

Planning for Urban Growth

With Special Reference to Windhoek, Namibia

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Submitted in partial fulfillment of the requirements for the

degree of Master of Town Planning

University of Tasmania

April 1999

Acknowledgements

I wish to express my sincere appreciation and gratitude to those who have supported me in the preparation of this project. I would especially like to thank my family whose distant presence and prolific encouragement were a great source of inspiration. I would also like to express my gratitude to my dear friends Natalie and Alison for their ongoing encouragement, support and interest. Thanks are also extended to Darren, who helped me in so many different ways, Richard and Judy for their tremendous kindness and generosity. I also wish to thank my project supervisors, Damien Mugavin and Bob Graham, for their astute comments, patience and personal interest.

People whom I would like to particularly thank for providing the necessary data, resource materials and advice include:

Abraham Blaauw
Andreas Wienecke
Barrie Watson
Birgit Eysselein
Braam Harris
Elmarie van den Bergh
George Kozonguizi
Hannelie Garbers
Henry Khroné
Trix Alberts

I am also greatly indebted to my sponsor, AusAID, who made it possible for me to realise a dream. And last but by no means the least, this is dedicated to my darling Llewellyn.

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Acronyms

CoW	City of Windhoek
BTP	Build Together Programme
CBO	Community Based Organisation
DcP	Decentralisation Policy
DP	Development Plan
Eskom	Electricity Supply Commission
GRN	Government of the Republic of Namibia
ISP	Informal Settlement Policy
KfW	Kreditanstalt für Wiederaufbau
LA	Local Authority
LN	League of Nations
MRLGH	Ministry of Regional & Local Government and Housing
MDRC	Multi-disciplinary Research Unit
NAHG	Namibian Housing Action Group
NamPAB	Namibian Planning Advisory Board
NBIC	National Building and Investment Corporation
NEPRU	Namibian Economic Policy Research Unit
NDP	National Development Plan
NGO	Non-governmental Organisation
NHE	National Housing Enterprise
NISER	Namibian Institute for Socio-economic Research
NPA	National Plan of Action
OPC	Ovambo Peoples' Congress
OPO	Ovambo Peoples' Organisation
RA	Reception Area
RSA/SA	Republic of South Africa
SWA	South West Africa
SWAPO	South West African Peoples' Organisation
UN	United Nations
UNCHS	United Nations Centre for Human Settlements
USAID	United States Aid for International Development

Part One

REALITY

Chapter 1

INTRODUCTION TO PROJECT

1.0 Problem Statement

Namibia became politically independent from South Africa (SA) in 1990 and although it holds prosperity for all, it also generated a whole range of problems. The urbanisation dynamic has become a primary trend of society since independence. The general trend of migration in Namibia is towards the commercial and manufacturing centres, particularly to Windhoek, the capital city. A recent survey indicated that in-migration accounts for 3.9% of the total population growth of Windhoek, which is overall 5.4% per annum (CoW 1996). These statistics have significant implications as the city's population is growing faster than employment opportunities and services.

Such mass urbanisation presents new problems and challenges. Rural-urban migration is one of the major factors responsible for the difficulties Windhoek is presently experiencing with regards to housing. Appropriate measures need to be taken immediately to minimise further development of squatter and spontaneous settlements¹ which have mushroomed since independence. This study will therefore focus on the housing situation within the Windhoek context since the city has particular circumstances, as discussed later in the project, which make it particularly vulnerable to the urbanisation phenomenon.

1.1 Aim of Project

The focus of this project is geared primarily to the provision of housing in Windhoek and those least able to help themselves, the substantial numbers of urban poor in that city, whether they are from the indigenous urban population or migrants from rural areas.

¹ "Squatter" or "informal" settlements are the two terms used in this project to describe the precarious settlement and living conditions of the persons concerned. In official documents these are defined as *organised and controlled non-conventional settlements equipped with basic services and minimum health and security requirements*. These are entirely illegal and have been tolerated until recently. Residents are now being resettled.

