# PROVISION OF HOUSING AND QUALITY OF LIFE: THE GEOGRAPHIC STUDY OF EXTENSION 44 IN THE POLOKWANE MUNICIPALITY

Ву

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#### DISSERTATION

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**JULY 2021** 

### **DECLARATION**

I declare that the dissertation hereby submitted to the University of Limpopo for the
degree of Masters in Geography and Environmental Studies has not been previously
submitted by me for a degree at any other university; that it is my own work in design
and execution, and that all material contained therein has been duly acknowledged"
Signature
Date

#### **ABSTRACT**

The study focuses on Extension 44 in the Polokwane, an exclusively Black urban Township defined as a liveable geographical space consisting of both activity and awareness space (perpetual) space. Central to this research is its origins and existence as part of the urban racial spatial organization of Polokwane Municipality, viewed in terms of the Colonial, Apartheid and the traditional theoretical models depicting the internal structure of urban centres, including how it fits into the post-Apartheid urban planning policies, the provision of housing (types and quality), including the availability of physical and social infrastructure, how the residents perceive and evaluate these in relation to the residents' quality of life in that area. The questions raised are (i) when and why was Extension 44 in the Polokwane municipality established? (ii) Who provides what type and quality of housing in the township? (iii) And lastly what perceptions do the residents have regarding housing and living conditions in Extension 44? Therefore, the study draws its significance as falling under both Settlement (Urban) and Behavioural geography. The former deals with origins and the nature of habitable space (settlements) while the latter is concerned, among others, with how people perceive their habitat.

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## **Acronyms**

IDP.....: Integrated Development Plan

RDP..... Reconstruction Development Programme

SA..... South Africa

SPSS...... Statistical Package for the Social Sciences

TREC..... Turf loop Research Ethics committee

USA....: United State of America

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#### **CHAPTER 1: RESEARCH BACKROUND**

#### . 1. STATEMENT OF THE PROBLEM

The provision of housing for the urban black population in South Africa is one of the challenges facing the new South African government. At the same time, the condition under which the greater proportion of urban Blacks lives in the Townships is a matter of serious concern. One of the reasons for this state of affairs is explained in the Reconstruction and Development Programme, A Policy Framework (1994:22) which states that, "the lack of adequate housing and basic services in urban townships ... today has reached crisis proportions". This crisis relates to increasing urban housing backlogs which in the 1990s were conservatively placed at 1, 3 million housing units and growing by approximately 200 000 new households per annum. Secondly, the housing problem in black occupied urban areas can be ascribed to limited range of capitalist housing markets and further aggravated by the absence of a coherent national housing policy.

The current democratically elected South African government strives to redress inequalities and injustices of the past in an attempt to provide all South Africans with a better life. The past South African apartheid laws, particularly the Natives (Urban Areas) (1923), the Natives (Urban Areas) Consolidation Act (1945) and the Groups Areas Act (1950) and (1966) as well as earlier legislation such as the Natives Land Act (1913 and 1936) and the Homeland Act (1956) restricted South Africans both in urban and rural areas to take residences in certain area and not in others. The consequence of this was the creation of the race-space organisation of the South African landscape which persists even today (McCusker and Ramudzuli, 2007).

Apartheid related differentiated residential areas mirrored differences in the levels of development, resource allocations and the quality of life of the residents. Residential areas of other races than of blacks were and still are well endowed with the latter characterised as depressed, deprived and poorly endowed areas. It thus became apparent that the Black Townships were not intended to develop into full-fledged towns but to become satellite dormitory settlements which provided a haven for black labour (Ndhlovu, 2000:29). They had no economic base and possessed poor physical and socio-economic infrastructure. Notably, they were characterised by rapidly deteriorating living conditions. Black Townships were an integral part of South Africa's

race-space organisation which, in the urban setting, evolved from colonial, then segregated into apartheid urban space.

The dawn of the new demographic system heralded the emergence of the new South African race-space organization. The country started to experience an influx of people to many urban centres. This created challenges with regard to the provision of services, especially housing, to the new urban immigrants. In order to improve the quality of life of the South African citizens, especially the poor, the government introduced low-cost housing projects through its Reconstruction and Development Programme (RDP); hence the houses that were built under this programme were referred to as RDP houses. These are mostly found in the black occupied areas (Townships) in the various urban areas of South Africa.

Residential areas as geographic liveable space should offer human satisfaction such as sense of belonging and security. One of the most important components of the liveable space is dwellings and houses wherein people live. Lamont (1990:147) defines a house as a "conventional building with solid walls, built on a concrete foundation of certain minimum measurements and a durable roof. Houses provide security to individuals and families. The other elements include the variety of amenities and physical infrastructure provided for the social convenience of the residence (Ndhlovu, 2000:157).

Extension 44 is a Township in Greenside, Polokwane that has emerged as a result of the RDP policy. The envisaged purpose of its establishment has been to improve the communities' quality of life through the provision of liveable houses and basic facilities such as clean water. It is therefore of academic interest for this study to examine the geographic space of Extension 44 with regard the provision of houses, their quality, and the subsequent quality of life of the residents.

#### 2. RATIONALE OR MOTIVATION

According to Drakakis-Smith (1992:85-86), there are basically three sources of supply for low-cost housing in Third World Cities, namely, public, private and popular sectors. The public and private sources are loosely classified as the formal sector though which housing is built according to the local building standards. On the contrary, the so-called popular housing is that which is constructed by the poor themselves usually in

contravention of some legislation. Some constructions are usually illegally done on any open piece of land therefore leading to squatting which invariably leads to and is associated with slums and squalor conditions.

Housing in the South African urban areas may be provided by private Township developers or individuals, who buy plots from the municipality or private owners and erect houses to their own specifications, that of the municipalities and or the state. In other words, although housing may be provided by a range of parties, the government is ultimately responsible for ensuring that housing, especially low cost housing, is provided for all (O' Malley,1994:23). Despite creating policy framework and legislative support for the realisation of this objective, the government embarks on the programme of construction of the so-called RDP houses in the existing Townships and in some instances in the newly established Townships or new neighbourhoods. The state through the National Housing and Planning Commission acquires land, establishes Townships and finances housing schemes either within the existing Townships or newly declared settlement areas outside the confines of already existing Townships.

Two important elements of Township housing are housing standards to ensure the quality of houses provided and affordability. Invariably, the minimum requirement for a reasonable housing unit is that it must be a durable structure providing protection and safety and of adequate size to provide reasonable living space and privacy. It must have sanitary, electric supply and water provision facilities. The unavailability of adequate housing in proclaimed residential areas usually leads to tenancy and squatting. Squatter settlements are illegal settlements so located that they provide access to nearby towns and cities for acquiring job opportunities available (Ndhlovu, 1986:203).

Housing affordability has become a serious problem in South Africa, and thus there is a huge pressure on delivering housing units. The rapid increase in urbanisation in South Africa can be attributed to in-migration, rural-urban migration and high natural urban population growth driven by rapid socio-economic changes and development. Undoubtedly, high levels of population increase result in a great shortage of services and resources. There is also a complaint that the houses delivered to the low-income earner citizens of South Africa are of lower standard and poor quality.

The consideration of how the residents of Extension 44 evaluate the quality of housing provided, places the` attention on the quality of their liveable space. Any environment evokes certain perceptual images which elicit behaviour on the part of the person interacting with that environment. This will be dealt with in terms of the perception behaviour model (Jakle et al., 1976:298) within the context of environmental perception. People not only make decisions about their actions but do decide about the relative importance and attractiveness of places, i.e. place utility (Ndhlovu, 2000:10). Important therefore is people's perception of as well as their attitudes towards the environment in which they live. Of particular interest is the consideration of attitudes of urban dwellers and human search for environmental ideals (Ndhlovu, 2000:13). Attitudes of people bring together both the internal mental life and overt behavioural response within one framework (Gold, 1980:23). Attitudes are learned predisposition to respond in consistently favourable or unfavourable manner with respect to a given object, person or spatial environment.

#### 3. AIM AND OBJECTIVES

#### 3.1 Aim of the study

The study is aimed at investigating the provision and the quality of housing as well as the quality of life of the residents in Extension 44 in the Polokwane Municipality.

The purpose of this research is to investigate the provision and the quality of housing as well as the expressed satisfaction levels regarding the quality of housing and life in Extension 44 in the Polokwane Municipality.

#### 3.2 Objectives of the study

The objectives of the study were therefore to:

- a) Investigate the reasons for the establishment of Extension 44 as a residential area in the Polokwane Municipality.
- b) Assess the types and quality of housing provided in extension 44 in the Polokwane municipality in terms of the government's housing policies and strategies.
- c) Determine the attitudes and the levels of satisfaction of the residents regarding the quality of housing in Extension 44 in the Polokwane Municipality.
- d) Establish the attitudes of the residents in Extension 44 with regard to their quality of life.

#### 4. STUDY AREA

#### 4.1 Location and description of the study area

The spatial organisation of Polokwane reflects that of a segregated and apartheid race-space city, with its suburbs (Bendor, Flora Park, Fauna Park, Penina Park, Hospital Park and Ster Park) considered white and other racially defined Townships, namely, Westenburg (formerly Coloured), Nirvana (formerly Indian) and adjacent to and at the outskirts of the City of Polokwane, then Pietersburg, was an old coloured and black mixed freehold residential area, New Pietersburg, and commonly known as Disteneng. Figure 1.1 shows the location of the study area.

The race-space organisation in Polokwane as described above is as a consequence of the implementation of the Group Areas Act (1950), the Illegal Squatting Act of 1951 and the Natives (Urban) Amendment Act of 1952.

Extension 44 is an exclusively black Township in Greenside situated about 2km to the north of the City of Polokwane, straddled between the Matlala Road and the Nelson Mandela Drive leading to Seshego Black Township and in close proximity to the commercial and industrial zones of Ladanna. Most of the residents of Extension 44 are individuals and families who had illegally occupied a piece of land to the east of Mandela Drive, from which the black residents of Seshego Township were relocated. Soon after their relocation other individuals moved in and took residence there. The latter group are the one who have been relocated to Extension 44, though not all could be moved thus leaving behind the remnants who are unfortunately continuing to increase.

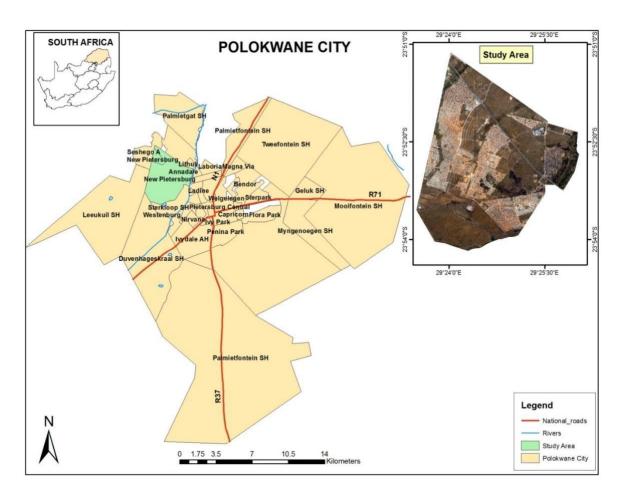


Figure 1.1. Geographic location of Extension 44 in Limpopo province

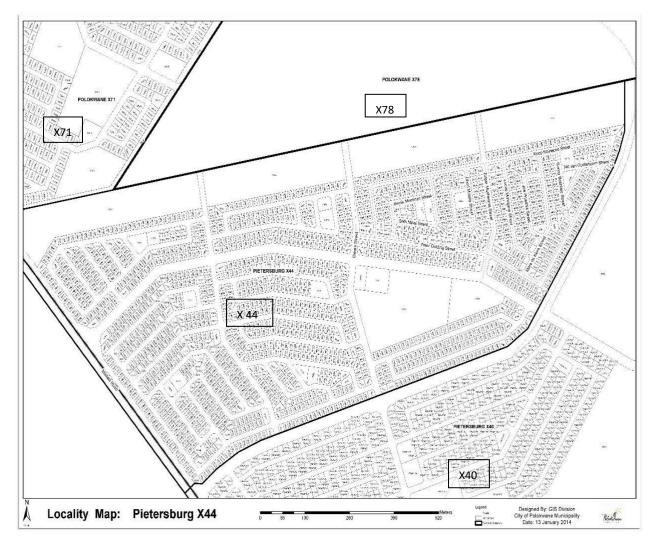


Figure 1.2. The location of extension 44 in relation to neighbouring residential units

The settlement comprises an admixture of different housing types, e.g. RDP houses, self-built houses, shacks and other informal dwellings and hostels. As it is the case in other Townships and formal settlements in South Africa, Extension 44 has high crime and unemployment rates as well as poor provision of basic services. It is densely populated and high population density puts much pressure on the meagre and poor infrastructure to the extent sewers are at times blocked resulting in sewage odour outburst, especially in the evenings. Conditions like these lead to outbreaks of debilitating diseases.

The Township consists of one thousand six hundred residential sites; seven educational sites; two business sites and six public open spaces (parks). It integrates with one middle income Township namely African Jewell. During the 2005/2006

financial year 1 000 residential units were allocated by the Department of Local Government and Housing to beneficiaries relocated from Sections A and B of New Pietersburg (Disteneng). The total cost of the first project was R39 929 per unit (including R 8 000 cost of municipal engineering services per unit and R31 929 cost of per housing unit).

A survey conducted during 2009/2010 financial year revealed that there were about 8 621 households still to be relocated residing in sections C and D of New Pietersburg. At the same time, although section A and B in New Pietersburg were considered clean and constantly monitored to ensure that no re-squatting was taking place have once again being illegally occupied by different groups of people.

#### 4.2 Research design

This study applies both the qualitative and quantitative approaches. The qualitative (idiographic) approach is based on acquisition of descriptive information through interviews and from conducting fieldwork in the study area. A tool used in acquiring the necessary data will be a structured questionnaire.

