



**Dissertation Topic:**

**Exploring Disparities in Housing, Water and Sanitation Policy Initiatives in Informal Settlement Upgrading in Ethekewini Municipality- The Case of Amawoti-Cuba and Barcelona 2 Informal Settlements**

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**Declaration:**

I **Sandile Mbatha** hereby declare that this dissertation is my own unaided work except where otherwise acknowledged. It is being submitted to the school of Architecture, Planning and Housing, University of KwaZulu-Natal, Howard College campus, in partial fulfillment of the requirements towards the degree of masters of Housing. This dissertation has not been submitted before for any examination or degree at any University.

Signature.....

**Supervisor:** Dr Rosemary Awour-Hayangah

## **Abstract**

Disparities between housing, water and sanitation policy initiatives continuously undermine the efforts of informal settlements upgrading programme of transforming living conditions of people living in informal settlements. The objective of this research project was to explore the disparities between the above mentioned policy initiatives in informal settlements upgrading with the view to develop an understanding of various elements leading to these disparities. To achieve this research two case study areas were selected from which data was collected. The case studies were selected purposively. Household surveys were conducted from each of the two case studies and interviews were conducted with housing, water and sanitation officials. Findings of the research indicate that there are indeed disparities between housing, water and sanitation. It indicated that the disparities manifested themselves at various levels of policy. The nature of these disparities also varied according to the level at which they manifested. The research concludes that disparities in housing, water and sanitation manifest themselves in informal settlement upgrading. Various levels of policy indicate the manifestation of these disparities. Informal settlement upgrading efforts are undermined by the lack of coordination and integration in the implementation of policy. The research therefore recommends adjustments from all levels of policy from formulation to implementation. Housing, water and sanitation policy formulation process should be conducted in an integrated and coordinated manner. All parties involved in policy development and implementation should adopt high level of communication and consultation on all policy related issues. Policy objectives should be consolidated.

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## **LIST OF ABBREVIATIONS**

AIDS	Acquired Immune Deficiency Syndrome
BNG	Breaking New Ground
DoH	Department of Housing
DAG	Development Action Group
DLA	Department of Land Affairs
DPLG	Department of Local Government
DWAF	Department of Water Affairs and Forestry
EWS	Ethekwini Water and Sanitation
EWSP	Ethekwini Water and Sanitation Programme
HIV	Human Immunodeficiency Virus
HSRDP	Human Settlement Redevelopment Programme
IDP	Integrated Development Planning
IRC	International Research Council
IRA	Intergovernmental Relations Act
ISP	Informal Settlement Programme
ISUP	Informal Settlement Upgrading Programme
MDGs	Millennium Development Goals
MIG	Municipal Infrastructure Grant
MFMA	Municipal Finance Management Act
KENSUP	Kenya Slum Upgrading Programme
KZN	KwaZulu-Natal
RDP	Reconstruction and Development Programme
RSA	Republic of South Africa
SDBIPs	Service Delivery Budget and Implementation Plans
SWH	Swedish Water House
UD	Urine Diversion
UN	United Nations
UNCHS	United Nations Centre for Human Settlements
UNICEF	United Nations Children's Fund
VIP	Ventilated Improved Pits
WB	World Bank

WHO World Health Organization  
WSDPs Water Services Development Plans



# **Chapter One: Research Introduction**

## **1.1 Introduction**

This research emerges from the author's special interest in housing delivery policies, particularly informal settlement upgrading, and its relationship with water and sanitation policies. The personal assumption is that upgrading has failed to transform informal settlements into sustainable human settlements. Many upgraded informal settlements still lack basic services such as water and sanitation. The generally understanding of the broad objective of upgrading informal settlements is that it is meant to facilitate access to basic services, transform communities, and facilitate local economic development through infrastructure development. The study is informed by personal assumption that South African service delivery environment is highly disintegrated and sector specific. It is generally perceived that the common objective of creating a 'better life for all' through the delivery of basic services is frequently overtaken by the desire to meet departmental targets based on backlogs and other ineffective criterion. The research seeks to understand the linkages, or lack thereof, between housing, water and sanitation policy initiatives in informal settlement upgrading.

The context of informal settlement upgrading was chosen because it presents the most challenging housing environment coupled with interesting water and sanitation issues. Based on the number of informal settlement populations in South African cities, informal settlements are home to the majority of urban population. This is the poor segment of the urban population which is often vulnerable to socio-economic and political trends. The research therefore seeks to understand how policy implementation affects these urban communities. It also attempts to evaluate whether or not transformation of informal settlements to sustainable human settlements has taken place. The delivery of these respective services is based on a new policy development path described below. Each element highlighted above is further outlined later on in more detail.

## **1.2 Problem Statement**

The nature of policies that existed during the apartheid system did not represent all segments of the society. They were based on discriminatory laws of segregation and inequality. As a result there was a compelling need for a new policy direction.

Policy redevelopment occurred immediately after the transition in the early 1990s. The main aim of redevelopment was to modify and repeal the previous policies that were based on racial discrimination and inappropriate laws of the apartheid regime. After 1994, the new democratic government had a compelling responsibility to develop and redirect policy for all South Africans. Housing policy, water policy and sanitation policy development took place under the framework of the Reconstruction and Development Programme (1994) and the Constitution of the Republic of South Africa which were both the aftermath of negotiated transition to democracy.

Enshrined in the South African Constitution is the right of access to adequate housing and basic drinking water supply for every South African (RSA, 1996). The housing, water and sanitation policies in South Africa are initiatives aimed at fast tracking the delivery of basic services to the poor as a constitutional obligation. It is often acknowledged that the current government inherited huge backlogs in the delivery of these basic services along with a distorted policy environment (Pillay & Naude, 2006) Therefore, South Africa's broad objectives were to normalize the policy environment and make it as inclusive as possible.

Over the last 14 years of democracy, policy initiatives in housing, water and sanitation have tended to function in isolation. These are the most pressing issues in the developing world today. The global estimate is that there are 1.5 billion people without safe drinking water, 2.5 billion without access to adequate sanitation and about 1 billion people live in slums (Mutume, 2004), most of whom are in developing countries. This reveals that housing, water and sanitation are an acute international challenge. To meet the challenge, developing countries need to develop new strategies and approaches for the delivery of housing, water and sanitation. According to the National Department of Housing (2004) census data, the total population living in informal settlements in South Africa was approximately 3,560,383 out of the country's total population of 44,819,776 in 2001. These adverse living conditions are predominant in KwaZulu-Natal, where the total population living in informal settlements was a staggering 1,016,596 in 2001. With an increase in the urbanisation rate, these figures could possibly increase. This has a potential to cause conditions to deteriorate to even more.

There are 555 informal settlements in the Ethekewini Municipality alone, which is the highest number for any city in South Africa ([www.durban.gov.za](http://www.durban.gov.za)).

Sanitation backlog currently stands at 672,683 households nationally (DWAF, 2007) of which KwaZulu-Natal accounts for 19%. About 168,484 households have no access to sanitation or have access to sanitation below RDP service level in Ethekewini Municipality (DWAF, 2007). The national water supply backlog, on the other hand, currently stands at 646,914 households of which KwaZulu-Natal contribute 36% (DWAF, 2007). Currently the water supply backlog at Ethekewini Municipality stands at 72,775 households without access or having only access to water supply below RDP services standards. The above statistics highlight the gravity of the situation and the challenge facing housing, water and sanitation in the Ethekewini Municipality.

These alarming statistics belittle the efforts of policy development that has taken place since 1994 and raise questions about the rate of service delivery. They also undermine the assertions and vision of the constitution of a better life for all. The Departments of Water Affairs and Forestry and Housing have developed, arguably, the most liberal and accommodating policies in their respective fields. However, this is disparaged by what Huchzermeyer (2006b) calls “perpetual challenge of informal settlements”. Informal settlements are an indication of a policy failure on the perspective of housing delivery (Huchzermeyer, 2006b). Their state of access to basic services is indicative of challenges facing service delivery policies. Informal settlements continue to pose health, environmental, social and political threats. They are often generally perceived to be at the core of riots and political unrest. Citizens of informal settlements are vulnerable to health and environmental hazards caused by the conditions and standards of living in these areas. The assumption is that city resources are frequently drained and infrastructure capacity overwhelmed by these unplanned settlements. Although these challenges are not unique to Ethekewini, their occurrence is more common than in any other metropolitan area in South Africa.

The above arguments highlight the challenges facing urban development and the supply of basic services such as housing, water and sanitation in South Africa in general and Ethekewini Municipality in particular. This is despite policy, legislative and institutional restructuring that has taken place since 1994. The current shortfalls in the delivery of basic services question the basis of policy formulation and implementation. The resultant problems such as insufficient supply of basic services like water and sanitation and the mushrooming of informal settlements in urban centres are often evident.

These problems question the nature of linkages between housing, water and sanitation policies. The extent of integration and coordination in the implementation of such policies therefore becomes questionable.

The dissertation is, therefore, an attempt to examine the gaps in policy initiatives and implementation particularly in informal settlements upgrading. The scope of the dissertation only covers the Ethekekwini Municipality.

### **1.3 Research Motivation**

Third world cities are urbanizing rapidly. It is evident that they are often unable to cope with this rapid rate of urbanization. “Almost 1 billion people, or 32% of the world’s urban population, live in slums, the majority of them in the developing World” (UN-Habitat, 2005:1). This highlights an urgent need for governments to introduce integrated and coordinated approaches to dealing with this challenge as advocated for by the UN-Habitat (2005). Informal settlement upgrading is one of the approaches adopted by the international community in order to meet the challenge of slums.

The supposition is that informal settlement upgrading has been implemented in isolation without significant consideration of other policies that may determine its successes and failures. This research project attempts to look at other implementation options for informal settlement upgrading which incorporate water and sanitation delivery policies. It is arguable whether informal settlement upgrading programs have been able to transform informal settlements into sustainable human settlements. Access to adequate basic service in RDP settlements has shown negligible difference from the ones in informal settlements. The scope and scale of the research project will be limited to the Ethekekwini Municipality. It is a micro scale informed by the broader challenges facing the global community, particularly the developing countries.

### **1.4 Research Objectives**

The broad objective of this study is to identify and understand the nature of policy disparities between housing, water and sanitation initiatives with the aim to evaluate their impact on informal settlement upgrading in the Ethekekwini Municipality.

There are four sub-objectives of the study which will assist in framing the research project:

- a) To analyze the shifts in housing, water and sanitation policies since 1994. The aim of which is to understand the nature of shifts and how they impact on integrated policy implementation adopted by the South African policy.
- b) To identify linkages between housing, water and sanitation policy initiatives with the aim of defining the nature of these linkages and their impact on the implementation of housing, water and sanitation policy initiatives in informal settlements upgrading.
- c) To examine the nature of policy implementation in informal settlement upgrading in Ethekwini with the purpose of understanding challenges involved.

Table 1 illustrates how these research objectives will be broken down into manageable elements. The purpose is to ensure that each objective covers the issues as broadly as possible while at the same time answers the questions raised. The main aim of the table is to condense and focus the research to yield measurable results. It serves as the backbone for the entire dissertation.

**Table 1: Themes, Objectives and Research Questions**

<b>Theme</b>	<b>Aims and Objectives</b>	<b>Research Questions</b>
<b>Policy Shifts</b>	To analyze the trends in housing, water and sanitation policies with a view to comprehend the shifts of policy since early 1994 to the present.	To what extent has policy changed since early 1994 and what are specific policy shifts that have taken place since then?
<b>Policy Linkages</b>	To identify the nature of linkages between water, sanitation and housing policies.	What is the relationship between water, sanitation and housing policy initiatives? What type of linkages exists? What is the nature of these linkages?
<b>Manifestation of Disparities in implementation</b>	To evaluate how policy disparities are manifested in informal settlement upgrading. To identify the policy disparities in informal settlement upgrading projects.	What is the impact of disparities on informal settlement transformation to sustainable human settlements? Is housing satisfaction linked to access to water and sanitation services?

**Source:** (Author, 2008)

## **1.5 Research Question**

The main research question is: To what extent does the lack of coordination and integration in housing, water and sanitation policy initiatives explain the failure of informal settlements to transform into sustainable human settlements?

## **1.6 Working Hypothesis**

This dissertation is based on the assumption that there is a lack of integration and coordination in housing, water and sanitation policy initiatives. This is assumed to result in disparities in policy initiatives which then undermine the broader service delivery vision resulting in perpetuated backlog in housing, water and sanitation provision.

## **1.7 Dissertation Structure**

Chapter 1 introduces the dissertation and outlines the problem statement. It highlights the main themes informing the structure of the dissertation. The main purpose of this chapter is to set the context and background for the dissertation.

Chapter 2 outlines the literature reviewed. It begins by introducing the international literature as a framework for understanding international trends in housing, water and sanitation policies. It then describes various policies and legislations informing the delivery of housing, water and sanitation in South Africa. Strategies, plans and programmes used by Ethekewini Municipality to deliver basic services in informal settlement upgrading are discussed.

Chapter 3 introduces theoretical and conceptual framework under which housing, water and sanitation policy initiatives can be understood and evaluated. It places the study under theoretical and conceptual environment to allow for critical engagement with the subject using the predefined academic spectrum.

Chapter 4 gives an outline of the research methodology used in the study. Data collection and analysis techniques are discussed. Research limitations are also discussed and explained.

Chapter 5 introduces the case studies within their broader and immediate spatial locations. It gives a broader view of how housing, water and sanitation challenges have been confronted

by Ethekewini. It outlines the backlogs and delivery history of Ethekewini. It also locates the case studies within the smaller planning units of Ethekewini Municipality.

Chapter 6 presents and analyses the data. The data is presented and analysed under specific themes. Each theme represents an objective of the dissertation outlined in Chapter 1. The purpose of thematically presenting and analysing data is to ensure that the objectives of the dissertation are fulfilled.

Chapter 7 gives a summary of findings, concludes the dissertations and gives recommendations. The summary of findings and conclusions will look at to what degree the dissertation has answered the research questions and sub-questions.

## **1.8 Summary**

The objective of this chapter was to give an introductory outline and background of the study. The introduction set out broad objectives and structure of the dissertation. The author's objectives and motivation for choosing the topic and undertaking the study are also outlined. The research problem is introduced using current delivery statistics in Ethekewini Municipality. A brief discussion of these issues is done at minor scope but will be further elaborated on in chapters 3 and 4. These set out the context for the dissertation. The final section outlines the dissertation structure and gives an overview of the content of each chapter. The purpose of the following chapters is to contribute towards achieving the objectives of the dissertation as set out in chapter 1.

## **Chapter Two: Theoretical and Conceptual Framework**

### **2.1 Introduction**

The objective of this chapter is to identify various theories and concepts that are relevant to this dissertation. This will be done with a view to achieve an understanding of how these theories and concepts influence housing, water and sanitation policy initiative issues in a broader sense. Both the theoretical and conceptual framework will assist in placing housing, water and sanitation policy issues within a predefined framework of processes and practices.

### **2.2 Coordination Theory**

Schwirian and Prehn (1962; p812-825) describe theory as “a system of inter-related definitions and hypothesis” which is assumed to possess the properties of universal validity and the capability of being empirically verified”. The elements and the driving principles of this theory are borrowed directly from computer technology language. “When multiple actors pursue goals together, they have to do things to organize themselves that a single actor pursuing the same goals would not have to do” (Malone and Crowston, 1993:5). This definition of coordination implies the following components: (1) a set of (two or more) actors, (2) who perform tasks, (3) in order to achieve goals (Malone and Crowston, 1993:5). Modified to suit the purposes of this study, ‘actors’ will signify policies and tasks will represent ‘project implementation’ and ‘goals’ will remain as goals. Malone further defines Coordination Theory as “..... a body of principles about how the activities of separate actors can be coordinated”.

Co-ordination as both a concept and a theory is a vital component of this thesis. Understanding co-ordination will assist in explaining an ideal relationship between housing, water and sanitation policy implementation in informal settlements upgrading. More often than not, spheres of government are concerned with satisfying their individual responsibilities. In the process they ignore the impact of their responsibilities on other spheres of government. As alluded to earlier by the DWAF (2001) in the White Paper on Basic Household Sanitation, there is a great need for ‘package of services’ approach. The principles of this theory offer this approach a structure on how this could be achieved. The common

objective of basic service delivery stakeholders is to create economically, socially, environmentally and politically sustainable communities.

Tasks are delivery targets set out by individual departments, or Units in the case of municipalities. The policies give directives as to how these targets can be achieved. Co-ordination therefore speaks directly to policy implementation process. In order for these tasks to be accomplished and goals to be met the actions of various stakeholders need to be coordinated.

### **2.3 Integration and Coordination Approach**

Smit (1998, p77) states that “in order to improve people’s lives in a meaningful way and be able to cope with the complexities of informality, it is essential that informal settlement upgrading policies and programmes are integrated...”. Smit (1998) further cites examples of successful integrated approaches to informal settlement upgrading from India and Kenya. Integration as a concept is often used broadly but in this thesis it will be used specifically as a tool of bringing together different sectors, policies or programmes in informal settlement upgrading. Mabin and Smit (1997) as cited by Pieterse (2003) define integration approach as coordination and integration of sectoral investments in cities to ensure that, among other things, economic and spatial planning come together and reinforce social development. According to Mabin and Smit (1997), this approach is used mainly in the Urban Development Framework of South Africa. They further support the significance of this approach by highlighting the entrenched legacy of sectoral (and disciplinary) specialization in the history of urban development policies in South Africa.

Pieterse (2003) outlines integration as a multidimensional approach. He gives the following dimensions as particularly important to consider in policy formulation and implementation:

- Integration as a policy rationale and outcome: ideal policy outcome of linking economic, political, social and environmental objectives.
- Integration as an institutional rationale: institutional architecture within municipal government and the broader governance system in the city: “successful urban development also requires coordination among the various spheres of government. Initiatives to develop urban management capacity must be supported by provincial and national government, but the management of the urban areas themselves can best

be carried out at a local level where decision-makers are in touch with local needs and conditions” Pieterse (2003:124).

- Integration as an object of spatial planning: a space strategy to integrate various spatial forms and socio-economic and environmental characteristics of urban development.
- Integration as the glue for sectoral investment: an attempt to integrate broad sectoral objectives into one investment goal.

These dimensions highlight critical pathways in urban development which require integration. Pieterse (2003) endorses the importance of foregrounding the need to link, coordinate and integrate numerous sectoral policies and investments to advance the development of more equitable and livable urban settlements. Even though Pieterse (2003) does not use terms ‘integration and coordination’ interchangeably, he however highlights the linkage between these terms. They are rather inextricably linked. He argues that it is difficult to achieve integration without proper coordination. He asserts that coordination between the various responsible line functions is vital to ensure integrated and sustainable urban development.

On the other hand, Watson (2003) gives a historical background to the concept of integration. She defines it as a term initially adopted by planners internationally to describe the characteristics of their new spatial planning approach. In this instance, planners referred to the integration of spatial integration and land uses. Although there is no particular reference to policy integration, her insights provide a meaningful step towards understanding integration as a concept. She does, however, later on refer to sectoral integration. Watson (2003) asserts that as ‘governance’ around the world has become increasingly complex, increasingly specialized, and increasingly open to conflicting demands, there has been a growing interest in the problem of achieving intersectoral integration, particularly within local administration.

## **2.4 Rights-Based Approach**

Rights-based approach is defined as an approach where every human being is recognized both as a person and as a right-holder (UNFPA, 2008). The United Nations High Commission for Human Rights on the other hand defines rights-based approach as a

conceptual framework for the process of human development that is normatively based on international human rights standards and operationally directed to promoting and protecting human rights. Rights-Based Approach is described as an instrument that strives to secure the freedom, well-being and dignity of all people everywhere, within the framework of essential standards and principles, duties and obligations. It safeguards and supports attainment of entitlements provided in government policies and legislation. This approach is often derived from international human rights declarations. Rights-based approaches are merely a new form of technical fix that combines expert-driven social and economic interventions with legal change that may not be relevant to people and communities or engage them as citizens (VeneKlasen, Miller, Clark & Reilly, 2004). There are a number of counter arguments to the usage of rights-based approach in service delivery. In most cases, they are often a source of inevitable conflict. VeneKlasen et al (2004) argue that the notion of rights as universal standards of human dignity belies their inherently political and conflictual nature.

Rights are indivisible, interdependent and interrelated. The human rights-based approach focuses on those who are most vulnerable, excluded or discriminated against ([www.unfpa.org](http://www.unfpa.org)). The South African environment is such that poor access to service delivery mostly affects the previously excluded and discriminated groups, this approach becomes appropriate in service delivery argument. The Bill of Rights and the Constitution, as discussed in Chapter 2, set out elements of the rights based approach within the South African service delivery environment. It is therefore important to note how international conceptualisation of the rights-based approach relates to the South African situation. The manner in which the rights based approach is framed internationally informs how it is understood and applied within the service delivery environment in South Africa. At a more practical level, the understanding of rights-based approaches informs and shapes policy development over time. For example, free basic water policy is shaped by the rights-based approach to water supply. The right to access to housing is also based on the above mentioned principles of rights-based approach. Therefore, appreciating rights-based approach is a necessary step towards understanding policy formulation and implementation in the context of housing, water and sanitation.

## **2.5 Accountability**

According to the general norm, accountability is defined and, often seen, within the above rights-based approach as a loose political principle. The UN according to CSA (2008) defines accountability as ‘an essential principle for securing an enabling environment for development’. The concept of accountability defines the ideal behaviour required from office bearers to fulfil their duties and uphold citizens’ rights. Accountability is international and nationally promoted through various legislative frameworks. “While there is a duty imposed by international law and many domestic constitutions to ensure the progressively realisation of the above rights, there is no corresponding duty placed on governments to justify the steps taken to ensure their realisation” (CSA, 2008)

## **2.6 Policy Coherence Approach**

Harrison (2003) argues that in recent years the concept of policy coherence has emerged as an alternative to ‘command and control’ mechanisms of the past. Furthermore, Harrison (2003) asserts that its emergence has been necessitated by significant institutional fragmentation, or ‘perforated sovereignty’, which has made it increasingly difficult to define boundaries in power and responsibility between spheres of government, and between the government, private and community sectors. As the number of agents involved in public policy has multiplied so the question of coordination has become more critical. Generally, local government departments have increased in South Africa. In the process, the traditional mechanisms to steer policy have diminished. There is a common perception that ‘Master Plans’ were traditional mechanisms for maintaining policy coherence in the past (Harrison, 2003). There is therefore a growing need to establish new approaches to ensure policy coherence. The new approaches should also take into account the changing nature and responsibility of local governments and their ever expanding mandates and challenges.

“Policy coherence essentially involves the integration of agendas between separate agencies, and common programming across sectors. At the local level, mechanisms are emerging to promote policy coherence. An example is the South African Integrated Development Plan (IDP), which has similarities with a range of other international practices including integrated planning and performance monitoring in New Zealand, integrated area planning in Europe and the multi-sectoral investment planning promoted by the United Nations Development Programme [UNDP]” (Harrison; 2001) as cited by Harrison (2003, p56). Coherence as a

concept has different meanings depending on the subject in which it is used. In the scope of this thesis however, coherence is used as a measure of alignment of objectives and principles of housing, water and sanitation policies.

## **2.7 Sustainability**

The generally accepted assumption is that sustainability applies to all aspects of life. However, it is commonly defined within ecological, social and economic contexts. Sustainability refers to the ability of a process to be continued indefinitely without damaging or degrading the environment on which it depends. The concept's frequent use in the development context has tended to narrow its common definition. As a result, sustainability is frequently defined as a non-detachable component of sustainable development concept. It can be argued that sustainability requires that the world is seen as a system; a system that connects space and a system that connects time (IISD, 2008). Thinking of the world as a system assists in the understanding of complex and serious global problems as interrelated. The concept of sustainability is used in this research to contextualize service delivery and policy implementation as collective responsibility of all government sectors. The research argues that the perception of service delivery as a system or machinery is based on principles of sustainability.

## **2.8 Housing Satisfaction**

Galster and Hesser (1987) conceptualize housing satisfaction as a variable reflecting the gap between a household's actual and desired housing situation. It can also be defined as a concept based on social variables indicating the impact of housing to occupants. Social and physical needs are particularly important in housing satisfaction. Muoghalu (1984) outlines some housing satisfaction or dissatisfaction indicators used in the Nigerian context. They include: house size, lack of internal house facilities and security, insufficient space inside the house especially storage space, poor construction and location of bathroom and toilet. Even though these indicators can be context specific, they are, however, a common trait in developing countries.

According to Muoghalu (1984), not only should housing indicators constitute the mechanism whereby the fundamental roles of housing are made operative, but they should also express the link between the physical environment and the fulfillment of social needs and by so doing

serve to highlight undesirable trends in the housing environment that demand renegotiation. The fulfillment of both social and physical needs is often linked to the delivery of basic services. Frequently, housing satisfaction is based on the level of access to basic services such as water, sanitation and electricity. Muoghalu (1984) and Galster (1987) both agree that data on housing satisfaction is restricted to western countries. There is a shortage of housing satisfaction data directly relating to developing countries. Galster (1987) argues that relatively little comparison has been made between the findings from international research data and those in developing countries where rapid urbanization is occurring at a high rate and where urban housing problems are dominant. The importance of understanding the extent of housing satisfaction in 'RDP' housing in South Africa is to establish elements contributing to sustainable human settlement. On one hand it helps change the mindset of housing being seen merely as 'shelter' independent of other basic services. The level of satisfaction is, arguably, often based on the availability of other basic services such as water and sanitation as will be demonstrated by the fieldwork result in the final chapter.

