from each department to perform the
 different roles. This implies that there is no balance between
 human resources and the budget attached to the actual
 deliverables.
- The government departments are not working together in a holistic manner, hence the ineffectiveness of the programmes. There should be representatives from each department; they should put their heads together to seek the best way of ensuring that the programmes benefit the poor.
- A large portion of the community has a negative feeling about the programmes. They feel that the programmes only benefit those who are known by the officials.
- There are not enough awareness forums undertaken to inform the community about the development plans and the success rate of these programmes.

 On the part of government, there is minimal monitoring and evaluating of the programmes, if any. The one government department that has gained credit from the community despite its challenges is the Department of Health. This could be attributed to the commitment of the senior government officials in the health ministry.

5.3.6 Stage 6: Feasible Desirable Changes

The comparison done in stage 5 was intended to generate debate about the possible changes to the perceived problem situation. Practically, the initial work done in stage 5 frequently draws attention to inadequacies in the initial analysis or in root definitions, and further work is required. The inadequacies resulting from the comparison stage enables the discussion of possible changes. There are three kinds of changes according to Checkland (1999b), namely changes in structure, in procedures and in attitudes.

- i. **Structural changes**: Changes made to those parts of reality that does not change in the short term (in the ongoing running of things). These may be to organisational groupings, reporting structures or structures of functional responsibility. The government departments should design a structure that integrates their plans to deal with the problem and also involves the community representatives. They should work in a systemic way.
- ii. **Procedural changes**: Changes to the dynamic elements, like reporting and informing. The councillors are supposed to play an intense role in the flow of information between the community and the decision- and policymakers in any plans concerning poverty alleviation and eradication programmes as well as the overall development plans.
- iii. **Attitude changes**: Intangible characteristics of the individuals and collective consciousness of human beings in groups. The most

critical change in attitude that needs to take place is that of the community itself. People need to change their mindset of wanting and expecting the government to do everything for them without them taking charge and coming up with feasible options to better their situation. An example is of a mother who has three children going to the same school. She claims that she cannot afford to pay school fees. Surprisingly enough, her girls are well dressed, their hair is neat and well plaited and they do not reflect what their mother is saying. The mother has another small baby on her back, but still she contends she cannot afford to pay fees of R160 a year. The government officials who are supposed to be the vehicles to enable the processes and the programmes to benefit the poor should begin to share in the objective of the programmes as a whole and not think of them in terms of how they are going to benefit. They are the ones who should be fighting any type of corruption during the delivery of these programmes.

5.3.7 Stage 7: Action to Improve the Problem situation

Stage 7 seeks to explore possible accommodation between contrasting opinions and interests that surface in the process of SSM. The implementation of agreed change proposals (as mentioned above) gives raise to another problem situation and so the process of SSM continues.

The main contrasting opinions in the process of SSM were expressing the problem situation rather than formulating the problem situation into a phrase or hypothesis. Some people prefer the problem to be stated as: "poverty alleviation programmes are short-term and therefore not sustainable", others argue that it is not the real problem and suggest that the problem is that "the programmes are not reaching the targeted people who are in poverty. These opinions did not cause too much chaos, as the group was reminded that fixing the problem at an early stage of the process is not ideal as it is always possible that it may change. The most

difficult thing for the group to reach agreement on was their attitudes. People could justify their behaviour and response with so much logic that it seemed almost impossible to agree on anything regarding attitude changes. In this instance, the process had to refocus on implementing the desirable changes and the group began to cooperate again; and without noticing it they did accommodate one another's opinions. This scenario justifies why Senge's view of consensus is so impossible (Flood, 1999).

The group agreed on the following implementation strategies resulting from the dialogue with the participants regarding the changes that should take place:

- İ. Organise regular forums for all the government departments in order for them to see how they can improve service delivery. These meetings will help identify interrelationships between the departments and, more importantly, will enable quick solutions to the problems because every department would be represented. For example, certain families do not pay their water bills and the meters get disconnected. They then decide to use water from the nearby stream, which is unclean. They get sick and have to go to the clinic. The clinic representative will communicate this to the health department, who will in turn table the problem to the municipality and the politicians (councillors). The councillors will take the problem to the council who will then resolve the problem by, for instance, reconnecting the meters at a reduced rate to enable the families to at least have drinking water and water to cook and bath with.
- ii. Market and encourage residents to maximise the use of the existing Clermont Regional Centre opposite the taxi rank provides multiple services such as a library, a clinic (run by the Department of Health), an old-age home (run by an NGO), a police station, a centre for the disabled, the offices of a women organisation,

politicians and councillors' offices. There is also a new building that is not in use yet. It is intended to be a one-stop shop where the community will receive a variety of services like identity documents and free photos — as one of the reasons why some people still do not have identity books is because it is expensive and they cannot afford the photos. (Most of the community members feel that this gesture is a political one that is done conveniently because it is time for elections.) There are also housing offices that will deal with applications and enquiries as well as social development offices.

