

**HOUSING DELIVERY AND
THE SUSTAINABILITY OF
THE DURBAN METROPOLITAN AREA**

By

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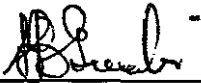
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DECLARATION

I declare that the thesis: **HOUSING DELIVERY AND THE SUSTAINABILITY OF THE DURBAN METROPOLITAN AREA** is my own work both in conception and execution. All the sources that have been used or quoted have been indicated and acknowledged by means of complete references.

By



BONGINKOSI B. GUMBI

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Bonginkosi Burlington Gumbi

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31 January 2001

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DEDICATION

This thesis is dedicated to
my late mother and my family,
and all the marginalised communities
of Africa

ABBREVIATIONS

AML	Association of Mortgage Lenders
ANC	African National Congress
CBOs	Community Based Organisations
CHB	Central Housing Board
D'MOSS	Durban Metropolitan Open Spaces System
GDP	Gross Domestic Product
Gear	Growth Employment and Redistribution
GIS	Geographic Information System
GNP	Gross National Product
GNU	Government of National Unity
HPF	Homeless People's Federation
IBRD	International Bank for Reconstruction and Development
IDP	Integrated Development Plan
IMF	International Monetary Fund
NGO	Non-Governmental Organisation
PHP	People's Housing Process
RDP	Reconstruction and Development Programme
SANCO	South African National Civic Organisation
SAPs	Structural adjustment programmes
SAPS	South African Police Services
SMMEs	Small Micro and Medium Enterprises

UNCED United Nations Conference on Environment and Development

UNO United Nations Organisation

USA United States of America

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ABSTRACT

Housing delivery and the sustainability of the Durban Metropolitan area is explained in this thesis as a heterogeneous, long lasting, immobile and essential consumer good that needs to be delivered to the homeless. Such a delivery process needs to ensure that the Durban Metropolitan area remains sustainable.

Conceptual frameworks of the thesis entail theory on First and Third Worlds as well as that on urban sustainability in relation to housing delivery. In an effort to place the enquiry in its proper perspective, philosophical paradigms such as neo-classical economics, Marxian socialist model, mixed economics and the Africanist – environmentalist point of view, with particular reference to the latter paradigm, are all examined. While the Marxian socialist economic model appears to have failed in most countries this paradigm is used as a critique on the neo-classical model.

In a mixed economic approach the aim is to make use of the positive elements of both capitalism and socialism as an effort to deliver housing in the study area. The Africanist-environmentalist thesis is a humanistic perspective.

The main objectives of the thesis aim to examine the nature of the housing delivery constraints with regard to their cause and effect relationships. The goal is to observe an ordered network of links between production, consumption, exchange and the environment. The next objective is to empower the marginalised through Afrocentric job creation initiatives. The final objective is aimed at considering a sustainable delivery of housing in the study area by taking into account the African environment and its people. Hypotheses related to the above objectives are discussed in the thesis.

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Methods of investigation encompass a combination of research techniques which attempt to attain a balanced picture of research findings. The walking strategy was used to identify housing delivery related problems. The questionnaire technique combined both structured and unstructured interview questionnaires. Purposive sampling where respondents from the middle income, lower income and lowest income groups answered questionnaires, was utilised.

The analysis and interpretation of data were effected manually by drawing two way tables which included column variables across tables, and row variables on the margins of tables. Later on, the tables, a pie chart and diagrams illustrating the ecological interaction were drawn by means of Microsoft Word '97 package. The map of the study area was drawn by means of a GIS package.

The main finding was that colonial imperialism is the major independent variable in the study area. Housing resource inequities resulted in housing shortages particularly amongst the poor. Dependent variables such as unemployment, homelessness and squatting are a function of resource inequalities amongst Whites and Blacks. The legacy of apartheid capitalism seems to favour middle income housing delivery at the expense of the marginalised. The high population growth rate appears to aggravate the housing delivery crisis in the study area.

The absence of infrastructural services in Black areas encourages slum conditions which degrade the natural environment. Natural hazards in the form landslides, floods and soil erosion inhibit the provision of housing in the study area. Lack of working skills amongst the poor hinders job creation initiatives.

The conclusions that emerged from the inquiry were that the human element plays a vital role in exacerbating the housing delivery crisis in the Durban Metropolitan area. The fact that apartheid capitalism, greed, corruption and crime are human engineered is proof that the human element contributes to the housing delivery problem. Blacks will only be empowered in the true sense of the word when they are financially self-sufficient and when they are fully in control of the housing delivery process in the study area. The recognition by all housing delivery stakeholders that the African environment and its cultural aspects play a prominent role in the provision of housing could make the study area sustainable to the benefit of current and future residents of the Durban Metropolitan area.

CHAPTER 1

CONCEPTUAL FRAMEWORKS OF THE STUDY

1.1 INTRODUCTION

The transformation period that prevails in South Africa to date has given rise to complex and diverse problems. One of these problems, which is going to be the point of departure of this study, is housing delivery and the sustainability of the Durban Metropolitan area. It is no longer sufficient for social scientists to enquire into the housing problem without examining the sustainability of the housing delivery process. Some of the questions that need to be probed are : What are the social, political, economic, cultural and environmental cause-effect relationships that exist within the housing delivery process in the Durban Metropolitan area ? How do these cause-effect relationships influence each other ? What strategies should be implemented to ensure a sustainable housing delivery process ? How do we envisage to empower the poor through job creation initiatives that are compatible with the African environment ?

This thesis seeks to explore a discourse on the problems related to housing delivery and the sustainability of the Durban Metropolitan area. The interplay between the objectives and the hypotheses of the investigation is aimed at guiding the researcher to attain relevant information for the study at hand. By pursuing a variety of philosophical paradigms the investigator seeks to demonstrate the significance of their interwovenness. The

neo-classical, Marxian-socialist, mixed economics and the Africanist-environmentalist paradigm are all examined with particular reference to the latter paradigm. The goal of the thesis is to highlight the importance of obtaining the positive elements in each economic system. Terms such as housing delivery, Durban Metropolitan area and sustainability need to be contextualised in accordance with the goals of this inquiry, in an attempt to place the investigation in its proper perspective.

1.2 ORIENTATION TO THE STUDY

The Longman dictionary of Contemporary English (1985) explains orientation as giving direction or guidance to. In the context of this study, it is giving guidance to a sustainable housing delivery process in the Durban Metropolitan area. It is no longer adequate for social scientists to view the housing issue without taking into account the intervention of man who degrades the natural environment. Whilst it is acknowledged that the poorest inhabitants construct shacks as they cannot afford formal housing, it should be taken into account that these shacks lead to environmental degradation. It is therefore the duty of all housing delivery stakeholders to ensure that whilst they make an effort to provide housing to all, they should also ensure that future generations are not compromised, through the degradation of the study area's natural environment.

1.3. THEORETICAL FRAMEWORKS

It is imperative to expatiate on the concepts of housing delivery, Durban Metropolitan area, sustainability, as they are the cornerstones of this thesis. Furthermore, philosophical paradigms that are pursued in the thesis entail Marxian socialism, capitalism, mixed economics and the Africanist-environmentalist thesis. Examples are quoted from countries in the First and Third Worlds who also experience or who have in the past experienced housing delivery related problems.

1.3.1. Housing Delivery

In an effort to contextualise the term “Housing Delivery” in its proper perspective, it is essential to define the two words separately in an effort to demonstrate their interwovenness.

- Housing

Conway (1985) defines housing as the physical manifestation of a social face, a sign of status for the inhabitants, a symbol of progress and modernity. Johnston, Gregory and Smith (1986) further define housing as heterogeneous, long lasting, immobile and an essential consumer good, which is also an indicator of social status and income differentials. On the other hand, the Longman Dictionary of Contemporary English (1985) defines housing as the act or action of providing a place to live.

In this thesis we examine the different income groups which are housed in three groups. The first group is that of the middle income residents obtained mainly from sections BB and AA of Umlazi. The second group is the one that is housed in the so called

“match-box” low cost four roomed housing in Black townships of Umlazi and Kwa-Mashu. This group belongs to the Lower Income residents. The Third group, the Lowest Income residents exists in shantytowns of V-6 and Power in Umlazi Township, and the Canaan shackland. The three groups belong to different social status and income differentials. The bigger middle income housing is a sign of status and progress, while the smaller shacks are an emblem of despair.

- **Delivery**

This term entails the act of setting free or the act of handing over or a state of being handed over (Encyclopedia Americana, 1986). Delivery is further defined as the act or the state of being set free (Longman Dictionary of Contemporary English, 1985).

In this inquiry, delivery is operationalised in relation to housing provision. Since the ANC-led Government of National Unity (GNU) promised to deliver one million houses by the year 1999 this has since become a pipe dream due to the relative slow pace of delivering housing in South Africa. Without properly conceived projects it could be difficult to deliver housing in the Durban Metropolitan area.

1.3.2. **The Durban Metropolitan Area**

Buchanan (1974 : 140) defines a metropolis as a “town or city whose importance lies in its status as the capital or seat of government, or hub of commercial activities.”

Swanevelder *et al* (1992 : 312), on the other hand, define a metropolis as a “city with dependent towns around it.” In the context of this thesis, Durban is the commercial capital

of Kwazulu-Natal province. The researcher looks at the housing delivery situation in relation to the dependent black townships which are financially dependent on Durban's resources.

Furthermore, the diverse topography of the area constrains urban industrial development which aggravates unemployment and housing shortages in the study area (Hindson *et al*, 1996)(a). The urban form which racially fragments the poor on the periphery and the affluent in the core (ibid) further exacerbates the unsustainable location of shantytowns to the detriment of the physical environment of the Durban Metropolitan area.

1.3.3. Sustainability

The majority of environmental authors (Redclift, 1987 ; Schram and Warford, 1989 ; Hindson *et al*, 1996) (a) and (b) to mention just a few, seem to concur that sustainable development should make an effort to link environmental issues with the socio-political and cultural ones. In accordance with Allen's (1980) assertion, the term sustainable development is development that is likely to achieve lasting satisfaction of human needs and improvement of the quality of human life. In the context of this thesis the delivery of housing should ensure that the needs of the poor, the group that is mostly affected by housing shortages, is met in such a way that the type of housing that is provided should improve

the poor's quality of life, when they are provided with conventional housing.

Redclift (1987) defines sustainability as a desirable objective which serves to observe the contradictions that development implies for the environment. There is a need for housing delivery stakeholders to ensure that housing development should not impact upon the physical environment of the Durban Metropolitan area. The compatibility of economic growth with environmental interests could improve the living standards and the integrity of socio-cultural systems on an intergenerational basis (Makhanya, 1997). Whatever cultural artefacts that are used by the Durban Metropolitan populace should empower the poor so that they are able to provide themselves with affordable housing of a sustainable type from one generation to the next.

Keating (1992) reported the earth summit's agenda for change, where in June 1992 a United Nations Conference on Environment and Development (UNCED) met at Rio de Janeiro in Brazil. The goals of the Conference were as follows :

- To eradicate the socio-economic causes of environmental degradation ;
- To ensure that the conference serves as the reference point for environment and development policies for the next century ;
- To change the way in which humanity relates to the environment ; and
- To call for a series of partnerships involving governments, international organisations, business and many other stakeholders.

It is encouraging that to date Hindson *et al* (1996) (a) and (b) have written a detailed account on sustainable development of the study area. They embrace most of the goals of the Agenda 21 of 1992. Some of Hindson *et al's* (1996) (a) goals are :

- To forge new partnerships between business, government and community ;
- To enhance natural features rather than their destruction ; and
- To acknowledge that unsustainable environmental degradation has marginalised the poor.

There is no doubt that if the above goals are striven for, and taking into account the delivery of housing with these goals in mind, the degradation of the study area's physical environment could be avoided. It is also encouraging that some of the Rio declarations embrace the eradication of poverty whilst at the same time reducing disparities in living standards. In the context of this thesis, the reduction of housing disparities between the middle income group and the poor could be a viable strategy. The fact that full participation of women is part of the Rio declaration has close links with the goals of this thesis of empowering women in the study area.

1.3.4. Urban sustainability in Relation to Housing Delivery

According to Stren *et al* (1992) the vast literature on the environment has paid very little attention to sustainable cities. It should be realised that when the poor construct shelter through rudimentary means, most of the time, they are not aware that they are contributing towards the unsustainability of urban environments. When the poor make use of uninhabitable and inhospitable land such as steep slopes and flood plains, to

mention just two problem areas, they are aggravating the degradation of city environments. According to Atkinson (cited in Mail and Guardian September 23-30, 1999) rich countries owe their poor counterparts billions of dollars. This is ascribed to the disproportionate amount of environmental damage they inflict on the planet particularly in cities as evident in the degradation of the developing world cities as well.

In an attempt to contextualise the city of Durban with regard to its ecological interaction between its people and the environment, it is the onus of this investigation to examine a brief discourse on the sustainability of cities. While Hamilton (1999) argues that a city is just as much a living ecosystem as a patch of unspoilt wilderness, it should be taken into account that planners ignore the city at their own peril. If planners and housing delivery stakeholders are going to turn a blind eye to the sustainability of South African cities, this could augur negatively for the future residents of the Durban Metropolitan area.

It could then be inferred that it is imperative for humanity, for instance, to understand that the city's micro-climate and geomorphology impact upon the delivery of indigenous housing in the Durban Metropolitan area. It should be acknowledged that the human components in the city interact with animate and inanimate things for the benefit of the poor's economic empowerment, through the utilisation of the natural environment, in a sustainable manner.

It could be to our benefit if we understand that the city is a complexity of both natural and artificial elements that need to be utilised for the delivery of sustainable housing in the Durban Metropolitan area. Otherwise, without taking into cognisance the ecological interplay that occurs in cities, it could be difficult to sustain a housing delivery process in the Durban Metropolitan area.

The sustainability of cities will not be complete if we do not look at social and economic inequalities that drive the poor to deplete their natural environment (Stren *et al*, 1992). It is imperative for city social scientists, for instance, to acknowledge that the poor house themselves in slum areas not because they like to inhabit such inhospitable areas.

Researchers should take into account that squatters are compelled by circumstances beyond their control to inhabit the unsustainable shantytowns. City officials need to be humane enough to recognise the financial plight of the poor if they aspire to redress the housing delivery problem in the study area.

In the light of the above contention it could be inferred that poverty should be initially eradicated amongst the poor if we wish to demonstrate to the poor that the resolution of poverty goes hand in glove with the sustainability of the city environment (*ibid*).

The poor should be conscientised towards sustainable cities, which might result in a sustainable delivery of housing as well. Proper environmental education of the poor, so that they realise the positive spin offs of environmental management, could solve the problem of unsustainable delivery of housing in the study area.

Despite the benefits of urbanisation large cities have exacted a terrible toll on the environment and on the poorer people (Stren, *et al*, 1992). There are a number of factors that have contributed to the marginalisation of the poor with deleterious results on the natural environment. Unless, amongst other problems, unemployment, land scarcity and insufficient housing are provided to the poor the degradation of the city environments could continue unabated. Urban shelter has become the most visible pressure point in many African cities (*ibid*).

It is worthy to note that shantytowns are often built on areas unfit for human habitation. Such locations are rubbish dumps, steep slopes, areas prone to subsidence, flooding or polluted land (Girardet, 1992). Such a situation does exist in the study area. Unless city officials start realising the dangers that are experienced by shack dwellers when they allocate themselves land in risky areas it could not be possible to redress the housing delivery crisis in the Durban Metropolitan area in a sustainable manner.

1.3.5. Philosophical Paradigms

One of the goals of the inquiry is to pursue a spatial discourse on the philosophical concepts in relation to the housing delivery question. The study seeks to examine the impact of capital on housing provision and the sustainability of the Durban Metropolitan area. The proponents of capital seem to concur that capitalism is the most efficient economic system (Begg *et al*, 1991 ; Hardwick *et al*, 1994 ; Okpala, 1994) that could resolve the housing delivery crisis in South Africa.

A Marxian socialist philosophy appears to be the most appropriate critique that exposes the weaknesses of capitalism. Themes of economic exploitation, conflict and capital domination over labour are unified by a Marxian interpretation (Harvey, 1973; Peet and Smith, 1977). The inability of capital to deliver housing necessitates a mixed economic one, which might deliver housing in the Durban Metropolitan area.

The failure of the market to solve urban problems and the inability of communism to attain its ultimate goal, where the working class is supposed to overthrow the capitalists, compels the investigator to advocate for an economic system that will make use of the positive elements of capitalism and socialism, as long as the lives of future generations are not compromised through the degradation of the natural environment. In a mixed economic system the government is necessary to mitigate inequality (Samuelson and Nordhaus, 1989; Begg *et al.*, 1991).

Kirk (1980) argues that the proponents of mixed economics see public intervention as a taming of capitalism. This economic system seems to augur well for housing delivery when both the private and public institutions exercise economic control through invisible direction of the market system and fiscal incentives (Samuelson and Nordhaus, 1989). In true economic sense the new world today is neither capitalist nor socialist, but is dominated by a conglomeration of elements from both capitalist and socialist economic models.

An alternative to a purely mixed economic system is not market driven efficiency versus state provided welfare, but how the state can assist markets to be more efficient and sustainable. This leads to the question of looking at the housing delivery problem beyond the scope of economics. In Short's (1989) work the humanistic perspective is not in itself a solution or an end point explanation. It should be taken into account that capital is a power which constrains but is not total. A people based strategy like the Africanist-environmentalist one concerns itself with the question of how capital could be used to enhance people's skills, potential, collective and individual abilities in an Afro-centric manner without depleting the environment.

Jackson(1994) responds to the critics of Africanisation by arguing that the peasants in Africa have sophisticated ways of managing the environment yet they are despised, exploited and ignored. While the Africans are regarded as backward and inefficient, there is a constant bias by the African Governments to favour Western technology. The non-recognition of African and indigenous technology seems to constrain whatever housing delivery initiatives that are being put in place. We should learn to use indigenous technology without destroying the African environment.

Housing problems are not peculiar to the Third World countries. They have a long history even in the Western World. Much of the housing of the poor was so deficient in itself that it constituted a health hazard. While the situation in USA , a country reputed to be the most advanced on earth still possesses all the Third World maladies, the spatial distribu

tion of wealth in USA exhibits similar tendencies as those existing in a developing country like Brazil (Chomsky,1997).

Tanzania represents an African country which attempts to prioritise African culture and technology in her housing delivery endeavours. The co-operative Ujamaa village was an effort to house the poor in Tanzania. This concept is linked to Afrocentric communality where friends and relatives help one another when it comes to the building of houses (Olivier and Crowder,1981;Mathey,1990). People ensure that they build housing appropriate to their needs, as well as affordable housing.

1.4. **THE PROBLEM**

As the title denotes the housing delivery process that was started in 1994 appears to be failing. The failed housing delivery initiatives express themselves on the Durban Metropolitan urban spaces. In fact, the spatial implications of the market forces to deliver adequate conventional housing seem to be, for example, a function of the geometric progression of shantytowns on the vacant Durban landscape. Squatter settlements which mushroom in an exponential manner all over the physical landscape of the study area, appear to lead to environmental degradation. As argued in the Rio document (Keating, 1992) "bad housing is one of the obvious and common physical impacts, as is overcrowding".

Whilst the absence of basic infrastructural services, in the form of toilets and waste disposal bins seems to create favourable conditions for house-fly related disease, there appears to be a struggle for the scarce resources which, amongst others, are land, water and housing. Such conflicts prevail, not only in informal settlements, but also in formal ones as well. When the corrupt urban managers favour the affluent with regard to the allocation of housing delivery resources (Bassett and Short, 1980; Saunders, 1981; Smit, 1984; Pacione, 1990; Gumbi, 1995), they seem to constrain a sustainable delivery of housing in the Durban Metropolitan area.

State subsidies and mortgage bonds that are granted to the middle income group have a proclivity to redline the poor. It could then be argued that the mismanagement of government funds allocated to the housing ministry further impinges upon the provision of housing. The roll-overs of state funds from one year to the other illustrate that the housing delivery problem is human engineered rather than economical. Whenever housing delivery systems are implemented, there is a common practice by decision makers and all housing delivery stakeholders to prioritise Eurocentric solutions above the Afrocentric ones. It is a general practice to encounter a situation where the indigenous technology that takes into account the African environment, is not fully utilised. It is common to witness a situation whereby the housing delivery techniques that are implemented do not consider the sustainability of the Durban Metropolitan landscape to the disadvantage of the lives of future residents of the area.

1.5. OBJECTIVES OF THE STUDY

There is a high degree of correlation between the title, the objectives and hypotheses of this inquiry. The following are the primary objectives.

- 1.5.1. To examine the nature of the housing delivery constraints with regard to their cause-effect relationships, and their implications on the Durban Metropolitan space and its populace, and to further observe an ordered network of links between production, consumption, exchange and the environment.
- 1.5.2. To empower the formerly marginalised through Afrocentric job creation initiatives as well as those Eurocentric strategies that are compatible with the African milieu.
- 1.5.3. To consider the sustainability of the housing delivery strategies and the study area, by taking into account the African environment and its people without compromising the lives of future residents of the area.

1.6. Hypotheses

1.6.1. Main Hypothesis I

It is hypothesised that the housing delivery crisis appears to be a collusion between the private and public sectors which succumb to the economic whims of global capital.

Sub-hypotheses

- Non-delivery of housing is related to inefficiency
- The poor are marginalised
- Women are at a disadvantage
- Shantytowns are polluted

1.6.2. **Main Hypothesis II**

The poor should utilise Afrocentric and Eurocentric job creation strategies that are compatible with the African situation.

Sub-hypotheses

- Housing infrastructure-related job strategies should be utilised.
- Strategies related with the cleaning of the physical environment should be used.

1.6.3. **Main Hypothesis III**

The utilisation of the African environment by making use of indigenous building materials which are affordable to the poor.

Sub-hypotheses

- Grass and mud houses for the very poor should be constructed.
- Eurocentric housing for the affluent may be build.

- A combination of Afrocentric and Eurocentric housing delivery strategies that are amenable to the African milieu could be utilised.

1.7. THE SIGNIFICANCE OF THE STUDY

Each study is unique in the sense that it has its own way of resolving societal problems.

This inquiry is unique in its character as it is executed within a period of transformation in South Africa. The study is therefore significant in the following manner.

- Whatever solutions that are arrived at with regard to the provision of housing in a sustainable manner could be copied and applied by other countries to solve their housing delivery problem. We should evolve a new vision for the study area which draws on the city's abundant human and natural resources (Hindson *et al*, 1996) (a) for the benefit of humanity throughout the world.
- By highlighting the disparities in wealth, resources and development which all have a bearing on the delivery of housing this could play a vital role in sustaining the global provision of housing all over the world, but particularly in the study area.

- There must be a consensus between local, provincial and national governments to ensure that whatever housing delivery strategies that are formulated should filter down from the national governments and business. It is evident that the gravity of the housing delivery problem requires a combined effort by all stakeholders if the process is to be a success. It should be acknowledged that local authorities are the main agents for implementing inner city policy (Home, 1982), inner city housing included.
- Whilst it is essential for the city local council to ensure that the worst slums are cleared we should not forget to acknowledge that slum clearance programmes and evictions of private tenants are major factors increasing the number of the homeless in inner cities (Home, 1982). There is a need for alternative accommodation as part of a housing delivery process for the slums that are to be cleared.
- It could be to the benefit of all South Africans if the housing delivery problem is re-dressed as it impacts upon other urban problems. Problems such as environmental degradation in the form of slums, pollution, diseases and social problems of poverty, unemployment, crime and violence, to mention some of the most serious ones, could be resolved by delivering housing to all the residents of the study area in a sustainable manner. A proper housing delivery process is imperative for the sustainability of the Durban Metropolitan area.

- A well executed investigation usually results in the acquisition of vital information that contributes to geographic knowledge. The period of transformation that prevails in South Africa is so volatile that it requires dynamic social scientists who will be prepared to face new challenges. The emergence of new problems in the form of housing delivery and the sustainability of Durban Metropolitan area's physical environment requires studies of this nature, that will make an effort to solve new problems in a dynamic fashion in a post-apartheid South Africa.

1.8. LIMITATIONS

A research inquiry of this nature has a tendency to be viewed by the poor as a negative venture that is against the grassroots' well-being. The scepticism that prevails whenever research is conducted amongst the poor is attributed to the following factors :

- The investigator was unable to conduct a probability sampling procedure especially amongst the lower and lowest income groups due to the political volatility of such settlements.
- When numerical data was gathered it was discovered that some of it was inaccurate.
- Some of the semi-literate subjects handed in incomplete questionnaires. Such questionnaires had to be rendered null and void by the investigator to the detriment of the overall success of the thesis in general.

- A shortage of books dealing with housing delivery and the sustainability of the Durban Metropolitan area compelled the researcher to use a number of secondary sources such as newspapers, journals, magazines and government documents, which, in anyway, played a prominent role in the theoretical framework of the study.
- It was difficult to arrange interviews with housing delivery stakeholders of note in the private and public sectors. This resulted in vital information being missed out.

1.9. DELIMITATION OF THE STUDY AREA

A geographic demarcation of the investigation encompasses the Durban Metropolitan landscape with particular reference to the Durban North Central, Durban Central proper, and the Durban South Central, which include :

- Umlazi township's section BB for middle income respondents; Power shack settlement near section AA in Umlazi for the lowest income group respondents; as well as miscellaneous subjects from all sections of Umlazi, who represent the lower income group. Some respondents emanate from Kwa Mashu township.
- A practical observation of the physical nature of the Ntuzuma and Isipingo Hill's upper income residential area together with its related poor and better off housing delivery infrastructural services and resources, respectively is explored.
- An empirical exploration of the Canaan shantytown which represents the worst off squatter settlement in the study area is further examined.

- Another empirical exploration is that of the inner city squatters of Victoria Street, and Durban station shack areas.
- The majority of Shack respondents are from V6 near the Umshiyeni Hospital in Umhlabeni and the Power shantytown near Section AA.

It is hoped that whatever information that is gathered from the areas earmarked for a detailed study will act as a microcosm for all other areas in the Durban Metropolitan area.

1.10. THE SEQUENCE OF INVESTIGATION

A logical presentation of any research investigation enables the researcher to succeed in reporting his findings. Whilst an empirical aspect of the inquiry is important it should also be taken into account that the success of the empirical inquiry is dependent on the success of the theoretical exploration as well.

In the first chapter the social scientist identifies the problem for exploration and the path to be followed when the investigation is being executed.

Chapter 2 purports to examine Philosophical Paradigms related to Housing Delivery. It is the goal of this chapter to pursue a theoretical discourse on some of the housing delivery issues in the First and Third Worlds, with the hope of linking this theory with the South African situation in general and in the Durban Metropolitan area in particular. The globalisation of capital and its impact on housing and the environment is also pursued in this chapter.

Chapter 3 is a report on how the thesis was executed. This is the methodology chapter.

Chapter 4 explores a discourse on the Evolution of the Housing problem in the Durban Metropolitan area. Themes such as pre-colonial, colonial, apartheid and post-apartheid periods are all examined, with the goal of linking them with current housing delivery crisis.

Whilst it is important to examine some of the theoretical terms concerning demography, it is more important in this chapter to obtain empirically, data which illustrate the “Demographic characteristics in the Durban Metropolitan Area”.

This is done in Chapter 5.

Chapter 6 deals with the ecological factors related to the housing delivery problem.

Chapter 7 is about housing delivery among the middle income group.

Chapter 8 deals with the housing provision among the lower and lowest income groups.

The evaluation of findings in accordance with their objectives and hypotheses is pursued in chapter 9. Implications on the sustainability of the entire Durban Metropolitan Landscape with regard to her housing delivery process, is also examined in chapter 9. The final part of chapter 9 examines a summary of conclusions and recommendations.

1.11 SUMMARY

This chapter has made an effort to define the housing delivery problem that is interwoven with the social, political, economic cultural and environmental dynamics that express themselves in a spatial manner on the Durban Metropolitan urban spaces. The resolution of the housing delivery problem has to acknowledge the interplay between the objectives and the hypotheses of the study, which go hand in glove with the title under investigation.

CHAPTER 2

PHILOSOPHICAL PARADIGMS RELATED TO HOUSING DELIVERY

2.1. INTRODUCTION

One of the objectives of this chapter is to pursue a spatial discourse on the philosophical paradigms related to housing delivery. The inquiry seeks to examine the impact of capital on sustainable housing in the Durban Metropolitan area. A critique on the neo-classical economic system is a device to expose the failure of the market principles to deliver housing to the poor.

However, a Marxian perspective which is basically a critique on capitalism is explored in conjunction with urban managerialism and collective consumption. A critical examination of Marxian principles introduces the concept of mixed economics, which endeavours to integrate the positive elements of capitalism and socialism. Furthermore, the Africanist-environmentalist point of view, where the cultural elements are also embraced is explored. One should acknowledge that neither neo-classical nor Marxist economics take into account, in a sufficient manner, the depletion of the natural environment (Redclift, 1987) by human beings.

While the globalisation of capital examines the developed world in relation to the developing world, the thesis aims to discover the housing provision problem which appears to be a function of imperial and colonial capitalism on the developing world.

Furthermore, the pursuit of theory on the USA in relation to Brazil is a strategy to demonstrate the equal impact of capital in both developed and developing countries.

When the International Monetary Fund (IMF) and its sister organisation, the World Bank, introduced the structural adjustment programmes (SAPs) in Africa, they were more of a failure than a success (Poswa and Wroots, 1991).

The squatter settlements are explored in the context that they are a strategy adopted by the poor to provide themselves with affordable form of shelter. It should be noted that whilst the shantytowns do provide shelter to the poor they nevertheless degrade the natural environment.

A theoretical analysis of the neo-classical, Marxian Socialism, mixed economics and the Africanist environmentalist approaches is examined. The latter approach is designed to demonstrate that human greed, which seems to be the basic element influencing the housing delivery problem, is beyond the scope of economics.

2.2. THE NEO-CLASSICAL APPROACH

Marxists such as Harvey (1973) and Bassett and Short (1980) view capitalism as an economic system that prioritises competition by making use of market forces to amass profits. The capitalists on the other hand concur that capitalism is the most efficient economic system that could resolve the housing delivery crisis in South Africa (Begg et al, 1991 : Siddique, 1997).

2.2.1. Capitalism and the availability of land for housing

The capitalist economic system revolves around four factors of production. These are land, labour, capital and entrepreneurship which refers to ownership, management and administration of the housing delivery process. It could be argued that the housing delivery question is basically a land issue (Gumbi, 1995). The fact that during the colonial era blacks were allocated only 13 per cent of the South Africa's land is related to the slow housing delivery process. It was evident that the scarce land that was allocated to Blacks would result in overpopulation to the disadvantage of sustainable housing development. To make matters worse land that was allocated to Blacks was prone to natural disasters such as landslides and soil erosion. Such disasters impacted negatively on Black land parcels.

According to Zhu (1994) market-oriented property development is usually beneficial to capitalist developers and property investors. These developers and investors depend on the allocation of a major portion of South African land to themselves. Owing to the high cost of land, a substantial amount of land lies idle in the hands of a few land-owners.

Through such policies, artificial land scarcities are created on the South African landscape. It is no wonder that the inhospitable hills are invaded by the landless. Such land invasions which usually occur on steep land result in landslides and soil erosion which are natural hazards that have a proclivity to impact upon the natural environment.

It is apparent that the artificial land scarcities created by capitalists in collusion with the state result in the proliferation of shantytowns which do not sustain the urban environments in South Africa. Without doubt, the neo-classical artificial land scarcities appear to aggravate the housing delivery crisis in South African cities.

By owning a major portion of urban land the capitalists seem to have conquered space (Cater and Jones, 1992). In large cities of the developing world urban land is under the jurisdiction of the public sector, and this has resulted in the peripheralisation of the poor (Stren and White, 1989). The marginalisation of the poor has created a situation where conflicts over scarce land resources have given rise to violence and crime in South Africa. There is no doubt that when conflicts ensue in urban spaces the natural environment is also affected. When fires are lit to burn houses the trees and grasses nearby may also be destroyed. There is a need for both the private and public sectors to see to it that urban land is properly and equitably utilised in cities.

In the process of the failure of the government to allocate land to the poor, the market forces have become stronger in terms of the ownership of private land. The private sector targets the affluent middle class which buy land at exorbitant prices. Moreover, the capitalists accumulate profit when they sell private land to the middle income group.

The ownership of a larger portion of urban land by the private and public sectors has a constraining effect on the delivery of housing in the Durban Metropolitan area.

Incidentally, the neo-liberal economists who call for the privatisation of urban land (Pichler – Milanovich, 1984), argue that this will be more effective for the control of urban land.

Land scarcities impact not only to the people but to the natural environment as well. The high density of squatters on scarce land results in the deterioration of a very important housing delivery related resources to the disadvantage of sustainable housing. The state has to ensure that it facilitates the allocation of urban land to the poor, if it hopes to deliver affordable low cost housing in the Durban Metropolitan area, without compromising land for future residents. A sustainable housing delivery process is a function of the equitable allocation of urban land by the private and public sectors to all the residents of Durban.

2.2.2. Capitalism and the financing of housing

The idea that a competitive market economy based on individualism and free enterprise maximises economic growth, is fundamental to classical economics (Begg *et al*, 1991; Siddique, 1997). It remains to be seen whether the above contention is applicable to the South African housing delivery situation, and in the Durban Metropolitan area in particular. The capitalists are of the opinion that it is duty of each individual to provide himself or herself with housing. (Bassett and Short, 1980). The exponents of modernisation appear to exonerate capitalism and blame the Third World nations instead, for their failure to resolve urban problems such as housing provision (Gumbi, 1995).

The spatial manifestation of South African cities reflects the way in which they are financed. Capitalists believe that the mobilisation of housing-related resources through the financial system is central to the development of profit in the housing sector.

Finance is skewed to the advantage of the middle income group at the expense of the poor. It is evident that city finance continues to favour Whites (Smith, 1992) and middle income Blacks as well. The mobilisation of resources through the financial system is therefore crucial to the evolution of private housing (Okpala, 1994).

Formal housing finance is relatively new in most developing countries like South Africa. Access to formal housing then translates into higher quality housing and infrastructure (Ibid), as well as the expansion of loanable funds to formal housing institutions, which hold the key to any country's housing stock.

There are immense potential resources in the informal sector which can be exploited by banks for the delivery of sustainable low cost housing. It is no use for the banks to cater only for people who are employed in the formal sector, because there are many people in the informal business sector who can afford low cost housing. It is evident that the acknowledgement of the informal sector as providing a market for housing finance could be a positive effort to redress the housing provision crisis in South Africa in general and in the study area in particular.

The informal sector can play a pivotal role in job creation endeavours and thereby empower this sector financially, to provide itself with housing. Housing delivery stakeholders should ensure that the informal market is fully exploited if they aspire to provide the informal workers with housing in the Durban Metropolitan area.

Capitalists argue that privatisation of housing leads to efficiency in the management of housing. (Bassett and Short, 1980) Whilst the taking over of housing by the private sector could be ascribed to the failure of the South African government to provide affordable housing to the poor, the limits of public resources to support large scale housing (Stren and White, 1989) is viewed by capitalists as compelling the private sector to take the initiative of providing middle income housing.

The neo-liberalists are of the opinion that there is a need for the private sector to determine housing choices for the South African populace, if the housing delivery problem is to be redressed. The Marxists advocate for state intervention. (Harvey, 1973, Saunders, 1981)

2.2.3. Metropolitan Government Intervention in Housing Delivery

It is the contention of the capitalists that the failure of the provincial government to deliver housing to the poor necessitates the intervention of Metropolitan Government. Capitalists also view the governance of the Metropolitan areas as holding the micro-economic relationships that are the stuff of real investment and job creation (Swilling *et al*, 1991), and that a smaller Metropolitan government will be more effective and easily managed. They believe that it could become easy for the Metro government to liaise with the private sector to ensure a speedy facilitation of financial resources from the private sector to the people on the ground. (Swilling *et al*, 1991).

In the light of the above argument one could then concur that the Metropolitan government's intervention within a housing delivery process should ensure that it does not intervene in such a way that it overlooks the private sector. An integrated approach where both the private and public sectors work together could augur well for a sustainable housing delivery process. Metropolitan Government intervention has to go hand in glove with proper planning.

2.2.4. Long Term Planning Versus Short Term Planning

All neo-liberal schools of thought are of the opinion that housing systems are more successful when they are achieved on a long term basis (Pichler-Milanovich,1994).

Moreover, capitalists appear to favour long term planning as more efficient than short term planning. They further argue that sufficient time is expended on the planning and the execution of housing delivery strategies.

It is evident that short term planning does not give all housing delivery stakeholders enough time to plan their strategies effectively. Short term planning therefore appears to be a temporary measure that partially redresses the housing delivery problem in South African cities. In the Durban case short term planning is essential due to the serious nature of the housing delivery problem especially amongst the shack dwellers. Durban is reputed as having the highest number of shantytowns in South Africa due to the fact that she is one of the fastest growing urban areas (Cubbitt and Joyce, 1995). It is futile for housing delivery stakeholders to concentrate on long term planning projects only.

Although we acknowledge that long term planning is more efficient than short term planning in Durban, we cannot do without short term planning in the provision of housing.

2.2.5. Labour Resource for Housing Delivery

According to capitalists the supply of cheap labour to industries is necessary for the accumulation of profits. Without sufficient labour, capitalism becomes redundant. At the same time it is recognised by capitalists that the low wages that are paid to workers are essential for the survival of the capitalist mode of operation.

Neo-liberal economists argue that large scale privatisation may lead to low unemployment (Lunsche, 1997). These economists continue to assert that privatisation of some parastatals in South Africa could give rise to the creation of jobs for the larger pool of the unemployed. About 40 percent of the country's active population is unemployed (Cawker and Whiteford, 1993). It is ironic that wealth creation is accompanied by job losses in the international arena today (le Pere, 1997). However, the constraining effect of capital on labour which results in job losses could be seen as an impingement towards housing provision. One could then infer that capitalism cannot survive without the services of labour. A need to ensure that jobs are not lost is imperative, if we aspire to empower the poor financially and otherwise.

It is the argument of this thesis that the proper utilisation of the labour force in housing related industries could provide the unemployed with work. It could be to the advantage of the poor if they are employed in the building industry, while at the same time being economically empowered, as well as the know how for building their own houses.

Much as the labour force is essential for housing delivery, it should be taken into consideration that the Durban Metropolitan area should not be compromised through the degradation of its physical environment. This could also compromise the lives of future residents of the city.

2.3. THE MARXIAN APPROACH TO HOUSING DELIVERY

A Marxian philosophy appears to be the most appropriate critique for the exposure of capitalism's weaknesses. It is useful for revealing the assumptions upon which capitalism rests. Themes of economic exploitation, conflict and capital domination over labour are unified and exposed by a Marxian interpretation (Harvey, 1973 ; Magubane and Yrchick, 1977; Peet and Smith, 1977 ; Bassett and Short, 1980; McCarthy and Smit, 1984). It should be hoped that the exposure of the short comings of capitalism will lead to their resolution, as well as the solution of the most pressing aspects of the housing delivery problem, if the short comings of capitalism are clearly identified and spelt out.

Karl Marx and Engels argue that the progressive growth of capitalism will ultimately lead to its downfall when the proletariat will rise and overthrow capitalism (Sterba, 1995).

Marx and Engels continue to state that the capitalist society will then be replaced by a socialist society. Whilst Marx's argument seems utopian to capitalists, due to the relative success of capitalism in the world today, this investigator concurs with most of the neo-Marxists that the only paradigm that critiques capitalism on a deeper and rationale level is a Marxian analysis.

The economic structure of a society is the real foundation on which arises a superstructure of legal, political and ideological forms (Bassett and Short, 1980; Bottomore, 1991). In this case the superstructure is informed by the underlying economic infrastructure which governs housing delivery in South Africa.

2.3.1. Marxian Philosophy On Bureaucracy And Housing Delivery

Max Weber argues that capitalism is the peacemaker for the bureaucratisation of the economy. (Roth and Wittick, 1978). In the context of this thesis it could be inferred that the housing officials in South Africa appear to be succumbing to the whims of capital by bureaucratising the housing delivery process. It is evident that the basis of capitalism creates patriarchal domination where the poor are not given a stake in decisions concerning the housing delivery process. Instead, the poor are treated as children, whose parents, the bureaucracy, have to decide everything for them. The bureaucratisation of the housing delivery process seems to relegate the poor to a status of being thoughtless sub-humans. The housing delivery officials should ensure that they involve the poor in whatever decision making if the housing delivery crisis is to be redressed in the Durban Metropolitan area. The bureaucratic rules and the attitudes of housing managers are important gatekeeping factors that may lead to the disadvantage of the poor (McCarthy, and Smit, 1984). The hurdles that are placed by urban managers such as bureaucratic corruption, where friends and family members are allocated housing delivery resources at the expense of the poor, all constrain a successful and sustainable delivery of housing to the poor in the study area. Furthermore, the hurdles that are placed by officials, where

the poor have to be on the waiting lists for years, whilst the affluent bribe the same officials to jump the waiting list line, are some of the red tape that seems to hinder the delivery of housing to the disadvantaged.

2.3.2. Market Restrictions and Housing Delivery

Weber continues to critique the market and asserts that it claims to be free, whilst, on the contrary, it has substantive restrictions (Roth and Wittick, 1978). There are legal as well as exchange restrictions that are imposed on the freedom of competition, to the detriment of a viable housing delivery process in the Durban Metropolitan area. The fact that only a handful of Blacks are able to enter the private sector with regard to housing delivery schemes, is proof of the restrictive and constraining effect of the so called free market on the housing delivery process. Furthermore, Weber views the market economy as having the most impersonal relationship of practical life. Consequently, the inhumaneness of the market principles appears to create a situation where the poor are further marginalised. In the light of the above contention one could then infer that the inhumaneness of the market is beyond the scope of economics. This inhumaneness could be attributed to human greed rather than economics.

2.3.3. Exploitation and Housing Delivery

The struggle of the working class by identifying the exploitation of many by a few, especially in the acquisition of property (Sterba, 1995) could be a positive effort to expose the failure of capital to deliver housing in South Africa. Such failures necessitate a critical evaluation of the capitalist economic system in favour of another economic

system that will acknowledge the exploitation of labour by capital. Moreover, the alienation of labour with regard to the accumulation of profit by capitalists, is proof of the exploitative nature of capitalism. Such an exploitative situation results in the inability of the exploited masses to afford even the cheapest form of conventional housing. Marxists argue that the wealth of the more advanced economies is caused by the systematic exploitation of resources of developing nations. This appears to be connected with the exploitation of natural resources of the developing world by the developed world (Chisolm, 1982). It could then be deduced that the affluence of the developed parts of Durban is a result of the exploitation of the underdeveloped parts of Durban, which are Black townships.

2.3.4. Property Ownership and Housing Delivery

In the Communist Manifesto Marx and Engels argue that the acquisition of property is based on the conflict between capital and wage labour (Sterba,1995). It is clear that Marx and Engels advocate for the land and property to be owned the state. This could be explained as a Marxian strategy to curb the ownership of land and property by a minority class. In the South African situation, the fact that the majority of the country's land, is in the hands of a minority compels the state to intervene in the ownership of land and property. There is no hope of addressing property ownership by a minority if we do not involve the state in South Africa in general, and in the study area in particular. The non-ownership of property by a majority usually leads to the creation of slums in the shantytowns.

2.3.5. Market forces and slums

The spatial existence of poverty pockets in Third World cities seems to be a class reflection of the restricted life chances of the poor. The class that is placed at a disadvantage is the proletarian class, whose production is consumed by the bourgeoisie class. It is evident that the delivery of middle class housing to the advantaged is a function of the proliferation of slums amongst the poor.

The slum conditions that are created when squatter settlements mushroom in urban landscapes could be ascribed to the poverty that is created by capitalism. Gilbert (1994) further informs us that the market is a destructive force when it comes to the environment. It should be taken Cognisance of the fact that artificial land scarcities that are created by capital accumulation give rise to land invasions, as well as the slum conditions that prevail in shantytowns. The slum condition that exist in each shack settlement are detrimental, not only to the residents of such areas, but also to formal residents.

It could then inferred that environmental degradation that prevails in squatter settlements is a consequence of artificial scarcities that are created by the non-delivery of formal housing and the allocation of land to the landless. This leads to a dichotomy of the 'haves' and the 'have-nots' within one city. Such spatial manifestations are also known as the dual nature of the city.