“Neoliberalism is most often used as a shorthand term to refer to the political preference for market mechanisms as a means of ensuring economic and social well-being. Neoliberalism demands the ascendancy of markets as society's prime distributional tool; the allocation of resources on the basis of competition; and the responsibility for well-being to be on the shoulders of the individual” ([Larner, 2004](#)). In a nutshell, Neoliberalism advocates for a market driven service delivery approach. This approach holds that the poor can access basic services through the market. Market forces are assumed to be a fair mode of service delivery. Neo-liberal theory advocates for market expansionism and sees services such as housing as transactional goods. It is this theory that informs World Bank's 'Enabling the markets to work' approach (World Bank; 1993). The World Bank's approach has influenced UN-Habitat policies. “What is clear from these policy measures is their emphasis on private market development and a lack of attention to the specific needs of informal and community groups and of the modes that provide most low income housing in developing countries” (Keivani & Werna, 2001a as cited by Keivani 2005; pg191). South Africa has adopted neo-liberal policies in its economic development process including service delivery. Generally, policies on service delivery are influenced by the forces of theories such as Neoliberalism. The theory offers an understanding on how particular tasks ought to be undertaken by providing relevant guidelines and principles.

## **2.9 Neo-liberal as response to Globalisation**

As globalisation defines the international and local development agendas, there is a growing need for developing countries to positively respond to its effects. According to Harrison (2003), the dominant local response is neo-liberalism, and is based on the premise that globalisation is inherently positive and that the role of local governments is to ensure the conditions that support global capitalism. This is a view, considered by most scholars such as Bond (2003), to be anti-poor.

Harrison (2003) argues that a neo-liberal paradigm is closely linked to a competitive city approach. This is an approach that promotes profit based management system, service delivery and unreasonable cost recovery mechanisms. Local governments in South Africa are forced to take optimal advantage of global capitalism by ensuring that they support the objectives of big investors. In its crudest form this approach involves doing that which is perceived big investors would expect local governments to do, whether this might involve privatisation of services or informal settlement removal (Harrison, 2003). Mayekiso, Bond and Harrison (2003) all agree that neo-liberal approaches to service delivery are dangerous, and at times disastrous, for meeting the needs of the poor. This is a view supported by a number of civil society organisations as it will be discussed below.

## **2.10 Civil Society perspective and debate**

Many civil organisations have varying views on service delivery in South Africa. Some adopt a completely anti-Neo-liberalism approach, promote rights-based approaches, socialist based approaches and so on. These civil organisations and NGOs position themselves to be seen as representing the interests of the poor. This is a position often questioned by those within government sector and sometimes outside the government sectors. The democratic local government believes that they are elected directly to represent the communities and that the political party in government represents the interests of the people. As a result they undermine civic organisations by not recognising them as serious representatives of community stakeholders (Mayekiso, 2003:7). This therefore raises questions, and often undermines the role of civic organisations and NGOs in development.

Abahlali Basemjondolo ([www.abahlali.org](http://www.abahlali.org)), supported by other pro-poor nongovernmental institutions such as the Centre for Civil Society (CCS) of UKZN, has been very vocal in opposing government's policy and approach to informal settlements.

Abahlali Basemjondolo is a grassroots organisation representing informal settlement residents. Literal translation of which means 'Informal Settlement Residents'. Abahlali Basemjondo represents mainly informal settlement residents. Their visibility in questioning and, at times, opposing, relocations and water policy amongst other things, has been particularly significant. Abahlali Basemjondolo's opposition to the recently promulgated KwaZulu-Natal Prevention of Re-emergence of Slum Settlement Bill is the current highlight of their intent as demonstrated by the following citation.

"We do not need this Bill. The first thing that we need is for government (local, provincial and national) to begin to follow the existing laws and policies that protect against evictions, forced relocations and which recommend in situ upgrades instead of relocations. After that we need laws that break the power that the very rich have over land in the cities and we need laws to compel municipalities to provide services to shack settlements while people wait for houses to be built" ([www.abahlali.org](http://www.abahlali.org))

Abahlali Basemjondolo contested the Bill on grounds of its unconstitutionality and utter disregard for the needs of the poor. They see the bill as an attempt to push the poor out of the city into the urban periphery. They dismiss the pronounced objectives of the Bill. Its main objectives are to:

- Eliminate 'slums' in KwaZulu-Natal.
- Prevent new 'slums' from developing.
- Upgrade and control existing 'slums'.
- Monitor the performance of departments and municipalities in the elimination of 'slums' and the prevention of new 'slums' from developing.

Abahlali Basemjondolo adopted a rights-based legalistic view. Their grounds for contestation of the Bill can be debated by those within the government sector as a mere lack of understanding of a broader vision. It is a rather a simplistic and narrow view of a long term vision of eradicating slum lordism and land invasions. It has been argued that the Bill is aimed at preventing 'slum lords', 'shack farmers' and other opportunists from taking

advantage of desperate and poor people. Its objective is seen, around government circles, as a measure to ensure that informal settlements do not continue to mushroom while upgrading is taking place. As civil society organisations attempt to find their voice and space in the new South Africa, they are increasingly submerged and lost in the mist of socio-political and socio-economic struggles (Mayekiso, 2003). In most cases, these organisations see themselves as pro-poor ‘good Samaritans’ and government’s policy opponents. This, therefore, questions the very cooperative nature and role of civil society organisations in the new South Africa.

Amongst others, The Centre for Civil Society (UKZN) is critical about service delivery policies in South Africa. Through Bond (2003), CCS considers the market-based approach to service delivery as anti-poor and largely unconstitutional. Bond (2003) argues that the current service delivery approach carries characteristics reminiscent of structured racism. He defines the neo-liberal approach as a codified and equally oppressive structured process that can be termed ‘class apartheid’. He bases his argument on some of the obvious shortfalls of urban policy implementation in recent years. Moreover, the government subsidised houses on the periphery of the city without proper social services and infrastructure are common deficiencies that serve as evidence to the arguments raised by Bond (2008). One is forced therefore to acknowledge Bond’s argument as carrying some degree of validity and substance.

Mayekiso (2003) argues that civic organizations are in crisis and their post-apartheid role is in question. He further asserts that there is still a political space available for social movements only if they can re-evaluate the reason for their existence and the role they should be playing. Maybe this argument is at the core of the current dilemma of civil society organizations and NGOs. The radical views and arguments of these organizations can be challenged, through adequate policy debates, as mere attempts to reposition themselves within political and influential circles.

A general criticism is that these organizations do not often engage in issues relating to policy implementation and its impact on the poor, rather they focus on too broad a scale such as policy formulation. CCS’s views on Water Policy can serve as an example for such behavior. Besides the magnitude of the scale, issues of policy formulation are less likely to have

immediate impact on the poor. And the organizations themselves are less likely to influence policy formulation process.

## **2.11 Policy Analysis Framework**

Bond (2003) criticizes post 1994 urban policies, including housing and water policies, for shifting from structured racism to a neo-liberal bias that, according to him, codified an equally oppressive structured process that can be termed “class apartheid”. He summarizes these aspects as listed below:

- Continued underdevelopment (variety of specific problems associated with apartheid era urban underdevelopment continued and were in many ways amplified).
- Some of these have been acknowledged by the government: Statistics S.A released astonishing figures of average Black household income, in real terms from 19% between 1995 and 2000. The decline that comes with a price for affordability of basic services.

Bond identifies two ways of thinking and conceptualizing urban problems, both in South Africa and internationally. They are the ‘mainstream’ and ‘critical’ perspective as summarized in Table 2 (pg 20). Mainstream approach and critical approaches provide two important perspectives into understanding and framing policy problems in South Africa (see Table 2 pg20).

The critical approach queries the merits allowing globalization and structural power imbalances to determine key features of urban development and instead posits a broader understanding of the positive economic, social and environmental benefits that come from strong public policies and programmes (Bond, 2003). These approaches provide an important view into understanding and analyzing service delivery policies. There are other broader policy analysis approaches that are important to consider. The approaches discussed outline various ways of conducting policy analysis.

Campoverde (2008) defines policy analysis as an investigation that generates information that informs policy makers’ judgement in developing adequate information, going beyond getting of facts seeking to produce information about values recommending action and setting up evaluation procedures. Campoverde (2008) identifies three forms of policy analysis Prospective; Retrospective; Integrative.

**Table 2: Policy Thinking and Conceptualization**

<b>Mainstream</b>	<b>Critical</b>
a) existing policies are basically fine (although some, like the overly generous housing policy and higher services standards - electricity, indoor taps, flush toilets - that are affordable to low income people, need tweaking to assure better alignment);	a) virtually all current state policies are excessively market-oriented (too stingy, insensitive to poverty, incapable of integrating gender and environmental concerns, unsympathetic to problems associated with public health and worsening geographical segregation, and even inefficient in terms of untapped economic multipliers);
b) post-apartheid laws, planning frameworks and regulations are sometimes onerous and usually unhelpful;	b) post-apartheid laws, planning frameworks and regulations are essentially ‘technicist’ and disempowering, and are generally an inadequate substitute for transformation in the balance of forces and in residual apartheid-era economic processes;
c) resources allocated for urban regeneration and quite sufficient (large capital grants, plus ongoing central-local subsidies, plus limited local-level cross subsidies from wealthy and corporate customers to the poor, plus other programmatic funds);	c) resources allocated are inadequate (by a factor of roughly five from central government, and with regard to inadequate local and national cross-subsidization) ;
d) institutional arrangement for urban projects are flawed (due to an excessive emphasis on Greenfield developments and housing top structures);	d) institutional arrangements are inappropriate (newly demarcated municipalities will struggle to meet small-town and rural needs, and the drive to corporatization and even privatization will worsen services inequality);
f) communities and workers remain part of the problem (the former have a culture of non-payment, the latter too dogmatically oppose privatization and act as a labour aristocracy);	f) communities and workers are potentially part of the solution (if community and worker control are enhanced);
g) while expanded urban infrastructure and services may have positive spin-off benefits, these are not worth calculating and incorporating into decisions regarding the levels of municipal services, capital expenditure or subsidies;	g) Infrastructure and services have extremely important positive spin-off benefits – improved public health, gender equity, environmental improvement, economic multiplier, increased productivity, and better educational prospects, desegregation potentials - which are absolutely vital to calculate and incorporate into decisions regarding the levels of services, capital expenditure or subsidies.

**Source:** (Bond, 2003, pg 40)

Campoverde (2008) further defines the prospective form as the one that looks at as much data as possible but yet does not collect data. It provides quantitative and evaluative information on which to make future decisions. It places emphasis on obtaining information about goals and objectives of policies. Prospective policy analysis can also mean assessing the effect of a proposed policy or program before it is put into place (Mossberger & Wolman, 2003).

Retrospective form is defined as the one which studies the data from policies that have already been put into effect. This form of policy analysis is often known as 'research'. The objective of this form is to provide macro-negative information to show what works at the macro level (Campoverde, 2008). The results are usually unclear and do not address the social problems. Instead it vaguely states social problems to satisfy political interest. Usually, it places primary emphasis on the result of actions and does not offer future actions.

Integrative policy analysis is concerned with collecting information before and after policy action. It benefits from both the prospective and retrospective methodologies. It is continuous and it proposes policy actions. Retrospective analysis has largely been adopted in this dissertation. Data from existing policies and implementation forms the foundation of the research project.

Campoverde (2008) defines three important approaches to policy analysis, namely, empirical approach, valuative approach and normative approach. Empirical approach looks at existing facts or facts expected to exist. This approach produces descriptive information or predictive information. The valuative approach looks at the facts past and, or future. Its objective is to ask whether they are worth it or if they are of any value. The end result of this approach is expected to produce valuative information. On one hand, normative approach looks at past facts and decides what action should be taken. According to the definition of this approach, the outcome is prescriptive type of information which recommends future action.

The aim of the above section was to provide an understanding of what informs policy development and implementation. It also presents an explanation of why things are done the way they are done, and attempts to explain how things could be done. The latter part contributes a framework which will assist in framing this research project within the confines of the existing body of policy analysis literature. This research project adopted a combination of both retrospective and integrative forms of policy analysis.

In terms of approaches or methodologies, a combination of all the above discussed approaches will be used.

## **2.12 Summary**

This chapter reviewed the theoretical and conceptual framework and was reviewed for two main purposes. Firstly, theoretical framework was aimed at placing the research within the existing framework of existing theories. This was envisaged to assist in explaining theoretical principles governing the subject in question. Secondly, the review of the conceptual framework was aimed at giving the research conceptual basis upon which the concepts used in the research can be understood. For instance, the chapter gave a generic understanding of how the two main concepts of integration and coordination can be broadly understood and applied. The theoretical and conceptual framework exercise was done with a view to frame this thesis within the existing body of knowledge. The theories in this exercise are useful in defining the housing delivery phenomenon hypothesised in this thesis. Both the theoretical and conceptual body of knowledge assist in framing this study within a proper academic setting.

## **Chapter Three: Policy and Legislative framework**

### **3.1 Introduction**

The purpose of this chapter is to review international literature on housing, water and sanitation. The review will help establish a framework for understanding global trends. It will also look at how these trends influence South African housing, water and sanitation policies and legislative framework.

South African literature will be reviewed with the aim of understanding the environment under which housing, water and sanitation policy initiatives are implemented. Previous implementation will also be examined to identify the shifts in policy and approaches. Strategies, plans and programmes introduced under the current policy framework will also be discussed. Housing literature will include, but will not be limited to, informal settlements upgrading and general housing challenges. Water and sanitation literature is often intertwined. For this reason, it is necessary that it be dealt with as a collective.

The element of limitation in this literature review is manifested in the fact that, often, housing, water and sanitation issues are written or debated separately. The challenge is to discuss these issues under one umbrella. Albeit the pervasiveness of housing, water and sanitation challenges, written data which deals collectively with housing, water and sanitation issues, is scarce. In many instances, water and sanitation is often seen as an engineering niche while housing is seen as a social science niche. However, globally, these issues have received considerable attention. There is a significant data resource base provided by intergovernmental and non-governmental organisations such as the UN and World Bank. It is for this reason that international literature dominates this section. The latter parts of this chapter illustrate how international policies influence South African housing, water and sanitation policies.

### **3.2 International housing, water and sanitation challenges**

#### **3.2.1 Millennium Development Goals (MDGs)**

##### **3.2.1.1 Housing**

In September 2000, 189 UN Member States adopted the Millennium Development Goals (MDGs), setting clear, time-bound targets for making real progress on the most pressing

development issues faced by the global world (UN, 2007). It was envisaged that achieving these targets would have a direct effect on the lives and future prospects of billions of people around the globe. The MDGs will mark a positive beginning at the start of the 21st century (WHO & UNICEF, 2004). They are a global cornerstone for facilitating access to adequate shelter, water supply and sanitation in the developing world. This section highlights significant points of departure in housing, water and sanitation issues. It establishes a broader understanding of these issues and how they influence policies in the developing countries.

In light of the increasing numbers of urban slum dwellers, governments have recently adopted a specific target on slums, i.e. Millennium Development Goal 7, Target 11, which aims to significantly improve the lives of at least 100 million slum dwellers by the year 2020 (UN-Habitat, 2003). There are two indicators necessary for monitoring progress to meet this target, i.e. (i) Proportion of urban population with access to improved sanitation; (ii) Proportion of households with access to secure tenure (owned or rented) (Alliance2015, 2007).

Highlighted above is the magnitude of the housing challenge as faced by the global community particularly the developing countries. It outlines some of the proposed interventions by intergovernmental organisations such as the UN. These provide the dissertation with impetus and direction on global trends and challenges of housing, water and sanitation policies.

### **3.2.1.2 Water and Sanitation**

There are over 1.1 billion world citizens who do not have access to drinking water from improved sources, while 2.6 billion lack basic sanitation. Safe drinking water and basic sanitation are so obviously essential to health that they risk being taken for granted (WHO & UNICEF; 2004). Through the MDGs, the world has pledged to reduce by half the proportion of people without sustainable access to safe drinking water and basic sanitation by 2015. Consequently, this commitment is globally publicized with the aim to support the commitment by the member states of the UN in recognition of the intensity of the water and sanitation challenge facing the developing countries.

The most difficult aspect of ensuring that access to adequate water supply and basic sanitation target is met is its complexity as a ‘moving target’. On one hand, population growth in poor regions of the world has posed an even bigger challenge for the reaching of this target. Also, population growth rate tends to exceed the capacity of the developing countries to deliver water and sanitation. Against this background, more intensive, effective and concerted action by all stakeholders is needed if the MDG drinking water and sanitation target is to be met (WHO and UNICEF, 2004).

Furthermore, the objective of the MDGs is to encourage developing countries to set practical targets, develop attainable action plans, and allocate the financial and human resources needed to bring safe drinking water and basic sanitation to their populations, in a sustainable manner, while protecting the basic needs of poor and vulnerable people. Therefore, setting realistic targets is an ideal starting point for developing countries if they are to come anywhere close to achieving the MDGs.

UN-habitat and the Indian Government (2006) developed a Framework of Action for achieving Millennium Development Goals on Water and Sanitation in the Asian-Pacific Region. The framework introduced four major themes of pro-poor urban governance and planning, slum upgrading, delivery of MDG for water and sanitation and financing sustainable urbanization in this region with the view to help pursue a common approach to the promotion of sustainable human settlements with focus on urban poor and slum dwellers.

The framework recommended measures to achieve the MDGs on water and sanitation in the Asian-Pacific region by primarily adopting: firstly, the use of appropriate and affordable technologies and system models for sustainable management: often governments of the developing countries tend to pursue conventional means of delivering services. The challenges of these conventional technologies include management, affordability and maintenance difficulties. Secondly; building partnerships with civil society organizations, private sector and regional knowledge centres: such partnerships are crucial in ensuring that new and innovative means of service delivery are established and implemented. They also have a potential to create a sense of collective responsibility towards improving living standards of the poor. Thirdly, Awareness, capacity building and community empowerment: another critical aspect in the development of sustainable communities and efficient local governments. Fourthly, principled governance: This principle may help develop a sense of

responsibility and eliminate corruption. Finally, Policies and programmes that pursue an integrated approach taking cognizance of the links among water, sanitation, health and hygiene between economy and the environment, and between urban and rural areas (UN-Habitat & Indian Gov; 2006, pg 25). This element can be considered as a first step towards integrated development. The linkages in development initiatives are critical in the shift towards holistic development that goes beyond predefined departmental boundaries. Highlighted here is a good example of a region that has taken MDGs and moulded them into what could be called ‘region specific’ targets. In this manner, MDG targets are regionalized, nationalized, narrowed and focused within reasonable capacity of a specific country.

However, SWH (2005, pg1) acknowledged that the water and sanitation target to cut in half the number of people without adequate and sustainable access to safe drinking water and basic sanitation will not be reached unless:

- There is deliberate commitment by donors to increase and refocus their development assistance and to target sufficient aid to the poorest low-income countries.
- There is a deliberate commitment by the governments of the middle-income countries that do depend on aid to reallocate their resources so that they target funding to their unserved poor.
- There are deliberate activities to create support and ownership for water supply and sanitation initiatives among both women and men in poor communities.
- There is a deliberate recognition that basic sanitation in particular requires an approach that centres on community mobilization and actions that support and encourage that mobilization.

These suggestions highlight the need for a global collective responsibility and commitment to prioritise water and sanitation issues. These are a few of many challenges that need to be overcome in order to achieve global consensus on water and sanitation delivery. Although presented at a macro level, they serve as a framework and benchmark for positive initiatives towards water and sanitation.

### **3.3 A Need for Prioritization**

Arguments in support of expanding access to water supply and sanitation services have been expressed in the language of human values, founded on the notion of human rights to basic services, and framed in terms of health and economic benefits (SWH, 2005).

Provision of basic services is a basic human right issue acknowledged worldwide and a useful point of departure.

“With regard to human values, expanding access to water and sanitation is a moral and ethical imperative rooted in the cultural and religious traditions of societies around the world. Virtually all of the world’s spiritual and cultural systems embody values and imperatives recognizing the primacy of human dignity, equity, compassion, and solidarity” (SWH, 2005). What this suggests is an ideal move away from service delivery as a statutory obligation for governments towards a basic needs based effort to transform service delivery initiatives for the global poor.

WHO and UNICEF (2004) declares that in the current climate, where poverty reduction strategies dominate the development agenda, the potential productivity and income effects of improved access is a significant argument to support further resource allocations to water and sanitation. This is an important argument because, quite often, governments have shown reluctance in investing in water and sanitation programmes. Water and sanitation has frequently been overtaken by other sectors considered more important. However, the ripple effects of investing in water and sanitation have cross-sectoral benefits.

### **3.4 Habitat Agenda**

Like most UN declarations, the Habitat Agenda is a global call to action at all levels. It offers, within a framework of goals and principles and commitments, a positive vision of sustainable human settlements - where all have adequate shelter, a healthy and safe environment, basic services, and productive and freely chosen employment (UN-Habitat, 2003). This approach considers that human settlements are more than just a shelter and should be treated thus.

There are challenges faced by government and departments responsible for the delivery of basic services to the poor. These include, amongst others, rapid urbanization. Rapid urbanization is a critical challenge for those charged with service provision to urban centres in developing countries. Unable to keep up with the rapid pace of population growth, many urban centres are experiencing a substantial increase in the number of people living below the poverty line in informal or unplanned settlements, many of which are illegal. It is a known

fact that most informal settlements lack access to adequate and affordable basic services such as water supply and sanitation.

The above challenges are evident in Third World countries. Numerous factors contribute to this global challenge. Poverty, inequality, bad governance, lack of resources and the lack of political will are some of the most common contributing factors addressed by the Habitat Agenda Principles (UN-Habitat, 2003).

### **3.5 Human Settlement and Shelter policies**

The UN-Habitat (2001) recognizes the imperative need to improve the quality of human settlements, which profoundly affects the daily lives and well-being of poor people. Through the declarations of the Habitat II the UN attempts to address two most crucial themes: Adequate shelter for all and Sustainable human settlements development in an urbanizing world.

The Habitat II recognizes that access to safe and healthy shelter and basic services is essential to a person's physical, psychological, social and economic well-being, and should be a fundamental part of global actions for more than one billion people without decent living conditions. It further acknowledges that more people than ever are living in absolute poverty and without adequate shelter. These are growing plights in many countries, threatening standards of health, security and even life itself.

Everyone has a right to an adequate standard of living for themselves and their families, including adequate food, clothing, housing, water and sanitation, and to the continuous improvement of living conditions. Most notably, housing, water and sanitation are pronounced as international human rights. The South African Constitution recognises the right to access to housing and other basic services. The recognition is informed by the above mentioned principles.

According to UN-Habitat (2003), slums are a manifestation of two main challenges facing human settlements development at the beginning of the new millennium: rapid urbanization and urbanization of poverty. These two concepts are better dealt with in detail at a later stage.

Important to note however is that cities in the poorer countries are often unable to deal with rapid urbanization and urban poverty. According to UN-Habitat (2005), there are more than 1 billion people or 32 per cent of the world's urban population that live in slums, the majority of them in the developing world. The above highlights the recognition of slums as a global challenge that needs urgent attention from all spheres of government and the private sector.

In order for MDG target to be achieved, there is a dire need for a shift in policy and mindset. "National approaches to slums, and to informal settlements in particular, have generally shifted from negative policies such as forced eviction, benign neglect and involuntary resettlement, to more positive policies such as self-help and *in situ* upgrading, enabling and rights-based policies" (UN-Habitat, 2003:2). This trend in policy shift has informed changes in informal settlement policies in the developing world. It has transformed the manner in which informal settlements are viewed internationally. The trend is particularly evident in the Breaking New Ground policy (2004) of South Africa, which gives informal settlements a credible 'voice'. The shift in mindset entails recognizing informal settlements as part and parcel of a broader urban fabric and therefore adopting policies, strategies and programmes to progressively improve the lives of informal settlement residents. Upgrading programme is by far the most recognized policy direction for improving the lives of informal settlement dwellers. There are spin-offs in improving the conditions of the urban poor. Improved access to basic services and better living conditions are critical to social and political stability. Farvacque-Vitovic' and Godwin (1998) debate that there is the potential for urban violence and social unrest as social disparities become more acute. This has been evident in South Africa over the past 3 years, from 2007, with service delivery protests.

Informal Settlement upgrading has become a very important area of focus, with increasing emphasis being placed on policy and operational support to the following areas: scaling up of informal settlement upgrading projects and programmes, within the context of city development strategies and through more innovative international and national financing mechanisms; urban water supply and sanitation, mainly through region-wide operational programmes; and pro-poor planning (UN-Habitat, 2003). The emphasis on informal settlement upgrading that takes into account pro-poor planning and integration of urban water supply and sanitation is a vital component in creating sustainable human settlements and thus meeting the MDGs. Table 3 (pg29) reflects some important objectives that informal

settlement upgrading programmes should strive to achieve. The key dimensions highlighted serve as significant foundation for informal settlement upgrading. The table illustrates the level at which South Africa is currently in comparison to international basic standards of informal settlement upgrading.

**Table 3: Five Key Dimensions of Slum Improvement**

<b>Action</b>	<b>Definition</b>	<b>S.A Basic Standards and practice</b>
Access to safe water	A household is considered to have access to improved water supply if it has sufficient amount of water for family use, at an affordable price, available to household members without being subject to extreme effort, especially for women and children.	Access to 200 litres of water per day per household within 200 meters
Access to sanitation	A household is considered to have adequate access to sanitation, if an excreta disposal system, either in the form of a private toilet or a public toilet shared with a reasonable number of people, is available to household members.	A Ventilated Improved Latrine (VIP) or flush toilet
Secure tenure	Secure tenure is the right of all individuals and groups to effective protection by the State against forced evictions. People have secure tenure when: a) There is evidence of documentation that can be used as proof of secure tenure status; b) There is either de facto or perceived protection from forced evictions.	A title deed, Prevention of Illegal Evictions (PIE)
Durability of housing	A house is considered as 'durable' if it is built on a non-hazardous location and has a structure permanent and adequate enough to protect its inhabitants from the extremes of climatic conditions such as rain, heat, cold, humidity.	40m <sup>2</sup> 'Starter-house' on well located land. Conventional brick and cement structure
Sufficient living area	A house is considered to provide a sufficient living area for the household members if not more than two people share the same room.	No specified living area based on household size.