The primary reason for the “urban poor” focus is partly because it is often felt that the poor should not be in cities in the first place, since it is assumed that they are economic “parasites” and that any assistance given to them in the form of housing and services will only attract more migrants and increase the problem further. This argument, however, fails to recognise that the urban poor make a collectively substantial contribution to both urban and regional economies. Planning and housing policies can be a powerful tool in helping reduce inequalities and thus making a major contribution to development strategies. In order to do so, it will be necessary for planners, architects and policy makers to learn from the poor and work and plan with them rather than making arbitrary assumptions.

The aim of this project is to:

- better understand the urbanisation dynamic at work at national and local metropolitan scales in Namibia, and how it impacts and exacerbates the housing issue in Windhoek
- investigate the housing issue as one aspect of the entire complex urban system, incorporating a critique on various low-income housing projects in order to see how housing relates to the issue of sustainability
- put forward relevant policy and strategy recommendations as a means of addressing the low-income housing issue

1.2 Methodology

The process of urbanisation in Namibia is a symptom of socio-economic development of the rural sectors of the country. It would be impossible to address all those issues in this study, and will therefore focus on one of the most critical issues, ie facilitating housing for the urban poor. The provision of appropriate standards of housing for all income levels, and the lack thereof, is currently a pressing issue and the biggest dilemma facing planning which is what this study seeks to address.

The project is divided into four components to facilitate a coordinated and structured approach. The first component sets the context and background necessary for further discussion of the central theme, that of low-income housing. The next two components form the core of this study, the latter highlighting the housing situation amongst the urban poor in greater detail. This is

done through a review of various low-income housing projects. The third alternative leads to conclusions about prospects and alternatives as a means of addressing the housing issue in a multi-disciplinary framework. The final section is a summary of the study, and also draws general conclusions.

Most information was obtained through interviews and correspondence with experts from various organisations, ie government and NGOs along with one short field visit to Namibia. Further information was gained from relevant literature and statistics. Obtaining relevant data was one of the biggest obstacles during the research phase of this project. Information regarding the development of Windhoek during the apartheid era was abundant. However, literature on low-income housing was scarce. Most writings refer mainly to historical development, urbanisation and the living situation in Katutura, the suburb which became the focus of this project. Besides the lack of data on current city growth, there are no concrete figures on the actual population size, the extent of squatter settlements or current housing backlog. Some experts have attempted to estimate these figures. The 1991 Population Census is not considered very reliable by most experts and has become obsolete due to the rapid changes in population growth and distribution. Nonetheless, this project has been developed to a reasonably useful level such that policies and strategies can be usefully developed.

1.3 Structure of Report

PART ONE – REALITY

Chapter 1: Introduction to Project

The study commences with a general introduction to the project and makes a problem statement. It further elaborates on the aim and purpose of the study as a whole.

Chapter 2: Physical & Social Profile – Namibia

This chapter provides the necessary background for orientation and setting the general context. It also looks at those physical and historical aspects which greatly contribute to the urbanisation forces at work in Namibia.

Chapter 3: Setting the Context - Greater Windhoek

A brief discussion of the capital city and how history impinged on its present functioning and the consequent ability to adjust to new demands as the city continues to grow.

Chapter 4: The Urbanisation Dynamic

In order to achieve the aim of this project, it is necessary to gain some understanding of the urbanisation phenomenon at national and in particular local metropolitan scales, as there is a direct relationship between these processes and the increasing housing crisis which this chapter seeks to address.

PART TWO - THE CHALLENGE

Chapter 5: Urban Housing

This chapter reviews trends which allow investigation of the nature and true impact of the housing crisis in Katutura. It discusses the issues surrounding the existing housing crisis, looks at the institutional framework, quantifies the housing demand, and provides a critique on existing low-income housing projects.

PART THREE - POSSIBLE URBAN FUTURES

Chapter 6: Alternatives in Response

This chapter addresses the housing need by putting forward various proposals for alternative approaches by trying to respond to the issues at hand in an open way.

PART FOUR - STUDY CONCLUSIONS

Chapter 7: Summary & Conclusions

The concluding chapter provides a brief discussion on the main issues emanating from the foregoing study from which general conclusions are drawn.