2.3.6. The Dual City

The urban environment is characterised by the duality of the city of despair and squalor on one hand, and the city of hope and splendour, on the other hand (van Kempen, 1994; Gumbi, 1995). This spatial dichotomy is attributed to the market forces which create a city of the 'haves' and the 'have-nots'. It is evident that the squalor that exists in shantytowns of South Africa is an emblem of despair, while the middle class housing represents a city of hope. As long as capitalism creates such spatial dichotomies and dualities within one city, the housing delivery problem could remain unabated. These spatial dichotomies result in artificial housing resource scarcities amongst the poor.

Smith (1995) argues that there is evidence of a world of material scarcity and human selfishness. The scarcity of housing in Black areas could be ascribed to the artificial scarcities that are created by capitalism. If the private sector could decide to provide housing not only to the middle income group, but to the lower income group as well, artificial scarcities that are created by the non-provision of low cost housing to the poor, could come to an end.

There is an increasing spatial polarisation between the poor and the affluent. Such polarities manifest themselves through the dichotomy of good housing for the middle income group, and bad housing for the lower income group.

The South African government has to see to it that such artificial scarcities amongst the poor are redressed as a matter of urgency, if the state aspires to resolve the housing

delivery crisis in the Durban Metropolitan Area. It should be borne in mind that all other housing delivery-related resources in the form of finance, land and employment, to mention just a few, are all artificially and scarcely created in urban landscapes. This is due to unequal resource allocation.

The capitalists claim that markets allocate resources in an effective way (Spencer, 1990). Yet the same capitalists fail to allocate goods and services efficiently in South African cities. This could be traced to the resources inequities that are created by the profit motives of a capitalist society. In the Durban case such a situation does exist where the city becomes a microcosm of resource allocation disparities (Hindson *et al*, 1996) (a). A situation where the very rich reside in close proximity to the very poor is prevalent in Durban.

2.3.7 The Marxian Urban Managerialist Thesis

Urban managerialism is another philosophical paradigm that is used in this thesis to critique the market principles with regard to the management of a city. According to Gumbi (1995) it appears that the urban managers stand out as the primary allocators of the housing resource in Umlazi township.

Banovetz (1971) informs us that cities are a catalyst for human interaction. He continues to argue that the dynamic nature of a city affects the way in which it is administered and managed. Urban managers are also affected by the socio-politico-economic dynamics that exist within a city.

Professional planners, designers, maintainers and controllers of the built environment become part and parcel of the urban crisis (Saunders, 1981), when they succumb to the whims of capital which is the engine of city life. The city officials of industry are responsible for the financial viability of all cities.

2.3.7.1. Partiality of city officials in Housing Delivery

Pacione (1990) avers that the institutions and principles that govern the allocation of urban resources are constrained by capital accumulation. The majority of the urban managers seem to depend on the accumulation of capital for their economic and financial well-being. It becomes difficult for the urban managers to adopt a neutral stance when they solve urban problems, without being dictated upon by capital. Whatever housing delivery decisions that are arrived at by urban managers are governed by what the capitalists desire to be, without taking into consideration the well-being of the poor. It is evident that the urban managers prioritise their well being, as well as that of capitalists, above the needs of the poor, who are devoid of housing in the Durban Metropolitan area. A need has arisen for the urban managers to cater for the well-being of the marginalised, if they hold any aspirations to redress the housing delivery crisis in the study area.

2.3.7.2. Inequitable Allocation of Resources

The economic factor on urban housing reveals itself through production, consumption and exchange (Bassett and Short, 1980). In the operationalisation of this study, the poor, who produce profit through their labour are alienated from the consumption of conventional housing, whilst there is exchange between the private sector and the middle income group, a group that consumes most of the private sector housing, to the detriment of the poor.

When the urban managers grant loans to the middle class their sole aim is to accumulate capital. The private sector managers of the various institutions execute the management and the allocation of the housing resource in an irrational manner when they allocate housing loans to the poor. Such an unequal distribution of the housing resource results in informal housing which is constructed by the poor.

Estate agents are associated with building societies that are major gatekeepers who control the house purchase system. The preferential allocation of mortgage bonds to the affluent is perceived in this study as a strategy to redline the poor. Estate agents ensure that they target the middle income group, the group that will enable the estate agents to accumulate profit with ease. It is therefore evident that the estate agents shape the residential space in order to extract absolute profit (Bassett and Short, 1980), at the expense of the poor. Such gatekeeping may sometimes create fertile ground for corruption by most of the housing managers.

2.3.7.3. Corruption and Housing Delivery

Capitalism enables spatial forms to be politically created to serve the functions of politics and human greed. Some of the politicians are dishonest when it comes to the allocation of housing resources. Space then becomes instrumental in using capitalism to exploit the marginalised. The class that controls space therefore controls its production and hence the reproduction of social relations (Saunders, 1981). It should be acknowledged that the ineffectiveness of the urban managers is usually aggravated by the political ideology of apartheid, whose legacy still exists today in all South African urban spaces. A number of housing delivery-related problems are interwoven with the legacy of apartheid (Pirikisi, 1997). These are land allocations, wealth inequalities, unemployment, to mention just a few.

The current government's inability to resolve the housing delivery crisis is imbedded in the legacy of apartheid, which was a political ideology, that created favourable conditions for housing delivery managers to be corrupt. Mechanisms have to be devised in order to break down the walls of apartheid that still exist today. Some of the failed promises of the ANC-led Government of National Unity could be ascribed to the legacy of apartheid which brought about the inefficiency of urban managers, and the resultant corrupt practices. At the same time we should not forget to acknowledge that it is the human nature of some urban managers to be greedy and corrupt, without the legacy of apartheid playing any role.

2.3.7.4. Collective consumption and the role of the state in Providing Housing

Consumption is the utilisation of goods and services by members of a society. Collective consumption may be defined as a social process which involves the consumption of services that are produced and managed collectively by the state (Saunders, 1981; Johnston *et al*, 1986). In the context of this thesis low cost housing of the four-roomed type was collectively made available to Blacks in their townships. It was the duty of the apartheid government to provide housing for the poor in a collectivised fashion at low rentals. Although such houses were too small for the larger Black families it was nevertheless an ideal strategy to deliver housing to the poor at reasonable rentals.

Much as the provision of services is collectivised it should be borne in mind that in the long term, collective consumption is skewed to the advantage of the profit motive. It is therefore the onus of the state to see to it that in the long term the collectivised provision of housing to the poor does not exploit the same group that is supposed to gain from the collective consumption of low cost housing. For instance, some of the houses whose rent has been paid by the poor are more than 30 years old. It is encouraging today to see that the current ANC government has embarked upon a housing strategy whereby all those residents of four-roomed housing, who have been paying rent for more than 20 years, are to be granted permanent ownership of their houses without further payment of rents.

The consumption of services is produced and managed on the basis of non-market choice (Johnston et al, 1986) during collective consumption. Castells (in Saunders, 1981) argues that the urban system is not different from its entire system. He continues to contend that the urban system is the specific expression of that system within a spatial unit of collective consumption. Furthermore, the house is regarded as one of the use values that are socially consumed in the reproduction of labour power. The role of the state as a prime provider of items for collective consumption and administration (Lambert et al, 1978; Bassett and Short, 1980; Johnston, 1980; Saunders, 1981; Johnston *et al*, 1986) could be a positive gesture to deliver affordable and sustainable housing to the poor in the Durban Metropolitan area.

Although the state continues to respond to working class pressure to provide housing in a collectivised manner, the state may yet function in the long term to the economic advantage of monopoly capital (Saunders, 1981). It is therefore essential for the state to ensure that the provision of housing through collective consumption does not disadvantage the poor in the long term. The collective consumption thesis has produced some helpful insights into the role of the state and its activities (Johnston et al, 1986). The thesis of collective consumption has defined the city as a residential unit of labour power that could be utilised for the benefit of housing delivery to the poor. It remains to be seen whether a mixed economic model which follows could be applied in South Africa for the benefit of the marginalised.

2.4. A MIXED ECONOMIC SYSTEM'S APPROACH TO HOUSING

DELIVERY

This research inquiry does not advocate for the complete transformation of the capitalist economic model, but to correct its short-comings. It could be an ideal strategy to make an effort to redress the housing delivery crisis by practising a mixed economic system.

In an effort to contextualise a mixed economic system within a housing delivery context, which could give rise to the sustainability of the Durban Metropolitan area, these are the questions that need to be answered : What is a mixed economy ? Where and when is it functional ? How do we go about implementing it ?

In a mixed economy, the government is necessary to mitigate inequality. So, the government becomes a facilitator rather than a provider of housing in the study area.

Through the intervention of the state legislation is passed to promote sound competition (Swanepoel and van Zyl, 1995). The proponents of mixed economics percieve public intervention as a taming of capitalism (Kirk, 1980). Such an economic system seems to augur well for housing delivery when both private and public institutions exercise economic control through the direction of the market system.

Woolman and Goldsmith (1992) and Perry and Perry (1991) argue that state intervention is a mechanism whereby some of the wealth redistribution could be attained, if a mixed economic strategy is applied within a housing delivery process. Such an economic system is functional in countries like South Africa where there are gross wealth inequalities. It is a travesty of justice to compare developed and developing worlds with

the hope that the magic wand of the free market could solve urban problems in the developing world's cities. One should take into account that the majority of the First World countries have rarely experienced gross wealth inequities.

Short (1989) is of the opinion that we should evolve strategies that make use of the human resource. This is possible only in a mixed economic system. He continues to argue that we should make an effort to conglomerate private and public ownership of a housing delivery process. There must be a mix of both formal and informal economies. In a mixed economy the market could play a vital role in providing housing to the poor without being the only provider of housing. Naïve socialism is as regressive as crude capitalism. It is imperative for housing delivery stakeholders to ensure that they make use of the positive aspects of both capitalism and socialism. In all industrialised economies the market determines prices whilst the government steers the overall economy with programmes of taxation, spending and regulation (Begg et al, 1991). It is generally agreed that in the modern era all economic systems are hybrids that overlap each other. In the true economic sense the new world today is neither purely capitalist nor socialist, but is dominated by a conglomeration of elements from both capitalist and socialist economic models (Samuelson and Nordhaus, 1989). It is the argument in this thesis that owing to the relative success of capitalism in the world to date, the more positive elements from the capitalist economic model should be utilised.

Brian Levy, a World Bank economist, concurs with the argument for state intervention to facilitate the housing delivery process (Moledi, 1997). Levy continues to argue that the state should only provide and formulate regulations that allow the market to flourish. In other words, the state should act as a watchdog of the capitalist system. Furthermore, the state should therefore act democratically and bring disadvantaged groups into the centre of decision making.

An alternative to a purely mixed economic system is not market efficiency versus state – driven welfare, but how the state can assist markets to be more efficient, egalitarian and sustainable. This culminates in the question of looking at the housing delivery problem and solutions that deal with the human impact on the housing delivery problem, as well as their impact on the sustainability of the Durban Metropolitan area.

2.5. THE AFRICANIST - ENVIRONMENTALIST APPROACH

Most social scientists tend to overlook the human factor that impacts upon the housing delivery problem. By adopting a viewpoint that is beyond the scope of economics, but not overlooking its interwovenness with economic factors, the social scientist hopes to come to grips with the hurdles that are man-made or human engineered when it comes to the delivery of housing. Moreover, the acknowledgement of the unique nature of the African environment, its people and its culture, demonstrates the significance of the human factor. The depletion of the natural environment by human beings requires a more humane view of the housing delivery problem and its resolution.

2.5.1 Afrocentric 'Ubuntu' Philosophy

Boon (1996) argues that 'Ubuntu' is embracing elements such as morality, humaneness, compassion, care, understanding and empathy. He further asserts that 'Ubuntu' occurs in an extended family. There is a small community of shared values and equality. It is evident that 'Ubuntu' should manifest itself in a spatial fashion in urban landscapes, where the communal interaction between people takes place. In the context of this study this interplay is spatially demonstrated when people help each other in the building of housing, as well as in the economic empowerment of the poor through for instance, the Afrocentric stokvel concept¹.

The 'Ubuntu' principle emphasises on a philosophy of fraternity and unity. 'Ubuntu' has been central to the survival of African communities (Chisolm, 1982). Before the slave trade Africa had achieved a certain level of civilisation. Part of this civilisation has been repressed and we need to revisit it (Smith, 1997). There was ruthless destruction of the traditional, social, cultural and economic structures of peasant life so as to create capitalist farmers (Vilakazi, 1995). There was no effort by the colonists to use indigenous technology nor an effort to synthesise the new with the old. This paper infers that the destruction of African traditions in a ruthless manner, and the transformation of subsistence farming to commercial farming are some of the reasons for the origins of poverty.

1. STOKVEL CONCEPT

The Independent on Saturday (June 20, 1998) reported that stokvels are used by Blacks to supplement their incomes. A group of people agree to contribute a set amount of money regularly to a common pool. This group may use its money to make profit by selling something. In the context of this thesis the Durban poor may use their Stokvel money to help each other to build houses on a rotational basis.

Poverty culminated in the migration of Blacks to towns, and this movement resulted in the scarcity of housing in cities.

Chisolm (1982) explains the Confucian philosophy, which has a close resemblance with the 'Ubuntu' concept, as originating in China. The Confucian thesis teaches an individual to be humane, which is a basic element of 'Ubuntu'. Furthermore, the Confucian ethic is a creation of dedicated, motivated and responsible individuals, as well as the enhancement of commitment. It is apparent that the 'Ubuntu' thesis embraces most of the elements that obtain in the Confucian thesis. What is the relevance of the Confucian theory on 'Ubuntu'?

The East Asian nations of Japan, China, South Korea and Taiwan, to mention just a few, are economically advanced today because they were able to make use of the Confucian thesis to advance themselves. It could be argued that elements such as high work ethic, has enabled the Asian Tigers to develop economically. It is encouraging that Japan, a country that was as poorly developed as South Africa, 30 years ago, has become the second economic giant on earth. This was made possible by the revitalisation of its cultural roots. Kristoff (1994) argues that it is projected that due to China's fastest growing economy in the world today, she is going to be the largest economy in future.

A country like South Africa, with the potential of becoming an economically developed country, could copy from the orientals by revisiting its cultural roots through the 'Ubuntu' concept if it aspires to redress most of its urban problems, housing included. The fact that colonialism negated and distorted African culture, civilisation, aspirations and needs of African people (Bunsee, 1997), compels Africans to revisit their cultural roots if we aspire to redress the housing delivery problem, as well as to sustain the Durban Metropolitan area.

Makgoba (Bunsee, 1997) further avers that Africans need a complete break with the past and European models. The cultural African environment should be aimed at serving the needs and aspirations of the African people. This thesis counters Makgoba's argument and proposes that Africans should not make a complete break with European models. What they should do is to integrate those Eurocentric models that are compatible with the African situation. The social transformation of the African people should go hand in hand with the Africanisation of the South African poor. It is argued in this thesis that Makgoba's concept of social transformation is interwoven with the acknowledgment of the African conditions that must be exploited in order to redress the housing delivery problem in a sustainable manner. We need to transform the poor in South African society in such a way that we empower it financially, technologically and otherwise, towards a sustainable housing delivery process.

The colonial liberation of the African's mind of not always viewing Eurocentric solutions as superior to the Afrocentric solutions, could force the African to exploit and explore the African environment and its culture to the benefit of empowering the poor in an Afrocentric manner. It was a common practice among Africans to help each other whenever they were faced with a problem. Friends and relatives had to help each other in the building of houses.

A deeper understanding of African culture could be a positive gesture to involve the grassroots in the formulation of a viable housing delivery mechanisms that are people based and African oriented. Moreover, the prioritisation of Eurocentric housing delivery and empowerment strategies above the Afrocentric ones should be a thing of the past if Africans aspire to redress the housing delivery crisis in the Durban Metropolitan area. Africans should aim at linking humanity's interdependence with the physical environment (Cater and Jones, 1992) of Africa.

Traditional African bonds with nature that were destroyed by Europeans need to be revitalised (McCormick, 1995), if Africans aspire to solve the housing delivery problem in the Durban Metropolitan area in a sustainable manner. The communal bonds that bound Africans together in the past need to be revisited and rekindled.

2.5.2. The African Environment And Sustainable Housing Provision

The African environment² is crucial to the resolution of the housing delivery crisis in the study area. The interplay between the physical environment, and its people should be demonstrated and implemented in urban landscapes of South Africa. The roots of poverty are external to the African traditions (Mayekiso, 1997). Seizure of African land and the destruction of the African's traditional way of life appears to have exacerbated the housing delivery problem in South African cities.

It is evident that the sustainability of the natural ecosystems is vital for the survival of humanity on earth. Any housing delivery initiatives should consider the conservation of the natural environment in its original and sustainable state. Technology must therefore be adapted to suit local conditions of the physical environment and the social structure of African people (Chisolm, 1982). It could then argue that technology should be appropriate with the African conditions.

Jackson (1994) argues that peasants in Africa have sophisticated ways of managing the environment, yet they are despised, exploited and ignored. To make matters worse, the African is regarded as backward and inefficient, yet the same so called backward and inefficient Africans were able to construct housing by making use of the environment.

2. The African Environment

The Longman Dictionary of Contemporary English (1985) defines environment as pertaining to natural conditions such as land and water in which human beings use and live on. These natural surroundings influence growth and development. In this thesis the African environment needs to be utilised in such a way that it benefits people socially, economically and otherwise without it being degraded by humanity for the benefit of current and future generations.

Africans made use of grass, wood and soil to build housing that was amenable to the African milieu. Such houses are warm in winter and cool in summer, thus minimising the cost of heating and cooling of the houses. Indigenous cultures are also inventors and custodians of technology (The Year of Science and Technology, 1998). Housing delivery stakeholders should learn to appreciate the expertise of indigenous people if they hope to deliver affordable housing to the very poor.

2.5.3. African Women and Housing Delivery

The African women in South Africa are the most disadvantaged group. Gumbi (1995) discovered that the women bread - winners of Umlazi are the worst hit by the scarcity of conventional housing. African women suffer the dual injustice of being marginalised at home by their husbands as well as the indignity of being disadvantaged as women in the workplace. In the context of this paper, women are also marginalised when it comes to the allocation of the housing resources.

Magubane and Mandaza (1986) state that the oppression of women in Africa is embraced in the entire patriarchal system. Women suffer the triple oppression as Blacks, women and workers. In the context of this paper they suffer the quadruple oppression of being marginalised when housing is allocated as well. It is apparent then that the extent to which housing delivery will be successful will depend on the active involvement of women in whatever decisions that relate to a delivery of housing amongst women in the Durban Metropolitan area.

The fact that women are more than men in South Africa compels housing delivery stakeholders to take the issue of the non-delivery and allocation of housing to most Black women as an impediment towards sustainable housing delivery in the Durban Metropolitan area. Women are an important resource base in the struggle to achieve sustainable development (Stren,1992) through housing provision.

2.5.4. Western Impact on Africa

African governments tend to favour Western technologies. The non-recognition of African and indigenous technology appears to constrain the delivery of housing in African cities. It seems as if the Western nations are not as humane as their Third World counterparts. According to Chisolm, (1982) Western nations should adopt a humanitarian approach which attempts to stir the conscience humanity.

It could be beneficial to Africa if the West makes an effort to embrace the African concept of 'Ubuntu' if they desire to solve African problems the African way. Africans should acknowledge that their prioritisation of Western ways of solving problems are not always an ideal strategy to solve African problems. What Africans should be doing is to utilise only those Eurocentric strategies that are compatible with the African environment if they aspire to resolve the housing delivery crisis in the Durban Metropolitan area.

2.5.5. The Need for Self-Introspection

There is a belief that some of the urban problems are caused by Africans themselves. (Ramogale, 1997). Africans need to undergo a process of self-examination if they hope to solve their problems in urban areas. They need to transcend the usual act of shifting blame for their failures elsewhere. Whilst it is agreed that some of the housing delivery problems emanate from the repressive White regimes of the past, it should be acknowledged that some of the problems are of our own making (Ramogale, 1997).

It should be realised that opposition to transformation is not the sole preserve of Whites. The enemy is also within Africans themselves. By inculcating habits of self-introspection and self-analysis it could be possible for us to link the failure of African culture to resolve urban problems. Through truthful self-consciousness Africans could emancipate themselves from the mental mindset of always blaming Whites for their failures. Africans need an inward looking discourse which will force attention on the strengths and weaknesses of their communities.

The demographic strength of Africans could help them to pull their efforts together for self examination. When Africans have purified their mindset from the colonial mentality of always blaming whites for their problems, it could be possible to resolve the housing delivery problem in a sustainable manner in the Durban Metropolitan area.

In a nutshell, "Through this subjecthood of self examination and the individual conscience that goes with it, we must discover a new relationship to our neighbours, and to the universe and its metaphysical order, which is the source of moral order. We live in a world in which our destinies are tied to each other more closely than ever" (Harvel,1994:238).

It is fashionable for some members of the Black elite and intelligentsia to blame White oppression for most of the problems in Black society (ibid). Scapegoating is a phenomenon that is rife amongst Africans. In the light of the above facts one could conclude that the inability of Africans for self - examination appears to impede whatever housing delivery initiatives that are envisaged. Africans should transcend the retrogressive slave mentality of always shifting the blame for their failures elsewhere.

2.6. THE GLOBALISATION OF CAPITAL AND ITS IMPACT ON THE HOUSING DELIVERY INITIATIVES IN SOUTH AFRICAN CITIES

2.6.1. Introduction

Capitalism is the dominant economic system in the world today due to its relative success especially in the Western world. This section seeks to examine the implications of global capital on the housing delivery initiatives in the developing world, and its implications on the South African housing delivery scenario, with particular emphasis on the Durban Metropolitan Area.

The thesis aims to discover the housing delivery problem which is a function of imperial and colonial capitalism on the developing world. When the International Monetary Fund (IMF) and its sister organisation, the World Bank introduced structural adjustment programmes (SAPs) in Africa, they were more of a failure than a success. By 1990s there were neo-dynamics with regard to the sale of gold by the IMF, which were meant for debt relief amongst the most indebted countries in the developing world.

The exploration of the global environment with respect to the degradation of the developing world's urban landscapes is a device to demonstrate the significance of sustainable cities. USA in relation to Brazil is pursued to demonstrate the inequalities that are experienced in both developed and developing countries.

2.6.2 Imperial Capitalism and the Impact of the Industrial Revolution

The origins of capitalism are traced to the Industrial Revolution which took effect in England in the late eighteenth and nineteenth centuries (Gumbi, 1995). The world's most serious environmental problems have emerged as a result of economic and social changes emerging from the Industrial Revolution (McCormick, 1995). It could then be inferred that the mercantile periods of the late eighteenth and nineteenth centuries therefore marked the beginning of the globalisation of capital during the Industrial Revolution.

The global transformation of the capitalist system led to the control of production by the developed world. The globalisation of capital created more losers than winners (le Pere, 1997) especially in the developing world. In the context of this study a situation was created where a dichotomy of the 'haves' and the 'have nots' gave rise to the housing delivery crisis in South African cities which were directly affected by the globalisation of capital.

According to Keesing (1975) the flow of raw materials to England, Germany, New England to mention just a few countries, the cheaper labour of natives, the creation of markets all tied tribal societies and non – Western states into a world wide system of exploitation. Keesing further avers that the destruction or forced transformation of tribal peoples reached a new scale with the world wide imperialism of the Industrial Revolution. The industrial nations of the West exported underdevelopment in their exploitation of labour and markets (Lewis,1988). The roots of environmentalism lay in the technological, economic and social changes that were brought about by the Industrial Revolution (McCormick,1995). It was evident that the Industrial Revolution was going to deplete city environments.

It could then be concluded that the creation of losers and winners by capital was also a creation of underdevelopment and development amongst the developing and developed countries, respectively. This underdevelopment and development was also imported to

South Africa amongst Blacks and Whites. It could therefore be inferred that the current housing delivery crisis that exists in South African urban spaces, with particular reference to the Durban Metropolitan landscape, was a direct result of the capitalist form of development that was imported by imperialism through colonialism. There is evidence that Western capitalism impacted upon the current housing delivery problem in South African cities.

A standard critique of globalisation of capital creates a situation whereby the less fortunate are marginalised to the disadvantage of housing delivery initiatives. Lenin (cited in Curtin, 1992) gives a picture of overseas expansion as representing the imperialist phase of capitalism. In the light of the above argument the intellectual justification of apartheid by its proponents could be viewed as imperialist.

This thesis concurs with Curtin that the imperialism of the West had a tendency to constrain the delivery of housing in South Africa because the poor were further impoverished by the extraction of raw materials by imperialist masters. Western people's self righteousness and arrogance culminated in the perpetuation of poverty in the developing world. In the process of extracting raw materials from the developing nations, important ecosystems were disturbed to the detriment of sustainable housing delivery in urban landscapes.

The imperialist plundered the developing world in an effort to amass profits for the mother countries of USA, Great Britain, Spain, Portugal, to mention just a few colonising countries. The invisible hand of the global market therefore created an economic gap between the wealthy and the poor. This benefited the affluent while the poor were further marginalised, hence their inability to provide themselves with the cheapest form of conventional housing in South African cities today.

Global inequality is therefore human-made and is controlled by economic warlords (le Pere, 1997). The capitalist notion that the underdevelopment of the Third World is a result of their corrupt governments with low work ethics (Gumbi, 1995) is countered by Kruijer (1987). He asserts that the developed world claims 83 percent of the world's Gross National Product, and 95 percent of all technological innovations. Organisations in the rich countries dictate terms and the developing world is disadvantaged by a multitude of power blocs.

In conclusion, the housing delivery hurdles express themselves in South African urban spaces as having been influenced by imperial capitalism which was transformed into apartheid capitalism in South Africa. The socio-spatial engineering of capitalist countries has led to a situation where the imperial masters exported capitalism to South Africa. It could be an ideal strategy to explore in detail, the impact of globalisation on the environment.

2.6.3. Globalisation and the Environment

According to Redclift (1987) the problem in achieving sustainable development is related to the overriding structures of the international economic system, which arose out of the exploitation of environmental resources, and which frequently operate as constraints on achieving long-term sustainable practices. In other words, Africa's natural resources made her a rich prize for imperialists (Narkiewicz 1981), while at the same time degrading her natural environment.

The debt crisis in African countries is a vivid illustration of a problem with serious environmental implications and causes, which is considered exclusively economic (Redclift, 1987). Redclift (1987) further argues that one person's world of resource abundance is another person's depletion. The extraction of resources from Africa was a gain for the imperialist countries of the West, at the expense of the ability of Africans to meet their economic needs such as housing delivery.

It is a fallacy to consider the debt crisis as exclusively economic as it impacts upon environmental degradation. When the developing countries exploit the environment in an attempt to obtain resources so as to pay back the huge debts they incurred internationally, they are, at the same time depleting the environment. People in the Third World are forced by poverty to extract natural resources, a practice that is deleterious to sustainable development.

In the same vein, when squatters exploit natural forests to build indigenous housing, as well as grasslands for roof thatching, they are compelled by their inability to afford the more expensive Eurocentric building materials. Urban workers use charcoal and firewood in their homes which contribute to the drastic overcutting of forests (Schram and Warford, 1989). When international corporations open up businesses in the developing world they tend to clear up natural forests without considering that the indigenous people have lived harmoniously with the natural environment for a long time. Moreover, nobody takes into account that the indigenous people are environmental experts who could be consulted. The non-consultation of the grassroots in matters concerning the environment appears to constrain the delivery of affordable indigenous housing to the very poor in African countries.

Benneth and Estall (1996) gives a picture of economic growth in the West as being achieved at the expense of the developing world. In the light of the above argument, the way in which natural resources are extracted from the developing world results in environmental degradation and poverty in Third World cities. That is why a vast majority of the poor in urban areas have inadequate housing and lack many basic urban services as well.

In conclusion, environmentalists should acknowledge that in developing countries the environment is a source of livelihood and survival (McIvor, 1998). The preservation of the environment for future communities will not appeal to the poor if issues such as their economic well being are not considered hand in glove with those environmental management. A balance between environmental issues and economics should be striven for if city officials aspire to redress the housing delivery crisis in a sustainable manner.

2.7. THE INTERNATIONAL MONETARY FUND (IMF) AND THE WORLD BANK

2.7.1. Introduction

The IMF and the World Bank are two aid agencies that seem to influence the housing delivery situation in South Africa. It is imperative for one to understand what these organisations stand for so as to comprehend the roots of the housing delivery crisis in the study area. The constraints that are placed by these agencies are all examined in an attempt to examine their failure to aid African countries in the past.

2.7.2 IMF vis-'a-vis the World Bank

According to Padayachee (1996) the International Bank for Reconstruction and Development (World Bank) was set up at the same time as the IMF in July 1944. Its original aim was to assist war-ravaged Western Europe, where it provided long term multilateral development aid for particular projects (ibid). The World Bank also provides advice, furnishes consultants and assists recipient countries in numerous economic projects (ibid).

Padayachee (1996) further argues that the IMF also addresses short term balance of payments while the Bank concerns itself with long term development aid. The IMF's primary aim is to facilitate the growth of world trade. The World Bank, on the other hand, discourages state intervention, import control as well as consumer subsidies (ibid).

The structural adjustment programmes (SAPs) of the IMF in the past included the slashing of wasteful government spending and subsidies and the privatisation of state – owned assets (Karanja, 1992). This is what is happening in South Africa today where the government has cut its budget on education, health and social spending in general. Such cuts have resulted in the increasing rate of unemployment due to retrenchments.

2.7.3. A critique on the IMF and the World Bank

In order to obtain finance from the IMF a government must arrange its finance in accordance with the dictates of the IMF and the World Bank. South Africa's Growth, Employment and Redistribution (GEAR) economic plan succumbs to the macro-economic whims of the two aid organisations. Whatever budget allocations that are aimed at housing delivery strategies without taking into cognisance that the IMF and the World Bank's austerity programmes constrain the provision of housing to the poor, it could be a pipe dream to provide housing to the poor in South Africa.

When a member country applies for financial aid, the IMF and the World Bank require a country to make certain reforms as a condition for further assistance (Kalyalya *et al*, 1988). If the government of a particular country rejects the IMF and the World Bank's proposals, the two organisations may refuse to assist that country.

The IMF and the World Bank compels the lending nations to dance to their tune, and in the long run, the chief benefactors are the developed countries who fund and control the IMF and the World Bank. It is evident that the global aid schemes by the IMF and the World Bank have done more harm than good in Africa (Poswa and Wroots, 1991; Karanja, 1992; Gilbert, 1994).

Such aid schemes perpetuated poverty in African countries and their cities. The IMF and the World Bank poured billions of dollars into unconceived projects (Williams,1996; Simms,1997). The SAPs of the IMF and the World Bank appear to aggravate the slow delivery of housing amongst the poor because they further aggravate poverty in South African cities by cutting down on jobs which lead to unemployment. On a positive note, it should be acknowledged that the current positive response that appears to emerge from the IMF and the World Bank, to respond to criticism, rather than the negative attitude of the past, is an encouraging sign. It could be to the benefit of redressing the housing delivery problem in the Durban Metropolitan Area if it is acknowledged that the austerity programmes of the past have also damaged the environments of developing nations.

As long as the country agrees to conform to the debt repayment conditions of the IMF the agency becomes sympathetic to that particular country. One could then infer that the South African GEAR economic strategy that was approved by the IMF has a tendency to constrain the housing delivery process in the study area. In the light of the above argument it could be concluded that the cuts that result in insufficient funds for housing delivery compel the government to opt for debt relief.

2.7.4. Towards Debt Relief

While the Jubilee 2000 South African campaign is calling for the cancellation of debt of R3 billion (Keeton in Sowetan November 6, 1998), Padayachee (1996) on the other hand, states that the IMF views, South Africa as not really in need of assistance due to her gold stocks. South Africa is regarded as a middle income country, not a recipient one (ibid).

Eveleth (in Mail and Guardian October 30 November 5, 1998) (reports that the antagonists of debt relief believe that South Africa does not qualify for debt relief because foreign debt is only 5 percent of our total debt and most of it was borrowed after 1994. He states that foreign debt that was accumulated by the apartheid regime amounts to only one percent of government debt. Sanctions during the 1980s forced the previous government to borrow from local banks. (ibid). The anti-debt campaigners further aver that as much as 40 percent of South Africa's debt could be restructured by changing the public service pension fund.

The proponents of debt relief argue that the fact that the South African populace was economically marginalised by the vicious apartheid system that was financially aided by the IMF to pursue its ideology, compels this country to opt for debt relief (Eveleth, 1998). It seems as if South African people are now paying for the mistakes of apartheid, a system that was declared a crime against humanity by the United Nations Organisation. Mapanga (in Sowetan May 13, 1998) asserts that the apartheid debt is odious and needs to be repudiated as a matter of urgency, if concerned stakeholders aspire to redress the housing delivery problem in the Durban Metropolitan area in particular.

The Educator's Voice (March, 1998) reports that already 20 per cent of South Africa's national budget is spent on repaying the apartheid debt. There is no doubt that debt repayment has become an important mechanism for transferring wealth from the people of the South to the financiers of the North. Apartheid's creditors should start thinking of making reparations to the New South Africa by cancelling the apartheid debt (ibid).

No matter how small the debt that was incurred internationally during the apartheid years, the fact that sanctions compelled the apartheid government to borrow from local banks was a further impediment on the government's debt, which it still has to pay the banks the moneys owed to local banks by the apartheid regime of the past. Atkinson (in Mail and Guardian September 23-30, 1999) informs us about Christian Aid's argument that the developed world's bill on its carbon dioxide account is three times as large as its financial debt from the developing world or \$ 612 billion compared to \$ 200 billion. Christian Aid continues to argue that rich countries demands for debt repayments are morally illegitimate and undermine the ability of poor countries to achieve internationally agreed poverty reduction targets.

As long as the developed countries do not acknowledge environmental devastation they cause in developing countries, it could be a pipe dream for the developing countries to obtain debt relief from the developed world. A need to start on a clean slate by wiping out debt owed by the developing world has become imperative, if the delivery of housing is to be sustained in the Durban Metropolitan area.

The high increase of foreign debt during the post apartheid era could be linked to apartheid because the current government was trying to redress the wealth imbalances that were created by the apartheid government of the past. It could therefore be concurred with the proponents of debt relief that if we aspire to redress the housing delivery problem, we should opt for debt relief.

2.8. SUMMARY

Various philosophical paradigms, as well as the role of globalisation of capital on housing delivery have been discussed in this chapter. In the light of these discussions, it seems that the neo-liberal economic system, the socio-spatial elements and the physical environment are intertwined in urban landscapes of both the developed and the developing world. However, the Third World cities appear to be the worst hit by the problem of housing delivery and the unsustainability of their cities. The urban environment is a contested terrain, where poverty has given rise to a dichotomy of the city of despair and hope.

The interplay of global forces where capitalism rules the roost seems to be a function of poverty and unemployment in the Third World. There is a spatial variation in the way in which global capital degrades the urban environment to the detriment of the poor's housing delivery situation. The socio-politico-economic forces that are interwoven seem to aggravate the housing delivery problem, whilst at the same time degrading the city environment, thus compromising the lives of future residents of the study area.

Finally the ecological interplay in African cities demonstrates the significance of utilising the African environment, its culture and its people to redress the housing delivery crisis and its related problems such as unemployment and poverty. There is a lot that we can gain from indigenous technology if we make an effort to integrate it with the Eurocentric technology that is compatible with the African Environment.

CHAPTER 3

METHODOLOGY

3.1. INTRODUCTION

Methods of investigation vary in accordance with a particular study. They depend on what a study aspires to investigate and discover. A combination of research techniques, each having its own strength and weaknesses, could provide a more powerful research strategy than the reliance on one method (Moser and Kalton,1985). In other words, the investigator aspires to attain a balanced picture of his research findings by employing a variety of research techniques.

This chapter follows a sequence where the types of theoretical procedures are identified as strategies to guide the empirical aspects of the inquiry. Without a good theoretical framework as background to the empirical investigation, it becomes difficult for any empirical inquiry to attain its goals. Accordingly, philosophical paradigms, First and Third World literature on global capital and sustainable housing delivery in urban spaces, is a viable strategy which attempts to make the empirical aspect of this study valuable. Theoretical evidence for this thesis was obtained from books, newspaper articles, journals, magazines, government documents and books. Unpublished university papers also form part of the secondary sources.

The empirical methods which form primary data entail a physical exploration of the Durban Metropolitan landscape by making use of the car, maps, a camera and photographs of the study area. In an effort to get familiarised with the areas earmarked for investigation the walking strategy was used. Participant observation enabled the researcher to communicate with respondents of inquiry and it should be borne in mind that the researcher himself was also used as a source of information, as he was born and bred in the study area.

Interviews consisted of structured and unstructured questionnaires. While the structured interviews were meant to be answered by the people on the ground, the unstructured ones were designed for the various housing delivery stakeholders of note and the Durban Metro officials. A combination of sampling procedures including, *inter alia*, non-probability, purposive, and stratified sampling techniques were used.

3.2. A THEORETICAL FRAMEWORK'S METHODS OF INVESTIGATION

All the objectives of this study are derived from the theoretical framework. As Bryman and Cramer (1990) indicate hypotheses deduced from theory are further submitted to a searching inquiry through empirical research. The First and Third World theory was imperative for guiding the researcher to attain relevant information. According to Fay (1987), for a theory to be scientific, it must be subjected to public empirical evidence.

When the researcher undertakes an empirical investigation in the study area, he is subjecting his theoretical framework to the public, his subjects; in an empirical fashion by means of interviews, as well as through the physical exploration of the study area.

It should be borne in mind that a theory always holds for some or other population of individuals universal conditions (Huysamen,1994). In the context of this thesis the various income groups in the Durban Metropolitan area are all aware of the constraining effect of the free market system on the worst housing conditions. Capitalism and its hindering effect becomes a universal condition.

3.3 EMPIRICAL TECHNIQUES

3.3.1. An Empirical Observation of the Physical Elements

Owing to the fact that environmental cognition becomes more intimate when one walks (Madanipour,1996) the investigator used the walking strategy in an attempt to identify housing delivery-related environmental factors that prevail in the Durban Metropolitan area. An empirical investigation of the physical elements was also executed by means of a car, where the researcher took a tour of the study area with the aid of a map and a camera.

It is worthy to note that the photographs taken of various areas in the Durban Metropolitan area that were earmarked for a detailed study were aimed at demonstrating the interplay between human and physical elements. For instance, photographs of shacks at the Canaan shantytown reflect the location of shacks on a steep slope which are

susceptible to physical hazards. A landslide, which destroyed some of the shacks at Canaan shows the interplay between human endeavour and the physical elements.

The investigator used his knowledge of the city of Durban to observe numerous places delimited for particular study. It could then be pointed out that the physical exploration and examination of elements entail the following :

- The city centre of Durban where the Victoria street shacks are examined first hand;
- The Durban station crafts traders together with squatter settlements around the station
- The hilly Berea residential area demonstrates the adequacy of housing - related resources in upper income housing as well as the ability of the affluent to construct expensive housing on hilly land. Large sites, basic infrastructural services such as refuse collection, the cleaning of streets and green open spaces in the form of parks, are some of the elements that were empirically observed.
- Umlazi and KwaMashu Black townships where the aspect of hills comes to the fore with regard to their hindering effect on the construction of low cost housing were explored. The exploration of both formal and informal housing with respect to its physical elements illustrates the dichotomous nature of 'good' and 'bad' housing in the study area.

- The Power shantytown in Umlazi represents the better-off squatter settlement, where the interaction between the shack dwellers and their environment was empirically observed. The Canaan shantytown represents the worst shacks in the study area. Another shack area near the Mshiyeni Hospital in Umlazi was also explored. This is the V-6 shantytown.
- Accordingly, a spatial manifestation of filth in the inner city is evidence of Environmental degradation that prevails in the study area.

3.3.2. Participant Observation

Reason (1994) argues that our existence is based upon participant observation and communion rather than separation. Participant observers make an attempt to interact with the respondents of inquiry. Participant observation is useful during the preliminary stages of a scientific inquiry for exploration and description (Jorgensen,1989). Although this method was used to a limited extent it should be noted that participant observation contributed a great deal during the execution of the pilot inquiry, as well as in the interviewing of some of the respondents in an unstructured manner.

The participant observation technique also contributed to the empirical examination of the physical elements which directly impact upon the unsustainability of the housing delivery - related problems. More than half of the shantytown of Canaan has to date been demolished, and its people relocated to an area near D section in Kwa Mashu. Only a small portion of the shack settlement still remains. Part of the shantytown is near a

water hole of an old quarry. The shacks on the flood plain of the Umgeni River are a new phenomenon.

3.3.3. The Researcher As A Member Of The Inner Circle

The participant observer becomes a member of the inner circle of the group being studied (Huysamen,1994). It is evident that the investigator became a member of the inner circle when he was communicating with the Durban Metropolitan respondents, who had to answer random questions aimed at discovering answers that were not part of the structured questionnaire.

Much as it was relatively successful to execute participant observation, nevertheless, there were problems encountered which tended to lower the validity and reliability of this technique's findings. Some respondents who refused to co-operate cited fear of being imprisoned because they thought that the researcher was somehow going to report them to the police for their views on corruption within the housing department.

The non-responses and the incomplete questionnaires of the structured interview were somehow covered by participant observation. The experiences that were observed first hand by the researcher as an insider (Huysamen, 1997) resulted in the gathering of useful information.

As participant observation requires an extensive period of time (Huysamen, 1997), the researcher observed the evolution of the Canaan shackland over a number of years. The beginning and the demise of the Canaan shackland was observed by the researcher on a daily basis on his way to work. The observation took a period of five years. The People's Housing Process (P.H.P.) at Newlands East was also observed in a similar manner.

In conclusion, the application of the participant observation technique is a humanistic way of linking the human aspect of the investigation with the physical elements. Much as the researcher acknowledges that participant observation is appropriate when the research problem is addressed by the gathering of qualitative data by direct observation (Jorgensen,1989; Reason,1994), one should not lose sight of the fact that the researcher's immediate experience also played a crucial role in the gathering of valuable data during participant observation.

3.3.4. The Questionnaire Technique

The ability of the respondents of social research to converse with each other and with the scientific investigator is a vital characteristic (Burgess,1982). By means of structured and unstructured interviews that were formulated in the form of questionnaires, the social scientist was able to find respondents who were induced to talk in an effort to gather valid and reliable data concerning housing delivery and the sustainability of the study area.

3.3.4.1. The Structured Interview

Burgess (1982) explains that structured interviews do not allow the subject to follow up any interesting idea. One could then infer that much of the questionnaire format contained close-ended questions yet each question was open-ended, by virtue of having to add an alternative other (specify) at the end of almost all the questions.

3.3.4.2. The Unstructured Interview

This was a device to enable housing delivery stakeholders to explore issues other than those that were included in the structured interview, or to gain a deeper insight on the issues included in the structured interview. A township housing department clerk who was promised anonymity, because of the serious nature of his revelations gave valuable information concerning corruption.

Burgess (1982) argues that the unstructured interview can be used as a conversation. It was easy for the researcher to start a conversation with a housing clerk as a strategy to obtain valuable information concerning corruption amongst government clerks. The unstructured interview provided an opportunity for the researcher to probe deeply, to uncover new clues, to open up new dimensions of a problem to ensure vivid, accurate accounts from informants that are based on personal experience (Burgess, 1982).

3.4. THE SAMPLING PROCEDURES

3.4.1. Stratified Random Sampling

Within a city stratification usually increases representativeness in social class (Babbie, 1973) as evident in the income groups under investigation in this thesis.

Stratified sampling is where the population is divided into sub-groups on the basis of some characteristics (O' Brien, 1992). The researcher ensured that appropriate numbers of elements drawn from homogeneous subsets were effected through stratified sampling (Babbie,1973). The homogeneity of income groups goes hand in glove with the heterogeneous nature of the groups as well . The chosen groups are homogeneous in the sense that the middle income group consists of respondents of the same economic class. The same applies to the lower income group and the lowest income group.

Section BB respondents belong to the middle income group, while the sections B and D of Umlazi, and KwaMashu sections who are four roomed low cost housing dwellers belong to the lower income group. The shack dwellers of the Power and V6 shantytowns and those of the Canaan shacks belong to the lowest income group.

Thirty respondents belonging to the middle income group emanated from AA and BB sections in Umlazi as well as from KwaMashu township. The other thirty respondents belonging to the lower income group, the so called low-cost four-roomed housing were obtained from various sections of Umlazi and Kwamashu. The final twenty respondents

are from the shacklands of Power and V-6 in Umlazi. The total number of respondents interviewed was eighty (n=80).