**Source:** adapted from Cities Alliance (2006, pg 4)

It is important to view both these aspects of informal settlements with caution. The positive aspects of informal settlements should by no means be seen as a glorification and ‘romanticisation’ of informal settlements. It should merely be seen as one of the considerations that informal settlement upgrading process should take into account. The negative aspects of slums should serve as a motivation for slum upgrading process to occur at a huge rate.

### **3.6 Case Studies**

#### **3.6.1 Case Study 1: The Kenya Slum Upgrading Programme (KENSUP)**

The slum upgrading programme in Kenya highlights important elements of upgrading. It is based on specific objectives. These objectives are used as key basics for upgrading programmes around Kenyan slums. These objectives are born out of the partnership between the government of Kenya, Nairobi City Council, Cities Alliance and UN-Habitat (IRC; 2008). The programme sets out the following objectives:

- a) To consolidate, rationalize and institutionalize a broad range of shelter-related policies, including creation of institutions and mechanisms for sustainable funding and development of shelter and related infrastructure.
- b) To implement decentralization, partnerships, consultation, stakeholder participation, consensus building, leadership and the empowerment of beneficiary communities in upgrading projects.
- c) To establish institutional frameworks and mechanisms for effective implementation of slum upgrading and shelter-related programmes.
- d) To establish socio-economic and physical conditions prevailing in slums and informal settlements, through relevant mapping, in order to set the stage for improvement in land tenure, basic services, livelihoods and housing structures.
- e) To develop and implement appropriate service improvement, including design, delivery strategies and approaches.

Nairobi City Council, Department of Roads, Public Works and Housing are the main institutions tasked with implementing the objectives of the KENSUP programme. The programme serves as a benchmark for informal upgrading in Kenya as a whole. Most of these elements have been applied in various informal settlements upgrading in Nairobi including Kibera. The Kenya Slum Upgrading Programme, which got underway in January 2003,

involves the construction of 14 blocks of flats and 770 housing units in Kibera. It will also ensure the provision of basic services such as water and sanitation (IRC,2008). Kibera upgrading created linkages with other relevant human settlement programmes such as HIV/AIDS programme, Water and Sanitation Programme, Nairobi Water Basic programme, Nairobi Dam Initiative, sustainable neighbourhood programme and road programme. The KENSUP indicates the importance of integrating cross-sectoral initiatives into an upgrading project thus facilitating coordinated delivery of a ‘basket of services’.

### **3. 6.2 Case Study 2: Strategic Informal Settlement Upgrading in India**

India is one of the countries with huge informal settlement challenges. It is astonishing that informal settlement population makes India’s challenges more acute and difficult. Like many developing countries, India has undergone policy reforms relating to informal settlements. India's draft National Slum Upgrading Policy provides an excellent policy framework, based on secure tenure and gender equity (Cities Alliance, 2000). Security of tenure is a valuable principle aimed at increasing access to social and economic amenities. The policy framework sets a foundation for partnerships between civil society organizations, a network of community-based organizations and the government. These partnerships help in creating collective responsibility towards informal settlement upgrading. In many slums of India, Bangalore, Gujarati and Andhra Pradesh states have adopted citywide upgrading strategies coupled with significant urban poverty initiatives. These initiatives symbolize a shift from informal settlement upgrading programs that only concentrate on housing development towards more integrated physical and social development.

Furthermore, according to Buckley, Singh and Kalarickal (2007), Indian Government policies on informal settlements have undergone paradigm shifts. In the 1970s and early 1980s, the government emphasized the notion of ‘slum free cities’. What this often meant was forced or voluntary resettlement of slums in central cities, (Buckley et al 2007). The global shift and attitude change towards informal settlements informed India’s policy transformations.

Under the current policy framework India has seen progress amid challenges on project planning and implementation. Buckley et al (2007) point out that the main shortfall in India’s informal settlement upgrading program is their current subsidy program. Generally, it appeared that subsidy amounts in the program were insufficient and were thus ineffective. The Evaluation study conducted by Buckley et al (2007) used five criteria to analyze the

subsidy programs: targeting, efficiency, transparency, administrative simplicity and sustainability. The five criteria capture the essence of challenges facing many subsidy programs in the developing world. Firstly, often subsidy amounts do not reach the intended targets. If they do, they are not utilized appropriately. Secondly, as far as efficiency is concerned, all subsidy programs should be evaluated on how well they improve the welfare of the beneficiaries (Buckley et al, 2007). Many upgrading programs in the developing countries concern themselves with quantity of subsidy spent instead of its impact on the ground. Thirdly, transparency is an important element in ensuring visibility of all costs of the subsidy in the budget. The amount of subsidy spent must be known and be accounted for in the country's budget. The duplication of subsidies in informal settlement upgrading programs makes it difficult to account for amounts of subsidy spent. Disintegrated subsidy programs make it hard to account for the amounts of subsidy spent on upgrading programs. Fourthly, administrative simplicity is a complex element in subsidy programs. It is complex because it is based on local government and state efficiency in planning and execution of projects, a characteristic most developing countries struggle with. The cost of government's administration would be higher if the subsidy program is designed poorly. The better designed the subsidy program, the lower the government's administrative cost of subsidy. Lastly, the definition of sustainability is context based and can easily be misunderstood if context is ignored (Buckley et al, 2007). In the context of subsidy programs sustainability refers to whether government design and implement an upgrading program so that it effectively addresses multiple objectives of upgrading. In this case, sustainability also encompasses financial sustainability.

The Indian situation highlights some significant challenges in informal upgrading programs. It highlights that appropriately designed policy framework can contribute to positive spinoffs such as formation of partnerships between various stakeholders. Arguably, the main challenge facing informal settlement upgrading is funding. Highlighted are some shortfalls in the subsidy programs within the informal settlement upgrading context. The problems raised are very generic in nature and apply to most developing countries. They provide a useful benchmark on how to assess, and or prevent problems in subsidy programs within the informal settlement upgrading environment.

### 3.6.3 Case Study 3: Slum Upgrading in Brazil

Like many developing countries, the reaction to informal settlements in Brazil was informed by public policies which sought to eradicate slums and relocate residents to housing projects on the outskirts of the city, which is still the approach in many areas (Abiko, Cardoso, Rinaldelli and Cesar, 2007). This policy reaction was informed by global trends and the context in which informal settlements were viewed at the time. The failure of this policy approach in many developing countries informed the paradigm shift towards the concept of informal settlement upgrading. Abiko et al (2007) further argue that considerable growth of informal settlements in Brazil rendered generalized relocations ineffective and no longer feasible, thus the shift towards in situ upgrading. Informal settlement upgrading meant the delivery of infrastructure, basic services and regularization of property titles.

According to Abiko et al (2007) Brazil introduced four basic stages for informal settlement upgrading projects. a) Feasibility or Preliminary study: this stage is critical in setting clear and achievable objectives in as far as technical, physical and legal standards are concerned. b) Registration or Allocation: allocation process should take place immediately after project approval. Involvement of communities in registration and allocation of beneficiaries is advisable as it will decrease the risks of corruption. c) Project design: the design of projects should take into account the various needs of the beneficiaries. The projects should be designed in such a manner that allocations cover as many of the beneficiaries as possible in a suitable area with all necessary amenities. The project design should assist with utilization of the project to its maximum efficiency to the benefit of recipients. d) Execution: implementation of projects should take into account area based challenges and attempt to meet them in a flexible and innovative manner. Timelines should be well defined within the resource capacity of implementing agents. Highlighted above are seemingly simplistic basics but which are critical in informal settlement program implementation. In the case of Brazil these basics were used in project implementation. Abiko (1995) acknowledges that delivering basic services in informal settlement upgrading projects is rather challenging. He further points out that there is an obvious need to integrate interdependent initiatives relating to informal settlement upgrading. Abiko (1995) furthermore acknowledges that this is a daunting task as different technical competencies involved are associated with institutions that have their own particular characteristics at different levels of government, Finally, Brazil has approached informal settlement upgrading projects in a manner that integrates access to

land, community participation on budgeting and investment planning. Here several municipalities have managed to develop partnerships by bringing together private and public stakeholders and thus improving access to housing and infrastructure investment (Cities Alliance, 2000). In areas where this approach has been implemented newly upgraded informal settlements have been integrated into the existing urban fabric.

### **3.7 Lessons from International Experience**

One of the most important lessons from the international experiences discussed earlier is that collective commitment is crucial. Stakeholders from the national government to local government, communities and families all have a role to play. Experiences highlight that projects ought to be real-needs driven. The expected outputs should be such that the beneficiaries understand their value. Also, upgrading projects should set quantifiable targets based on broad sustainable development objectives. Key in ensuring that upgrading projects are implemented effectively is putting in place adequate institutional arrangements. To sustain upgrading projects, sustainability concerns around financing, institutions and regulations must be prioritised (Cities Alliance, 2000).

Clearly, housing, water and sanitation are intertwined and are inextricably linked. At a macro level, MDGs are a cornerstone of development and they are the point of departure for sustainable delivery of basic services to the global poor. This is one of the reasons why this literature review section gives a detailed discussion of MDGs. In order for the world to meet MDG targets in housing, water and sanitation, there has to be commitment from all stakeholders. The prominent lessons were that housing, water and sanitation require global attention and national priority. There is need for increased strategic investments into housing, water and sanitation. It is the responsibility of national governments to adopt and localise global initiatives into effective delivery instruments. A trend that is evident in the respective policies.

More broadly, international policies, particularly UN policies, influence and inform positive policy shifts in the South African context which are unlikely to have occurred under normal government and local authority environment. Adebayo (2008) states that individual states would then adopt policy approach to local conditions, using the framework set out by the UN and other intergovernmental organisations, and through experimentation, determine the appropriate and suited combination.

Main influential elements of the UN policies suggest that housing, water and sanitation delivery should be a collective responsibility of various departments. Partnerships should be at the core of service delivery. Experience shows that there is need to move away from project based targets to the broader objectives of social, economic and environmental benefits of adequate housing, water supply and sanitation provision. Policies and programmes should be integrated and be pro-poor in nature. They should respond to the needs of the poor by focusing on key performance indicators. These indicators can include security of tenure, access to basic services, and durability of housing and sustainable livelihoods. For instance, the KENSUP experience shows that this could be achieved through consolidation, rationalisation and institutionalisation of a broad range of shelter-related policies and programmes. Policies and programmes should maintain flexibility and explore innovation.

What appears to dominate international debate is a persistent call for governments of developing countries to adopt approaches and strategies that are pro-poor. Moreover there are strong calls for integrated approaches to ensuring sustainable access to adequate water supply and basic sanitation. More specifically, on the adequate water supply and basic sanitation side, emphasis is placed more on the process of delivery rather than the construction of facilities. This assertion has some degree of validity because in most cases policies tend to concentrate on delivering facilities at scale rather than the impact of the service they deliver. Indeed the policy initiatives on housing, water and sanitation are often stuck between the 'width' and 'depth' paradigms of service delivery. This therefore raises a need to balance this service delivery pendulum.

The influence of international policy on South African housing, water and sanitation policies is echoed in various policy shifts. This is particularly evident in policy shifts in the Housing White Paper (1996) to the Breaking New Ground (2004). Shift from merely a delivery of 'houses' to the delivery of sustainable human settlements is particularly significant. Adoption of informal settlement upgrading approach and its incorporation into the new South African housing policy shows a major international influence. There are various elements of housing, water and sanitation policies that reflect the influence of international policy. For example, the abovementioned policies adopt sustainability principles in the delivery of housing, water and sanitation. National policies on housing, water and sanitation inform the nature and character of service delivery in provincial and local governments.

The current policy environment has allowed for the formulation of a number of programmes and approaches for the delivery of basic services. As mentioned above, some of the international policy ideas have greatly influenced the South African policy framework.

### **3.8 Housing, Water and Sanitation Policy Framework in South Africa**

This section discusses relevant policy initiatives in housing, water and sanitation in South Africa. The primary objective of the policy framework is to describe the policy environment under which housing, water and sanitation initiatives are implemented. The main policy principles in housing, water and sanitation will be discussed with a view to understanding the current trends in the delivery of the respective services. Institutional arrangement under which policy implementation occurs will be outlined. The section will also cover the Housing White paper, Breaking New Ground and the White Paper on Water and Sanitation. The discussion on housing policy initiatives will concentrate on policy provisions on informal settlement upgrading in South Africa. For purposes of this study, this section only commences its discussion from 1994 onwards. Water and sanitation approach will also adopt a similar direction. The aim is to capture the background to the current policy environment and its delivery stage.

#### **3.8.1 Housing Policy**

The Housing White Paper is an outcome of the 1992 National Housing Forum negotiations. The forum consisted of mass political groupings, labour, business, the building industry, financial institutions, the civil organization, and development organizations (Tomlinson, 1999). The forum initiated the new era of the more inclusive housing delivery process. Although there were positives, critics of the negotiation process cited representation as the main shortfall which has ultimately led to current challenges. “The Forum did not have any representatives of women’s groups; tenants or homeless; rural sector and informal savings organisations and associations” (Jones & Datta, 2000:399 as cited by Khan 2003).

Social exclusion of these groups from housing policy deliberations and institutional marginalisation from implementation decision-making – reference to the processes of place-making – continue to this day (Jones & Datta, 2000 and Khan 2003). Clearly, the policy negotiation process was complex and challenging.

The main objective of the Housing White Paper was to redress the inequalities of the past by ensuring an inclusive and non-discriminatory housing environment. After a series of debates and disagreements about what the main principles of the housing policy were to entail, a compromise was finally reached. The compromise entailed that the state was going to play both a facilitating and enabling role. “The (housing) policy is founded on the principle of creating an enabling environment whereby the state supports and facilitates delivery rather than engaging directly in provision; i.e. state-assisted, market driven delivery approach” Khan (2003:11). Furthermore, Khan (2003) reckons that the key to the enabling approach is the creation of a supportive regulatory framework and institutional environment for efficient functioning of the housing markets. This echoes the sentiment of the World Bank’s enabling approach. In a nutshell, the World Bank’s enabling approach has seven key instruments for developing governments to adopt in order to harness their scarce resources in bringing about an efficient housing market. These instruments include three to stimulate the demand for housing, three to facilitate housing supply, and one to manage the sector in a manner that ensures that markets provide adequate and affordable housing for all (World Bank, 1993). These are some of the important elements that were incorporated into the seven key strategies of the South African Housing White Paper. These strategies were developed as an overall approach to ensuring effective housing delivery and they have set out the framework for housing policy implementation and delivery in South Africa. They included: a) Stabilizing the Housing Environment; b) Supporting the Housing Process, c) Mobilising Housing Credit; d) Mobilising Savings; e) Subsidies; f) Institutional Arrangements; g) Land; and; h) Coordinated Development (DoH, 1997: pg 24 & 25).

The above are a fundamental part of the Housing White Paper. The implementation process has revolved around these strategies which are a supporting base for policy approaches and considerations adopted by the Housing White Paper. The obvious omission from these approaches is informal settlement upgrading as a concept, let alone as a policy directive. The Housing White Paper does not mention anything on informal settlements. It might be worth considering the complexity of the times during which the policy was formulated, in relation to informal settlements. In the South African context the 1980s and the early 1990s, marked a brutal reaction to informal settlements based on evictions and forced removals.

As mentioned in the first section of the chapter, international trends influence national trends and policies. Consequently, the latter could qualify as a justification for the omission of an ‘informal settlements upgrading’ concept in the Housing White Paper.

After a long stagnant and unsatisfactory housing delivery process, under the directive of the Housing White Paper (1994), there was need for policy evaluation. Indicated below are some of the founding sentiments of the BNG policy (2004). It is astonishing that even though there is a recognition of housing programmes to ‘go wrong’, and a number of other criticisms levelled against the standard and quality of dwellings over the years, the houses continue to be poorly designed, environmentally unsound, unsuited to local climate, relatively expensive to maintain at a comfortable physical indoor climate, locationally peripheralised and spatially marginalised, not conducive to social, economic, aesthetic or environmental sustainability; gross deficient in essential community facilities and services (DoH, 2000a as cited by Khan,2003)

The Breaking New Ground Policy (2004, pg 2) highlights a shift in the way sustainable human settlements will be addressed over the next 5 years and provides a summary of key programmes highlighting enhancements necessary for successful implementation. One of the significant paradigm shifts introduced by the BNG (2004) includes the moving away from ‘quantity’ driven approach to a ‘quality’ driven approach. Noteworthy in these enhancements is the status given to informal settlements upgrading as a delivery instrument. It was for the first time in the South African housing policy scene for informal settlements to be afforded recognition and the upgrading concept given attention as an approach to housing delivery process.

There are other various policy shifts introduced by the BNG, but for the purposes of this section attention will be given to those related to informal settlements upgrading. The BNG recognises a need to respond positively and proactively to processes of informal development which are taking place across the country (DoH, 2004). As mentioned earlier, the BNG recognises informal settlements as part of the broader urban fabric of South African cities. DoH (2004) further declares that there is a need to shift the official policy response to informal settlements from one of conflict or neglect, to one of integration and cooperation, leading to the stabilization and integration of these areas into a broader urban framework.

Recognising the gap left by long periods of neglect, the BNG advocated for the introduction of a new funding mechanism for informal settlement upgrading. The objective of this funding mechanism is to maintain the existing social and economic networks in the informal settlements while ensuring that area-wide upgrading process is taking place at a reasonable rate. The aim of this mechanism is to support informal settlement upgrading through phased processes (DoH, 2004). The three phases entail intensive community consultations, provision of basic services and social infrastructure, security of tenure for the entire community and the development of housing. The vision is that the development of housing will respond to community demands through various housing typologies and tenure systems (DoH, 2004)

The BNG clearly states that the informal settlement upgrading process will be implemented in partnership between National, Provincial government and municipalities (DoH, 2004). However, it does not clearly identify individual responsibilities of each sphere of government. During its inception, the BNG introduced nine pilot projects as models of how the informal settlement upgrading programme was to be undertaken. The programme was to consist of one pilot project in each province. Currently, the N2 Gateway, which has been subject to controversy and media attention, is an example of these pilot projects.

Set out in Chapter 13 of the National Housing Code are rules for the in situ upgrading of informal settlements. The main objective of the National Housing Code is to give a comprehensive foundation for the National Housing White Paper (DoH; 2000). The Code sets out policy intent, principles of the programme and other related activities of an informal settlement upgrading programme.

In concluding this Section, the above policy narrative would be meaningless unless it is attached to the objectives of this thesis. The above discussed housing policy documents assist in framing the arguments raised by this thesis within the existing policy environment that guides the implementation of informal settlement upgrading and the entire housing delivery process. The principles outlined explain the trends in policy relating to informal settlements. They also provide an understanding of where the informal settlement upgrading process is headed. These documents supply conceptual understanding of the complexities experienced in informal settlement upgrading.

### **3.8.2 Water and Sanitation Policies**

Like housing, access to water and sanitation was characterised by inequalities embedded in discriminatory laws of the apartheid regime that governed the entire water and sanitation sector. The water and sanitation environment represented a distorted and complex social, political and economic system inherited from the previous dispensation. This policy framework section discusses the development of policy in this sector over time. In its discussion, it highlights important policy principles relevant to this research.

#### **3.8.2.1 White Paper on Water Supply and Sanitation Policy**

The White Paper on Water Supply and Sanitation Policy of 1994 acknowledges that “the lack of basic services such as water supply and sanitation is a key symptom of poverty and underdevelopment.....and the provision of such services must be part of a coherent development strategy if it is to be successful” (DWAF, 1994: 4). The provisions and the principles of this White Paper are based on the Reconstruction and Development Programme (1994). The programme’s objective is to achieve the delivery of basic services such as water and sanitation in an integrated and principled manner (DWAF, 1994). The RDP principle of an integrated and sustainable programme has already been identified as critical to the success of service provision. It is recognized that there is limited value in having a water supply and sanitation strategy which is not part of a comprehensive development strategy (DWAF, 1994).

The Housing White Paper (1994) further asserts that water supply and sanitation should be integrated into programmes for the provision of other basic needs. The co-ordination of the various public organizations involved in the planning and delivery of basic services is therefore essential. The broader objectives of the White Paper on Water Supply and Sanitation Policy are to first provide the historical background regarding water supply and sanitation development in South Africa. Secondly, the policy aims to explain the development approach to be adopted with a view to developing specific basic policy principles. Thirdly, it aims to outline institutional framework for water supply and sanitation services. Fourthly, it also aims to provide standards and guidelines for basic service delivery. Lastly, it aims to set out policy for the financing of services (DWAF, 1994:5)

The introduction of the White Paper on Water Supply and Sanitation (1994) was aimed at addressing disparities in the water and sanitation environment imposed by the previous government. This policy had a responsibility to defragment the fragmented institutional arrangement. In this process, the White Paper acknowledged the absence of coherent policy, absence of an institutional framework setting out clear responsibilities, exclusion of priority areas, lack of political legitimacy and will as well as failure to make available resources where they were most needed. It was against this background that the principles of the White Paper on Water Supply and Sanitation were established.

The policy principles were based on local and international experience and the RDP document. The White Paper highlights 8 driving principles adopted as core elements of the policy. These principles state that development should be demand driven and community based. Water supply and sanitation delivery projects should incorporate community participation strategies and respond to real needs of the beneficiaries rather than being based on narrow departmental objectives. The principles demand that the policy views the supply of basic services as a human rights goal. The principle of “Some for All”, rather than “All for Some” is a call for equitable distribution of water and sanitation resources. The economic value of water should be upheld. The policy principles also argue for incorporation of integrated development objectives into water and sanitation projects. Finally, principles clearly stipulate that users have the responsibility of paying for their services (DWAF, 1994). Echoed in these principles is the constitutional assertion of basic services as a human right. In these principles, the policy also adopts the width aspect of water supply and sanitation rather than the depth approach. Equal distribution of resources necessary for the provision of basic services is recognized as a prominent element of the policy.

On the same note, while the economic value of water is recognized, there is also a responsibility on the shoulders of users to pay for it. It is a tricky assertion considering the economic status of the majority of the society. Although environmental integrity is one of the important elements of the policy, integrated development remains the most relevant to this thesis.

Water and sanitation development are not possible in isolation from development in other sectors...co-ordination is necessary with all tiers (spheres) of government (DWAF, 1994:11)

Recognition of integration and co-ordination of water and sanitation with other sectors is particularly important in this dissertation. This is a particularly important acknowledgement within the realm of what this research is attempting to investigate.

Furthermore, the policy sets out responsibilities of various spheres of government. It states that since local government is charged with the responsibility to ... “make provision for access to all its residents under its area of jurisdiction to water and sanitation [and other services] ... provided that such services and amenities are rendered in an environmentally sustainable manner and are financially and physically practicable” (DWAF, 1994:13).

The policy defines water supply using elements such as quantity, cartage, availability, assurance of supply, quality, and upgradability. In terms of quantity, the minimum standard set is 25 litres per person per day (DWAF, 1994). Interestingly, this minimum amount is only considered for direct consumption such as cooking [or general food preparation] and personal hygiene. It is not considered to be adequate for a full, healthy and productive life (DWAF, 1994). Important to note, Ethekewini Municipality, within the framework of this policy, will increase its free basic amount from 200 litres per household per day to 300 litres per household per day by 2009 (EWS, 2008).

In terms of sanitation, the policy highlights the importance of providing adequate sanitation with a view to protecting both surface and underground water while at the same time ensuring basic health. It also acknowledges the fact that waterborne sanitation is in most cases not a realistic, viable and achievable minimum service standard in the short term due to its financial implications.

The policy proposes a Ventilated Improved Pit (VIP) toilet for a minimum acceptable standard for sanitation delivery. It further states that the VIP should be constructed to agreed standards and maintained properly:

...since sanitation is provided at household level, consistency with urban and rural housing policy essentials, both to ensure consensus on standards and strategies and to avoid double subsidies - clarity on the extent of basic services deemed to be included in the national housing subsidy and how bulk services to such schemes are to be financed, both with regards to capital and operating cost. (DWAF, 1994:29)

This is a critical acknowledgement of the interrelationship between sanitation and housing. It also serves as a useful linkage between the funding instruments for sanitation and housing. Moreover, the policy recognises a need to contextualise sanitation challenges in line with the integrated development strategy. In the process, it calls for assessment of the impact of inadequate sanitation on a variety of sectors to be understood. “It is for these reasons that water supply and sanitation are inextricably linked as part of broader development process” (DWAF, 1994:35)

### **3.8.2.2 White Paper on Basic Household Sanitation Policy 2001**

This policy contains almost similar objectives as those contained in the Water Supply and Sanitation White Paper Policy. However, this policy concentrates mainly on the provision of basic household sanitation to rural communities and informal settlements (DWAF, 2001). It defines sanitation as “... the principles and practices relating to the collection, removal or disposal of human excreta, household waste water and refuse as they impact upon people and the environment”(DWAF, 2001:5).