On the other hand, the quantitative (nomographic) approach entailed the application of statistical techniques for systematic empirical investigation of the salient inherent characteristics of aspects under investigation

#### 4.3 Data collection

Two types of sources of data will be used, namely, primary and secondary sources. The instrument for collecting primary data will be a structured questionnaire which will also facilitate personal interviews and interactions with the respondents. The information to be solicited by means of the questionnaire relates to the following aspects:

- (i) Demographic characteristics of the population, namely, age, gender, family size, schooling, employment status and health status (self-assessed general health);
- (ii) Residence (duration of stay and type of house occupied)
- (iii) Attitude and perception of respondents with respect to quality of life, satisfaction with type and size of housing, quality of the physical environment and infrastructure provided, determined on a graduation scale.

#### 4.4 Sampling method and sample size

There are 1 734 formal household units in Extension 44, consisting predominantly of type the government low-cost houses (89,6%) commonly known as RDP houses assigned to qualifying households, families or single individuals and relatively a small proportion (10,4%) of privately built houses.

Therefore, above total number of households constituted the research population, which by definition "...is any class of phenomena arbitrarily defined on the basis of its unique and observable characteristics" (Williams, 1979:5).

Consequently, a sample of 110 housing units, comprising 70 RDP household units and 40 self-built household units will be determined. This will constitute 6, 3% of the total number of household units with the exception of backyard tenants. The backyard tenants will not be considered since attention of this study is on main or principal owners of residential units. The sample size for each distinctive residential sector of a particular house type is proportional to the total residential units of that house type. A sample thus determined is considered small yet large enough to represent a given well defined research population.

Because of the dichotomous principal house types in Extension 44, stratified random sampling method will be used in identifying households whose owners were to be interviewed. The random sampling entailed the use of random sampling numbers on the basis that all household units had equal chance of being selected into the sample. Again, "...it is an unbiased and representative cross-section of the body of data" (Gregory, 1978:100). This method is as ideal for determining a sample of an area distribution.

#### 4.5 Data manipulation and representation

Data manipulation and representation concerns the re-organisation of collected research data into a more meaningful manner and to allow it to be summarised into tables, statistical diagrams and graphs for the purpose of revealing salient characteristics of the population under investigation. One reason for this process is to facilitate comparisons and further statistical analysis. The following statistics will be determined in describing the data at hand:

- a) Measures of central tendency (mean, mode and median) for both ungrouped and grouped data.
- b) Tabulation of data to show frequencies of occurrences

In addition to the descriptive statistics, analytic statistics, particularly the Chi-square test, will be employed to determine the correlation and differences between and among varied perceptual variables. This is the case where we deal with nominal and ordinal level data. The formula for the Chi-square test is expressed as follows:

$$x_2 = \sum \underline{\qquad} (fo - fe)^2$$
(Equation 1)

Where:

 $\Sigma$  = The Sum

fo = observed frequencies and

fe = expected frequencies

#### 5. SCIENTIFIC CONTRIBUTION

This is a geographic study that pursues spatial knowledge based on an important element of the evaluative approach in geographic space perception. Geographically decisions on space perception relate, at least in part, to the way in which people perceive their environment and to the differential evaluation of the various portions of that environment (Ndhlovu, 2000:15). Significant also is to gauge the people's environmental preferences based on the attractiveness of places which are important in residential desirability and choice (Ndhlovu, 2000:10). Due to the fact that Extension 44 has been established with an aim of improving people's quality of life, the results of the study are envisaged to assist the municipal authorities in future planning and decision when reviewing the effectiveness of implementing the RDP policy. In addition, the results will also add to the existing knowledge on the theoretical background about geography of settlements.

#### 6. ETHICAL CONSIDERATION

Permission for conducting this research will be obtained from the University of Limpopo's Turfloop Research Ethics Committee (TREC), Polokwane Local Municipality, and the Civic Association of Extension 44. Other important considerations in the study will include seeking informed consent from respondents and assuring them of their anonymity and confidentiality with regard to their responses

#### 7. THESIS ORGANISATION

This study comprises five chapters with Chapter 1 as an introduction. Chapter 2 presents a survey of existing literature, with respect to the establishment of Black Townships, the provision of housing and infrastructure and what quality of life in Townships entails.

Chapter 3 deals with the research methodology, while Chapter 4 presents the findings relating to analysis of data pertaining to the types of housing, provision of infrastructure and the quality of life in Extension 44, looking at residents' perceptions and levels of satisfaction of these houses.

Conclusions and recommendations are given in Chapter 5.

#### CHAPTER 2: LITERATURE REVIEW

#### 2.1 INTRODUCTION

This chapter presents the literature review in relation the essence of population-space relationship within the context of Urban Geography, the reason for the existence of black urban Townships within the South African race-space organisation. Aspects of adequate (or inadequate) housing, squatter and informal settlements, government initiatives and quality of life of the Township residents receive attention.

#### 2.2 CONCEPTUAL FRAMEWORK

Daniel and Hopkinson (1993:10) assert that "geography is an exciting and dynamic subject, concerned with issues which affect us all no matter where we live. We are all to a greater or lesser extent concerned with environmental quality and social wellbeing ..."Elaborating on the study of the relationship between population and the environment, Downs (1970: 67) indicates that "many geographers suggest that they are studying the man/land ecosystem, or that they are concerned with the earth as the home of man." For this reason, the present study falls within the two sub-disciplines of human geography, namely, settlement geography, particularly, urban geography and behavioural geography, which each analyses space (place)-people interrelationships and interactions (Figure 2.1).

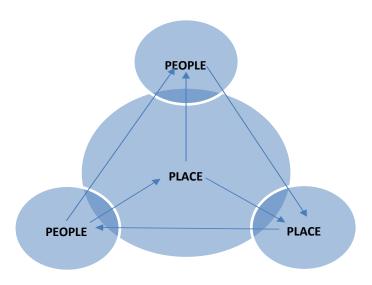


Figure 2.1. People-place and place-place relationships (Downs (1970)

#### 2.2.1 Urban Geography

Urban geography is principally concerned, among others, with the origins, nature, structure and characteristics of urban human settlements as well as the spatial relationships and interactions between urban centres on the one hand, and between internal functional zones of such urban centres. The functional zones are distinguished by specific dominant functions — a function denoted as an activity performed by that specific spatial unit. The understanding of the internal morphology of urban settlements and the reason for the existence of its functional zones can be achieved through the structural-functionalist approach. In addition, each zone is explained teleological in terms of its assumed purpose. For the example, urban residential areas should be analysed and explained in view of their purpose or function within the whole structure of urban centres wherein they occur.

Any residential component of an urban centres a functional unit, defined and distinguished from other residential units according to the socio-economic status or characteristics of their inhabitants, hence low, middle- and high-income areas and in the case of the past South African experience the differentiation was based on race, namely black, white coloured and Indian residential areas). This explanation depicts both a vertical and horizontal (spatial) zone of the South African population.

Although a settlement may provide a focus for interdisciplinary study, the geographical perspective is significant with respect to spatial organisation and casting light on the *where* and *why questions*. Looking at the patterning within urban centres and understanding of the location of various functional zones calls for comparing the observed patterns with those depicted by any of the traditional models such as the concentric zone model, Hoyt's sector model and multiple nuclei model (Figures 2.22.4).

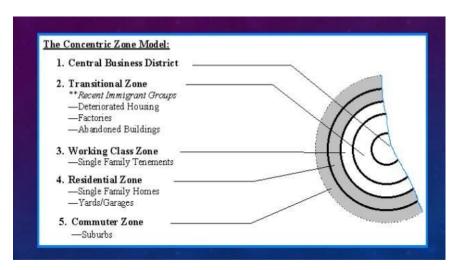


Figure 2.2. Burgess' concentric zone model. (FYFE and KENNY 2005)

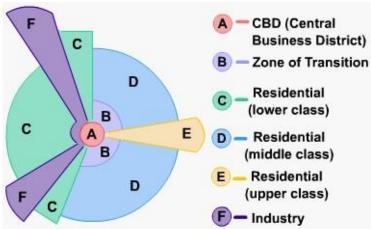


Figure 2.3. HOYT'S SECTOR MODEL (FYFE and KENNY, 2005)

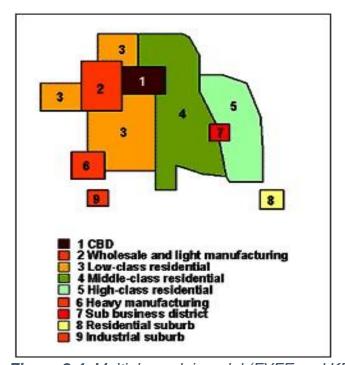


Figure 2.4. Multiple nuclei model (FYFE and KENNY, 2005)

On the other hand, the spatial morphology of Polokwane Municipality could be compared with a typical Segregation and Apartheid City Models (Figures 2.5 and 2.6).

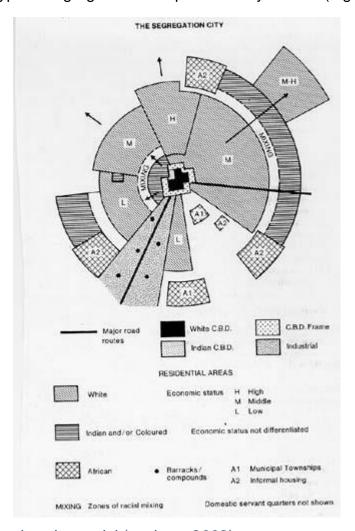


Figure 2.5 Segregation city model (pacione, 2009)

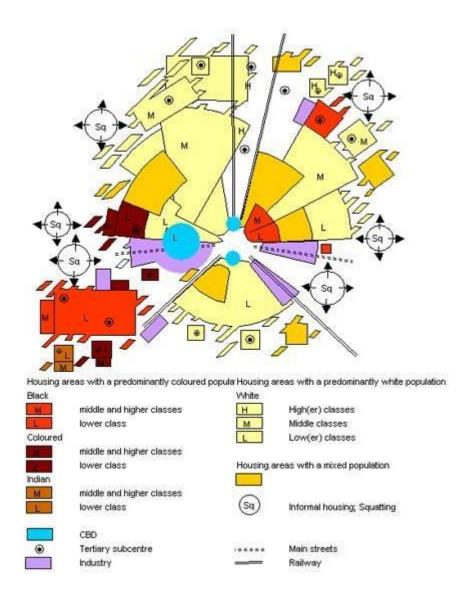


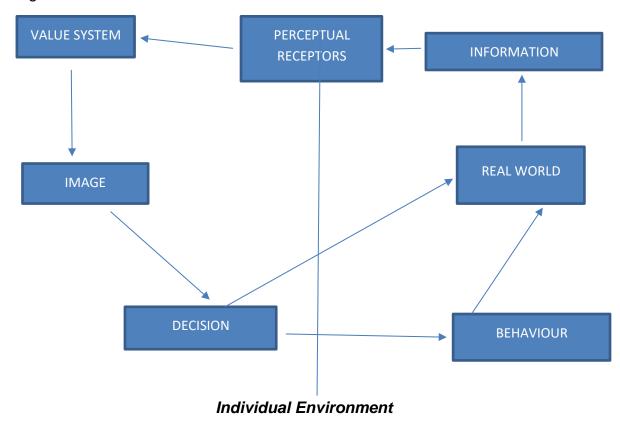
Figure 2.6. Apartheid city model. (Pacione, 2009)

#### 2.2.2 Behavioural Geography

The common feature between urban geography and behavioural geography is the population-environment paradigm. Underlying the population-environment paradigm are individuals' perception of their habitat and how their act in and reacts towards it. Consequently, this would explain the individuals' meaning of/and attachment to place. The significance of the latter in the life of an individual or groups of individuals has become relevant subject in geography (Cohen and Shinar, 1985:1). Every place has meaning and its evaluation hinges on the ideas and beliefs people have about it.

#### 2.2.2.1 Geographic Space Perception

The geographic space perception is only part of a more general trend in modern geography, namely the behavioural revolution which seems to be closely following in the wake of the quantitative revolution (Downs 1970:68). It represents a fundamental change in the conceptual understanding of human spatial behaviour. Its more realistic assumptions about the nature of human beings are no longer environment-spatial behaviour but environment-population-spatial behaviour. Therefore, population become an intervening variable (Downs 1970:68). At the same time, human behaviour depends on individuals' evaluation and relative assessment of the environment. As indicated in Figure 2.7 below, the perception approach deals with the cognitive understanding which people have of their environment, how they evaluate such an environment and their behaviour as a consequence of formed cognitive mental images.



*Figure 2.7* Model of geographic space perception (Downs, 1970)

As explained by Downs (1970:79-81) the perception of geographic space can be researched in terms of the following approaches:

- a) The structural approach which is concerned with the identity and structure of geographic space perception. Of importance in this regard is that any perceived environment possesses two characteristics, namely, legibility and image ability, which together with the five elements, paths, edges, districts, nodes and landmarks are components which are cognitively synthesised into a mental image.
- b) The evaluative approach through which a person's decision making and behaviour is related to his/her evaluation of the perceived environment according to a given gradation scale.
- c) The preference approach. This approach flows from the second one above and entails a process of assessing the quality of the perceived environment on a scale of preference. The evaluative and preference approach underlies choices people make. Thus, choice is important in people-environment interactions (Saarinen 1976:40).

The relationship between the population and their environment is extremely important in contributing to the satisfaction of the population's needs. Therefore, the people's perception and evaluation of their habits are based on their attitudes towards those environments and their disposition towards those environments is also a function of interpretations of meanings that exist in their minds (See figure 2.8). Besides the quality of the physical environment, social circumstances have a bearing on how one is disposed to the environment. Negative factors such as those in the diagram below do play an important role in influencing perceptions and attitudes of the population.

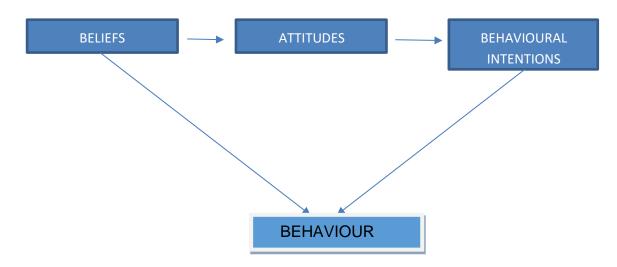


Figure 2.8 Components of an attitude (Downs, 1970).