It is hoped that the utilisation of stratified random sampling will lend an extra ingredient of precision to random sampling (Bryman and Cramer, 1990).

3.4.2. Purposive Sampling

Purposive sampling, which is a non-probability sampling device was used in an attempt to balance the failure of probability due to the political volatility and scepticism of Black respondents towards research. As an effort to undertake a study of housing delivery in the study area different sampling techniques are utilised. The use of non-probability purposive sampling in politically volatile Black townships outweighs the disadvantage of not applying it at all. Huysamen (1998), Moser and Kalton (1985) and Babbie (1973) all seem to concur that non-probability is advantageous in that it is less complicated and more economical.

3.5. DATA ANALYSIS AND INTERPRETATION

The analysis of data was effected manually by drawing tables which included column variables across the tables and row variables on the margins of tables. Later on, the manually drawn tables were drawn by a computer which employed the Microsoft Word '97 Windows '95 package.

The figures used entail a pie chart and a map of the study area drawn by means of the GIS technique. Diagrams illustrating the ecological interaction were drawn by means of a computer using the above package. The photographs that were taken of the various areas in the study area were analysed and interpreted by the researcher in verbal terms because they were observational in nature. Theories used in the thesis were tested qualitatively by formulating inferential conclusions from empirical data emanating from structured questionnaires in a deductive manner. Sometimes it became essential to develop theory from analysed data by means of inductive reasoning. Whatever was described and explained was done without the use of quantitative techniques. This could be seen as the relative weakness of this thesis, when data was analysed and interpreted. Nevertheless, the use of qualitative analysis and interpretation of data outweighs the non-utilisation of qualitative techniques altogether.

Qualitative inferences involved measurements on samples and then from observations the researcher deduced something about a population (Kidder,1976) of the Durban Metropolitan landscape's housing delivery problems and solutions. Photographs taken by the researcher was a means to integrate the physical aspects of the thesis with the empirical ones.

The analysis and interpretation of data requires the researcher's own judgement and skill (Moser and Kalton; 1985). Whatever is analysed and interpreted is the researcher's originality in arriving at reliable findings that are based on the intellectual analysis and interpretation. The investigator's ideas are acknowledged in the thesis because the researcher was born and bred in the Durban area, and this enabled the investigator to

furnish valuable data when analysis and interpretation was undertaken. However, the only difference was that the investigator's opinions were of a limited extent so as to guard against subjectivity.

3.6. THE PILOT STUDY

In an effort to conduct a successful study the researcher undertook a pilot investigation as a dress rehearsal for the final inquiry (Moser and Kalton, 1990). The pilot study also indicated questions that needed restructuring or elimination (Sudman and Bradburn, 1982). The pilot study also provided information on how long it took to conduct interviews. Ten respondents were interviewed.

A pilot study was conducted by making use of open-ended questions. With regard to this study, a pilot inquiry amongst the middle, lower and lowest income groups contributed towards the formulation of another easier questionnaire, as well as a Zulu version of the questionnaire. While it was not difficult for the middle income subjects to answer the initial questionnaire, it was discovered that the initial questionnaire was beyond the intellectual capacity of most of the lower and the lowest income groups. Many of the subjects failed to comprehend the questions on the initial questionnaire.

In the light of the above findings the researcher decided to formulate another questionnaire that was earmarked for the understanding of the lower and lowest income groups.

Another important element which came to light was the need for the formulation of the Zulu version of the second questionnaire. However, for the illiterates the researcher had to read all the questions and alternative answers to the respondents.

One could therefore conclude that the execution of a pilot investigation enabled the researcher not only to gain valuable information from the middle class, but from the lower and lowest income groups as well. The two sets of questionnaires are available in the appendix section of the thesis.

3.7 CONCLUSION

This chapter has made an effort to show the path to be followed when the investigation is being executed. It should be borne in mind that it was the investigator's goal to undertake a probability sampling procedure but in vein. In any case, the application of the less scientific non-probability techniques outweighed the non-application of non-probability at all.

The use of unstructured interview questionnaire technique enabled the researcher to obtain data that was not included in the structured interview questionnaire. The utilisation of inferential and descriptive statistics manually, was a mechanism to ensure that accurate and reliable findings are attained from the analysis and interpretation of collected data.

CHAPTER 4

THE EVOLUTION OF THE HOUSING DELIVERY CRISIS IN THE DURBAN METROPOLITAN AREA

4.1. INTRODUCTION

The serious nature of the housing delivery problem in the Durban area compels this investigator to make an effort to discover the historical causes which appear to impact upon the housing delivery problem even today. One hopes that the revelation of the social, political, economic, cultural and environmental effects that are interwoven with the housing delivery problem can only be exposed if their foundations are traced back to the precolonial, colonial, segregation, apartheid and post apartheid periods.

An historical explanation can produce a verifiable theory that can be used in an attempt to redress the housing delivery crisis in Durban. By briefly integrating some of the historical facts pertaining to some Black townships, is a device to make use of the townships as a microcosm of all other Black townships in the Durban Metropolitan area.

4.2. THE PRE-COLONIAL PERIOD

While the arrival of the White man in South Africa could be traced to 1652, when Jan Van Riebeeck arrived at the Cape on his way to India, the arrival of the British settlers begins in 1820 in Natal. In the pre-colonial times Blacks lived harmoniously with their natural environment. They were able to exploit the physical environment's resources for their own benefit without disturbing the natural ecosystems.

4.2.1. Self Sufficiency of Blacks

The economic system of bartering that was practised at the time did not create inequality amongst Blacks. Black people were able to utilise the indigenous technology and building materials to build housing that was compatible with the African environment.

Blacks were agricultural farmers who were able to sustain a living by practising subsistence farming, and there was no need for them to migrate to the so-called white towns. It is evident that Blacks were self-sufficient when it came to their daily needs during the pre-colonial era. In accord with Magubane and Yrchick's work (1977) the destruction of African peasant agriculture destroyed Africa's self-sufficiency and encouraged economic dependency on industrial capitalism. Smith (1997), on the other hand, affirms Magubane and Yrchick's contention and argues that before the slave trade in Africa, Africans had achieved a certain level of civilisation, which, in this paper is the provision of Afrocentric housing through indigenous technology. The indigenous survival techniques and collective efforts of the past saved the poor from poverty and leath and the absence of the housing problem during the pre-colonial era.

4.2.2. Destruction of African Traditions

The pre-colonial traditional bonds with nature that were destroyed by Europeans need to be revitalised (McCormick, 1995) if we hope to redress the housing crisis in Durban.

The pre-colonial conditions as examined above also existed in Durban, which was then just a natural harbour. Whatever housing problems that came into existence only occurred during the colonial era of British rule.

4.3. THE COLONIAL PERIOD

A more productive way to understand urban issues is to explain principles and ideals that shaped the South African urban process (Parnell and Mabin, 1995). In the context of this paper, we need to understand how historical conditions and circumstances impacted upon the urbanisation of the Durban area during the colonial period.

4.3.1. Abundant Land

According to Christopher (1988) when Shaka scattered the tribes in Natal favourable conditions were created for the white people to immigrate to Natal where the land was in abundance. While White people allocated themselves better land around Port Natal it was not surprising that later on Blacks were to be relocated on the periphery of the so called White towns. The colonial period therefore begins in 1863 with regard to its impact on the housing problem in Durban (Maasdorp and Haarhoff, 1983).

4.3.2. Temporary Sojourners

When Blacks were effectively prevented from obtaining the residential franchise in 1869 they were viewed as temporary sojourners in the land of their birth. From the 1870s onwards steps were taken to exercise the control of labour (Maylam, 1996). Later on in 1893 Theophilus Shepstone, who was the secretary for Native Affairs in Natal highlighted the problem of a large influx of Black casual workers who were viewed as causing insecurity to the White people in town (Morris, 1981). The 1893 legislation restricted the movement of Africans into towns (Swilling *et al*, 1991). The Leyden Commission recommended the segregation of Africans in towns. This Commission wanted separate residential locations occupied by Africans whose employment entitled them to be in town. In the early 1900s African traders from rural areas entered Durban, on 5 day passes to hawk eggs, sticks, assegais, to mention just a few things (Maylam and Edwards, 1996). This demonstrated a desire by Blacks to empower themselves economically in urban areas.

In Natal the proximity of urban centres to the Native reserves made the question of Black immigration into town a central issue (Morris, 1981). The Native Reserve Location Act of 1902 and the Native Locations Act of 1904 took the 1893 legislation further by tightening the movement of Africans in towns. (Swilling *et al*, 1991). It should not be forgotten that the desire by Whites for separate residential areas was mooted as early as 1863 (Maasdorp and Haarhoff, 1983)

4.4. THE SEGREGATION PERIOD UNDER THE UNION OF SOUTH AFRICA

This period ranges from 1910 to 1947. It is marked by the historical event when the Union of South Africa came into existence in 1910. A theoretical examination of the works of Magubane and Yrchick (1977); Morris (1981); Maasdorp and Haarhoff (1983); Cloete (1986); Hendler (1987); and Atkinson (1991), seem to concur that the segregation period linked the colonial period with the apartheid era that was to follow.

4.4.1. The 1913 Land Act and its impact on housing provision

Whilst a number of government regulations were promulgated the two Acts that stand out as the primary hurdles towards the delivery of housing during this era were the Land Acts of 1913 and 1936. These Acts appear to be confirmed by Gumbi's (1995) empirical investigation on the Umlazi township, that the land issue is indeed basic towards the current existing housing backlog in the Durban area. According to Plaatjie (Sowetan July 30, 1999) the Land Act that was prepared by J.W. Sauer took 75 percent of African land and gave it to White farmers.

As the title denotes this period was marked by the year 1910 where racial groups were segregated with regard to residential areas. This is supported by the fact that by 1910 there was official racial segregation (Atkinson, 1991). The promulgation of the 1913 Land Act which allocated only 13 percent of South African land to Blacks proved once and for all that the land issue was indeed the basic component of other housing delivery related problems that were going to emerge later even in urban areas.

The first formal accommodation for African families in Durban was at Baumanville Location (Maylam,1996). It was not until 1915 to 1916 that family cottages were built at Baumanville. However, the provision of a formal location at the centre of town is perceived by Maasdorp *et al* (1975) as a strategy devised by the local government to eliminate undesirable conditions in which the Black community was viewed to be living under.

4.4.2. The 1918 Influenza Epidemic in relation to housing provision

This epidemic struck South Africa, taking a toll of 500 000 lives among Blacks (Morris, 1981). The epidemic urged immediate attention to the slum conditions in native locations. It could then be concluded that the slum conditions that prevailed in Durban's Black locations were a result of the inability of the local government to effect a sustainable housing delivery process in Durban.

The improvements with regard to the upgrading of slum conditions in Black townships was cosmetic and unsustainable. The local government in Durban did not implement a housing delivery process where Black townships were going to be hygienic, by being provided with housing infrastructural services such as water borne toilets that were similar to the ones provided in White areas. How did the Durban authorities expect the Black locations to be hygienic, if cleaning infrastructure was not availed to the poor ?

4.4.3. The Stallard Commission vs the influenza epidemic on housing

In 1918 the serious influenza epidemic drew attention to the extremely bad living conditions of urban Blacks (Magubane and Yrchick, 1977; Morris, 1981). The Native Affairs Commission was set up under the auspices of the Native Affairs of 1920. At the same time the Stallard Commission report in Parliament in 1922 was an attempt to establish the temporary status of urban Blacks in the so-called White towns. The 1922 Draft Bill maintained that native villages should be set-aside for urban Blacks. A pass system controlled the movement of Blacks into White towns in all provinces (Morris, 1981).

According to Gumbi (1995) the 1918 Influenza Epidemic as well as the Stallard Commission only encouraged the policy of segregation rather than desegregation. It enabled White authorities to use the Commission as a scapegoat for viewing Black slums as unhealthy, while in reality the segregation policy was aimed at providing for the economic interests of Whites. It was evident that Whites were not honest in their endeavours to sustain the housing delivery process in such a way that unhealthy conditions became a broader housing development process that took into account the sustainability of the housing delivery process. It was apparent that the temporary status of Blacks in urban areas was a means to exploit their labour as long as the White people desired to do so. But as soon as their labour was not desired they were expected to move away from towns to Black locations. So, the character of towns was Black and White (grey) by day, and White by night.

4.4.4. The Central Housing Board vs Housing Delivery

Wilkinson (1984) informs us that the establishment of the Central Housing Board (CHB) in terms of the 1920 Housing Act was a consequence of the influx of Africans to cities. Whilst the influx of Africans into towns was perceived as a threat to the White people's well being it was evident that the numerous laws that were promulgated were designed to arrest the influx of Africans to White towns like Durban. This justified the cosmeticity of the Slum Clearance Act which was not actually meant to clean slums, but to safeguard the economic interests of Whites by controlling the employment of Blacks in urban industries.

4.4.5. The 1923 Urban Areas Act and its impact on housing delivery

Magubane and Yrchick (1977) argue that the 1923 Urban Areas Act provided for the territorial segregation in urban areas. Morris (1981) seems to support Magubane and Yrchick who argue that this Act controlled the presence of Blacks in urban areas. It was clear that such repressive laws were going to impact negatively on the construction of proper housing. How did the local government in Durban expect the illegal immigrants to construct formal and sustainable housing that was not going to compromise the lives of future residents of Durban, if such a housing scheme was hindered by the numerous laws that were promulgated during the segregation period ?

Morris (1981) further argues that the 1923 Urban Areas Act entrenched the ideology of Stallardism. It was obvious that Blacks were going to experience housing and land shortages because this Act ensured that Blacks were relocated in locations and native reserves. The 1923 Urban Areas Act also facilitated the exploitation of African labour by capitalist industries in towns. It became apparent that this Act was serving the interests of capital accumulation, which impoverished Blacks in towns, and the ensuing housing shortages. Later on, between 1930 and 1937, this repressive Urban Areas Act of 1923 was amended and made it increasingly difficult for Blacks to enter towns.

4.4.6. The Slums Act of 1934

By 1930 the Native Areas Act gave the government the power to control the presence of Blacks in urban areas (Hendler, 1987). Powers were given to effect into laws, regulations regarding Blacks residing but not employed in urban areas. Such a situation also prevailed in Durban. The Slums Act of 1934 caused intense and personal distress amongst the poor in urban areas (ibid). The poor who inhabited the slum areas as a last resort were deprived of the only means of shelter, when the slums were demolished without being provided with alternative accommodation.

Although the slums were an environmental hazard in Durban, it should be taken into account that their demolition without providing alternative accommodation to the illegal residents proved to be a regressive measure. The fact that the Durban local authorities did not integrate housing development within the context of a wider urban strategy, resulted in housing that had the proclivity to compromise the lives of future residents. In

other words, the housing delivery process of the time was unsustainable. Environmental factors were not highly prioritised. The Stallard Commission has affirmed the above point of view that it was not the primary purpose of the state to clean Durban's natural environment, but only to safeguard the economic interests of Whites in towns.

Hendler (1987) is of the opinion that the slums were a result of Black poverty and housing shortages. It could then be argued that though the slums were infested with various diseases, they were nevertheless an important facilitating mechanism for housing provision to the very poor in Durban. In a way, they decreased the greater demand for formal housing amongst the poor. Hendler goes on to argue that the introduction of the Slums Act of 1934 exacerbated the critical housing shortage amongst the poor.

The policy of clearing slums could be looked at as elitist because it only catered for the welfare of the white elite, who viewed the slums as a housing problem. It would have been better if the slums were upgraded through the provision of all the infrastructural services that were lacking; or it could have been a better option if people whose slums had been cleared were granted alternative accommodation.

4.4.7. African Formal Housing Delivery

According to Morris (1981) the first houses were built at the then Lamontville location in 1934, whilst in Cato Manor, land was originally owned by Whites who then sold land to Indians. The Cato Manor Blacks rented sites from Indians. Whilst the 1937 Native Laws Amendment Act was aimed at controlling Blacks in towns, during the same year a second batch of family houses was provided at Lamontville by the Durban Municipality.

The provision of Black housing not far from the city centre in locations such as Lamontville and Cato Manor is perceived in this study as having laid a foundation for the permanence of Blacks in Durban. It was evident that the institutionalised temporary status of Blacks in Durban was going to fail in the near future.

During the colonial period the idea of transforming the Umlazi Mission reserve into a location was raised by the South African government as early as 1940, and the Durban City Council began the planning of the location (Mkhwanazi, 1977, Townsend, 1991).

Between 1940 and 1945 about 900 houses were built at the Blackhurst Estate near Durban, which was later named Chesterville location (Maasdorp and Haarhoff, 1983). In 1943 the population of Cato Manor, an area adjacent to Chesterville, where Blacks rented sites, increased from 2 500 in 1935 to more than 17 000 the same year. By 1944 the explosive population growth resulted in the first wave of squatter movements in cities (Wilkinson, 1984). A 1946 survey indicated that about 5 500 Black families (30 000 people) were already living in shacks in the Durban area. By the same year (1946) the demands of wartime economy for African labour stimulated a massive increase in the urban African population, exacerbated by a decision in 1942 to relax the influx control measures (Wilkinson, 1984).

4.4.8. The Black Urban Areas Act of 1945

The Black Urban Areas Act of 1945 repealed the 1923 Urban Areas Act, and prepared the ground for the legislation of the Group Areas Act of 1950 (Cloete, 1986). In 1947 it was reported that 7 000 houses were provided for Blacks under the auspices of the National housing formula (Morris, 1981). In 1948 the Nationalist government came into power, and there was a transformation from segregated to apartheid housing policies.

4.4.9. Conclusion

The segregation period is only important for laying foundations for the apartheid era when the housing crisis was at its zenith. The influx control laws that were promulgated during this period, reached their height in restricting the immigration of Blacks into urban areas during the apartheid period. This law slightly decreased the housing demand during the segregation period, only to reinforce it during subsequent periods.

In conclusion, the colonial era is crucial towards a deeper understanding of the origins of the housing crisis. The variety of laws that were meant to restrict the movement of Blacks in Durban did constrain the delivery of housing amongst Blacks. The Land Acts are identified as having been the cornerstone governing the allocation of housing delivery related resources, which disadvantaged the Africans, who were allocated only 13 per cent of South Africa's total land. The inability of the local authorities to implement a sustainable housing delivery process, which did not take into cognisance the interwovenness of housing development with environmental conditions, appears to have

exacerbated the housing problem in Durban. It now remains to be seen how the housing problem was treated by the Nationalist government which came to power in 1948.

4.5. THE APARTHEID PERIOD

This period began in 1948 when the Nationalist government came into power and continued until its demise in 1990. It represents the time when the housing crisis was at its worst. The establishment of the Black townships in the early 1950s marked the commencement of frontier commuting. Gumbi (1995) argues that these commuting practices impact upon the inability of the poor residents of Umlazi, which is part of the Durban area, to afford even the cheapest form of conventional housing imaginable. Most of the meagre wages earned by Blacks in industries are spent on commuting to workplaces and back to townships on a daily basis instead of being spent on housing.

Whilst it is acknowledged that the cornerstone of the apartheid rule was the Population Registration Act, the impact of the Group Areas Act of 1950 on residential segregation should not be forgotten. There were many other Acts that were promulgated such as the Influx Control Act of 1950s and Job Reservation Act, to mention two Acts, which directly impacted upon the poor delivery of housing amongst the disadvantaged as few Blacks were able to enter towns and few of them were also able to gain employment due to the above Acts.

4.5.1. The Clairwood Shantytown

Gumbi's (1998) paper reports that the Clairwood Indian shack settlement that existed in the early 1950s was one of the few areas in Durban where Indians were able to utilise their environment effectively for their own benefit without disturbing the river ecosystem of the nearby Umhlathuzana river. Indians in this shack settlement constructed corrugated iron houses and practised small scale agricultural farming. Whilst most of the produce, which was in the form of vegetables and fruits was domestically consumed some of the produce was sold to the Clairwood vegetable and fruit market. The spatial existence of the Clairwood small scale farmers in close proximity to the Umhlathuzana riverine system, and the utilisation of the soil without disturbing the natural ecosystems demonstrate the sustainable manner in which the Clairwood shack settlement was maintained. It was evident that when these farmers were relocated to Chatsworth after the promulgation of the Group Areas Act, a very important sustainable form of existence was disturbed to the detriment of sustainable housing development.

4.5.2. Urban Relocations

In 1952 the Jacobs location residents were relocated to the then Lamontville location, whilst some of the residents were relocated to the Baumanville location in Somtseu road (Gumbi, 1998). The next group of residents at Jacobs were relocated to Lamontville in 1957. The majority of the Clairwood Indians were relocated to Chatsworth. The National Party claimed that the Group Areas Act was a response to the calls from Durban, Pietermaritzburg and practically the whole of Natal to act against Indian penetration and expansion (Maharaj, 1992). The local state played a crucial role in the execution of the

Group Area Act of building adequate housing for the poor. It could therefore be argued that the housing delivery problem in the Durban Metropolitan area was entrenched by the implementation of the Group Areas Act.

Swanson (1968) claims that Durban was the leading practitioner of the Group Areas policies. These laws fragmented urban societies and increased the need for formal housing as squatting became a common practice amongst the poor and the landless.

It was nevertheless paradoxical that the various racial groups that were expected to stay separate from one another were economically interdependent. Blacks and Whites were brought together by the economic symbiosis of city life. This ecological existence compelled both groups to live together, and some of them were able to violate the apartheid laws. The fact that capitalism was primarily practised in cities demonstrates that the urban milieu contributed to the origins of urban apartheid.

The 1960s was a decade which saw the largest township in the Durban area coming into existence. The Bantu Beer Act No. 63 of 1962 specified the use to which profits derived from the sale of beer could be used in the construction of Black townships houses and related infrastructure (Morris, 1981; Hendler, 1987). In May 1962 the first houses in Umlazi 'new' township became available (Mkhwanazi, 1977). It is estimated that by 1963 Umlazi was absorbing about 50 per cent of the families that were removed from the Umkhumbane shacks in Cato Manor (Maasdorp and Humphreys, 1975). It has been argued that slum clearance is the main element of housing loss (Balchin and Kieve, 1982). There was a loss of housing units when the Umkhumbane shantytown was

cleared. It could also be argued that replacement demand of formal housing in the Durban area is a function of the Umkhumbane slum clearance.

The creation of townships like Umlazi and KwaMashu, to mention the biggest townships in Black Durban, was a typical demonstration of the need for housing in Durban. It was therefore not surprising when KwaMashu township was established in 1960 whilst the largest township in Durban, Umlazi, was established in 1964. By the establishment of the Bantu Housing Board, full residential segregation was accomplished (Wilkinson, 1984).

4.5.3. Total Apartheid in Relation to Freehold Rights

When the government had resolved the immediate pressing issues that were represented by the 'Bantu housing problem' the government turned its attention to its ideal of 'total apartheid', which entailed the attack on African rights to freehold and land tenure, as well as the then existing 99 year leasehold tenure in the White cities (Wilkinson, 1984).

The absence of proper and hygienic toilets, rubbish bins, and clean water gave rise to numerous diseases amongst the squatters. It was evident that the unsustainable manner in which the shack settlements were evolving was leading to environmental despoliation and the lowering of the lives of all township residents in Durban. The natural resources in the form of plants, trees, animals were all in danger of extinction.

4.5.4. The Demise of Apartheid

Atkinson (1991) sees the latter half of the 1980s as a period when local urban initiatives attempted to restructure the urban political order on a non-racial basis. When the administration of housing was under the jurisdiction of administration boards the housing delivery process became a failure. Its failure was due to the fact that Blacks did not have the administrative capabilities as well as adequate housing delivery-related infrastructure. It became clear that the Black Housing Boards were mere extensions of the apartheid system.

The late 1980s marked the commencement of national and international boycotts against the apartheid regime. Numerous boycotts which prevailed in South Africa also took place in Durban. It was clear that the numerous boycotts that prevailed in the country and the civic actions were aimed at bringing apartheid to its knees. Conference papers that began to flow dealt largely with the repeal of all apartheid laws on the statute books (McCarthy, 1991). The demise of apartheid was significantly marked by a watershed when Nelson Mandela³ was released from prison in 1990. It should be taken into account that under apartheid, housing was not guided by a concern for the sustainability of the city of Durban but by a concern for the economic well being of Whites.

3. AFRICAN NATIONAL CONGRESS (ANC) AND NELSON MANDELA

Govender et al (1999) state that the ANC was formed in 1912 as an organisation to fight against White domination. The ANC was initially a non-violent movement but after it was repressed by the Nationalist Government of the time it began to think of taking arms against the South African government. In March 1961 members of the Congress Alliance of the ANC decided to form a military wing which was to operate under the leadership of Nelson Mandela, a lawyer from the Eastern Cape. After the Rivonia trial of the 11th of July 1963, Mandela, together with other comrades were incarcerated at Robben Island. Mandela was imprisoned for 27 years before his release in 1990.

4.6. The Post-Apartheid Period (1990-1999)

When Mandela walked out of prison on the 11th of February 1990, with his right fist held up in a black power salute, and his wife Winnie Mandela by his side, a new era had begun, the post-apartheid period. A lot was expected by the grassroots from the African National Congress, with regard to the improvements of the quality of life of the Black people. During this time, the National Party Government had already stopped building low cost four roomed housing for the poor. The responsibility of providing housing was shifted to the private sector which provided housing that was beyond the financial means of the poor. Some of the residents of the Durban area were already involved in self-help housing schemes that were nevertheless not affordable to the majority of the poor.

4.6.1. Self Help Housing Schemes

Wilkinson (1984 : 17) argues that the corollary of any efforts by the state to withdraw from the housing process is that individuals would have to assume responsibility for housing themselves. In the South African case it was proved that self-help schemes are too expensive if left entirely in the hands of the poor without any state or private sector aid (Gumbi, 1995). In the process, the poor had no alternative but to seek for solutions that were affordable to them, hence the spatial manifestation of shantytowns in a geometric fashion during the early 1990s.

It was common to witness a situation where important ecosystems such as rivers, lakes, forests, were degraded as a result of the spatial invasion of informal housing within Durban's physical landscape.

4.6.2. The indigenous African Communal Spirit and Housing Construction

As early as 1992 the communal concept based on traditional African concept of 'ubuntu' was already in operation (South November 28-2 December, 1992). This meant that people had to co-operate and support one another in building operations and in job creation ventures. This concept was opposed to individualism and competitiveness. The poor were already working together in an attempt to provide themselves with housing by making use of the communal sweat equity principle, where friends and relatives help in the building of housing. This reduced the building costs.

The Afrocentric communal concept was also an effort to eliminate Eurocentric blind spots, where everything that was done by Whites was viewed as superior. Only those Eurocentric building strategies that were compatible with the African milieu were utilised. It was advantageous to make use of Afrocentric housing delivery strategies as long as the poor ensured that the natural environment was not over-utilised to the detriment of the future residents of the Durban Metropolitan area.

4.6.3. Land Claims

In 1992 hundreds of Durban people who were dispossessed of their homes and land under apartheid legislation initiated a campaign for the return of their properties or for adequate alternative compensation (Daily News December 18, 1992). However, the former land owners in Durban, whose land had remained undeveloped for decades after it was expropriated from its owners, were to benefit from land allocations, if they were to be effected in an equitable manner.

Artificial land scarcities amongst Blacks were created by high costs of land. Such scarcities seem to have exacerbated the housing delivery crisis in the Durban Metropolitan area.

It was empirically confirmed in Gumbi's (1995) work that land is one of the primary hurdles towards the delivery of housing. Without land whatever housing delivery strategies that were being envisaged, were going to fail, hence the non-delivery of adequate low cost housing to the poor, in Durban in 1992. According to Cobbett *et al* (1998) it was evident that post apartheid housing policy makers in South Africa were going to inherit serious problems in squatter settlements where squatters numbered 7 million at the time. This was a result of the spatial distortions that emanated from the Group Areas Act.

4.6.4. Informal Housing

By 1993 informal housing which numbered about 2 million squatters and self-help residents around Durban (Daily News November 26, 1992) was fast becoming recognised as an integral component of national housing programme in South Africa, and in the Durban Metropolitan area in particular. The mushrooming of informal housing was the most rapid in the Durban Metropolitan area hence Durban's reputation as the fastest growing City in the world behind Mexico city (Maylam and Edwards, 1996) on the basis of its exponential population growth as well as the geometric progression of shantytowns.

The growth of informal housing caused by the massive migration of rural inhabitants to cities had resulted in significant decline in the level of services available to all (Daily News November 13,1992) to the detriment of the natural environment. A situation where waste removal, water-borne toilets and tarred roads were absent gave rise to various environmental problems in informal settlements.

It should be acknowledged that the proliferation of informal settlements on Durban's physical landscape was a building strategy by the poor to provide themselves with affordable housing. This was a mechanism utilised by the poor to improve their lifestyle at the expense of the natural environment. Much as informal settlements are important as they provide the poor with affordable shelter, they should not become a cornerstone of any housing strategy, because in the long run they degrade the natural environment.

4.6.5. Home Loans Defaults

In the early 1990s the people who owned private sector housing had begun to default their home loans due to the rising unemployment and the increase in boycotts of formal housing against financial institutions (Raboroko, in Sowetan July 13,1993). These boycotts confirmed the theoretical contention that private home loans were mainly aimed at capital accumulation because their exorbitant monthly payments were the principal reason for such boycotts.

The increase in informal housing in Black areas and the need for more formal housing put pressure on the financial institutions to play a more active role in alleviating the housing delivery problem (New Nation February 5-11,1993). On the other hand, commercial banks and Association of Mortgage Lenders (AML) were offering low cost housing loans of between R5000 and R38000 to the people who could not afford normal bank loans. It was interesting to note that even community organisations were also involved in negotiations with the financial institutions (Raboroko , in the Sowetan July 13, 1993)

4.6.6. The Cato Manor Area

The majority of the residents of Umlazi and KwaMashu, the largest townships in Durban, originate from Cato Manor. The Cato Manor area could play a prominent role in providing low cost housing for the poor. Cato Manor, by virtue of having previously housed the majority of the Umlazi and Kwa Mashu residents was crucial towards the delivery of low cost housing in the Durban area. It was encouraging to know that the first pilot project involving more than R1 billion took off the ground in 1993 (Natal Mercury November 26, 1992).

The development of 2000 hectares would occur along important transport routes. It was planned that the Cato Manor area would provide 30 000 to 40 000 households for Blacks with affordable housing. It is encouraging to see that today the Cato Manor housing scheme is visible as one undertakes an empirical exploration of the Cato Manor area.

4.6.7. Civic Organisations

The involvement of civic organisations who represent the people on the ground is perceived by the investigator as a positive gesture towards the resolution of the housing delivery crisis in the Durban Metropolitan area.

According to Ludman (1992) the AML and the South African National Civic Organisation (SANCO)⁴ were planning to discuss a method to facilitate bond repayments for home-owners who had been fired or retrenched.

Issues such as the redlining of Blacks in townships, the inner city, suburbs, and areas near shack settlements, and the identification of land owned by banks which could be developed for low cost housing, were all issues of importance (Ludman, 1992).

In an effort to affirm what has been stated above in the previous paragraph that Blacks were redlined by banks, Gumbi's (1995) work on Umlazi, a Black township south of Durban, such a situation does exist. A number of retrenched workers had lost their houses because the banks' lending policy did not cater for the retrenched and the unemployed. It had become apparent that the retrenched home owners were suffering and had become homeless.

4. SANCO

Mayekiso (1997) explains SANCO as a civic organisation which emerged in 1992. The South African National Civic Organisation initially defined itself as non-party political. It regard itself as a watchdog monitoring political and economic issues of the poor. SANCO played a role in the drafting of RDP.

4.6.8. The Reconstruction and Development Programme (RDP)

Ngwenya (Sowetan July 31, 1995) reported that the RDP planned to build one million houses in five years (1994-1999) in a way that would create jobs in the building of housing. It could be argued that the RDP project was a positive strategy to improve poverty amongst blacks. It aimed at tackling poverty with programmes that would build the country's wealth (Reconstruction and Development Programme, 1994).

Consensus had to be reached between government, labour, business and communities. The government's view was that formal jobs were to be created (Daily News August 10, 1995) through economic growth that comes with large investments in programmes which bring basic services to the people. It was hoped that the provision of housing was going to provide other sectors like building, steel and furniture industries (ibid), with finance.

Whilst the ANC led Government of National Unity (GNU) after 1994 wanted to help the poor through the RDP projects, the government also hoped that the people could meet it half-way, rather than to expect everything to be done by the government. Centralised political power marginalises civil society, while some people are of the opinion that the marginalisation of civil society comes from society itself by abdicating responsibility (New Nation October 6, 1995).

People had stopped doing things for themselves as they used to do in the past. It could be inferred that such a culture could have been caused by the ANC's electioneering strategy, of promising civil society to build houses for all the people of South Africa. Evidently, people's expectations were raised by the ANC's promises which it failed to honour. It could therefore be concluded that the failure of the RDP to deliver housing to the poor in the study area was a result of civil society's inability to meet the RDP half-way. While it is acknowledged that some of the corrupt RDP bureaucracy contributed to RDP's failure, it should be considered that due to South Africa's low economic growth, the government does not possess the essential muscle to provide housing alone without assistance from the private sector and civil society.

Another report by the Daily News (June 23, 1995) informed that for the RDP to really work, people needed to create a climate where the historically dispossessed people were imbued with a sense of self-reliance. It was necessary for the affluent to cut back on exorbitant luxuries. Large companies had to channel some of their profits for the next five years into the RDP. However, it came to light that the RDP had many loopholes which hindered its progress.

The RDP itself was short-term and top-down in its approach as most of its strategies were formulated by the government with minimal consultation of the grassroots. Furthermore, the RDP needed facilitators instead of manipulators. It needed co-ordinators rather than self-important rulers who wanted to maintain permanent control over its programme.

The Durban Metropolitan area, which was part of the RDP projects' plan also experienced the above problems to the disadvantage of adequate housing delivery, as well as the sustainability of the Durban Metropolitan area. Such a situation prevailed in the mid-1990s.

4.6.9. The Housing Policy of 1994's Critique

The South African Government Gazette White Paper (1994) reports that a new housing policy considered various tiers of government, the private sector and communities as having been involved in the formulation of a new housing policy. Such a policy was geared to serve a population of 43 million in 1995 with an average population growth rate of about 3 per cent per annum. The housing delivery constraints that were acknowledged in the White Paper (1994) were geographic disparities between various ethnic groups. The low incomes of the majority were key hurdles. Furthermore, the high urbanisation rate increased the demand for housing in towns, Durban included.

Bond and Tait (1997) give a clear picture with regard to the impediments that resulted in the poor delivery of housing to the disadvantaged. The two authors above critique the market-centred approach as having failed to deliver housing in South Africa. This affirms a theoretical claim that a developing nation like South Africa where gross wealth inequalities exist cannot afford to wish for the market miracle only to solve her housing delivery problem.

The government appears to be dictated upon by market principles which were in the past few years, an anathema to the ruling ANC government. It is evident that a large scale delivery of middle income housing does not provide housing for the poor majority. It could be added that the non-subsidisation of the very poor is a further impediment towards a successful delivery of housing in the study area. This has also discouraged banks to grant low cost housing loans to the poor. (Bond and Tait, 1997)

There is a reluctance by the private sector to grant loans to areas that are conflict-ridden. Local authorities and developers are not prepared to build housing in Black townships that have been targeted as risk areas. The non-involvement of the state in fields as diverse as construction, building material management, public works delivery, retail financing and management, all constrain the delivery of housing. A need to involve the government as a facilitator towards the provision of all housing delivery-related infrastructural services as mentioned above, has become imperative if we aspire to redress the housing delivery problem in the Durban Metropolitan area in a sustainable manner.

Towards the end of 1996 the housing backlog was estimated at between 1,5 and 1,9 million units in South Africa (Sowetan October 28,1996). In the light of the figures above, it could be inferred that the housing problem is escalating rather than diminishing.

4.6.10. Black Townships Development

It was encouraging to know that about R80 million had been injected to provide infrastructure to Durban's Black townships of Kwa Mashu and Umlazi, which are the largest formal townships in the Durban area (Sowetan November 7, 1996). To date (1999) the building operations that are visible in Durban townships could be ascribed to the above project where roads and some informal settlements are being upgraded. While it is encouraging to see some improvements in Black townships, it should be taken into account that more projects of this kind are still required, because those that exist are inadequate.

One third of Durban's population ekes out an existence in shantytowns. Almost half of 1997's R950 million capital budget had already been poured into disadvantaged communities by the middle of 1997. Some 43 percent had been allocated to two new police stations for Umlazi (Daily News August 26 1997). Communities had organised themselves to help one another. The state initiated Homeless People's Federation had loaned money to people to build their first solid dwelling for widowed pensioners, plus R15000 government subsidy.

4.6.11. The Netherland's Urban Planning Scheme

Urban planners from the Netherlands and South Africa have submitted innovative proposals to find the best architectural solution for Durban's Cato Manor. The Rotterdam Academy of Architecture drew plans for a new South African city (Daily News August 27,1997). There is a massive challenge for appropriate urban planning, the provision of public service and low income housing. The above project hopes to address the growing squatter settlement problem.

The investigator argues that the Netherland's scheme could play a vital role in the resolution of urban problems. Accordingly, the fact that the project integrates the resolution of the squatting problem in its plan is evidence that the scheme takes into cognisance environmental degradation that goes hand in hand with the squatting phenomenon. In this way it could be easy to ensure the sustainability of the Durban Metropolitan area without compromising the lives of future residents.

4.6.12. Housing Delivery And The Environment

The Durban Metropolitan Environmental Policy initiative intends developing Durban into a healthy environment (The Natal Mercury February 4, 1998). Such an initiative augurs well for the present (1999), as well as for the future residents of the Durban Metropolitan area.

As Whyte (1995) argues, the key challenge is to convince the economic and social planners that the environment is a provider of natural resources and the ultimate absorber of all waste.

4.7. Conclusion

This chapter has made an effort to examine an historiographical evolution of the housing crisis in the Durban area, by looking at the absence of the problem in the pre-colonial period, and the culmination of the housing delivery crisis in the colonial, the segregation, apartheid and finally, in the post apartheid era. The emergence of the housing delivery problem in the colonial period demonstrates the self-sufficiency of Blacks during the pre-colonial period. It is important to acknowledge the import of capitalism by colonists from Europe as having led to resource imbalances amongst Blacks and Whites in the study area.

The destruction of indigeneous agriculture and other ways of living that were compatible with the African conditions compelled Africans to migrate to towns where they became solely dependent on towns for their sustenance. Those Africans who could not afford formal housing had no alternative but to house themselves in unhygienic and unsuitable shantytowns.

While the segregation period laid a foundation for separate development (apartheid) that was to follow, it also led to ideal conditions that created fertile ground for environmental degradation in urban settlements. This is ascribed to the impoverishing effect of capitalism which creates a class of underlings in the Durban Metropolitan urban spaces.

Much as we acknowledge that the numerous repressive laws that were promulgated during the segregation era resulted in the housing crisis, the Land Acts of 1913 and 1936, together with the Group Areas Act of 1950, stand out as the cornerstones that caused the housing crisis in Durban. In the post-apartheid period, a great deal has been done by the ANC led Government, to solve the housing delivery crisis, though the ANC's strategies leave much to be desired. A viable housing delivery strategy has to take into account the interwovenness of social, economic, and cultural aspects with those of the physical environment.

CHAPTER 5

DURBAN METROPOLITAN AREA'S DEMOGRAPHIC FACTORS

IMPACTING ON HOUSING DELIVERY

5.1. INTRODUCTION

The failure of both the private and public sectors to deliver housing in the Durban Metropolitan area seems to compromise the lives of future residents. This failure is governed, amongst other things, by the rules of demography. Demography entails the elements such as fertility¹, mortality² and migration³. It is the goal of this chapter to demonstrate how the above factors impact upon the housing delivery process in the study area.

Questions that need to be probed are : What is population growth ? How does it influence population distribution ? How does fertility and mortality impact upon a sustainable delivery of housing in the study area ? How does the population variable influence the gender factor on housing delivery and the environment ? What is the impact of the socio-political and economic factors on population and housing delivery ?

5.2. POPULATION GROWTH IN RELATION TO HOUSING DELIVERY

Owing to a high fertility rate the South African population is expected to grow more than half between 1996 and 2026 (South African Survey, 1997). While fertility and infant mortality rates will drop, life expectancy will rise. This might put pressure on the scarce housing delivery resources as more people will need a roof over their heads. This pressure will go hand in glove with the degradation of the natural environment, as more people will house themselves in the unsustainable shantytowns. It is evident that the driving forces behind the overuse of natural resources are population growth factors (Bartelmus, 1996).

Woods (1982) argues that fertility is high in peripheral areas while lower in core regions. In this thesis, fertility is high in shack areas which are peripheral areas on the outskirts of Durban. As Knapp (1986) notes, high population growth rates result in low living standards. This is the case in shacklands of the Durban Metropolitan area, which are also called informal settlements⁴.

Much as it is acknowledged that mortality rates amongst Blacks are still higher than those of the other population groups, it could be argued that such mortality rates do play a crucial role in slightly decreasing the housing delivery problem in the Durban Metropolitan area. Improved health standards and proper nutrition amongst a reasonable number of Blacks seems to impact upon the housing delivery crisis as more people survive to seek for a roof over their heads.

TABLE 5.1. AVERAGE FERTILITY RATES PER POPULATION GROUP

1996	BLACKS	WHITES	COLOUREDS	INDIANS	AVERAGE
AVERAGE	4 %	1,76 %	4 %	4 %	3,49 %

Source Population Census (1996)

TABLE 5.2. POPULATION FIGURES AMONGST RACIAL GROUPS

RACE	1985	1990	1995
BLACKS	1 691 000	2 063 200	2 565 200
INDIANS	0 539 600	0 596 700	0 650 200
COLOUREDS	0 063 000	0 071 500	0 079 500
WHITES	0 334 800	0 354 400	0 373 900
TOTAL	2 629 100	2 085 800	2 668 800

SOURCE : POPULATION CENSUS, 1991

TABLE 5.3. PREDICTED POPULATION OF THE DURBAN METRO AREA

RACE	YEAR 2000	MEAN % GROWTH RATE
BLACKS	2 685 764	4,7
INDIANS	0 662 878	1,9
COLOUREDS	0 081 488	2,5
WHITES	0 378 387	1,2
TOTAL	3 808 517	2,4

DERIVED FROM : POPULATION CENSUS, 1991

Statistics in table 5.2. reveal that the population group where growth rises fastest in the five year periods is still the Black racial group. Between 1985 and 1990 Blacks had a growth rate of 4.5 percent, which is above the mean for all population groups of 2,4 percent, as illustrated in table 5.3. below. This demonstrates a need for more housing provision particularly to the Black population group.

Durban's population of around 3 million inhabitants demonstrates that each year there is an increase of around 105 000 new inhabitants. This figure is calculated as follows :

Total inhabitants	3000 000
Average rate increase	3,49%
Nearest average rate increase	3,5
Total increase p.a.	$\frac{3,5}{100} \times \frac{3000\ 000}{1}$
	$= \underline{105\ 000\ \text{Inhabitants}} \rightarrow$

The highest fertility rates in the Durban Metropolitan area have a hindering effect on a substantial delivery of housing. The population that abounds in shacklands could be ascribed to the high number of squatters which results from high fertility rates particularly amongst the poor.

The high population growth rate amongst Blacks appears to justify the Malthusian hypothesis that population grows in an exponential manner (Haggett, 1983; Newman and Matzke, 1984; Knapp, 1986). It is estimated that by the year 2000 the total Black population which was 1 691 000 in 1985 would reach the 2 685 764 mark. Knapp (1986) asserts that population growth is understood as a phenomenon that results in the increase in the number of people in a particular region. As Marwoski (1992) argues, overpopulation and rapid population growth rates are intimately connected with most aspects of the current housing delivery predicament. In the case of this study it is the housing delivery predicament. The carrying capacity⁵ of the study area of 1366km² (1998) appears to be inconsistent for a population that is close to 3 million.