The objective of the policy is to highlight the impact of poor sanitation on health, living conditions and the environment, while at the same time providing the framework for the development of sanitation improvement strategies to meet the sanitation challenge. It also aims at providing framework for municipality driven implementation programmes, promotion of greater coherence and co-ordination amongst the different spheres of government and amongst role players in addressing the sanitation problem (DWAF, 2001:5). In the process it also attempts to address challenges facing monitoring of the policy implementation and sanitation programmes.

The policy proposes the adoption of a common approach to implementation. It suggests five common approaches, namely: -

- Alignment of policies;
- Adherence to norms and standards;
- Integrated development planning;
- A package of services approach; and
- Agreement on implementation models and technical options. (DWAF, 2001:16).

These policy proposals speak directly to the objectives of this research. They highlight main departure points such as alignment of policies, integrated development and package of services approach, which in this case refers to housing, water and sanitation. Within the premises of this exercise, Integrated Development Planning (IDP) and the ‘package of services’ approach brings to light critical linkages between the provision of health and hygiene education and sanitation services, water supply services, solid waste management and housing (DWAF, 2001). This highlights the importance of the linkages between basic services provision with regards to integrated development in general. “The current lack of coherence in the sanitation sector is largely a result of uncoordinated planning” (DWAF, 2001:17). Integrated development planning is an all encompassing tool which attempts to bring together all aspects of service delivery into a single component ([www.dplg.gov.za](http://www.dplg.gov.za)). As a result, this policy draws its assertions from other human settlement policies such as housing policy and water policy for a positive influence. Stated in the policy is that the minimum level of service prescribed by the Minister of Housing, for sanitation, is a VIP per household (erf) unless the situations, such as the soil conditions, dictate otherwise (DWAF, 2001:24).

The policy further defines the concept of housing development as inclusive of provision of portable water and adequate sanitation facilities. This reveals the acknowledgement, on the part of basic sanitation policy, of the responsibilities of housing development as an integrated process through which services can be delivered. Also vital to note is that... “The alignment of the housing development programmes with the provision of the basket of services through the mechanism of the IDP is essential to avoid duplication of subsidies and the construction of houses without services” (DWAF, 2001:31). Highlighted above is the importance of policy alignment, integration and coordination in housing development. This section has highlighted critical policy linkage challenges. It is evident that housing, water and sanitation issues are inextricably linked. However, these linkages are either non-existent or underdeveloped. Table 4 (pg 45) attempts to summarise some significant points of divergence and convergence between these policies. Moreover, this section gives an overview of significant policy principles in both water supply and sanitation delivery influencing informal settlement upgrading. Both Water Supply and Sanitation White Paper and Basic Household Sanitation Policies attempt to emphasize the gravity of the water and sanitation challenge. They offer various approaches and suggestions on how to meet the challenge of access to adequate water supply and basic household sanitation.

Table 4: Policy Linkage Matrix

Policies	Main objectives	Key principles	Shifts	Linkages
Housing Policy	Facilitate and support housing delivery process	<p>Normalize the housing environment</p> <p>Facilitate access to land and housing</p>	<p>'Width' &gt; 'depth'</p> <p>Quantity &gt; quality</p> <p>Basic shelter &gt; sustainable human settlements</p> <p>Greenfield development only &gt; informal settlement upgrading</p> <p>Low income housing market &gt; entire residential market</p>	No visible linkages between housing policy and other shelter related policies
Water and Sanitation Policy	<p>To ensure access to sustainable water supply</p> <p>To ensure access to sustainable basic sanitation</p> <p>Management of human waste</p>	<p>Development should be demand driven and community based</p> <p>Basic services are a human right</p> <p>"Some for All", rather than "All for Some"</p> <p>Equitable regional allocation of development resources</p> <p>Water has an economic value, integrated development, environmental integrity and the user pays</p>	<p>Racially based &gt; inclusive policy</p> <p>Market driven only &gt; free basic for the poor</p>	<p>Clear acknowledgement of other policies</p> <p>Other settlement policies are acknowledged</p> <p>Alignment of policies;</p> <p>Adherence to norms and standards;</p> <p>Integrated development planning;</p> <p>A package of services approach; and</p> <p>Agreement on implementation models and technical options</p>

Source: Author's construction (adapted from DoH, 1997&2004, DWAF, 1998)

### 3.9 Housing, Water and Sanitation Legislative Framework

The objective of this section is to identify and discuss legislative framework relevant to housing, water and sanitation. The purpose will be to build an understanding of the legislative environment which supports the housing, water and sanitation policies. The understanding will assist in outlining basic norms and standards set in relation to policy implementation. Finally, relevant elements of legislative framework will assist in identifying any linkages or lack thereof between these policies.

### **3.9.1 Constitution Act no 108 of 1996**

The Constitution is the supreme law of the land. Enshrined in the Constitution (Act 108 of 1996) is a right to access to housing for all South Africans. Section 152 and Part B, read with section 155(7) & 156 (1) of the Constitution (1996) assigns responsibility to local government to ensure the provision of services, such as water and sanitation, to communities in a sustainable manner.

### **3.9.2 Housing Act 1997**

The aim of this act is “to provide for the facilitation of a sustainable housing development process; for this purpose to lay down general principles applicable to housing development in all spheres of government, to define the functions of national, provincial and local governments in respect of housing development” (DoH, 1997:2).

The Housing Act (1997) is recognized as a supreme housing law in South Africa. It legally governs all aspects of housing in the country. The Act prescribes principles and defines housing related functions of each sphere of government. The general principles of the Act give priority to the poor in respect of housing development (DoH, 1997). The objective of these general principles is to ensure that there is meaningful consultation with various stakeholders and beneficiaries of housing developments. The second principle is to ensure that housing development provides as wide a choice of housing and tenure options as is reasonably possible, while making certain that the process is economically, fiscally, socially and financially affordable and sustainable (DoH, 1997).

The Act also sets the norms and standards controlling the provision of services and the development of subsidized government houses, often referred to as ‘RDP’. These norms and standards ensure that housing development occurs in a controlled manner and certain criteria are followed. The physical standard of the ‘RDP’ house is set to be a minimum of 40m<sup>2</sup> consisting of one bedroom, an internal toilet and a kitchen.

### **3.9.3 National Water Act no 36 of 1998**

Like the Housing Act, the Water Act (1998) is recognised as the highest water law of the land. The purpose of which is to ensure that the nation’s water resources are protected, used, developed, conserved, managed and controlled in ways which take into account their:

- Meeting basic human needs in a sustainable way,
- Promoting equitable access to water, redressing the past principles of racially and gender service delivery policies, and
- Promoting the efficient, sustainable and beneficial use of water in the public interest (DWAF, 1998:10)

These are some of the goals of the Act that are relevant to the scope of this dissertation. The other objectives are also important to take into account as their failure may impact on the ones mentioned above. The Act also sets objectives for the establishment of an institutional framework necessary for the achievement of set water access targets.

### **3.9.4 Water Services Act no 108 of 1997**

The National Water Act no 36 of 1998 is responsible for governing the entire water resource environment while the Water Services Act is directly accountable for water services as end products. It regulates the relationship between water services, consumers and water providers. In the process, it sets national standards and norms for tariffs in respect of water services. The Act is responsible for the development of a regulatory framework for water services institutions and water services intermediaries (DWAF, 1997).

The second main objective of this Act is to ensure that the right to access to basic water supply and basic sanitation is fulfilled (DWAF, 1997). Echoed here is the provision by the National Constitution on the right to access to basic water supply and sanitation. The Act emphasizes that the water services institutions must take reasonable measures to realise this right. It also states that the right to access to basic water supply and basic sanitation is not absolute but is subject to limitations contained in the Act (DWAF, 1997).

The third main purpose of the Act is to set out conditions for the provision of water services (DWAF, 1997). The Act mandates water boards to develop general conditions for the provision of water services. There are a number of important conditions laid out by the Act. Section 5 places an obligation on water services institutions to prepare draft Water Services Development Plans (WSDPs) as a statutory requirement. WSDPs will be discussed at a later stage. The Act also introduces Strategic Framework for Water Services which provides important definitions. The Act proposes establishment of dispute resolution procedures

relating to the measurement of water services provided, conditions relating to payments, disconnections and limitations.

Amidst these Acts and policies that have been established, government departments have struggled to function as a unit. This is an assumption based on swelling numbers of service delivery backlogs in housing, water and sanitation. Establishment of an intergovernmental legislation to ensure cooperation between state departments was informed by these challenges.

### **3.9.5 Intergovernmental Relations Act no 13 of 2005**

This Act aims to establish a framework for the national government, provincial governments and local governments to promote and facilitate intergovernmental relations; to provide for mechanisms and procedures to facilitate the settlement of intergovernmental disputes; and to provide for matters connected therewith (DPLG, 2005:2). This act provides a framework for interaction between all spheres of government in relation to service delivery.

The main goals of the Act are to facilitate co-ordination in the implementation of policy and legislation (DPLG, 2005:7). This includes, but is not limited to:

- ensuring coherent government;
  - effective provision of service;
  - monitoring implementation of policy and legislation and realization of developmental goals of government as a whole;
  - taking into account circumstances, material interest and budget of other governments, when performing their functions;
  - consulting other affected organs of state through direct contact or through any relevant intergovernmental relations structures;
  - co-coordinating their actions when implementing policy and legislation affecting material interest of other governments;
  - avoiding unnecessary and wasteful duplication or jurisdictional contest/turfs;
  - support and build capacity, share information and consult other affected governments;
- (DPLG, 2005:7)

This Act provides an impetus and a core for continuous debates presented by this thesis on integration and co-ordination in housing, water and sanitation policy initiatives. The Act

suggests possible critical paths towards ensuring intergovernmental relations in the provision of services. There is a significant link between this Act and the hypothesis of this research. The proposal raised by this Act provides a framework for integration and co-ordination in housing, water and sanitation in informal settlements which should be understood.

Furthermore, the Act introduced ‘implementation protocol’. The protocol means that “where the implementation of a policy, the exercise of a statutory power, the performance of a statutory function or the provision of a service depends on the participation of organs of state in different governments, those organs of state must co-ordinate their actions in such a manner as may be appropriate or required in the circumstances....” (DPLG, 2005:15).

### **3.9.6 Municipal Systems Act of 2000**

The Municipal Systems Act no 32 of 2000 provides an insight into how the municipalities should conduct their duties in relation to each other within the broader development objective. The main highlight of the Act is the adoption of an Integrated Development Planning approach. The Act puts emphasis on the development and adoption of integrated development plans. Municipalities are expected to use IDPs as a prominent development tool. Integrated development planning is core to the delivery of housing and basic services such as water and sanitation within the municipality. The Act sets out the framework for integrated development planning. The framework is based on the provisions and principles of the constitution in relation to service delivery. One of these principles is ‘ensuring that all members of the local community have access to at least the minimum level of basic municipal services in an equitable and accessible manner (DPLG, 2000).

### **3.10 National Programmes, Plans and Strategies**

Housing is largely a social research concern while water and sanitation remains a scientific one. The difficulty in sourcing data further shows the disparity between housing, water and sanitation. Various National programmes, plans and strategies attempt to narrow the gap between housing, water and sanitation. The main purpose of national programmes, plans and strategies is to assist with practical implementation of policies. Even though some are statutory requirements of the national government, provincial and local governments are responsible for their implementation. To develop a better understanding of the functions of national programmes, plans and strategies, Ethekewini Municipality is used as a case study. It

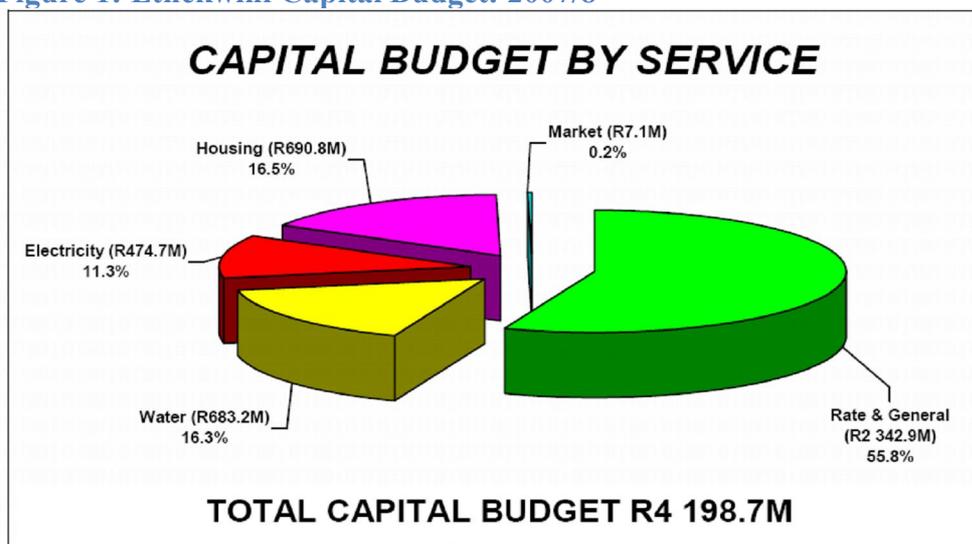
would be daunting to discuss these elements in a general national government context. Their functions and impacts can be understood within the environment of local government. It is beyond doubt that national programmes, plans and strategies are a national government priority and they carry a common objective.

### 3.10.1 Implementation Strategies and Plans

#### 3.10.1.1 Service Delivery and Budget Implementation Plans (SDBIPs)

Under the legislative framework of Municipal Finance Management Act (MFMA) of 2003 municipalities are required to develop Service Delivery and Budget Implementation Plans. Service Delivery and Budget Implementation Plans are used as strategic financial management tools to ensure that budgetary decisions adopted by municipalities for the financial year are aligned with their Integrated Development Plan Strategy (Ethekewini Planning Unit, 2006). The main objective of the SDBIP 2007/8 for Ethekewini is to strengthen accountability and governance, and to improve capital as well as operational planning, spending and service delivery. The plan gives direction to appropriate monitoring of the municipal budget and facilitates allocations of budgets to achieve key strategic priorities as per the IDP. In essence, SDBIP 2007/8 attempts to achieve alignment of IDP to the budget. Figure 1 shows that for 2007/8 housing and water each were allocated about 16.5% and 16.3% of the budget respectively ([www.durban.gov.za](http://www.durban.gov.za)). The SDBIP ensures that capital budget is prioritised against the needs of the city and in line with IDP objectives.

**Figure 1: Ethekewini Capital Budget: 2007/8**



Source: (EWS, 2008:9)

SDBIP allocates budgets per ward. The level of detail goes down to projects in each ward. Figure 2 indicates capital budget allocated to Barcelona 2 informal settlement upgrading programme. Barcelona 2 is introduced in Chapter 4 as one of the two case studies. In this Chapter, the capital budget allocation is used as an illustration of how SDBIPs function.

**Figure 2: Capital Allocation for Barcelona 2 Upgrading Project**

ETHEKWINI MUNICIPALITY					
CAPITAL BUDGET 2007/08 TO 2009/10- WARD INFORMATION					
ID	Tack Name	Ward no.	Budget 2007/2008 Rm	Budget 2008/2009 Rm	Budget 2009/2010 Rm
522	Barcelona 2 phase 2	75	8.435	7.200	1.200

**Source:** (EWS, 2008)

Budget allocation is a significant step towards effective implementation. It highlights priorities of the municipality informed by its needs. The SDBIPs informs service delivery programmes and it sets the framework for capital investment.

### **3.10.1.2 Ethekwini Water and Sanitation Programme (EWSP)**

The EWSP was established in 2001 to provide communities in the newly incorporated areas of the Unicity with water and sanitation services. These areas had recently been affected by outbreaks of cholera because they had traditionally been under-served in terms of water and sanitation provision (EWS, 2003). Ethekwini Water and Sanitation (EWS) have embarked on a free basic water and basic sanitation programme for disadvantaged communities to improve their current and long-term health status. In technical terms this involves the provision, to every household, of an affordable, sustainable and environmentally-friendly infrastructure as follows:

- A sustainable supply of potable water in terms of a 200 (300) litres ground tank for each household, connected to a water supply.
- a ventilated improved urine diversion toilet which is safe, reliable, environmentally sound, easy to keep clean, provides privacy and protection against weather, is well ventilated, keeps smells to a minimum and prevents the exit of flies and other disease-carrying pests (Ethekwini, 2003:3).

### **3.10.1.3 Integrated Development Plans**

As outlined in earlier sections, Integrated Development Plans are tools for municipalities to ensure that critical linkages between the provision of health and hygiene education and sanitation services, water supply services, solid waste management and housing are created and managed (DWAF; 2001). It is the statutory requirement for all municipalities to prepare IDPs for their areas of jurisdiction. Through the IDP process, municipalities are able to establish constraints, areas of needs and opportunities which then allow them to develop strategic interventions. Services such as housing, water and sanitation are therefore prioritised by the municipality based on situational analysis of the IDP process. The strategies and interventions developed under the IDP process are then reflected through Capital Investment Framework and Spatial Development Framework. These frameworks facilitate the implementation of the prioritised interventions. One other significant part of the IDP is the Housing Sector Plans, sometimes called Housing Chapters. They provide a ‘housing voice’ into the IDP. The significance of IDP process is that it provides guiding principles for integration of all elements of development. It supports and facilitates cross-sectoral planning, development and implementation of various services.

### **3.10.1.4 Water Services Development Plans**

All water services authorities have a statutory requirement to prepare draft Water Services Development Plans for their areas of jurisdiction, as part of an Integrated Development Plan process (DWAF, 2005). Water Services Development Plan is a tool to assist water services authorities to make informed decisions about water and sanitation services, and plan for those communities without access to these basic services. The WSDP give water and sanitation a ‘voice’ in the IDP. It ensures that various stakeholders are aware of water and sanitation priority areas in that particular municipality. WSDP must, at all times, bear in mind the requirements of Section 5 of Water Services Act (1997) which states that: “If the water services provided by a water services institution are unable to meet the requirements of all its existing consumers, it must give preference to the provision of basic water supply and basic sanitation to them” (DWAF, 2005).

### **3.10.1.5 Strategic Framework for Water Services**

Strategic Framework for Water Services (2003) is one of the strategic elements of Water Services Act (1997). The Water Services Strategic Framework is a guiding principle of water

and sanitation service implementation. The framework provides two crucial definitions. It defines basic water supply service and basic sanitation service.

‘Basic water supply service’ as the provision of a basic water supply facility, the sustainable operation of the facility (available at least 350 days per year and not interrupted for more than 48 consecutive hours per incident) and the communication of good water-use, hygiene and related practices. A basic water supply facility is defined as the infrastructure necessary to provide 25 litres of potable water per person per day within 200 metres of a household and within a minimum flow of 10 litres per minute (DWAF, 2003:66).

‘Basic sanitation service’ is defined as provision of a basic sanitation facility which is accessible to a household, the sustainable operations of the facility, including the safe removal of human waste and wastewater from the premises where this is appropriate and necessary, and the communication of good sanitation, hygiene and related practices. A basic sanitation facility is defined as the infrastructure necessary to provide a sanitation service which is safe, reliable, private, protected from weather, ventilated, keeps smells to minimum, is easy to keep clean, minimises the risk of spread of disease-carrying flies and pests, and enables safe and appropriate treatment and, or removal of human waste and wastewater in an environmentally sound manner (DWAF, 2003:46)

The framework provides particularly important definitions for basic understanding of the expected standard of service and infrastructure. Frequently, water and sanitation implementation is undertaken by sectors that are not familiar with the Water Services Act (DWAF, 2003). The framework therefore serves as a simplified guideline for implementation.

### **3.10.1.6 Informal Settlement Upgrading Programme**

Informal Settlement Upgrading Programme (ISUP) is one of the housing delivery elements introduced under the new BNG policy. It was envisaged to provide a platform to initiate upgrading projects which do not require project-linked housing subsidy finance. Primarily, the programme has mainly focused on an approach aimed to eradicate informality, either through evictions or highly technocratic and often market-driven infrastructure development

upgrading programmes (DAG, 2007). The programme is also premised on the objective to ‘progressively eradicate’ informal settlements (DoH, 2004). This approach is informed by the assumption that informal settlements are momentary places, which can be eradicated through generalized programmes of resettlement onto site and serviced plots on the urban edge (DAG, 2007). The new upgrading programme aims to facilitate a need to shift the official policy response to informal settlements from one of conflict or neglect, to one of integration and co-operation, leading to the stabilization and integration of these areas into the broader urban fabric (DoH, 2004). This is to be achieved through the introduction of phased *in situ* upgrading projects where possible and relocations where necessary. Proposed new funding mechanism for informal settlement upgrading is aimed at supporting upgrading at a broader level rather than on a project by project basis.

According to DAG (2007), informal settlement upgrading by virtue of its nature, is not simply the responsibility of housing departments, but rather the multi-sectoral responsibility of a range of stakeholders or partners who should work collectively to address the community’s development priorities through a range of complementary social and physical development initiatives that address issues of access to land tenure, basic services, and urban livelihoods. It is under this context that *in situ* upgrading can create an impetus for inclusive and integrated development which has the potential to reduce poverty, and to socially, physically and economically integrate an informal settlement into the wider city.

Programmes, plans and strategies are elements of policy directly responsible implementation. They are tools through which policy objectives are to be implemented on the ground. They are important elements of policy. If developed and applied inappropriately policy objectives and goals cannot be met. In the context of this dissertation, programmes, plans and strategies outline and explain various choices taken by Ethekwini municipality in implementing its informal settlement upgrading programme.

### **3.10.2 Existing Informal Settlement Upgrading Funding and Constraints**

National Department of Housing released the 2008/9 subsidy quantum which are informative in understanding the intentions of the National Department in respect of subsidy funding as well as areas of disjuncture between the intention and implementation. According to Misselhorn (2008) based on the latest quantum for informal settlement upgrading, the total

housing budget allocated to informal settlement upgrading is R67, 916 per household made up as follows:

- Informal settlement upgrading programme (allocations for incremental interventions and servicing) – total budget of R24,410 per household (excluding relocation grant):
- Phase 1 (R5, 830 per household): Survey, registration, participation, facilitation, dispute resolution etc (at 3% project cost); Geotechnical investigation; Land acquisition; Pre-Planning; Interim engineering services.
- Phases 2 & 3 (R18,580 per household): Detailed town planning; land surveying and pegging; Contour survey; Land survey examination fee; Civil engineer's fee; Site supervision fees; Permanent engineering services provision; Project management ( at 8% project cost)
- Relocation grants (R938 per household): Transportation and loading costs for people and household effects. Social service support including support for the registration of social benefits, school registration and other welfare support. Relocation food support to households (Misselhorn, 2008:17)

Top-structure construction for a 40sqm house – total budget of R43, 506 per household (Including earthworks, house construction, P&G, overheads, and contractor's profit)

Based on Misselhorn's calculations addressing the entire informal backlog by conventional means, whether by means of in situ upgrade or green-fields projects or a combination of both, will require massive financial resources. Informal settlement upgrading funding, proposed under ISUP, is smaller than what is required to address the informal settlement challenge. Financial cost of upgrading is escalated by various factors such as land and bulk infrastructure (Misselhorn, 2008). Box 1(pg 56) illustrates typical funding constraints as demonstrated by Misselhorn (2008).

According to Mayekiso, Huchzermeyer and Harrison (2003), the past couple of years have marked an improved quality of life in urban and rural environments throughout South Africa. There has been a significant increase in the supply of basic services such as shelter, water, sanitation and electricity. These advances are attributable to a profound restructuring of government institutions, legislative and regulatory frameworks, and systems of resource allocations.

**Box 1.**

Even optimistically assuming an optimistic cost of R70,000 per unit (including top structure, land acquisition costs, servicing of land, and bulk infrastructure provision), approximately R84 billion would be required for conventional upgrading of the estimated housing 1.2 million households currently living in informal settlements.

*[Whilst the costs might vary from one urban centre to another, it is noted that in Ethekekwini, the current total costs per site run at approximately R80,000 (for land, servicing, and housing) ]*

Assuming the current subsidy quantum for upgrading (R43,506 for top-structure + approximately R18,000 for Human Settlement Redevelopment Programme / servicing allowance), then approximately R76 billion of this would come from the DoH (SA Housing Fund) and the balance of approximately R8 billion would need to come from MIG / municipalities (although this amount would increase if the HSRDP portion were reduced or total infrastructure costs increased).

The per annum financial implications in this optimistic scenario assuming the 2014 target for the 'eradication' of slums is R12.7 billion in housing funding and R1.3 billion in additional infrastructure requirements (although the split between the two could vary if there were a change in HSRDP allowance or if additional Department of Land Affairs or Municipal Infrastructure Grant funding were put into the mix). It is noted that this scenario is probably unrealistically optimistic for the following reasons: a) does not factor in any growth in informal settlements which is almost certain to occur; b) is at current values and does not factor in the costs of inflation; c) the actual informal settlement backlog figure of 1.2 million is probably understated. In addition, the costs of free basic services have not been factored in. These are likely to be very significant and would need to be borne by the municipality.

The scenario also does not factor in the serious constraint of electricity supply shortages which would probably mean that few upgrade projects would be provided with electricity and that alternative energy solutions would therefore need to be explored at additional cost.

A slightly more realistic scenario which factors in a 7.5% annual growth in informal settlements and a total product price including all servicing and land costs of R80, 000 per unit (allowing for projected inflation), would require an annual budget of R27 billion per annum over six years to 'eliminate' informal settlement by 2014, but even this does not by any means factor in all of the additional cost variables mentioned.