- iii. With regards to the attitudes of the people, the group, especially the politicians, felt that the response from the community was very poor in terms of taking advantage of what is available to them to improve their situation. The number of grants awarded to the community is dependent on the number of applications submitted. This means that development committees should intensify their marketing strategies to ensure that the whole community is aware of what is available for them. T-shirts are normally used to advertise and act as incentives for the community to attend public meetings. This strategy is still challenged, because there are many people who wear these T-shirts, but do not know what they are about (what is written on them either because they have no interest or they are illiterate).
- iv. It has become apparent that the NGOs encourage the SMMEs to take a lead in the business sector of Clermont and to grow their businesses. For the purpose of creating jobs as a matter of urgency though, outside businesses should be allowed to invest, but it should be done in a controlled manner. Skills would be transferred in this way.
- v. Finance remains the biggest barrier to entry into the business world for most emerging businesses. Each government department has black economic empowerment (BEE) programmes

in place. Funding should not be limited to financial institutions only. At the moment, SMMEs who do not have access to finance go to the *mashonisa* (a Zulu word meaning "keeping one in a death situation"). These are illegal cash loans where people are exploited and loaned money at very high interest rates – normally 25% and upward. This leaves the poor even poorer.

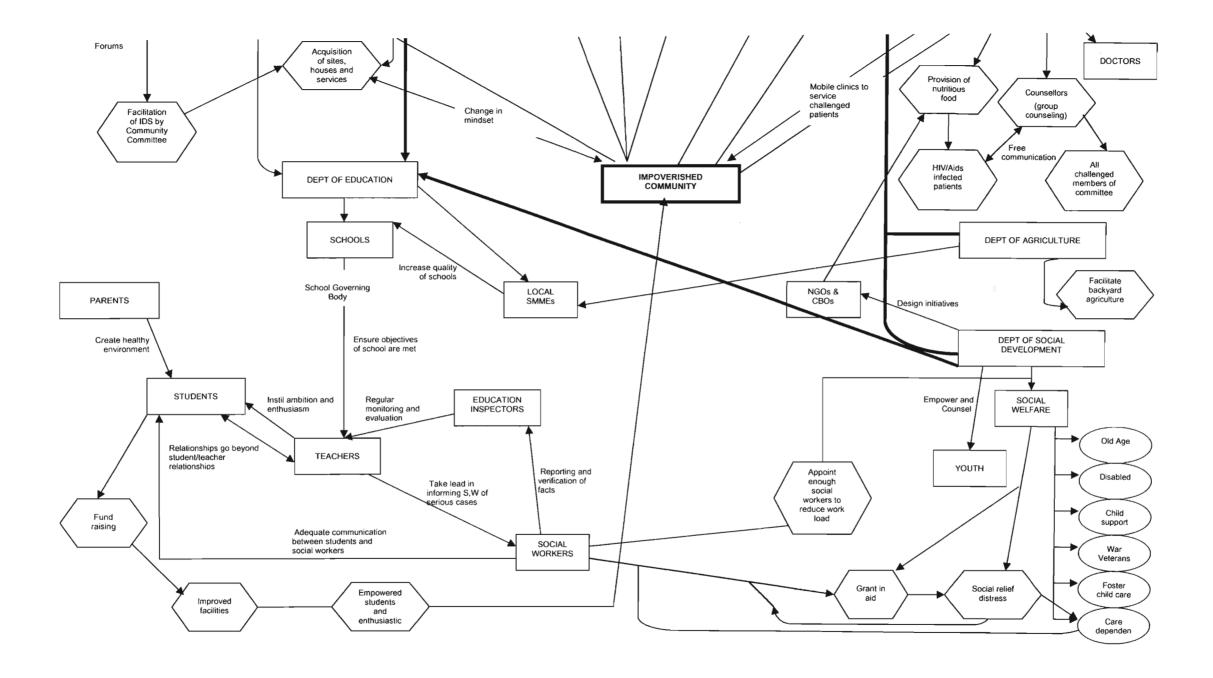
Figure 5.5 and 5.6 below show a systemic diagram of the corrected problem situation and a rich picture depicting the systemic issues and processes towards a corrected situation respectively. both figures give more detail in terms of relationships and communication lines and responds to the problematic situation depicted in Figure 5.1.