5.3. POPULATION FIGURES IN RELATION TO HOUSING TYPE,
HOUSING UNITS AND DENSITY OF HOUSES

The statistics below illustrate the high population ratio amongst Blacks in all the areas demarcated within the Durban Metropolitan area. Population statistics amongst the various racial groups are as follows :

TABLE 5.4. BLACK POPULATION OF THE DURBAN METROPOLITAN AREA

	MALES	FEMALES	TOTAL
Durban North Central	367 913	376 750	744 663
Durban South Central	288 488	278 515	567 003
Durban Metro	039 443	040 224	079 667
Inner West	155 692	151 525	307 217
Durban North	052 678	053 656	106 334
Outer West	080 065	087 435	167 500
Durban South	039 443	040 224	079 667
	1 023 722	1 028 329	2 052 051

Source : 1991 Population Census

Statistics in Table 5.4. reveal a situation whereby a picture that emerges demonstrates the high population figures in all the regions of the Durban Metropolitan area. What is interesting is the high number of women which underlines the need for housing delivery stakeholders to prioritise the delivery of housing to women rather than the conventional attitude of the past of prioritising the delivery of housing among males. The total number of 1 023 922 males to that of 1 028 329 amongst females indicates that the ratio between males and females is higher amongst females.

If the total population of 2 606 837 in 1991 is considered together with the total housing units which are about 489 879 in number, it is possible to calculate the housing density as follows :

TOTAL POPULATION IN 1991	2 606 837
TOTAL HOUSING UNITS	489 879
HOUSING DENSITY	$\frac{2\,606\,837}{489\,879}$
	= <u>5,3 people per house</u> →

On the strength of the evidence above it could be possible to estimate the number of houses needed for a growing population of the study area which is around 3 million to date as follows :

ESTIMATED CURRENT POPULATION	3 000 000
HOUSING DENSITY	5,3 people per house
CURRENT HOUSING UNITS NEEDED	3 000 000
	5,3
=	566 037,7 Housing Units

There is evidence that the study area needs more than 566 000 housing units if it is going to deliver housing to all its inhabitants. It is up to housing delivery stakeholders to see to it that the current housing stock of around 500 000 housing units, as estimated from the 489 879 housing units of 1991, is short of the estimated housing demand of 566 000 housing units.

5.4. EMPLOYMENT AND LITERACY IN RELATION TO ECONOMIC POSITION AND THE IMPACT ON HOUSING DELIVERY

According to population statistics (1991) the people who are economically active are 939 895 whilst those who are economically inactive are 1 051 903. This demonstrates that more people are inactive than those who are economically active. Such a situation augurs negatively as less people are able to afford to provide themselves with the cheapest form of conventional housing. The employed population of 768 801 people in 1991 demonstrates, that less people are employed whilst more than 1 million are

unemployed. Again, unemployment renders most people unable to afford conventional housing in the study area.

In 1991 male literacy was estimated at 943 314 people whilst female illiteracy was 528 372 people in the Durban Metropolitan area. The fact that more males are literate than their female counterparts could be a reason for the high unemployment rate amongst females. This ultimately results in less females becoming owners of houses thus increasing the number of homeless people in the study area.

The marginalisation of women with regard to literacy exacerbates the housing delivery crisis in the study area as they become unemployable. Women illiteracy further renders them to be ignorant of the measures to control birth rate.

Another inhibiting factor is the number of people earning below R15 000 per annum (Population Census, 1991). This number is estimated at 617 121, whilst those who earn more than R15 000 per annum and who can afford housing is estimated at 269 405 people. When more people earn above R15 000 per annum it could be possible to ensure that the housing delivery problem is redressed in the Durban Metropolitan area.

5.5. POPULATION DISTRIBUTION IN DURBAN IN 1995 BY POPULATION

GROUP

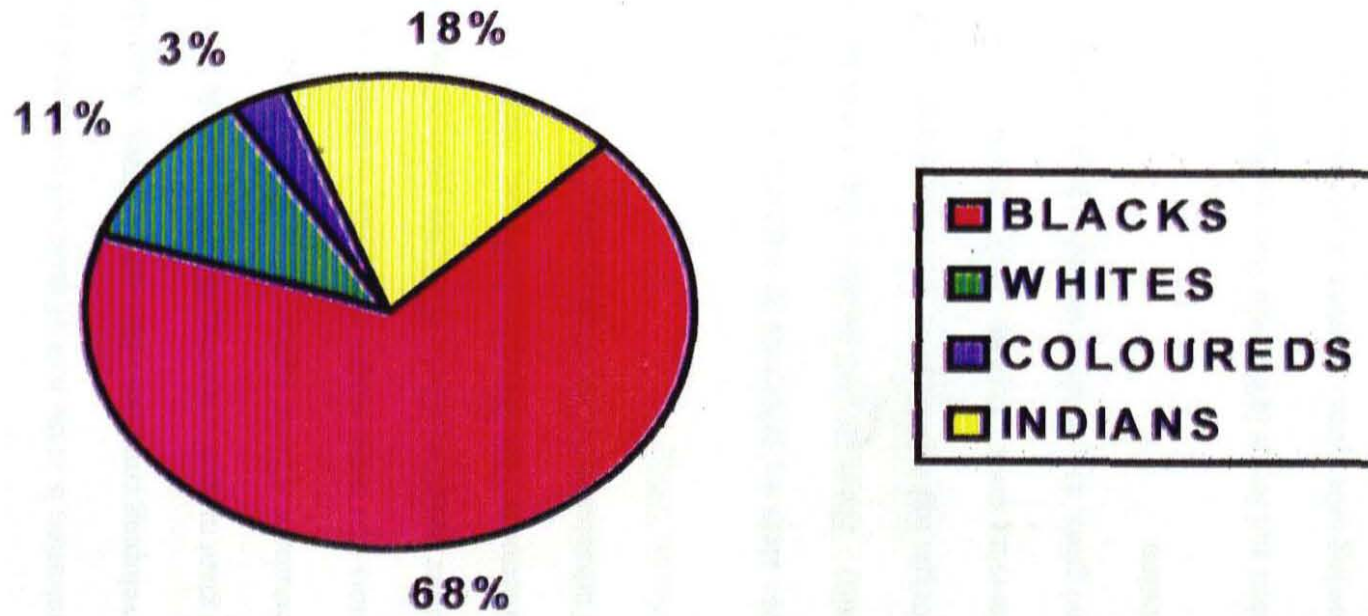
Figure 5.1. below reflects a distribution of population whereby Blacks constitute 68 percent of Durban's population in 1995. This is illustrated by the red colour on the pie chart which represents 2,6 million residents. The second group which is illustrated by a yellow colour stands for Indians who constitute 18 percent of the pie chart. This represents 700 000 inhabitants.

The third group which constitutes 11 percent of the pie chart belongs to Whites who are illustrated by the green colour. Their number is estimated at 400 000 inhabitants. The purple colour which stands for 3 percent of the pie chart represents Coloureds who number about 100 000 residents of the Durban Metropolitan area.

An empirical exploration of the study area revealed that most Black townships have higher population distribution even in elevated terrains. The distribution of the Black population in inhospitable land parcels demonstrates the need for housing delivery stakeholders to consider the distribution of the Black population in such areas as hindering a sustainable delivery of housing.

PIE DIAGRAM OF POPULATION DISTRIBUTION IN DURBAN IN 1995

FIGURE 5.1.



5.6. URBANISATION AS A MIGRATORY FACTOR IN RELATION TO THE HOUSING DELIVERY PROBLEM

Accelerated urbanisation is at the root of most environmental impacts on human settlements in developing countries (Bartelmus, 1996). According to Glassner (1993) South Africa is a giant magnet attracting desperate people from all poverty stricken countries of the Southern African region. Haggett (1983) argues that there are basically push and pull factors that cause people to migrate to cities. The increase in the price of land could be another negative factor. While the price of food also pushes people away, unemployment in farms is high (Swanevelder *et al*, 1987). It is evident that the most serious impact of urbanisation in developing countries is the mushrooming of marginal settlements (Bartelmus, 1996).

The attractive urban areas are perceived by migrants as having better prospects for jobs and better life quality. These are pull factors. That is why the young and the educated are pulled by the bright lights of Durban. As soon as rural inhabitants arrive in cities they put stress on the housing stock (Haggett, 1983). The poor also put stress on rivers, forests, top soil and grass, as a result of the rapid pace of urbanisation which increases the study area's population.

According to Cubbitt and Joyce (1995) the Durban Pinetown conurbation is said to be the world's fastest growing urban area. Durban is perceived as an area with better chances for survival by the rural inhabitants. In most cases, the overwhelming growth in urban areas is due to rural people seeking employment in the city (Knapp, 1986).

The Durban Metropolitan area contains 2 873 000 inhabitants who represent 34 percent of the Kwazulu Natal's total population of around 9 million people (State of Environment, 1995). Only 68 percent is Black and about 45 percent are under 18 years. This shows that the study area's population is becoming younger to the disadvantage of the population that is expected to fend for itself. The 68 percent of the total population that will reside in urban areas in future has profound and deleterious implications for the Durban Metropolitan area's planning and housing provision.

5.7. **THE IMPACT OF APARTHEID ON RACIAL RESIDENTIAL SEGREGATION ON SUPPLY AND DEMAND FOR HOUSES AMONG DIFFERENT RACIAL GROUPS**

The Group Areas Act of 1950 marked the beginning of racial residential segregation which was influenced by the local state in Durban (Maharaj, 1992). It should be borne in mind that South Africa was the only country in the world that legalised racial stratification (Hindson, 1987). It was evident that residential segregation was going to impact upon the distribution of housing delivery resources such as land and housing.

Residential segregation appears to have forced the poor into high density slums and near slums (Maharaj, 1992). It was evident that residential segregation in Durban represented the territorial dimension of racism. The technical sub-committees race-zoning proposals maintained that residential neighbourhoods should not only be clearly racially defined, but spill overs into another group area must be reduced (Maharaj, 1992). One race was not allowed to traverse the residential area of another. It could be argued that the residential segregation impacted upon the supply and demand of housing particularly

amongst the Black racial group that was relocated in small townships. Those were composed of hilly land. Residential areas for Blacks were confined to underdeveloped territories outside the city of Durban (Maharaj, 1992).

5.8. CONCLUSION

There is evidence that the high birth rate amongst Blacks impact upon a sustainable delivery of housing in the Durban Metropolitan area. The large number of Blacks lead to environmental degradation as well. Whilst it is acknowledged that causes of population increase are high birth rates, it should be borne in mind that high fertility is a function of poverty as well. Bartelmus (1996) argues that the limiting of population growth by eliminating poverty could be an ideal strategy, which in this thesis, could result in a sustainable delivery of housing in the Durban Metropolitan area.

Apartheid race residential segregation aggravated the housing delivery crisis in the study area as the Black population was allocated in inhospitable and inadequate land for housing construction. The Group Areas Act of 1950 ensured that Blacks were relocated to the outskirts of Durban where flat land that is ideal for low cost housing construction was scarce. The high population density of the poor on steep land, on risky areas such as flood plains, and on unhealthy land near the polluting industries further exacerbated the unsustainable manner in which the Black population group exists in the study area.

NOTES

1. **Fertility** is defined by Haggett (1983 : 141) as the “actual production of offsprings by females in a population”. In the context of this thesis paper, the fact that Durban has an estimated fertility rate of 4 percent amongst Blacks is cause for great concern. It is evident that fertility is one of the factors which make Durban one of the fastest growing cities in the world.
2. **Mortality** refers to “the number of deaths per thousand per annum (Haggett, 1983 : 141). It is worthy to note that a decline in the mortality rate amongst Blacks further aggravates the housing delivery crisis in the Durban Metropolitan area, as more people survive to seek for a roof over their heads.
3. **Migration** is defined as the movement of people from one area to another (Knapp,1986). The inflow of migrants from the neighbouring states is called International migration. Emigration, where people move out of the country is rarely experienced in the study area. National migration, on the other hand, refers to the movement of people within the boundaries of the country from one province to the other.
4. **Informal Settlements** refer to the houses that are in a sense built without adhering to accepted standards and specifications. It is housing that is essentially established unconventionally (Hart, 1992). Site and service schemes which offer formal tenure are also classified as informal. In the context of this thesis the shacklands of Power and V6 in Umlazi and those of Canaan, as well as sites with

toilets at Section CC in Umlazi, are all part and parcel of informal settlements

5. **Carrying Capacity** focuses on the number of people that can be sustained by a given territory for the maintenance of a higher quality of life on a particular habitat (Bartelmus, 1996). In the context of this thesis, it is doubtful that the Durban Metropolitan landscape's carrying capacity can sustain the lives and housing delivery to a population of about 3 million inhabitants.

CHAPTER 6

ECOLOGICAL FACTORS IN RELATION TO SUSTAINABLE HOUSING

DELIVERY

6.1. INTRODUCTION

Whilst it is not the primary goal of this inquiry to examine the ecological factors and their impact on the housing delivery process in the Durban Metropolitan area, it is nevertheless essential to identify some of the ecological elements that are interwoven with the housing delivery process. It is evident that the understanding of the housing delivery problem will not be complete without initially addressing the ecological aspects which are interwoven with the social, political, economic and cultural factors.

This chapter follows a sequence where the introduction is followed by an examination of the ecological elements. Such elements entail site and situation, the influence of climate and geomorphology on the natural environment, where soil erosion, land slides and floods are part and parcel of the geomorphological aspects. The influence of housing densities is meant to demonstrate its impact on infectious diseases amongst shack dwellers. Finally, the ecological interaction between animate and inanimate things in shack settlements is also examined.

6.2. ECOLOGICAL FACTORS

Physical components embrace site and situation of the city of Durban in relation to her climate and its impact on the housing delivery process. The influence of climate and geomorphology on the natural environment is a device to demonstrate the interaction that takes place on the Durban Metropolitan landscape. The degradation of the environment by a multifaceted combination of pollutants by human beings is examined with regard to its impact on the housing delivery situation in the Durban Metropolitan area.

6.2.1. SITE AND SITUATION IN RELATION TO CLIMATE AND TOPOGRAPHY

Haggett (1983 : 390) defines site as “the actual location where the city began and the terrain over which it is spread”. Haggett further defines situation as referring to the general location. Garland (cited in Moon and Dardis, 1988) on the other hand, informs us that Durban is located on the east coast of South Africa at a harbour site. It is encouraging that Portnet is planning to keep the Durban harbour environmentally friendly by ensuring the ecological balance of its waters for the benefit of fish that could be utilised to boost Durban’s economy and job creation for the unemployed to the advantage of sustainable housing delivery (Challenor, 1999).

The eastern boundary of Durban is the Indian Ocean where a natural harbour exists. Further westwards away from the city centre there exists an elevated terrain, the Berea upper income residential suburb which is clearly visible with its double-storey housing and large sites. In Swanevelder’s (1992) work it is said that elevated areas with a good

view are often expensive since they are popular for residential purposes. It could then be inferred that the allocation of sites on the elevated terrain of the Berea area for the upper income group with mainly double storey houses was influenced by a hilly topography.

The close proximity of the industrial areas of Moberi, Jacobs and Merebank adjacent to the Merewent residences has economic advantages. Much as it is advantageous for the residents of Merewent to be located near workplaces, it should be acknowledged that it is nevertheless an environmental disadvantage; as these areas are located near the polluting industries. In any case, the compatibility of the two land use zones enables the workers to be accessible to workplaces at low transport costs. The fact that the Berea residential area is far away from industrial areas illustrates the incompatibility of an upper income group suburb and a factory area. This is in accordance with the theoretical assertion by Stren et al (1992) and Sutterwhaite (1999) that waste generation is concentrated in cities, and that industrial areas have high levels of population, respectively, which seems to be empirically confirmed at Merebank and in Umlazi.

When the affluent are located far away from the noisy industries this minimises effect of the winds on industrial pollution. This demonstrates the apartheid planning of the past which favoured the location of the wealthy residents in better locations.

Further north westwards are the Black townships of KwaMashu, Ntuzuma and Newlands. The southern part of the city is bordered by the sprawling Black township of Umlazi. With the peripheralisation of Black townships on the outskirts of Durban, this seems to constrain the delivery of low cost housing near the city centre, where the majority of Blacks are employed.

It is ironical that a Black township like Umlazi, with its hilly topography was allocated to the poor. As it is evident that it is expensive to build a house on a hilly terrain it could be ideal if the township was allocated to the affluent Whites and Indians. The siting of the poor in far away townships demonstrates the correlation between the physical and socio-political and economic aspects of this study when the apartheid regime ensured that Blacks had to commute long distances on the journey to work (Gumbi,1991) rather than using the transport funds to provide themselves with affordable low cost housing. It was evident that such distances were going to impact upon the poor's financial well-being, as well as the quality of life of the marginalised.

In the past housing delivery stakeholders did not include hills in their plans in Black townships. Many hills were left vacant for a long time. The availability of free and inaccessible vacant land on the hills of Black townships encouraged the squatting phenomenon. Many squatters invaded land to the detriment of the natural environment. When the apartheid government realised that squatters were making use of hilly land, the state began to introduce sites with toilets on hills. Such a situation is clearly visible below.

PLATE WITH SITES ON HILLS IN UMLAZI TOWNSHIP



Vegetation at the centre of the photograph illustrates hilly land that is left vacant for years at Section CC. Pit toilets are covered by dense vegetation.

The integration of hills in the formal township tends to discourage the very poor to use the site-with-toilet strategy. For instance at section CC in Umlazi there are numerous sites with toilets that are uninhabited. A drive through section CC in Umlazi reveals the presence of such sites. Vacant sites appear to aggravate the scarcity of land and housing amongst the poor. It is essential that engineers assess the suitability of a site before construction takes place. In the context of this inquiry it is encouraging to note that the Durban Metropolitan council is doing something for the Canaan shack dwellers who experienced landslides, that resulted in the destruction of their shacks.

Housing delivery stakeholders should consider the constraining effect of site and situation with regard to the delivery of housing to the poor in a sustainable manner. As long as decision makers do not integrate site and situation within a broader housing delivery strategy, the housing problem could remain unresolved and unsustainable.

6.2.2. THE INFLUENCE OF CLIMATE AND GEOMORPHOLOGY ON THE NATURAL ENVIRONMENT

In accordance with the works of Hardie (1964), Preston-Whyte (1980), Preston Whyte and Tyson (1988), Durban enjoys a subtropical climate as a result of the location of the city on the subtropical high pressure belt which is centred at 30°S latitude. The annual range about the mean temperature for Durban of 20,5°C is 8.3°C (Preston-Whyte, 1980 cited in Gumbi, 1995).

The fact that the city of Durban is washed by the warm Mozambique current has resulted in the construction of upper income residences not far from the city centre. The preponderance of upper income group residential areas, near the city centre has a propensity to constrain the delivery of low cost housing near the city centre. It is the opinion of the investigator that the poor should be provided with low cost housing near the city centre, such as in the area where the greenbelt is located.

6.2.3. THE EROSION OF THE TOP SOIL RESOURCE

Beckedahl *et al* (1988 : 249) argue that soil erosion in South Africa is extensive and diverse. Durban, a city that is part of Southern Africa, and located on the east coast where most rain falls, also experiences extensive and diverse soil erosion.

Beckedahl *et al* (1988) continue to describe Southern Africa as an area with a high concentration of conical hills topography, which are common in KwaZulu - Natal.

A hilly topography that is evident in Black townships such as Ntuzuma and Umlazi township, as witnessed by the social scientist during an empirical observation of the Durban area, has a close resemblance with the conical hills. What is common is the occurrence of steep slopes, which are susceptible to soil erosion.

It is interesting to note that the poorest inhabitants of the Durban Metropolitan area make use of mud to construct shacks. It could then be inferred that the extent of soil erosion in South Africa and in the Durban Metropolitan area in particular does constrain the delivery of low cost housing. The poor make use of mud for the walls of their shacks. The formation of dongas after soil erosion which are uninhabitable thus impact upon the land resource for housing construction.

The location of the Canaan shack settlement on a steep slope appears to exacerbate the problem of soil erosion. Soil erosion in the Durban Metropolitan landscape affects a very important housing resource in the form of the top soil. Soil erosion hampers the provision of mud housing as well as formal housing when good and flat sites are transformed into dongas. Squatter settlements of the Canaan type, are in danger of being flooded when soil erosion occurs during heavy downpours.

As long as the hindering effect of soil erosion is not considered as one of the factors inhibiting a sustainable delivery of housing in the Durban Metropolitan area, it could be difficult to redress the housing delivery crisis. It could then be inferred that the top soil is a vital component for the delivery of sustainable housing in the Durban Metropolitan area. The dongas that are formed by soil erosion also inhibit the delivery of housing, on uninhabitable land.

6.2.4. LANDSLIDES

Knapp (1983 : 134) defines a landslide as “downward movement of a large mass of earth or rocks from a mountain or cliff”. Buchanan (1974:128), reiterates Knapp’s contention and defines a landslide as “the mass downslope movement of earth material under the influence of gravity”. Landslides are generally sudden and sporadic. In the contextualisation of this thesis, it is the movement of a large mass of earth such as the one that occurred in 1997 at the Canaan squatter settlement at Cato Crest. (Khumalo, 1997).

The Durban Metropolitan local council discovered that some of the Clair Estate land at Cato Crest is not suitable for human habitation (Khumalo, 1997). Four hundred families living in the informal settlement at Canaan, a settlement that has been declared a danger zone, were relocated to a new camp at Springfield, an area that is not very far from this settlement (Sowetan, March 27, 1998). A walk across the N2 freeway by the investigator revealed that the Springfield area is hardly three kilometres away from the Canaan shack settlement.

Heavy rains had caused the ground to collapse. About 86 families have already been evacuated from the affected area at Canaan, (Sowetan, March 27, 1998) Geologic surveys have shown that the homes of the people who still remain behind are in danger of collapsing at any time. The landslide that occurred at Canaan demonstrates the need for soil engineers to ensure that areas that are susceptible to landslide formation are identified as a matter of urgency. It was discovered that not all the vacant land parcels around the city of Durban have been declared free of landslides and other disasters.

6.2.5. Floods

Whilst floods are recognised as one of the natural hazards that impact upon the housing delivery process, it should be acknowledged that floods are a danger to human beings as well. The lives of the Durban squatters are sometimes put at risk when heavy rains occur in the Durban Metropolitan area.

When the squatter settlement of Cato Crest was explored it was discovered that the proliferation of squatter camps has resulted in the occupation of the Umgeni River flood plain. As Durban is located on the east coast where heavy rains are frequent in summer, the location of squatters on the banks of the Umgeni river exposes them to flooding when the Umgeni river is in spate.

Another area of concern was the proliferation of squatter settlement on the flood plain of the Isipingo river in Umlazi Township. It could be argued that the location of squatters on flood plains does not solve the housing delivery problem, but only exposes squatters to dangers. A theoretical contention by Stren *et al* (1992) that illegal housing often develops on steep hillsides or flood plains was empirically affirmed by an exploration of the Canaan shackland in the study area. It is high time that decision makers ensure that squatters do not inhabit risky areas like flood plains.

6.3. THE INFLUENCE OF HOUSING DENSITIES ON THE DURBAN METROPOLITAN POPULACE

Whilst it is known that upper and middle income housing consists of low housing densities on the Durban Metropolitan landscape, the high housing densities especially in shantytowns, where the lower and lowest income groups exist should be considered.

The high housing densities lead to overpopulation which ultimately lead to various infectious diseases which seem to impact upon sustainable housing development in the study area.

The high population densities in squatter camps appear to place great strain on the physical environment of the Durban Metropolitan area. Squatters make use of available agricultural resources such as scarce land, water from riverine systems, grass; and water for cooking purposes, as well as planks and poles from trees; and forests for building purposes. It goes without saying that the overutilisation of natural resources in the Durban Metropolitan area is a function of overpopulation which is caused by high housing densities in shack settlements.

An incident which occurred at Canaan (Daily News November 3, 1998), where 250 shacks were gutted down by fire demonstrates the dangers of high shack densities in all squatter settlements. An empirical exploration of the Canaan shack settlement confirmed the higher densities in which the squatter camp exists. More than 250 residents of Canaan lost their shacks in the process. Simon Gumede (33) was taken to King Edward hospital with severe burns (Ibid). It is evident that the close proximity of shacks made it easy for fire to spread from one shack to the other. Without doubt a need for the shantytowns to have lower housing densities has become imperative if we hope to safeguard the people from the dangers of fire hazards.

When fires are lit by squatters who make use of firewood, cardboards, ijuba containers and planks, due to the high density of shacks such fires may lead to respiratory diseases such as tuberculosis. As the majority of squatters cannot afford electricity most of them have no alternative but to utilise firewood for cooking and warming purposes. In the process the air is polluted.

Another area of concern is the fact that it is easy for the squatters to spread infectious diseases when they live closer to one another. It is evident that the Durban Metro local council should ensure that high shack densities are decreased if it hopes to transform shantytowns in to liveable and sustainable environments.

Conflicts that arise in shantytowns may be ascribed to high shack densities. A struggle for the scarce housing resources is due to high shack densities. There is a need for the Durban Metro Local Council to acknowledge the struggle for scarce housing related resources as being caused by high shack and population densities amongst the poor.

AN ECOLOGICAL INTERACTION BETWEEN ANIMATE AND INANIMATE THINGS
WITHIN THE DURBAN ENVIRONMENT

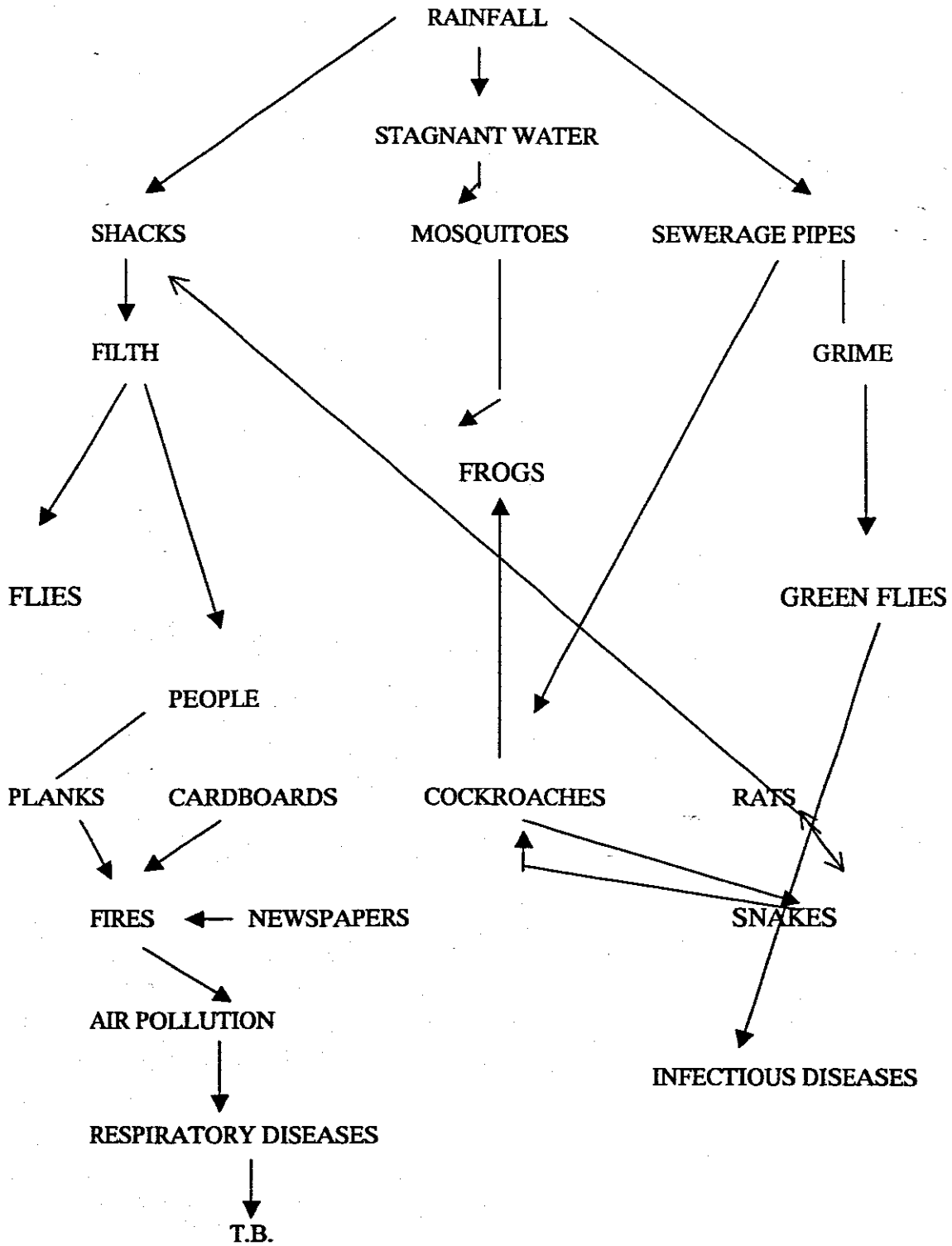


Figure 6.1. The Ecological Existence of the Victoria Street Squatters

All elements that impact upon the unsustainability of the housing delivery process are interwoven. A cause-effect relationship that ensues in the inner city squatters reveals the following :

- People use planks and cardboards for heating and cooking purposes to the detriment of clean air.
- Heavy rains or showers result in stagnant water which creates artificial habitats for mosquitoes.
- Frogs that abound in wet areas such as sewerage pipes feed on mosquitoes and flies, while at the same time attracting poisonous snakes who may bite the shack dwellers.



Plate 6.2. Victoria Street squatters on the pavement. An informal trader pushes a trolley on the Victoria Street.

An empirical exploration of the Victoria Street and Durban Station shack settlements by the investigator revealed that squatters exist in their areas in an unsustainable manner.

The filth that is caused by the inadequacy of rubbish bins ; and public toilets that are used by squatters are not frequently cleaned and repaired. Toilets then become a health hazard, not only to squatters, but to the entire Durban Metropolitan populace. When the Durban Metro Local Council was asked about the cleanliness of the shack areas, it was discovered that the people responsible for repairing toilets decided not to repair them because they claim that the toilets are constantly vandalised by the squatters.

The filth that prevails in such shacks attracts the bigger green flies to the camps.

Cockroaches that are found in sewerage systems attract frogs to the area. When frogs are in abundance they become food for the snakes, who in the process are also attracted to the squatter camps. It then becomes risky for shack dwellers who are in danger of being bitten by snakes.

The stagnant water that attracts and results in the exponential proliferation of mosquitoes leads to diseases such as Malaria fever. A newspaper report informed us that rats as big as small dogs bit one of the babies who lived in a Durban Station squatter camp (Independent on Saturday May 9,1998). When the squatter dwellers were enquired about this incident it was empirically confirmed that such an incident did take place. It was also discovered from the shack respondents that some of them have been bitten by snakes in summer, the same snakes that are attracted by the presence of rats and frogs in the areas.

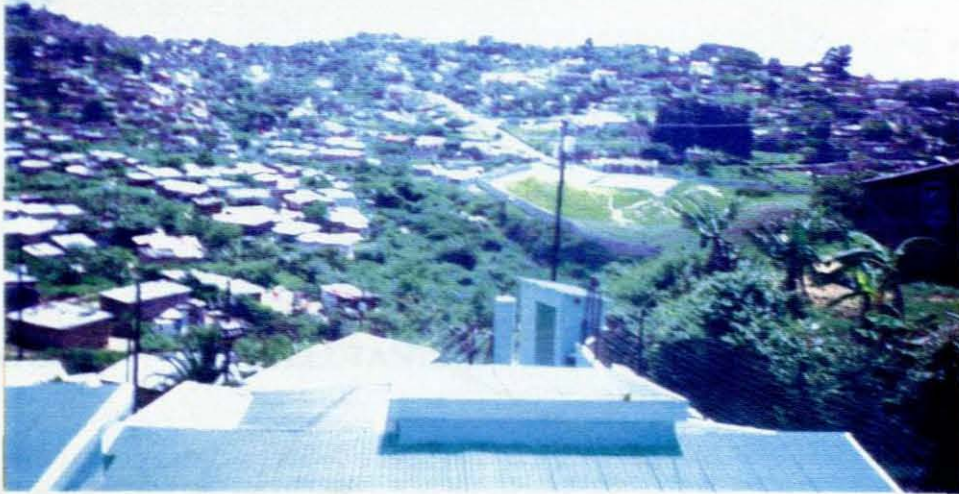


Plate 6.3. Power shantytown showing a sports ground at the centre and the Isipingo river where there is dense vegetation below the sportsfield.



Plate 6.4. Another view of the Power shackland

ISIPINGO RIVERINE SYSTEM AND ENVIRONMENTAL DEGRADATION

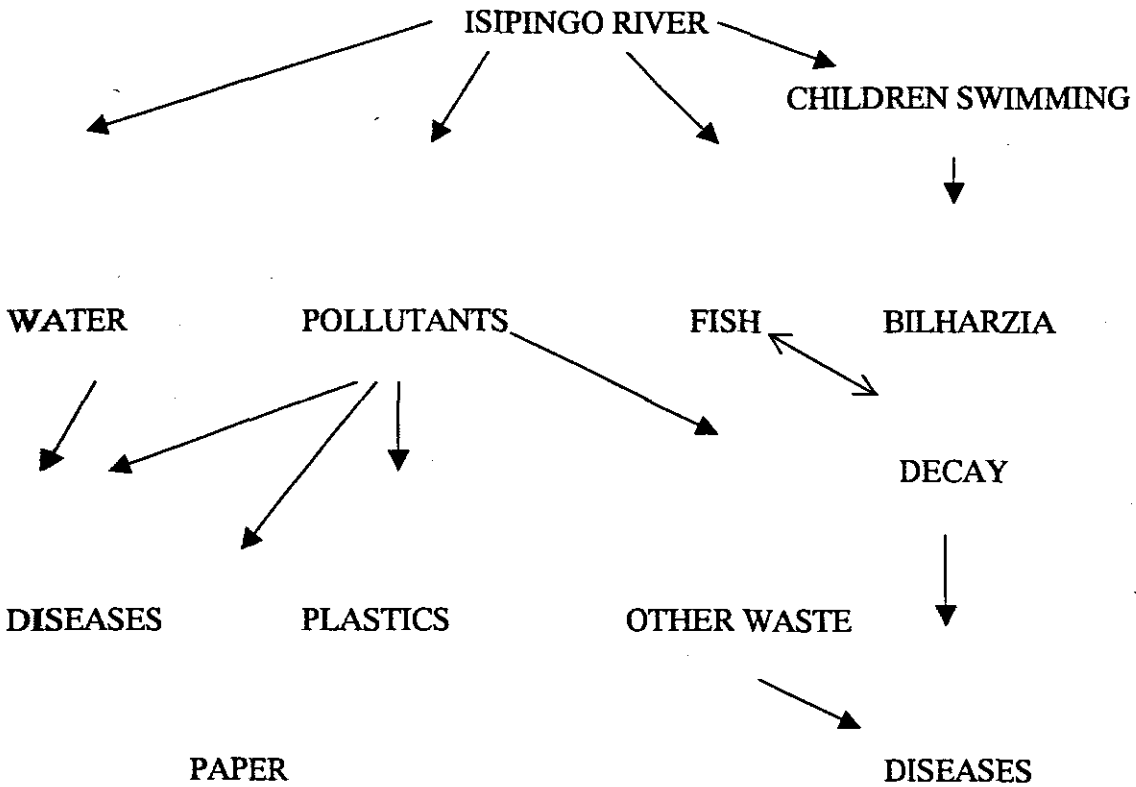


Figure 6.2. Isipingo Riverine System

There is a distinct cause-effect relationship that is demonstrated by the interaction of living and non-living things in figure 6.2. above in the Isipingo Riverine System that was empirically explored by the researcher. Before we examine the interaction in Figure 6.2. above it is necessary to explore its physical characteristics.

The Power shack settlement is located between sections AA and L in Umlazi Township. It was named “Power” shantytown due to its location in close proximity to an electricity power station (See Plate 6.3.). Cutting across the squatter settlement is the Isipingo river.

Some of the shack dwellers who depend on fish for their survival informed the investigator that fish have in the process died due to the toxic pollutants that are released into the system. Wastes in the form of papers, plastics, newspapers and many other pollutants give rise to the pollution of the Isipingo riverine system. Some of the squatters who bathe and swim in the river are in danger of contracting water borne diseases such as bilharzia.

A need for decision makers and environmentalists in co-operation with housing delivery stakeholders to ensure that riverine systems of the Isipingo type are cleaned and freed of pollutants have become imperative if we hope to make such settlements healthy and sustainable. Whilst acknowledging the expensive nature of cleaning such systems, it could then be an ideal strategy to make the squatters aware of the environmental degradation that they are creating in such riverine systems. Environmental education among Blacks could be a strategy to prevent rather than curing the problem of the Power shack settlement in Umlazi.

It could then be inferred that the location of the Power squatter settlement near a polluted riverine system seems to be unsustainable. The shack dwellers are at risk because they may be infected by various diseases emanating from the filth that prevails in the Isipingo river. A need for the Durban Metro Council to provide shack dwellers with waste disposal bins has emerged. The pollution that prevails in this squatter camp is not only detrimental to its inhabitants, but is also affecting the health of the adjacent formal residents of the entire township as well. Housing delivery stakeholders should ensure that the Isipingo riverine system is not polluted.

CANAAN SQUATTER SETTLEMENT AND NATURAL HAZARDS

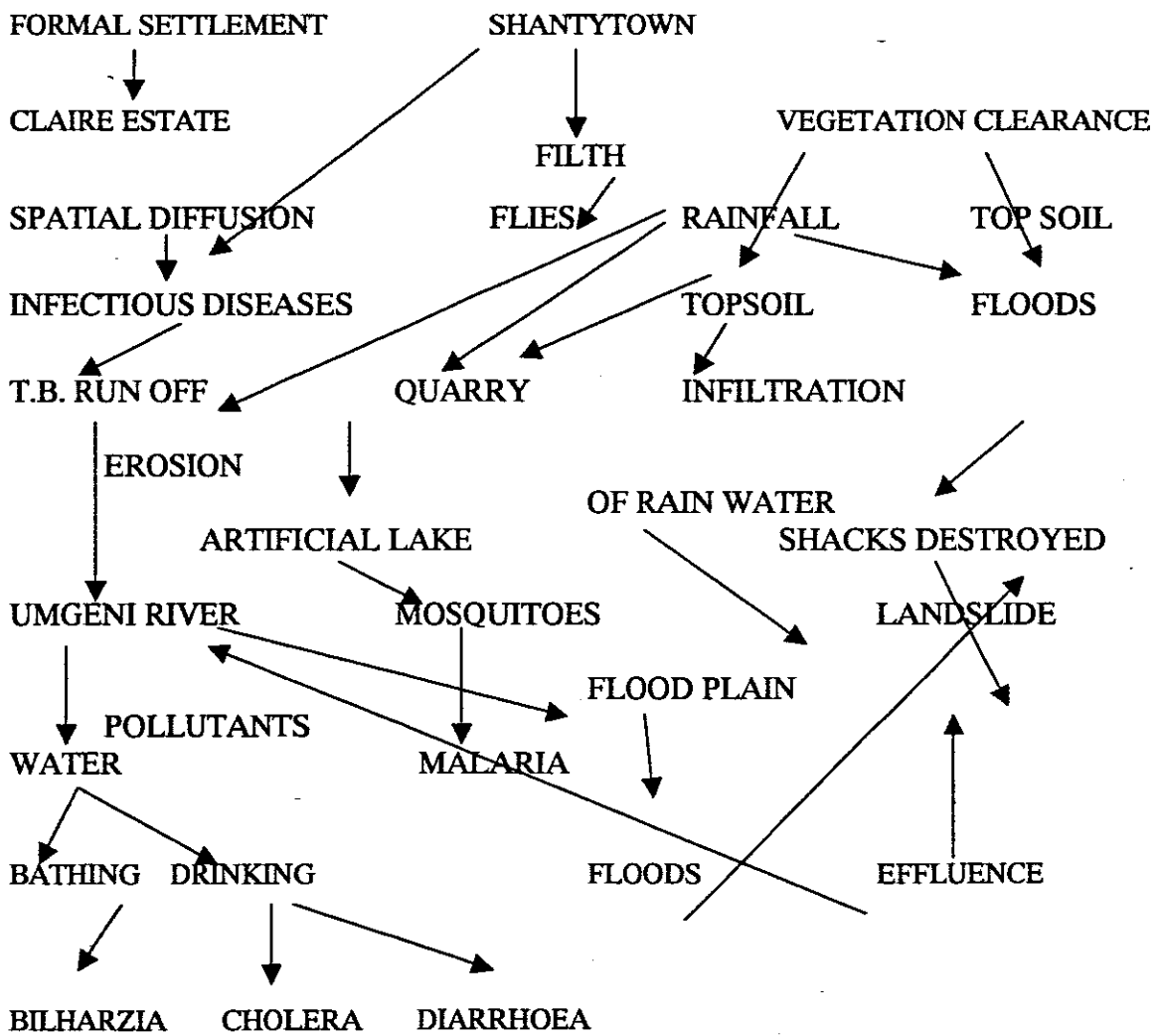


Figure 6.3. Canaan Ecological Interaction

The Canaan squatter settlement is located on a steep slope adjacent to the formal residential area of Claire Estate, where Indian families reside in upper middle income housing. It is apparent that whatever environmental problems that occur they impact upon both formal and informal settlements.

Figure 6.3. above reflects a situation that was discovered by the investigator when he undertook an empirical exploration of the Canaan shantytown, where the physical elements that influence housing development were identified. When the shack dwellers constructed shacks they had to remove the vegetation on the steep slopes. It is evident that the removal of vegetation on the top soil loosened the soil particles of the top soil. As soon as rains ensued natural hazards were bound to take place.

An old quarry near this area has depleted the ground and water accumulates in the deep hole that exists. When the shack dwellers who dwell nearby were interviewed they indicated that mosquitoes from this stagnant water are a nuisance especially in summer as they are attracted by stagnant water. The presence of stagnant water in close proximity to the Canaan shackland also renders the middle income housing nearby unsustainable. A need for the relocation of all shack dwellers in the area has become imperative, if it is hoped that the Durban Metropolitan area remains sustainable.

The rains that are common in summer result in floods when heavy rains occur. If it happens that sufficient rain water is able to infiltrate the top soil as indirect run off it may disturb unstable soil, which may ultimately form landslides that did occur in the Canaan squatter area. The location of some of the shack dwellers on the flood plain of the Umgeni River could destroy shacks when this river is in spate. Some of the shack dwellers even dump waste in the river to the detriment of the rivers ecosystems.

It is worthy to note that it is not only the shack dwellers that are affected by environmental pollution that prevails in the Canaan shantytown. The Claire Estate residents are affected as well. There is a spatial diffusion of infectious diseases from the shack area to the formal area. People who bathe in the river usually suffer from bilharzia.

6.4. CONCLUSION

In conclusion, housing delivery stakeholders need to ensure that they take into account the interwovenness of environmental problems, with the housing delivery problem in a sustainable manner. Otherwise, the problem could remain unresolved for a long time to the disadvantage of future generations of the Durban Metropolitan area.



Plate 6.5. A Power station near the Power shackland in Umlazi



Plate 6.6. Section BB park with the middle income houses in the background

Plate 6.7. A woman sits on the pavement of the bridge near Victoria Street.

This woman sleeps on this bridge.



Plate 6.8. A woman sits on the pavement of the bridge near Victoria Street.



Plate 6.8. Canaan shantytown near a waterhole. Shacks in close proximity to upper income housing could be seen above the waterhole



Plate 6.9. Canaan shackland on the flood plain of the Umgeni River

CHAPTER 7

HOUSING DELIVERY TO THE MEDIUM INCOME GROUP

7.1. INTRODUCTION

Before embarking upon an interpretation and analysis of the research data it is necessary to probe numerous questions that are interwoven with the housing delivery-related problems and the sustainability of the Durban Metropolitan Area. In accordance with the principles and goals of sustainability as espoused by Sutterwhaite (1992) it is necessary to answer the following questions : -

Does the delivery of housing in the study area meet human needs? Is environmental capital kept intact? How does the consumption of housing by the privileged class impact upon the slum conditions in shacklands? What happens to people's health when the polluting industries of the city of Durban generate waste? How does poverty and housing resource deprivation affect the very poor? Are the flora and fauna that are found within housing in the study area ecologically sustainable? How do market forces impact upon natural forces with respect to the delivery of housing in the Durban Metropolitan Area ? What are advantages and disadvantages of high population and housing densities particularly amongst the shack dwellers? Are the Durban people and city managers pursuing similar priorities and goals towards the delivery of housing in a sustainable manner?