#### 2.2.2.2 The Neighbourhood Concept

In the South African context black Townships as bounded residential areas can be conceived as micro-territories of urban social space, with identifiable patterning of spatial relationships resulting in the confinement of certain activities and people. Social space can be defined as a synthesis of objective physical space and the perceived dimensions of space (Jones &Eyles, 1977). In the words of Daniel and Hopkinson (1993:195) a social space embraces both activity and awareness space (Figure 2.9). Activity space describes where people live, their various forms of movement and their social events, while the awareness space also known as perceptual space is concerned with how people perceive their environment. The perceptual images individuals have about their environment serves as an interface between reality and their behaviour.

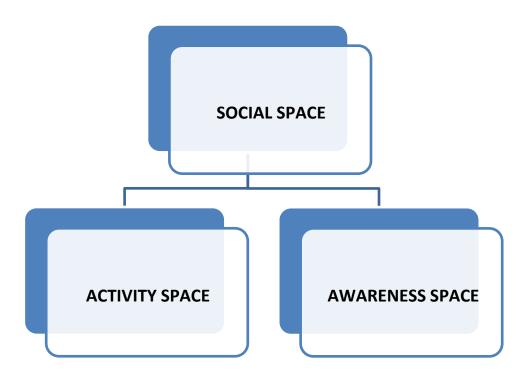


Figure 2.9 Components of social space (Daniel and Hopkinson, 1993)

As Caruso and Palm (2005:221) point out, the concept social space suggests the understanding of "why are phenomena located where they are?" Furthermore, it implies a complex pattern of movements and group memberships which characterise particular sub-units of society. Hence the study of social space involving the classification of spatial interrelationships of demographic and socio-economic characteristics shed light on urban residential choice behaviour (Caruso & Palm 2005:221).

Black Townships, as social space, are territorial units which comprise both spatial and social attributes. As Daniel and Hopkinson (1993:200-201) explains there are distinctive different types of neighbourhoods ranging between arbitrary neighbourhoods and communities, namely:

- a) Arbitrary neighbourhoods which are ill-defined areal units lacking individual identity and social cohesion.
- b) Physical neighbourhoods distinguished by distinct physical characteristics and clearly defined boundaries. Houses may be similar in age and architectural design.
- c) Homogenous neighbourhoods possessing attributes of the physical neighbourhoods, namely, clearly defined territories with distinct physical characteristics. In addition, they have certain social characteristics and are

- occupied by groups of people with common social and cultural attributes and socio-economic status.
- d) Functional neighbourhoods which are the fourth tier of neighbourhood akin to the homogenous neighbourhoods but with further additional social infrastructure and services.
- e) Communities, at the top of the hierarchy whose population has developed as sense of togetherness and associating more with each other than with outsiders.

There are two main reasons for the establishment of new neighbourhoods, including the Black Townships in South Africa. In the first instance, new neighbourhoods are created as result of the urban sprawling. Johnson (1979:129) explains that "an outstanding feature of large modern cities is the growth around them of extensive residential suburbs ... partly as a result of the increasing populations of those cities whose dynamic economies allow them to attract migrants and to retain the natural increase of their own populations". Secondly, new settlements and/or neighbourhoods can be brought into existence as a result of the process of relocation and which may be due to the implementation of the slum-clearance programme by the local government. The latter would explain the origins of Extension 44 in the Polokwane Municipality.

Johnson (1979:136) goes further to point out while the tendency in the establishment of new residential suburbs or neighbourhoods is for residential areas to be segregated from other land-uses within a city; there is also a tendency for continuous areas to be occupied by a single social class or racial group. The latter is a clearly evident where a town or city is dominated by distinct population classes or racial groups.

#### 2.3 DEFINITION OF A TOWNSHIP

A Township is the land formally allocated to hosting the site of town; Township may either refer to both industrial and residential sites. South Africa is largely known to have the most famous Townships which were created by the apartheid system and its predecessor regimes of white rule.

The black urban Townships form part of the urban landscape with historical antecedence both in the colonial and apartheid past. According to Beavon (1982:3)

their origins lie in the establishment of the so-called locations, slum yards and freehold Townships. Until the end of the 19th Century the South African pre-Apartheid inner city residential areas were racially mixed (1955:149) and ChristopherinStututer (1983:145) although the colonial Whites never regarded any other racial group equal to them.

Apartheid was formally instituted as state policy in 1948 but dating from the white settlers' permanent landing at what is now Cape Town in 1652, racial segregation was formal practice. The Townships were racially discriminatory in that black African, Coloured (mixed-race) and Indian people were ordered by the Land Act of 1913 and the Group Areas Act of 1950 to live separately. Even within black Townships, ethnic groups were often segregated into separate areas of Zulus, Xhosas, Sotho's, and others. These laws existed until the early 1990s, and since then there has been only gradual desegregation of formerly white, coloured, and Indian areas.

Townships originated from South Africa's unique economic requirement for inexpensive migratory labour, and they were managed using brutal policing systems as well as British municipal administrative traditions.

In the area surrounding Johannesburg, South Africa's largest metropolis (founded after the discovery of gold in 1886), the best-known Townships are Soweto (an acronym for "South Western Townships") and Alexandra. Others include Bosmont (largely Coloured), Daveyton, Diepsloot, Duduza, Eldorado Park (Coloured), Etwatwa, Evaton, Ivory Park, Kagiso, Katlehong, KwaThema, Lenasia (Indian), Orange Farm, Tembisa, Thokoza, Tsakane, Vosloorus, and Wattville.

#### 2.4 SOUTH AFRICAN RACE-SPACE ORGANISATION

The introduction of segregated policies before the Second World War, which later developed into the policy of Apartheid under the Nationalist government underlay racial territorial separation and the maintenance of urban racially separate living space. The subsequent Groups Areas Act (1950) gave rise to the South African racially defined urban spatial organisation (Ndhlovu, 2000:27).

The South African race-space organization is the product of the implementation of the past policies of racial segregation which played itself out in the socio-economic sphere but also mirrored by the physical and political organisation of space into distinctive racially defined residential areas according to the racial composition of the South African population. Blacks, Whites, Coloureds and Asians were expected to live separately within the same political space, and what bound the groups together was cohesion, with a minority group gaining control and institutionalising its distinctiveness. As Greenberg (1980:16) points out the principal characteristics of such a society are cultural diversity, inequalities in material, reward housing, education, health and so on, and domination. Ndhlovu (2000:24) explains that the race-space concept is important in understanding spatial characteristics of multi-racial or plural society such as South Africa. The race-space organisation in South Africa has persisted until today.

#### 2.5 BLACK URBAN TOWNSHIPS AS SOCIAL SPACE

The human occupied landscape or human spatial organisation consists of human structures associated with specific functions and forming part of what we call the geographical environment. This component of the geographic environment is defined as social territorial spaces designated as residential areas, urban and rural. Urban areas are a type of spatial organisation consisting of functional zones typified in all models explaining the internal structures of urban areas. One of the important elements of an urban area is differentiated residential areas (social spaces) providing housing for the residents in different socio-economic status. Therefore, in some cases, these social territorial spaces may be homogeneous in terms of racial composition and social class (Daniel and Hopkinson, 1986:137). In the South African context, the race-space organisation undergirds the socio-economic differentiation of the South African population at the micro and macro scales.

Social space, exemplified by residential areas, is defined as a synthesis of objective physical and perceived dimensions of space. In other words, it embraces both the activity space and the awareness space (Daniel & Hopkinson, 1986:137-8). The activity space in turn describes where people live and carry on with their various activities while the awareness space entails the way people perceive their environment.

#### 2.6 NEED FOR ADEQUATE HOUSING

People need houses or dwellings to live in. As pointed out by Ndhlovu (2000:91) "housing is an element of any human settlement, i.e. a place which is permanently inhabited. A house or dwelling is a building for human habitation, especially one that consists of a ground floor (Christopher, 1977). On the other hand, a household is defined as group of people who share a dwelling and financial resources (Aysan and Davis, 1992). According to Statistics SA a household consists of a single person or a group of people who live together for at least four nights a week, who eat from the same pot and who share resources, therefore a household count is different from a household dwelling, as a result there may be more than one household in a dwelling (Stats SA, 2008).

Provision of housing in South Africa is currently a problematic issue (Ameringen, 1995). "Because shelter is necessary to everyone, the problem of providing adequate housing has long been a concern, not only for individuals but for governments as well. No country is yet satisfied that adequate housing has been provided to the various economic groups of its population" (Ndhlovu, 2000:91). The problem with housing provision is that it does not prioritize the poor people; instead it focuses on people with stable employment and income (CPRG, 2004). There has also been controversy about the allocation of government-subsidised RDP houses (Buhlungu et al, 2007). In addition, some other problems arise even when the houses have been fairly allocated; however, some beneficiaries either sell or rent them out to people who don't qualify for subsidised housing. There is serious dearth in the provision of decent housing in the Black Townships. The backlog is so huge that it will take the government a considerable number of decades before the problem can be brought under control.

The inadequate provision of housing in the urban areas is exacerbated by uncontrolled increasing population. Population growth in the cities is relatively proportional to political, social and economic changes (Bale &Drakakis-Smith, 1987). Population growth occurs at different levels in various regions, there is a higher level of population growth in the developed countries of Europe and North America than in those of the third world (Bale &Drakakis-Smith, 1987). Population growth is related to various socio-economic problems (Ameringen, 1995). As population increases thousands of

people's dignity and health is compromised (Ameringen, 1995). The availability of shelter is a basic human need and yet most people still don't have it (Pacione, 2009)."In the USA the government provides only 1 per cent of the total stock in the form of social housing, primarily as a complement to private urban-renewal programmes, and this effort is directed mainly at the poor, one-parent households, non-working family with dependent children or the low- income elderly" (Pacione, 2009).

Housing provision is inadequate in most of the developing cities, to an extend where there is a formation of informal settlements which have lack of services, schooling, health, water, electricity, sanitation and refuse removal (Bonnefoy, 2007). The lack of fresh water and sanitation means that the shacks areas constitute an extreme health hazard to all residents (WHO, 2007). The problem with the provision of housing for most of the black population is that most of the blacks have a low income (Minnaar, 1992). Therefore, the government initiated a housing programme to deliver low-cost housing to the people (Tshikotshi, 2014). The reality of this government housing programme is that many people have to wait for many years for houses (Tshikotshi, 2014). People wait for houses in terrible conditions, without access to the basic services of clean water, sanitation and refuse removal (Macdonal&Ruiters, 2007). Even when the houses are offered they are too far away from children's schools (Macdonald &Ruiters, 2007). They require the people to relocate and start their lives all over again.

#### 2.7 DEVELOPMENT OF SQUATTER AND INFORMAL SETTLEMENTS

Among the manifold reasons why so many people in South Africa live in shacks, both in informal and squatter settlements are the following: in adequate supply of housing in the formal settlements, ineffective government housing policies, lack of funding to buy or rent and sometimes people choose the shacks, because criminal activities are easier to conduct from an informal settlement (Ameringen, 1995).

#### 2.8 GOVERNMENT INITIATIVES IN PROVIDING HOUSING

The main reason why public housing initiatives are failing is that they do not have political support (Minnaar, 1992). Most of the initiated programmes are overlooked. The local housing authorities receive no operating subsidy from federal government. One of the pressing needs in the informal settlements is the provision of clean water, at the present most of the ground water is polluted and contaminated and this increases the spread of diseases, and it is very expensive to build dams and reservoirs (Minnaar, 1992).

During the Second World War most people had their attention focused on wartime needs, even the available material were used to assist in the wars to which housing lagged badly behind (Lemon,1991). When this situation worsened squatter settlements mushroomed around South African cities in order to fill the gap of housing shortages in South Africa (Lemon, 1991). During the segregated city low-income white housing was close to the industrial sector, while compounds for the African workers were located within the industrial zones (Lemon, 1991). The pre-apartheid cities were not completely segregated (Lemon, 1991).

The following is brief scan of the government settlement programmes prior to and after the implementation of The Reconstruction and Development Programme (1994):

- a) The establishment of the so-called Free Settlement Areas in terms of the Free Settlement Act of 1988. The essence of this programme was for the government to accept those neighbourhoods where integration had gone too far to reverse. The Act enabled the declaration of open areas on the recommendation of the Free Settlement Board.
- b) The establishment of the so-called Grey Areas which as Lemon (1991:15) explains, "with increasing numbers of middle-class blacks able to afford houses in white areas, this increasingly led to houses in those areas coming into black ownership ... In this way a new generation of "grey areas", pockets of integrated residential settlement ..."
- c) The implementation of the RDP after the demise of the Nationalist Apartheid Government after 1994. The RDP is an integrated, coherent socio-economic policy framework. One of its strategies is the provision of housing and services (RDP, 1994:1

- & 16). It accepted the fact that "the lack of housing and basic services in urban Townships and rural areas today has reached crisis proportions." (RDP 1994: 22) and "endorses the principle that all South Africans have a right to a secure place in which to live in peace and dignity (and that) ... housing is a human right." (RDP, 1994:23).
- d) The Breaking New Grounds Housing Programme was initiated in 2004 by the Department of Housing and human settlements meant to redirect and enhance exiting mechanisms to move towards a more responsive and effective delivery. The main objective of this programme was to foster residential integration of all classes of the South African population.
- e) The implementation of the RDP as government's policy in providing low-income housing in South Africa is the biggest state housing delivery programme in the world outside of China (Zunguzane, Smallwood and Emuse, 2012). There are more than 2,5 million houses built since 1994. There is, however, serious housing backlog in South Africa (Dozoretz, 2013). The current backlog would require 200 000 houses to be built each year for the next 10 years, with an estimated 45-55% of all households in need of new housing and unable to afford it without government subsidy" (Zunguzane et al, 2012).