Chapter 2

PHYSICAL & SOCIAL BACKGROUND

2.0 Introduction

This chapter is a brief account of the physiographic features so unique to Namibia. It is also a synopsis of individual components, in the historical treatment of elements 2.4, 2.5 and 2.6, to provide the backcloth essential for further discussion of the urbanisation phenomenon in Namibia.

2.1 Geographic Location

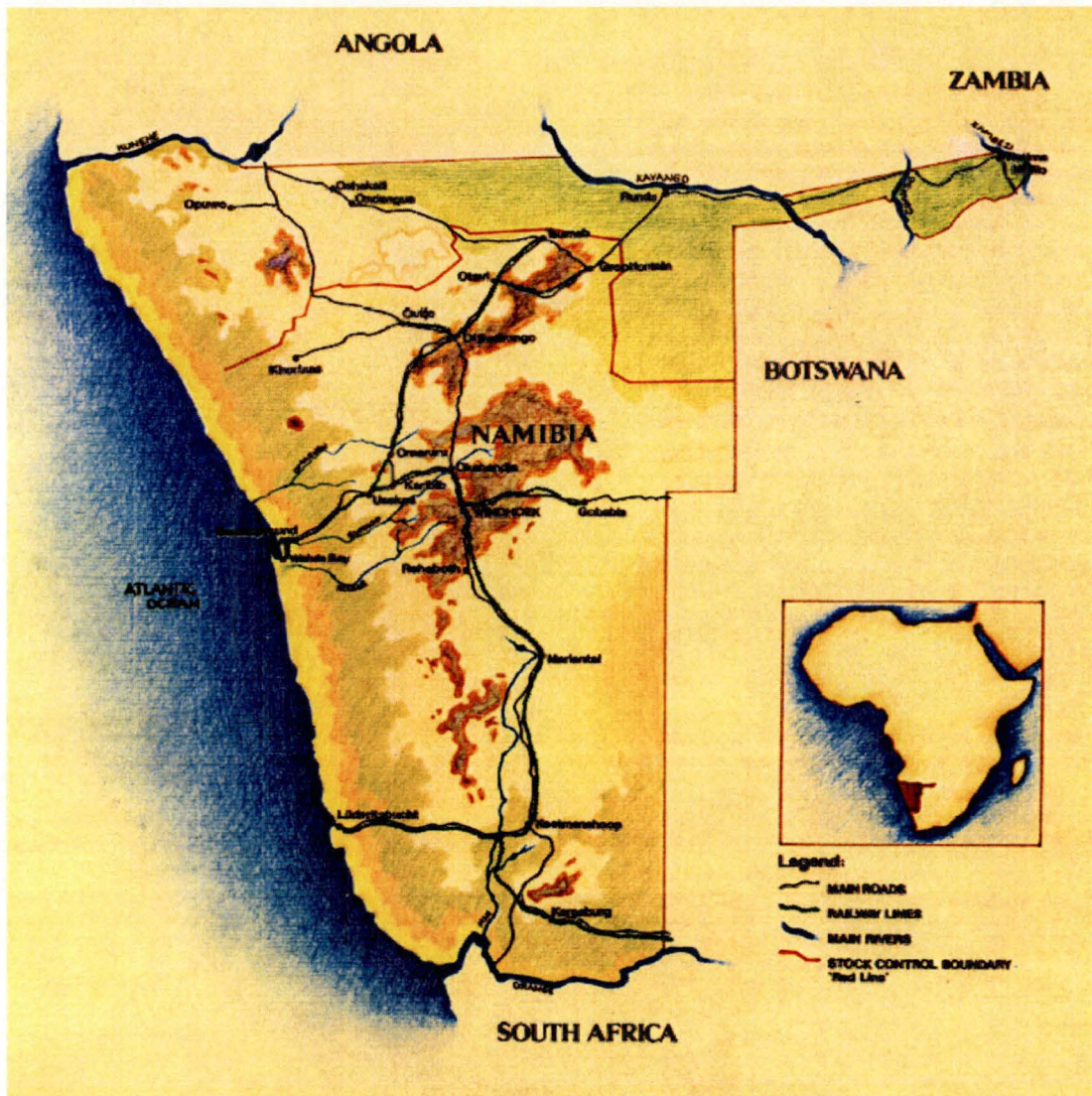
The newly independent Republic of Namibia is named after its famous coastal desert, the Namib. The name is derived from the Nama-Damara² word !Namib, which literary means "the enclosure", referring to the desert which protects the plains from pounding waves, but for many years also protected the hinterland from plundering navigating colonialists.