This chapter will make an effort to follow the objectives of the thesis which aim to establish whether the house building strategies take into account the idea of the African environment. It will also examine the cause-effect relationships which hinder the delivery of housing in the study. Afrocentric job creation initiatives will also be examined. The study will then make an effort to accept or reject the hypotheses of the study as they appear in chapter 1.

7.2. FACTORS RELATED TO THE LEGACY OF APARTHEID ON HOUSING DELIVERY

TABLE 7.1. RESPONDENTS' VIEWS ON FACTORS EMANATING FROM THE LEGACY OF APARTHEID

FACTORS	Number Agreeing	%	No Response	%	TOTAL
Long commuting distances	09	30	21	70	30
Apartheid influenced capitalism	07	23	23	77	30
Scarce housing delivery resources	15	50	15	50	30
All of the above	14	47	16	53	30

In accordance with table 7.1. above data reflects that about 50 percent of the respondents identify the scarce housing delivery resources as primarily impacting upon the housing delivery problem in the study area. The second highest figure of 47 percent perceive that the long commuting distances, apartheid influenced capitalism and the scarce housing delivery resources all contribute towards an important implication on the legacy of apartheid. It should also be noted that 30 percent perceive the long and costly commuting distances resulting from the legacy of apartheid as hindering the delivery process of housing in the study area.

As indicated in the theoretical framework that a more productive way to understand urban issues is to explain principles and ideals that shaped the South African urban process (Parnell and Mabin, 1995) it should then be concluded that apartheid shaped the housing delivery process in the Durban Metropolitan area today.

The fact that the middle income group appears to be favoured when housing resources are allocated is cause for great concern. Furthermore, the theoretical assertion emanating from the urban managerialist thesis (Banovetz, 1971; Saunders, 1981; Pacione, 1990) as explored in the literature review chapter seems to be empirically affirmed. The thesis that argues that the scarce housing delivery resources are artificially created by some of the urban managers (Saunders, 1981) is proof that artificial scarcities play a crucial role in constraining the housing delivery resources amongst the poor. This contention is empirically confirmed by 50 percent of the respondents. 47 percent respondents indicate that all the above facts emanate from the legacy of apartheid.

It is interesting to discover that only 30 percent of respondents give the long commuting distances as the second significant legacy of apartheid. Gumbi (1995) empirically proved that the long distances further impoverished the already disadvantaged to the detriment of housing provision in the study area. It could then be concluded that it is the responsibility of the local government to see to it that the expensive journeys to work are catered for by subsidising the journey to work.

The relocation of Blacks on the periphery of town was a political strategy which further marginalised Blacks economically. As a result they could not be able to provide themselves with the cheapest form of conventional housing, hence the spatial manifestation of shacklands in the Durban Metropolitan area to the disadvantage of a sustainable city of Durban.

As long as the retrogressive elements that were created by apartheid still exist in the study area it could be difficult to deliver housing which will not compromise the lives of future residents of the study area. Much as it is acknowledged that apartheid has been officially wiped out from the statute books, its legacy still exists.

TABLE 7.2. RESPONDENTS' PERCEPTION ON THE REASONS FOR THE INABILITY OF THE STATE TO DELIVER HOUSES

FACTORS	Number Agreeing	%	No Response	%	TOTAL
Mismanaging housing delivery process	17	57	13	43	30
Corruption by state officials	18	60	12	40	30
Lack of sufficient funds	18	60	12	40	30
Bureaucratic Red – tape	11	37	19	63	30
Other (specify)	04	13	26	87	30

Whilst in a new dispensation Blacks have attained political power, it is discouraging to discover the problems that express themselves in Table 7.2. Corruption by state officials and lack of sufficient funds appear to be the major problems that render the state unable to deliver housing to the poor. This is illustrated by 60 percent respondents for each reason. The mismanagement and

administration of housing in the Durban Metropolitan area is of secondary importance, with 57 percent respondents opting for this reason. Only 37 percent give bureaucratic red-tape by public and private sector officials as a reason that hampers the local government from delivering housing to the very poor. Only 13 percent of the respondents identify other reasons that are not given in the questionnaire. The following reasons were given by individual respondents.

- One respondent suggested that it could be an ideal strategy to solve the housing delivery problem if all the problems mentioned in Table 7.2. were treated as having an equal impact on the housing delivery process without targetting any of the four problems as more important than the others. Furthermore, the respondent continued to argue that the only difference is the degree in which each cause impacts upon the housing delivery problem.
- Another respondent indicated that the homeless and the landless are not provided with cheaper building material. *The homeless are not sufficiently encouraged to become “do it yourself” enthusiasts, while habitable land is not provided to the very poor.*
- The third respondent argues that the private sector lacks the will to solve the housing delivery problem and in the process does not help the state in facilitating the resolution of this problem.

Deducing from the information reflected in Table 7.2. the three tiers of government that is, the central, the provincial and the local ones do not have the political will to ensure that the housing delivery bureaucrats are not corrupt and do not acknowledge the hurdles or red tape that impede the housing delivery process in the Durban Metropolitan area. It could be avered that a proper

management and administration of the housing delivery process depends on the political initiatives that emanate from the state if it aspires for a viable housing delivery process in the study area.

The majority of respondents are aware of the redlining of the housing delivery resources on the poor by private and public sector managers. This could be ascribed to the absence of transparency amongst housing delivery officials. Although the ANC led government champions the principle of openness and transparency, yet when it comes to some of its leaders, this is not the case.

The maladministration and mismanagement of the housing delivery process will continue to impinge upon whatever positive plans that are aimed at solving the housing provision problem in the study area. It is high time that the “big fish” who are involved in housing scams are caught because when only the small fry is caught, the big wigs will forever hinder the progress of housing delivery with their diabolical acts.

TABLE 7.3. RESPONDENTS’ VIEWS ON HOW THE STATE CAN SPEED UP THE ALLOCATION PROCESS

STRATEGIES	Number Agreeing	%	No Response	%	TOTAL
1. Employing efficient officials	10	33	20	67	30
2. Utilising allocated funds	11	37	19	63	30
3. (1 and 2 above)	16	53	14	47	30
4. Other (specify)	05	17	25	83	30

53 percent of respondents give a combination of utilising allocated funds, and the employment of efficient officials as positive mechanisms that could lead to a speedy facilitation of the land allocation process in the study area. The second group identify only the utilisation of funds by land

allocation officials as a measure that could speed up the appropriation of land to the landless. This group numbers 37 percent of the respondents. Whilst only 33 percent respondents indicate that the employment of efficient officials could facilitate the appropriation of land to the poor, 17 percent of the respondents give alternatives other than those given in Table 7.3. The alternatives read as follows :

- The landless should be given unused state land.
- The employment of land allocation consultants who charge exorbitant fees could take away money allocated for land appropriation unnecessarily.
- Local authorities should identify habitable land around Durban and allocate it to the landless as a matter of urgency.
- Some of the land that was allocated to whites only, could be made available to the landless.

Mechanisms for the appropriation and redistribution of land seems to create an endless spiral which excludes the poorest (Amis and Lloyd, 1990). Such a theoretical contention seems to be affirmed in the Durban Metropolitan area. The above assertion is empirically affirmed by the exponential and geometric proliferation of shantytowns on Durban's urban landscape with deleterious environmental impacts. The 53 percent respondents who identify a combination of the employment of efficient officials, and the utilisation of allocated funds, demonstrates the importance of managing the land allocation process properly if land is to be successfully handed over to the poor in the study area. Day's (1997) argument that land reform has failed with most provinces seems to be affirmed by the majority of respondents of this study.

The fact that the South African government had spent less than R20 million of its R314 million by 1997 is confirmed by the empirical results that officials are not efficient enough to carry out the allocation process in a speedy manner. There is a need to include more land allocation experts if the process is to be a success. By 1997, a staff of 200 that was responsible for implementing land reform could not cope with this process (Lund, 1997).

TABLE 7.4. RESPONDENTS' VIEWS ON STRATEGIES TO SPEED UP THE ALLOCATION PROCESS

STRATEGIES	Number Agreeing	%	No Response	%	TOTAL
End bureaucratic inertia	05	17	25	83	30
Encourage home ownership	12	40	18	60	30
Squatting could decrease	17	57	13	43	30
To curb official corruption	07	23	23	77	30
All of the above	10	33	20	67	30
Other (specify)	01	03	29	97	30

57 percent of the respondents intimate that the appropriation of land to the poor could decrease the squatting phenomenon. It could be inferred that the legalisation of land invaded by squatters could be an ideal strategy to redress the land imbalances that exist in the Durban Metropolitan area. The second group of respondents (40 %) indicate that the homeownership strategy could lead to more land being allocated to the poor. Whilst 33 percent of the respondents give the significance of all the alternatives in above only 23 percent gives official corruption curbing as a mechanism that could enable land officials to speed up the appropriation process.

Although the 3 percent comprises of only one respondent, one should not lose sight of the fact that the suggestion given by this respondent is crucial towards facilitating the land allocation process.

The suggestion is as follows :

- Land will not only be available for housing delivery but could also provide for urban agriculture for the poor.

Squatters invade land illegally because they do not own any piece of land. The identification of alternative 3 which intimates for the decrease of squatting and the fact that this could encourage home ownership, is affirmed by the land invasions that ensue in squatter settlements. It should be taken into cognisance that the spatial manifestation of shantytowns on Durban's open spaces is a result of the non-ownership of formal land by the squatters. In other words, the squatting phenomenon could be ascribed to all the alternatives in Table 7.4. above, as indicated by the 33 percent of respondents.

When land allocation officials are able to put into place mechanisms whereby the landless own a piece of land, this could augur well for the resolution of the housing delivery crisis in a sustainable manner. A speedy and efficient allocation of land to the poor could ensure that natural ecosystems that are usually degraded by shantytowns such as lakes, parks, rivers to mention just a few, could remain intact, thus making Durban a sustainable city to inhabit. When the poor are able to utilise some of their land for agricultural purposes, this could be an ideal strategy for their economic empowerment as well.

TABLE 7.5. RESPONDENTS' VIEWS WHERE LAND COULD BE OBTAINED FOR ITS ALLOCATION

FACTORS	Number Agreeing	%	No Response	%	TOTAL
Greenbelt	11	37	19	63	30
White farms nearby	17	57	13	43	30
Former trust land	22	73	08	27	30

In table 7.5. a clear picture emerges, where 73 percent of respondents opt for former trust land near Black townships as land that should be prioritised for land allocation to the poor. The second group of respondents who number 57 percent identify White farms nearby as land that could be earmarked for Black settlement. Only 37 percent respondents perceive the Greenbelt as an area that could be used for low cost housing. It is encouraging to know that the national minister responsible for land allocation

(Ms Thoko Didiza) is planning to redistribute 30 percent of White farm land to the poor (E-TV-News 10h00, 20 – 06 – 2000)

It is the feeling of most respondents that Trust land should be allocated to Black townships. This could be ascribed to the fact that Black people, who are located near Trust land, like the Umlazi residents who are near the KwaMakhanya area across the Izimbokodwe river, view this land as significant for housing provision, due to its proximity to Umlazi township.

Whilst it is known to date that, some of the Ingonyama Trust land which has a bearing on the Durban Metropolitan area's land parcels, has been freed from the jurisdiction of the Zulu King, it will nevertheless take some time before adequate land is expropriated from the Trust. The reason ? The Ingonyama Trust Act vested a large portion of the KwaZulu-Natal land which could not be allocated overnight. About R150 million on housing subsidies was tied to the Ingonyama Trust land by 1996 (Arde, 1996). This land has yet to be adequately rendered available to the landless.

White farms are viewed by 57 percent of the respondents as of secondary importance because when land was expropriated from Blacks it was appropriated to White farmers. The identification of White farmland around Durban as having a bearing on the delivery of housing to the landless could be futile if this land impacts upon important agricultural lands, and significant ecological systems.

The identification of the Greenbelt by a minority reveals the ignorance of respondents who are unaware of the boundaries forming this belt. When the Greenbelt, was empirically explored by the researcher it was interesting to discover that some of its land already had new industrial, commercial and residential areas. This is the area around Duff's Road and Phoenix. It could then be concluded that although a minority identified the Greenbelt as an area for future housing development, this illustrates the importance of the belt in terms of a sustainable housing delivery process.

TABLE 7.6. RESPONDENTS' PERCEPTION OF POLITICAL MEASURES TO REDRESS THE HOUSING DELIVERY PROBLEM

STRATEGIES	Number Agreeing	%	No Response	%	TOTAL
Political tolerance	14	47	16	53	30
Combined efforts	22	73	08	27	30
Apartheid city reconstruction	09	30	21	70	30
Speeding up land restitution	15	15	15	50	30
Other (specify)	01	03	29	97	30

Table 7.6. reflects a situation whereby 73 percent of the respondents are in favour of the three tiers of government, the central, the provincial and the local governments to work together in close co-operation, consultation and consensus amongst themselves with regard to the resolution of the housing delivery crisis in the study area. About 50 percent respondents believe that the speeding

up of the land restitution process could be an ideal political mechanism to redress the land inequities of the past in the study area.

Whilst political tolerance comes out as the third choice (47 %), the reconstruction of the apartheid city, where 30 percent of the respondents identify it, pales into insignificance. This could be associated with the inability of most respondents who are not well versed with the theory on the apartheid city, to understand the political dynamics that go hand in glove with the restructuring of the city of Durban. The non-responses for each alternative belongs to respondents who did not agree with each response.

TABLE 7.7. RESPONDENTS' VIEWS ON POLITICAL STRATEGIES BY STATE TO ENCOURAGE THE GRASSROOTS TO BUILD HOUSING

STRATEGIES	Number Agreeing	%	No Response	%	TOTAL
Actual political empowerment of people	14	47	16	53	30
Central govt. to ensure commitment	22	73	08	27	30
Women empowerment	10	33	20	67	30
(1,2 and 3) above	14	47	16	53	30
Other (specify)	01	03	29	97	30

Respondents who are 73 percent in number intimate for the central government to ensure commitment by the grassroots so as to encourage them to provide housing on their own.

Whilst 47 percent respondents support the idea of empowerment of the people in the real sense of the word, the other 47 percent respondents give a combination of alternatives 1, 2 and 3 above.

Only 33 percent of respondents favour women empowerment as a political strategy that could be

utilised by the state. 3 percent respondents give an alternative of their own as follows : Land allocation powers should be delegated to the lower regional councils in the study area.

The investigator argues that the constraining effect of only empowering a few individuals who belong to the elite group tends to aggravate the housing delivery crisis in the study area. The actual political empowerment of the poor, when they are made aware of their political rights could augur well for a successful delivery of housing in the Durban Metropolitan area. As long as the grassroots are politically illiterate it could be difficult to redress the housing delivery crisis in the study area.

The 73 percent of respondents who identify the central government which should ensure total commitment by all housing delivery stakeholders in the public and private sectors is empirical affirmation of the theoretical contention that the government should be the chief watchdog, the *chief facilitator of the housing delivery process in the study area.*

It could be argued that the 33 respondents who are for women empowerment confirm the theoretical contention that women are marginalised at home as Blacks and as house owners. The patriarchal attitude of Black respondents towards women still exist today. How do we hope to resolve the housing delivery crisis if we do not acknowledge the marginalisation of women with regard to the allocation of the housing resource ?

The Sunday Times (April 24, 1996) reports that the extent to which housing delivery becomes sustainable and successful will depend on the actual participation of women. The involvement of

women in decision making concerning the housing delivery process could become a win-win situation in the study area.

It could then be concluded that it is imperative for housing delivery decision makers to acknowledge that the women who are in the majority should be given first preference when housing is being allocated to the poor. It is encouraging to be informed that the women in Umlazi have started job creation initiatives in the form of gardens, dressmaking and knitting (Nhlangulela cited in Ilanga July 29 – 31, 1999). Such job creation initiatives could empower women financially, so that they are able to provide themselves with formal housing. An empirical exploration of the Umlazi Township affirmed the theoretical contention from the Ilanga newspaper above.

TABLE 7.8. RESPONDENTS' VIEWS ON THE IMPACT OF COLONIAL LEGACY ON HOUSING PROVISION

STRATEGIES	Number Agreeing	%	No Response	%	TOTAL
Entrenching apartheid capitalism	13	43	17	-	30
Resource inequities	19	63	11		30
(1 and 2) above	14	47	16		30
Other (specify)	01	03	29		30

Data in table 7.8 reflect a situation where 63 percent of the respondents give resource inequities as a major colonial legacy that impacts upon the delivery of housing in the Durban Metropolitan area. Less than half the respondents inquired perceive both 'entrenching apartheid capitalism' and 'resource inequities' as alternatives that influence the legacy of colonialism on housing provision. This group numbers 47 percent. While only 43 percent have identified 'entrenching apartheid

capitalism' as the primary factor being influenced by the legacy of colonialism, only 3 percent gives another alternative that does not appear in Table 7.8. above. This group argues that the land that is still locked in the hands of White farmers is viewed as a colonial legacy which mainly influences the housing delivery process.

In accordance with Lewis ' (1998) contention, the industrial nations of the West exported underdevelopment in their exploitation of Third World labour and markets. It could be argued that the resource inequalities that emerged in South Africa were a direct result of the exploitative nature of colonialism. The identification of resource inequities as a prime legacy of colonialism is an empirical affirmation of the theory of colonialism in chapter two of the thesis.

The political ideology of apartheid ensured that capital favoured the colonists. It is evident that the distribution of housing delivery resources is skewed to the advantage of Whites and middle income Blacks who are already relatively affluent. The resource inequities are interwoven with the entrenchment of apartheid capitalism in favour of the already advantaged group, while the poor are further marginalised. The dichotomy of the haves and have-nots, which has led to unemployment and poverty, contributes to the resource inequalities that are a function of the legacy of colonialism which brought about apartheid capitalism to South Africa.

TABLE 7.9. RESPONDENTS' PERCEPTION OF POLITICAL EFFECTS ON THE HOUSING DELIVERY PROCESS

STRATEGIES	Number Agreeing	%	No Response	%	TOTAL
Prioritisation of politics	19	63	11	31	30
Over-exploitation of resources	08	27	22	73	30
(1 and 2) above	15	50	15	50	30
Other (specify)	03	10	27	90	30

63 percent of respondents believe that politicians in the Durban Metropolitan area as well as the grassroots prioritise politics above environmental issues. The second group of respondents who constitute half the number, (50 %) of respondents identifies alternative 3 which combines the prioritisation of politics above the environment and the over-exploitation of natural resources by foreign nations as equally important.

The empirical discovery in Table 7.9 where the majority of respondents are of the opinion that politics is prioritised above the environment is cause for great concern. It is a fact that decision makers of the past did not take into account that political decisions should go hand in glove with environmental issues, if it is hoped that the housing delivery process is effected in such a way that the Durban Metropolitan area remains sustainable.

When the Durban Metropolitan council allows industries to dump waste in Black townships, such as Umlazi, this action is perceived by the investigator as a political act that compels the Durban Metro council to yield to the powers of the captains of industry for monetary gain, at the expense of the poverty and health of the poor .

A report in the Daily News (November 3, 1998) informs us that the dumping site at Merebank is an environmental injustice. The Mondi Mill is the main culprit. This compels decision makers to ensure that the health of the Merebank community is looked after, and that there is no effect on the Umlazi canal, if the city of Durban is to be sustainable. A practical observation of the Umlazi and the Merebank dumping sites confirmed the unsustainable manner in which the dumping sites were kept. It is encouraging that to date, both dumps have been closed.

A random interview of a few respondents who used the Umlazi dumping site for sustenance revealed a shocking state of affairs. Much as the respondents did acknowledge the negative effects the dumping site had on them, they nevertheless indicated that the site played a crucial role in their economic well-being. Whatever was obtained from the site especially the food and plastics that are dumped, were sold in the formal and informal sections of the township. Another reason the subjects gave was that, due to the fact they are unemployed, it is worth the risk of contracting diseases to look for anything of value in the dumping site rather than starving. Some of the food remains obtained from the dump is also consumed by the poor.

While the over-exploitation of natural resources is of minimal significance to the respondents, it should be acknowledged that industries have a duty to ensure that the lives of the poor are not compromised by pollution. It should be acknowledged that they are the main culprits who pollute the environment. Mechanisms have to be implemented whereby industries somehow reward the victims of pollution. How this is to be done rests with the Durban Metro council which should facilitate this process.

It is evident that the prioritisation of political issues above those of the environment creates a situation where Black residential areas remain unsustainable. Nevertheless, it should be taken into account that it is not only the lives of residents who stay in close proximity to the dumping sites which are affected. A spatial diffusion of pollutants result in the spread of infectious diseases like tuberculosis, from the Black residential areas to those of the affluent as well. A need to prioritise environmental issues above the political ones is imperative, if we aspire to make Durban a sustainable city.

7.3. SOCIO-ECONOMIC FACTORS IN HOUSING DELIVERY

TABLE 7.10. RESPONDENTS' PERCEPTION OF THE INFLUENCE OF GEAR ON THE HOUSING DELIVERY PROCESS

STRATEGIES	Number Agreeing	%	No Response	%	TOTAL
Weakens civil society	08	27	22	73	30
Over-exploitation of resources	09	30	21	70	30
Creates jobs and affluence	14	47	16	53	30
Favours the wealthy	17	57	13	43	30
Other (specify)	02	07	28	93	30

About 67 percent of the subjects identify all the alternatives as causes for the unemployment in the study area. These are apartheid legacy and job reservation, Gear principles, and low income growth. The second highest group of respondents point out apartheid legacy and job reservation as the chief causes for the unemployment situation in the study area. This group numbers 57 percent respondents. While 43 percent respondents give low income growth as a major cause for unemployment, only 30 % percent intimate that Gear and market principles are the major causes for joblessness in the Durban Metropolitan Area. Only 10 percent of respondents give alternatives

other than those appearing in table 7.10 above. This group argues that a lack of a strong South African based private sector seems to result in joblessness.

Evidence above seems to point in a direction that all the alternatives above play a prominent role in hindering the progress of employment in the study area. It is common knowledge that during the apartheid period certain jobs were reserved only for Whites. This created a situation where the majority of Blacks were kept out of the job market to their economic disadvantage. Without jobs, it was going to be difficult for Blacks to provide themselves with conventional housing, hence the spatial proliferation of shantytowns on Durban's physical landscape.

The opponents of GEAR argue that much as GEAR is aimed at delivering 400 000 jobs by the year 2000 (Sunday Times November 16, 1997), it is ironical that GEAR has led to job cuts in the public and private sectors, as an attempt to speed up privatisation.

GEAR appears to hinder the delivery of housing mainly amongst the unemployed who are deprived of the essential funds for building housing.

The failure of the respondents in this study to comprehend the complex nature of the GEAR principles forces them to minimally recognise GEAR as causing unemployment amongst the poor. However, the respondents that identify other causes give the following:

- 3 percent respondents indicate that the privatisation of parastatals such as railways, telecommunications, mines and the slow pace of affirmative action, all result in job losses. Such a

situation is empirically affirmed because it is common knowledge that many people have lost jobs both in the private and public sectors.

- The other 4 percent intimate that the South African private sector cannot be trusted because it is not loyal and committed towards redressing the problem of unemployment in the study area.

The failure of the GEAR strategy demonstrates the futility of imposing an economic strategy that is not applicable in the South African situation. It is high time the ANC government makes an effort to look at other economic strategies that may be viable in a country where there are gross wealth inequities. It could be inferred that this will benefit the poor and the unemployed if the negative aspects of GEAR are rooted out by embracing a new economic policy like a mixed economic model.

TABLE 7.11. RESPONDENTS' PERCEPTION OF THE CAUSES OF UNEMPLOYMENT

STRATEGIES	Number Agreeing	%	No Response	%	TOTAL
Apartheid legacy and job reservation	17	57	13	43	30
GEAR and market principles	09	30	21	70	30
Low economic growth	13	43	17	57	30
All the above	03	10	27	90	30

About 67 percent of the respondents identify all the alternatives as causes for unemployment in the study area. These are apartheid legacy and job reservation, GEAR principles, and low economic growth. The second highest group of respondents identifies apartheid legacy and job reservation as the chief causes for the unemployment situation in the study area. This group numbers 57 percent. While 43 percent respondents give low economic growth as a major cause for

unemployment, only 30 percent intimate that GEAR and market principles are the major causes for joblessness in the Durban Metropolitan area. Only 10 percent respondents give alternatives other than those appearing in table 7.11 above. This group argues that a lack of a strong South African based private sector seems to result in joblessness.

Evidence in table 7.11 above indicates that all the alternatives above play a prominent role in hindering the progress of employment in the study area. It is common knowledge that during the apartheid period certain jobs were reserved only for whites. This created a situation where the majority of Blacks were kept out of the job market to their economic disadvantage. Without jobs, it was going to be difficult for Blacks to provide themselves with conventional housing, hence the spatial proliferation of shantytowns on Durban's physical landscape.

The opponents of GEAR argue that much as GEAR is aimed at delivering 400 000 jobs by the year 2000 (Sunday Times November 16, 1997), it is ironical that GEAR has led to job cuts in the public and private sectors, as an attempt to speed up privatisation. This appears to hinder the delivery of housing amongst the unemployed who are deprived of the essential funds for building housing.

The failure of the respondents in this study to comprehend the complex nature of the Gear principles forces them to minimally recognise Gear as causing unemployment amongst the poor. The subjects that identify other causes give the following:

- One respondent indicated that the privatisation of parastatals such as railways, telecommunications, mines to mention a few and the slow pace of affirmative action, all result in job losses. Such a situation is empirically affirmed because it is common knowledge that many people have lost jobs both in the private and public sector.
- The other respondent intimated that the South African private sector cannot be trusted because it is not loyal and committed towards redressing the problem of unemployment in the study area.

TABLE 7.12. RESPONDENTS' PERCEPTION OF PREFERRED GROUP WHEN HOUSING LOANS ARE GRANTED

STRATEGIES	Number Agreeing	%	No Response	%	TOTAL
Middle income group	12	40	18	60	30
State employees	22	73	08	27	30
Some private sector employees	12	40	18	60	30
All the above	11	37	19	63	30

73 percent of the respondents give state employees as the preferred group when it comes to the granting of housing loans in the study area. The group that identifies the middle income group as well as those that identify some private sector employees have an equal number of 40 percent. 37 percent respondents give all the above alternative.

Market based theory reveals that housing loans that are granted to the middle income group are beneficial to capitalist investors (Zhu, 1994). It could be deduced that the allocation of housing loans primarily to state employees who happen to fall under the middle income group appears to

constrain the delivery of housing to the poor. It is evident that the lending institutions are targetting the middle income group and state employees because they aim at the group that is less risky. Capitalists are sure that they will accumulate profit amongst the middle income group without losing out.

There is a general consensus amongst the poor, as evidenced by an empirical inquiry on this issue, that the state should compel the lending sector to grant affordable loans to the poor. As long as banks keep on granting housing loans to the middle income group only, the housing delivery problem could continue unabated in the Durban Metropolitan area. The unsustainable manner in which the shantytowns exist in the study area is due to the inability of the private sector to grant low cost housing loans to the poor.

TABLE 7.13. REASONS WHY FINANCIAL INSTITUTIONS HAVE RESERVATIONS TO GRANT HOUSING LOANS TO THE POOR

STRATEGIES	Number Agreeing	%	No Response	%	TOTAL
Unprofitable low cost loans	17	57	13	43	30
Rent boycotts in black townships	12	40	18	60	30
Townships perceived as risk areas	26	87	04	13	30
Other(specify)	03	10	27	90	30

87 percent of respondents believe that the financial institutions do not want to grant loans to the poor because such lending sectors perceive the Black townships as risk areas. While the second group which numbers 57 percent respondents intimate that low cost loan's unprofitability discourages banks and building societies to grant loans to the poor, only 40 percent identify the

rent boycotts by township residents as hindering the granting of loans to the poor by the lending sector. Only 10 percent give alternatives that do not appear in table 7.13. The answers are :

- Low economic growth and financial instability in the country compels the country to be selective when they grant housing loans.
- Instability of the employment sector compels the lending institutions to target the more affluent middle income group.

Whilst it is acknowledged that most of the Black townships are risk areas, as indicated by 87 percent which is an overwhelming response, and the fact that low cost loans are perceived by the lending sector as unprofitable, this seems to confirm the Marxist contention that building societies are only interested in capital accumulation at the expense of the poor. The fact that the government grant subsidies to its employees, is proof that the government is dancing to the tune of capital.

Such loans are repaid over long periods of time ranging between 20 and 30 years at high interest rates. The loans that are repaid over long periods are profitable to the lending institutions who target the class that will be able to repay its loans without any hiccups. The profitability of middle income loans, and the redlining of Black townships by lending institutions result in the non-allocation of the so called unprofitable low cost housing loans to the poor. Banks argue that a mortgage loan of R100 000 is better managed than four low cost mortgage loans of R25 000 each (Sunday Times August 31, 1997). The theoretical assumption that banks are only interested in profits seems to be justified in this study. This demonstrates the insensitivity of the capitalists who prioritise profits above human needs. The inhumanity of the lending institutions aggravates the

housing delivery crisis in the Durban Metropolitan area. At the same time, the proliferation of shantytowns degrade the physical environment.

TABLE 7.14. RESPONDENTS' PERCEPTION OF MECHANISMS THAT CAN BE DEvised BY THE DURBAN METRO HOUSING DEPARTMENT TO FACILITATE LOW COST HOUSING FINANCE BY THE LENDING SECTOR

STRATEGIES	Number Agreeing	%	No Response	%	TOTAL
By banks themselves	10	33	20	67	30
Controlling regular payments	14	47	16	53	30
Ending redlining practices	25	83	05	17	30
Other (specify)	04	13	26	87	30

83 percent of respondents intimate that the Durban Metro local council should implement mechanisms that will see to it that banks do not redline the poor. The poor should ensure that they do honour the payments of their loans regularly. About 47 percent of the respondents give this alternative. Only 33 percent indicate that banks themselves should put their house in order. 13 percent identify alternatives that do not appear in table 7.14 above. This group gives the following answers :

- The Metro council should ensure that the entire poor populace is subsidised with the object of providing this group with low cost housing.
- The Metro council should promulgate laws that regulate the exploitation of the poor by the lending institutions.
- The council should also ensure that banks insist on employing debit order facilities for debt repayment.

By 1995 banks were prepared to make R2 billion available so as to provide 50 000 loans (Coetzee *et al*, 1995). This could only be a viable mechanism when banks stop demanding security of loans from the poor because in most cases the required security does not exist amongst the poor. It is encouraging to know that the respondents indicate that it should not only be the responsibility of the Metro Council to see to it that the poor are not redlined by banks. The banks should turn a new leaf and start granting low cost loans to the poor. The poor should also make it a point that they honour their loan payments regularly if they aspire to be freed of the redlining practices by banks.

It is the onus of the state and the lending institutions to form a consensus whereby they ensure that blacks are not marginalised in terms of low cost housing loans. The fact that some of the respondents identify the promulgation of laws regulating the exploitation and the redlining of the poor, is affirmation of the theoretical assertion that the public sector should act primarily as a facilitator rather than a provider of housing in the study area.

TABLE 7.15 RESPONDENTS' VIEWS ON THE INVOLVEMENT OF THE INTERNATIONAL FINANCIAL INSTITUTIONS IN SOUTH AFRICA

STRATEGIES	Number Agreeing	%	No Response	%	TOTAL
1. Financial aid to developing countries	16	53	14	47	30
2. Should not be involved in RSA	14	47	16	53	30
3. Should cancel apartheid debt	05	17	25	87	30
4. (1 and 3 above)	15	50	15	50	30
5. Other (specify)	01	03	29	97	30

53 percent respondents identify financial aid as an important strategy to reduce the housing delivery problem in the study area. The second largest group of 50% gives both alternative 1 and 3 as crucial towards the resolution of the housing delivery crisis in the Durban Metropolitan area. This group intimate that financial aid to developing countries as well as the cancellation of the apartheid debt could lead to the resolution of the housing delivery problem in the study area. Only 17 percent respondents give the cancellation of the apartheid debt as a major factor that could redress the housing delivery crisis. 3 percent respondents give an alternative that does not appear in table 7.15 above. This group argues that the international community might give a helping hand to South Africa indirectly through international tourism.

There are two schools of thought that argue differently with regard to financial aid in the third world. It is interesting to discover a situation where 53 percent of respondents are for debt relief, whilst the other 47 percent could be taken as opting against debt relief.

The International Monetary Fund (IMF) and the World Bank are the international agencies that grant aid to developing countries. It is therefore not surprising that 53 percent of respondents opt for financial aid, whilst the other 50 percent identify both debt cancellation and financial aid to go together. 53 percent respondents feel that it is the responsibility of international capital which created poverty in the country in the first place by its introduction of structural adjustment programmes which led to unemployment, to aid developing countries like South Africa. It could then be concluded that the financial institutions are obligated to grant financial aid to South Africa without any ulterior motives.

The fact that the South African populace was economically marginalised by the vicious apartheid system of the past compels this country to opt for debt relief from the international lending institutions like the IMF and the World Bank. It appears as if Blacks are now paying for the errors created by the apartheid regime. The apartheid debt was incurred for the subjugation of the African people. A crime against humanity had been committed against the African people of South Africa (Mapanga,1998). This debt appears to constrain whatever initiatives that are being implemented as an effort to deliver housing to the poor in the Durban Metropolitan area. Whilst the qualifying criteria for credit are harsh and arbitrary and not based on meeting human needs it could be argued that the country qualifies for debt relief because its debt, which is felt by the poor, was incurred by the repressive apartheid regime of the past.

The IMF advocates for job cuts in the public service as an attempt to speed up privatisation. This has a negative effect on whatever job creation initiatives that are being implemented. It has become apparent that the housing delivery problem will never be redressed if the international lending agencies are not prepared to help developing countries like South Africa without any ulterior motives. The debt crisis in Africa today is a vivid illustration of a problem with serious environmental implications (Redclift 1987), hence the spatial proliferation of shantytowns as a result of the poverty that is caused by the debt crisis. There is a link between the debt crisis and environmental degradation in the study area.

TABLE 7.16. RESPONDENTS' VIEWS ON HOW THE CORRUPT GOVERNMENT OFFICIALS AGGRAVATE THE HOUSING DELIVERY CRISIS

STRATEGIES	Number Agreeing	%	No Response	%	TOTAL
They embezzle state funds	16	53	14	47	30
Grant funds to relatives and friends	12	40	18	60	30
(1 and 2) above	12	40	18	60	30
Employ friends and relatives	22	73	08	27	30
Other (specify)	01	03	29	97	30

73 percent of respondents give a picture where the employment of friends and relatives emerges as the major corruption that prevails amongst government officials. Secondly, 53 percent respondents indicate that the embezzlement of state funds is of secondary importance. While only 40 percent of respondents give both alternatives 1 and 2 as of equal importance, only 3 percent gives a reason that does not appear in table 7.16 above. The reason given is as follows : - Government officials give first preference for housing provision to companies that have no reputation.

There is a general consensus amongst respondents that corruption is rife amongst state officials responsible for the allocation of housing resources. This is illustrated by Ramphela (Sunday Times June 7, 1998 :21) who argues that,

“ The evils of the past do not
justify corruption today, nor
exonerate us from the responsibility
of taking action. Integrity and
truthfulness are values that
can build a nationThe
defensive use of the race label
by Black people involved in
corrupt practices should not
be allowed”

The above abstract together with data refelected sum up the gravity of the corruption that prevails amongst government bureaucrats in the country in general, and in the Durban Metropolitan Area in particular. Such corrupt practices empirically express themselves in the form of nepotism, embezzlement of state funds which are also granted to friends and relatives. All these problems result in in a spatial manifestation of formal housing shortages especially amongst the poor.

Ramphela’s arguments in the above extract seems to be empirically affirmed that the roots of corruption lie in the central assumption on which colonisation and imperialism were based. She continues to argue that the origins of a culture of corruption from entitlement of a settler population to extract and exploit resources ranging from labour to mineral wealth, and the denial of most basic rights of the indigenous populace, entrenched the culture of corruption (ibid).

A government clerk who works in the housing department in a Black township of Durban was prepared to give the researcher valuable information concerning corruption amongst clerks as long as he was to remain anonymous. The information that was given by the anonymous clerk was further empirical information that the embezzlement of state funds is indeed common amongst government officials. The clerk informed the investigator that it was easy for the corrupt housing clerks to buy sites from the corrupt township manager who has since died. It was a common practice about four years ago to find clerks owning more than one site. Some owned as much as ten sites. Some of the clerks have since been caught misappropriating the R15 000 subsidy earmarked for the very poor. Others have since been charged in court, suspended or dismissed.

It was interesting to discover that amongst the clerks that applied for severance packages, are those that were running away from the corrupt practices they left behind. Other clerks who applied for packages were rejected because it was discovered that they had either embezzled state funds or were discovered to be owning a number of sites.

The Mpumalanga township in the Durban Metropolitan area is a microcosm of the corrupt practices that exist in other areas of the study area. It was reported in the City Press (April 5, 1998) that the Mpumalanga township mayor, Dr. Hadebe was tipped off about people who owned more than 50 residential sites for upper income earners. This allegation appears to be empirically affirmed by the anonymous clerk, as well as the 53 percent of respondents who seem to be aware of the corruption that prevails in the housing offices of the Durban Metropolitan residential areas.

There are individuals who have more than 20 houses under their names in Mpumalanga township (ibid). People who had fled township violence of the late 1980s discovered that they cannot re-occupy their homes because the homes had already been allocated to the new owners, by unscrupulous township officials. When the rightful owners tried to re-occupy their houses they were chased away by gun-toting new owners (ibid). A big Durban Metro townships like Mpumalanga could soon be racked by violence which could be reminiscent of the political violence of the late 1980s, if the corruption is not rooted out urgently (Daily News February 19, 1998).

The investigator believes that the housing scams are a hindrance towards redressing the housing delivery imbalances of the past. It could be concluded that if township officials responsible for housing provision in African areas are able to misappropriate state coffers, what will prevent officials responsible for housing provision in Indian, Coloured and former White suburbs to do likewise ? It is up to the Durban Metro Council to put in place mechanisms to curb corruption, if the housing delivery crisis is to be redressed.

TABLE 7.17 RESPONDENTS' VIEWS ON THE UPROOTING OFFICIAL

CORRUPTION

STRATEGIES	Number Agreeing	%	No Response	%	TOTAL
1. Sack corrupt officials	11	37	19	63	30
2. Imprison officials concerned	13	43	17	57	30
3. (1 and 2) above	20	67	10	33	30
4. Other (specify)	06	20	24	80	30

67 per cent respondents indicate that viable measures to stop corruption in its tracks combines alternatives 1 and 2 in Table 7.17 above which intimate that the sacking of state officials and their incarceration in prison could root out corruption amongst state officials. While only 43 percent respondents give the imprisonment of state officials as of primary importance, only 37 percent prioritise the sacking of corrupt officials above their imprisonment. 20 percent of respondents who give their own answers maintain that:

- The state should stick to the policy of accountability, whereby state officials should be monthly monitored with regard to monies spent on housing delivery.
- The housing delivery process should be seen to be sufficiently transparent.
- All corrupt officials should be blacklisted by the state.
- Officials should be reshuffled periodically and should sign honesty pledges.
- Stiffer sentences for the guilty offenders should be meted out.

According to the Sowetan (October 28, 1999) transparency international ranks South Africa 34th out of 99 countries that were surveyed in its corruption perception index. Furthermore, the empirical investigation above seems to underline the gravity of the corruption problem in South Africa. For the country to be able to implement its housing delivery strategy effectively, corruption has to be stopped in its tracks as a matter of urgency.

TABLE 7.18. RESPONDENTS' VIEWS ON REASONS FOR CRIME IN SHACK SETTLEMENTS

STRATEGIES	Number Agreeing	%	No Response	%	TOTAL
Harbour criminals	11	37	19	63	30
Conflicts over scarce resources	17	57	13	43	30
(1 and 2) above	15	50	10	33	30
Other (specify)	06	20	24	80	30

There are 57 percent respondents who identify conflicts over scarce resources as the main reason for the spatial diffusion of crime from one shack to the next in the study area. Whilst half of the respondents (50 %) combine both the conflicts over scarce resources and the fact that the shantytowns easily harbour criminals, only 37 percent respondents give the harbouring of criminals by shantytowns as the primary reason for the spatial existence of crime in the Durban Metropolitan area. 20 percent identify other reasons that are not part of table 7.17 above. This group gives the following reasons :

- Unemployment causes crime in squatter settlements.
- The inaccessibility of the shantytowns as a result of a lack of formal roads makes it difficult for the police to reach these areas when they are looking for the wrong-doers.
- The majority of the squatters who are usually unemployed live below the poverty datum line.

These is a general consensus amongst respondents that conflicts over scarce resources are the cornerstone for the crime that is rife in shantytowns of the Durban Metropolitan area. This assertion seems to justify the theoretical argument in chapter 2, that the artificial scarcities that are created by capitalism create a dichotomy of the haves and the have-nots. Whilst it is not common

for the squatters to steal against each other, it is common to witness a situation where the shack dwellers perceive the formal parts of the township as better off than the shacklands.

It is common to witness a situation where the shackland residents cross over to the formal parts of township to steal whatever they can lay their hands on. For instance, in the BB section at Umlazi township, squatters from Section CC nearby and people living across the Isipingo river in the KwaMakhanya Reserve are a menace to the Section BB residents. Some of the thieves who were caught in the act have already lost their lives, and some are rotting in jail.

The inaccessibility of a majority of the squatter settlements encourages criminals to hide in such settlements because they know that it is not easy for the police to look for them in such areas. It could then be concluded that the unemployment of most squatters creates a situation whereby criminals have no alternative but to target the middle income houses in Black townships who are regarded as soft targets. The criminals are no longer interested in targeting the former White suburbs, which are, in anyway, far from Black townships and more secure than Black townships.

The large contingent of policemen in the former White suburbs discourages criminals to the detriment of the formal parts of the Black townships. As long as Black townships are perceived by criminals as soft targets, it could be difficult for township residents to stock building materials in their backyards because it is easy for the material to be stolen by criminals especially at night.

TABLE 7.19. RESPONDENTS' VIEWS ON THE IMPACT OF UNEMPLOYMENT ON FORMAL HOUSING

STRATEGIES	Number Agreeing	%	No Response	%	TOTAL
Results in shantytowns and slums	11	37	19	63	30
Leads to illegal land invasions	12	40	18	60	30
(1 and 2) above	18	60	12	40	30

60 percent respondents of the population under investigation give both alternatives 1 and 2 as resulting from unemployment. These are the proliferation of shantytowns and slums, and the illegal invasions that ensue. Whilst 40 percent respondents identify illegal land invasions as the chief effects of unemployment, only 37 percent of respondents prioritise the mushrooming of shacklands above illegal land invasions as the primary impact of unemployment on housing.

According to Bond and Tait (1997) there appears to be no creative plans to provide access to state owned land. This could be the reason why the unemployed invade land that is left vacant for a long time, as is visible at Cato Manor. The identification of appropriate land for development, its acquisition and ownership has emerged as key factors that could hinder the invasion of vacant land particularly by the unemployed. The spatial manifestation of shacklands reflects the poverty and unemployment of the majority of the poor in the Durban Metropolitan area.

However, when the poor are trapped in poverty pockets and are cut off from the main-stream of formal housing, they have no alternative but to construct shantytowns that exist under appalling slum conditions to the detriment of the natural environment. It is evident that shantytowns reflect peculiarities which express a continuing failure to supply formal housing to the poor (Pillay, 1995) who are usually the unemployed.

The illegal invasion of vacant land by the predominantly unemployed results in the provision of free shelter without any monetary exchange. The high unemployment rate that prevails in the Durban Metropolitan area's physical landscape is a function of the scarcity of formal housing. Without the resolution of the unemployment problem squatting on vacant land could continue unabated, with the resultant degradation of the city's natural environment. The city of Durban will only be sustainable when the problems of squatter invasions, which go hand in glove with slum conditions are redressed.

TABLE 7.20. RESPONDENTS' ARGUMENTS AGAINST THE PAYMENTS OF RATES

STRATEGIES	Number Agreeing	%	No Response	%	TOTAL
1. Poverty	11	37	19	63	30
2. Worst infrastructure in black areas	12	40	18	60	30
3. Inadequate infrastructure	18	60	12	40	30
4. (1, 2 and 3) above	12	40	18	60	30
5. Other (specify)	03	10	27	90	30

47 percent of respondents identify both poverty and inadequate infrastructure as the major reasons that compel township residents to have reservations with regard to the payments of rates. The next group of respondents (40%) point out the three alternatives at 1,2, and 3 above as of equal importance. These are poverty, worst infrastructure and inadequate

infrastructure as causing the township residents to be sceptical when it comes to the payment of rates. 10 percent give other answers that do not appear in table 7.19 above. The answers they give are the following :

- Most of the infrastructural services such as hypermarkets are situated in towns over long and expensive distances.
- Township residents should be clearly made aware of the reasons for the payment of rates. Most of them seem unaware of the reasons why they should pay rates which they were not paying for in the past.
- Most of the Blacks houses have small yards and lack recreational facilities, and have poor infrastructural services.