**Source: Misselhorn, 2008:21**

According to the Demarcation Act of 2000, local government restructuring has particularly been a notable reorganization. Notwithstanding these advances, there are still critical insufficiencies in terms of both policy framework and implementation. Furthermore, Mayekiso et al (2003) agree that despite a clear commitment to urban integration and coordinated development, housing policies and practices are producing, as an unintended effect, results that are not entirely dissimilar to those produced under apartheid, namely poor

quality housing which is badly located with respect to urban opportunities - such has been the nature of housing delivery in South Africa. This has contributed to the formation and perpetuation of informal settlements in urban centres. Some of the latter mentioned challenges have been discussed in this chapter. It is also important to consider theoretical and conceptual framework on which housing, water and sanitation policies are founded. The next chapter attempts to summarise some important theories and concepts informing service delivery policies.

## **Chapter Four: Research Methodology**

Undertaking any research requires that there be a method of collecting and analyzing data. The objective of this section is to outline and describe the relevant method of data collection and analysis.

### **4.1 Methodology**

In an attempt to understand the issues, the dissertation conducted a literature review exercise and primary data collection. The literature review exercise, dealt with in Chapter 2, was used to place the study within the existing contextual, policy and legislative framework. Case study data collection was used to test the hypothesis under authentic circumstances. Data was then analyzed to yield research findings and conclusion. The following sections discuss the methods used to collect and analyse data.

#### **4.1.1 Case Study**

De Vaus (2002), states that case study design is fundamental and substantive to the methodological development of social science research. It is an important cornerstone of any research project that aims at examining authentic social issues. He provides a useful definition of what ‘case’ is in case study design. He defines it as the ‘object’ of study and a unit of analysis about which we collect data. The case studies provide authentic environments under which housing; water and sanitation initiatives can be evaluated and understood within a defined theoretical framework defined in earlier chapters. Moreover, case studies emphasize detailed contextual analysis of a limited number of events or conditions and their relationships. Yin (1984) defines the case study research method as an empirical inquiry that investigates a contemporary phenomenon within its real-life context; when the boundaries between phenomenon and context are not clearly evident, and in which multiple sources of evidence are used (Yin, 1984, p. 23).

There are two selected case studies. Each case study represents a particular unit of analysis and purpose. The broader objective is to study issues in policy implementation from the perspective of ‘beneficiaries’ in contrast to ‘policy officials’. The two selected case studies were used to analyse how the disparities between housing, water and sanitation policy initiatives manifest themselves in implementation.

The first case study (Amawoti-Cuba) is an upgraded informal settlement, and the second one (Barcelona 2) is an ongoing upgrading project.

#### **4.1.2 Fieldwork/ Field Visits**

Bechhofer and Paterson (2000) argue that fieldwork is exceptionally good at providing access to the negotiated social order and everyday processes through which it is negotiated and sustained. It is generally an important form of data collection and observation by which a researcher gains a close, and sometimes intimate, acquaintance relationship with whom he/she interacts. In conducting fieldwork the principles suggested by Bechhofer and Paterson (2000) were adopted. They argue that the researcher, in a fieldwork situation, should be able to strike a careful balance between just being a researcher and becoming acquainted with some people in the area. They highlight dangers of trust and mistrust that might occur. These are, however, beyond the scope of this dissertation but their basic understanding is of valuable importance.

4 field visits were made to each case study area by the researcher. The initial trip entailed situational analysis of the areas. It included elements of physical and social environment analysis. Physical analysis was aimed at checking whether or not the areas were walkable. Social environment elements aimed at understanding social hierarchies of authority and leadership. This was a useful analysis because later on it offered freedom and protection for the fieldwork to be conducted with relative ease. As soon as people realised that all necessary hierarchies had been observed, they were willing to engage and help whenever possible. These aspects were crucial to the understanding of broader societal issues that might have affected the research. Frequently, communities reject or even react violently to people who do not observe the hierarchies of power. More generally, the field visits allowed for the development of a rapport with subjects and the environment from which data was to be collected. The other visits were to conduct questionnaire surveys with households. Appointments with the professionals were made two weeks in advance. All the professionals were emailed an interview schedule and format including questionnaires before the actual interviews.

### **4.1.3 Sources of Data**

It is a general consensus that sources of data are core contributors to any research. They provide the study with relevant data. In most circumstances, the relevance and importance of data provided by each source is based on the nature and character of data obtained. A personal observation is that primary data sources will often provide relevant data to a particular situation. Secondary data sources may provide relevant and irrelevant data. It is therefore in the discretion of the researcher to take only the data relevant to the objectives of the research being conducted. This research had many options. Primary data was sourced from policy professionals and households through data collecting techniques discussed in Section 4.1.4 below.

Secondary sources of data were identified from an array of available data which ranged from government policy documents, legislative documents, NGO's documents, articles and official government correspondence. The selection of these sources was informed by the need to create a theoretical and conceptual foundation for this research.

### **4.1.4 Data Collection**

Secondary data was used as a starting point to understand overarching issues in housing, water and sanitation. Policy analysis requires that policy documents and legislation be an integral part of data collection. Data from government policy documents and legislation on the provision of housing, water and sanitation in informal settlements upgrading in Ethekewini Municipality, was collected from national government sources such as department websites and published government reports.

Primary data sources included community members and policy professionals. The household surveys were conducted in the two selected case study areas. Random sampling method was used. This method allowed each household an opportunity to be included in the survey. 30 households were surveyed per case study making in total 60 households. Barcelona 2 had approximately 250 households and Amawoti had approximately 280 households. The reason for choosing 60 households was based on the assumption that informal settlement upgrading projects have uniform characteristics in each given area. Therefore, a small sample size was deemed a rational option given time and monetary constraints from the researcher's side. Questionnaires were used to collect data from the households.

Household interviews were structured and consisted of a combination of close-ended and open-ended questions. The questionnaires yielded qualitative data.

Purposive sampling method was used to identify policy professionals from municipal departments of housing, water and sanitation.

A purposive sample is one which is selected by the researcher subjectively. The researcher attempts to obtain the sample that appears to be representative of the population and will usually try to ensure that a range from one extreme to the other is included (Galloway, 1997)

The policy professionals that were interviewed were from the field of housing, water and sanitation within Ethekewini Municipality. They included the Research Manager from Housing Unit, Deputy Head of Water and Sanitation Department and Planning Manager in Land Section. The interviews were semi structured to allow for an open conversational discussion of broader policy issues. The majority of the questions were open-ended and the purpose of this was to allow free flowing conversation on policy matters that could have not otherwise been stimulated through closed questions and structured interviews. The questionnaires and interview questions were designed to answer the research question (see the appendix). They took into account the broader research objectives.

#### **4.1.5 Data Analysis**

The objective of data analysis is to look at and summarize data with the intent of extracting useful information and develop conclusions. The analysis of data is done in a thematic format using research objectives outlined in Chapter 1. Data is categorised accordingly and is placed into these themes. It is therefore discussed within the framework of research objectives and supported by the literature review. The purpose of analysing data this way is to ensure that each research objective is met. The data collected is attached as an appendix to avoid clutter and to make the data analysis process relatively simple. Data is presented using graphs, tables and figures.

#### **4.2 Limitations**

The outstanding limitation was first and foremost doing the survey with the community in Barcelona 2 who were in the transit camp.

The difficulty was that instead of referring to their situation in their original Barcelona 2 they often reflected on their current situation in the transit camp. The response to this explanation was mostly positive even though the author had to repeat it to each household respondent. They had difficulties separating their lives in shacks and transit camps. Ultimately, the explanation became part of the introduction to the study and questionnaire.

There is likelihood that their responses were influenced by their temporary environment. To correct this situation the author clarified before all the interviews that the questionnaire was based on their previous informal settlement environment before the transit camp.

To mitigate the circumstances, the author dealt with data cautiously by engaging with literature from both technical and social environments in an integrated manner. The author made linkages between housing, water and sanitation literature using a perceived common objective that was often discussed in both literatures. These were further developed into common distinguishable linkages which are based on objectives of each of these policies. Sustainable delivery of basic services to lower income households is one of these linkages. They each have an objective to contribute to the development of sustainable human settlements.

### **4.3 Summary**

This chapter provides the methodological framework of how the case studies were selected, how the data was collected and analysed. It gives a justification of research instruments and methods used in conducting the research. These are important because they offer a broader understanding of what the author was trying to achieve, and how. This section also outlines limitations of the study that might have influenced the outcome of the entire research project. At least, it provided mitigating actions taken by the author to overcome the challenges faced.

## **Chapter Five: The Study Area**

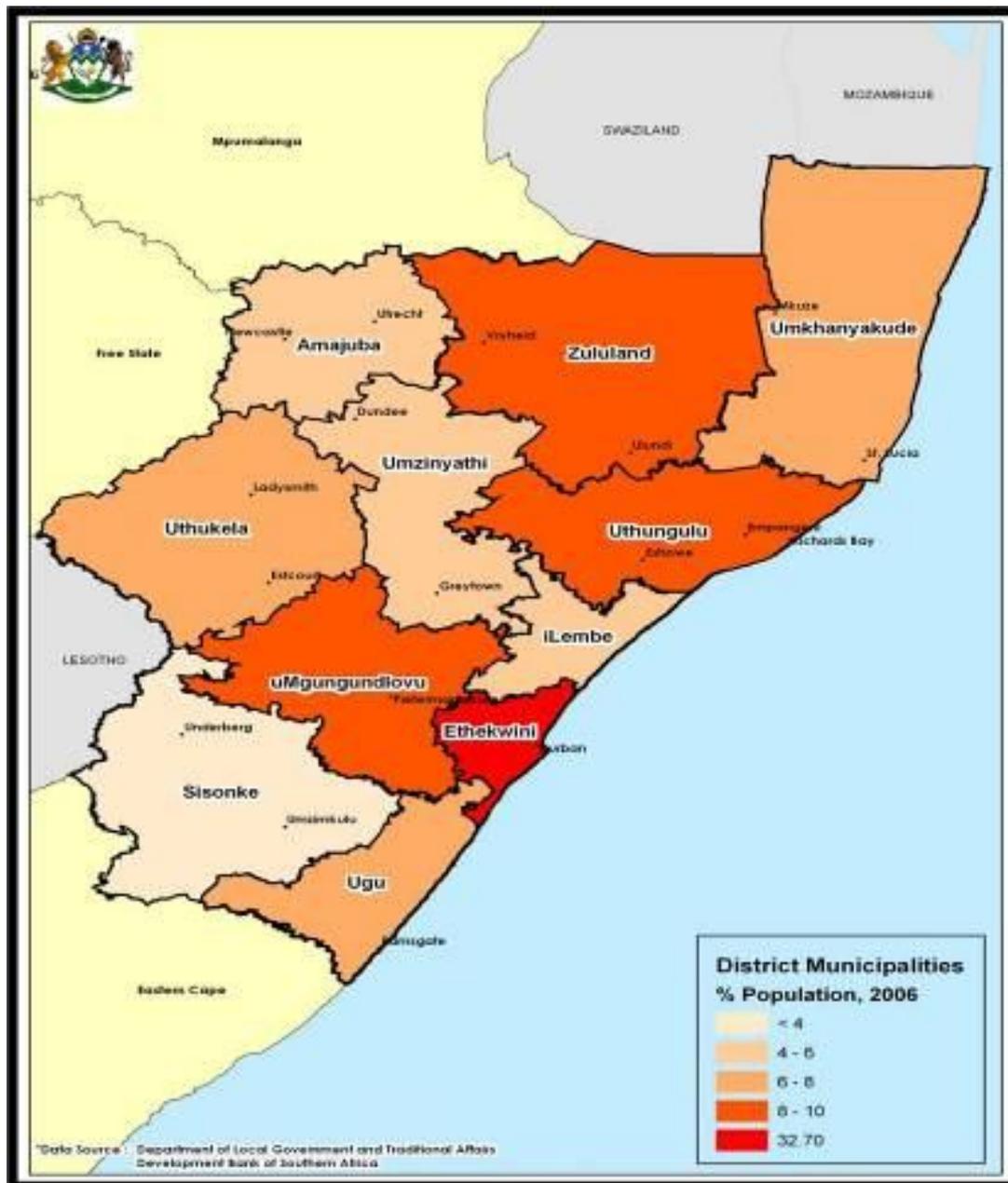
The purpose of this chapter is to first introduce the case study area within its broader spatial location in Ethekekwini Municipality. It will also highlight socio-economic and political characteristics of each study area. Housing, water and sanitation service levels will also be discussed area by area.

### **5.1 Ethekekwini Municipality**

Ethekekwini Municipality covers an area of 2291 km<sup>2</sup> and has an average of 1.56% annual population growth rates (Cities network, 2008). Map 1 on page 64 depicts Ethekekwini's population contribution towards KZN. This level of scope gives a clear indication of the overwhelming population size of Ethekekwini.

Housing, water and sanitation are most critical basic services for human life. Delivery of these services to the poor is seen as a major challenge facing most South Africa Cities. Housing, water and sanitation delivery was largely characterized by inequalities and red-tape in what was previously known as Durban Metro. In this process the large segment of the Ethekekwini population was excluded from access to these basic services. After the 2000 local government elections the boundaries of Ethekekwini were extended to include a large number of rural areas that were previously under the chiefs. The Municipality boundary then covered some of the largely rural communities which were previously outside the service delivery network. Through the demarcation process, Ethekekwini inherited these rural areas which were without housing, water and sanitation. There was also a considerable lack of bulk infrastructure closer to these areas. This was an added challenge to the already existing backlog in housing, water and sanitation

Map 1: KZN District Municipality and Population Densities



Source :(KZN Housing, 2008)

Map 1 on page 64 above shows a spatial location of these informal settlements in Ethekwini. It also shows the location of the two case studies. In recognition of this challenge the Municipality has developed Informal Settlement Programme (ISP) and adopted Slum Clearance Project. In 2006 there were over 700 housing projects being implemented in Ethekwini Municipality. These projects included Greenfield projects, relocations and in situ upgrades (Ethekwini Housing Unit, 2008). 37 projects have since been completed.

### 5.1.1 Ethekwini’s Informal Settlement Upgrading and Housing Delivery Experience

According to Misselhorn (2008), the experience of Ethekwini Municipality is useful in understanding the real issues and constraints relating to informal settlement. Ethekwini Municipality have been pro-active in addressing the issue of informal settlement upgrading in a number of respects. This assumption is informed by the large number of successful upgrade projects completed and underway (see appendix 5). The municipality has multi-year effective forward planning both in respect of prioritising projects and in budgeting for them. On the other hand, the city has introduced a range of temporary relief measures for informal settlements. However, Misselhorn (2008) concedes that notwithstanding Ethekwini’s pro-activeness and relatively high levels of capacity, there are nonetheless serious constraints in rapidly addressing the entire informal settlement backlog via conventional housing delivery.

There are more than 555 informal settlements in Ethekwini – the highest figure of any city on the country. These settlements are home to about 155 000 families, and by our reckoning, eThekweni’s housing backlog stands at a total of 205 000 units, which includes informal settlements, overcrowding, and hostels (Ethekwini, 2007).

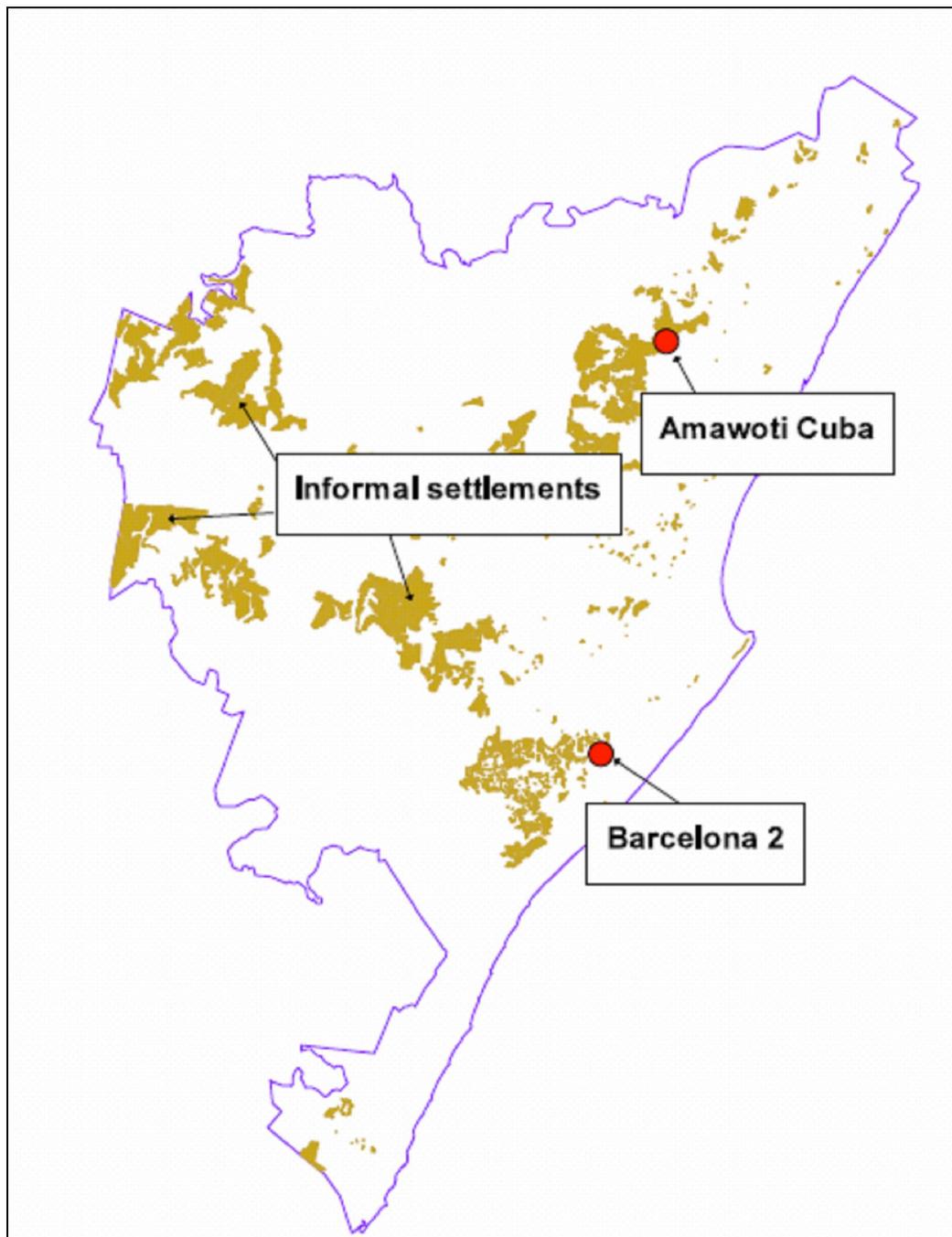
Table 5 shows the houses constructed by Ethekwini from 1994 to 2008. This only includes newly constructed houses and excludes in situ upgrading projects. Table 5 also shows how the municipality has progressively delivered housing since 1994. The figures in the table illustrate steady progress.

**Table 5: Houses Constructed in Ethekwini**

Years	Houses Constructed P/A	Houses Constructed Cumulative
1994-1999\ 2000	33,843	33,843
2000\1	7,623	41,466
2001\2	8,000	49,466
2002\3	10,000	59,466
2003\4	12,500	71,966
2004\5	15,172	87,138
2005\6	11,552	98,690
2006\7	16,253	114,943
2007\8	18,149	133,092
<b>Total</b>	<b>133,092</b>	

(Personally sourced via email from Research Manager, Ethekwini Housing Unit, 2008)

**Map 2: Informal Settlements Location in Ethekekwini Municipality**



**Source:** adapted from Ethekekwini GIS data (accessed, 2008)

### **5.1.2 Water supply**

Water supply is one of the most important functions of local government. It is a constitutional responsibility of every local government to ensure water supply to its citizens (RSA, 1996). Ethekekwini Municipality has performed relatively well in terms of ensuring adequate water supply to its population (see Table 6 pg 67). Umngeni Water is the bulk portable water

supplier for Ethekwini Municipality. The municipality then pipes the water to its community. The water is supplied through full pressure, semi-pressure roof tanks, standpipes and ground-tanks. The more affluent segment of the community has a financial ability to access the full pressure system. The lower income bracket is afforded access to a semi-pressure system. However, the semi-pressure system has an upgradability element in it. Low-income communities are not expected to use the semi-pressure system perpetually but are given an option to upgrade as their socio-economic fortunes change.

According to Dickens and Rawhani (2004) Ethekwini is the first municipality to provide free basic water to its citizens. The free basic water programme is aimed at ensuring access to a free basic amount of 200 litres of water per person per day. This programme has since been put into water supply policy of South Africa. Ethekwini Water and Sanitation (EWS) have been very proactive and innovative in terms of water supply approaches to communities. The particularly important interventions in informal settlements are through standpipes, ground tanks, ablution blocks and roof tanks. Like any programme, these interventions face critical challenges the biggest of which are acceptability, by-passing, abuse and illegal connections as observed in the case study areas.

**Table 6: Water Service Backlog**

<i>Water Service Authority</i>					
Ethekwini Metropolitan Municipality					
31 July 2008					
Water Service Authority Summary View					
Service level view					
<b>Total Households Served</b>					
Service Level	No Infrastructure	Below RDP	at RDP	Above RDP	Total
<b>Total</b>	10,717	45,943	132,031	737,124	925,815
<b>Served</b>	0	45,943	132,030	737,124	915,097
<b>%</b>	0.00%	100.00%	100.00%	100.00%	98.84%
Service level view					
<b>Total Poor Households Served</b>					
Service Level	No Infrastructure	Below RDP	at RDP	Above RDP	Total
<b>Total</b>	2,992	13,069	41,635	242,084	299,780
<b>Served</b>	0	13,069	41,635	242,084	296,788
<b>%</b>	0.00%	100.00%	100.00%	100.00%	99.00%

**Source:** (DWAf, 2008)

Table 6 on page 67 shows the number of households with access to water supply. The numbers indicate that Ethekwini has done well in terms of meeting the water needs of its

poorer households. The table shows different levels of water services backlog in Ethekekwini. The number of households served above the RDP standards is much higher than the number of households served at both below and at RDP levels. The table shows significant improvement in the number of served households.

### **5. 1.3 Sanitation delivery**

The constitution (1996) of South Africa places an obligation on [local] government to ensure that all South Africans have access to adequate sanitation services (RSA, 1996). Like all municipalities, Ethekekwini is mandated to provide basic services in all settlements within their area of jurisdiction in accordance with the rights described in the Constitution as well as in the various Acts that guide service delivery at local level. After the local government elections in 2000 Ethekekwini inherited rural areas which were largely un-serviced. These rural communities depended largely on traditional unimproved pit latrines. The difficulty with these areas is that they fall outside bulk service network such as sewer lines and water mains. Conventional sanitation was almost impossible to implement because of low densities, topography and distance from main bulk infrastructure (Ethekekwini Housing Unit, 2005). There was a great need for innovation and creativity. The Municipality's response was an introduction of ventilated improved latrines (VIPs) and Urine Diversion (UDs). The degree of success varies from one place to another. Recent studies reveal that with proper educational campaigns the success rate of these technologies could be higher.

Informal settlements present a huge sanitation challenge for the municipality. Lack of proper sanitation in informal settlements has implications on the environment and health of the communities around the city. Charlton (2006) argues that even though informal settlements have been part of the South African urban landscape for decades, they received little focused attention in national policy processes until almost 10 years after the introduction of the post-apartheid government's housing programme. Service delivery problems had been left to accumulate over the years. Interestingly, the sanitation challenge is directly proportional to informal settlements. The more the informal settlements increase in numbers the larger the sanitation problems become. In recognition of the gravity of the sanitation challenge, the municipality has developed an entry criterion using innovative measures which include, but are not limited to, installation of temporary shared blocks, ablution blocks, and communal toilets. These measures can only be implemented in those informal settlements that fall

outside the 5 year housing plan (Ethekewini Housing Unit; 2005). Amawoti and Barcelona are within the housing five year plan and thus do not qualify for interventions mentioned above.

To date, the municipality has provided 38 ablution blocks (see example Figure 3)

Communal Ablution Blocks provide the community with drinking water service, toilets, washing basins and showers.

**Figure 3: Permanent Ablution Block (Left), Temporary Ablution Block (Right)**



Source: (Pollution Research Group, 2008)

**Table 7: Number of Households without Access to Basic Water and Sanitation Services**

WSA Name: Ethekewini Municipality	Total Below RDP Sanitation Population (DWAF)	Total Below RDP Sanitation Population (LG)
	673,269	805,901

Source: (DWAF, 2007)

Water and sanitation delivery in Ethekewini is done under the framework of Water Services Development Plans, as discussed in Section 2.4.1.4. The 2003 Water Services Development Plan for Ethekewini was prepared after careful consideration of the following:

- A spatial configuration of the Municipal area in the form of a “T” with the areas closer to the two major national freeways tending to be well provided with water services infrastructure.

- Areas on the periphery being generally poorly resourced with diverse topography (steep escarpments to relatively flat coastal plains) contributing to the challenge of providing a cost effective water services infrastructure.
- A population of slightly in excess of 3 million with a predicted static growth rate, averaged over the period to 2020.
- A backlog in the provision of access to basic water supply to 72 775 households and access to basic sanitation to 168 484 households.
- An established national strategy of free basic water but an evolving strategy of free basic sanitation.
- A Strategic Framework for Water Services – adopted by National Cabinet in September 2003 – which provides policy for water services and sets a framework for its implementation over the next 10 years, specifically setting targets for all households to have access to basic water supply by 2008 and access to basic sanitation by 2010.
- A City IDP and Spatial Development Framework which provides strategy and policy direction for the WSDP (EWS, 2003)

## **5.2 Case Study Areas**

The purpose of the case studies, as explained in Chapter 4, is to analyse how the disparities in housing, water and sanitation policy initiatives, in informal settlement upgrading, manifest themselves in implementation. The case studies were selected on the basis of their upgrading stages and unique characteristics. They present a research project with an authentic environment for understanding issues of disparities in housing, water and sanitation policy initiatives in informal settlement upgrading projects. Both Barcelona 2 and Amawoti Cuba have features and characteristics appropriate for investigating the housing, water and sanitation policy implementation issues as hypothesised by this dissertation. They are both informal and have a very long and interesting history.