With a total area of 824 269km² it is Africa's 12th largest country. It is situated between latitudes 18 and 28° south and longitudes 14 and 21° east. Formerly known as South West Africa (SWA), it is located at the south western margin of the African continent and shares borders with Angola in the north, Botswana and Zambia in the east, and the Republic of South Africa (RSA) in the far south (see Map 2.1). The Atlantic coastline borders it to the west stretching a distance of 1300km. The 35km Caprivi Strip extends in the north-east, separating Angola from Botswana, running a distance of about 450km to the Zambezi River. The Orange River in the south, the Kunene in the north-west, and the Kavango and Zambezi river systems in the north-east are the natural boundaries and are also the only four perennial rivers in Namibia.

Geographically, the country is larger than the United Kingdom and Germany combined. Its population occupies a sparse arid region and although land is in abundance, the country cannot sustain a

² The Nama is one of Namibia's eleven indigenous groups.

large population due to poor soil conditions and a low annual rainfall combined with the high evaporation rates.



Map 2.1 The geographic location of Namibia. Taken from UNICEF.

2.2 Topography, Climate and Water Resources

Namibia is a land of contrasts, its vast territory hosting widely different climates and physical terrains: from tropical forests along the northern border with Angola, to desert landscapes in the south. Topographically, Namibia is divided into 3 distinct natural regions: the Namib Desert, the Central Plateau and the Kalahari Desert. The 80 - 120km wide belt of the expansive and desolate

Namib Desert stretches along the entire coastline with the Atlantic Ocean and covers about 15% of the country's total area. Its desolateness makes it totally uninhabitable, but despite that it contains enormous riches and has made Namibia one of the world's largest producers of gem diamonds.

To the east of the Namib, altitude rises rapidly to the interior plateau which covers more than half of the central land surface area and stretches across the country from the northern to the southern border. The semi-arid mountainous plateau varies in altitude, from 1000 – 2000m, and eventually joins the Kalahari Desert in the east. The Central Plateau is characterised by a diversified landscape with mountains, valleys and undulating plains.

The Kalahari Desert, which lies along most of the eastern part of the country, is characterised by thick layers of terrestrial sand and limestone, scanty rainfall and almost a complete lack of surface water.

With a mean annual rainfall of approximately 250mm, Namibia has the driest climate in sub-Saharan Africa. Along the coast the cold Benguela Current moderates the desert heat, inhibits rainfall and causes fog. Scant rainfall arises from the cool air masses generated by the Benguela Current and the high pressure conditions over the southern Atlantic and Indian oceans. Rainfall patterns are marked by considerable regional variations both within and between years, and the country as a whole is susceptible to drought. Areas of relatively reliable rainfall are limited to those in the north-central region and eastern Caprivi. The Ovambo Region, (this incorporates the regions of Omusati, Oshana, Ohangwena and Oshikoto - refer to Map 2.2) on the other hand, experiences unreliable rainfall patterns, and even flooding of the oshona³ drainage system. The average rainfall ranges from 20mm in the south-west (Namib Desert) to the Caprivi area in the north-east, which receives some 600mm of rain.

There are two rainy seasons: a short one (October - December) and a long one (mid January - April) which are usually accompanied by heavy and frequent thunderstorms. On average Windhoek receives 25mm or more rain on only three days per year, and 1 - 10mm on 54 days (Department of Water Affairs 1991). Dry and cloudless conditions with blue skies mark the rest of the year.

³ An oshona is a shallow surface depression.