In order to function effectively South African cities need adequate own source revenues in the form of a good tax structure (Bell *et al*, 1993). But this is not possible as long as Blacks perceive that their housing infrastructural services are not up to scratch. This is empirically affirmed by 40 percent subjects who intimate that Black townships have the worst infrastructural services.

Swilling *et al* (1991) argue that the level of contrived White privilege in South African cities was only possible by the extraction of resources from the politically disenfranchised, spatially marginalised, and coercively exploited urban poor. There is a need for the development of Black townships in such a way that inhabitants work and shop in and around the townships. The fact that Black people work and shop in 'White' areas means that resources are transferred from poor areas to rich areas (Bell *et al*, 1993). The empirical evidence in Table 7.20 above that most Blacks

cannot afford rates because they are poor could be ascribed to Bell's argument above. A drive through Black townships reveals that there is an element of truth in the theoretical assertion that Black townships lack basic infrastructural services.

The absence of recreational facilities compels township children to expose themselves in vehicular accidents when they use roads as playgrounds. It could be argued that one of the reasons for the non-payment of rates by township residents is the absence of playgrounds or their inadequacy in Black townships. Black residents seem to argue that they will only be prepared to pay their rates when services and facilities have reached the high levels of former White suburbs. While there is evidence that the Durban Metro

Council has done something with regard to the provision of playgrounds for children, it could be argued that such recreational facilities are inadequate for the larger Black population of the study area.

While it is encouraging to see that something is being done to upgrade township roads one should take into account that the resolution of old problems should not create new ones. For instance, in Black townships some of the humps that are built on busy township roads are too high and usually result in vehicular damages. Much as it is acknowledged that the road humps do decrease accident rates, it should be acknowledged that the roads may also become a road hazard when these humps are too high. It is up to the Durban Metro officials to see to it that Black townships are provided with adequate infrastructural services if it hopes to amass adequate revenues that might contribute

towards the delivery of housing and its infrastructural services. Without a suitable economic strategy it could not be possible to make Durban financially viable.

TABLE 7.21 RESPONDENTS' PERCEPTION OF A SUITABLE ECONOMIC STRATEGY FOR SOUTH AFRICA

STRATEGIES	Number Agreeing	%	No Response	%	TOTAL
Capitalism	02	07	28	93	30
Socialism	07	23	23	77	30
Mixed Economics	24	80	06	20	30

Data in table 7.21 above reflects a situation where the predominant number of respondents (80 %) which stands for 24 respondents feel that mixed economics is a viable strategy for South Africa. In support of their arguments these subjects give the following reasons for opting for mixed economics :

- The new dispensation deserves an ethically-inclined economic infrastructure since both capitalism and socialism appear to have failed to deliver the goods to the poor.
- A Western-oriented capitalist economic system which is complex does not enable us to match the West. One could deduce that the respondents believe that a mixed economic system could enable us to match the Western countries, economically.
- A developing country like South Africa needs a mixed economy because it is not a well-established economy, internationally speaking.
- A mixed economy caters for both the haves and the have-nots because it acts as a balance between the positive aspects of both capitalism and socialism.

The next group of respondents identify socialism as a viable economic model for South Africa.

This group is only 23 percent of all respondents. Reasons given by this group for choosing socialism are :

- That socialism will ensure ownership of land and industries by the state.
- Equal distribution of resources as well will become possible when socialism is applied in the country.
- People will be able to co-operate and help one another.
- Socialism will close the gap between the very rich and the very poor, and everybody will have an equal standard of living.

Only 7 percent give capitalism as a viable strategy.

80 percent of respondents seem to concur with the mixed economic philosophy that it is the luxury of the West to practise an economic system that requires a situation where gross wealth inequalities have never occurred. Such a situation is in direct contrast with the South African situation where gross wealth and resource inequities were further aggravated by apartheid capitalism. There appears to be an overall agreement amongst respondents that a country like South Africa needs to embrace both the private and public sectors if it desires to redress its housing delivery crisis in a sustainable manner.

Respondents seem to argue that market forces, which have failed to deliver housing in the Durban Metropolitan area, should not be the only mechanism to redress the housing delivery crisis in the study area. The empirical discovery that the market principles have failed to resolve the housing

delivery crisis in Durban confirms the theoretical contention in chapter 2 of this thesis that a mixed economic system is the only viable economic strategy in a developing nation like South Africa.

Whilst it is acknowledged that the capitalist model appears to be relatively successful in developed countries, this is further confirmation of the theoretical assertion that a market system is only workable in a situation where a country has not experienced gross wealth and resource inequalities. It could then be understood why some respondents favour socialism though it has failed in most socialist countries. This group appears to be compelled by market failure to opt for an economic system where no group of people will be seen to be wealthier than the majority. The creation of the dichotomy of the haves and the have-nots compels some respondents to opt for socialism.

To reiterate briefly what has been explored in detail in chapter 2, on the evidence of the overwhelming empirical identification of mixed economics by a majority respondents as a viable economic strategy for South Africa, it could be argued that a mixed economy is necessary to mitigate inequality, where the public sector is perceived by Kirk (1980), Samuelson and Nordhaus, (1989), Begg et al (1991), Swanepoel and van Zyl (1995) as a facilitator. Through state intervention it could be possible to redistribute housing delivery resources from the affluent to the poor.

The fact that South Africa is one of the most unequal societies on earth (Haggett, 1983) necessitates a mixed economic strategy that will deliver housing to the homeless, while at the same time channelling some of the resources from the rich to the poor. It should be mentioned that

neither neo-classical nor Marxist economics take sufficient account of the inability of economics to acknowledge environmental degradation (Redclift, 1987)

7.4. USE OF NATURAL RESOURCES AS BUILDING MATERIAL BY THE POOR AND ENVIRONMENTAL CONSERVATION

According to Schram and Warford (1989) it appears that the most serious and pervasive problems facing developing countries are a cause-effect of poverty.

Table 7.22 below concerns the use of the natural environment by the poor as building material which impacts upon the physical environment.

TABLE 7.22 PERCEPTION OF BLACK RESPONDENTS ON INDIGENOUS BUILDING MATERIALS

STRATEGIES	Number Agreeing	%	No Response	%	TOTAL
Are in favour	12	40	18	60	30
Unsuitable for cities	22	73	08	27	30
Other (specify)	04	13	26	87	30

An overall picture emerging from the above data is that generally, Blacks have a low regard for indigenous building materials in Black townships. Such results are illustrated by the 73 percent respondents who intimate that indigenous building materials are unsuitable for cities. While 40 percent are in favour of the indigenous building materials, only 13 percent of the respondents give their views which do not appear in Table 7.22 above. This group gives the following views :

- Those who aspire to sell their houses in future believe that indigenous houses are not easy to sell.
- The poor are forced by circumstances beyond their control to use indigenous building materials even though they do not like them.
- Middle and upper income groups tend to favour the contention that indigenous housing is *unsuitable for cities*.
- A pilot inquiry informed the researcher that houses built on indigenous building materials look clumsy. Others indicated that such houses consume a great deal horizontal space.

The perception that is expressed by 73 percent of respondents reveals a mindset where anything indigenous and Afrocentric is viewed as backward by most urban Blacks. This perception could be traced back to its colonial origins. As Makgoba (1997) argues, colonialism distorted African culture. A mindset was evolved where Afrocentric things were looked down upon, while the Eurocentric ones were held in high regard, and as superior to the Afrocentric ones. This encouraged Africans to search for foreign solutions that were sometimes incompatible with the *African environment, its culture and its people*. It could then be inferred that it is inhibiting for Africa to borrow too many ideas that are sometimes not amenable to the African milieu. Most of these ideas were created in Europe by Europeans for a European situation. Blacks need to ensure that whatever ideas that are borrowed from the West are workable in an African situation. A negative perception by the majority of respondents regarding indigenous building materials seems to affirm the theoretical view that Blacks value Eurocentric things above the Afrocentric ones.

There is a general myth amongst urban residents that indigenous houses are not suitable for an urban setting. It is evident that myths of this kind inhibit a sustainable provision of affordable housing to the very poor. As long as Africans formulate strategies that will make use of indigenous building materials and implementing indigenous strategies without depleting the natural environment, it could be possible to deliver housing in the study area, whilst at the same time ensuring the sustainability of the Durban Metropolitan area.

The time has come for Blacks to value their own things if they aspire to redress the housing delivery crisis in a sustainable manner. Blacks need to face the reality that while they do acknowledge that some of the Western solutions can help them solve their our housing delivery problem, they should make an effort to prioritise African solutions above the Western ones.

The African environment requires African solutions by Africans themselves if they aspire to solve the housing delivery problem, whilst at the same time, ensuring the sustainability of the Durban Metropolitan area for future residents.

TABLE 7.23. RESPONDENTS' PERCEPTION OF COMMUNAL EFFORTS BY BLACKS

STRATEGIES	Number Agreeing	%	No Response	%	TOTAL
Rarely help each other	13	43	17	57	30
Utilise sweat equity	10	33	20	67	30
Employ informal builders	21	70	09	30	30
Construct own houses	20	67	10	33	30

Table 7.23 demonstrates that 70 percent of respondents indicate that most urban Blacks favour the employment of formal builders, who are cheaper, over the weekends. This group seems to disagree that Blacks utilise communal efforts to construct their houses. The second group numbering a percentage of 67 percent respondents intimates that Blacks construct housing on their own. This appears to be the case when the worst shack settlements are being constructed as it happened at Canaan shantytown. It is noticed that the poor make use of anything to provide themselves with a roof over their heads. They use planks, cardboards, corrugated iron, mud-bricks, plastics, pieces of bricks, to mention some of the building materials.

While 43 percent respondents intimate that Blacks rarely help each other when building houses, this group seems to verify the fact that Blacks rarely use the sweat equity strategy, where friends and relatives help each other in order to decrease building costs. Only 33 percent of respondents believe that the sweat equity strategy is utilised by the poor in the Durban Metropolitan area.

67 percent of respondents who point out that the poor build housing on their own appears to confirm the theoretical argument that most Blacks are so poor that they cannot afford even the cheapest type of conventional housing. Blacks cannot afford to call friends for help because they know that they cannot give anything in return.

It is disturbing to witness a situation where Blacks have lost the communal spirit of the past, where friends and relatives used to help in building operations without any aspirations for gain. Again this attitude is viewed by the researcher as confirmation of the Africanist philosophy that Whites destroyed the cultural values of Blacks through colonialism and capitalism. An attitude of pride and arrogance seems to have overtaken the communal spirit of helping one another. To date, most urban Blacks are of the opinion that when they request help from their neighbours, they are going to be perceived as inferior, financially and otherwise.

It would be concluded that the inability of Blacks to revitalise the communal spirit of the past tends to hamper whatever housing delivery strategies that are being implemented by the poor. This is the time for Blacks to rekindle and revisit their cultural roots if they aspire to redress the housing delivery problem especially amongst the very poor.

TABLE 7.24 RESPONDENTS' VIEWS ON BUILDING STRATEGIES THAT ARE COMMON AMONGST THE POOREST

STRATEGIES	Number Agreeing	%	No Response	%	TOTAL
Self help low cost housing	09	30	21	70	30
Informal better off shacks	21	70	09	30	30
Worst shantytowns	14	47	16	53	30



Plate 7.1. People's Housing Process At Newlands East. Temporary Shelters could be seen on vacant sites adjacent to completed houses.



Plate 7.2. Four-roomed low-cost houses at Section Q in Umlazi Township

Table 7.24 above reveals that 70 percent respondents favour the informal better-off shacks as a building strategy that is common amongst the poor. While 47 percent respondents identify the worst shacklands as another common building strategy amongst the poorest, only 30 percent are in favour of self help low cost housing.

In the light of the evidence above there seems to be a general consensus amongst the middle income respondents that the better-off shantytowns which are cheaper to construct are an ideal strategy to redress the housing delivery crisis amongst the poor. Although it is acknowledged that the unsustainable manner in which the worst shantytowns exist, nevertheless, they are an important temporary measure for the delivery of the cheapest form of shelter amongst the very poor.

The theoretical argument that self-help housing is too expensive to be left entirely in the hands of the poor (Gumbi, 1995) appears to be empirically confirmed by the spatial presence of vacant sites with toilets in Black townships, particularly at Section CC in Umlazi township (See plate). There is clear empirical evidence that the Durban Metro council should make an effort to upgrade the better off shantytowns if housing is to be delivered in a clean Durban Metropolitan environment.

Ubuntu's Benefit on housing

The concept of **ubuntu** is crucial towards evolving a culture of humaneness amongst Blacks which could enable Blacks to help each other in the building of indigenous housing.

TABLE 7.25. RESPONDENTS' VIEWS ON UBUNTU'S BENEFIT TO HOUSING

PROVISION

STRATEGIES	Number Agreeing	%	No Response	%	TOTAL
1. Self introspection	06	20	24	80	30
2. Love for mankind	11	37	19	63	30
3. Imelevant	07	23	23	77	30
4. (1 and 2) above	18	60	12	40	30

When the respondents were requested to answer the question on **ubuntu's** benefit to housing provision the following answers came to the fore :

60 percent respondents identified a combination of alternatives 1 and 2 above, while 37 percent gives love for mankind as an important element of **ubuntu** that could encourage people to help each other. While 23 percent intimate that **Ubuntu** is irrelevant to housing delivery, only 20 percent identify self introspection as an important element of **ubuntu**.

The group that identifies **ubuntu** as irrelevant appears to be confused by the term, because many of them contradicted themselves by also identifying the positive elements of **Ubuntu**.

The concept of **Ubuntu** has been explored in detail in the theory chapter. Boon (1996) argues that **Ubuntu** embraces elements such as morality, humaneness, compassion, care, understanding and empathy. It occurs when people interact with each other. This interplay could be demonstrated by the principle of sweat equity where people help each other when they construct housing. **Ubuntu** inculcates self-introspection in people (ibid).

The respondents who identify a combination of alternatives 1 and 2, seem to be aware of the positive externalities of **ubuntu** on people. It could be to the benefit of housing delivery if the

constraining problems of crime, corruption, nepotism, cronyism, to mention some of the crucial problems, could be redressed when we undergo a process of self-examination, which is part and parcel of **ubuntu**. Love for one another could be a positive gesture towards helping each other. As soon as a vital role that could be played by human beings is acknowledged when they embrace the principle of **ubuntu**, this could be a positive strategy to redress the housing delivery crisis in the Durban Metropolitan area.

TABLE 7.26. RESPONDENTS' PERCEPTION OF DURBAN METRO COUNCIL'S COMMUNITY BASED HOUSING DELIVERY STRATEGIES

STRATEGIES	Number Agreeing	%	No Response	%	TOTAL
State driven Masakhane	18	60	12	40	30
NGO – driven	10	23	20	77	30
CBO - driven	07	23	23	77	30
(1 and 2) above	12	40	18	60	30

60 percent respondents favour state-driven Masakhane, while the second largest group of 40 percent intimate that state-driven Masakhane, NGO-driven and CBO⁵-driven strategies are essential for a community based housing delivery strategy. Only 33 percent identify non-governmental (NGO) organisation driven strategies as more important.

5. COMMUNITY BASED ORGANISATION (CBO⁵)

Ndlovu (1997) states that CBOs are one of the pillars of true governance where community participation is one vehicle that could lead to a partnership between government and civil society. Community participation entails efforts to increase control over resources by the people on the ground. Such people respond to issues affecting the grassroots. A good example of a CBO is SANCO.

While it is acknowledged that involvement of the state in housing delivery strategies that are geared towards community control, it should not be forgotten that the actual empowerment of the people on the ground will only be attained when they are fully in control of community based strategies. As long as strategies like the Masakhane one are still driven primarily by the state bureaucracy, the true empowerment of the poor will not take place.

State-driven strategies like the People's Housing Process (PHP), as instigated by the National Minister of Housing, is aimed at supporting people who want to build their own houses (Sowetan April 15, 1998). It is encouraging to know that the housing minister has promised communities that they will be at the centre of development so as to promote ownership of the building process.

It is hoped that

“Small geographically contiguous
communities will be assisted
by the more developed community
to achieve empowered standards
of social and economic life

(Jeppe cited in Cotezee and Graaff, 1996 : 313)

An empirical observation of the People's Housing Process at Newlands East over a period of 3 years (1998 – 2000) manifested a spatial transformation of shack settlements which are now becoming formal houses. When people arrive here they establish temporary shacks. After a few months they buy blocks and transform their shacks into formal housing (See plate 7.1). An

empirical investigation of this housing strategy above appears to confirm the housing ministers objective of wanting to promote the ownership of the building process by communities.

The investigator argues that the government's plan to help communities to establish themselves by building their own houses is a good intention as long as the state guards against too much intervention which might end up being retrogressive. The fact that 60 percent of respondents favour state-driven Masakhane strategy demonstrates that the majority of the poor believe that it is the government's sole responsibility to deliver housing to the poor. This is a fallacy because it has been proved that the housing provision problem cannot be resolved by the government without assistance from civil society and the private sector.

According to Ndlovu (1997) community participation is one vehicles that could lead to a partnership between government and civil society. NGOs may assist communities to deliver housing on their own without outside intervention either from the public or private sectors. It is encouraging to discover that some of the respondents do acknowledge the importance of NGOs as well. Housing delivery that is not perceived as being driven by the people on the ground will not be successful. The state should ensure that ordinary people have access to top level consultation without going through channels that hinder the housing delivery process in the study area.

TABLE 7.27 RESPONDENTS' PERCEPTION OF AFROCENTRIC HOUSING

DELIVERY RELATED JOB CREATION MECHANISMS

STRATEGIES	Number Agreeing	%	No Response	%	TOTAL
Building material industry	19	63	11	37	30
Housing infrastructure	08	27	22	73	30
Ecotourism industry	06	20	24	80	30
All the above	14	47	16	53	30

The building material industry is identified by 63 percent of the respondents as an ideal Afrocentric job creation initiative that might empower the marginalised. While 47 percent of the respondents identify a combination of all the alternatives in Table 7.27 above, only 27 percent give the development of housing infrastructural services as a mechanism that might lead to job creation for the unemployed. Only 20 percent gives ecotourism as an empowerment strategy that could create jobs in the study area.

Much as it is agreed that low economic growth in South Africa results in unemployment, it could be to the benefit of the jobless if they pursue job creation strategies that consider the utilisation of the African environment. The building material industry entails the construction of mud and cement blocks, roof tops, the planting of trees for forestry, which are some of the Afrocentric job creation endeavours that are given by respondents.

During an empirical observation of the Power and V-6 squatter settlements in Umlazi township, and the Canaan shantytowns of Cato Crest it was discovered that the filth that exists in such shacklands is a result of the absence of waste disposal bins or their inadequacy, and the non-

collection of waste. Items such as tins, newspaper, plastics usually end up in the Isipingo and Umgeni rivers to the detriment of the riverine ecosystems.

It was discovered amongst some of the respondents that already, the unemployed had started collecting, newspaper and tins for recycling in town. Most of the collectors are shack dwellers and the inner city squatters. When the Victoria Street area was passed a pile of cardboards was visible on the pavement. When the squatters were enquired about the pile of cardboard boxes, they did indicate that they sell the cardboard boxes for recycling at the city centre.

The Victoria Street squatters did indicate that the selling of cardboard boxes enable them to have funds for their own well being as all of them are unemployed. Whilst the collection of cardboard boxes provide the squatters with money for buying food, such an activity also helps to keep the city of Durban clean and sustainable.

Urban agriculture is another self-empowerment strategy that is utilised by some urban dwellers where vegetables are grown and sold so as to generate funds for building and also improving housing. Urban agriculture is a form of self-employment strategy that is practised by some of the poor. Although the researcher discovered during an empirical survey of the Durban Metropolitan area that urban agriculture is not well established job creation strategy, there is hope for its utilisation by others who aspire to make use of it.

There is a need for local government to facilitate urban agriculture particularly amongst Blacks as it is compatible with the African environment which is basically agrarian. This could be a self-empowering strategy that could play a crucial role in the delivery of housing amongst the poor.

When some of the respondents were interviewed during an empirical investigation the following information came to light :

- A mixture of soil with a little bit of cement could make strong mud bricks in the informal building material industry that recognises the utilisation of the physical environment, for the benefit of the poor, who cannot afford Eurocentric building material.

In an attempt to discover the attitude of Durban Blacks towards the natural environment the people on the ground were required to answer a question on the questionnaire which was based on the sub-heading below:

TABLE 7.28 RESPONDENTS' VIEWS ON BLACK ATTITUDE TOWARDS THE NATURAL ENVIRONMENT

STRATEGIES	Number Agreeing		No Response		TOTAL
		%		%	
Positive	06	20	24	80	30
Negative	04	13	26	87	30
Blacks prioritise development	12	40	18	60	30
Blacks prioritise the environment	06	20	24	80	30
(1 and 4) above	06	20	24	80	30
(2 and 3) above	08	27	22	73	30
Other (specify)	02	07	28	93	30

About 40 percent of respondents indicate that Blacks prioritise development issues above those pertaining to the environment. The second group of 27 percent identify a combination of alternatives 2 and 3. These alternatives intimate that Blacks have a negative attitude towards the natural environment, hence their prioritisation of developmental issues above those of the environment. There are three groups of 20 percent respondents who give the following alternatives :

- The first group of respondents has a positive response towards the environment.
- The second group intimates that Blacks prioritise the environment above developmental issues.
- The final group points out a combination of alternatives which do not appear above. This group believes that a small minority of Blacks is environmentally conscious. This group is of the opinion that there are no proper environmental programmes in place in the study area.

Before Whites arrived in South Africa Blacks existed in harmony with the natural environment. As soon as the White man arrived, the mutual relationship between Africans and the environment was destroyed. It is therefore not surprising that to date, as revealed in table 7.28 above, urban Blacks have a low regard for environmental issues to the detriment of sustainable housing provision. The theoretical argument by McCormick (1995) that the poor are too concerned with survival to be concerned with environmental issues is empirically justified in this study. Urban Blacks should therefore not be blamed for their negative attitude towards environmental issues as of secondary importance to the developmental ones. Blacks believe that developmental issues should be prioritised above the environmental

ones. They seem to consider environmental issues as a luxury of the affluent. It is very difficult for Blacks to link development with the environment.

There is a need for housing delivery stakeholders to be seen to be taking an equal interest in both environmental and developmental issues, if the study area is to be sustainable. As indicated by one respondent. "There are no proper environmental programmes". It is high time the poor are shown that development cannot survive without a sustainable city of Durban. As Whyte (1995) reiterates below :

"The key challenge is to convince
the economic and social planners
(and the grassroots) that the
environment is a provider of
natural resources and the
ultimate absorber of all waste,
which underwrites the viability
of economic growth and social
redistribution"

It is up to planners responsible for the environment to put in place strategies that will educate the poor to be environmentally conscious.

TABLE 7.29 RESPONDENTS' VIEWS ON THE MARGINALISATION OF THE POOR THROUGH UNSUSTAINABLE HOUSING DELIVERY

STRATEGIES	Number Agreeing	%	No Response	%	TOTAL
1. Mushrooming of shacks and environmental degradation	10	33	20	67	30
2. Spread of diseases lower life quality	13	43	17	57	30
3. Sustainable housing delivery process	06	20	24	80	30
4. Black prioritise the environment	13	43	17	57	30
5. Other (specify)	02	07	28	93	30

It is interesting to discover that about 43 percent of respondents opt for alternatives 1 and 2 with equal strength (43 %). This group is of the opinion that both the mushrooming of shacks and the resultant degradation of the environment, together with the spread of diseases and the lowering of the quality of urban dwellers, are of equal importance with regard to the marginalisation of the poor. While 33 percent respondents identify the mushrooming of shacks and environmental degradation as of primary importance, only 20 percent intimate that housing is sustainable in the study area. Only 7 percent gives alternatives that are not part of table 7.29. The alternatives are as follows :

- There is lack of housing delivery infrastructure in shantytowns.
- The high cost of middle income housing which cannot be afforded by the poor aggravates the unsustainable shacklands.

Some of the most pressing problems that emanate from the inability of the poor to provide themselves with formal housing are found in unsustainable squatter settlements. It is a risk to stay in squatter settlements because squatters are exposed to many forms of dangers as well as diseases that are caused by environmental degradation. The respondents who point out that the spread of diseases lowers the quality of life of shack dwellers demonstrate that the poor are aware of their bad living conditions.

An empirical exploration of the Canaan, V-6 and Power shacklands empirically affirmed that the squatters are marginalised by living in unhealthy environments. There is clear evidence that the majority of shacklands are unsustainable and need to be upgraded or demolished as a matter of urgency. Whilst we acknowledge the disadvantages of shantytowns, we should not forget their advantages of being cheaper to construct and the creation of a spirit of togetherness amongst the shack dwellers.

TABLE 7.30 RESPONDENTS' PERCEPTION OF THE IMPACT OF INNER CITY SHACKS ON UNSUSTAINABLE HOUSING DELIVERY

STRATEGIES	Number Agreeing	%	No Response	%	TOTAL
Brings diseases to inner city	08	27	22	73	30
Discourages tourism	15	50	15	50	30
Pollutes inner city	14	47	16	53	30
All the above	18	60	12	40	30
Other (specify)	01	03	29	97	30



Plate 7.3. Durban Station Shackland

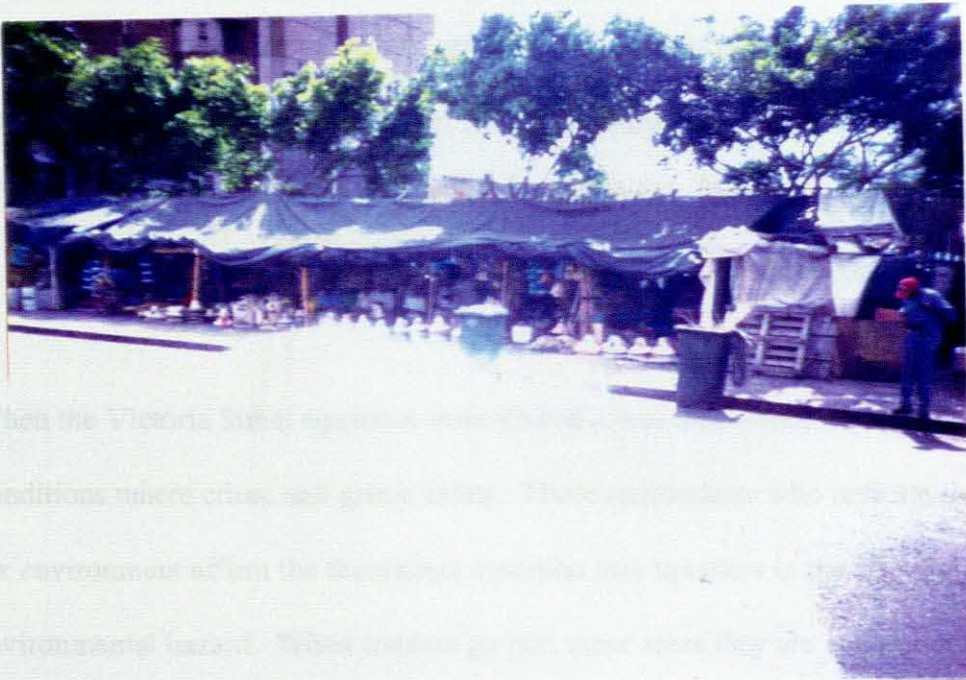


Plate 7.4. Durban Station Craft Traders

60 percent respondents identify all the above alternatives as causing an unsustainable housing delivery process in the Durban Metropolitan area's inner city. These are respondents who indicate that inner city shacks bring diseases to the city centre, whilst they also discourage tourism as well as polluting the inner city. While 50 percent respondents identify that inner city squatting discourages tourism as of major importance, about 47 percent indicate that the pollution of the inner city is of primary significance. About 27 percent subjects indicate that inner city squatting brings diseases to the city centre. Only 3 percent respondents gives other alternatives. This group contends that since the resource base of the city is dependent on tourism, failure of tourism through inner city squatting could deprive the city an important resource base.

The South African cities of the pre and apartheid periods were so regulated that the inflow of the poor to city centres was not possible. When the influx control measures were repealed, a multitude of the poor invaded the cities in search of employment. To date squatters have invaded inner cities to the detriment of the South African cities' physical environment, Durban included.

When the Victoria Street squatters were visited it was discovered that squatters live under squalid conditions where crime and grime exists. Those respondents who indicate that squatters pollute the environment affirm the theoretical assertion that squatters in the city centre are an environmental hazard. When tourists go past these areas they are amazed of the filth that prevails in such places. This appears to have a negative impact on the future

Of tourism in Durban as tourists are discouraged of ever visiting a filthy city like Durban.

The people who inhabit the inner city are exposed to various diseases. A group of squatters that was observed at Victoria Street wore old and dirty clothes. The state of their bodies which were unwashed is evidence of the risks of easily contracting filth related diseases. The tins that they use for cooking purposes are so filthy that it is easy for the squatters to consume poisoned food. Some of the squatters suffer from botulism as they scavenge for food in waste disposal bins in the inner city. Skin diseases as well were evident as one looked at the squatters' bodies. It was pathetic to witness a situation where a woman sleeps on a bridge in open air even during cold winter nights. Such a situation empirically affirms the gravity of the housing delivery problem in the study area.

The investigator is of the opinion that the centripetal tendency of the city centre as a magnet to the poor exacerbates the problem of housing provision which leads to environmental despoliation. Mechanisms to provide city centre squatters with formal housing have to be devised urgently if the Durban Metro Council aspires to sustain the city of Durban. The centrifugal tendency of the peripheral populace around Durban, which results in rural-urban migration needs to be curtailed immediately.

TABLE 7.31 RESPONDENTS' PERCEPTION OF MEASURES TO BE IMPLEMENTED BY THE DURBAN METRO COUNCIL TO CURB INNER CITY SQUALOR

STRATEGIES	Number Agreeing	%	No Response	%	TOTAL
Demolish shacks	26	87	04	13	30
Introduce strict laws	14	47	16	53	30
Allow the poor to invade city	05	17	25	83	30
Other (specify)	02	07	28	93	30

About 87 per cent respondents intimate that the demolition of shacks could curb inner city squalor. The second group of respondents who number 47 percent intimate that the introduction of strict laws in Durban could control inner city squatting. While only 17 percent opt for the poor to be allowed to invade the inner city. Only 7 percent give their own alternatives.

The identification of shack demolition by a majority of respondents seems to justify the theoretical point of view that shacks are an environmental hazard in the inner city. While the above assertion is acknowledged it should not be forgotten that shack demolition should go hand in glove with the provision of proper alternative accommodation. It is common to witness a situation where demolished shacks mushroom somewhere else, if alternative accommodation is not provided.

The strict laws governing shack settlements could curb inner city shacks. Yet it should not be forgotten that such laws could not be effective if local government officials do not acknowledge that the shack dwellers are compelled by poverty to shack in the inner city.

It is imperative that poverty should be resolved if the inner city is to be kept free of shacks.

TABLE 7.32 RESPONDENTS' PERCEPTION OF MEASURES AIMED AT ENVIRONMENTAL AWARENESS

STRATEGIES	Number Agreeing	%	No Response	%	TOTAL
Educating the poor	15	50	15	50	30
Improving squatters' living conditions	16	53	14	47	30
(1 and 2) above	13	43	17	57	30
Other (specify)	02	07	28	93	30

About 53 percent of the subjects under investigation are in favour of the improvement of squatter's living conditions rather than their demolition. This refers to the better off shantytowns of the Power type, while the worst off shacklands are exemplified by the Canaan shantytown. The next largest group of 50 percent respondents identify the education of the poor with regard to environmental awareness. While 43 percent of respondents indicate that both alternatives 1 and 2 are of equal importance, only 7 percent give alternatives that do not appear in table 7.31 above. This group gives the following answers.

- The Durban Metro council should introduce environmental awareness courses in schools, churches, community meetings etc.
- By creating job opportunities for the poor environmental degradation by the poor could be curbed.

In the light of the above data in table 7.32 it could be inferred that the poorest of the poor will only be aware of devastation that ensues in shacklands if environmental officials show by example, by upgrading the better-off shantytowns, so that they become neat and make Durban a sustainable city to live in. It is discouraging to know that some of the Durban people who are regarded as more

progressive than their rural counterparts are ignorant of environmental degradation in the study area.

Although it is beneficial to upgrade the better-off informal settlements one should bear in mind that this is not enough if the poor are not educated on the constraints that are placed by a depleted environment on the sustainability of the Durban Metropolitan area's physical landscape. An exploration of the formal parts of Black townships revealed that such areas also need to be environmentally revamped. People who collect disposal of waste bins are not frequent. Waste disposal plastics that are placed on township streets are sometimes torn by dogs, and waste is spread all over the streets. This waste attracts the larger green flies.

To date, it is encouraging to know that more firms are beginning to talk about sustainable development, which is measured according to environmental, financial and social performance (Sunday Times November 22, 1998). The fact that industries are the main culprits that degrade the physical landscape of cities, necessitates their responsibility to the poor.

TABLE 7.33 RESPONDENTS' VIEWS ON DURBAN METRO COUNCIL'S STRATEGIES FOR RESIDENTIAL DEVELOPMENT WITHIN A WIDER METROPOLITAN SYSTEM

STRATEGIES	Number Agreeing	%	No Response	%	TOTAL
Integrate residential growth with industrial, commercial and service provision	15	50	15	50	30
Ensure sustainable D'Moss	12	40	18	60	30
Rehabilitate old city buildings	09	30	21	70	30
All the above	13	43	17	57	30

Half the number of respondents (50 %) are of the opinion that the integration of residential growth with industrial and service provision could provide sustainable housing in the study area. The second group, which is 40 percent in number intimate that the Durban Metro council should ensure that a sustainable Durban Metropolitan Open Space system (D'Moss) exists. This entails the conservation of natural ecosystems such as rivers, lakes, parks, to mention just a few. About 43 percent of respondents give all alternatives as of primary importance. 30 percent respondents identify the rehabilitation of old city buildings as essential for a city of Durban that all ensure that the lives of future residents are not compromised.

According to Hindson *et al* (1992) natural systems heavily transformed by human settlements and exploitation have led to unsustainable housing development. The framework for a new housing strategy should be based on a broad spatial plan which draws together environmental, land use, transportation and economic functions of the city in a single planning entity (*ibid*).

The majority of respondents seem to concur with the theoretical claim above as respondents are in favour of an integrated residential growth with industrial, commercial and service provision. An empirical investigation of the Phoenix area revealed that there are new industries, residential areas and a commercial centre.

Hindson *et al* (1996) (b) further argue that natural systems have untapped potential to perform functions in newly concentrated and integrated residential, industrial and ecological systems. Once more, the role of open space is being perceived in terms of its wider context to the city's

sustainability. It is a positive sign to discover that 40 percent of the subjects of research are in favour of the D'Moss strategy, where natural ecosystems such as lakes, rivers, forests, parks and lagoons are all sustained without disturbing plans for a housing delivery process that will ensure the sustainability of the Durban Metropolitan area.

Although one acknowledges the importance of the Durban Metropolitan open space systems concept, it should not be forgotten that such a system should not compromise the housing delivery process in the form of the Canaan shackland, which pollutes the Umgeni Riverine system.

TABLE 7.34 RESPONDENTS' VIEWS ON CULTURAL ARTEFACTS AND HOUSING

DELIVERY

STRATEGIES	Number Agreeing	%	No Response	%	TOTAL
Selling of wares for economic empowerment	10	33	20	67	30
Education of grassroots	16	53	14	47	30
People should not disturb environment	07	23	23	77	30
(1 and 2) above	11	37	19	63	30

Data in table 7.34 reveal that 53 percent of the respondents opt for the education of the poor with regard to the utilisation of the natural environment to make cultural wares as an ideal strategy. The same wares that are sold in the city centre at Durban station are sometimes bought by tourists. In a way such artefacts act as a tourist attraction. It could be argued that they are part and parcel of Durban Tourism. It is encouraging that the Integrated Development Plan (IDP) (Maistry, 1998), that was designed by the Durban Metro local council earmarks areas as tourism corridors in

Durban. This concurs with the hypothetical point of view that tourism, is one of the fastest growing industries in the world, likewise in Durban.

An empirical exploration of the Durban Station and along Durban's beaches seems to affirm the theoretical aversion that Durban is indeed a tourist destination surpassing all other coastal cities in the country. The selling of cultural artefacts to tourists is a self employment strategy that empowers Blacks economically to the advantage of providing themselves with the essential funds for housing provision

An empirical exploration of the Durban station area where indigenous crafts are sold revealed that people involved in the craft industry originate as far away as Zululand. No wonder that only about 23 percent of respondents who intimate that the natural environment should be utilised are urban dwellers who are not involved in the craft industry. This bodes negatively for the future of the craft industry which makes use of the natural environment.

There is no doubt that the location of the city of Durban in an area that has a rich biodiversity in its doorstep could contribute towards the development of the craft industry. It should be noted that environmental concerns are no longer about how the flora and fauna of the area is managed. In this way it could be easy to empower the marginalised financially, so that they are able to provide themselves with affordable housing without disturbing the natural environment.

However, the contribution of Black people's culture towards the economic advancement of the city of Durban, together with its sustainability appears to be minimally recognised by the status quo.

As long as Blacks ensure that they do not deplete the natural environment, they should make use of its resources for their economic empowerment.

The spatial distribution of indigenous plants around Durban could be exploited from nature by making use of the craft industry, vases, wooden spoons, trays, grass mats and Zulu beads, which are all sold by the Black community from rural areas could also be practised by the Durban people. While Durban is the most African of all South African cities, it is also where the characteristics of the First World are in juxtaposition with their Third World counterparts. In conclusion, it could be to the benefit of the poor if indigenous communities implement innovative partnerships with tour operators to promote ecotourism on their terms (Blangy,1999).

7.5. CONCLUSION

As we mentioned at the beginning of the chapter with regard to meeting the principles of sustainability, was the chapter successful in answering the questions that were posed ?

The investigator made an effort to give answers to the posed questions. For instance the need for upgrading squatter settlements is an attempt to keep the study area clean. There is evidence that the polluting industries affect the health of residents as shown at Merebank and Umlazi.

It was revealed that the poverty further aggravates the housing delivery crisis amongst the poor. Market forces appear to impact upon natural forces where the poor make use of natural building material which is cheaper to exploit to the detriment of the physical environment. The high population densities that exist amongst shack dwellers act as an advantage and a disadvantage as well.

There are strong communal bonds amongst the poor in shacklands, whilst at the same time, the high population densities create favourable conditions for the spread of infectious diseases. The job creation initiatives where the poor make use of the natural environment is a rational calculus by the poor to provide themselves with finance for housing provision to the disadvantage of the physical environment.

CHAPTER 8

HOUSING PROVISION AMONG THE LOWER AND LOWEST INCOME GROUPS

8.1. INTRODUCTION

This chapter deals with the analysis and interpretation of data that were derived from the four-roomed low cost housing and shack respondents. To arrive at significant findings amongst the lower and lowest income groups, data was analysed and interpreted by means of tables.

8.2. THE HOUSING DELIVERY SITUATION

TABLE 8.1. MARITAL STATUS OF THE RESPONDENTS

LOWER INCOME GROUP						LOWEST INCOME GROUP				
Status	No.	%	No	%	TOT.	No.	%	No	%	TOT.
	Agree		Resp.			Agree.		Resp.		
Married	12	40	18	60	30	07	35	13	65	20
Single	18	60	12	40	30	13	65	07	35	20
Divorced	-	-	30	10	30	-	-	20	10	20
				0					0	
Widowed	-	-	30	10	30	-	-	20	10	20
				0					0	

A picture where 60 percent respondents of the lower income group who inhabit the so called “matchbox” four roomed housing who are unmarried emerges. 40 percent respondents are married. 65 percent shack dweller respondents are single, whilst only thirty five percent are married.

It is surprising that the lower income group, who have stayed in the township for decades is unmarried. Such a situation reflects the bias towards the younger respondents who were prepared to answer the questionnaire. Most aged and married respondents were not interviewed because of their scepticism towards research.

Shack dweller respondents who are single and originate from the formal parts of Black townships, either as second or third generation children leave their homes in search of independence from their parents. About 24 percent of shack dweller respondents intimated that they left their homes because the four-roomed houses are sometimes overpopulated. This group wanted to relieve their parents the burden of staying and being looked after by poor parents who have larger families to feed. The majority of shack dweller respondents are young adults who aspire to possess houses of their own, hence the spatial proliferation of shantytowns on the Durban Metropolitan area.

On a negative note, some respondents informed the researcher that there are those young and unmarried people who run away from strict parents because they want freedom to stay as man and woman out of wedlock. This group has no aspirations for marriage, or are compelled by their inability to afford the costs of a marriage, to squat.

Not all shack dwellers are driven by poverty to establish shacks, though this group is in the minority. It could be concluded that the unsustainability of the Durban Metropolitan area is sometimes caused by people who do not deserve to be housed in squatter settlements.

TABLE 8.2 AGE GROUPS OF RESPONDENTS

LOWER INCOME GROUP						LOWEST INCOME GROUP				
Age Grp.	No. Agree.	%	No Resp.	%	TOT.	No. Agree.	%	No Resp.	%	TOT.
20-30yrs	04	13	26	87	30	10	50	10	65	20
31-40yrs	18	60	12	40	30	06	30	14	35	20
41-50yrs	08	27	22	73	30	04	20	16	100	20
51-60yrs	-	-	30	10	30	-	-	20	100	20
				0						
> 60yrs	-	-	30	10	30	-	-	20	10	20
				0						

Amongst the lower income group 60 percent of respondents belong to the young adult group of between 31-40 years. The predominance of young adults in this case could be ascribed to their flexibility with regard to the answering of the questionnaire. A different picture emerges from the shack dwellers, wherein the 50 percent of respondents are very young and between the ages of 20-30. Only 30 percent belong to the 30-40 age structure, while only 20 percent are older than 40. The older respondents were not prepared to answer something they did not think it would help them in future.

The group that suffers the most, with regard to housing provision is that of young adults. The researcher concentrated on this group because it was easier to convince the respondents that the investigation is an attempt to redress the housing delivery problem which could benefit them in future. Although the younger group contributed more than the older group, some of the older respondents made a contribution which was crucial towards the success of the enquiry.

TABLE 8.3 RESPONDENTS' VIEWS ON HOUSE OWNERSHIP, HOUSING NEED AND SATISFACTION WITH THE HOUSE

LOWER INCOME GROUP						LOWEST INCOME GROUP				
	No.	%	No	%	TOT.	No.	%	No	%	TOT.
	Agree.		Resp.			Agree.		Resp.		
House ownership	22	73	08	27	30	10	50	10	50	20
Housing need	12	40	18	60	30	20	100	-	100	20
House satisfaction	12	40	18	60	30	02	10	18	90	20

Lower income group

70 percent of the subjects own their houses, whilst 20 percent do not. While 60 percent respondents intimate that they are in need of housing, the other 40 percent does not need housing. It is interesting to discover that only 40 percent respondents are satisfied with their houses, while 60 percent is not satisfied.

Lowest Income Group

An equal number of respondents indicate that they own their shacks, and the other 50 percent do not. The entire population of shack dwellers is in need of proper housing of the conventional type.

The fact that 70 percent of respondents amongst the lower income group are home owners is further proof of Gumbi's empirical findings that when the government provided four-roomed low-cost housing in Black townships the housing shortages were not as bad as they are to date. When the government ceased to supply such housing in a collectivised manner in the early 1980s it was evident that the housing delivery problem was going to be aggravated. There is evidence that the collective consumption thesis as espoused by Saunders (1981), Basset and Short(1980), Lambert *et al* (1978); Johnston (1980), and Johnston *et al* (1986), wherein they highlight the role of the state as a provider of housing in a collectivised manner, could benefit the poorest residents of the study area. A need has arisen for the state to revitalise the provision of four-roomed housing in Black townships for the benefit of the marginalised Black communities.