The section below introduces the two case study areas within their immediate location of Ethekwini Municipality. It also discusses important features of their surroundings. It discusses constraints and opportunities provided by these areas. It also establishes relationships between these two case studies and their surroundings with the purpose of analysing the impact, negative or positive, of each to one another.

## **5.2.1 Barcelona 2**

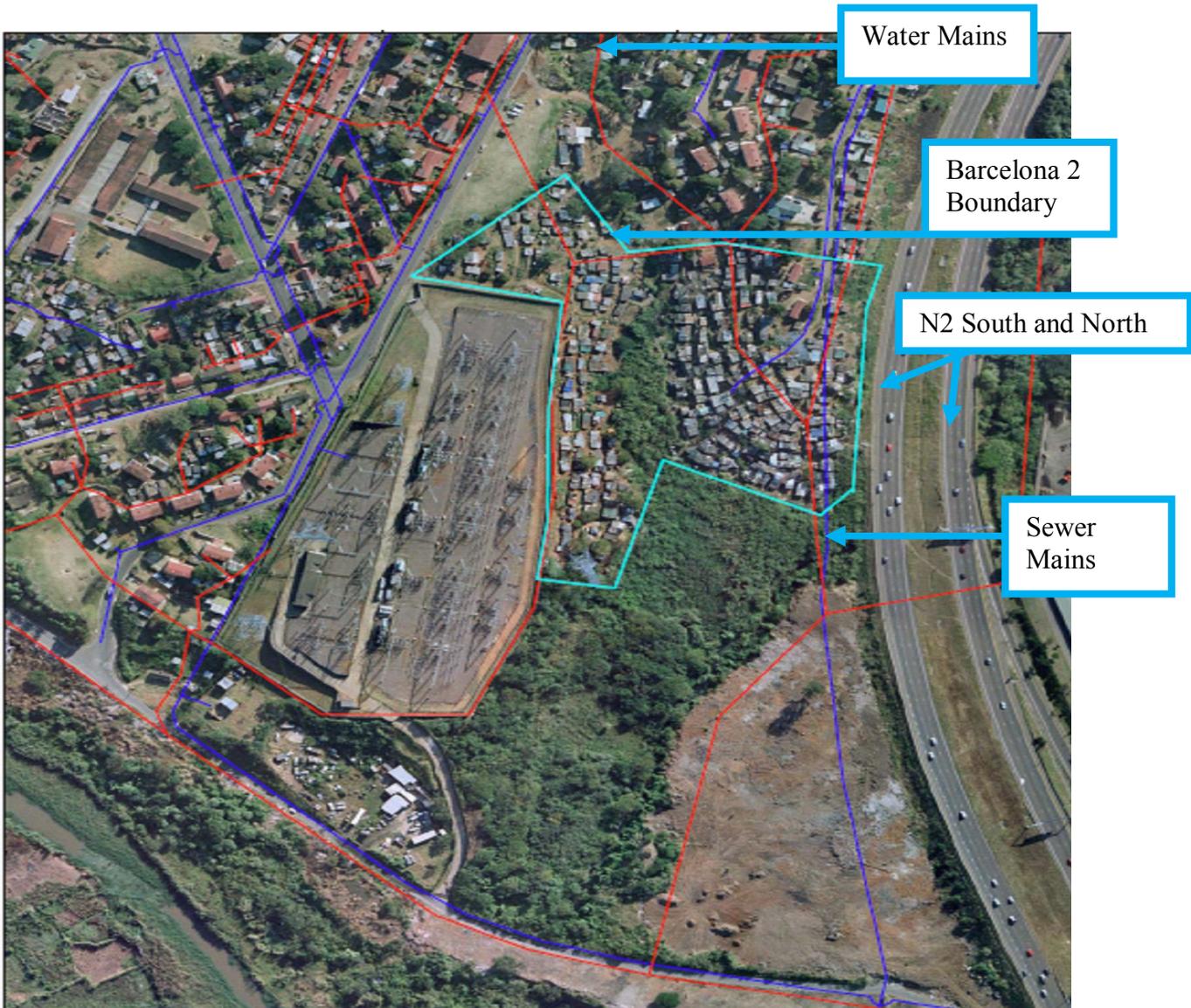
### **5.2.1.1 Background and overview**

Barcelona 2 informal settlement falls under Ward 75 and is located in the Southern region of EtheKwini Municipality. There are 375 households living in this area. It is located in a very hazardous area between the power station and the N2 Northern Freeway (see Map 5). Barcelona 2 is part of Lamontville Township. Built in 1934, Lamontville is Durban's oldest African township. Intended for members of the aspiring African middle class, it was also home to thousands of workers in the nearby south Durban industrial areas ([durban.gov.za](http://durban.gov.za)). The history of Barcelona 2 informal settlement is deeply embedded in the history of Lamontville. It cannot be separated by any means. Lamontville Township has a very rich political history. A number of politicians were born and bred in Lamontville. Its citizens are very politically conscious owing to its political past between the African National Congress and Inkatha Freedom Party during the 1980s ([www.durban.gov.za](http://www.durban.gov.za)). According to its residents, Barcelona 2 also has a very close relationship with S.J. Smith Hostel located across the N2 Freeway. Most of the residents of Barcelona 2 have relatives in the hostel or they have previously lived there themselves. Although S.J Smith Hostel does not fall under Lamontville planning unit, it has a significant influence on Barcelona 2.

Map 5 (page 74) shows the Lamontville planning unit boundaries under which Barcelona 2 falls. These boundaries have a significant influence on the character of Barcelona 2. Some of the areas within Lamontville planning unit serve as points of entry into Barcelona 2. Barcelona 2 residents are highly dependent on these areas for social amenities and other basic services. In terms of service networks, Barcelona 2 is well located as far as bulk infrastructure is concerned, particularly water and sanitation infrastructural services (see map 3 (pg72)). It is located with the sewer network and water main network of EtheKwini Municipality. Infrastructure network of Lamontville and surrounding areas offer access to opportunity for Barcelona 2 in terms of infrastructural services.

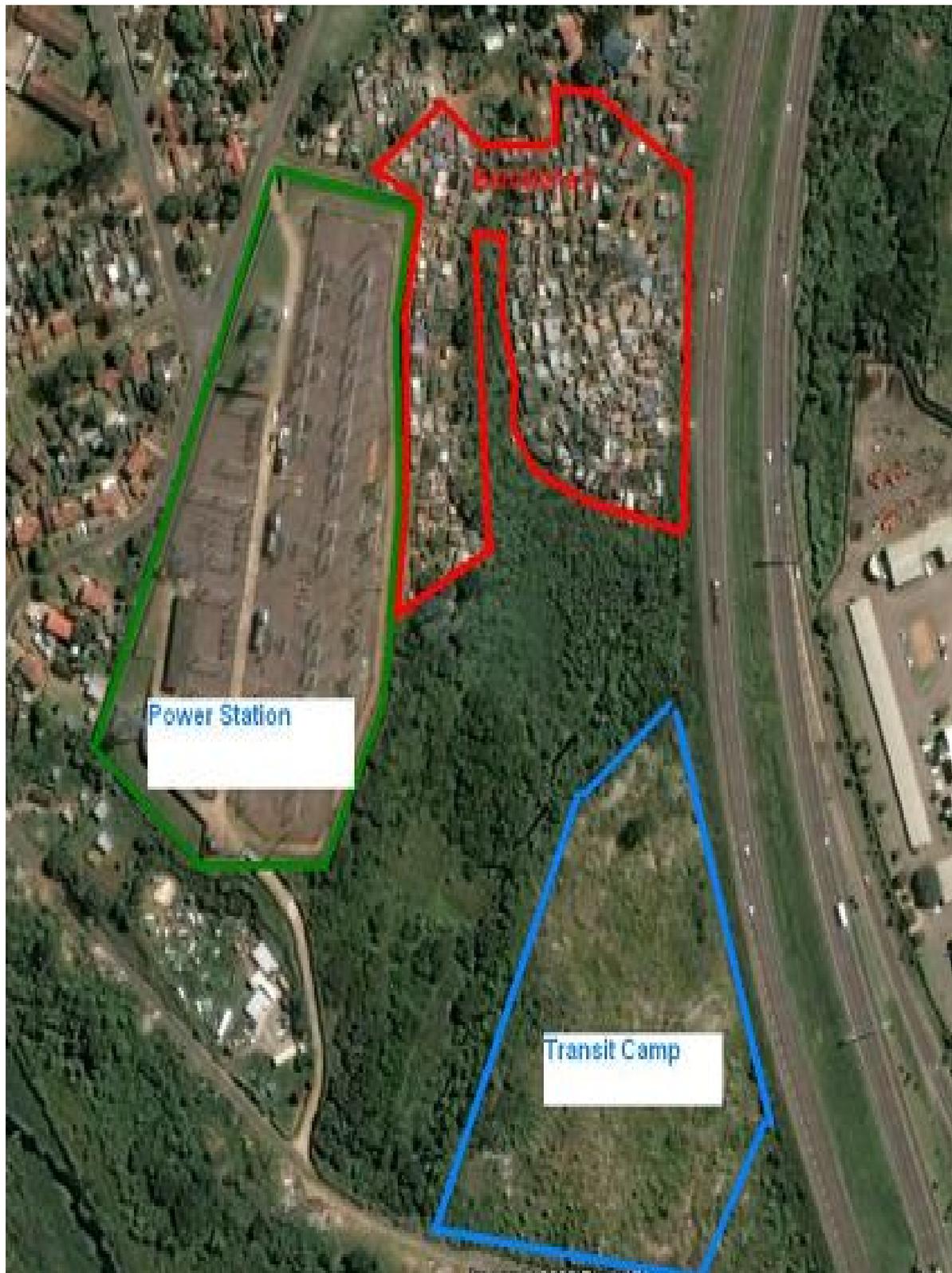
Map 3 (pg72) shows that Barcelona 2 is well located in as far as bulk water and sanitation infrastructure is concerned. The availability of water and sanitation infrastructure indicates a possibility of cost effective basic water and sanitation delivery within the context of upgrading.

**Map 3: Water and Sanitation Mains in Barcelona 2**



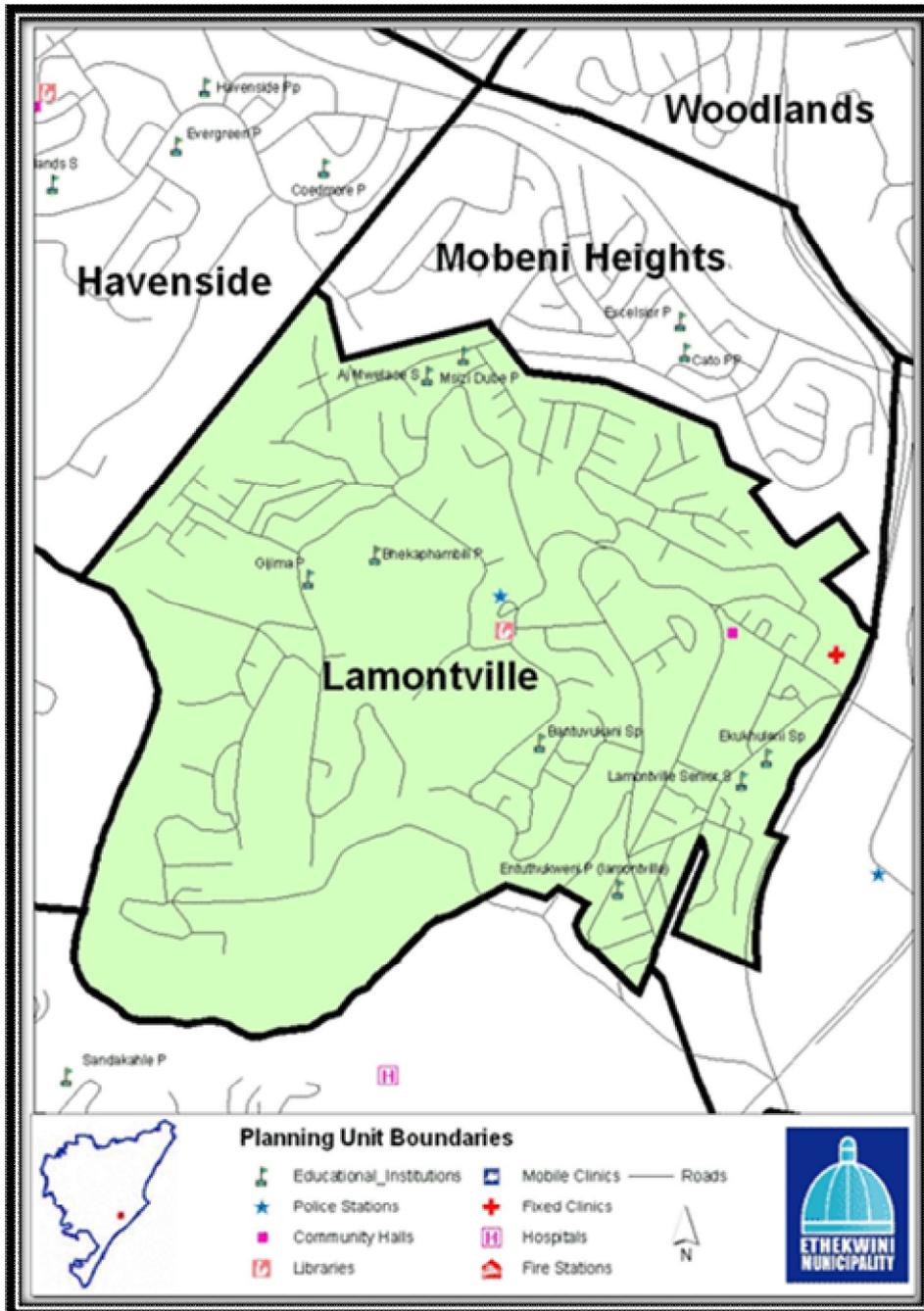
Source: adapted from Google Earth: (accessed, 2008)

**Map 4: Electric Substation and Transit Camp**



**Source:** (Google Earth, 2008)

**Map 5: Lamontville Planning Boundary Unit**



Source: (<http://capmon.durban.gov.za/>)

### 5.2.1.2 Access to water and sanitation

Lamontville has an acceptable level of access to water supply and sanitation facilities ([www.durban.gov.za](http://www.durban.gov.za)). Water supply system consists of dominantly conventional metered water supply, standpipes and ground tanks (see Figure 4).

Only the formal part of Lamontville has access to metered water supply. Informal settlements around Lamontville, including Barcelona 2, use ground tanks and standpipes for their water supply. According to the results of the research, out of the total population of approximately 150 households, only less than 5 households had access to either a ground-tank or a standpipe in Barcelona 2 (Author's field survey, 2008). As it will be discussed in Chapter 5, households depended on neighbours who had access to ground-tanks for their water supply (see Figure 4)

**Figure 4: Ground Tanks in Barcelona 2**



**Source:** (Author, 2008)

In terms of access to sanitation services, Lamontville has water borne sanitation system for most of its formal households.

The majority of informal households, especially in Barcelona 2, use various unimproved sanitation facilities. These include using pit latrines and the bush. Unlike Amawoti-Cuba, Barcelona 2 is located within a more formalised and serviced township. Therefore, there is likelihood that the results will show some inconsistencies in the number of households with access to basic household services. From the field visit observation and responses, households in Barcelona 2 do not have access to any form of improved sanitation. Barcelona 2 residents reported previously practising open defecation. Few had pit latrines as mentioned earlier. The results from the fieldwork also confirm that there has been no intervention from the city in terms of sanitation. The fact that 100% of the households were not satisfied with their sanitation further illustrates the sanitation challenge in the area.

## 5.2.2 Amawoti-Cuba

### 5.2.2.1 Background and overview

Amawoti-Cuba is one of the many informal settlements that make up the greater Amawoti area. It is located in the northern part of Ethekewini Municipality. There are 14 informal settlements in total. Amawoti-Cuba alone has 946 households with an average household size of about 7 people per household. The area consists of people of various ethnic origins. The fundamental difference between Amawoti-Cuba and the rest of Amawoti can only be attributed to informal settlement upgrading that has taken place.

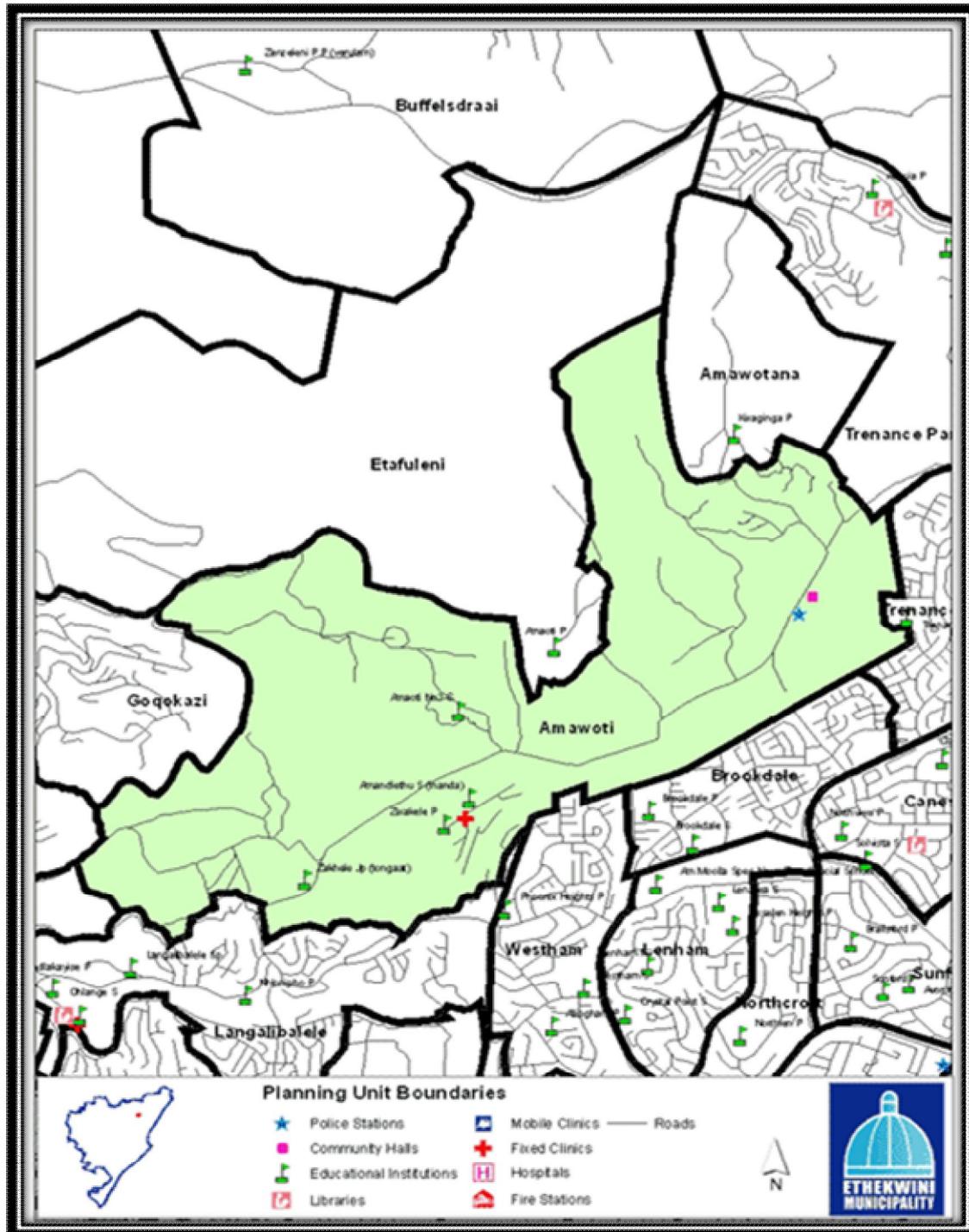
**Map 6: Amawoti-Cuba Boundaries as Perceived by its Residents**



**Source:** (Author, adapted from Google Earth, 2008)

Map.7 on page 77 shows Amawoti within its planning unit boundaries. Amawoti is one of the largest informal settlements in Durban. The whole area covers an extent of approximately 700ha and extends from the Phoenix boundary in the south to the boundary of the North Local Operational Entity in the east.

**Map 7: Amawoti Planning Boundary Unit**



Source: (<http://capmon.durban.gov.za/>)

Amawoti consists of a number of small portions of informal settlements organised into communities: Nigeria, **Cuba**, Zimbabwe, Palestine, Moscow, Libya, Namibia, Angola, Mozambique, Tanzania, Zambia, Geneva, Lusaka 1 and Lusaka 2 (Enumeration, 2004). It is not clear why each of these communities were given such names.

Observed while conducting fieldwork for the European Commission project in 2007 was that these communities are occupied by a number of foreign nationals from across the African continent. Some of them are unemployed immigrant workers. Their nationality contributes to the formation of informal settlements as they do not qualify for housing subsidies. Amawoti Cuba forms a part of Amawoti informal settlement as indicated above. Therefore, Amawoti Cuba cannot be discussed in isolation. Boundaries between Amawoti-Cuba and its neighbours are not formally defined but only understood by the community. There are no visible demarcations but its residents understand and know where boundaries are. Like most informal settlements, Amawoti is a very impoverished settlement. Its current population is approximately 14500 According to the Ethekewini (2008) 27% of the City's population is unemployed while 20% is not economically active. Only 18% of the entire population is employed. There is also a high rate of illiteracy. It is poorly serviced in terms of access to water and sanitation as well as other basic services. 40% of its household types are informal ([www.ethekwini.gov.za](http://www.ethekwini.gov.za)). There is a lack of major community facilities. The area is serviced by one clinic, one police station and only four schools. There are no libraries, community halls, mobile clinic stations.

#### **5.2.2.2 Access to water and sanitation**

The area is poorly serviced in terms of access to water and sanitation ([www.durban.gov.za](http://www.durban.gov.za)). However, 3 main water and sanitation projects were implemented around various communities of Amawoti. For instance, a 200 litre ground-tank water project was implemented in Amawoti Angola (unpublished EU project, 2007), and approximately 300 households were afforded clean water supply through this project. The ground tank project catered for all free basic water beneficiaries.

Households with less than 8 people were supplied with one ground tank per household. On the other hand, larger households, with more than 8 family members residing in the household, were given two ground tanks per household. These were based on the Free Basic

Water policy of Ethekewini municipality. These water and sanitation projects are being implemented in phases in various areas of Amawoti.

Water supply systems in the area include ground-tank, standpipes and community ablution blocks. Community ablution blocks serve as multipurpose service stations. They include water taps, toilets and shower areas. Ablution blocks are part of the Ethekewini Municipality projects that are being rolled out in various informal settlements ([www.durban.gov.za](http://www.durban.gov.za)). Forms of sanitation systems in the area include: pit latrines, ventilated pit latrines, open bush, ablution blocks and shared communal toilets. Generally, the level of sanitation service in Amawoti is poor.

Figure 5: Water Mains in Amawoti-Cuba



Source:(EWS, 2008)

Figure 5 shows water mains in Amawoti Cuba. These mains supply the standpipes in the area. There are no sewage mains closer to the area. As a result, there are no households with a conventional toilet system in Amawoti Cuba.

### **5.3 Summary**

The chapter introduced the study areas within their broader spatial location. Figures, maps and pictures were used to depict the spatial location of each case study. It described at various defining elements and characteristics each of the two case studies. It then introduced the two case study areas within their immediate surroundings. This was an important exercise in establishing the areas' level of access to service and infrastructure networks. Significant, but by no means surprising, were the high unemployment percentages and poor access to basic services and social amenities in the two areas. The chapter discussed significant challenges facing Ethekewini municipality in housing, water and sanitation delivery, particularly in informal settlements. The service delivery challenges facing the two case study areas are partly influenced by what is happening in their immediate surroundings. The general observation is that both case studies, individually, present a perfect scenario to analyse disparities in housing, water and sanitation policy initiatives. They represent typical but dynamic housing, water and sanitation challenges of informal settlements in South Africa. Each case study represents its unique context and character. Context analysis was important in the understanding of the overall picture of what is happening within the housing, water and sanitation sector in Ethekewini Municipality.

## **Chapter Six: Data Presentation and Analysis**

The objective of this chapter is to present and analyse data collected from the two case studies, Barcelona 2 and Amawoti-Cuba respectively. Research objectives are used as themes to allow for thematic analysis. Various sets of data will be presented and analyzed within the relevant theme with the purpose of answering research questions outlined in Chapter 1. Each theme represents a particular disparity or aspect of the housing, water and sanitation challenge. The objective of analyzing household data will be to uncover how the hypothesized disparity in housing, water and sanitation policy initiatives, and lack of integration and coordination, manifests themselves in de facto circumstances. Information from policy professionals will also be analysed under appropriate themes with the purpose of understanding the official perspective of policy evolution.

### **6.1 Policy Shifts**

This chapter tracks policy shifts from 1994 until recently. This is done with a view to understanding how flexible and innovative housing, water and sanitation policies have evolved over time. The main objective is to analyse how those policy shifts have impacted on the implementation of housing, water and sanitation policy initiatives in informal settlement upgrading. In analysing the available data one should bear in mind that this increasingly complex society confronts us with more and more difficult policy problems that are not easily solved. Although these problems may be “attacked” or “addressed,” often they have no absolutely correct answers” (Patton and Sawicki, 1993:4).