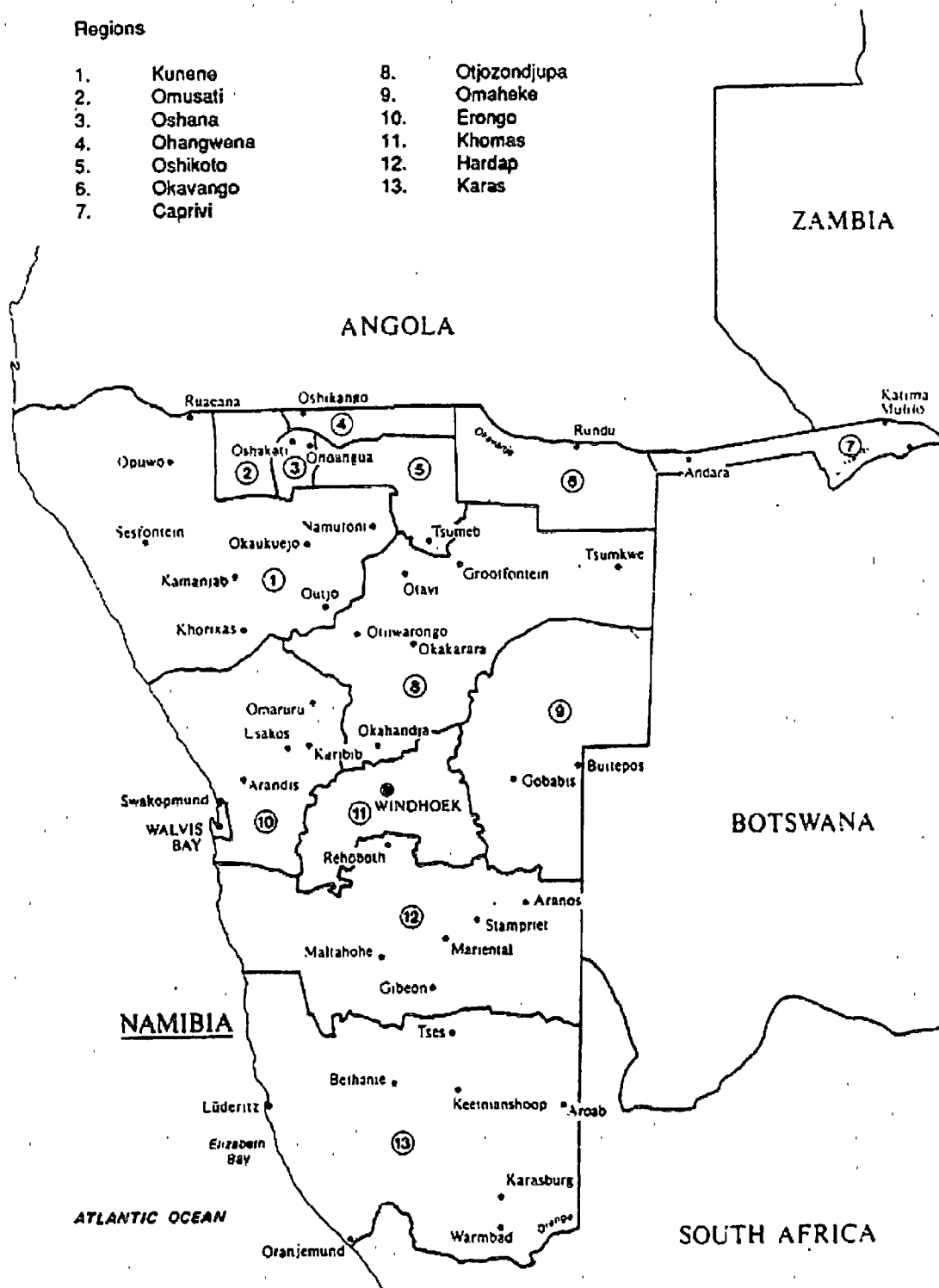
and in all, the country enjoys an average of 300 days of sunshine per year.

Evaporation levels are extremely high. It is estimated that about 83% of all rain evaporates soon after it falls (Department of Water Affairs 1991). The evaporation rate is due to the high mean temperatures which characterises the climate in most areas of the country. Windhoek's annual evaporation rate is ten times that of its rainfall. Again, however, marked variations in aridity and temperature, arise from the extensiveness of the landmass and the differences in elevation. Although the greater part of the country lies north of the Tropic of Capricorn, the climate is typical of a semi-desert country. It is not unusual for temperatures to rise above 40°C in midsummer.