The discovery that only 40 percent of the respondents are in need of housing amongst the the lower income respondents, whilst 60 percent do not need housing is further empirical evidence of the crucial role that is played by the four-roomed low cost housing scheme of the past. The respondents who desire housing are those with large families who are not

satisfied with their housing, or those who are in need of new housing in the former White suburbs. Some are driven by crime in Black townships.

It should be noted that the entire population under investigation in shacklands is in need of housing of the conventional type. This affirms the theoretical point of view that shack dwellers are forced by circumstances beyond their control to be housed in shantytowns. The shack dwellers who are satisfied with their housing are those that have improved their houses in such a way that they now look similar to the four - roomed houses or the middle income ones.

TABLE 8.4. RESPONDENTS' PERCEPTION ON GOVERNMENT SUBSIDY

LOWER INCOME GROUP						LOWEST INCOME GROUP				
	No.	%	No	%	TOT.	No.	%	No	%	TOT.
	Agree.		Resp.			Agree.		Resp.		
Absolutely important	28	93	02	07	30	15	75	05	25	20
Important	02	07	28	93	30	02	10	18	90	20
Not important	-	-	30	100	30	-	-	20	100	20
Not sure	-	-	30	100	30	03	15	17	85	20

93 percent of respondents concur that the subsidisation of the poor is absolutely important. This is also affirmed by 75 percent of the lowest income group who intimate that it is important to be subsidised by the government.

On the strength of the evidence expressed in table 8.4 above, it could be inferred that the subsidisation of the poor is absolutely important if the Durban Metro Council aspires to redress the housing delivery problem amongst the poor. The hypothetical aversion that the poor cannot afford to build even the cheapest form of conventional housing is justified by the majority who favour the subsidisation of the poor.

An empirical exploration of the study area affirmed that the greater majority of the Durban Metropolitan residents are so poor that they do require some form of financial assistance from the government to improve the existing house, or for transforming a shack into a formal house, or to upgrade their shacks. The empirical exploration of the study area revealed the poor state of the majority of housing particularly in Black townships.

TABLE 8.5 RESPONDENTS' VIEWS ON THE GRANTING OF LOW COST HOUSING LOANS BY BANKS, APPLICATION FOR A SUBSIDY, AND A NEED FOR A LOAN ON THE HOUSE.

	LOWER INCOME GROUP					LOWEST INCOME GROUP				
	No. Agree.	%	No Resp.	%	TOT.	No. Agree.	%	No Resp.	%	TOT.
Granting of low cost by Banks	28	93	02	07	30	18	90	02	10	20
Application for a subsidy	18	60	12	40	30	15	75	05	25	20
House satisfaction	20	67	10	33	30	19	95	01	05	20

Lower Income Group

93 percent of the respondents concur that the government should facilitate mechanisms for the banks to grant low cost housing loans to the poor. This argument seems to agree with that of the 60 percent respondents who indicate that they have applied for a subsidy. 67 percent of the respondents intimate that they need a housing loan.

Lowest Income Group

It is interesting to note that the shack dwellers also identify the facilitation by banks to grant low cost housing loans as essential. The 90 percent respondents are not far from the 93 percent by the lower income group. About three quarters of respondents (75 %) intimate that they need a housing loan, whilst only 40 percent indicate that they have applied for a housing subsidy.

In table 8.5 above, a picture that emerges is that 93 percent and 90 percent of the respondents seem to be aware that banks do not grant low cost housing loans to them, hence their houses and shacks being inadequate and improper for their families. The fact that 60 percent and 75 percent lower income and lowest income respondents have applied for a subsidy scheme, and many of them have not yet been subsidised, seems to confirm the theoretical assertion that officials responsible for allocating subsidies are either inefficient or corrupt. The identification that more than half of the shack dweller respondents (75 %) have applied for a subsidy is proof of the redlining practices by government officials when it comes to the allocation of housing delivery related resources

to the marginalised. The granting of housing loans and their subsidies could go a long way in redressing the unsustainable manner in which the Durban Metropolitan area exists due to the spatial manifestation of shantytowns which degrade the physical environment.

TABLE 8.6 RESPONDENTS' VIEWS ON EMPLOYMENT AND PERMANENCE IN THE DURBAN METROPOLITAN AREA

LOWER INCOME GROUP						LOWEST INCOME GROUP				
	No.	%	No	%	TOT.	No.	%	No	%	TOT.
	Agree.		Resp.			Agree.		Resp.		
Employment	28	93	02	07	30	08	40	12	60	20
Permanence	26	87	04	13	30	18	90	02	10	20

About 93 percent of the lower income group respondents are employed, while those employed amongst the lower income group are 40 percent. An overwhelming number of 87 percent and 90 percent amongst the lower and lowest income groups, respectively, indicate that they are permanent in the study area. Only 13 percent and 10 percent amongst the two groups are thinking of moving from the Durban Metropolitan area.

The unemployment situation in the study area for the Power shackland seems to have an element of bias. When the inquiry was conducted the people who were prepared to answer the questionnaire were the unemployed hence the high number of the unemployed in this group. A picture where about 40 percent respondents amongst shack dwellers are employed seems to reflect the hypothetical assumption that about 40 percent of Blacks

are unemployed in South Africa. It appears that more people are unemployed rather than the conventional estimate of about 40 percent, hence the mushrooming of the cheaper shantytowns in the Black townships.

It is interesting to note that 87 percent and 90 percent of the lower and lowest income groups respondents intimate that they are a permanent feature in the study area. It is surprising that even the unemployed have not lost hope of attaining employment, hence their wish for permanence in the Durban Metropolitan area. The theoretical argument that Durban is perceived as an area that has better job opportunities than all the other KwaZulu-Natal towns acts as a centripetal force which compels immigrants to aspire for permanence in the city of Durban.

The shortage of housing and the proliferation of backyard shacks and shantytowns in the vicinity of four roomed low cost houses is a function of the aspiration for employment and permanence in the study area. Such aspirations lead to the geometric progression of spontaneous settlements which lead to the degradation of the city's physical landscape.

TABLE 8.7 RESPONDENTS' PERCEPTION OF CAUSE FOR THE SLOW DELIVERY OF HOUSING

LOWER INCOME GROUP						LOWEST INCOME GROUP				
	No.	%	No	%	TOT.	No.	%	No	%	TOT.
	Agree.		Resp.			Agree.		Resp.		
Poverty among Blacks	10	33	20	67	30	08	40	12	60	20
Unemployment	12	40	18	60	30	12	60	08	40	20
No subsidy from govt.	-	-	30	10	30	04	20	16	80	20
				0						
No loans from banks	12	40	18	60	30	10	50	10	50	20
Expensive building material	06	20	24	80	30	12	60	08	40	20
High costs of builders	07	23	23	77	30	10	50	10	50	20
Lack of land	05	17	25	83	30	14	70	06	30	20
Other (specify)	03	10	27	90	30	02	10	18	90	20

Lower Income Group

40 percent of respondents point out both unemployment and the inability of banks to grant low cost housing loans to the poor as hindering the delivery of housing. About 33 percent of respondents identify poverty as a major cause for the slow delivery of housing. While only 23 percent give the high costs of building materials as a cause for the slow delivery of housing in the study area, the other 20 percent identify the expensive building materials as a primary cause. 17 percent respondents identify lack of land as a major cause for the housing delivery crisis in the study area, while 10 percent give their own views as causes. Such views do not deserve mentioning.

Lowest Income Group

70 percent of the shack respondents indicate that lack of land is the primary cause for the housing delivery crisis in the study area. This appears to justify the theoretical argument that land is the basic element that causes the housing delivery crisis amongst the poorest of the poor. The second larger two groups of 60 percent each indicate that unemployment and expensive building materials are the main causes for the housing delivery problem in the study area. While half the number (50%) of respondents give the lack of land and high costs of building as of equal importance, only 20 percent indicate the lack of subsidies are a major cause. About 40 percent subjects give poverty as a major cause, while only 10 percent give their own answers, which do not deserve mentioning.

The poor who identify both unemployment and the inability of banks to grant low cost housing loans seem to affirm the theoretical assertion that there is a considerable number of Blacks who are unemployed in formal industries. There is consensus between the three income groups that unemployment is one of the major reasons for the shortage of housing particularly amongst Blacks.

Whilst it is acknowledged that poverty amongst Blacks results in their inability to buy expensive land and building materials, the high costs charged by formal builders are also a great cause for concern. The land issue and unemployment stand out as the primary causes hampering the delivery of housing in the Durban Metropolitan area.

TABLE 8.8 RESPONDENTS' PERCEPTION OF REASONS WHY BANKS

GRANT LOANS TO THE MIDDLE INCOME GROUP

LOWER INCOME GROUP					LOWEST INCOME GROUP					
	No.	%	No	%	TOT.	No.	%	No	%	TOT.
	Agree.		Resp.			Agree.		Resp.		
Do not trust the poor	16	53	14	47	30	12	60	08	40	20
Sure money will bring profit	13	43	17	57	30	15	75	05	25	20
Sure of regular instalments	19	63	11	37	30	03	15	17	85	20

Lower Income Group

63 percent of the respondents are of the opinion that banks target the middle income group because they are sure of regular payments of monthly instalments by this group. About 53 percent respondents intimate that Blacks do not trust the poor, while only 43 percent give the reason that banks are sure that their money will bring profit

Lowest Income Group

75 percent of the respondents intimate that banks grant loans to the middle income group because they are sure that they will bring profits. About 60 percent indicate that banks do not trust the poor, and only 15 percent believe that the regular payments of instalments by the middle income group is a major reason. There is causality between the granting of loans to the affluent on the poor.

The majority of the poorest residents seem to be aware that banks are mainly interested in the accumulation of profit. This justifies the theoretical contention in chapter 2 of this thesis. When the banks grant loans to the middle income group they target the group that comprises mainly state employees. The banks do not grant loans to this group because they trust it. The stop orders that are arranged ensure that monies owed to banks are deducted before the client obtains his or her salary at the end of the month. In this way, banks are guaranteed that their loans will bring profit due to the compulsory payments of mortgage loans.

Whilst it is acknowledged that banks require their clients to be regular when they pay their instalments, it should be taken into account that the main motive by banks is to accumulate as much profit.

TABLE 8.9 RESPONDENTS' PERCEPTION OF THE CONDITION OF THE AREAS IN WHICH THE LOWER AND LOWEST INCOME GROUPS RESIDE

	LOWER INCOME GROUP					LOWEST INCOME GROUP				
	No. Agree.	%	No Resp.	%	TOT.	No. Agree.	%	No Resp.	%	TOT.
Too much crime	20	67	10	33	30	07	35	13	65	20
Roads in bad state	10	33	20	67	30	03	15	17	85	20
No electricity	04	13	26	87	30	05	25	15	75	20
No garbage removals	04	13	26	87	30	06	30	14	70	20

Lower Income Group

An analysis of Table 8.9. reveals a situation where 67 percent of respondents in this income group give crime as the worst problem experienced by the lower income group.

Where 33 percent respondents indicate that roads are badly managed, an equal number of 13 percent point out the absence of electricity and no garbage removals as prime problems experienced in the areas of four-roomed housing.

Lowest income group

Only 35 percent respondents identify crime as a problem in shantytowns. While only 30 percent of the respondents identify the absence of garbage removal as another problem in shacklands, only 25 percent respondents intimate that there is no electricity. 15 percent respondents are of the opinion that roads are badly managed.

The identification of crime as the number one problem experienced by the lower and lowest income groups appears to concur with the general perception by newspapers, radio and television that crime has become the primary problem in the country as well as in the study area. It could be concluded that crime plays a crucial role in constraining the delivery of housing amongst the poor, as many residents become victims of criminal elements especially over weekends and month ends.

When respondents are robbed of the meagre wages they earn from industries around Durban, they are unable to save their money either for extending the four roomed house, or upgrading the better off squatter settlement. The fact that criminals mainly from shantytowns sometimes steal building material from the formal townships seems to worsen the housing delivery problem in the study area.

There is a need for the Durban Metro police department in conjunction with the South African Police Services (SAPS) to curb the criminal activities in Black townships for the betterment of the housing delivery crisis in the study area. It could be inferred that the criminal activities taking place in the Black townships are a hindrance towards delivering housing in the study area.

The identification of the electricity problem as not serious supports the empirical discovery that many four-roomed houses in Black townships have installed electricity, while some shack residents have also done likewise in the better-off shantytowns. The infrequent manner in which garbage is sometimes collected in Black townships results in the degradation of the physical environment of the study area.

TABLE 8.10 RESPONDENT'S VIEWS ON TYPE OF HOUSE PREFERRED

LOWER INCOME GROUP						LOWEST INCOME GROUP				
	No.	%	No	%	TOT.	No.	%	No	%	TOT.
	Agree.		Resp.			Agree.		Resp.		
Soil and mud house	02	7	28	93	30	02	10	18	90	20
Grass thatched house	02	7	28	93	30	02	10	18	90	20
Corrugated shack house	02	7	28	93	30	08	40	12	60	20
Other (specify)	24	79	06	21	30	08	40	12	60	20

Lower and Lowest Income Groups

An equal number of 7 percent identify soil and mud and grass-thatched housing as the type of houses preferred. There is an equal number of shack respondents (40%) for each alternative, who are either for corrugated iron houses or brick and tile or cement block houses. Equally, only 10 percent respondents identify either soil and mud houses or grass- thatched houses as the preferred type of housing.

An empirical investigation amongst the middle income group respondents reveals that this group is in consensus with the lower income group in identifying brick and tile or cement block houses as the preferred type. This appears to affirm the theoretical point of view that Blacks look down upon indigenous and Afrocentric solutions (Makgoba, 1997) It is disturbing to discover that 86 percent of the lower income group and 80 percent of the lowest income group respondents do not realise the importance of indigenous housing, (mud, poles and grass houses), particularly to the very poor, who cannot afford

Eurocentric brick and tile or cement block housing. This group seems as if it does not acknowledge that the indigenous building materials' compatibility with the African milieu is spatially demonstrated by their coolness in summer and their warmth in winter, thus reducing the costs of cooling or heating.

The 40 percent shack respondents who favour corrugated iron housing argue that such houses are not easily burned. Whilst such housing is too cold in winter and too warm in summer, its advantage over the mud and grass housing outweighs its disadvantage of being incompatible with climatic elements.

It should be acknowledged that 80 percent of lower and 40 percent of the lowest income groups aspire to own brick and tile or cement block housing. The type of shelter that they are able to build is due to financial circumstances beyond their control.

All the respondents (100%) of the four-roomed housing are not in favour of shantytowns, whilst only 40 percent of shack respondents are in favour of shacklands. About 50 percent of shack respondents are not in favour of squatter settlements, while only 10 percent of respondents is not sure.

Whilst all the shack respondents (100%) support the upgrading of shantytowns, it is not the case with the lower income group. 73 percent of the respondents from this group favour the upgrading of shantytowns, While only 13 percent are not sure. 7 percent respondents give the following answers :

- Shantytowns should exist in clean areas
- As long as the Durban Metro Council ensures that it gives a helping hand towards the upgrading of shacklands, the city could remain clean.

It is evident that the contradictory picture that emerges above, where the entire lower income respondents are not in favour of shantytowns is surprising. Some of the residents in four-roomed housing have backyard shacks that are similar in structure to the shacklands. The fact that about 73 percent of respondents of the lower income group favour shack upgrading is proof of the constructive role that is played by shacklands, which provide the cheapest form of shelter to the very poor.

The entire population of respondents (100%) who are for shack upgrading is further empirical evidence of the crucial role that is played by shantytowns. As long as the shacklands are allowed to exist in a clean environment, it could be possible to make use of them to resolve the housing delivery crisis in the study area.

TABLE 8.12 RESPONDENTS' PERCEPTION OF WHAT SHACK DWELLERS SHOULD DO TO KEEP THE ENVIRONMENT CLEAN

LOWER INCOME GROUP						LOWEST INCOME GROUP				
	No.	%	No	%	TOT.	No.	%	No	%	TOT.
	Agree.		Resp.			Agree.		Resp.		
Be aware of surroundings	16	53	14	47	30	16	80	04	20	20
Report criminal activities	10	33	20	67	30	14	70	06	30	20
Discourage littering	08	27	22	73	30	12	60	12	40	20
Be involved in decisions	10	33	20	67	30	08	40	12	60	20
Learn to manage resources	11	37	19	63	30	06	30	14	70	20
Encourage cleaning campaigns	14	47	16	53	30	14	70	06	30	20
Other (specify)	04	13	26	87	30	02	10	18	90	20

Lower Income Group

Respondents comprising 53 percent of the population under investigation in this group intimate that people should be aware of the physical environment around them. While 47 percent respondents favour cleaning campaigns, only 37 percent are for the management of natural resources such as water, trees, grasses and an artificial resource in the form of electricity. The third group identifies both the reporting of criminal activities and the involvement of the people on the ground in decision making concerning the environment and the housing delivery process.

This group is 33 percent for each alternatives 2 and 4. Only 13 percent gives the following alternatives :

- That shacks should be discouraged and replaced by decent housing
- That environmental education is the key towards a sustainable delivery of housing in the Durban Metropolitan area.

Lowest Income Group

80 percent of the respondents are of the opinion that shack dwellers should be aware of their surroundings. An equal number of 70 percent for alternatives 2 and 6, which favours the reporting of criminal activities, and the encouraging of cleaning campaigns is given by shack respondents. While 60 percent respondents opt for the discouraging of littering, 40 percent is for the involvement of the grassroots in decision making.

It is encouraging to discover that both the lower and lowest income groups intimate for the awareness of the environment as crucial towards a sustainable city of Durban, which may lead to a viable housing delivery process.

Cleaning campaigns that are being introduced in Black townships, where bottles, bones and old tins, as well as plastics, are sold in town for recycling, augurs well for a sustainable Durban Metropolitan area. It is a positive discovery that about 47 percent of lower income respondents and 70 percent of the shack dwellers opt for cleaning campaigns. The shack dwellers who are the worst victims experiencing unhealthy conditions has the largest number opting for cleaning campaigns.

It is discouraging that only 37 percent and 30 percent of lower and lowest income groups, respectively, are aware that the management of natural resources such as rivers, vegetation and the top soil is crucial towards a sustainable Durban Metropolitan area.

While only 30 percent and 40 percent of lower and lowest income groups, respectively, acknowledge the involvement of the people on the ground in decision making, these two groups identify the importance of the involvement of the grassroots in matters concerning their habitation in the study area.

When the poor are able to manage natural resources and acknowledge their importance as part and parcel of a sustainable environment, it could be easy for them to inhabit their environment without compromising the lives of current and future residents of the study area. The poor should be made aware that South Africa is basically a dry country whose water resources need to be conserved.

TABLE 8.13 RESPONDENTS' PERCEPTION OF THE UTILISATION OF CRAFTS INDUSTRY RELATED RESOURCES FOR SELF EMPLOYMENT

LOWER INCOME GROUP						LOWEST INCOME GROUP				
	No.	%	No	%	TOT.	No.	%	No	%	TOT.
	Agree.		Resp.			Agree.		Resp.		
Carving of Wood	16	53	14	47	30	14	70	06	30	20
Making straw hats, mats etc	14	47	16	53	30	14	70	06	30	20
Clay ornaments	08	27	22	73	30	12	60	08	40	20
Other (specify)	08	27	22	73	30	-	-	20	100	20

Lower Income Group

Table 8.13 illustrates a picture where most respondents who number 53 percent indicate that the carving of wood into various implements for the craft industry is the most common form of empowering the marginalised so that they become self - employed.

While 47 percent identifies the making of straw hats, mats, and many other crafts using grass and wood as of secondary importance, only 27 percent are for the production of clay ornaments. Respondents (12%) who gave their own views gave the following :

- Brick making where the soil is mixed with a little bit of cement is an ideal job creation strategy which utilises the physical environment.
- That a combination of all the above alternatives could empower the disadvantaged.
- That the building of indigenous houses for the poor as a business venture could be a positive empowerment mechanism.
- Urban agriculture and poultry could empower Blacks.
- Home improvements by township builders is another empowerment strategy.

Lowest Income Group

70 percent of the respondents for each alternatives 1 and 2 believe that the carving of wood and straw making are of equal importance. The other 60 percent respondents include clay ornaments as another empowerment strategy.

Global Picture

It is discouraging to discover that respondents are not aware of ecotourism whereby natural places of interest such as the Durban lagoon, harbour and beaches which could be visited by tourists, could play a prominent role in improving ecotourism to boost the city's economy for the benefit of housing delivery. Respondents are, in any case, aware of the craft industry's role as a job creation strategy.

An empirical exploration of the Durban Station area revealed that the people involved in the crafts industry are mainly from rural areas. It was discovered that the people who buy crafts include tourists who are mainly Whites from overseas. The craft industry appears to facilitate tourism as the various crafts which are products of natural systems become part and parcel of tourism when they are visited and bought by overseas tourists.

The location of the city of Durban in an area that has a rich biodiversity in its doorstep could contribute towards the development of the craft industry. It should be noted that environmental concerns are no longer about how we manage the flora and fauna of the area, but how these elements are utilised for the benefit of humanity. In the operationalisation of this study there is a need to utilise Durban's periphery for the benefit of the disadvantaged. In this way it could be easy to empower the marginalised financially, so that they are able to provide themselves with affordable housing without disturbing the natural environment.

The contribution of Black people's culture towards the economic advancement of the city of Durban, together with its sustainability appears to be minimally recognised by the status quo. As long as Blacks ensure that they do not degrade the natural environment, they should make use of its resources for their economic empowerment.

TABLE 8.14 RESPONDENTS' PERCEPTION ON THE CANAAN

SHANTYTOWN

LOWER INCOME GROUP						LOWEST INCOME GROUP				
	No.	%	No	%	TOT.	No.	%	No	%	TOT.
	Agree.		Resp.			Agree.		Resp.		
The area is too risky	18	60	12	40	30	12	60	08	40	20
Too close to Umgeni River	06	20	24	80	30	10	50	10	50	20
People exposed to accidents	10	33	20	67	30	08	40	12	60	20
Lower quality of life	16	53	14	47	30	04	20	16	80	20

An equal number of 60 percent respondents of both income groups believe that the Canaan shantytown is a risky area to inhabit. This justifies the theoretical assertion that the area once experienced a landslide when numerous shacks were destroyed. This was also empirically confirmed by squatters who still inhabit the area when the investigator conducted an empirical observation of the area.

The location of the shackland near a busy N2 freeway has resulted in a number of accidents in the area. Many people from the Canaan shackland have been killed while crossing the N2 freeway. About 53 percent of subjects intimate that the area lowers the quality of life of residents. Only 20 percent squatter respondents agree with the above notion. They seem to be unaware or do not want to acknowledge that the shackland lowers the quality of life of all the residents in the area. When one undertakes an empirical observation of the Canaan shackland it is evident that the area is too risky to inhabit. The land is steep and therefore susceptible to soil erosion. When the shack dwellers were interviewed they affirmed the theoretical contention that the area is easy to flood during heavy rains. The close proximity of the shantytown to the Umgeni river places the squatters at risk particularly when the river is in spate when shacks are in danger of being flooded.

TABLE 8.15 RESPONDENTS' FEELINGS ABOUT BRIDGE DWELLERS

LOWER INCOME GROUP						LOWEST INCOME GROUP				
	No.	%	No	%	TOT.	No.	%	No	%	TOT.
	Agree.		Resp.			Agree.		Resp.		
They have no choice	04	13	26	87	30	-	-	20	100	20
They are okay	02	07	28	93	30	02	10	18	90	20
Their lives in danger	18	60	12	40	30	03	15	17	85	20
They pollute the area	16	53	14	47	30	02	10	18	90	20
People exposed to dangers, diseases etc.	26	87	04	13	30	04	20	16	80	20
Must be taken care of by govt.	16	53	14	47	30	08	40	12	60	20
Other (specify)	04	13	26	87	30	02	10	18	90	20

Lower Income Group

About 87 percent of respondents are of the opinion that bridge dwellers⁷ are exposed to dangers, diseases, robberies and floods, while the second group of 60 percent respondents intimate that the lives of the bridge dwellers are in danger. An equal number of 53 percent respondents for each alternative (4 and 6) indicate that the bridge dwellers pollute the city centre, and the government must take care of the shack dwellers. Only 13 percent in this group point out that the bridge dwellers have no choice.

7. Bridge dwellers are the squatters who sleep under bridges. In this study bridge dwellers are those that use the Victoria Street bridge as shelter from natural elements such as rain, wind and sunlight during the day.

The final 13 percent give the following alternative :

- The government should remove the bridge dwellers and relocate them in proper residential areas.

Lowest Income Group

It is interesting to discover that 10 percent of the shack respondents suggest that bridge dwellers are alright in their squatting areas. This seems to support the alternative which indicates that the squatters have no choice because they are very poor. Whilst 62 percent of shack respondents seem unable to agree that the the lives of bridge dwellers are in danger or the fact that they pollute the natural enviroment, about 40 percent of them are aware that the government must take care of the bridge dwellers.

In the light of the evidence reflected in table 8.15 above it could be argued that most respondents amongst the lower income group are aware that the bridge dwellers are exposed to dangers hence the lower positive responses amongst the shack respondents.

The Durban Metro Council should ensure that the bridge dwellers such as those squatting below the Victoria Street bridge are relocated to residential areas away from the city centre, if the city is to be kept clean. The pollution that goes hand in glove with the activities that are carried out by bridge dwellers all pollute the city to the disadvantage of tourism.

TABLE 8.16 RESPONDENTS' VIEWS ON DURBAN METRO COUNCIL'S RESPONSIBILITY TO SQUATTERS

LOWER INCOME GROUP						LOWEST INCOME GROUP				
	No.	%	No	%	TOT.	No.	%	No	%	TOT.
	Agree.		Resp.			Agree.		Resp.		
To deliver services	24	80	06	20	30	12	60	08	40	20
To reduce health hazard	13	43	17	57	30	04	20	16	80	20
To educate squatters about cleanliness	27	90	03	10	30	13	65	07	35	20
Other (specify)	08	27	22	73	30	03	15	17	85	20

Lower Income Group

Data in table 8.16. above demonstrates a situation whereby 96 percent of respondents are of the opinion that it is of vital importance for the Durban Metro Council to educate squatters about cleanliness. Whilst 80 percent of respondents intimate for the local council to ensure the delivery of services to the poor, only 43 percent respondents identify alternative 2, which proposes the reduction of health hazard conditions in the area where the poor reside. Only 27 percent respondents give other alternatives as follows:

- The local council should look for aid from the international community so as to assist the poor.
- The council should build formal housing for the poor and the homeless.

Lowest Income Group

Shack dweller respondents who are 65 percent in number identify the education of squatters as of primary importance. While 60 percent respondents give the delivery of services as crucial, only 20 percent indicate that the Council should reduce health hazard conditions.

The identification of alternative 3 by the lower income group which intimates for the education of the poor by an overwhelming majority is affirmation of the English expression that "prevention is better than cure". It appears that if the local council is going to prioritise the cleaning of the environment above environmental education, this is perceived by the researcher as a temporary measure that is not going to redress environmental degradation in the study area. There is evidence that the ignorance of shack respondents towards the importance of environmental education compels only a 20 percent to identify the reduction of health hazards as crucial towards a sustainable Durban Metropolitan area.

When the poor are environmentally literate it could become easy for them to keep their residential area neat. The delivery of all infrastructural services to the lower and lowest income groups residential areas could automatically redress the problem of a dirty environment, as there will be sufficient refuse collection bins in the area. Nevertheless, it should be acknowledged that the alternatives given by respondents are crucial towards

enabling the poor to be aided by the local council. It could be to the benefit of the council if it seeks aid from the international community as long as such aid does not have any ulterior motives.

TABLE 8.17 RESPONDENTS' PERCEPTION OF PROBLEMS REQUIRING THE COUNCIL'S ATTENTION

LOWER INCOME GROUP						LOWEST INCOME GROUP				
	Yes	%	No Resp.	%	TOT.	No. Agree.	%	No Resp.	%	TOT.
Rising crime	12	40	18	60	30	06	30	14	70	20
Unemployment	15	50	15	50	30	03	15	17	85	20
Lack of proper acomodation	03	10	27	90	30	02	10	18	90	20
Street children	08	27	22	73	30	02	10	18	90	20
Pressing needs of squatters	02	07	28	93	30	01	05	19	95	20
All the above	24	80	06	20	30	03	15	17	85	20

Lower Income Group

Evidence in table 8.17 above points in a direction where 80 percent of respondents identify all the alternatives above as requiring the council's attention. It appears that unemployment is secondary in importance, where 50 percent respondents identify it. Rising crime which is given by 40 percent respondents follows after unemployment. Only 10 percent, give lack of proper accomodation, whilst only 7 percent respondents identify pressing needs of squatters as important.

Lowest Income Group

The questions in table 8.17 were poorly answered by shack dwellers, hence the high numbers of non - responses for all the alternatives. While 30 percent of respondents indicate that rising crime needs the council's primary attention, only 15 percent give all the above as crucial. An equal number of 10 percent respondents indicate that lack of proper accomodation and street children need the council's attention. Only 5 percent identify the pressing needs of squatters.

Whilst it is acknowledged that all the alternatives given in table 8.17 above need the council's attention, the rising crime that ensues at present needs the council's primary attention if the council desires to redress the crime problem as all other related problems that impact on the delivery of housing will also be resolved.

There is a dire need for the Durban Metro council to implement mechanisms that will facilitate the creation of jobs for the unemployed if crime is to be redressed.

While the pressing needs of squatters are not very important to the lower income group, the pressing needs of squatters should be catered for so as to make Durban a sustainable city to inhabit.

TABLE 8.18 RESPONDENTS' SUGGESTIONS FOR THE FACILITATION OF LOW COST HOUSING FOR SQUATTERS

LOWER INCOME GROUP						LOWEST INCOME GROUP				
	No.	%	No	%	TOT.	No.	%	No	%	TOT.
	Agree.		Resp.			Agree.		Resp.		
1. Demolishing Shacks	10	33	20	67	30	04	20	16	80	20
2. Discourage creation of shacks	14	47	16	53	30	12	60	08	40	20
2. Hindrance of squatting	05	17	25	83	30	02	10	18	90	20
4. None above	03	10	27	90	30	04	20	16	80	20
5. All of the above	21	70	09	30	30	06	30	14	70	20
6. Other (specify)	04	13	26	87	30	-	-	20	100	20

Lower Income Group

About 70 percent respondents indicate that alternatives 1 - 3 above are all important.

This group proposes that the demolition of shacks, discouraging shack erection, and the hindrance of squatting in the city centre is crucial before squatters are provided with formal housing. Whilst individually, the discouraging of shack erection (47%) is of secondary importance to all the alternatives 3 above, about 33 percent of respondents opt for the hindrance of squatting in the city centre as a mechanism that could redress squatting.

The 13 percent population under investigation which gave alternatives of their own gave the following :

- The local council should discourage squatting by providing alternative accommodation for the squatters.
- Some foreigners invade the country's land illegally.

Shack respondents who are 60 percent in number suggest that the discouraging of the erection of shantytowns, so that low cost housing is provided in their place, seems to be a strategy that could facilitate the provision of affordable housing in Durban Metropolitan area. While 30 percent of shack respondents indicate that all the above alternatives, which are alternatives 1, 2 and 3 in table 8.18 above an equal number of 20 percent respondents for each alternative 1 and 4.

Squatting is an environmental hazard which needs to be addressed as a matter of urgency. This could lead to a sustainable Durban Metropolitan area when squatting is no longer taking place. It should be acknowledged that squatting occurs because of the squatters' financial marginalisation and the non-allocation of land to squatters.

The facilitation of low cost housing by the Durban Metro Council could redress the housing delivery crisis, whilst at the same time ensuring the sustainability of the study area.

8.3. CONCLUSION

This chapter has made an effort to analyse and interpret the findings of questionnaires belonging to the lower and the lowest income groups. The housing delivery problem is the human engineering of capitalism in such a way that it leads to related effects such as poverty, unemployment, crime, environmental degradation, to mention some of the effects.

It was discovered that in order to empower the marginalised in the true sense of the word, we need to utilise those job creation strategies that are amenable to the African milieu, as well as the Eurocentric ones that are compatible with the African situation.

Whatever housing delivery strategies that are implemented should also acknowledge the significance of the African environment. Various housing delivery strategies should ensure that the study area remains sustainable for the benefit of current and future residents of the Durban Metropolitan area.

CHAPTER 9

FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

9.1. INTRODUCTION

According to Katzer *et al* (1998) evaluation of research findings should be based on observations made and data collected. Findings are also based on assumptions or hypotheses of a particular study. The researcher should bear in mind that the factual accuracy and generality of the findings depend on the methodological procedures employed to collect data (ibid)

After interpreting findings, it is essential to sum up the objectives of the thesis and compare them with the findings, and then draw conclusions. This chapter seeks to follow a sequence whereby the findings of the thesis are examined in accordance with the objectives and hypotheses of the study. Without forgetting the title under investigation the study makes an effort to accept or reject the hypotheses related to the inquiry.

Conclusions drawn emanate primarily from the empirical aspects of the investigation. The conclusions are also drawn from the ecological factors' chapter 6, and data analysis and interpretation chapters 7 and 8, as well as the general conclusions that are drawn from the various respondents that were interviewed in an unstructured questionnaire manner. The recommendations that ensue comprise basically empirical data that is relevant to the investigation. Problems experienced in the inquiry and future research directions form the final part of this chapter.

9.2. **FINDINGS**

In an endeavour to arrive at valid and reliable findings, and to place the study in its proper perspective it is essential to reiterate the objectives and hypotheses of the inquiry. The objectives hope to discover the cause effect relationships, job creation initiatives and housing delivery strategies. The hypotheses, on the other hand identify global capitalism as the cause of the housing delivery problem in the study area. Job creation initiatives entail those related with housing infrastructural services. Housing delivery strategies are those that are compatible with the African environment.

9.2.1. **Hypothesis I Findings**

Cause-effect Relationships

Colonial imperialism seems to be the major independent variable that was human engineered and is interwoven with its dependent variables such as international capitalism, which contributed to resource plundering in South Africa, and the resultant poverty. The international aid schemes, which emanate from colonial capitalism further aggravated the inequalities that exist in the study area. It is evident that the GEAR economic plan that was approved by the IMF and the Bank appears to have caused job losses instead of job creation. The high unemployment rate particularly amongst Blacks results in homelessness and the mushrooming of shantytowns. The unsustainable manner in which the Durban Metropolitan area exists leads to environmental degradation, to the detriment of the entire populace of the study area.

It could then be concluded that the identification of colonial imperialism by most respondents is partially accepted in this thesis as its effects are still felt to date. The argument that apartheid capitalism alone is the cause for the housing delivery crisis in the study area is partially rejected because without human beings, capitalism would not have been possible. Instead of addressing apartheid capitalism, housing delivery stakeholders should be looking at redressing human greed which creates wealth and resource inequalities in the study area. The inhumanity of capital therefore seems to increase the housing delivery problem in the Durban Metropolitan area.

A need has arisen for the international lending institutions to minimally cancel South Africa's debt of over R300 billion. Some of the debt was incurred during the apartheid rule, a political system that was declared by the United Nations Organisation (UNO) as a crime against humanity. It appears that the poor are today paying for the mistakes which are not of their own making, but of the apartheid regime of the past. This notion is accepted in this thesis.

GEAR appears to impact upon housing provision by cutting down on jobs thus rendering millions unemployed and devoid of funds for housing provision. It is encouraging to know that the ANC is in the process of scrutinising the negative effects of GEAR on the poor (Sowetan October 19, 1998). Generally, GEAR appears to create poverty and joblessness. Even amongst the highly educated, GEAR seems to create an endless spiral of unemployment. GEAR hinders the delivery of housing particularly amongst the unemployed. It is evident that the spatial manifestation of squatter settlements that are

mainly inhabited by the poor and the unemployed reflects the retrogressive nature of the GEAR economic policy that was approved by the IMF and the World Bank.

The underspending of R314 million budget for land allocation confirms the lack of expertise amongst the land allocation officials, and the red tape that goes with it. The artificial land scarcities that are created by the urban managers responsible for the appropriation of land from the haves to the have-nots worsens the housing delivery crisis in the study area. The inability of the poor to own a piece of land encourages illegal squatting in the Durban Metropolitan area.

When officials grant more than one site to themselves and to friends and relatives, this further impinges upon whatever land allocation mechanisms that are being implemented.

Most loans are granted to the elite middle income group because the public and private sectors succumb to the whims of capital at the expense of the poor. The taking over of housing by the private sector demonstrates the failure of the state to provide affordable low cost housing loans to the poor.

There is a general consensus amongst the poor that the government should facilitate a climate where banks can grant low cost loans to the poor. It could then be inferred that the profitability of middle income housing to banks is a function of the non-allocation of the so called unprofitable low cost housing loans. Whilst it is imperative for the state to facilitate the granting of low cost housing loans to the poor, there is empirical evidence

that banks should take the initiative of granting low cost loans without being compelled by the state.

The non-allocation or the inefficient allocation of housing loans to women who are in the majority and who are the worst oppressed seems to aggravate the housing delivery problem in the study area. The quadruple oppression experienced by women at home by their husbands, as Blacks, in the workplace, and in the allocation of housing loans leaves much to be desired.

The insensitivity of the capitalists is demonstrated when they grant loans to the middle income group for profit, whilst the poor are redlined by banks. Until such time when there is equity in the granting of low cost loans the housing delivery problem could remain unabated and unsustainable, as the homeless will be forced to construct shacklands which degrade the physical environment. In a way, the lives of future residents of the Durban Metropolitan area will be compromised when the area remains unsustainable.

There is clear evidence that the misuse of funds earmarked for the delivery of housing amongst the poor exacerbates the housing delivery problem in the study area. The identification of lack of funds by the majority of respondents does not concur with the theoretical assertion that funds are there. It is the opinion of the investigator that the problem lies with the funds' utilisation as well as their embezzlement by housing officials.

It is evident that the housing scams are a hindrance towards redressing the housing delivery imbalances of the past. Important funds earmarked for the poor are embezzled by government officials as indicated empirically by respondents and the anonymous clerk. Whilst it is acknowledged that the ANC government is positive when it preaches transparency, yet when it comes to the exposure of some of its corrupt officials it appears to be opaque.

A general consensus exists amongst Blacks that corruption is rife amongst state officials responsible for the allocation of housing resources. This corruption is mainly in the form of housing officials' nepotism, cronism and the embezzlement of state funds. The various housing scams that exist exacerbate the housing delivery crisis in the study area. The inaccessibility of shacklands makes it easy for criminals to hide in them. Again, crime that is caused by conflicts over scarce resources, when squatters steal from the formal houses is cause for great concern.

The capitalist system has created social distress in the Durban Metropolitan area as empirically evidenced by squatting in the city centre and on its periphery. It is perceived that capitalism is a luxury of the West. Capitalism appears to be relatively successful particularly in developed countries which have never experienced gross wealth and resource inequalities. The capitalist system is only workable in a situation where the people are already given equal opportunities to develop economically.

A general agreement amongst the respondents is that a developing nation like South Africa needs to involve both the private and public sectors in its endeavours to redress the housing delivery crisis in a sustainable manner. It is apparent that South Africa cannot solve her housing delivery-related problems through market principles only. It could then be avered that market forces which have failed to deliver housing to the very poor necessitate a mixed economic model that integrates the positive aspects of capitalism and socialism.

The absence of adequate infrastructural services in Black townships is one of the major reasons for the non-payment of rates by township residents. The rent and rate boycotts are therefore ascribed to the above assertion. Such boycotts hinder the progress of housing provision and its infrastructural services, as meagre financial resources are collected by the Durban Metropolitan Council.

The absence of infrastructural services particularly in shantytowns encourages filth and makes life hazardous not only to squatters but to the formal residents as well. The absence or the inadequacy of infrastructural services compels Blacks to be sceptical of paying rates in the study area. Blacks also intimate that they will only be prepared to pay rates when infrastructural services are similar to the ones that are provided in the former White areas. However, the repairing of roads in Black townships and the provision of water and electricity in shantytowns is a positive gesture.

A proper management and administration of the housing process was discovered to be dependent on the political initiatives that emanate from the state. The maladministration and mismanagement of the housing delivery process will continue to impinge upon whatever positive plans that are aimed at redressing the ensuing problem. It appears that most urban managers make it difficult for the work of honest managers to become a success. Until such time when all urban managers co-operate and work in harmony without any hiccups, the housing delivery problem could remain unresolved.

The siting of the poor on a hilly terrain seems to be beyond the poor's financial means to utilise hills and construct low cost housing. It is revealed that the construction of housing on a hilly terrain is too expensive for the poor. It is easier for the affluent to make use of hills to construct housing because they can afford such houses. It could then be concluded that it is not fair to the poor to be allocated hilly land because it is beyond their financial means. As long as decision makers do not integrate site and situation within a broader housing delivery framework, the housing delivery problem could remain unresolved and in the process making the Durban Metropolitan area unsustainable. There is evidence that sites with toilets on hills in Black townships will remain vacant for years due to their unpopularity amongst the poor. The siting of the Canaan shantytown near the busy N3 freeway causes accidents which sometimes result in death.

Natural hazards such as landslides, floods, soil erosion, to mention a few, inhibit the provision of housing in the Durban Metropolitan area. This is evident in the Cato Crest area at Canaan where numerous shacks were destroyed by a landslide which occurred in

1997. Such hazards also destroyed the top soil which is an important resource for land allocation, urban agriculture and soil ecosystems. When floods and soil erosion occur, it is not only the top soil that is destroyed. Houses and people are also affected.

The Dumping site that is located in Umlazi is a health hazard not only to the Umlazi residents but to the nearby Isipingo residents as well. The close proximity of such a dumping site to residential areas leads to the unsustainability of the Durban Metropolitan area. Empirical evidence reveals that dumping sites of this nature do deplete the natural environment of Black residential areas to the detriment of the people's health, whilst at the same time lowering the quality of life of the affected residents. It is encouraging that such dumps have since been closed down.

The close proximity of the Merebank residential area near the polluting paper industry at Mondi, which emits effluents into the Umlazi canal, is an environmental hazard. People of Merebank are in danger of contracting respiratory and infectious diseases. Much as we acknowledge the negative effects the dumping sites have on residents, it is worthy to note that some of the poor regard the dumps as playing a positive role in their economic well being.

The researcher discovered that the dump in Umlazi enabled the poor to obtain, amongst other things, plastics and boards, which they sell to township residents. Some residents intimated that they even obtained food from the dump.

There is a growing awareness amongst the poor that industrial effluents degrade the physical environment in their areas. Yet a lower environmental awareness amongst the shack dwellers is disturbing. The high number of non-responses amongst the shack respondents to questions relating to the physical environmental awareness is a cause for concern. The poor cannot be blamed for prioritising development above environmental issues due to their poverty.

Inner city and peripheral squatting plays a pivotal role in degrading the natural environment of the study area. The filth that prevails in squatter settlements such as Canaan and Victoria Street attract house-flies who spread diseases in shack areas. The grime and filth that prevails in shacklands is cause for great concern for environmentalists and urban planners.

The insect pests and animals that exist in shantytowns are a danger to squatters. It could be inferred that the ecological existence of rats and snakes in squatter settlements demonstrates the unsustainable manner in which the shacklands exist.

The absence of proper toilets in squatter settlements leads to faeces being washed away into nearby riverine systems which are ultimately polluted. This is the case in the Umgeni and Isipingo rivers that were empirically observed and investigated. The over-utilisation of space creates overcrowding in shacklands. Overcrowding then leads to

diseases which tend to lower the quality of life of shack dwellers. The spatial juxtaposition of informal traders in close proximity to the Victoria Street squatter camp aggravates the grime problem in the city centre.

It was discovered that most shack dwellers are single or live together as man and woman out of wedlock. The majority of shack dwellers are young adults who aspire to have a formal house of their own, but due to poverty, they resort to squatting. It could then be avered that the unsustainability of the Durban Metropolitan area is sometimes caused by people who do not deserve to house themselves in shantytowns. The majority of squatters have no alternative but to squat in unsustainable shantytowns.

An increase in the city's population compels the poor to squander indigenous resources to the detriment of the physical environment. The pollution that abounds in shacklands is ascribed to the high number of squatters as a result of high fertility rates amongst the poor. The high population growth rates amongst Blacks aggravates the unsustainability of the housing delivery process in the Durban Metropolitan area.

Colonial imperialism, global capitalism, international aid schemes are major independent variables that appear to result in effects such as poverty, unemployment, inequality, shantytowns and environmental degradation. The latter are dependent variables that are interwoven. The hypothesis that the major variables above are the chief causes for the

housing crisis, is partially accepted and rejected. Without identifying the human factor, which is human greed, the researcher cannot fully accept hypothesis I above.