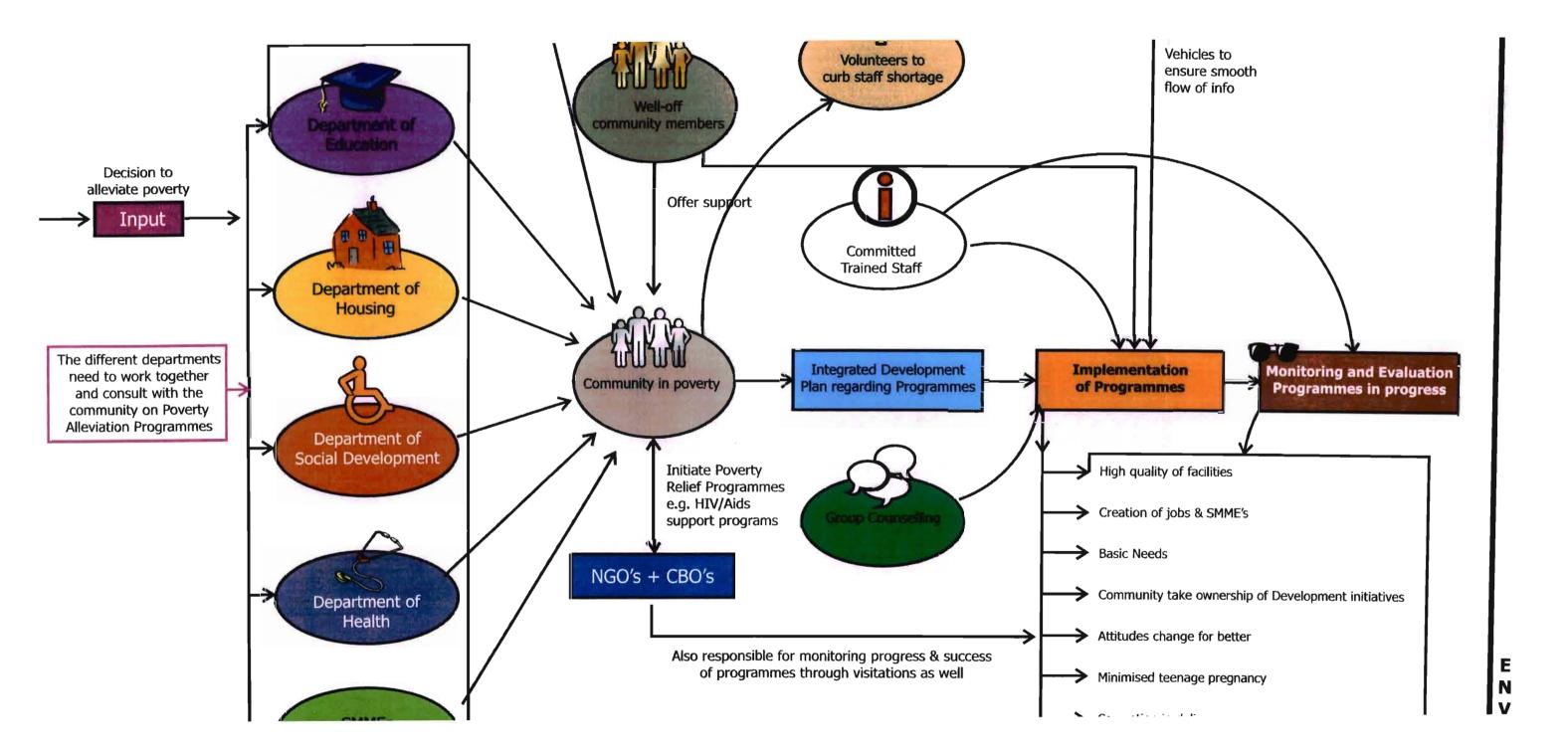
In Figure 5.5 the impoverished community is put at the centre of all the other systems and depicted as the hub of the entire system to reflect what the stakeholders should be doing to address the problematic situation in Figure 5.1. The impoverished community should firstly change their way of thinking and mindset with regards to housing and understand the bigger objective of housing delivery. The Department of Housing should shorten their tender and approval processes to enable timeous acquisition of sites, houses and services thereby addressing the apparent backlogs in housing delivery. More staff can be employed to deal with backlogs in the registration of beneficiaries' applications. The Department of Education with the help of the Department of Public Works (implementing agent) build and upgrade schools in appropriate areas using local SMMEs. Whilst parents are responsible for creating a healthy environment for the learners, the teachers should be able to instil ambition and enthusiasm in students and should take the lead in informing social workers of serious cases and there should be adequate communication between the social workers and the students. Students should also take initiatives to improve their environment by fund raising to improve facilities so that they take

ownership of their education and become empowered. Education inspectors should monitor and evaluate the progress at schools regularly. The same social workers can be instrumental in assisting the families of the students with the appropriate advice with regards to which grants are available in the different situations. The Department of Social Development supports the old age, disabled, children, war veterans, foster child care and is also responsible for empowering and counselling the youth. More social workers need to be employed for the success of the implementation of the different grants in place. With enough doctors, nurses and health care facilities, counsellors, the impoverished community can benefit a lot with regards to the quail of health especially the HIV/Aids infected patients. Mobile clinics should be increasingly adopted to reach those who are unable to reach health facilities because of old age or unavailability of bus fare. Department of Health and Agriculture together with the NGO's can facilitate the provision of nutritious food for HIV infected patients.

Figure 5.6 paints a scenario where all the Departments are integrated and are working together with the community when it comes to poverty alleviation programmes and are approaching the challenge of poverty holistically with one goal and one mind. The financial institutions should also play a significant role in the provision of funds. The well-off community members should offer support to the impoverished community together with the volunteers who can curb the issue of staff shortages. Support from the political structures is also vital to ensure that the progress on the success of the programmes becomes an agenda item in their meetings. When all the departments have put an integrated development plan together regarding the programmes, implementation and adequate monitoring and evaluation would result in, amongst other things high quality of facilities, creation of jobs, basic needs, community take ownership of the development initiatives, attitudes will change for the

better, minimised teenage pregnancy and no corruption in the delivery processes.