Surface waters are heavily influenced by local variations in rainfall. The only perennial rivers are along the northern and southern borders, which are located far away from the main centres of demand. Other rivers, such as those in the central parts only flow for intermittent periods and drain either into the Orange River to the south or the Atlantic Ocean to the west. Runoff is even more circumscribed in the sandveld areas, with the exception of the Ovambo Region where water is retained in oshonas for some months. Exploitation of groundwater resources is hampered in most areas by the unfavourable combination of rainfall and geology. In addition, water quality is poor in many areas, salinity being a major problem in the Ovambo Region, the southern Nama Region and the Auob-Nossob Basin.

2.3 Soils and Vegetation

The three main soil categories correspond to the three topographical zones described above. The coastal sanddunes and weathered rock of the Namib Region, together with the vast stony areas exposed to severe wind erosion bordering the desert, are comprised of desert-type soils, which are too infertile to support any agricultural production, apart from the alluvial beds along the rivers. The majority of the east and north-east areas are comprised of Kalahari soils, which are characterised as sandy, fine-textured, deficient in phosphorous, with weak cohesion and a high absorbent capacity (Mthoko et al, 1990).



Map 2.2 Namibia's electorate regions. Taken from UNICEF.

The shallow lithosol soils in the central region are less sandy, whilst the best alluvial soils are found in isolated pockets along rivers such as the Kunene and Okavango in the north.

Namibia's ecology is not very suitable for dense forests or rapid growth of most tree species. There are, nevertheless,

considerable areas of natural forests, which contain numerous different species in closed forests, open savannah woodlands, and dry forests and shrubs. The country as a whole is divided up between three major vegetation zones: desert, savannahs and woodlands, within which 15 main vegetation types occur. Desert vegetation accounts for 16% of the land area, varying along the Namib Coast from annual grass plains to succulent or virtually no vegetation. The dry forests of the north-east comprise of about 20% of the entire country and is concentrated in Caprivi, Kavango and Ovambo regions, and contain a fairly dense concentration of trees as well as palms which are well-suited to the humid conditions prevailing there. Savannahs constitute the remaining 64% of the country, consisting of grassveld and shrubs.

Vegetation patterns as well as water availability determine the sustainable rangelands grazing capacity. Limited natural vegetation in the drier southern regions and western desert margins demand large areas per stock unit, whilst the central and northern areas have greater capacity for more intensive stocking of cattle and smallstock. The more heavily vegetated and humid northern regions also hold the highest distribution of wildlife resources.

Overall, the physical environment of Namibia is naturally fragile and harsh. Wide ranging abuse and degradation of the environment has already occurred. Of particular concern is the degradation of the natural rangelands within both commercial and communal farming areas through overstocking and overgrazing. Localised deforestation in the northern communal areas of Ovambo, Kavango and Caprivi is problematical and increasing.

2.4 Historic Overview

Namibia developed as a colonial country during the period of German occupation (1885 - 1914) and later under SA administration (1915 - 1990). Its history can be divided into three political phases. Firstly, the period before German colonisation of which very little is known. Secondly, the relatively brief period of German colonisation which set the overall pattern of economic distribution. This pattern was reinforced by the eighty odd years of SA occupation.

Thirdly, SWAPO (South West African Peoples' Organisation) which is the governing power of the day. These are briefly discussed below.

2.4.1 The Pre-colonial Period

Western Caprivi is today occupied mainly by the San people. The San, also known as the Bushmen, were the first inhabitants of the country and have occupied the territory for as long as 30 000 years. These hunter-gatherers, were found throughout southern Africa. Following centuries of being pushed further and further into drier and less economically useful parts of the region by successive waves of newcomers, only about 50 000 San are scattered through southern Africa today, including Namibia. The Namas and Damaras⁴ inhabit the central parts of the country, while the Ovambos settled in what is today northern Namibia and southern Angola. Here they have built settlements and planted crops, and kept large herds of cattle and goats. The Hereros settled between the Namas and the Ovambos. They do not usually cultivate crops. The Kavangos came to stay in the north-eastern part of the territory along the Kavango River, and the Caprivians settled between Kavango and Zambia.