The housing vision is the establishment of viable, socially and economically integrated communities, situated in areas allowing convenient access to economic opportunities, as well as to health, educational and social amenities in which all South Africans will, on a progressive basis, have access to:

- a) Permanent residential structures with secure tenure ensuring internal and external privacy and providing adequate protection against the elements; and
- b) Potable water, adequate sanitary facilities and domestic energy supply

According to Green Building Council of South Africa (2012), the South African government has built almost 3 million low-cost homes since 1994 and a further 3 million are targeted by 2025. South African housing provision has been distorted by apartheid and municipal restructuring. According to the Minister of Human Settlements, Tokyo Sexwale, speaking in Parliament in June 2013, 3, 3 million housing opportunities has been provided by the state, leaving a current backlog of 2.1 million housing (DA Policy on Integrated Human settlement for South Africa, 2013).

"Section 26 of the Constitution of the Republic of South Africa, 1996, enshrines the right to housing, as follows:

- (a) Everyone has the right to have access to adequate housing.
- (b) The State must take reasonable legislative and other measures within its available resources, to achieve the progressive realisation of this right".
- (c) No one may be evicted from their home, or have their home demolished, without an order of court made after considering all the relevant circumstances. No legislation may permit arbitrary evictions.

South Africa has entered its second phase of democracy and 'good governance', since its proposed policy on Reconstructive Development Programme of 1994, and the central purpose of such policies is to provide basic service delivery of material assets to previously disadvantaged communities (Marthinus, 2012).

#### 2.9 QUALITY OF HOUSING PROVIDED

There are many controversial issues with respect to the provision and quality of housing in the black residential areas (Teits&Chapple, 1998). In the case of low income houses, poor-quality housing, "whether poorly planned in the wider sense, or badly designed, has been the hallmark of a commodity culture whereby housing is viewed as merely a 'demand good' to be thrown up wherever the price is right" (Zunguzane et al, 2012). The houses provided do not necessarily consider the enduser in mind, where the end results are an unhealthy and unsafe environment. (Zunguzane et al, 2012) Most of these houses are made of the following features that qualify them as inadequate, poor building standards in terms of inadequate sound or heat insulation, relatively small sizes of houses, Overcrowding, Lack of basic urban design amenities, and inadequate supply of services (Zunguzane et al, 2012).

In order to qualify for a RDP house in South Africa one must be a South African citizen over 21 years of age (Liebenberg, 2010). You must have a total household income of less than R3 500 per month and must be married or live with a partner or be single and have dependents (children you are responsible for), furthermore you must never have owned a house or a property anywhere in South Africa (Liebenberg, 2010).

Applicants will only ever get one housing subsidy (except for consolidation subsidy) so they must use it wisely, the names of both partners are then added onto a database (Robins, 2008). If it happens that they separate from their partner whose name appears in the database, they will not be granted another subsidy with a new partner (Robins, 2008). If one wishes to extend or renovate their RDP house before eight years of ownership must get permission to do so from their local municipality (Liebenberg, 2010).

#### 2.10 MUNICIPAL IDPS IDENTIFY LOCAL HOUSING PRIORITIES

The Constitution of the Republic of South Africa, 1996 stipulates that the local sphere of government consists of municipalities which were established for the whole of the territory of South Africa – the so-called wall-to-wall municipalities. The objects of local government are set out in Section 152 of the Constitution.

Accordingly, the objects are -

- a) To provide democratic and accountable government for local communities;
- b) To ensure the provision of services to communities in a sustainable manner;
- c) To promote social and economic development;
- d) To promote a safe and healthy environment; and
- e) To encourage the involvement of communities and community organizations in the matters of local government. The Constitution commits government to take reasonable measures, within its available resources, to ensure that all South Africans have access to adequate housing, health care, education, food, water and social security. The development of the Integrated Development Plan (IDP) in municipalities is in different legislations that govern local government. The legislative framework that the IDP is vastly discussed includes the Municipal Systems Act of 2001 and the Municipal Structures Act of 1997. Another piece of legislation which has a tremendous impact on the IDP is the Municipal Finance Management Act 56 of 2003 (MFMA) as it outlines the alignment of the budget and IDP.

In the Polokwane city the Council has ensured that as a developmental municipality, they continue with their responsibility to mobilize, inform, educate and empower people to expand their livelihood assets and capabilities, to participate in, negotiate with, influence and hold accountability on issues that affect their lives and their wellbeing.

This is done guided by the principle that they have put community participation and communication at the centre of their activities

Municipalities ensure that, within the framework of national policy and provincial guidelines, constituents within their jurisdictional areas have access to adequate housing. Municipalities set aside, plan and manage land for housing and development in line with the housing priorities identified in their integrated development plans (IDPs). They initiate, plan, co-ordinate and facilitate appropriate housing development within their boundaries with the objective of ensuring safe and healthy living areas

# 2.11 CONCLUSION

The above information presents the literature about the provision of housing and the quality of life in Extension 44. It is against this background that the provision of housing and the quality of life has been examined in this study. The method of the study is presented in the next chapter.

#### **CHAPTER 3: RESEARCH METHODOLOGY**

#### 3.1 INTRODUCTION

This chapter provides an outline of the research design, data collection, data manipulation and representation as well as data analysis and interpretation.

## 3.1.1 METHODOLOGY

This study applies both the qualitative and quantitative approaches. The qualitative (idiographic) approach is based on acquisition of descriptive information through interviews and from conducting fieldwork in the study area. A tool used in acquiring the necessary data was a structured questionnaire (Figure 3.1).

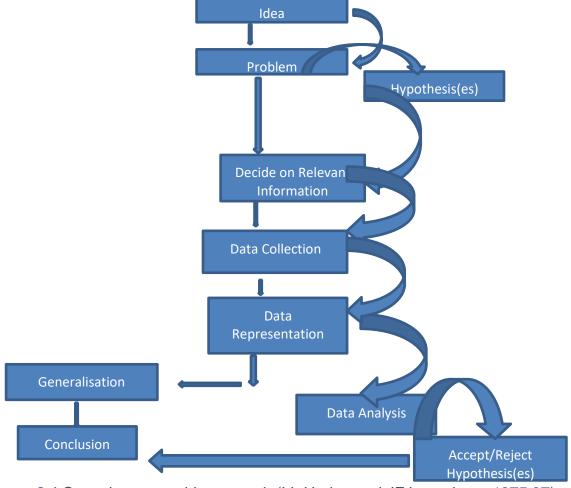


Figure 3.1 Steps in geographic research (LL Haring and JF Lounsbury, 1975:37).

On the other hand, the quantitative (nomographic) approach entailed the application of statistical techniques for systematic empirical investigation of the salient inherent characteristics of aspects under investigation (Figure 3.1).

# 3.1.2 DATA COLLECTION

Two types of sources of data were used, namely, primary and secondary sources. The instrument for collecting primary data was a structured questionnaire which also facilitated personal interviews and interactions which the respondents *(Addendum A)*. The information solicited by means of the questionnaire related to the following aspects:

demographic characteristics of the population, namely, age, gender, family size, schooling, employment status and health status (self-assessed general health);

- (iv) residence (duration of stay and type of house occupied)
- (v) Attitude and perception of respondents with respect to quality of life, satisfaction with type and size of housing, quality of the physical environment and infrastructure provided, determined on a graduation scale determined.

# 3.1.3 SAMPLING METHOD AND SAMPLE SIZE

There are 1 734formal household units in Extension 44, consisting predominantly of the government low-cost houses (89,6%) commonly known as RDP houses assigned to qualifying households, families or single individuals and relatively a small proportion (10,4%) of privately built houses.

Therefore, above total number of households constituted the research population, which by definition "...is any class of phenomena arbitrarily defined on the basis of its unique and observable characteristics" (Williams 1979:5).

Consequently, a sample of 110 housing units, comprising 70 RDP household units and 40 self-built household units was determined. This constitutes 6,3% of the total number of household units with the exception of backyard tenants. These were not considered since attention was on main or principal owners of residential units. The sample size for each distinctive residential sector of a particular house type is proportional to the total residential units of that house type. A sample thus determined is considered small yet large enough to represent a given well defined research population.

Because of the dichotomous principal house types in Extension 44, stratified random sampling method was used in identifying households whose owners were to be interviewed. The random sampling entailed the use of random sampling numbers on the basis that all household units had equal chance of being selected into the sample. Again, "...it is an unbiased and representative cross-section of the body of data" (Gregory 1971:100). This method is as ideal for determining a sample of an area distribution.

#### 3.1.4 DATA MANIPULATION AND REPRESENTATION

Data manipulation and representation concerns the re-organisation of collected research data into a more meaningful manner and to allow it to be summarised into tables, statistical diagrams and graphs for the purpose of revealing salient characteristics of the population under investigation. One reason for this process is to facilitate comparisons and further statistical analysis. The following statistics will be determined in describing the data at hand:

- c) Measures of central tendency (mean, mode and median) for both ungrouped and grouped data.
- d) Tabulation of data to show frequencies of occurrences

#### 3.1.5 DATA ANALYSIS

In addition to the descriptive statistics, analytic statistics, particularly the Chi-square test, has been employed to determine the correlation and differences between and among variables. This is the case where we deal with nominal and ordinal level data. The formula for the Chi-square test is expressed as follows:

$$\chi^2 = \sum \cdots (fo - fe)^2$$

Where fo = observed frequencies and fe = expected frequencies

# 3.1.6 CONCLUSION

Interviews and questionnaires were used to collect data from the respondents. Data were collected from both primary and secondary sources and analysed using graphs and photos. The statistical package for the social sciences (SPSS) software programme was used for the determination of both the descriptive and analytic statistics.

# CHAPTER 4: RESEARCH PRESENTATIONS AND DISCUSSION

#### 4.1 INTRODUCTION

This chapter presents the findings about the community's provision and the quality of housing as well as the expressed satisfaction levels regarding the quality of housing and life. This study was carried out in Extension 44 in Polokwane Municipality. The aim of the study has been to assess the provision and the quality of housing as well as the quality of life of the residents in terms of the government's housing policies and strategies. This was achieved by determining the attitudes and the levels of satisfaction of the residents regarding the quality of housing in the study area, and the attitudes of the residents with regard to their quality of life. Information for this study was obtained both from the municipality officials and the residents of Extension 44.

The methodology of the study involved the interviews conducted with the municipality officials by the use of semi structured interviews, and the administration of structured questionnaires with the residents of the respective residential area. The key issues identified from the municipality officials were about the establishment of Extension 44 as a residential area in the Polokwane Municipality, the types and quality of housing provided in extension 44 in the Polokwane Municipality. Whilst information collected from the residents included their demographic characteristics such as gender, age, education, household status, family size, monthly income; their views and opinions regarding the quality of housing and the quality of life in Extension 44.

The findings of the study are presented below. These highly determine the quality of life in the households. The data is presented in table format.100 questionnaires were distributed among the households.

#### 4.2 RESEARCH FINDINGS

# 4.2.1 Responses from the municipality officials.

#### 4.2.1.1The establishment of extension 44

According to the information from the municipality the reasons for the establishment of Extension 44 as a residential area have been a result of the centripetal pull of Polokwane as a city and a capital of the Limpopo Province, there was a high influx of labour into the settlement as people were coming into the city in search of jobs.

Hundreds of people from around Limpopo and other provinces flocked to the city to seek better life and to offer labour. Within a few years the population in Disteneng grew rapidly. A total of approximately 27 000 people were living in Disteneng and shared 20 self-made toilets and only three water taps. Unhygienic conditions accompanied by environmental degradation turned Disteneng into a squalor settlement.

Extension 44 was established principally as a relocation urban settlement (Township) for Blacks who had taken an illegal occupation of an informal settlement called Disteneng. Extension 44 is a racially defined Township; a planned and exclusively black Township, and therefore the spatial organisation of Polokwane reflects that of a segregated and race-space city. It was established by the government to accommodate the increasing urban population due to in migration and through the implementation of the relocation and slum clearing programme

The programme to relocate residents came after a decision was taken by the Council of Polokwane Municipality to formalise the demarcated area designated as Extension 44 to be a proclaimed Township. The residents were to be provided with basic services by the Municipality. During 2005/2006 financial year the Department of Local Government and Housing erected one thousand residential units at Extension 44 Phase 2. The move came as a relief to the relocated families and individuals given the appalling conditions in which they were living at Disteneng. The development of Townships and the provision of housing is one of the competencies of the National Government. The National Department of Housing is responsible for establishing and maintaining a sustainable national housing development programme. It does this by developing policy and strategy, determining delivery goals, monitoring and evaluating the housing sector's performance, establishing a national funding framework for housing development and allocating the budget to provincial governments.

#### 4.2.1.2 Existence of extension 44 within the spatial organisation in Polokwane.

The spatial organisation of Polokwane reflects that of a segregated and apartheid race-space city, with its suburbs (Bendor, Flora Park, Fauna Park, Penina Park, Hospital Park and Ster Park) considered white and other racially defined Townships, namely, Westenburg (formerly Coloured), Nirvana (formerly Indian) and adjacent to and at the outskirts of the City of Polokwane, then Pietersburg, was an odd coloured and black mixed freehold residential area, New Pietersburg, and commonly known as Disteneng.

The race-space organisation in Polokwane as described above is as a consequence of the implementation of the Group Areas Act (1950), the Illegal Squatting Act of 1951 and the Natives (Urban) Amendment Act of 1952.

Polokwane Municipality has the provincial growth point which functions as a first order settlement. However, the geographical area of Polokwane Municipality is predominantly rural including considerable land under traditional authority. Polokwane has a large portion of the population living in rural or peri-urban areas, which for most part is unplanned and poorly serviced. All spatial planning takes cognizance of the population and contribute to the improvement of their living conditions.

## 4.2.1.3 Township housing and development

The National Department of Housing is responsible for establishing and maintaining a sustainable national housing development programme. It does this by developing policy and strategy, determining delivery goals, monitoring and evaluating the housing sector's performance, establishing a national funding framework for housing development and allocating the budget to provincial governments.