5.4 CRITICISMS OF SSM

The main criticism of SSM is that it neglects certain difficulties in achieving open and meaningful debate. The other criticism is that there is little said about the power or impact of SSM and the way it can distort the outcome of the debate. Mode 2 of SSM, which is not dealt with in this study, attempts to offer some response to this criticism. It recommends a political systems analysis as part of the stream of cultural analysis. However, it barely touches on the notion of knowledge, power and social transformation.

5.5 CONCLUSION

It is apparent that SSM is, in principle, a continuous process of learning and understanding. There is no wrong and right, but unexpected illumination of the initially perceived problem definitely takes place. The participants definitely understand the problem situation better than before applying the SSM. The use of SSM has also demonstrated the value of agreeing on a clear definition of the system; fostering debate around the beneficiaries, victims, owners, actors, and the environment; seeking clarity on the transformation implied by the system; and obtaining consensus on the worldview underpinning the system. The use of the rich pictures was also helpful as it surfaced some important issues.

The next chapter presents the analysis of the approach to methodology, and the findings and conclusion of this research study.

CHAPTER SIX ANALYSIS OF METHODOLOGY

FINDINGS AND RESEARCH

6.1 INTRODUCTION

Chapter five presented the case study and applied the Systems Thinking approach, using the SSM to investigate the extent to which the poverty reduction and eradiation programmes are impacting on the impoverished community of Clermont. It also showed most of the interrelationships between the different government departments with regards to poverty reduction and eradication programmes.

This chapter presents the analysis of the findings from chapter five (generated by the Clermont case study and SSM). The analysis is also done in relation to the literature review (given in chapter 2 and 3). It seeks to show how the findings of chapter five contradict or confirm the theoretical framework that was built up at the beginning of the research and how the findings contextually illuminate the theory. The methodology adopted in chapter three will also be analysed in terms of its effectiveness in illuminating understanding of the complex problem of poverty.

6.2 ANALYSIS OF FINDINGS

In chapter two different definitions of poverty were given as well as the different views of the sociologists, economists, anthropologists and politicians. The overall conclusion of these definitions was that poverty is a relative term that can be defined differently in different geographic areas, eras, economies and political paradigms. The fact that poverty can never have a global definition was confirmed. The analysis here will be made according to the different core government departments mentioned in the previous chapters.

6.2.1 Department of Housing

As mentioned in chapter three, the housing vision of government is to strive for the establishment of viable, socially and economically integrated communities situated in areas that allow convenient access to economic opportunities as well as health, educational and social amenities, to which all South Africans will have access to on a progressive basis. From this vision it becomes obvious that the Department of Housing cannot implement the housing strategies without the input of the other relevant departments, such as the Department of Health and the Department of Education; especially with regards to their overall strategic planning. The departments should plan together to avoid a situation where, for example, there are 1 000 houses that are not in balance, for instance, with the number of clinics and schools available. As far as housing is concerned, no construction of subsidised housing is currently taking place in Clermont and the question may well be: why, especially when there are so many people living in shacks? The answers to this question vary. Some residents and housing officials say some of the residents are happy living in shacks and that it is the only way they can save the little money they have; or their applications have not been approved; or they have formal houses in the rural areas and are just there to work and go back home; or they are not informed at all about what is available to them with regards to different housing schemes.

6.2.2 Department of Health

The majority of the poor in Clermont are generally satisfied with regards to health facilities and free medical care. The Department of Health has managed to strike a better balance between service delivery and internal transformation than other departments. The principles of Batho Pele are practiced satisfactorily. As mentioned in chapter five though, there is only

one clinic in Clermont and the challenge is that a doctor only visits the clinic twice a week. This means that for emergencies people cannot get help and therefore get referred to the nearby hospitals. In cases like these, some people decide to wait for the doctors to visit the clinic because they genuinely cannot afford the transport costs although the treatment is free. Transportation and staff shortages remain the main challenges for this department. With regards to working with other departments, the Department of Health works closely with the Department of Social Development as they refer patients to social workers for counselling.

6.2.3 Department of Social Development

The programmes put in place by the Department of Social Development are designed to address the transient poverty in the short term, temporary or seasonal poverty, as well as chronic poverty (that is long term or structural). These programmes are indeed reaching most of the poor people in Clermont. Those who are supposed to be benefiting but are not are hindered by the fact that they do not meet all the requirements set by the department – they are not informed about what is available to them; they know about the grants but are indifferent to them; the elderly cannot get to the social development offices and so on. The main challenge is that there are only two social workers assigned to the whole of Clermont and they simply cannot manage to attend every case. They have long lists of families they need to visit and even if they manage to visit them, they cannot do the follow-ups. When these programmes were put in place, the question of human resources to perform the tasks was not looked into enough. The number of HIV/Aids-infected people is also a serious problem. These people do not have enough support from the social workers, and they lack access to nutritious food. The government used to provide food to the NGOs or CBOs to prepare and cook for these people. but they stopped providing food. The question of sustainability comes into play in situations like these: the programmes should prove to be

sustainable and where they are meant to be short term, the community should be informed.