This chapter conducts a policy analysis exercise. It is therefore important to consider challenges facing policy analysis in the present day. There are no correct answers to policy problems (Patton and Sawicki, 1993). However, policy analysis can assist in identifying and defining shortfalls within policies. This can then contribute towards the development of alternative approaches to policy formulation and implementation.

#### **6.1.1 Housing policies**

The key informants from both Ethekwini Housing Unit and Ethekwini Water and Sanitation agreed that housing policy, like water and sanitation policies, has indeed evolved from none to basic, and ultimately, advanced stages. The key informant from Ethekwini housing stated that housing policy, in particular, has evolved from the discriminatory and racially based

policy to a more inclusive policy. Changes in the political system from apartheid to a democratic dispensation played a major role in the shift of housing policy. Before the transition period, housing policy only catered for whites, Indians and coloureds (Parnell, 1989). The 1992 National Housing Forum, made up of representatives from mass political groups, the business community, the building industry, financial institutions, unions, the civics and development organisations, gave birth to a consensus-based housing policy (Tomlinson, 1999). This policy served as an alternative to previously racially based housing policy. From the process came an inclusive policy which laid a foundation for all housing activities and delivery in democratic South Africa.

Bailey, a manager in the Housing Research Unit since 1993, recalls that the previous housing policy was dominated by site and services. He states that since he started working for the municipality in 1993 the policy has shifted a great deal. The site and services scheme was not supported by any subsidy scheme. Housing delivery was purely market related. He further states that implementation of policy was a challenge because in most circumstances there were only one or two planners within the then Durban Metro. This was a period before 1994 and shortly thereafter and resulted in imbalances and inconsistencies in how the policy was implemented. The period was defined as 'check book' planning. This referred to one planner having absolute power over a number of projects. There was also no proper financial planning for projects. One planner determined whether the project could be done or not based on individual judgement without any checks and balances.

The respondents agreed that the introduction of the new housing policy had provided a shift towards normalising the housing environment and ensuring access to housing for all. They all agreed that even though this was an ideal objective in principle there were numerous challenges. The delivery of housing was slow and unsatisfactory in many respects. Problems with quality of housing dominated the housing scene. There were also problems with funding institutions and large construction companies. These large construction companies were reluctant to participate in the housing process as it was deemed unprofitable and risky.

The key policy informants agreed that the focus on meeting the housing backlog isolated the housing delivery process from the broader developmental agenda. Mark Bailey, the housing key informant, claimed that Housing practitioners and their respective institutions operated in 'silos' to achieve their narrow objective of meeting the backlog. He further states that this

individualistic pursuit of departmental targets was perpetuated by the principles of the housing policy.

The above mentioned practice seemed to have been a major obstacle towards achieving a better life for all through housing delivery. The introduction of the Comprehensive Plan for development of Sustainable Human Settlements in 2004 is largely seen by all key policy informants as a particularly significant policy evolution. They justify this establishment by pointing out that the BNG, unlike the Housing White Paper, states how the objectives of the policy are to be achieved. The BNG also defines housing delivery within a broader development spectrum.

The BNG (2004), as it is known, provided a policy shift from quantity to quality with emphasis on housing as a process not merely a product (Tomlinson et al, 2004). The shift also entailed considering various housing delivery options and instruments. The BNG also calls for cross-sector based housing delivery. 100% of the key informants conceded that even though policy has evolved there are still substantial challenges facing the housing policy sector in South Africa in terms of aligning it to other sectors.

Furthermore, Mr Bailey, the key informant, sees the introduction of the BNG as particularly crucial to how informal settlements are currently dealt with. The BNG focuses intensively on informal settlement upgrading as a housing delivery option. All key informants considered this to be a significant policy shift. They pointed to Section 3.1 of the BNG as a significant evolution of informal settlement policy within the housing policy. Section 3.1 of the BNG outlines the plan to progressively eradicate informal settlements in South Africa (BNG, 2004). The BNG (2004) is to do this through introduction of a new funding mechanism for informal settlement upgrading. The mechanism is envisaged to support upgrading on an area-wide as opposed to project basis. The overarching objective of Informal Settlement Upgrading Programme is to integrate informal settlements into the wider urban fabric with minimal disruption to social networks in the affected communities.

Informal Settlement Upgrading Programme cannot by itself ensure the development of sustainable human settlement. It has to be supported by effective legislative framework. The framework needs to enforce integration of ISUP objectives and principles with broader service delivery objectives.

Policy evolution was also described as beyond just housing, water and sanitation policy shifts. Related legislations such as Intergovernmental Relations Act (2005) were seen as contributing factors to the evolution of housing, water and sanitation policies. The objective of IRG Act is to facilitate co-ordination in the implementation of policy and legislation including:

- coherent government;
- effective provision of service;
- monitoring implementation of policy and legislation, and
- realisation of development goals of government as a whole (DPLG, 2005:7)

The objectives of Intergovernmental Relations Act (2005) echo broader intent of this thesis. The introduction of Intergovernmental Relations Act (2005) supports the presupposition that there is a lack of coordination and integration in housing, water and sanitation policy initiatives in informal settlement upgrading. All the key informants acknowledged the IRA as a positive establishment towards ensuring cooperation between government departments and for effective and integrated service delivery. The high proportion of respondents dissatisfied with housing, water and sanitation delivery suggests a lack of effective provision of service in both Amawoti-Cuba and Barcelona. The observed lack of quality and shoddy workmanship in the new RDP houses in Amawoti also illustrate the lack of monitoring of policy implementation and legislation. Amawoti-Cuba had a number of houses that were not adequately completed. Beneficiaries had occupied those houses without proper finishes.

### **6.1.2 Water and Sanitation policies**

There was a consensus amongst the key informants that water and sanitation policy have evolved from none to very basic and eventually advanced policy in a similar manner to the housing policy. They considered water and sanitation policy as progressive since 1994. They argued that the policy is now pro-poor orientated and is very innovative in developing new approaches compared to what existed previously. Key informants stated that the previous water and sanitation policy was based on market driven delivery. As a result, the poor were often excluded and many did not have access to adequate water supply and basic sanitation. Some of the shortfalls in water and sanitation policy were seen as attributable to the lack of attention previously given to water and sanitation issues in general and in particular by the constitution of the Republic of South Africa. As soon as water and sanitation were enacted as

basic human rights in the Constitution there was steady but solid evolution of policy. The policy began to cater for the poor. The Free Basic Water programme is one of the positive changes which were brought with the evolution of policy. The policy started to cover a broader scope of the society that had previously been ignored. The introduction of basic sanitation levels for low-income communities was another innovative evolution of policy. These innovations were largely informed by the changes and trends in international water and sanitation environment. The influence comes particularly from the UN policy documents outlined in Chapter two.

Free basic water policy is seen as part of the major shift in paradigm that is taking place within the water supply sector. Participants cited a number of innovative sanitation interventions and technologies that symbolise the continuing shifts in policy in terms of sustainability. For example, the introduction of dry toilets is seen as a valuable contribution to water conservation and sustainability of sanitation provision to the poor (see Figure 6: p85). The Urine Diversion (UD) toilet invention is not suitable for informal settlements because of its permanency and lack of space, amongst other reasons. Urine Diversion toilets are an intervention that EtheKwini implements in peri-urban and rural areas. Areas like Ensimbini and Empushini have enough space to accommodate UD toilets (unpublished EU field survey, 2009). Figure 6 depicts typical UD toilets in a household in Ensimbini. The policy of EtheKwini Municipality is that a household with more than 8 members is supplied with two UD toilets each ([www.durban.gov.za](http://www.durban.gov.za))

**Figure 6: Urine Diversion Toilets**



**Source:** Author (2009)

These innovations amount to positive shifts of water and sanitation policy. Ethekwini Municipality is seen, by the key policy informants, as very innovative and pro-active in regard to the free basic water policy. Ethekwini is currently in the process of increasing the free basic amount from 200 litres of water per household per day to 300 litres per household per day. These are some of the innovative shifts in water and sanitation policies, particularly in the case of Ethekwini. The main question is, are these innovations transferable into effective service delivery? The responses from the case studies indicate otherwise. Effectiveness of service delivery can be measured in various ways. One of these ways is the recipients' satisfaction with their access to basic services. According to the data gathered (see appendix), recipients were not entirely satisfied with certain elements of service delivery. In Barcelona 2 100% of the respondents were not satisfied with their access to sanitation.

Misselhorn (2008) argues that, the policy shifts discussed above have not been adequately put into practice and translated into effective delivery on the ground. He argues that they have not been accompanied by the necessary changes in systems, mechanisms and regulations, nor has there been the requisite political will to enable real take-up on the alternative approaches at provincial and local levels. Evidence from the field results suggests that alternative approaches have not been adopted in implementation of policy. The 'silo' mentality still exists between housing, water and sanitation departments. It has been noted that although the BNG envisaged that municipalities would become the champions of putting the new policy direction into practice, by means of pilot projects, progress has been slow and unsatisfactory.

## **6.2 Policy Linkages**

"The global challenges of water, sanitation, and human settlements are inextricably linked" (UN-Economic Development, 2004:1). Even though the challenges in housing, water and sanitation policy initiatives are inextricably linked evidence of practical linkages is unclear. The response from the key informants interviewed in Ethekwini Municipality confirmed that linkages between housing, water and sanitation policies are important but are underdeveloped. They unanimously agreed that there were indeed linkages between housing, water and sanitation policy initiatives at a strategic level. However, the linkages at this level were not clearly defined. Identified linkages were only in principle. They were no means of ensuring that these linkages get developed into implementable initiatives. As a result, they remain underdeveloped and difficult to implement. 'In a supply-driven approach, 'planning

agencies plan at the sectoral level' (Moser, 1995a, p. 161) and therefore households are unable to make contextually and culturally specific cross-sectoral trade-offs. On the contrary, she argues that households and individuals do in fact plan cross-sectorally, therefore a demand-driven approach and inter-sectoral policy linkages are critical (Moser, 1995a).

One respondent, in response to whether there are any linkages between housing, water and sanitation policies, argued that it is a 'yes' and 'no' situation. He defined this as a situation where linkages existed in principle but not in practice. He cited that the housing policy insist on water onsite while the Water Act (1998) insist on water offsite. The Water Act's basis for water offsite are embedded in the principle that water can only be brought onsite if the site is 400m<sup>2</sup> or bigger if there is no water reticulation. However, he stated that RDP sites are often much smaller than 400m<sup>2</sup>. The average size of the RDP plot is around 200m<sup>2</sup>. The 200m<sup>2</sup> plots, according to the Water Act (1998), are unable to drain water properly unless there is efficient reticulation.

Contrary to this, the housing policy, in the norms and standards laid out in the Housing Code; insist on water being onsite without any particular specifications about site sizes. This represents a disparity in policy formulation because one would expect that both housing and water and sanitation policies and legislation would speak a similar language in terms of standards and specifications such as the one highlighted by the respondent above. The nature of this disparity is located at a strategic policy development process. It is a type of disparity that could have been avoided had policy formulation at national level included both Departments of Housing and Water Affairs and Forestry. Policies relating to the delivery of housing are developed independently by the Housing Department and there is a similar scenario for policies relating to water and sanitation provision. This is an indication that there is no adequate linkage between housing, water and sanitation policy formulation processes.

Key informants agree that the linkages between the policies were not adequately developed. For instance, policy development process continued to take place in 'silos'. Housing policy makers and water and sanitation policy makers develop policies in isolation without meaningful consultation with each other. Also cited by the respondents as the manifestation of the lack of linkages between housing, water and sanitation policies was the inability of different types of technology to co-exist and respond to one another. For instance, the housing policy has continuously delivered RDP houses with an internal toilet for poor

households while water and sanitation has attempted to deliver dry sanitation, ground tanks and roof tank technologies. More often than not these technologies are incompatible with each other. This is a clear indication of the lack of integration and coordination between housing, water and sanitation. Section 6.3 below will highlight how some of these disparities have manifested themselves in implementation. It will also provide pictorial evidence of this lack of linkages. While on the field trip the author interacted with residents of Cato Manor who told me that they had to collect water from the stand pipe to flush the toilet in the RDP house. This despite the fact that DWAF (2001:17) insisted on “the alignment of the housing development programme with the provision of the basket of services through the mechanism of the IDP as [is] essential to avoid duplication of subsidies and the construction of houses without services”.

On the contrary, one of the key informants believed that integration does exist at the strategic planning level. Integrated Development Plans are seen as providing some form of linkage between housing, water and sanitation at a strategic planning level. He pointed out that the IDP contains Housing Chapters, previously referred to as Housing Sector Plans, and Water Services Development Plans as a form of coordination and integration at a strategic planning level. He cited a stronger need for involving all line functions during the planning process as he believed that policy linkages exist but are not clearly defined and line departments in local government are unable to identify these linkages in implementation. Even though these linkages are sometimes recognised in strategic planning they are however not applied in project implementation. Ultimately, the linkages often turn into disparities at the implementation level.

### **6.3 Manifestation of Disparities in Implementation**

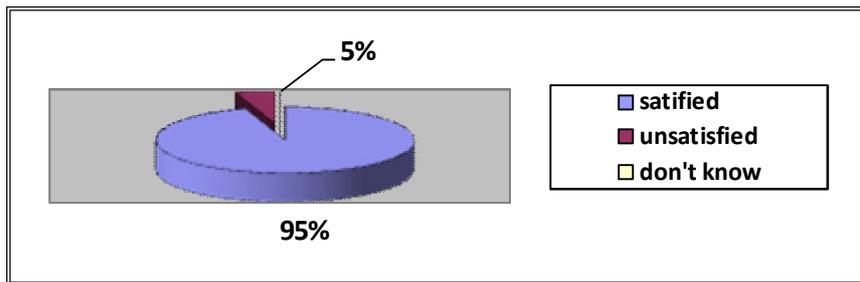
Disparities in implementation manifest themselves in various ways, namely, lack of satisfaction, duplication of services, duplication of subsidies, use of conflicting technologies, and lack of informal settlement transformation into sustainable human settlements. Community dissatisfaction is used here as an indicator of disparities in policy implementation. It was interesting to note that housing satisfaction was seen through the availability of other basic services such as water and sanitation and vice-versa. The use of housing satisfaction as an indicator of manifestation of disparity is informed by the role played by housing in facilitating access to other basic services such as water and sanitation.

Generally, householders base their housing satisfaction on the availability of basic services in the household (field survey). Generally, housing should not be considered as an independent entity but an element facilitating access to basic services as mentioned above. Observation from the field survey suggests that the physical quality of housing was not used as a basis to measure housing satisfaction. Rather its ability to facilitate access to water and sanitation was used as the basis for measuring satisfaction. The conclusion that could be drawn from the above is that lack of coordination and integration manifests itself in instances such as the one highlighted above where the satisfaction with one service is based on availability of other services. There are other means of evaluating how disparities in policy manifest itself in implementation: such as calculating cost of delivering services separately and collectively which was outside the scope of this study. However, to meet the objectives of this thesis, service satisfaction was used as the main indicator of the manifestation of these disparities.

Two scenarios and case studies were used to evaluate these disparities as explained in earlier chapters. The first scenario consists of the already upgraded informal settlement of Amawoti-Cuba. Housing, water and sanitation issues in this area are very different compared to the ones in Barcelona 2. Amawoti-Cuba already had access to RDP houses and has standpipes as their form of water supply which has a bearing on the findings. The second scenario is constituted by an ongoing informal settlement upgrading project in Barcelona 2. The residents and respondents in particular, have temporarily been relocated to transit camps. In these camps they have access to clean running water and sanitation facilities and they have been allocated transit camp houses while in situ upgrading is taking place in their original plots. These transit camps are much better than their shacks. In this case too, the situation might have influenced the responses and overall perception of housing, water and sanitation issues.

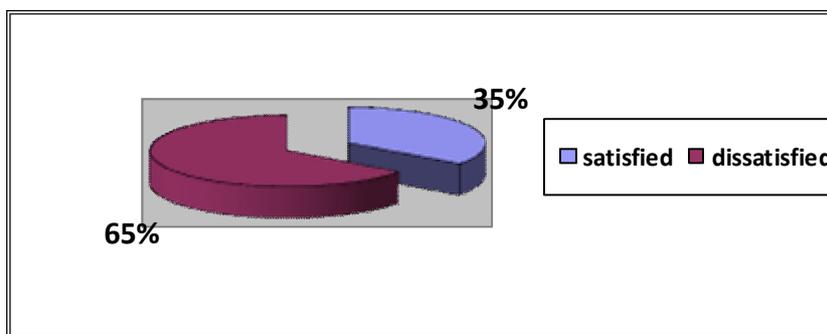
In Amawoti-Cuba, 95% of household respondents, who had access to RDP houses, were satisfied with the municipality's efforts to provide them with housing while 5% did not think the municipality was doing enough. It is difficult to explain the 5% trend but it is important to consider that most of the respondents lived in the area where shacks were still dominant. In a way they looked at themselves as privileged compared to their neighbours. Amawoti-Cuba is an interesting area because upgrading is such that it did not cover the whole area but happened in patches.

Figure 7: Number of Respondents Satisfied with Municipal Efforts to Deliver Housing



Source: (field survey, 2008)

Figure 8: Satisfaction with Municipal Efforts to Supply Respondents with Water



Source: (field survey, 2008)

On one hand, 65% of respondents thought that the municipality was not doing enough to ensure them access to water while only 35% were satisfied with the municipality's efforts to provide them with water (see figure 8 above). Respondents measured their satisfaction and dissatisfaction with water based on internal connections and distance from the standpipes. For some, RDP houses had created the expectation that water will be connected individually and internally. All the RDP houses in Amawoti-Cuba had internal roof tanks that were not connected. This seems to have created expectation that water was to be connected internally. The above indicates how lack of integration and coordination manifests itself as disparities. The rigidity of housing standard and design, as prescribed in the Housing Code (1997), creates expectations that cannot be fulfilled in practice. There is no integration in the level of standard and service to be delivered. If housing, water and sanitation policy implementation were coordinated at the project level, the above challenges would not come about. The 'toilet space' in the RDP house also created an expectation of individual connection. Conventionally, inside toilets are flush toilets which require that the house be reticulated. On the other hand, 95% of respondents did not think the municipality was doing enough to provide them with sanitation while 5% were satisfied with efforts. The 5% is astonishing and

very difficult to explain. 95% is easy to explain because all household respondents did not have access to an improved toilet facility. They all depended on traditional pits. There was no visible intervention by the municipality to provide sanitation in this area. Figure 9: Grey and Figure 10: illustrate the current sanitation situation in this area.

**Figure 9: Grey Water Problem in Amawoti-Cuba**



**Source:** (Author. 2008)

As discussed earlier, dissatisfaction with housing, water and sanitation can be used as an indicator of manifestation of a gap in policy implementation. Admittedly, there are many factors that can influence satisfaction and dissatisfaction with the above services which may not necessarily be indicative of policy disparities in implementation.

**Table 8: General satisfactions with housing, water and sanitation**

	Satisfied	Dissatisfied	Partly satisfied	Total Population
<b>Housing</b>	25%	30%	45%	100%
<b>Water</b>	15%	55%	30%	100%
<b>Sanitation</b>	-	100%	-	

**Source:** (Author, 2008)

With that in mind, 45% of respondents were partly satisfied with their housing. 35% were completely dissatisfied and 25% were satisfied as shown in Table 8 (pg 91). The logic of these values is hard to explain. However, it was observed that respondents who were satisfied with their housing were either located closer to the standpipe and, or had an illegal water

connection. Illegal connection is when the household connects into a water main illegally without the permission of the authority in charge. The majority of the satisfied household respondents had one or two employed members of the family. For such households it was easy to construct their own decent improved traditional pit.

Table 8 on page 91 also shows that 55% of household respondents were not satisfied with their water source. They complained that the standpipe was too far away and thus unsafe to use at night. 30% were partly satisfied with their water source. Only 15% were satisfied with their water source. The responses were not based on the service itself but rather, interestingly, on location to the household. To a certain extent the distance between the standpipe and the household determined the level of satisfaction. The expectations, as mentioned earlier, created by the features of the RDP houses in terms of internal water connection also play a critical role in explaining the level of satisfaction.

It was also observed that some of the households were more than 200m away from the standpipes which is contrary to the provision of the water policy. The minimum standard of service is a standpipe provided to serve a community where the maximum distance from the furthest dwelling to the standpipe is 200 meters ([www.ethekwini.co.za/durban](http://www.ethekwini.co.za/durban)). Standpipes were installed as a temporary intervention in the area before upgrading took place. When upgrading was taking place, the process did not adjust to the new arrangements in terms of where water points were located nor were the water points adjusted to suit the new settlement settings as explained by key informants interviewed. 100% of the respondents were completely dissatisfied with their sanitation. The reason for this is that none of the respondents had access to an improved toilet facility. The majority of the area depended on traditional pits. As shown in figure 9 on page 91, some households attached traditional pits onto their RDP houses. Arguably, the purpose of delivering RDP housing is to improve lives of people which seem to be demeaned by images such as the ones in Figure 10.

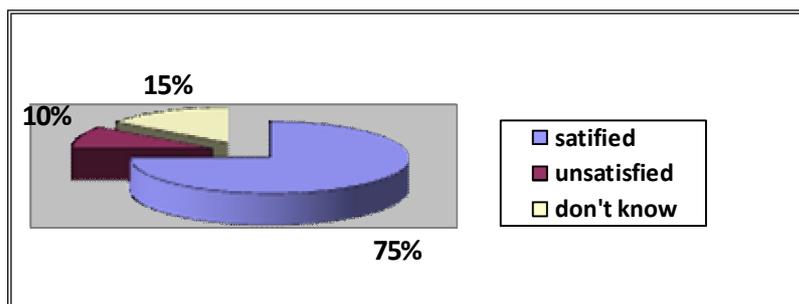
**Figure 10: A Pit Latrine next to newly built RDP House in Amawoti-Cuba**



**Source:** (Author, 2008)

In Barcelona 2, the respondents' views were influenced by the expectations that had been created by their move to the transit camp. All the respondents were not satisfied with their housing as they had just been moved from shacks. They considered shacks to be unsafe, inhuman, weak and uninhabitable by human beings. During the time of the survey, the situation in Barcelona 2 was such that 50% of the households had been temporarily moved from their shacks into transit camps. Each household was allocated a number corresponding to their shack number created by GIS.

**Figure 11: Satisfied with municipality's efforts to delivery housing**



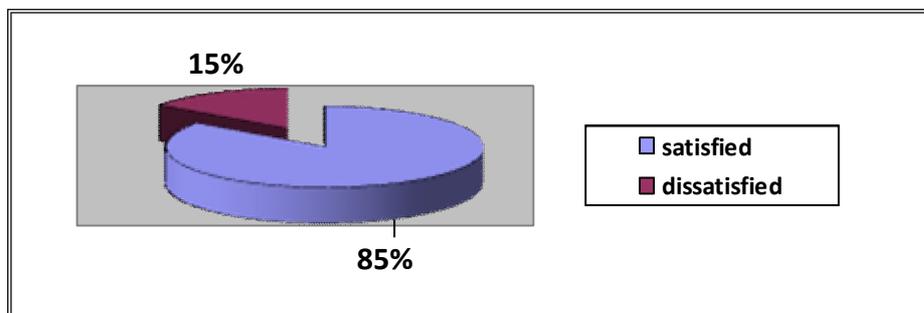
**Source:** (Author, 2008)

In contrast, figure 11 shows that 75% believed that the municipality was doing enough to ensure them access to housing. This could have been as a result of the expectation created by their relocation into a transit camp. The remaining 15% were sceptical of the municipality's efforts to provide them access to housing. These respondents seem to have understood the relocation to transit camps not necessarily as a step towards access to housing but the municipality's ploy to remove them from the hazardous area they had previously occupied.

Based on what is currently happening in the area, these fears were just perceptions. Construction is currently taking place in situ. The part of Barcelona 2 shown in

Figure 13: on page 95 has been paved to serve as a buffer between the upgraded area and the power station. 85% of respondents said that the municipality was doing enough to ensure them access to water while 15% thought the municipality was not doing enough (see Figure 12:). The respondents' perceptions of the municipality's efforts are critical in evaluating their expectations and the 85% affirmative responses were, to a certain extent, influenced by the services in the temporary accommodation.

**Figure 12: Satisfaction with Municipal Efforts to Supply Respondents with Water**



**Source:** (field survey, 2008)

All the respondents interviewed thought the municipality was not doing enough to ensure them access to sanitation. No respondents had access to an improved toilet in Barcelona 2 before being relocated to a transit camp. Residents depended on traditional pits and the bush. The municipality had not provided any form of sanitation in Barcelona 2. According to the residents, there were no signs that the municipality was going to provide any sanitation facilities any time soon. In this instance household respondents' perceptions were too strong to be influenced by the sanitation facilities provided by the temporary accommodation. To make matters worse, some of the toilets in the transit camp were not functional. All the respondents showed low levels of satisfaction with their housing, water and sanitation. Even though some respondents thought that the municipality was doing enough to provide them with housing, 100% of the respondents were not satisfied with their housing.

A transit camp was definitely not seen as housing by the respondents. Also very interesting was the fact that there were a sizable percentage of respondents who were satisfied with their water supply even though they did not have water before moving to the transit camp.

The majority of them depended on neighbour's ground-tanks and vendors for water. 90% of the respondents were dissatisfied with their lack of access to an improved toilet facility. As mentioned earlier, none of the residents in Barcelona 2 had access to any form of improved toilet facilities. There was also a general perception that housing was not going to include the provision of toilets. This perception was informed by what some of the respondents had witnessed in other upgrading projects.