Extension 44 is largely due to migration of households from in and around Limpopo Province, and migration from rural areas to the city. Young adults also prefer an urban environment to small and remote rural settlements. Increasing numbers are leaving the homes of their parents in rural areas and establishing new households in Extension 44. The Town Planning and Township's Ordinance, 15 of 1986 is now used to establish Townships across the nation. The Town Planning Scheme in 1999 repealed the Provincial governments promote, co-ordinate and implement housing programmes within the framework of national housing policy. Provinces approve housing subsidies and projects and provide support to municipalities for housing development. They also assess municipalities' applications for accreditation to administer national housing programmes, and will be responsible for monitoring the performance of accredited municipalities.

The Department of Housing introduced a new housing development process in April 2002 that is aligned with the legislative requirements regarding procurement of goods and services by organs of state. In line with the role of municipalities defined in the Housing Act no 107 of 1997, the new procurement compliant housing delivery process places the responsibility for housing development with municipalities. The full

implementation of the new approach is hampered by the lack of municipal capacity to assume the responsibilities.

# 4.2.2 Demographic characteristics of the respondents.

## 4.2.2.1 Gender-age composition

As Table 4.1 reveals, the respondents in Extension 44 comprises 56.4% males and 43.6% females. The greater proportion (55.4%) of the respondents is in the age category greater than 25 and less than 40 years. Furthermore, the respondents less than 25 years account only 18.2%, while those in the age group greater than 40 years constitute 26.4% of the total respondents.

Considering the gender composition of the population in Extension 44, a question is whether there are any significant differences in the number of males and females. The application of the Chi-Square test, yielding the calculated value of 1,78 which is less than the critical (table) value of 12,71 with the degrees of freedom (df = n-1) of 1 at a significance level of 0,005 leads to the acceptance of any assumption (i.e. null hypothesis) that there are no significant differences in the gender distribution of the population in Extension 44.

Likewise, the application of the Chi-Square test on the data showing the distribution of the sampled population according to age categories as reflected in Table 4.2 above, results in the calculated value (2,95) less than the table value (12,84) with the degrees of freedom (df = n-1) of 3 at the significance level of 0,005. This means that any assumption (null hypothesis) that there are no significant differences in the distribution of the respondents in terms of given age categories can be accepted.

Table 4.1 The distribution of gender-age of the population in extension 44

Variables	Frequency (N=100)	Percentage
Gender		
Male	62	56.4
Female	48	43.6
Age		
Below 25	20	18.2
25-30	32	29.1
31-40	29	26.4
Above 40	29	26.4

Table 4.2 The distribution of gender-age of the population in extension 44

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	5.775ª	3	.123
Likelihood Ratio	5.897	3	.117
Linear-by-Linear Association	.002	1	.966
N of Valid Cases	110		

## 4.2.2.2 Education level and employment status

A cursory look at the classification of respondents according to employment status indicates that 60.9% are not employed while the remaining proportion (39.1%) is employed (See Table 4.3). The latter group is further divided into those individuals who have taken up employment as employees (29,1%) and those who are self-employed (10,1%).

A question to be considered in view of the educational level and employment status of the residents in Extension 44 is whether there is any correlation or relationship between these two variables. The basic assumption (null hypothesis) would be, "there is no significant difference between the numbers of respondents with respect to both their levels of education and employment status". Subjecting the relevant statistical data to the two-way Chi-square test (See Table 4.4) to ascertain the validity of the above assertion yielded the result that such an assertion or assumption cannot be tenable. Therefore, there are significant differences in the distribution of respondents in terms of their educational levels and employment status. In other words, there is no positive correspondence between employment status and educational levels denoting a negative correlation between these two variables

Table 4.3 The distribution of educational level and employment status

Variables	Frequency (N=100)	Percentage	
Highest education level			
No schooling	5	4.5	
Primary	4	3.6	
Secondary	81	73.6	
Tertiary	20	18.2	
Employment status			
Unemployed	67	60.9	
Employed	32	29.1	
Self-Employed	11	10.0	

**Table 4.4** The chi-square test on educational level and employment status of the respondents

	Value	df	Asymptotic Significance (2sided)
Pearson Chi-Square	12.795ª	6	.046
Likelihood Ratio	15.976	6	.014
Linear-by-Linear Association	2.510	1	.113
N of Valid Cases	110		

7 cells (58,3) have expected count less than 5. The minimum expected count is 40.

#### 4.2.2.3 Household status

The data in Table 4.5 shows in part the classification of respondents in terms of household status. Evidently, the greatest proportion of the respondents consists of children and other individuals in the households. These constitute 57,2% of the respondents, comprising 33,6% children and 23,6% other members of the household with the exception of parents(household heads and spouses). The latter makes up the rest of the proportion (42,8%) of the respondents, of which 16,4% are household heads. The observation made from the above data is that many households have adults absent from home, presumably being at work.

Hence part of Table 4.5 reveals that 64,6% comprises husbands (46,4%) and wives (though consisting of a relatively small proportion (18,2%)). In addition to these two categories of breadwinners, other family members (35,5%) are in some instances also breadwinners. The dominant role of husbands as breadwinners is, therefore, not uncommon among Black Africans.

**Table 4.5** The socio-economic characteristics of respondents

Variables	Frequency (N=100)	Percentage
Relationship to owner		
Household head	18	16.4
Spouse	29	26.4
Child	37	33.6
Others	26	23.6
Household breadwinner		
Husband	51	46.4
Wife	20	18.2

## 4.2.2.4 Household (family) size

As indicated in Table 4.6 and Figure 4.1 below, the number of individuals per household (family size) ranges between less than 5 and more than 10. The greater proportion (53,6%) of households have family size of less than 5, while (43,6%) have household family size between 5-10 and the remaining proportion (2,7%) a family size greater than 10. The data thus portrays a negative relationship where the proportion of households decreases with an increase in family size. In general, the average family size in Extension 44 calculated as the quotient between total population (11 928) and the number of households (1 734) comes to 7 persons per household. Consequently, the greatest proportion of households has family size less than the average. This, therefore, precludes conditions of overcrowding in many.

Table 4.6 The distribution of respondents per family size

Variables	Frequency (N=100)	Percentage
Number of people per household		
Below 5	59	53.6
5-10	48	43.6
Above 10	3	2.7

The significant rise in the urban population results in overcrowding, poor urban living conditions, increasing poverty, deteriorating environment, and rise in urban insecurity. To deal with the problem of overcrowding some of the residents in Extension 44 erect backyard houses to accommodate other members of the family.

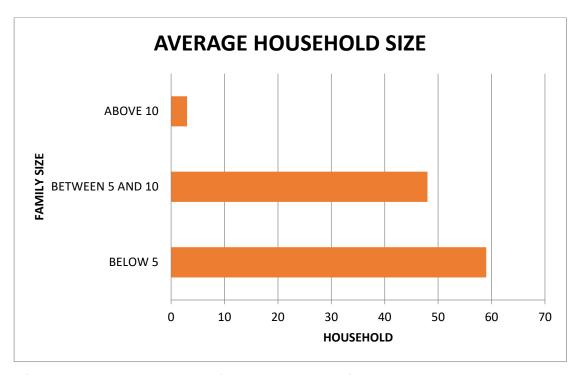


Figure 4.1 The distribution of respondents per family size

# 4.2.2.5 Total monthly income per household

The total monthly income of the residents of Extension 44 ranges between zero and more than R5 000, reflecting an average total monthly household income of R3667. As portrayed in Table 4.7 below, a sizeable proportion of households (51,8%) have no disposable income. The remaining proportion have total monthly income between less than R1 000 and more than R5 000 of which 1,8% have accrued total monthly income of less than R1 000 while 30,0% and16,4% have total household monthly income of R1 000-R5 000 and greater than R5 000 respectively. The conclusion drawn from this statistical data is that the non-income and low-income earners are dominant in this area; presupposing high dependency ratio.

The application of the Chi-square test on the assumption that there is no difference in the distribution of the number of households in relation to the total monthly household income, with respect to the statistical data shown in Table 4.7, yielding the calculated Chi-square test value of 23,48, degrees of freedom of 2 and a critical(table) value of 10,90 at a significance level of 0,005, leads to the rejection of the above assumption. Therefore, the conclusion is that there is a significant difference in the distribution of the number of households in relation to total monthly household income. In fact, there

emerged a negative relationship between these two variables. In other words, there is a decrease in the number of households with corresponding increase in income levels.

Generally, income differences can be related, among others, to the following factors:

#### 4.2.2.5.1GENDER DIFFERENCES

Table 4.7 reveals disparate differences in income accrued by males and females. In the category of individuals without any income, females constitute the greater proportion (54,4%), 8,8% more than males in that category. In income categories R1 000-5 000 and >R5 000, there are more males than females, with males comprising 66,7% and 72,2% respectively.

Further question is, with respect to data depicted in Table 4.7, to what extent does gender distribution of respondents in Extension 44 differ according to the given income levels? Like in the above case, the Chi-square test was applied to determine whether there are no significant differences in the distribution of male and female respondents according to given income categories. With the calculated Chi-square test value of 5,35 which is less than the critical value of 10,60 at a significance level of 0,005 and degrees of freedom of 2, the above assertion cannot be tenable. Therefore, the conclusion is that there are indeed no significant differences in the distribution of respondents in Extension 44 with respect to their income categories. Even in this instance, the distribution displays a negative pattern — i.e. a decrease in the frequencies of respondents in correspondence with the increase in income levels or categories.

**Table 4.7** The income distribution per gender

DISTRIBUTION OF INCOME						
			Monthly Inc	ome (Rands)		Total
		No	<1000	1000-5000	>5000	
	Income					
Gender	Male	26	1	22	13	62
	Female	31	1	11	5	48
Total		57	2	33	18	110

#### 4.2.5.2.2 DIFFERENCES IN EDUCATIONAL LEVELS.

The following important educational and income aspects of the population in Extension 44 revealed in Table 4.8

- (i) The greatest proportion of respondents (73,6%) have secondary school educational qualification. The educational qualifications of the rest are as follows: 18,2% tertiary, 4,5% no-schooling and 3,6 primary school educational qualification.
- (ii) About 51,8% of the respondents irrespective of the level of education have no gainful employment and thus are non-income earners. Significant fact is that 73,7% of individuals in this category have acquired educational qualification of secondary level and 8,2% have tertiary education qualifications.
- (iii) Noteworthy also is that the individuals with secondary educational qualification constitute the greatest proportion in all income categories; e.g. 100%, 81,8% and 55,5% of <R 1000, R 1000- R 5000 and >R 5000 income categories.

**Table 4.8** The distribution of income per educational level

	DISTRIBUTION OF INCOME					
		Monthly Income				Total
		No income	<1000	1000-5000	>5000	
Education Level	No schooling	3	0	2	0	5
	Primary	3	0	1	0	4
	Secondary	42	2	27	10	81
	Tertiary	Tertiary 9 0 3				
Total		57	2	33	18	110

## . 4.2.2.6 Distribution of income per age

Table 4.9 demonstrates the age-income distribution of respondents in Extension 44. Given the erratic distribution pattern of the number of the respondents with respect to age and monthly income indicates an absence of correlation, association or relationship between these two variables

Furthermore, other significant observations include the following:

- (i) Slightly more than 51,8% of the respondents do not generate any income nor contribute to the families' monetary resources.
- (ii) In the age category <25 years the proportion of non-income earners is the greatest at 80,0%, while in all other age categories the proportions range as follows: 46,9% (25-30 years) 41,4% (30-40 years) and 48,3% (>40 years).
- (iii) With respect to income earners, 62,3% are individuals earning between R1 000 and R5 000 per month. Those whose monthly income is in the excess of R5 000 comprises 34% of income earners, while 3,8% have a monthly income less than R1 000.
- (iv) There are noticeable variations in the proportions of the highest monthly income earners per each income category, excluding non-income earners. These proportions are as follows:
  - (a) 75% in <R1 000 income category

(b) 64,7% in R1 000-R5 000 income category and (c) 52,9% in >R5 000 income category.

**Table 4.9** Distribution of income per age groups

DISTRIBUTION OF INCOME PER AGE GROUPS						
				Total		
		No Income	<1000	1000- 5000	>5000	
Age	<25	16	1	3	0	20
	25- 30	15	0	11	6	32
	31- 40	12	1	7	9	29
	>40	14	3	29		
Total		57	2	33	18	110

# 4.2.2.7 Distribution of income per family size

Families with more earners generally enjoy a larger income, families with income of <R1000 had only one earner. Figure 4.10 reveals that families sizes of below 5 have a higher monthly income than the rest of the family sizes. This figure indicates a non-association of family size and income in larger families, this pattern suggest that the earnings of the head are the dominant element in the family income picture.

**Table 4.10** Distribution of income per household

	I	INCOME DISTRIBUTION				
				Total		
		No income	>5000			
Family size	Below 5	31	2	18	8	59
	5-10	24	0	14	10	48
	Above 10	2	0	3		
Total		57	2	33	18	110

# 4.2.3 PERIOD (LENGTH) OF RESIDENCE

The duration of stay of the residents in Extension 44 extends between 1 year and 15 years. About 39% of the respondents have been residing in Extension 44 for less than 5 years. On the other hand 51% of the respondents have been residing in Extension 44 for a period of between 5 and 10 years, while the remaining proportion of 10% a period of 10 years and more (see Figure 4.2).