6.2.4 Department of Education

The teachers in Clermont schools lack enthusiasm and passion for what they do; most of them feel neglected by the Department of Education. Very few students are performing well and are positive about their future; whereas the rest lack ambition and they blame the government for inequality. It can be argued that the attitude of the children is justified because they are looking up to their teachers for enthusiasm and encouragement. For example, none of the schools in Clermont have the most important facilities like laboratories, but the department's target since the inauguration of the new government was to improve and provide equal attention to areas of science, technology and mathematics for African children. Instead, the students are encouraged to go to the schools in the suburbs nearby to use their facilities. The schools are in a bad state: the windows are broken, sometimes there is not even enough money to buy chalk; they hardly get visits from education inspectors and even if they do, no change takes place at all. This department is also working in isolation.

Teacher forums should be held, where they are given an opportunity to voice their concerns to the government and participate towards improving their situation. Team-building outings organised for educators would help a lot too, in terms of boosting their enthusiasm, passion and commitment to what they do. This would in turn get transferred to the students.

6.2.5 NGOs, CBOs and Businesses

NGOs have mushroomed in South Africa in the past eighteen years, but many are too dependent on foreign aid and are too involved in delivering services to be of much use in keeping the state accountable. There is a growing body of evidence that organisations of civil society have provided a "voice" for people living in poverty as well as supporting their immediate needs for livelihood.

The NGOs in Clermont have done well to a certain extent: they run an old age home and are in the process of building a hospice. They rely on a grant-in-aid to improve and build recreation facilities as per the community's demand. The CBOs are also doing well. They run poverty alleviation programmes, where they train unemployed and uneducated community members in different fields such as sewing, knitting, baking, gardening and literacy. A woman's organisation called Sibambeleni (meaning "do it yourselves") runs an old-age home and is funded by government. The results of the training are promising. Upon completion, the sowing students get jobs at the factories, sowing and knitting uniforms and jerseys for churches, schools and other organisations.

The NGOs and CBOs, if managed properly and professionally, can be good partners for the different government departments. The community can then take ownership of what belongs to them and begin to appreciate their talents. There is another group of women as well who offer pastoral care to HIV/Aids patients specifically, but they cannot reach all of them. They pray with them, and, if possible, offer them food and vegetables out of their own incomes.

While outside businesses are not encouraged to invest in Clermont because they only want the people of Clermont to own businesses, this poses a serious challenge, as outside businesses are needed to ignite growth in the area. This can be done by job creation, transfer of skills, training, energy, technology and investment that other sectors lack. People would also not have to travel such long distances to get opportunities.

6.3 ANALYSIS OF THE RESEARCH METHODOLOGY

The SSM applied in chapter five has been found very useful in its ability to illuminate understanding of such a complex problem as poverty. The methodology enables the people who are living in the situation to think and research thoroughly about ways they can improve the situation together. It takes the view that people facing the social problems are much more informed and have the analytical capacity needed to solve the problem of poverty better than anyone else, including the policymakers. Through this interaction it is possible to see how different aspects are linked and interrelated. The methodology shows that poverty can be understood clearly through thorough interaction with all the different role-players.

Although this methodology adds so much value in bringing forth understanding of complex issues like poverty, the outcome is solely dependent on the level of commitment that people involved in the process have. The team must understand that their role in the SSM process has to be as open and objective as possible to ensure that they bring more insight and useful information into issues around the problem, which people outside the problem do not have. The onus is therefore on the driver of the process to emphasise the goals of the process. This way the unnecessary debates and power games are easily avoided and people can understand that the debate could be a positive one that brings value to the process.

6.4 CONCLUSION

Overall, the above analysis shows that the problem of poverty is not being addressed in an integrated manner by the different government departments. The policymakers have not yet taken the time to sit back and

draw out the links between the departments, thereby striving to enhance a holistic approach to the problem. Although they talk about integration and sustainability, they do not practice it as yet.

Like any other methodology, SSM also displayed shortcomings (as mentioned above). On the other hand, it has managed to illuminate understanding of the problem situation. The next chapter looks concludes this research and provides some recommendations that would benefit the community going forward.

CHAPTER SEVEN CONCLUSION AND RECOMMENDATIONS

7.1 CONCLUSION

The problems associated with poverty are very challenging. Solutions are therefore not readily forthcoming. There is no one correct, scientific, agreed definition – because poverty is inevitably a political concept and thus inherently a contested one. It needs to be looked at with regard to its different aspects. A drastic shift in the thinking of the poor and the policymakers is imperative to understanding the problem and putting in place action plans that are sustainable and integrated.

A stronger integration of poverty policies and programmes should be achieved across a range of sectors that impact upon strengthening the assets of the poor and for redressing the urban poverty. The goal of integration is dependent upon South Africa introducing certain integrative institutional structures, designed to coordinate both policy formulation and implementation in many areas that impact on the reduction and eradication of poverty. Systems Thinking through the application of SMM provides the poverty programme designers with useful insight to understanding the problem that is being dealt with. Because poverty is complex, alleviation programmes need to be designed with the participation of the poor communities whom are to benefit from the programmes.