9.2.2. Hypothesis II Findings

Job Creation Initiatives

The majority of lower income respondents hide the fact that they are unskilled labourers. They are embarrassed to reveal their real qualifications in fear of being looked down upon by skilled and more educated workers. The lack of skills amongst the poor hinders job creation initiatives. It is evident that the lack of skills by the poor to create their own jobs hampers whatever plans that are envisaged for the provision of housing for this group. The meagre wages that are earned by the poor render them unable to provide themselves with the cheapest form of conventional housing.

The city's centripetal tendency of attracting the poor to its centre, due to Durban's perceived presence of job opportunities exacerbates the problems of unemployment, homelessness and squatting. The fact that the poor have a low esteem, wherein they believe that they cannot create jobs on their own, compels them to be attracted to the bright lights of Durban.

The self-sufficiency of Blacks will be ensured when they recognise indigenous job creation initiatives. Generally, urban Blacks have a low regard for indigenous technology. Job creation initiatives such as ecotourism, the collection of tins, newspapers, cardboards, plastics, bottles and bottles for recycling in town the cleaning of

riverine systems, parks were discovered that they could all empower the poor economically.

Most houses require a proper infrastructure which act as a supporting system for urban dwellers. Spaza shops that are owned by the poor, telephone booths, vehicles for transporting pupils and students, could all be positive job creation initiatives that were empirically discovered in Black townships. The high unemployment rate requires the above to be fully utilised instead of depending on formal jobs which are declining.

It is evident that when the poor are fully empowered financially through job creation, it could be easy to redress the housing delivery crisis as many of the poor will be able to afford formal housing rather than the unsustainable shantytowns.

The hypothesis that the poor need to concentrate on job creation initiatives that are Afrocentric and indigenous and mostly those Eurocentric strategies that are amenable to the African situation, is fully accepted.

9.2.3. Hypothesis III - Findings

Housing Delivery Strategies

The majority of the better-off squatter settlements are constructed out of mud bricks on the walls and corrugated roofing. Many squatters indicated that they use corrugated iron because they are afraid that if the roofs are thatched, they could easily catch fire.

Nevertheless, the worst shacklands of the Canaan type are made up of anything and are susceptible to fires.

Some squatters who use corrugated iron only indicated that the reason is to safeguard their shacks from being burned down. Though the squatters are aware that corrugated iron shacks are a health hazard because they are too cold in winter and too hot in summer, their disadvantages are outweighed by their advantage of not easily catching fire.

When the poor construct shantytowns they are forced to do so by circumstances beyond their control. They perceive the shacklands as a rationale strategy to provide themselves with affordable shelter. Much as the positive externalities of squatting are known their negative externalities should also be acknowledged.

It could be argued that the mushrooming of backyard structures is a result of the non-delivery of adequate housing to Blacks or the non-satisfaction by the lower income group with small 'match-box' houses of the four-roomed type. The proliferation of backyard shacks and shantytowns could be ascribed to the aspirations by the poor for permanence in the study area. Although the backyard shacks deplete the environment they nevertheless, provide an essential form of shelter for the larger Black families.

The low-cost housing scheme of the four-roomed type plays a crucial role in delivering housing to the lower income group although the rooms are inadequate. It is interesting to note that the respondents who desire better housing other than the so called 'match box'

houses are those with larger families. Others want to migrate to the former White suburbs because of the problems that are rife in Black townships.

It is inhibiting for South Africa to borrow too many ideas from the West, that are sometimes not amenable to the African milieu. There is a general myth amongst urban Blacks that indigenous housing is not suitable for urban areas. Myths of this kind seem to overlook the fact that indigenous housing is cooler in summer and warmer in winter. Urban residents appear as if they do not acknowledge that indigenous housing makes use of cheaper natural resources which are easy to obtain as well.

It should be taken into account that the poorest inhabitants construct indigenous housing not because they like such houses. The poor cannot afford the more expensive Eurocentric housing of the middle income group. It is worthy to note that whilst indigenous housing is looked down upon, it is nevertheless an ideal strategy for the very poor.

Most urban Blacks favour the employment of formal builders who are cheaper and who work over the weekends on a part-time basis. However, it is disturbing to witness a situation where Blacks have lost the communal spirit of the past, where friends and relatives used to help in building operations without any aspirations for gain. This appears to affirm the Africanist-thesis that a perception exists that Whites destroyed the cultural values of Blacks through colonial and imperial capitalism.

There is a general perception amongst urban Blacks that when respondents request help from their neighbours, friends, or relatives, they are going to be viewed as inferior financially. The inability of Blacks to revitalise the communal spirit of the past seems to hamper the delivery of housing in the Durban Metropolitan area. The individualism that was entrenched by the invasion of Whites in Africa destroyed the communal spirit of the African people.

Most of the community-based housing delivery strategies are not fully controlled by the people on the ground, but are state-driven, such as in the case of Masakhane. This does not empower the disadvantaged in the true sense of the word. Nevertheless, the state-driven People's Housing Process (PHP) as seen at Newlands East appears to be a success. An empirical exploration of this area revealed that when people arrive here they construct housing of a temporary nature, the shantytowns. After a few months the shacks are transformed into block housing. Another success story is the Malukazi housing project near Umlazi.

Sites with pit toilets are unpopular as a housing strategy for the poor. That is why most of them remain vacant for years in Black townships. The CC section in Umlazi is a good example of such a housing strategy. Another reason for their unpopularity is that most of them are located on hilly terrains, which are not ideal for the construction of low-cost housing.

The chemicals that are used in such toilets are too expensive. These chemicals are an environmental hazard as they pollute the top soil. Unless such sites are provided with water borne toilets, they will remain vacant for a long time, whilst lowering the delivery of low cost housing to the poor.

The hypothesis that we need to look for housing delivery strategies that are Afrocentric, as well as those Eurocentric ones that are compatible with the African situation, appears to be accepted. It should be realised that the very poor cannot afford the Eurocentric housing delivery building materials because they are too expensive.

9.3. CONCLUSIONS

9.3.1. Hypothesis I - Conclusions

Regarding the primary objective which aims to discover the cause-effect relationships which impact upon a sustainable housing delivery process, the following conclusions are drawn :

- Whilst it is acknowledged that the housing delivery problem is a result of colonial capitalism, empirical evidence in this thesis points in a different direction. Data seems to identify the human element as contributing to the inadequacies of colonial capitalism. The fact that most Blacks lack a capacity for self-examination is indicative of the human element as playing a pivotal role in capitalism's deficiency. Humans seem to forget that some of the faults such as greed, corruption, crime to mention just a few, are of their own making.

The fact that capitalism is a product of human engineering is proof of the greed of capitalists who create artificial resource scarcities for their own benefit. When the marginalised seek for cheaper alternatives, whereby they construct shantytowns, which render the Durban Metropolitan area unsustainable, they are employing a rational calculus to provide themselves with affordable form of shelter.

Previous research by Gumbi (1995) concluded that the endemic poverty amongst the marginalised compels them to be housed in shacklands as a last resort. But in this thesis, it is interesting and worthy to note that it is not only poverty that results in the proliferation of squatter settlements in the study area. Some of the squatters originate from formal houses where they migrate to shantytowns in search of independence from strict parents who do not approve of their children staying in their homes out of wedlock.

It was discovered that some of the residents who stay in the site-and-service scheme at L Section in Umlazi own middle income houses. There is evidence that the site rather than poverty compels some residents to occupy site and service scheme which is supposed to be occupied by the poor. This proves that even some of the middle income residents who are unable to obtain middle income sites opt for a site and service scheme.

When the urban managers in the public and private sectors fail to meet the housing needs of the very poor, but succeed in meeting the housing needs of the affluent, they appear to collude with each other to exploit the poor. The corruption that prevails when housing

delivery resources are allocated where friends and relatives are preferred, is ascribed to the greediness and nepotism exhibited by housing managers.

9.3.2. Hypothesis II – Conclusions

Whilst it is the objective of the investigator to discover strategies that will empower the disadvantaged through Afrocentric job creation initiatives it should be borne in mind that

whatever Eurocentric strategies that are implemented should be those that are amenable to the African milieu.

Blacks will only be empowered in the true sense of the word if they are enabled to be self-sufficient financially. Self-sufficiency has to go hand in glove with self-examination. The traditional “blame-the-Whites” syndrome appears to constrain whatever job creation strategies that are being implemented.

As soon as Blacks start viewing Afrocentric job creation initiatives such as crafts industry, building material industry, urban agriculture to mention just a few, their empowerment could be possible. Blacks should make an effort to create Afrocentric jobs as well as those Eurocentric jobs that will be compatible with the the African situation in a sustainable manner. In that way the lives of current and future residents of the Durban Metropolitan area will not be compromised.

9.3.3. Hypothesis III – Conclusions

The recognition by all housing delivery stakeholders that the African environment and its cultural aspects play a crucial role in the study area could be a viable mechanism to make the study area a sustainable area to inhabit. In an endeavour to arrive at reliable conclusions the following information is revealed. Physical elements such as site and situation, housing densities, ecological interactions between animate and inanimate things should be considered if we aspire for a sustainable housing delivery process in the Durban Metropolitan area. The physical elements play a role in shaping housing delivery systems. For instance, steep slopes and hills are too expensive for the establishment of low cost housing. Informal settlements that are established near riverine systems seem to be unsustainable because the rivers are polluted by the squatters.

Whilst it is acknowledged that indigenous housing is affordable to the very poor it should be taken into account that such a strategy is unpopular amongst Blacks. The sweat equity strategy, where friends and relatives help in building operations to decrease building costs, appears to be under-utilised in the study area, whilst community-based strategies such as Masakhane are not fully controlled by the people on the ground. Sites with pit toilets are unpopular and are detrimental to the physical environment. Chemicals that are used on them are expensive and also pollute the top soil.

The above conclusions are an effort by the researcher to obtain the gist of what emanates from the findings of the entire thesis. Whatever is left behind is considered as less important by the investigator.

9.4. RECOMMENDATIONS

The recommendations that are given below are an effort to resolve the housing delivery crisis in the Durban Metropolitan area. There is hope that some of the recommendations may contribute towards the resolution of the housing delivery crisis if they are put into practice. The investigator believes that such recommendations should not be taken as a finality. The recommendations read as follows :

9.4.1. Cause-Effect Recommendations

The globalisation of capital should be seen to be resolving the housing delivery crisis by channelling resources from the haves to the have-nots. A need to adapt a mixed economic strategy, due to the failure of the market forces, to deliver housing, has become imperative. It is further recommended that the government should weigh the pros and cons of the GEAR economic strategy, if economic development is to be a success in the study area, for the betterment of a viable housing delivery process as well as a sustainable Durban Metropolitan area.

There is a need to include more land allocation experts if the process is to be speeded up. Inadequate staff that is employed to allocate land appears to slow down the land allocation process to the disadvantage of providing land and housing to the landless and the homeless. It is recommended that a bridge is constructed across the Izimbokodwe river near section BB in Umlazi. This could provide more land from the KwaMakhanya reserve to the most populous township in the study area. The entire boundary of the

Durban Metropolitan area should be extended to the peripheral rural areas, as long as the Zulu King is consulted in this matter.

Some of the recommendations that were given by respondents are as follows :

- The landless should be appropriated unused state land. In other words, illegal land invasions will be a thing of the past if current land that is occupied by squatters is legalised.
- The employment of land allocation consultants who charge exorbitant fees should be curtailed, as this consumes funds allocated for land appropriation to the landless.
- Local authorities should identify habitable land around Durban and allocate it to the landless as a matter of urgency.
- People who have already invaded land illegally should not be relocated unless the land which they occupy is unstable, or if alternative accommodation is not provided.

Banks should make an attempt to grant low cost housing loans to the poor if they are to be part of the solution rather than a problem. Banks survive by accumulating profits from civil society. This compels banks to plough back some of their profits by granting the so-called unprofitable low cost housing loans to the poor. When the lending institutions are humane enough to grant low cost loans to the poor, the housing delivery problem could be a thing of the past. As a way forward towards redressing the corruption problem

amongst state officials, the following measures were empirically attained and recommended :

- Officials should be monitored periodically
- Officials should be employed on merit rather than on cronyism and nepotism
- Stiffer sentences for the guilty offenders should be meted out. As Ramphele (1998) argues that it is no use for the guilty parties to be exposed and then get light sentences.

- Housing officials should be reshuffled periodically and should sign honesty pledges.
- Transparency could be effected by involving community representatives as watchdogs.
- Commissions of inquiry on all housing scams should be set up.
- It is imperative for the government to become the servant of the people, not vice versa (Sunter, 1988), if we aspire to curb corruption in the housing department of the Durban Metropolitan area.

Whilst it is revealed that the majority of Blacks do not pay rates to the disadvantage of the city's revenues due to the poor state of infrastructural services in Black townships, it is recommended that the Durban Metropolitan Council should see to it that Black townships are provided with adequate infrastructural services if it aspires to accumulate

enough revenues for the city's improvements. In addition the infrastructural services should be similar to those that are provided in the former White suburbs.

It is recommended that government officials responsible for the administration and management of the housing delivery system should ensure that their managerial skills are up to standard. Political initiatives that emanate from the state to ensure a proper administration and management by housing managers will go a long way in making the housing delivery process a success in the Durban Metropolitan area.

Flat sites should be allocated to the poor because steep sites are too expensive to construct conventional housing. Housing not far from workplaces and the city centre should be constructed for the poor in an effort to save on transport costs. Land that is susceptible to natural hazards should be identified and be made known to the poor. Such land should be declared as "no man's land".

The dumping of waste near residential areas should be stopped because the waste is hazardous to the people and the environment. People should not use dumps for their economic well-being.

- Environmental education rather than the cleaning of the environment will ensure a sustainable Durban Metropolitan area as people will learn to keep the environment neat. Environmental education is the key towards a sustainable delivery of housing in the study area.

- There is a need for the Durban Metropolitan Council to demolish the worst shantytowns of the Canaan type as they pollute the physical environment. However, it should be borne in mind that alternative accommodation should be made available before shacks are destroyed. The better-off shacks need upgrading and the provision of infrastructural services. Low shack densities will curb the spread of fires and infectious diseases.

9.4.2. Job Creation Recommendations

It appears that too much democracy creates laxity amongst some of the people of South Africa. There seems to be a low work ethic amongst some of the country's people.

Much as we espouse a democratic order, we cannot hope to resolve urban problems if we do not adopt some form of authoritarianism in some aspects of our lifestyles such as high work ethics and respect for the laws of the country.

A lazy nation cannot expect to progress economically while a crime-ridden one can also not hope to attract foreign capital to South Africa. South Africa needs to take a leaf from the Asian Tigers, whose governments stamped authority on the governance of their peoples.

A democratic government has created a class of people who take things for granted.

Some people expect the government to do things for them. Such a class of people believe that because they voted for the ANC government to be in power the government therefore owes them.

Black people with the knowledge of how to make use of the craft industry to make beads, grass-mats, hats, wooden spoons, trays, clay pots and many other things, should train the unemployed urban Blacks to explore ecotourism for their own financial benefit.

The utilisation of the top soil with a little bit of cement could make strong Afrocentric bricks for the informal building sector, where people could own small scale businesses, thus creating jobs for the millions who are unemployed in the study area.

A building material factory near natural systems such as a forest, a quarry and a river could provide jobs and funds for formal housing. Such a business should guard against the over-utilisation of the indigenous building materials if the poor aspire for a small scale sustainable building material business venture. This strategy could be copied by others who stay near rivers.

An appropriate housing infrastructure entails the subordinate parts that go hand in hand with housing. Amongst others, drinking water pipes and taps, sewerage, roads, electricity, schools, churches, playgrounds, transport means in the form of buses, taxis, private vehicles are all essential infrastructural services. Shops, telephones, clinics are other elements of the housing infrastructure that could be owned by Blacks.

It is interesting to know that the Durban Metropolitan Council has given tenders to Blacks to read electricity meters. What is worrying is that the meter readers estimate high figures to the detriment of the resident's finances. Some residents owe as much as

R10 000 for water. What is surprising is that water costs seem to be higher than those pertaining to electricity. As long as the meter readers give correct figures jobs could be created.

There are township residents who own public telephone booths, taxis and vans which all create jobs in Black townships. School children are transported by means of vans to school. Such job creation initiatives need to be properly controlled in a professional manner, if it is hoped that they provide jobs for the unemployed residents. Other people could be involved in the cleaning of rivers, collections of tins, bones, papers, bottles and plastics for recycling in town.

A developing nation like South Africa needs to prioritise the acquisition of technical skills rather than the current emphasis on academic education. A need to revamp the entire educational system of the country has become imperative so as to produce enough skills-oriented workers. This could resolve the problem of the unemployed and unskilled workforce, which can ultimately be able to provide itself with funds for housing. It is encouraging that something is being done to revamp the educational system in South Africa.

9.4.3. Housing Delivery Recommendations

A thorough investigation of the site is essential for construction purposes. It could be to the benefit of all if all vacant land parcels are thoroughly investigated before hand if the Durban Metropolitan local Council aspires to prevent the proliferation of shantytowns on

risky land. It is further recommended that top soiling and grassing will prevent soil erosion in the study area especially in hilly and unstable areas like the Canaan shackland. The relocation of inner city squatters to proper residential areas could keep the city centre clean for the sake of tourism.

Infectious diseases and accidental fires could be curbed by lowering shack densities in shantytowns which are better-off while the worst shacklands are demolished. There is evidence that high housing densities spread infectious diseases and fires.

Close co-operation and consensus between central, provincial and local government structures could ensure a successful delivery of housing in the study area. This could lead to effective and efficient management and administration of the housing provision process in the Durban Metropolitan area.

Deducing from the contrasting views with regard to foreign aid and debt relief, it is recommended that the IMF and the World Bank do grant aid to South Africa without any ulterior motives. On the evidence that South Africa does not deserve debt relief, because most of the debt was accrued after 1994, the investigator recommends minimal debt relief that was accrued during the apartheid era. The investigator therefore recommends that R90 million that was accrued during the apartheid rule be scrapped. Some of the money could be allocated to the national housing ministry until some of it reaches the Durban Metropolitan council.

It is recommended that the government and environmental officials educate Blacks so that they adopt a positive attitude towards environmental issues. Blacks should recognise the significance of the African environment and its related building materials that they play a crucial role in the delivery of affordable and sustainable housing particularly to the very poor. Whatever Eurocentric building strategies and materials that are used should be those that are compatible with the African situation.

It is recommended that Blacks go back to their roots which were communal in nature. Blacks should revisit the sweat equity strategy where friends and relatives give a helping hand in building operations so as to lower building costs. Much as we acknowledge that some Blacks make use of Afrocentric “stokvel” concept whereby they pool together their financial resources, there is very little evidence that this strategy is fully utilised in the provision of housing.

Black communities should take charge of their social and economic life if they aspire to empower themselves in the true sense of the word. This could be done primarily through their own local efforts and through local community participation in all stages of goal selection, mobilisation of resources and executions of projects (Jeppe cited in Coetzee and Graaff, 1996). It is discouraging to discover that very few Blacks have already taken charge of their social and economic life.

It is essential for decision makers in the Durban Metropolitan area to ensure that the poor are fully involved in the decision making process with regard to the utilisation of the cultural and physical diversity of the city for the poor’s economic empowerment.

Through an integrated development approach, which considers the sustainability of Durban's natural environment, together with the cultural and economic systems, it could be possible to empower the disadvantaged.

The recommendations above are an attempt to contribute to the already existing body of geographic knowledge. It is hoped that the recommendations will come to the notice of all housing and environmental stakeholders.

9.5. PROBLEMS EXPERIENCED

Initially, the investigator wanted to execute a probability sampling technique of 150 respondents. Due to the poor responses during a pilot inquiry, particularly amongst the shack respondents, it became clear that only non-probability was going to be used successfully. While the researcher aimed at conducting research of at least 30 respondents for each housing class, it was again impossible to achieve this amongst the squatters. The majority of the non-responses amongst the lower and lowest income groups were caused by the fact that the poor do not want to involve themselves in something that they perceive to be disadvantageous to them. Only 20 respondents out of the targeted minimum of 30 were able to answer the questionnaire amongst the shack dwellers.

However, the few respondents that were able to answer the questionnaire amongst the squatters outweighed the possibility of obtaining zero responses amongst this class.

Another problem was that few respondents amongst the three classes interviewed were

prepared to give their own views other than those alternatives given by the researcher. The lower and lowest income groups who are the ones that experience the worst housing delivery problems contributed very little towards the resolution of the problem. Instead, the group that is perceived to be better-off, the middle income group contributed a great deal towards the resolution of the housing delivery problem. This is ascribed to the lower quality of the lower and lowest income group questionnaire, while that answered by the middle income group was of a higher quality.

Nevertheless, the little that was contributed by the poor played a vital role towards the relative success of this study. It is high time that research should be conducted in such a way that it is not perceived by Blacks as something done for the benefit of Whites at the expense of the poor. Most Blacks were not satisfied by the ANC administration which in 1994 promised to grant the poor housing but in vain. It is evident that research is perceived by Blacks as a waste of time because of the failure of the public and private sectors to provide affordable housing to the homeless.

Mechanisms have to be put in place whereby the poor should be fully involved in research, if it is hoped to resolve the housing delivery problem in the true sense of the word. Whilst the vital role that is played by the middle income group with respect to the relative success of this study, is acknowledged it should be borne in mind that real answers to the problem will emanate from the group that actually experiences the worst housing delivery problem.

When the Cato Crest residents were visited it was discovered that more than half of the shack dwellers had already been relocated to Newlands East. The investigator had no alternative but to depend on the respondents from Power and V6 shantytowns in Umlazi. It was problematic to obtain respondents from an area where subjects were expecting to be relocated anytime.

9.6. **FUTURE RESEARCH DIRECTIONS**

It could be to the benefit of future research for housing delivery investigations to ensure that problems encountered in this study are avoided. A need for the more scientific probability sampling procedure is essential. Time is over when housing delivery issues were perceived as *primarily economic issues that are divorced from the environmental ones*. There is a need for future researchers to examine the human elements that impact upon housing delivery and the sustainability of the study area. Social scientists of the future need to acknowledge that the housing delivery problem is beyond the scope of economics.

Future social scientists need to go beyond the conventional socio-economic analysis of *housing delivery issues and begin to delve deeply into the anthropogenic and environmental elements that are interwoven with socio-economic aspects*. The cultural environment of Africa needs to be probed deeper than what have been discovered in this thesis. It is hoped that the investigation lays a foundation for the more successful studies in future which emphasise on the sustainability of the study area.

9.7. CONCLUSION

The thesis has made an effort to resolve the delivery of housing without forgetting that the Durban Metropolitan area remains sustainable. It is evident that the primary hypothesis that colonial capitalism is the major cause for the housing delivery crisis, is partly to be blamed. It is argued that colonial capitalism gives rise to other cause-effect relationships. The fact that colonial capitalism is human engineered, the human element is therefore primarily blamed above the colonial capitalistic one.

Blacks will only be fully empowered if they revisit their cultural roots and inculcate ethics of self-examination and hard work, if they aspire to empower themselves with housing of the conventional type. This will enable Blacks to acknowledge that some of the housing delivery-related problems are of their own making.

In conclusion, the utilisation of the African environment in whatever job creation and housing delivery strategies that are implemented, should be those that lead to a sustainable Durban Metropolitan area. This will ensure that the lives of current and future generations are not compromised.

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APPENDIX A

UNIVERSITY OF ZULULAND

DEPARTMENT OF GEOGRAPHY

DURBAN - UMLAZI CAMPUS

Research Project Questionnaire – B.B. Gumbi (1998)
For a PhD Degree

QUESTIONNAIRE FORMAT

FOR THE MIDDLE INCOME GROUP

1.1. DECLARATION OF CONFIDENTIALITY

- ** The questionnaire is designed as an endeavour to obtain the viewpoint of the people on the ground who are/or have been affected directly by the housing delivery crisis and its environmental problems.
- ** This questionnaire is purely for Research purposes. It is by no means a test or an examination. therefore, all answers are correct. The investigator appeals to you to give your views on the housing delivery-related problems. He needs your perception of the situation. All information obtained will remain strictly confidential, and under no circumstances will it be used for any other purpose other than the one specified.
- ** You may give answers in the order of importance.

1.2. APARTHEID LEGACY – RELATED FACTORS ON HOUSING DELIVERY

1.2.1. How does the legacy of apartheid impact upon the delivery of housing in the Durban Metropolitan ?

1. Long and costly commuting distances from the Black Townships	
2. Apartheid capitalism	

3. Scarce housing delivery resources amongst the poor	
4. (1,2,3) above	
5. Other (specify)	

1.2.2. Why is the state unable to solve the housing delivery problems ?

1. Mismanagement and maladministration of the housing process	
2. Corruption by state officials	
3. Lack of sufficient funds	
4. Bureaucratic red-tape by private and public sector officials	
5. Other (specify)	

1.2.3. How should the state facilitate the allocation of land to the landless ?

1. By employing knowledgeable and efficient officials	
2. By making use of the funds allocated to the process	
3. (1 and 2)	
4. Other (specify)	

1.2.4. Where about in Durban could land be obtained for the allocation to the Landless ?

1. Greenbelt	
2. Neighbouring White farms	
3. Former Ingonyama Trust Land near Black townships	
4. Other (specify)	

1.2.5. How could the appropriation of land to the poor solve the delivery of housing in the Durban Metropolitan ?

1. By ending bureaucratic inertia	
2. It could encourage home ownership	
3. The squatting phenomenon could decrease	
4. It could curb official corruption	
5. All the above	
6. Other (specify)	

1.2.6. What political initiatives could the state create for a successful delivery of housing in the Durban Metropolitan ?

1. Facilitate a climate of political tolerance	
2. Combined efforts by the three tiers of government i.e. Central, Provincial and Local	

3. Reconstruction of the apartheid city	
4. Speeding up the land allocation city	
5. Other (specify)	

1.2.7. Which political strategies could be implemented by the state to encourage the delivery of housing by the people on the grass root level ?

1. By empowering the grass-roots in the actual political sense	
2. The Central Government should ensure that the Local Government is totally committed to solving the housing delivery process	
3. Political empowerment of women	
4. (1, 2, and 3) above	
5. Other (specify)	

1.2.8. How does the legacy of colonialism impact upon the housing delivery process in Durban Metropolitan ?

1. By entrenching apartheid capitalism	
2. Resource inequalities	
3. (1 and 2) above	
4. Other (specify)	

1.2.9. Which political effects have led to the unsustainability of the housing Delivery process in Durban Metro ?

1. Prioritisation of politics above the environment	
2. The over exploitation of natural resources by foreign nations	
3. (1 and 2) above	
4. Other (specify)	

2. SOCIO – ECONOMIC FACTORS

2.1. How does the growth employment and redistribution GEAR economic Strategy influence housing delivery in Durban Metropolitan ?

1. Weakens civil society	
2. Creates joblessness and poverty	
3. Creates jobs and affluence amongst all	
4. Favours the wealthy	
5. Other (specify)	

2.2. What is the cause of the high rate of unemployment in the Republic of South Africa ?

1. Apartheid legacy and job reservation	
2 GEAR and market principles	

3. Low income growth	
4. All the above	
5. Other (specify)	

2.3. Which people are usually granted housing loans by the lending Institutions ?

1. Middle income group	
2. State employees	
3. Some private sector employees	
4. All of the above	
5. Other (specify)	

2.4. Why do financial institutions have reservations with regard to the granting of housing loans for low-cost housing ?

1. Unprofitability of low-cost loans	
2. Occasional rent boycotts in Black townships	
3. Townships are regarded as high risk areas	
4. Other (specify)	

2.5. What mechanisms can be devised by the Durban Metro Housing Department to low-cost housing by the lending sector ?

1. By Banks	
2. Ensure that low-cost home owners pay their instalments regularly.....	
3. Ensure that Banks do not redline the poor	
4. Other (specify)	

2.6. To what extent should the International Lending Institutions be involved in the housing delivery ?

1. Should grant financial aid to developing countries without ulterior motives	
2. Should cancel international debt in RSA	
3. Should not be involved in RSA due to its past failures in Africa	
4. (1 and 2)	
5. Other (specify)	

2.7. How do corrupt housing delivery officials aggravate the housing delivery crisis in the country ?

1. They embezzle state funds	
2. They grant state funds to relatives and friends	
3. (1 and 2) above.....	

4. They employ friends and relatives in good jobs	
5. Other (specify)	

2.8. How do corrupt housing delivery officials aggravate the housing delivery crisis in the country ?

1. Sack the corrupt officials	
2. Imprison officials concerned	
3. (1 and 2) above	
4. Other (specify)	

2.9. What is the effect of crime on squatter settlements?

1. Harbour criminals	
2. Conflicts over scarce resources	
3. (1 and 2) above	
4. Other (specify)	

2.10. To what extent does unemployment impact upon the shortage of formal housing in the study area ?

1. Results in shantytowns and slums	
2. Leads to illegal invasions of vacant land	

3. (1, 2) above	
4. Other (specify)	

2.11. What are the main arguments by township residents who are against the payments of rates ?

1. Poverty	
2. Worst state of existing housing infrastructure in Black townships	
3. Absence of adequate infrastructure	
4. (1, 2 and 3) above	
5. Other (specify)	

2.12. Between Capitalism, Socialism and Mixed Economics which strategy suits the South African situation ? Give reasons.

1. Capitalism	
2. Socialism	
3. Mixed Economics	
4. Other (specify)	

.....	
.....	
.....	

3. CULTURAL-ENVIRONMENTAL FACTORS AND NATURAL BUILDING MATERIALS FOR HOUSING DELIVERY

3.1. How do Blacks perceive the construction of low-cost housing by main use of indigenous building materials in townships ?

1. Blacks are in favour of indigenous housing	
2. Blacks view indigenous housing as unsuitable for cities	
3. Other (specify)	

3.2. How do Blacks help each other in the building of houses ?

1. They rarely help each other	
2. They utilise the sweat-equity strategy	
3. Some employ informal builders	
4. They construct housing themselves	
5. Other (specify)	

3.3. Which building strategies are common amongst the poorest of the poor ?

1. Self help low cost housing (formal)	
2. Informal shantytowns i.e. wood, mud and corrugated roofing :	
3. Worst shantytowns where anything is used as building material:	
4. Other (specify)	

3.4. How can the philosophy of 'Ubuntu' be of benefit to the housing delivery process in the Durban Metropolitan?

To indicate love for 'mankind' and a love for helping the poor	
'Ubuntu' is irrelevant to the housing delivery issue	
(1 and 2) above	
Other (Specify).....	

3.5. Which community based housing delivery strategies can be devised in the Durban Metropolitan?

State-driven strategies i.e., Masakhane	
NGO – driven mechanisms...	
(1,2 and 3) above...	
Other (Specify)...	

3.6. Which housing delivery-related job creation initiatives, that take into account the utilisation of the African environment can be devised?

1. Building material industry eg. Wood-making, brick and block making, thatching, etc.	
2. Housing infrastructure jobs, i.e. quarrying, electrification, Plumbers etc.	
3. Crafts Industries...	
4. All of the above	
5. Other (specify)...	

3.7. What is the attitude of urban Blacks with regard to the sustainability of the natural environment ?

1. Positive	
.....	
.....	
2. Negative	
.....	
.....	
3. Blacks prioritise development above environmental issues	
.....	
.....	
4. Blacks prioritise environmental issues above development	
.....	
.....	
5. (1 and 4) above	
.....	
.....	
6. (2 and 3) above	
.....	
.....	
7. Other (specify)	
.....	
.....	
.....	

3.8. How has unsustainable housing development marginalised the poor ?

1. Mushrooming of shacks along with environmental degradation	
.....	
.....	
2. Spread of diseases in shacks and the lowering of the quality of life of all Durban residents	
.....	
.....	
3. Housing delivery process is sustainable	
.....	
.....	
.....	

4. (1 and 2) above	
5. Other (specify)	

3.9. How does inner city decay impact upon sustainable housing delivery ?

1. Brings diseases to inner city	
2. Discourages tourism	
3. Pollutes the inner city	
4. All of the above	
5. Other (specify)	

3.10. What measures can the Durban Metropolitan Council devise to redress inner city squalor ?

1. Demolish inner city shacks and relocate squatters to healthy areas	
2. Re-introduce laws restricting inner-city squatting	
3. Allow the poor to invade the inner city so as to allow them to be nearer the core area	
4. Other (specify)	

3.11. What measures can be implemented by the Durban Metropolitan Council to inculcate environmental awareness amongst the poor ?

1. By educating the poor community	
2. By improving the living conditions of squatters	
3. (1 and 2) above	
4. Other (specify)	

3.12. What strategies can be put in place by the Durban Metropolitan Council to ensure that residential development is planned in accordance with relationship to the wider Metropolitan systems ?

1. Integrate residential growth with industrial, commercial and service provision	
2. Ensure the Durban Metropolitan open spaces' system (D'Moss) does not interfere with land earmarked for housing development	
3. Rehabilitate built structures i.e. old vacant buildings in inner city	
4. All the above	
5. Other (specify)	

3.13. How can the green belt be utilised for the sake of introducing sustainable housing development in Durban ?

1. Metropolitan Council to allocate some land for low-cost housing	
2. To ensure that natural eco-systems i.e. rivers, forests, lakes, grasses are retained without destroying them	
3. Discourage squatting	
4. (1,2 and 3) above	
5. (1 and 2)	
6. Other (specify)	

3.14 What mechanisms can be devised by the Metropolitan Council to highlight to the poor that the degradation of the natural environment has major implications for the sustainability of the city's economic and social systems ?

1. By quoting concrete evidence in squatter settlements where filth degrades the city's landscape	
2. By making the people aware that filth causes diseases	
3. (1 and 2) above	
4. Other (specify)	

3.14. What is your perception with regard to the upgrading of informal Settlements ?

1. They should be demolished rather than being upgraded	
2. They are an important element in strategy of sustainable housing delivery	
3. Other (specify)	

3.16 What is your view on pit latrines ?

1. They are alright for the poor as they are cheaper to build	
2. Pit latrines chemicals are too costly to purchase and they usually overflow soon after installation	
3. Chemicals used pollute the soil	
4. (2 and 3)	
5. Other (specify)	

3.17. How can crafts industry play a role in housing development?

1. By empowering the grass roots to obtain funds by selling wares made up wood and grass	
2. People should be educated to utilise the natural resources without destroying them	

3. People should leave the environment intact in its original state	
4. (1 and 2)	
5. Other (specify)	

3.18. What are advantages of Durban over other South African towns as a Tourist destination ?

1. Indian Ocean and its	
2. A diversity of flora and fauna	
3. The natural environment attracts tourists	
4. Other (specify)	

THANK YOU FOR YOUR CO-OPERATION

APPENDIX B

UNIVERSITY OF ZULULAND

DEPARTMENT OF GEOGRAPHY (DURBAN - UMLAZI CAMPUS)

Research Project Questionnaire - B.B. Gumbi (1998)

for a PhD degree

QUESTIONNAIRE FORMAT

FOR THE LOWER INCOME GROUP

1.1. DECLARATION OF CONFIDENTIALITY

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- ** You may give answers in order of importance

DATE :

year year month month day day

--	--	--	--	--	--

Questionnaire no.

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1. Where do you Live in the Durban Metro?

1.
2.

2. Marital Status

1. Married
2. Single
3. Divorced
4. Widowed

3. How old are you?

1. 20 - 30	.....
2. 30 - 40	.....
3. 40 - 50	.....
4. 50 - 60	.....
5. Over 60	.....

4. What is your occupation?

1. Unskilled	.....
2. Skilled	.....
3. Semi-skilled	.....
4. Housewife	.....
5. Retired	.....
6. Unemployed	.....
7. Self-employed	.....
8. Manual labourer	.....
9. Clerical	.....
10. Technical	.....
11. Administrative	.....

5. Do you stay in your own house?

1. Yes	.....
2. No	.....
3. Other (specify)	.....

6. Do you need a house?

1. Yes	.....
2. No	.....
3. Other (specify)	.....

7. Are you employed?

1. Yes	
2. No	
3. Self-employed	

8. Who built your house for you?

1. I inherited it	
2. I bought it	
3. Friends and relatives helped	
4. By informal builders	
5. Employed Formal builders	
6. Other (specify)	..... .....

9. Are you satisfied with the house you have?

1. Yes	
2. No	
3. If No. give reasons	..........
4. Other (specify)	

10. Are you a permanent resident in the Durban Metropolitan area?

1. Yes	
2. No	
3. Not sure	
4. Other (specify)	..... .....

11. Do you think that the Government subsidy is important in resolving the Housing delivery problems?

1. Absolutely important	.....
2. Important	.....
3. Not important	.....
4. Not sure	.....

12. Should the Government encourage the Banks to give low cost housing loans?

1. Yes	
2. No	
3. Not sure	
4. Other (specify)	..... .....

13. Have you ever applied for a housing subsidy?

1. Yes	
2. No	
3. Granted	
4. Rejected	
5. Other (specify)	..... .....

14. Do you need a housing loan/subsidy?

1. Yes	
2. No	
3. Not sure	

15. By whom were you subsidised?

1. Government	
2. The company	

16. Are you satisfied with the housing delivery?

1. Very satisfied	
2. Satisfied	
3. Not sure	
4. Minimally satisfied	
5. Not satisfied	
6. Other (specify)	.....

17. What are the causes of slow delivery of houses?

1. Poverty among Blacks	
2. Unemployment (have no money)	
3. No subsidy from Government	
4. No loans from Banks	
5. Expensive building materials	
6. High costs of builders	
7. Lack of land	
8. Other (specify)	

18. Why do Banks and Building Societies grant loans to certain type of people only (e.g. elite, well-to-do etc)?

1. Do not trust the poor	
2. Sure their money will bring dividends	
3. Sure of regular payments of instalments	
4. Other (specify)	..... .....

19. What is the condition of the area in which you live?

1. Too much crime	
2. Roads badly managed/no roads	
3. No electricity	
4. No garbage removals	
5. No sewerage system	
6. No clean water supply	
7. Other (specify)	..... ..... .....

20. What type of houses would you prefer?

1. Soil and mud houses	
2. Grass-thatched houses	
3. Corrugated shack houses	
4. Other (specify)	..... .....

21. Are you in favour of shack settlements?

1. Yes	
2. No	
3. Not sure	
4. Other (specify)	..... .....

22. How do shack settlements encourage litter pollution?

1. Lack of litter bins	
2. Apathy	
3. Ignorance	
4. No accountability	

23. What must the shack dwellers do to keep their environment/surroundings healthy?

1. Become aware of their surroundings	
2. Report any criminal activities in their areas	
3. Discourage littering of any kind	
4. Become involved in decision-making	
5. Must learn to manage resources well eg. water, trees, electricity etc.	
6. Encourage cleaning campaigns	
7. Other (specify)	..... .....

24. Should the squatter settlements be upgraded?

1. Yes	
2. No	
3. Not sure	
4. Other (specify)	

25. The poor should make use of natural environment for self employment

1. Carving of wood	
2. Making of straw hats, mats etc	
3. Clay ornaments	
4. Other (specify)	..... .....

26. What are your views on Canaan shack settlements and its people?

1. The area is too risky	
2. Too close to the Umngeni	
3. Too exposed to accidents on freeway	
4. Lowering of quality of life fo all residents	
5. Other (specify)	..... .....

27. What are your feelings about the bridge dwellers?

1. They have no choice	
2. They are okay	
3. Their lives are in danger	
4. They pollute the area	
5. Are exposed to all types of danger, diseases, mugging, floods, robbery etc.	
6. Must be taken care of by Government	
7. Other (specify)	..... .....

28. What is the local Council's responsibility to squatters?

1. To deliver services	
2. To reduce health hazards conditions	
3. To educate them about cleanliness	
4. Other (specify)	..... .....

29. Do the following problems require Council's attention?

1. Rising crime	
2. Unemployment	
3. Street children	
4. Lack of proper accommodation	
5. Pressing needs of the squatters?	
6. Some of the above	
7. All of the above	

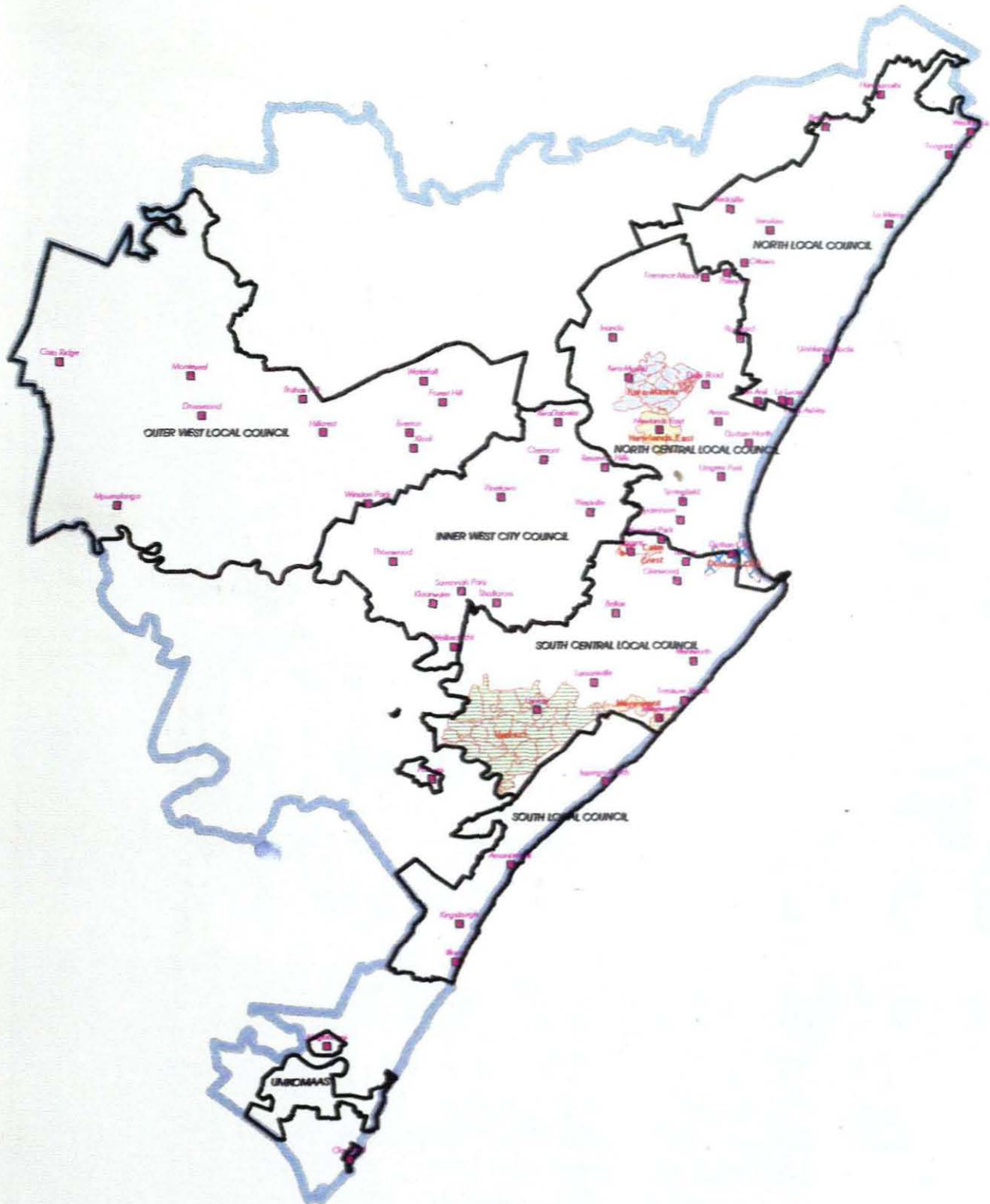
30. Do you have any suggestions that may facilitate the delivery of low-cost housing for squatters?

1. Demolishing of shack dwellings	
2. Discourage further erection of shacks	
3. Hinderance of squatting in the city centre by harassment	
4. None of the above	
5. All of the above	
6. Other (specify)	..... .....

APPENDIX C

THE DURBAN METROPOLITAN AREA

Place Names



Date: 03-01-2007
Reference: CST/Urban 01



Development Planning
Development Information Services
Central Region
Newcastle

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1:400000



Kilometres

Legend:



Source:

Department of Environmental Affairs and Tourism
2004-01-15, 2004-01-15, 2004-01-15