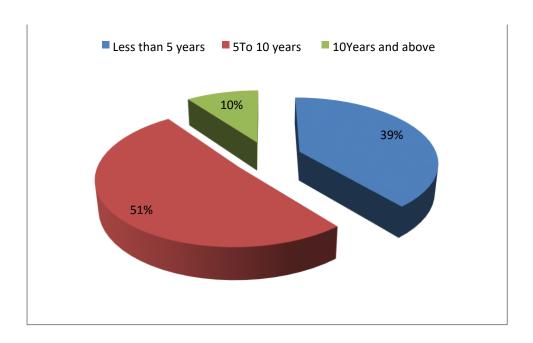


Figure 4.2. Depiction of period of residence in extension 44

#### 4.2.4 PLACES OF ORIGIN OF THE RESIDENTS OF EXTENSION 44

According to Figure 4.3 about 52% of the residents in Extension 44 includes individuals relocated from Disteneng and Seshego (including Mohlakaneng) while the rest of the respondents come from various other urban/peri-urban areas (16%) such as Mankweng, Westenburg, Mokopane and Makotopong, and rural areas (30%) such as Ga-Matlala, Mmotong wa Perekisi (Perskesbult), Ga-Mphahlele, Ga-Molepo, Bochum, Chebeng, Moletjie, Segopye, Botlokwa and Venda in the Limpopo Province. A relatively few number (2%) come from other provinces such as Mpumalanga and Gauteng

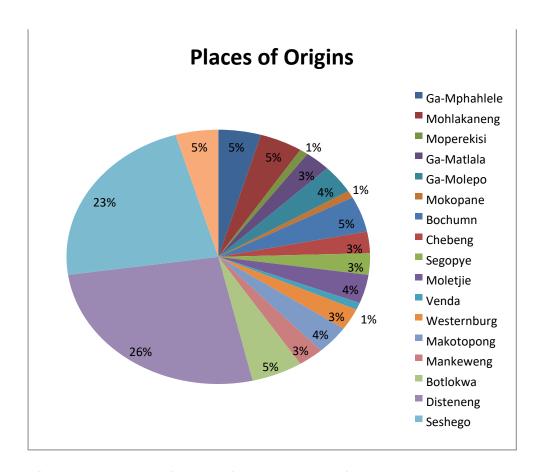


Figure 4.3 Places of origin of the residents of extension 44

#### 4.2.5. REASONS FOR RELOCATION TO EXTENSION 44

There are various reasons why the present inhabitants of Extension 44 took residence there. However, most of them were illegal people relocated by the Polokwane Municipality from the informal settlement of New Pietersburg, otherwise Disteneng. The information solicited from other residents during the research reveals the reasons shown in Figure 4.4 for having taken residence in Extension 44. The three most important and interrelated reasons for staying in Extension 44 are:

- (i) close proximity to place of work
- (ii) searching for job opportunities
- (iii) close to town

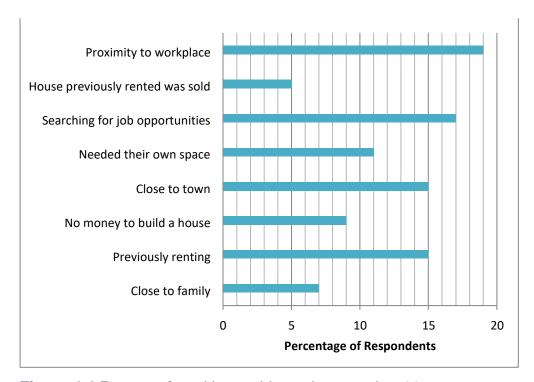


Figure 4.4 Reasons for taking residence in extension 44

#### 4.2.6. DIVERSITY OF RESIDENTIAL HOUSING IN EXTENSION 44

Under the Apartheid government African residents were not allowed to own land in urban areas but Township houses could in principle be rented or owned. This policy has resulted in a legacy of different legal forms of ownership. Private letting and subletting has existed as a tenure option since the building of Townships, although this practice was illegal under the apartheid government.

Today different, often informal forms of tenure are common in Extension 44, from letting out space in the backyard to build shacks, to letting out the complete property by absentee landlords. As indicated in Table 4.11 the greater proportion (64,5%) of the respondents stay in RDP, while the remaining proportion (34,8%) stay in either self-built houses, rented houses and back yard dwellings.

Table 4.11 Occupation of different house types in extension 44

Occupation of different house types in extension 44

	WHAT KIND OF HOUSE DO YOU STAY IN?					
		Frequency	Percent	Valid Percent	Cumulative Percent	
Se	elf-built formal house	35	31.8	31.8	31.8	
be	ented house clonging to a private crson	3	2.7	2.7	34.5	
	ackyard rented velling	1	.9	.9	35.5	
RI	OP	71	64.5	64.5	100.0	
То	otal	110	100.0	100.0		

#### 4.2.7 ASSESSMENT OF HOUSING QUALITY

As already been indicated, Extension 44 comprises an admixture of different housing types, namely, RDP houses, self-built houses, shacks and other informal dwellings and hostels. These structures are also differ according to conditions in which they are (See Figure 4.5 below). Often the residential houses in Townships are quite diverse because residents have extended and improved their homes. Some have replaced the houses with new ones. But there are also houses that have strongly deteriorated or have added backyard shacks. Many Township residents have invested significantly in their homes. Most had to do this out of their pockets because they did not qualify for loans.

The right to adequate housing is enshrined in the Constitution of the Republic of South Africa (Act 108 of 1996) which states that everyone has the right to have access to adequate housing and that the state must take reasonable legislative and other measures within its available resources to achieve the progressive realisation of this right. As articulated by Ndhlovu (2001:91), "housing is an important element of any human settlement ... (hence) housing and the need for shelter is one of the basic human needs". Nonetheless, "in the post-industrial period, the availability of housing in developing countries continues to be of insufficient quality and quantity to meet the demand of some parts of the population (Ndhlovu, 2001:91).



Figure 4.5 Types of housing in extension 44

Housing quality is evaluated in terms of size/number of rooms, roofing, walls, doors, windows and kitchen. Respondents who live in the self-built houses are satisfied, since the houses are built according to their desires. The majority of the RDP inhabitants were dissatisfied (Table 4.6) .Complaints from the occupants varied from roofs and walls that had cracks (Figure 4.6A) and broken doors that had a problem opening and closing and the residents had to use a black plastic to cover the windows. (Figure 4.6 B).

Extension 44 has two scenarios, people who live there working in or around town; conversely, we find those who live in Gauteng or any other province in South Africa yet having houses in extension 44, leaving their children, parents or family members to stay home. Women form the majority of the population and female-headed households are particularly disadvantaged. Their cost of living is high because they

spend relatively more on basic social services such as food and water, shelter, energy, health and education, and transport and communications services

As already been pointed out, Extension 44 is made up of a variety of houses, namely, self-built houses, RDP, Shacks and Hostels. In certain instances, it is not uncommon to find a modern luxurious house next to an RDP type of a house. There are some RDP houses that have been modified and enlarged. Many of the residents in Extension 44 have backyard rooms for renting, while on the other hand some of the residents complain that this backyard renting puts a lot of pressure on the electricity transformers whereby it makes the electricity in their homes very weak.

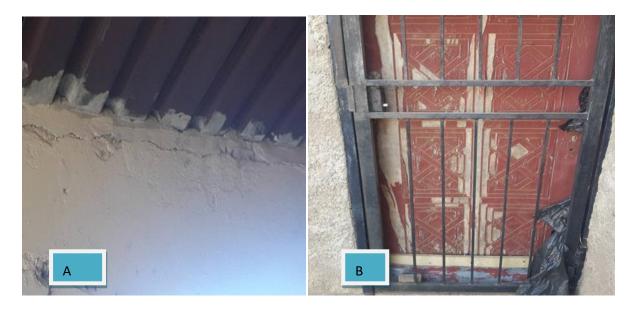


Figure 4.6 Cracked wall and doors covered with plastic

Table 4.12 Levels of satisfaction regarding RDP housing in Extension 44

Variables	Dissatisfied/poor	Uncertain/moderate	Satisfied/Good
Size/number of rooms	44.5	16.4	39.1
Roofing	65.5	0	34.5
Walls	62.6	3.0	34.4
Doors	78.5	4.5	17
Windows	65.8	8.5	25.7
Kitchen	80	2.8	17.2
Average	66.15	5.8	27.9

The attitude of respondents in Extension 44 concerning the level of satisfaction regarding the following identified aspects of their housing varies from very poor to very good (Table 4.12).

The respondents satisfaction level regarding the quality of housing is presented in Table 5.2. The results shows that a large proportion (66,2%) of the respondents were not happy with the quality of housing, with 27,9% indicating that they were satisfied while very few (5.8%) who were dissatisfied with quality of their houses. This suggest that most of the respondents felt that their current houses fall short of their needs and expectations

Many of the RDP houses in Extension 44 are badly constructed with cracks running from the roof to the foundation. The bricks used to build the houses seemed very weak and there were also broken drains and leaking water pipes. Windows were broken due to extreme winds. Some defects in the RDP houses in Extension 44 included unstable door frames and small kitchens (See Figure 4.7 B).



Figure 4.7 Depicting a broken window and small kitchen of an RDP house.

The RDP houses erected in Extension 44 do not necessarily consist of the same type of building materials. Corrugated iron roof sheeting is most frequently used for the roof, but on more and more occasion clay tile roofing is used. The walls are built from clay bricks or block work; it usually depends on what is more readily available in the area. Walls are plastered and painted on the internal and external. Other RDP houses only have the internal plaster and paint. The floor construction is a normal slab. Standard steel windows and doorframes are currently being used with hollow core wooden doors. The houses have no gutters. The result of a house without gutters is that the runoff rainwater falls directly onto the ground surrounding the house. This causes the ground to erode.

#### 4.2.8 CONDITION OR STATE OF HOUSES

Housing conditions were assessed using items concerning the physical condition and the surrounding environment of the current house. Respondents reported to have the following problems regarding the physical condition of their houses: not enough space, leaking roof and broken windows. On the surrounding environment, the most problematic situations faced by residents of Extension 44 were flowing sewage caused by busted pipes. When asked about issues on the surrounding environment of their houses that they *always* had to face, most of the respondents reported of proper maintenance by the local authorities (Figure 4.8).

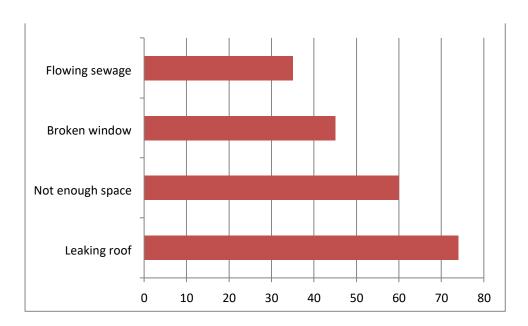


Figure 4.8 Some of the problems faced by residents in Extension 44

#### 4.2.9 SIZE OF HOUSES

Pertain to the size of houses, 44, 5% of the respondents regard their houses as very small in terms of size and number of rooms (See Figure 4.9) and these eventually leads to both physical overcrowding in net density terms and psychological overcrowding in gross or overall terms. Overcrowding poses severe hazard to health and has been linked to severe psychological disorder. The effects of crowding include violation of privacy, personal space and territoriality. Crowding breaches privacy in the regulation of inter-personal interaction through a bounding control process.



Figure 4.9 Type and size of RDP houses in extension 44.

# 4.3 RESIDENTS' ATTITUDE REGARDING THE PROVISION OF PHYSICAL INFRASTRUCTURE AND SERVICES

In addition to managing housing development, municipalities are instrumental in providing bulk-engineering services, such as roads, water, sanitation and electricity, where there are no other service providers. According to the research data there have been tremendous improvements in the provision of water, sanitation, electricity and refuse removal in Extension 44 as compared to other areas in Polokwane.

#### 4.3.1 WATER PROVISION

With respect to the provision of water in Extension 44, all the sampled households (100%) responded in the affirmative that they are being provided with piped water in their properties by the Polokwane Municipality (Table 4.13). Furthermore, the attitude of the respondents on whether they are satisfied with quality of water provided is that the greatest proportion (89%) is satisfied and 11% are extremely satisfied (Table 4.13).

On the regular supply of water, 93% of the respondents intimated that they have regular supply of water to their homes. Only small proportion (7%) do not have regular water supply (Table 4.15). Interruptions of water supply do occur in Extension 44, affecting the residents in varying degrees. About 28% of the residents experience frequent interruptions of water supply while 72% indicate that they do have water supply interruptions "at some other times" or infrequently (Table 4.16). Interruption of water supply due to water pipe burst is infrequent because when asked, "How often

do you experience water pipe burst (interruptions)" the response of 100% of the respondents is infrequently to some other time (Table 4.17).

Table 4.13 is water provided in Extension 44

Responses	Percentage of Respondents
Yes	100
No	0

Table 4.14 The level of satisfaction regarding quality of water supplied

		PERCENTAGE RESPONSES	S		
Extremely Dissatisfied	Dissatisfied	Neutral	Satisfied	Extremely Satisfied	Total
0	0	0	89	11	100

Table 4.15 Is there regular water supply

PERCENTAGE RESPONSES		
Yes	93	
No	7	
TOTAL	100	

**Table 4.16** How often is water supply interrupted?

RESPONSES	PERCENTAGES
Infrequently	1
Some Other Times	71
Frequently	28
TOTAL	100

**Table 4.17** Experiencing of water pipe burst

RESPONSES	PERCENTAGES
Infrequently	92
Some Other Times	8
Frequently	0
TOTAL	100

#### 4.3.2 SANITATION

#### 4.8.2.1 Sewerage reticulation system

The provision of sanitation facilities adds to the improvement of both personal and environmental health as well as the overall quality of life of the residents. In Extension 44 water borne sewerage system is available and consequently 100 % of the respondents indicated that they have water flushing toilets, either in their dwellings or yards (Table 4.18). The quality and capacity of such an infrastructure as well as how well it is functioning are of great importance. Of great concern is how often the residents experience sewerage blockages both in their properties and in the streets. The greatest proportion (75%) of the respondents complain about frequent sewerage blockages, while 25% infrequently or some other time experience this problem (Table 4.19)

**Table 4.18** Types of toilet facilities available

Type of Toilet Facilities	Percentage of Responses
Flushing Toilets	100
Pit (VIP)	0
Bucket Latrine	0
No Facility Provided	0

Table 4.19 Problem of sewerage pipe blocked

Frequency of Occurrence	Percentage of Responses
Infrequent	9
Some Other Time	16
Frequent	75
TOTAL	100

## 4.3.3 GARBAGE COLLECTION

Garbage collection in urban residential areas is the responsibility of the local municipality.