7.3 IMPLICATIONS FOR THEORY, POLICY AND PRACTICE

To date, theory on poverty has been substantial. It covers measuring it, quantifying it according to different countries, continents, genders, races and rural or urban settings, and defining it. The theory now needs to be put

into practice and communicated in a way that would give people a bigger picture of the problem instead of its parts in isolation. This also applies to the policies and programmes that are put in place to reduce and eradicate poverty. No plans have been put in place to address the gaps, which are apparent in these different programmes. For example, the major gap in almost all the government departments is the shortage of staff. The usual response from the government officials is that there is no money to employ more staff. From this, one can identify another gap in the planning process. Having only two people planning to register the whole township for different grants and at the same time addressing the needs of families that require special attention is extremely inefficient.

The programmes have a big impact on people's lives and are making a difference, especially those by the Department of Social Development. There is, however, no significant improvement in putting the proposed programmes of the Department of Education to practice, especially when compared with the Department of Health, which is doing exceedingly well. Therefore, it seems that there is still a long way to go before the poverty reduction and eradication programmes are practised. Participation and consultation with the people living in poverty is another key to the success of the programmes.

7.4 RESEARCH LIMITATIONS

The general limitations of this research have already been outlined in chapter one. The other limitations with regards to the research were changing the mindset of the people who were co-researchers (as this study adopted the action research methodology). Getting people to understand the importance of looking at the issue of poverty in a holistic way, thereby illuminating their understanding of the problem, was a challenge. Frequently one would encounter arguments between people

from different departments, blaming each other. For example, a policeman would blame the Department of Justice for the high crime statistics, because they would put criminals behind bars and within no time they were released and back on the streets. This of course discourages the police – they feel like their work and efforts are in vain. Another example is the municipality, which closes off the water meters of households that do not pay. The people then get sick from drinking unclean water. The nurses and doctors blame the municipality and question their commitment to health issues and poverty reduction. Adopting a Systems Thinking approach for messy problems like poverty is a learning curve and has not yet been encouraged because, although government speaks of integrated development, it is only practiced at higher levels of government (which excludes people on a grassroots level).

7.5 IMPLICATIONS FOR FURTHER RESEARCH

A great deal of research has been done on poverty with relation to its definition and its extent in different countries. Poverty alleviation programmes have been put in place by different countries/governments, but the eradication programmes are not yet clear. While everybody understands that now is the time for uprooting poverty as opposed to concentrating on reducing it, there is an urgent need for practical models that would address, for example, barriers of entry into financial institutions. All stakeholders, including the poor, should design these models collectively. The models should reflect a systemic approach to poverty eradication and people on grassroots level should have access to the big picture of all the issues surrounding poverty. Of significant importance are strategies to ensure that the population living in poverty becomes a valuable partner and contributor to fighting poverty as opposed to just endlessly receiving grants with no improvement in their individual livelihoods and standards of living.

Following this research, one could foresee the need to go further and concentrate on the role of the construction industry in the fight against poverty. The construction industry would have to be part of the policymaking and should utilise the Construction Industry Development Board established by an Act of Parliament (Act 38 of 2000) which is currently paving the way to a better future for all through its initiatives.

7.6 RECOMMENDATIONS FOR FACILITATING CHANGE

Recommendations for facilitating change are suggested below:

7.6.1 Sustainability strategies

Raising the living standards of the poor while conserving the natural resource base on which their livelihoods depend, is a key challenge. While rich world-consumption patterns are responsible for the greatest environmental damage, the poor are the ones hit the hardest by the resulting disease, degradation of soil and water and environmental crises. Poverty reduction strategies must seek to conserve natural capital and make more sustainable use of the finite resources, on a local and global level. Suggested sustainability recommendations are as follows:

- Meaningful community participation and involvement of public and private organisations, NGOs, CBOs and faith-based organisations should be encouraged.
- Community structures should be put in place and there should be regular interaction with them.
- Ongoing training and development of staff and volunteers should take place.

- There should be publicity and marketing of services with clearly defined referral systems and confirmed beneficiaries.
- There should be inter-sectoral collaboration in planning, the sharing of resources, ideas and service delivery.
- Grants-in-aid and donations from the public, private and nongovernmental sector should be encouraged.
- Community and financial contributions or volunteer work should be encouraged.
- An ongoing adopt-an-orphan or destitute family/victim programme should be established.
- Creative fundraising events, functions and campaigns to help the poor should be established.
- A circle of friends for compassionate care should be established and enlarged.
- Income-generating and anti-poverty projects and programmes should be established.
- South Africa must be seen as supporting the free market system.
 What is done today must cater for the uncertainties of the future.
 We should fit in with the global economy.
- The fact that business has a key role in poverty elimination should be realised. Effective governments create the framework of regulation that enables business developments, protects workers, consumers and investors from unscrupulous practices, and can encourage business decisions to reflect the true social and environmental costs of their impacts.
- New partnerships, sharper management tools and better national and international public policy frameworks should be established.
- Businesses should realise that poverty elimination is a business opportunity and multi-sectoral partnerships could emerge that will

focus on policy developments. Practical implementation will be crucial in getting beyond the wasted effort and mutual opposition that have often characterised the approach of different sectors working apart.

- Businesses should do more both to minimise its negative impacts on the poor and to find market opportunities that enable human potential to flourish. Their involvement in poverty elimination rests on three assumptions, namely that –
 - poverty is bad for business;
 - business can be good for the poor; and
 - commercial benefits can result from pro-poor strategies.