When the Portuguese landed in 1486, they were the first Europeans to come to the territory. They arrived at Angra Pequena (now Luderitz Bay) but did not succeed in annexing and colonising the territory since the Namib Desert discouraged them. From time to time, ships called at the natural harbour of Walvis Bay, but most navigators avoided its gloomy waters. The Namib Desert delayed colonisation in Namibia by at least four centuries. In 1786 a British ship, the Nautilus, explored the coast and anchored at Angra Pequena. However, annexation did not occur until 1793 when the area along the west coast came under British control.

2.4.2 German Colonisation

With the annexure of Walvis Bay by Britain in 1876 and the establishment of the first German businessman, Adolf Luderitz, at Angra Pequena in 1883 - 1884, the country was opened to

⁴ The Damaras, Hereros, Kavangos, Ovambos and Caprivians are some of the eleven different ethnic groups inhabiting Namibia.

international economic and political interest. Within months the German government took full control of the territory and established itself as the colonial power of the day.

SWA was the only German colony in Africa regarded as suitable for white immigration. Therefore, from the very beginning of German occupation, it became policy to encourage white settlement on the lands occupied by Africans. The Germans took over the most fertile and economically viable lands of the territory. Settlers were encouraged to immigrate to SWA and settle as farmers and raise cattle and sheep.

The loss of land led first the Nama, and then the Herero tribes to revolt against German colonialism in 1904. During the Herero revolt, an extermination order was issued by Germany. Two-thirds of the total Nama and Herero tribes were killed during the resistance war of 1894 – 1907, reducing the Hereros from 80 000 - 15 000. More than 100 000 Africans had been killed by the time the Germans finally ceased to control the territory. Some people managed to flee to the neighbouring Botswana, but the rest were forced into slavery.

2.4.3 South African Rule

Soon after the outbreak of World War I, SA troops invaded and occupied SWA on behalf of the Allied Forces. SA encouraged the Africans to see the invasion as their liberation. However, although they were allowed to move onto German Crown Land which was not occupied by white farmers, the SA conquest made their struggle for survival even more difficult. The SA occupation did not bring peace to the territory at all.

In the 1920s, with the defeat of Germany at the end of World War I, SWA became a League of Nations (LN) mandated territory under the administration of SA. According to the terms of this mandate, SA was to promote the material and moral well-being of the inhabitants. The SA government, however, did not return the land to the original owners, nor did it promote the interests of the Africans in accordance with the terms of the mandate. Instead, it continued to expropriate the land from the Africans and give it to white settlers. Specially demarcated areas called "reserves" or "homelands" were set aside for use by blacks who otherwise served as cheap labour.

World War II marked the end of the LN and was replaced with the United Nations (UN) organisation. The UN Charter declared that some of the mandate territories inherited from the LN should be granted early independence. Others would become UN Trust Territories. All mandate powers agreed, with the exception of SA, which refused to acknowledge the transfer of its duties from the LN to the UN. For a while SA accepted the mandatory responsibility given it by the LN, it still harboured the idea of eventually annexing the territory and making it its fifth province.

At the fourth Committee Meeting of the General Assembly on 14 December 1946, the Prime Minister of the RSA, General J. Smuts, requested permission from the UN to formally annex SWA. His request was firmly rejected. The SA government then continued its illegal occupation of SWA. It is against this background that the UN concerned itself with the question of Namibia from 1946 until 1989. Innumerable resolutions were passed by that organisation, calling upon SA to grant independence to Namibia. All these efforts, however, took almost half a century before they were realised.

2.4.4 The Formation of SWAPO

In response to the conditions described above, and in protest against the illegal occupation of SWA, and especially against the oppression and exploitation of its inhabitants, the Africans started forming political organisations. In 1957, the Ovambo Peoples' Congress (OPC) was formed and later renamed the Ovambo Peoples' Organisation (OPO). Its formation was an attempt to improve the conditions of contract workers (refer to s2.6, p15). In 1960, the OPO developed into SWAPO, a representative movement of the Namibian people. Still nothing changed in the status of the black Namibian, despite peaceful demonstrations for independence, and despite appeals by the African population to the SA regime.