When asked whether "does the municipality collect refuse and garbage" in Extension 44, all the respondents (100%) indicate that such is the case (See Table 4.20). How often is this done is of importance to determine the extent to which non-removal or collection of refuse leads to the unwarranted and unsightly huge accumulation of garbage? This leads to the temptation of refuse dumping at undesignated sites by some residents.

In this instance, 71% of the respondents in Extension 44 points out that refuse collection takes places frequently, while 29% indicate that it occurs "some other time", meaning that they are not at all satisfied in the manner in refuse collection occurs (See Table 4.21). However, all the respondents point out that they had incidences where refuse was not collected in the last three months

Table 4.20 Opinion whether municipality does collect refuse

.Responses	Percentage of Respondents
Yes	100
No	0

.

**Table 4.21** How often is refuse collected?

Percentage of Responses		
Infrequently	0	
Some Other Times	29	
Frequently	71	
TOTAL	100	

In this instance, 71% of the respondents in Extension 44 points out that refuse collection takes places frequently, while 29% indicate that it occurs "some other time", meaning that they are not at all satisfied in the manner in refuse collection occurs (See Table 4.21). However, all the respondents point out that they had incidences where refuse was not collected in the last three months

#### 4.3.4 ELECTRICITY SUPPLY

One of the important functions or responsibilities of the local municipality is the supply of electricity generated by ESKOM. Electricity in the urban areas of South Africa is supplied to households on the pre-paid or monthly billing basis. According to the responses given by the respondents is that all households in Extension 44 have electricity connection (Table 4.22). However, 82% do experience frequent electricity cuts or outages or interruptions. Only a small proportion (18%) do at some other times have electricity interruptions (See Table 4.23).

Power cuts or black outs became the order of the day as municipalities tried to save energy. In the year 2008 South Africa had major electricity supply problems. Communities were warned about more power cuts taking place if energy usage did not decrease. The government also had to come with a strategy of cutting back on power usage. When asked how soon usually after the problem of electricity interruptions had occurred attended to, about 21% indicate that the problem is resolved immediately. On the contrary, 79% have their electricity cuts attended after some delays (Tables 4.24).

Table 4.22 Is there household electricity connection

Responses	Percentage of Respondents
Yes	100
No	0

**Table 4.23** The occurrence of electricity disruption

Occurrence of Electricity	Percentage of Respondents
Disruptions	
Infrequently	0
Some Other Times	18
Frequently	82
TOTAL	100

**Table 4.24** The municipality's response to electricity disruptions

PERCENTAGE OF RESPONSES		
Immediately	21	
After Some Delays	79	
TOTAL	100	

### 4.3.5 CONDITION OF STREETS AND ROADS

Interconnectivity, accessibility and movement between the various functional zones of an urban area are very important. Good and all-season roads promote spatial interconnectivity and interaction between spatial units in an urban area. According to information gathered during the research is that the residents in Extension 44 describe the conditions of streets in their neighbourhood as between good and very bad, i.e. 91% consider the condition of streets as bad (23%) to very bad (68%) (See Table 4.25), despite the fact that they are all tarred and have street lights (Tables 26 & 27).

The aesthetics of streets and of the surroundings are reflected, among others, by the condition of sidewalks and pavements. The residents of Extension 44 are far from being satisfied with the condition of street sidewalks and pavements in their

neighbourhood. Consequently, most of the respondents (80%) describe them as between bad (21%) and very bad (59%). The remaining proportion (20%) considers the condition of pavements and sidewalks as good (Table 28).

Most respondents indicated that streets inside the development are bad. Better roads are those that give access to the district's roads leading to the city. The rest of the area is uncovered soil.

**Table 4.25** The respondents' opinion concerning condition of streets

Description of Streets' Condition	Percentage of Respondents
Very Bad	68
Bad	23
Moderate	0
Good	9
Very Good	0
TOTAL	100

**Table 4.26** The opinion of residents regarding the tarring of streets

Responses	Percentage of Respondents
Yes	100
No	0

Table 4.27 The opinion of residents regarding street lights

Responses	Percentage of Respondents
Yes	100
No	0

**Table 4.28** The respondents' opinion concerning condition of sidewalks

Condition of Sidewalks and	Percentage of Respondents
Pavements	
Very Bad	59
Bad	21
Moderate	0
Good	20
Very Good	0
TOTAL	100

#### 4.4 RESIDENTS' ATTITUDES REGARDING THEIR QUALITY OF LIFE

#### 4.4.1 Provision of Social Services

Quality of life and provision of housing is a function of the general well-being and human satisfaction. Table 5.29 indicates the percentage of respondents for the availability of each service item in Extension 44. Close proximity to services and places of work is very important as it will make people save money for other things. When these services are not ideally located it will put strain on low income families as they will be spending large amount of money on transport, thus eventually exacerbating their conditions of poverty. Table 5.30 indicates the percentage of respondents for the accessibility of each service item in Extension 44.

Table 4.29 Availability of social services in Extension 44

Amenities	Available	Unavailable
Pre-school	100	0
High school	100	0
Spaza shops	100	0
Primary school	100	0
Clinic (s)	0	100
Pension pay out point	100	0
Formal grocery shop	0	100
Bus depot or Bus stop	100	0
Police Station	0	100
Taxi ranks or pick-up points	85	15

#### 4.4.1.1 RESIDENTS' ATTITUDES REGARDING AVAILABLE HEALTH FACILITIES

This study reveals that there are no health facilities in extension 44, only a mobile clinic that comes once a week. Most health centres are located in Polokwane and serves all townships around Polokwane. Residents complained that at times they do not have money to travel to the health facilities and even when they do, they are taking chances because the queues at the Polokwane clinic are always very long.

Table 4.30 Accessibility of social services in Extension 44

Amenities	Easily Accessible	Not easily Accessible
Pre-school	86	14
High school	75	25
Spaza shops	98	2
Primary school	95	5
Clinic (s)	34	66
Pension pay out point	45	55
Formal grocery shop	15	85
Bus depot or Bus stop	5	95
Police Station	15	85
Taxi ranks or pick-up points	65	35

### 4.4.2 RESIDENT'S ATTENDANCE OF SOCIAL SERVICES.

Social services have a statutory obligation to safeguard and promote the welfare of vulnerable children and adults and can provide a wide range of services to children and their parents. Social services aim to create more effective organisation, build stronger communities, and promote equality and opportunity.8% of the residents of Extension 44 frequently attend social services, 20 % occasionally attend social services, 30 % rarely attend and of which only 32% never attend social services (See Table 5.31). Extension 44 has a low percentage of frequent social service attendance, which explains the high level of crime in the area.

Table 4.31 Social services attendance

Attendances of social services	Percentage of Respondents
frequently	8
occasionally	20
Rarely	30
Never	32
TOTAL	100

#### 4.4.3 RESIDENTS' ATTITUDES WITH RESPECT TO THE LEVEL OF CRIME

Safety from crime is one of the aspects of their life that Respondents are least satisfied. The level of crime in Extension 44 is very high (See table 4.32), and yet there is no police station in the area. The respondents say that they use the police station in western-burg or in town, and when crime happens in their area the police take time to avail themselves until the residents take the law into their own hands. The majority of the respondents say that the police only arrive when the victim is badly injured

Table 4.32 Level of crime in Extension 44

Level of crime	Percentage of Respondents
Very high	68
High	23
Low	0
Very low	9
Non existent	0
TOTAL	100

#### 4.4.4 CRIME IN EXTENSION 44

Concerning security, a high degree of dissatisfaction has been associated with security provision. Cases of house breaking, robbery, stealing, physical assault and rape are very common in the area (Figure 4.10). The poor police presence and protection have resulted in occupants taking the law into their own hands. The respondents expressed

some concern regarding their safety from crime given the high levels of crime and the unavailability of a police station in the Township.

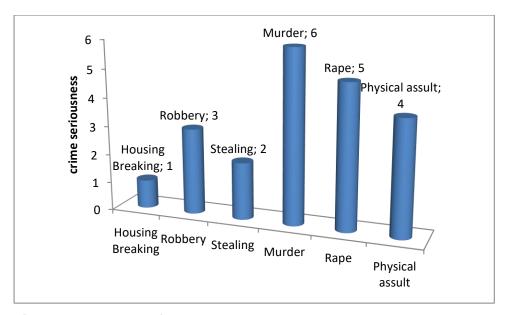


Figure 4.10 Types of crime in Extension 44

## 4.4.5. CONCLUSION

The information above presents the findings relating to analysis of data pertaining to the types of housing, provision of infrastructure and the quality of life in Extension 44, looking at residents' perceptions and levels of satisfaction.

#### **CHAPTER 5: CONCLUSION AND RECOMMENDATIONS**

#### 5.1 CONCLUSION

The racial spatial patterning of population and the establishment of racially designated urban residential areas in South African has its roots in Colonial and subsequently Apartheid eras. This occurrence can be, and is, typified by both the segregated and apartheid urban internal spatial structure models. The creation of the urban race-space organisation in South Africa still persists today. During the Apartheid era, the urban race-space organisation was as a consequence of the implementation and enforcement of the Groups Areas Act (1950) and the Natives (Urban) Areas Amendment Act (1952). Since the colonial and through the apartheid era, Black townships were, and still are, located at the periphery of urban centres.

Extension 44 is another racially homogenous urban Township exclusively for black population, forming part of Polokwane's urban space. Like all other similar urban settlements, its location fits into the Segregated and Apartheid race-space organisation. It is more of a dormitory settlement and was established, as a result of the implementation of the slum clearance programme, principally as a relocation urban settlement (Township) for people who had taken an illegal occupation of an informal and squalor settlement at Disteneng, in close proximity to the Polokwane City. The population relocated to Extension 44 had invaded and occupied the freehold area called Disteneng (also known as New Pietersburg) whose initial population was moved to Seshego Township as a result of the Group Areas Act (1950).

According to the Constitution of the Republic of South Africa, the features of a liveable space include the following:

- i) the right to have access to adequate housing
- ii) the right to an environment that is not harmful to health or wellbeing
- iii) the right to have access to health care.

One of the important elements of a residential area is the provision of housing. Housing and the need for shelter is one of the basic human rights. The provision of adequate

housing for the Black population has been a serious challenge in South African urban centres. Furthermore, there is ever increasing housing backlog in the Black Townships.

There are various ways in which formal housing is provided in Extension 44. Firstly, the government provides free housing to qualifying individual through the Reconstruction and Development Programme. Thus, the greatest proportion of the residents stay in the formal government provided houses (RDP houses). Secondly, individuals provide own housing, i.e. have own self-built houses. Thirdly, housing accommodation is provided through tenancy. In this instance, some residents stay in rented houses and backyards dwellings. Where housing shortage arises, informal structures are erected for housing purposes. It is also uncommon to find modern luxurious houses and remodelled, modified and enlarged RDP houses.

Important consideration in studying housing in the Black Townships is the type and the quality of housing provided. The assessment of both the type and quality of housing in Extension 44 points to a general expression of dissatisfaction regarding quality and size of houses among the residents occupying the RDP houses and those renting and backyard dwellings. In other words, they regard their houses falling far short of their needs and expectations. However, it is not surprising that the residents staying in self built houses are satisfied with the type, quality and size of their houses. The relationship between the family size and the size of a dwelling defines the existence or otherwise of overcrowding. Overcrowding has a deleterious effect on health and leads to the violation of privacy and personal space.

The quality of housing in Extension 44 varies from very poor to very good. Many of the low-income houses in Extension 44 are badly constructed. For this reason the majority of the RDP occupiers are extremely dissatisfied with quality of these houses. Complaints from the occupants include, among others, leaking roofs, cracking walls and broken doors.

Another significant element of a residential area (neighbourhood) is the provision, existence and maintenance of both physical and social infrastructure. The observations drawn from the respondents are that there exist problems of lack of

adequate services and infrastructure. Under such circumstances the idea of a better life for all is not and cannot be realised.

While progress has been made since South Africa's democracy through its Reconstruction and Development Programme (RDP) to provide basic services, such as housing, running water and electricity to residents in Townships, the backlog is tremendous. Lack of these services substantially affects one's quality of life.

The municipality provides the various physical infrastructures. The following is the summary of the attitudes and perceptions of the residents regarding the provision and quality of each type of the physical infrastructure in Extension 44:

- household. Although the majority of the residents are extremely satisfied with water supply, although a small proportion is not satisfied with the quality of water supplied. Furthermore, a relatively small proportion of the residents complain about the frequent disruption of the water supply.
- ii) Water borne sewerage systems has been provided. However, the majority of the residents do experience frequent sewerage blockages.
- iii) Municipality do collect refuse and garbage in the Township. The regularity of collection is not the same in the various parts of the Township. At some places the collection of garbage and refuse is frequent, yet in other places it is not regular, leading to refuse dumping at undesignated spots.
- iv) Extension 44 has been provided with electricity supply. Unfortunately, the Township experiences frequent power outages and the municipality delays in dealing with the problem.
- v) Although some all-weather (tarred) streets exist in Extension 44, there is a general dissatisfaction with the quality of streets which are described most described as very bad. Similar perceptions and attitudes are held by the residents with respect to the condition of sidewalks, pavements and street lightings.

vi) Although some schools have been erected, health facilities (clinics), security facilities (police station) and formal grocery stores are non-existent. The absence of a clinic necessitates that the residents should travel to the clinics, hospital and private doctors in the city. Due to the absence of a police station, crime in Extension 44 has reached unacceptable levels. Cases of house breaking, robbery, theft, physical assault rape are rife.

In general there is high degree of dissatisfaction concerning the availability and the quality of social and physical infrastructure in Extension 44. This does impinge on the quality of life of the residents. Absence of critical services in Extension 44 and its location put a strain on low income families as they will be spending large amount of money on transport, thus eventually exacerbating their conditions of poverty.