7.6.2 Communication strategies

These strategies deal with how communication should flow between the relevant stakeholders and how the processes can be handled in an integrated manner, giving the observer and the people in the problem situation a holistic picture of all the dynamics.

Currently there are a number of committees at national, provincial and local level that sit regularly to discuss different aspects of development in South Africa as a whole. As well structured as they are, they still prove to be weak because whatever is discussed in those meetings regarding development is not channelled to the beneficiaries. This becomes a serious challenge in terms of realising the fruitfulness of the meetings.

7.7 FORMATION OF A POVERTY UNIT

The creation of a poverty unit is an important process in the generation of a management system and a coordinating and monitoring system for all the poverty reduction and eradication programmes in place. The poverty unit is therefore the most effective structure and tool from which to implement the programmes. This would enhance the process of identification and delivery of services, infrastructure and target communities for local economic development projects.

Monitoring and evaluation systems

The employment of a monitoring and evaluation system in the form of indicators should take place. These indicators should be linked to the strategies and relate to government departments' responsibility in ensuring that targets are achieved to combat poverty in the province and South Africa at large.

The delivery of information of the integrated poverty programmes of all departments should be formulated in the form of a user-friendly brochure.

A poverty atlas, which assists in the understanding of the spatial aspects of poverty and the identification of communities and their needs, should be made available and easily accessible. Different district and local municipalities should be able to participate as well.

A system of indicators that links to national government mandates to ensure accountability for addressing poverty should be formulated.

The construction industry

While this entire research has focused on poverty, Systems Thinking and the effectiveness of the poverty reduction and eradication programmes, there is a very important aspect that has not been dealt with. That is the role of the construction industry in fighting the enemy of development, namely poverty. In chapter one the relevance of this topic to the built environment was justified. The construction industry is responsible for the delivery of infrastructure, schools, clinics, recreation facilities, houses and HIV/Aids awareness centres — thereby contributing much in fighting poverty.

Therefore it is highly recommended that the construction industry be involved right at the beginning of formulating the poverty reduction and eradication programmes; because it is interconnected to the government departments that were looked at in this study. One of the concepts of Systems Thinking mentioned in chapter two is that the whole is greater than the sum of the parts. It also stresses the role of interconnections. It is therefore believed that this partnership would yield effective results in an attempt to fight poverty, because the construction industry possesses all the expertise regarding the technical requirements, especially in terms of time, cost, quality and empowerment. Institutions like the Construction Industry Development Board (CIDB), South African Institute of Consulting Engineers (SAICE), South African Black Technical Consultants (SABTACO), South African Institute of Building (SAIB), National Home Building Regulatory Council (NHBRC), Construction Education and Training Authority (CETA) and others should be given a chance to contribute to the content of the programmes.

Economic growth

The main element here is the pursuit of a broad-based economic growth that will generate income-earning opportunities for the poor, thereby making use of their most abundant asset – their labour. The other element is to ensure that the poor have the human capital to take full advantage of these opportunities by improving access to education, health care and social services. This strategy endorses the use of social "safety nets" for the most vulnerable segments of society who cannot take advantage of income-earning opportunities or who may be hurt during the policy adjustment phase.

In the Holy Bible, the book of Acts, chapter 4, verse 12 it is said that the believers share their possessions:

"All the believers were in one heart and mind. No one claimed that any of his possessions was his own, but they shared everything they had. With great power the apostles continued to testify to the resurrection of the Lord Jesus, and much grace was upon them all. There were no needy persons among them. For from time to time those who owned lands and houses sold them, brought the money from sales and put it at the apostles' feet, and it was distributed to anyone as had need."

The Holy Bible – Acts 4:12

The fundamental truth around poverty and how it is dealt with is that a change of heart from all with regards to sharing is crucial.

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APPENDIX 1

QUESTIONNAIRE USED AS A GUIDELINE DURING INTERVIEWS WITH THE DIFFERENT STAKEHOLDERS

QUESTIONNAIRE USED AS A GUIDE LINE DURING INTERVIEWS WITH THE DIFFERENT STAKEHOLDERS

1. Community (youth, old people, students, ill people, teachers, e.t.c)

- a. How would you define poverty?
- b. What concerns do you have about the poverty situation facing the communities and what opportunities do you see for the situation?
- c. What do you think should be done about the situation?
- d. Do you consider yourself poor?
- e. If yes to the above question are aware of any government programmes aimed at alleviating poverty?
- f. Which ones are you aware of and are you benefiting from them?
- g. What are the challenges regarding these programmes?
- h. What do you like about the programmes?
- i. In comparison which programmes are more effective in addressing your situation?
- j. Who should be doing something about the situation?
- k. What will happen if things carry on as they are currently?

2. Department of Housing; Department of Social Development; Department of Health and Department of Education

- a. What is the department doing to alleviate poverty for the poor communities?
- b. What programmes are in place to alleviate poverty?
- c. How successful are the programmes?
- d. How do you measure success and failure of these programmes?
- e. How do you communicate the programmes to the community or the intended beneficiaries?
- f. What challenges are you encountering if any with regards to implementation of these programmes?