**Figure 13: The Unlikely Neighbors: Shacks built next to a Power Station in Barcelona 2**



**Source:** (Author, 2008)

Figure 13 above (pg 95) shows the dangerous location of Barcelona 2. In the event of natural disasters such as explosions and electrical storms proximity to the power station can be dangerous. This becomes one of the difficult issues in the process of deciding whether to relocate or upgrade in situ. In most circumstances residents resist relocation. The resistance is often informed by existing social networks in informal settlements. Arguably, the resistance to relocate is also supported by civil society organisations representing the informal settlement residents. The recent cases in Western Cape and Gauteng can substantiate this. A case between Landless People's Movement vs. City of Johannesburg and Delft Symphony Residents vs. the City of Cape Town are typical examples where civil organisations have supported resistance against relocations ([www.abahlali.org](http://www.abahlali.org)). Whether their actions are

justifiable or not is another issue. Observed, during an EU survey, in Kennedy Road Informal Settlements is that residents have organised themselves, based on their social network, in resistance against relocation. In the case of Kennedy Road it is very difficult to understand the merits of resistance as the area is built on a landfill and has unstable soil. Civil organisation such as Abahlali Basemjondolo supports residents' action amid the facts mentioned above.

Based on a couple of reported cases, resistance against relocations has become a trend in informal settlement around South Africa. The residents of Barcelona 2, in anticipation that they would be relocated, reacted negatively towards any questions of relocation. Barcelona 2 residents stated clearly that they would not want to be relocated to somewhere else. This illustrates one of the many spatial problems of informal settlements in EtheKwini Municipality.

#### **6.4 Funding of Upgrading Programme**

Access to finance is one of the most important elements of the informal settlement upgrading programme. Policy professionals from housing, water and sanitation, in answering policy funding initiatives question, referred to their respective policy funding mechanisms as an important policy linkage.

Housing professionals referred to the housing subsidy scheme as the main funding instrument for informal settlement upgrading. They cited various subsidy bands that are applicable to informal settlement upgrading. Water and sanitation professionals also referred to the DWAF funding policy, Municipal Infrastructure Grant (MIG) and external agencies. No holistic funding instrument had been developed for informal settlement upgrading. A holistic funding instrument refers to an element of funding that takes into account all development needs of informal settlement upgrading and which covers housing development cost, water supply cost and sanitation facilities development cost. Evidently, there is a gap in policy funding for informal settlements and policy professionals are in agreement with this. According to Misselhorn (2008), based on the somewhat optimistic concept of co-operative governance, it was thought that various departments would seamlessly co-operate to provide the necessary funding (i.e. Department of Housing provides funding for top-structures, Department of Land Affairs provides funding for land acquisitions, MIG provides funding for infrastructure such

as roads, water and sanitation). From the evidence gathered, the funding system seems to be inundated with flaws. Even though the BNG continuously suggests elasticity, provincial government insist on only paying for top structure and telling municipality to source alternative funding for engineering services such as water and sanitation.

There was consensus between the professionals that housing projects and water-sanitation projects took place separately at different intervals in informal settlement upgrading. This was evident in Amawoti-Cuba where residents had access to new RDP housing without sanitation. The only form of water supply residents had access to standpipes which, as mentioned earlier, are a temporary intervention in informal settlements. This caused delays in connections to the households. Policy professionals from the water and sanitation unit believed that the housing unit did not consult with them adequately. At times EWS needed to adjust their budgets because housing had upgraded an informal settlement without consulting them. Consequently, they had to enter the project at a very late stage after housing had been constructed. Apart from this lack of institutional coordination, there are cost implications for policy implementation related to location.

## **6.5 Proximity of Bulk Services to Informal Settlements and its Cost Implications**

Informal settlement upgrading was considered to be a very costly policy to implement. Distances from bulk infrastructure were considered to be the main challenge in this regard according to key informants interviewed. Some informal settlements are located on the periphery of the city outside the main sewer networks and water mains and sometimes on very steep undevelopable land. Housing professionals conceded that in most cases relocations are an option instead of in situ upgrading albeit subject to community resistance. However, they considered in situ to be costly to implement. Topography was considered as the biggest challenge even though Ethekewini received 15% more on their housing budget compared to other provinces.

The above cost implication is applicable to Amawoti Cuba which is located on the periphery of the city. As illustrated in Figure 5 (pg 79), there is no sewer main located close to the area. This will make it difficult to install conventional sanitation in the area. Even though Ethekewini sanitation policy offers an alternative of dry toilets for such areas, the 'RDP' houses constructed in the area do not allow for such alternatives. Each of these 'RDP' houses

has a space for an internal toilet thus creating the expectation by the beneficiaries that a conventional toilet system will be installed.

Water and sanitation policy professionals found policy implementation in informal settlements very expensive and difficult to implement. According to water and sanitation professionals the clause in the Basic Water and Sanitation Policy prohibits intervention into an informal settlement that is under the Five Year Housing Plan. As a result Ethekwini Water and Sanitation Unit find itself having to provide services to the same group of beneficiaries for a term longer than 5 years. Informal settlements intervention in the temporary provision of water and sanitation is considered inevitable but very costly in terms of maintenance and later upgradability.

## **6.6 Identified Disparities**

Disparities in housing, water and sanitation policy initiatives are multifaceted and are found at various levels of policy life-cycle as revealed by the findings of the study. Even though policy shifts occurred at different time intervals for each of these policies it does necessarily form an element of disparity. However, it does have an impact on the level of advancement for each of the policies.

The main disparity that was identified was lack of integration and coordination at the policy formulation and development level. Housing, water and sanitation policies are a statutory obligation of two different departments, Department of Housing and DWAF respectively. The process of policy development therefore occurs within these silos. Department of Housing bases its policy on its needs, targets and goals and so does DWAF. There is no forum for negotiated policies which will facilitate a cross-sectoral policy development process. Consequently, housing, water and sanitation policies are not incongruent with one another.

On the one hand, legislative framework is rigid and sector specific. Norms and standards introduced by legislative frameworks of housing, water and sanitation are not receptive of technological innovations. For example, the norms and standards stipulated in the Housing Act of 1997, outlining the acceptable level of an 'RDP' house, do not support the technological choices introduced by the Water Services Act of 1997. One significant

disparity is with the dry-compost toilet technological innovation. The Housing Act continues to insist on an internal flush toilet. In the environment of high water prices and projected drought, policy initiatives are expected to support each others' initiatives, particularly when they support sustainability. Figure 9 on page 91 depicts a new RDP house with a pit latrine attached to it which illustrates the crucial lack of integrated support for technological choices. Housing Act's choice of an internal toilet facility contradicts Water Services Act choice of providing water offsite for smaller, typical 'RDP', plots.

As a result of disintegrated and uncoordinated policy formulation process, linkages between these policies are generally underdeveloped and thus unclear at the implementation level. There is evidence of linkages at a strategic planning level as it will be discussed below. Even though underdeveloped and unclear their development at a strategic planning level is innovative. Integrated Development Planning is one of the significant tools for facilitating the development of these linkages. Through Housing Chapters and Water Services Development Plans aligned with the IDP is an attempt to integrate housing, water and sanitation delivery processes. The negative implication, however, of placing integration ideals within one 'master plan' is that if the plan fails, integration also fails. Therefore, integration becomes an objective directly entrenched in the effectiveness of a single document, the IDP.

Moreover, the IDP process alone does not guarantee effective cross-sectoral engagement. It is merely a tool aimed at facilitating the service delivery process. Participation in the IDP process is often seen, by various departments, as simply a statutory obligation and merely part of the department's duties (Author's survey, 2008). Most IDPs, including the one for Ethekwini, have high level goals often distant from implementation. Evidence from the field agrees with the above statement. For example, in Barcelona 2, there was no sign of integration between housing, water and sanitation provision as the IDP asserts. The community participation part of the IDP did not seem to have taken place.

The funding for informal settlement upgrading and the delivery of basic water supply and sanitation services is informed by specific policy directives. As policies administering the delivery of each of these services are formulated with departmental objectives in mind, funding is narrowed towards achieving the objectives discussed below. Departmental service backlogs mainly influence the funding system. It reacts to the narrow objective of eliminating the backlog. Subsidy programme, as a preferred funding system for service delivery for poor

South Africans, has disintegrated (Author's survey, 2008). Housing has its own subsidy programme while water and sanitation also has its own. The effectiveness of the subsidy programme is thus limited. It is safe to assume that if subsidy programmes for housing, water and sanitation were consolidated they could be more effective. The consolidation of subsidy schemes, as a recommendation of course, is more likely to have optimum success in achieving better life for all through sustainable human settlements development.

The location of informal settlements from bulk infrastructure networks renders informal settlement upgrading an expensive process in general. This has a negative effect on the delivery of basic services such as water and sanitation. The Cost Surface Model recently developed by Breetzke (2007) reveals negative cost correlation between access to peripheral land and bulk infrastructure. He further suggests that low income housing projects in peripheral locations, if fully serviced, often attract exceptionally high bulk infrastructure costs which must be financed from the municipal budget or from national infrastructure grant monies. Calculating the bulk infrastructure costs for every potential project can be time-consuming and costly and therefore generally occurs only at project packaging stage rather than at the planning stage.

The above identified disparities have a direct impact on implementation of housing, water and sanitation policy initiatives in informal settlement upgrading projects. More than 50% of respondents were dissatisfied with either housing or water or sanitation. Dissatisfaction with the delivery of housing, water and sanitation is used as a measure of how disparity in policy manifests itself in implementation. Dissatisfaction with the delivery of housing, water and sanitation seemed to be very significant in the two case study areas and this has numerous negative ripple effects. Lack of satisfaction hinders household investment in Housing. At Amawoti-Cuba, for instance, there was not even one consolidated 'RDP' house. This was influenced by the respondent's lack of satisfaction with water supply and sanitation service delivery in the area. In essence, they saw no value in their housing and thus no drive to consolidate.

## **6.7 Summary**

This Chapter has presented and analyzed data using objectives of the dissertation as themes. Each theme represents a specific objective outlined in Chapter 1. The data from policy informants was presented and analyzed under the theme of policy shifts and linkages. The household surveys are used. The data presented and analyzed indicate that the challenges facing informal settlement upgrading were rooted at all levels of policy initiatives. It became clear that challenges in implementation are just a manifestation of a much bigger problem.

# **Chapter Seven: Summary of Findings, Conclusions and Recommendations**

## **7.1 Introduction**

The purpose of this chapter is to provide a summary of findings, conclusions and recommendations. The chapter concludes the dissertation by revisiting the research questions and sub-questions and then evaluates whether or not the research has been able to answer these questions. Table 1 (pg5) on chapter outlines research questionnaires which, for the purposes of this chapter, will serve as the guide to place the summary of findings within specific themes and these will be used in this chapter to evaluate whether or not these research questions were answered.

## **7.2 Policy Shifts**

To what extent has policy changed since the early 1994 and what are the specific policy shifts that have taken place since then? This question was particularly important in understanding significant trends in policy shift. Before continuing, there is a need to acknowledge successes and failures in as far as policy shifts are concerned. Firstly, the shift in housing, water and sanitation policy has been significant since 1994 as explained below. Secondly, the influence of international trends has been visible and important. Thirdly, the shifts have been informed by a number of factors such as the experience of the years after 1994; the quality of services delivery and the change in political mindset.

Within the housing policy environment, policy shifted towards a more progressive and innovative mindset. The ‘language’ of policy has significantly changed as well and, in hindsight, the principles and broad objectives have also changed. The Housing White Paper never articulated itself around the issues of informal settlements. After almost 10 years of delivery, this situation was re-evaluated and rectified through the inception of the Breaking New Ground paper. The BNG has significantly put informal settlements in the delivery map and as an important housing delivery instrument. The ‘quality vs. Quantity’ and ‘width vs. Depth’ aspect are two major shifts in housing policy. It is safe to say that housing policy has become more progressive and has somewhat expanded itself across board.

The period from 1994 to date has seen progressive shifts in water and sanitation policies. Policies have become more inclusive, innovative and flexible. It is inclusive in a sense that delivery of water and sanitation now covers all segments of society, particularly the poor as well as previously disadvantaged communities. On the other hand, the policies have been innovative in the manner in which they have developed and supported various programmes and instruments as far as water supply and sanitation delivery is concerned. The nature of delivery of water and sanitation services has slowly shifted from one that is supply driven to one that is more demand driven. The policies have facilitated this through restructuring of institutions and responsibilities. Moreover, the flexibility trait of water and sanitation policies has been comprehensively clear in the manner in which other policies have been taken into account. It is a unique trait particularly when one recalls that housing policies do not make any efforts to align its policies with other service delivery policies. Water and sanitation policies are explicit on integration, coordination and alignment with other policies. This is arguably a progressive and flexible nature of water and sanitation policies. However, it is important to note that even though there have been significant shifts in policy thinking, this has been in principle and not in practical terms. Implementation continues to be problematic and sector driven. At a micro level, water and sanitation departments persist in reacting to backlog driven objectives rather than collective and integrated commitment to the delivery of basic services

Amidst these shifts, the execution of informal settlement upgrading programmes has remained problematic and inadequate. The transformation of informal settlements into sustainable human settlements has not adequately taken place. One needs to make a distinction between informal settlement ‘improvement’ and ‘transformation’. Therefore, improvement refers to a slight positive change in the physical condition of the informal settlement. Transformation can be referred to as a holistic change in form, structure and nature of a settlement. Transformation into sustainable human settlement takes into account the change in socio-economic standards of living of the informal settlement residents. However, integrated and coordinated improvement in service delivery is more likely to lead to transformation of informal settlements into sustainable human settlement.

### **7.3 The Relationship between Housing, Water and Sanitation Policy Initiatives**

The research findings of this study suggest that there is an intrinsic relationship between housing, water and sanitation policy initiatives. If housing policy initiatives are to yield positive results in the creation of sustainable human settlements, their relationship with water and sanitation policy initiatives should be strengthened. The benefits would include the shift in policy mind set from housing as merely a delivery of shelter to the one of creating sustainable communities. As a result, in order for housing to have any positive impact on people's lives it should be accompanied by other basic services. One of the indicators of housing satisfaction and effectiveness is access to basic services. If a housing policy does not facilitate adequate and sustainable access to these basic services, the broad objective of creating sustainable livelihoods is defeated. More importantly, at a micro level, lack of access to basic water and sanitation hinders beneficiaries from taking ownership of their 'RDP' houses and thus they do not invest incrementally. It is for this reason and more that housing delivery, particularly informal settlement upgrading, has failed to develop sustainable human settlements. Moreover, adequacy for informal settlement upgrading is based on an integrated and coordinated relationship between the delivery of housing, water and sanitation as demonstrated by the findings of this study. Policies responsible for the delivery of these services should acknowledge and facilitate the coordination in the implementation of these policy initiatives, particularly in informal settlement upgrading.

The benefits of a relationship between housing, water and sanitation policy initiatives inform the need for linkages between these initiatives. The research found that the linkages between these policy initiatives are underdeveloped and often taken for granted. In a nutshell, in order for housing policy initiatives to have an impact on the lives of informal settlement residents upgrading programmes should incorporate water and sanitation programmes as part of a holistic package. The implementation of informal settlement upgrading should move beyond the delivery of housing as just a 'physical product', but it should provide basic services which will add value in the creation of sustainable human settlements. It is clear that a house without water and sanitation is merely just a shelter and not a sustainable 'home'. One of the basic roles of housing is to facilitate access to water and sanitation services for the poor. Therefore, if housing undermines the role of water and sanitation policy initiatives in the accomplishment of its objectives it is destined to continue producing 'formalised slums'.

## 7.4 Nature of Linkages

The nature of linkages between housing, water and sanitation identified in the study manifested themselves at various levels of the policy life cycle. The first one was at the policy formulation level. Housing, water and sanitation policies seemed to largely contradict or ignore each other. This is mainly due to a policy formulation process that is highly isolated and based on narrow departmental objectives. The literature review revealed that as much as housing policies made mention of water and sanitation in their principles there were no explicit attempts for alignment of objectives. The housing policy also seemed to be too rigid to allow for any innovation from the side of water and sanitation to filter through in upgrading projects. On the other side, water and sanitation policies were explicit in their integration and alignment ideals. However, they are rather subdued principles as they are not explicit as to how this can be achieved. There are no clear guidelines set to achieve these objectives.

The second linkage at the strategic planning level was found to be weak. There are no clearly defined planning strategies that deal with integration and coordination of housing, water and sanitation policy initiatives in informal settlement upgrading. Moreover, the planning of informal settlement upgrading projects is not guided by any specific strategy or policy. In the case of Ethekewini, the municipality uses its own discretion in planning informal settlement upgrading. Even more challenging is the fact that informal settlement upgrading planning is project based and not city wide. As much as IDPs are strategic planning tools, they have not been able to assist in informal settlement upgrading projects. This is partly because IDP mandate is too broad and does not give necessary guidelines as far as upgrading projects are concerned. The lack of strategic planning tools has created challenges in as far as funding of upgrading programmes are concerned. One can only imagine how far subsidies would go if they were strategically packaged in upgrading projects. Arguably, the duplication would be minimised and subsidies would have a far greater impact in upgrading projects.

The third and final linkage is at the implementation level. It very much ties in with strategic planning. The implementation of housing, water and sanitation policy initiatives in upgrading projects is highly disintegrated and uncoordinated. At the level of Ethekewini Municipality, housing seats with the Housing Unit while water and sanitation seat with the Water and Sanitation Unit. These units are each guided by their own budgets, backlogs and targets in all

their actions. The implementation process lacks collective objectives. As a result, project implementation is driven by individual departmental objectives. The most crucial level of policy life cycle is the implementation stage. Case study results show that policy disparities manifested themselves in implementation. The effects of these disparities were: perceived inadequacy of housing, water supply and sanitation services. What was prevalent was that some of the respondents, who had access to housing but did not have access to adequate water supply and sanitation, considered their housing as inadequate. The social value of housing was measured through access to water supply and sanitation services. Evident in Amawoti-Cuba was that people did not think that the area had moved from being an informal settlement to being a sustainable human settlement. The lack of transformation of Amawoti-Cuba into a sustainable human settlement with adequate basic services might have deterred the community from investing reasonably in housing consolidation.

The researcher argues that disparities in housing, water and sanitation policy initiatives in informal settlement upgrading contribute to the lack of transformation and improvement of informal settlements. To begin with, the impact of disparities manifests themselves in a continued inadequacy of access to basic water and sanitation services in informal settlements post upgrading. The research found that households in Amawoti-Cuba did not have adequate sanitation in spite of upgrading having taken place. The fact that the community relied on pit toilets in a post-upgrading stage indicates the lack of transformation of Amawoti-Cuba into a sustainable human settlement where households have access to basic sanitation. This is notwithstanding that housing development, during the upgrading process, included the toilet space. The toilet space provided inside the RDP house was not utilised for sanitation, as the Housing Unit had envisaged, because Water and Sanitation Unit had not planned for internal water connections which would have allowed for the building of a flush toilet. The lack of project coordination leads to the situation depicted in Figure 10 (pg93), where households built pit toilets next to their RDP houses. Water supply was also an issue in so far as the distance from the household to the standpipe is concerned. Some households reported having to travel more than 200 meters to the standpipe. This brings questions of safety for women and children during the night and during precarious weather conditions.

Considering the situations described above, the conclusion is that disparities have a huge impact on informal settlement upgrading and post-project conditions. Moreover, the highlighted challenges undermine policy objectives of the informal housing, water and

sanitation policy initiatives. On the other side, the broad objectives of informal settlement upgrading programme are also undermined by the shortcomings and failures to implement policy in an integrated and coordinated manner. Consequently, informal settlement upgrading projects do not seem to fully contribute to the development of sustainable settlements.

## **7.5 Recommendations**

A research attempted to identify various aspects of coordination and integration in housing, water and sanitation policy initiatives in informal settlement upgrading in Ethekwini. The extent of lack of coordination and integration was examined. Based on the literature review, discussions, observations and findings the following recommendations are made. These recommendations are by no means exhaustive. They represent an innovative direction and approach that the implementation of housing, water and sanitation policies in informal settlement upgrading can take in a coordinated, integrative and holistic manner. They are based on the findings the research and are listed below:

- Policy formulation processes should take place within a cross-sectoral environment.
- Integration of housing, water and sanitation policy strategies into one holistic strategy: [e.g. housing sector plans, water development plans and sanitation strategies should be linked together at a local municipality level].
- Consolidated funding initiatives and instruments: housing, water and sanitation subsidies should be packaged into one subsidy instrument.
- Departmental consultation at implementation level.
- Backlogs should be consolidated cross-sectorally.
- Continuous consultation with communities about upgrading projects: times lines and order of upgrading should be made transparent
- Coordinated and integrated project packaging and implementation.

Furthermore, there is a need for a shift in mindset within all parties directly or indirectly responsible for service delivery. Informal settlements upgrading should be a collective responsibility and their goals should be aligned. Also, it will be useful to design informal settlement upgrading programmes as a continuous process rather than a once-off project. Aside from adopting integration and coordination principles informal settlement upgrading programmes should be a multi-sectoral continuum.

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## **Appendix 1: Community Survey Questionnaire 2008**

### **Interview details:**

Name of the interviewer : Sandile Mbatha

Area of Interview :

Date of interview :

### **Respondents Data**

#### **a) Gender**

• Male

• Female

#### **b) For how long have you lived in this area?**

• Less than a year?

• 1-5years?

• 6-10 years?

• 11 years and more?

#### **c) Are you:**

- Employed?
- Unemployed?
- Self-employed?
- Pensioner?

**d) How many are you in your household?**

**Expectations and perceptions**

**1. Do you think the municipality is doing enough to ensure access to housing?**

- Yes  or No

**1.1 If no, please explain.**

**2. Do you the municipality is doing enough to ensure access to water?**

- Yes  or No

**2.1 If no, please explain.**

**3. Do you thing the municipality is doing enough to ensure access to sanitation?**

- Yes  or No

**3.1 If no, please explain.**

**4. Would it be better if you knew upgrading stages in your area?**

- Yes  or No

**4.1 if yes, please select the options below in order of priority**

- Housing?
- Water or?
- Sanitation?

**ACCESS**

**5. Do you have access to house?**

- Yes   No

**5.1 If yes, when?**

**6. Do you have access to water? Yes or No**

**6.1 If yes, what water source do you use?**

**6.2 When did you get access to this source?**

**7. Do you have access to a toilet facility?**

**7.1 If yes, what type of a toilet do you use?**

**7.2 When did you get access to it?**

**Service satisfaction**

**8. How satisfied are you with your housing?**

- Partly satisfied
- Satisfied
- Unsatisfied

**8.1 If unsatisfied, please give a reason**

**9. How satisfied are you with your water source?**

- Partly satisfied
- Satisfied
- Unsatisfied

**9.1 If unsatisfied, please give a reason**

**10. How satisfied are you with your toilet?**

- Partly satisfied

- Satisfied

- Unsatisfied

**10.1 If unsatisfied, please give a reason**

**Diseases**

**11. Have you or anyone in your household suffered from water and sanitation related diseases?**

- Yes  or No

**Appendix 2: Key Informants' interview questions and summaries**

General Interview Questions:

1. Are there linkages between housing, water and sanitation policies at the national level?
2. Does housing policy formulation/development process take into account water and sanitation policy {this could be through representation by DWAF policy makers in the housing development process]?
3. Are there funding mechanisms specifically designed for informal settlement upgrading programme?
4. Do you think integration and coordination are an achievable ideal in housing, water and sanitation policy implementation in informal settlement upgrading?
5. What do you think are cost implications of informal settlements upgrading?

**INTERVIEWEE: FAIZAL SEEDAT – MANAGER: PLANNING BRANCH**

**Date: 07-07-08**

1. How long have you been working for the Land section of EThekwini Municipality?

*11 years for the Planning Branch within the Housing Unit.*

2. In your opinion, are informal settlements in EThekwini Municipality increasing or decreasing?

*Increasing*

3. What, in your opinion, are the major challenges facing informal settlement upgrading projects?

- *Implementing low rise high density projects utilizing innovative housing typologies.*
- *Complex community dynamics & hence the reluctance on the part of many developers to avoid such projects*
- *Also high densities mean relocations are inevitable & there has to be a Greenfield project implemented in parallel to the upgrade project to accommodate the excess households ... hence the need to upgrading in situ with higher densities – making maximum use of the well located land & saving of servicing & social facility costs.*
- *Lack of well located & developable land.*
- *Provincial approvals – from various depts. Incl Dept of Housing, Planning, DEAE for EIAs etc.*

4. Do you think informal settlement upgrading has worked?

*Depends on the project. Some have & some haven't. Also depends on location. Also on the amount of subsidy that was in effect at the time. In the early days the subsidy only provided for smaller structures compared to the 40sqm minimum enforced today. The Council now provides water borne sanitation whereas with the early attempts at housing dev, some upgrades still comprise of ventilated pit latrines (VIPs) – which by the way is still a National & Provincial standard but not for eThekweni Municipality.*

*There is no choice but to upgrade esp if settlements are in pretty good locations. Land is very scarce in this Municipality & the huge housing backlog does not help.*

5. Do you think housing backlog can be linked to water and sanitation backlog when collecting data on informal settlements?

*It all depends on how backlogs for each sector are defined. For example, the National water target is based on the provision of water x metres to y households – while the housing standard is piped water to each unit.*

*Having said that , this Municipality is working towards establishing a standard or common set of backlogs & yes the housing backlog will be linked to water & sanitation backlogs – once again it all depends on how its defined – you can get different standards or levels of services!!!*