The findings provide empirical evidence of the relationship between poverty, housing conditions, and quality of life. Housing is not only a physical shelter but also plays a significant role in a person's physical, mental, and emotional health conditions with regards to the qualitative dimensions provided by the housing condition and the surrounding environment of the housing area. Unfortunately, the housing conditions of Extension 44 are lacking all these aspects and failed to provide these important dimensions. Due to the strong significant relationship with the quality of life, housing condition needs to be seriously considered as a socio-economic indicator in the assessment or measurement of urban poverty. A study should also be done on finding the optimal housing conditions of the urban Townships in terms of the physical aspect of the house (design, size, materials used) and the surrounding areas (location, availability of public amenities and services). Failures to address the housing issues of the urban poor might cause the group to be continuously marginalized in the society and deprived of a quality life.

#### 5.2 RECOMMENDATIONS

This study suggests the following recommendations:

- The creation of a new neighbourhood through the relocation process should aim at enhancing the quality of life of the residents at a scale that far surpasses the conditions under which they originally lived.
- 2. A newly established neighbourhood or Township, like any other urban residential area, should be conceived as a social space comprising both the perceptual and activity space. Since an environment or part thereof evokes certain perceptions and attitudes of the population, there is a need for comprehensive perceptual studies particularly on the interactions between Black residents and the Township environment in which they live. Such studies would elucidate how residents perceive their environment and also how they act in and interact with it.
- 3. A new generation of suburbs or urban residential areas is needed than perpetuating the mere labour dormitory settlements akin to Townships established during the Apartheid era. The creation of any new urban settlement or a new neighbourhood of a sprawling existing settlement should be aimed at creating a sustainable full-fledged settlement with commendable physical and social infrastructure amendable to creating a wholesome liveable space that promote the wellbeing of the population.
- 4. When designing RDP houses, the government should, among others, consider the passive physical design of the houses leading to energy saving.

#### 5.3 REFERENCES

- **Ameringen, M. (1995).**Building a South Africa. International development Research.ISBN:0-88936-745-4
- **ANC. (1994).** The RDP: Reconstruction and Development Programme A Policy Framework. ANC. Johannesburg.
- Bassett, K. and Short, JR. (1980). Housing and Residential Structure.

  Routledge & Kegan. London.
- **Bonney, X. (2007).** Inadequate Housing and Health: An overview. Environment And Polluton, Vol. 30
- **Christopher, AJ. (1983).** From Flint to Soweto: Reflections on the Colonial Origins of the Apartheid City. *Area, 15, 145-149.* 
  - Christopher, S. Murray, S and Ishikawa S (1977). A Pattern of Language,
    Towns and Building Construction.USA
    - **DA**, **(2013).**Policy on Integrated Human Settlements for South Africa.Building Foundations, South Africa.
- **Daniel, P. and Hopkinson, M. (1986).** *Population Geography.* Paul Chapman. London.
- Department of Human settlement (2009). The national housing code: Rural Interventions communal land rights. Republic of South Africa
- **Drakakis-smith, D. (1987).** The Third World City.London and New York.
- **Dozzorets, L. (2013).** Reforming the Reconstruction and Development Programmes (RDP) Housing Policy in South African Cities to Move beyond Shelter Provision toward the

- Creation of Food Security and Sustainable Urban Settlements.
- **Gleick, P. (2006).** The World's Water 2006–2007: The Biennial Report on Freshwater Resources (Washington, DC: Island Press
- **Gold, J.R., (1980).** An Introduction to Behavioural Geography, Oxford University Press, London.
- **Greenberg, SB. (1988).**Race and State in Capitalist Development.Ravan Press. Johannesburg.
- Green Building Council of South Africa (2012). Improving Lives by Greening

  Low-Cost Housing: Case Study Report of the Cato Manor Green Street.

  Retrofit
- **Gregory, S.(1978).** Statistical methods and the Geographer; The Caucer Press, London
  - Haarhoff, E. (1985). Contemporary Urban Informal Settlement and African

    Urbanisation in the Durban Region.In Haines, R. and Buis,
    G. The Struggle for Social and Economic Space: Urbanisation in

    the Twentieth Century South Africa. University of Durban-Westville.Durban.
  - Harring LL and Lounsbury, JF.Introduction to Scientific Geographical Research.

    Wm. C.Brown CompanyPublishers.lowa. USA.
  - Jakle, JA., Brunn, S and Roseman, CC. (1976). Human Spatial Behavior. Duxbury

    Massachusetts. USA
  - Jones, E and Eyle, J. (1977) Introduction to Social Geography. Oxford University Press. London.
  - Lamont AM. (1990). Provision of Housing and Infrastructure, in Mostert, WP

- And Lotter, JM (Eds). South Africa's Demographic Future. HSRC. Pretoria.
- **Lemon, A. (1991).** Homes Apart: South African Segregated Cities. David Philip. Cape Town.
- Ndhlovu, AE. (1986). Recent Socio-Economic Development in Lebowa (South Africa). MA Thesis (Geography). Ohio University, Athens, Ohio. USA.
- Ndhlovu, AE. (2000). Blacks' Perception of Urbanisation in South Africa. PhD Thesis (Geography). University of the North. Turfloop. South Africa.
- McCusker, B and Ramudzuli, M.R. (2007). Apartheid, spatial engineering and land use change in Mankweng; The Geographical Journal, 173(1), 56-74.
- Nor Rashidah, Z., Gurmit, K., Nor Aisah., A and Jamaliah, K (2012). Housing
  Conditions and quality of life of the urban poor in Malaysia.

  Faculty and institude of business management, University of
  Technology. Malaysia.
- Oluwole, A and Egidaro, B. (2014). The impact of housing transformation of Residents. Quality of life: A case study of low income housing Estate, Covenant journal of Research in the built Environment. Nigeria. Page 135-145.
- O'Malley, P. (1994). Transition (1990-1994)- The Reconstruction and Development Programme(RDP).

  <a href="https://www.nelsonmandela.org/omalley/index.php/site/q/03lv02039/04lv0210\_3/05lv02120/06lv02126.htm">https://www.nelsonmandela.org/omalley/index.php/site/q/03lv02039/04lv0210\_3/05lv02120/06lv02126.htm</a> Accessed 02/11/2015.
- Pacione, M. (2009). Building A South Africa. A Global perspective, 3rd

USA.Canada. South Africa Rural Deveopment (2004). Rural development quarterly

Sabarirejan, A,. MEharajan, T and Arun, B (2010). A study on the various welfare

Measures and their impact on QWL provided by the textile mills with

Reference to Salem District. Asian. Journal management research. Tamil Nadu,

India

**Solomon O, (2014).** A study of student housing quality in LadokeAkintolaUniversity Of Technology. Jornal of Environment and Earth Science. Ogbomoso, Nigeria. Pages 1-18.

**Statistics South Africa (2008)**. Income and Expenditure of Households 2005/2006: Analysis of Results, Report No. 01-00-01, 2008.SA

**Toyobo, A.E and Muili, A.B (2014).** The relevance of infrastructural facilities to rural Housing development in LageluLocal Government,

Department of Urban and Regional Planning. International

NGO journal.Oyo Estate, Nigeria.Pages 32-34

**Tshikotshi, V. (2014).** The Challenges of Eradicating Informal Settlements in South Africa: The Case Study of Seraleng Sustainable Human Settlement.North West Province.

Williams, F. (1971). Reasoning with Statistics; Holt Rinehart and Winston, New York.

Yaseman, A and Davis, J (1992): Disasters and the Small Dwelling
Perspectives for the UN. James and James Science Publisher. USA Canada

Yussuf, L., Bako, A.I., Omole, F.k., Nwokoro, I.I.C., Alakinde, M.K (2014): Environmental health Conditions of Slum Dwellers of Ijora- Badia. Academic journal of interdisciplinary studies. Lagos, Nigeria. Page 82-86 **Zdenko**, **C.**, **Ines**, **M and Sanda**, **G.K (2014)** Entrepreneurial managent of private Accommodation in times of crisis: A comparative Approach. University of Rijeka

**Zunguzane, J. Smallwood and F. Emuze (2012).** Perceptions of the Quality of Low-Income Houses in South Africa: Defects and their Causes.SA

#### **APPENDIX A**

#### **QUESTIONNAIRES**

My name is Thabang Ngoatle and I am a student in the department of geography and Environmental studies at the University of Limpopo. Iam conducting an academic research which seeks to investigate the provision of housing and the quality of life of the residents in Extension 44 in the Polokwane municipality, Limpopo province. These questionnaires will take you 20 minutes to complete. If you need assistance in answering these questions do not hesitate to ask. The information supplied by participants is strictly confidential. Anonymity is assured. Completion of the questionnaires is voluntary.

PLEASE ANSWER THE FOLLOWING QUESTIONS BY PUTTING A CROSS (\*) SIGN ON THE APPROPRIATE BLOCK.

# SECTION A: RESPONDENT'S BACKGROUND

#### 1. Gender

Male	1
Female	2

#### 2. Age: Less than 16 years

Below 25	1
25-30	2
31-40	3
Above 40	4

### 3. Highest Educational Level

No schooling	1
Primary	2
Secondary	3
Tertiary	4

### 4. How are you related to the owner?

Household	1
head	
Spouse	2

Child	3		
Other please			
Specify			
5. How many pe	eople live in your h	ousehold? I	Please specify number of
Children	1		
(Below 18			
years old)			
Adults (Below	2		
18 years old)			
6 What is your	employment statu	s	
Non	1		
Employed	2		
Self employed	3		
Con omployed			
	monthly income?		
No income	1		
Less than	2		
R1000			
R1000- R5000	3		
More than	4		
R5000			
8. Are any mem	bers of your family	working?	
Yes		1	
No		2	
If you have many			
ii yes now many.		•••••	
9. What is their	total monthly incor	me combine	d?
No income		1	
Less than R100	0	2	
R1000- R5000		3	
More than R500	00	4	
10 M/ha ia tha	oin househald br-	و ا سرور ما ام	uuaahald?
	ain household hea		ousenoia <i>!</i>
Husband	1	•	
Wife	2	<u></u>	
Other please			
Specify			

# **SECTION B: RESIDENCE**

1.	How long have you been staying in Extension 44?
2.	Where were you staying before coming to Extension 44?
3.	Why did you relocate to Extension
44	?

# SECTION C: THE QUALITY OF HOUSING

# 1. Type of dwelling

Formal	1
Informal	2

## 2. Ownership status of house

Owner	1
Renting	2
Squatting	3

## 3. What kind of house do you stay in?

Self (privately) built formal	1
	'
house	
Rented house that belong to	2
a private person	
Backyard rented dwelling	3
RDP (Low cost) municipal	4
provided housing	
Shack	5

# 4. How many rooms does your dwelling have?

One	1
Two	2
Three	3
More than three	4

5. How do you rate your satisfaction level regarding the house you dwell in?

Variables	Bad	poor	Moderate	Good	Very good
Size/Number					
of rooms					
Roofing					
Walls					
Doors					
Windows					
Kitchen					
Average					

SECTION D: PROVIS	ION OF PHYSICAL
INFRASTRUCTURE	

# **WATER**

1. Are you provided with clean piped municipal water in your property?

Yes	1
No	2

2. Are you satisfied with the quality of water provided by the municipality?

Extremely	Dissatisfied	Neutral	Satisfied	Extremely
Dissatisfied				Satisfied

2. Do you have regular water supply to your home?

Yes	1
No	2

3. If NO, how often does it get interrupted?

Infrequently	1
Some other time	2
Frequently	3

4. How often do you experience water pipe burst?

Infrequently	1
Some other time	2

Frequently	3

# **SANITATION**

1. What kind of toilet (sanitation) service does your household have access to?

Flush Toilet	1
Pit (VIP)	2
Bucket Latrine	3
No sanitation provided	4

2. How often do you experience sewerage blockages or overflow outside your property / in your street?

Infrequently	1
Some other time	2
Frequently	3

3. Does the municipality remove refuse collection/rubbish at your home?

Yes	1
No	2

4. If Yes how often?

Infrequently	1
Some other time	2
Frequently	3

5. Have you had incidences where refuse was not collected in the last 3 months?

Yes	1
-----	---

No 2	
------	--

### **ELECTRICITY**

1. Does your house/dwelling have electricity connection?

Yes	1
No	2

2. How often do you electricity cuts/disruptions?

Infrequently	1
Some other time	2
Frequently	3

3.If you do experience electricity cuts, how soon is the problem solved?

Immediately	1
After some delays	2

## Residential Streets, Roads, Sidewalks and Pavements

1. How would you describe the conditions of the streets in your neighbourhood?

Very bad	1
Bad	2
Moderate	3
Good	5
Very Good	6

2. Are the streets in your neighbourhood tarred?

Yes	1
No	2

3. How would you describe the conditions of the sidewalks and pavements of the streets in your neighbourhood?

Very bad	1
Bad	2
Moderate	3
Good	5

Very Good	6

4. Are street lights available in Extension 44?

Yes	1
No	2

# **SECTION E: QUALITY OF LIFE**

1. Which of the following social services are available in Extension 44?

Amenities	Available	Unavailable
Pre-school		
High schools		
Spaza shops		
Primary schools		
Clinic (s)		
Pension pay out point		
Formal grocery shop		
Bus depot or bus stop		
Police Station		
Taxi ranks or pick-up		
points		

2. How accessible are these social amenities/services to you?

Amenities	Easy Accessible	Not easily Accessible
Pre-school		
High schools		
Spaza shops		
Primary schools		
Clinic (s)		
Pension pay out		
point		
Formal grocery shop		
Bus depot or bus		
stop		
Police Station		
Taxi ranks or pick-up		
points		

3. How often do you and your family attend any social activities (e.g. church, club or interest group)?

Frequently	1
Occasionally	2
Rarely	3

Never	4

4. What is the level of crime in Extension 44?

Very high	1
High	2
Low	3
Very low	4
Non-existent	5

5. Rank according to their seriousness the following crime types in Extension 44? (1 most serious)

Crime Type	Rank
House breaking	
Robbery	
Stealing	
Murder	
Rape	
Physical Assault	

6. How are authorities dealing with these crime types in Extension 44?

Effectively	1
Ineffectively	2

**NB: THANK YOU FOR YOURE TIME AND COOPERATION.**