- g. Was there consultation with the communities in the formulation of these programmes and how was it conducted?
- h. Which other government departments do you work with to formulate poverty alleviation programmes?
- i. To what extent do you communicate with other departments to integrate your work?

3. Business Enterprises

- a. How is your business benefiting the poor people in your area?
- b. What advice can you offer to the people in your community who also want to start their own businesses?
- c. For further growth and development do you encourage businesses outside Clermont to invest for purposes of closer opportunities and skills transfer?
- d. Are you aware of the poverty alleviation programmes put in place by government? If so do you think they are effective
- e. For those that are not effective what do you think should be done to improve them?
- f. What should be done to alleviate poverty and by whom?

4. Non Governmental Organisations (NGOs)

- a. How is your organization contributing to the alleviation of poverty?
- b. How do you communicate your initiatives with the community?
- c. Do you work hand in hand with different government departments to alleviate poverty?
- d. What are you concerns about the situation and what do you think should be done, by whom?

5. Politicians

a. What concerns do you have about the poverty situation experienced by your community?

- b. What do you think should be done to alleviate poverty?
- c. Who do you think should be doing something about the situation?
- d. What role are you playing to contribute in alleviating poverty?

APPENDIX 2 STAKEHOLDERS CATWOE's

DEPARTMENT OF SOCIAL DEVELOPMENT

Customers/Clients	Children who are under the age of 18 and who are abused, neglected, orphaned, abandoned and/or living in other especially difficult circumstances; Families that are vulnerable, including single-parent, child-headed, destitute and/or refugee families; the youth who are between the ages of 14 and 28 years and who are at risk in conflict with the law, out of school or unemployed; vulnerable women including victims of violence, poor and unemployed;
	vulnerable older people including those who are abused, frailed and indigent.
Actors	Department of Social Development, Social workers, families, communities, support groups including churches.
Transformation	Provision of integrated programmes of Social security, social welfare and social welfare to support the target groups within a community. The programmes deal with social issues such as psychological stress, chronic poverty, food insecurity and other adverse social conditions.
Worldview	People should be fully engaged in their own process of learning, growth and change; people should be connected to each other and with their environment in ways that make them more effective in their individual and collective efforts towards a better life. The disbursements of resources should be based on need, priorities and historical imbalances. There should be access to information and openness regarding administrative and management procedures. Programmes and policies should promote social justice
Owners	Department of Social Development
Environment	Very poorly developed prevention and intervention services; loss of skilled personnel due to poor salaries and working conditions; almost non-existent information management system which greatly hampers planning.

DEPARTMENT OF HOUSING

Customers/Clients	Previously disadvantaged individuals
	who do not possess stable and
	sustainable residence.
Actors	Department of Housing, people in need
	of houses, and ward committees
Transformation	The input is availability of funds to build
	the houses including the design and
	building costs. The output is the
	availability of sustainable houses for
	people in need of houses.
Worldview	Housing is viewed as a variety of
	processes through which stable and
	sustainable private and public
	residential environments are created for
	households and communities. The
	environment within which a house is
	situated is as important as the house
	itself in satisfying the needs and
	requirements of occupants.
Owners	Department of Housing (National and provincial)
Environment	People with houses should have access to
	economic opportunities as well as health,
	education and social amenities. Some
	successful applicants are so used to their
	current situation that when they finally
	acquire the houses, they sell them or rent
	them out while they stay in their shacks.

DEPARTMENT OF HEALTH

Customers/Clients	All the people with health care needs and benefit
	from the department of Health
Actors	Department of Health is the main actor responsible
	for performing the transformation
Transformation	Provision of health care facilities, nurses and
	doctors to look after the patients and the output of
	the process would be healthy people who are able
	to take control of their lives again.
Worldview	There should be a process of raising the standard
	of living conditions through improved income-
	earning opportunities, sanitation, water supply,
	energy sources and housing to make up the overall
	strategy of improving health.
Owners	Department of Health (National and Provincial)
Environment	Poverty contributes to poor both directly such as
	through damp or inadequate accommodation and
	indirectly through the poor diet and high stress
	levels. Being poor makes it difficult to access or
	afford adequate health care when needed and can
	reduce the opportunity and motivation to adopt a
	healthy lifestyle. The inadequate management
	capacity, staff and other resources shortages, few
	nurses and doctors, bed linen and medicine in short
	supply owing to pilfering.

DEPARTMENT OF EDUCATION

Customers/Clients	Pupils / learners
Actors	Department of education, educators, learners, School Governing Bodies (SGBs), parents
Transformation	The input is education infrastructure which includes schools, with facilities like laboratories, furniture, boards, equipment, ablution facilities, recreational facilities e.t.c. as well as educators to teach the learners. The output would be educated pupils with high pass rates.
Worldview	Education system that is internationally recognized and competitive which will enable high quality standard of education through curriculum development that pays attention to the education of Black children especially in the areas of science, technology, arts and mathematics. All children should be afforded the opportunity to study for at least ten years. Issues of equality should be addressed in
Owners	Department of Education is the key owner but the learners and educators are also owners as they can have power to stop the process.
Environment	Uneven quality of education has resulted in ongoing marked racial differences in basic literacy and numeracy. Teachers' remunerations are generally low which explains their lack of enthusiasm and passion in what they do.