SWAPO then launched a guerrilla resistance war in 1966, which continued until 1989 when RSA accepted the UN Security Council's Resolution 435⁵ and an independence/peace plan for SWA. SWAPO gained overwhelming support from the contract

⁵ This was a peace/independence plan which eventually led to the political freedom of Namibia.

Namibia's national liberation movement, SWAPO also gained the UN's recognition as the sole and authentic representative of the Namibian people. The general Assembly re-affirmed the legitimacy of the struggle of the Namibian people against the RSA's illegal occupation of their country.

2.5 Population

Reference should be made to Appendix 1. Although a vast country, Namibia has a relatively small population in absolute numbers. Namibia currently has an estimated population of 1.7 million, and is one of the most sparsely populated countries in the world with an average density of 2 persons per km². Namibia's population is growing fast. It is suggested that an additional 45 000 exiles who had repatriated in 1989/90 alone have increased the national population by some 3% and that of the Ovambo Region by 6% (NPC 1991).

Eleven separate ethnic groups speaking almost as many languages weave a rich cultural tapestry. The largest linguistic group in Namibia is the Ovambo, constituting about 60% of the entire population. The other ethnic groups and racial communities are, in descending order: Kavango, Herero, Damara, Nama, White (Afrikaner, German, English), Coloured⁶, Caprivan, Bastards, and Bushmen. Approximately 88% of the total population is black, 5% white, about 5% coloured, and only 2% are of other races.

There are sharp internal contrasts in terms of population distribution, mainly climatic. Nearly 60% live in the northern districts of Caprivi, Kavango, and Ovambo and only 7% in the southern districts. While in 1970 the total Namibian population was said to be 737 497, it had almost doubled to 1, 410 711 in 1991. This implies an annual population growth rate of roughly 3%, which is markedly more than the country's average annual economic growth rate. Such disproportion is reason for concern.

Current projections estimate that by the year 2000 Namibia will have attained a 7% growth rate per annum amongst the urban population, and 11% for peri-urban areas. This suggests that even Namibia is gradually turning into an urbanised society. In light of present developments it can be assumed that this process will further accelerate if land degradation is not brought under control.

⁶ Coloured is a derogatory term for people of racially mixed parentage.

Roughly 550 000 of the Namibian population is urban. This suggests a tendency for rural-urban migration compared to the figures of the 1981 census. This identified a proportion of 25% urban and 75% rural inhabitants. Windhoek, with more than 35% of the country's total urban population is the single most urbanised district in the country. Census data from 1995 indicates an urban population growth rate of 5.4% per annum (1995 Resident Survey Report) for this centre.

2.6 Movement and Settlement of People

Extensive migration and population movements from the rural areas have been the result of the migrant labour system and the disruption caused by military operations, particularly in the northern parts of Namibia generally referred to as the "war zone".

Contract labour started in the early days of German presence in the territory. During that era, the Odendaal Commission⁷ in 1964 divided the population into 11 separate ethnic groups or the so-called Bantustans, and forced them to live in alleged homelands according to their ethnic origin. This establishment of the fragmentation was the basis of SA's "divide-and-rule" apartheid system in Namibia. The whites henceforth occupied about 45% of the territory and approximately ¾ of the viable farmland. Parallel to the settlement and confinement of the Africans to such reserves/homelands, economic activities started to flourish in white-owned areas where mining, fisheries and small businesses were concentrated. These activities required labour which was not readily available and had to be recruited from the reserves.

The homelands have always depended on small-scale agriculture, yet their grasslands are very small and consequently overgrazed. The African population crowded into these unproductive areas have therefore often been forced to migrate to the so-called 'white areas' in search of jobs. The majority of contract workers

⁷ The RSA state president of 1962, Dr Verwoerd, appointed a Commission of Enquiry into SWA under the chairmanship of FH Odendaal. This report covered in detail the RSA's plans for improving communications, water and electricity for the territory, largely for the benefit of the white community and of overseas investors, for whom it was the middleman.

were from the northern parts of the country. Tens of thousands of men, especially in rural areas, left their families behind to work for the whites in mines and factories, on the railways, as domestic servants, etc. One of the many reasons why Ovambo men were recruited as contract workers was that between 1906 and 1910, when the Germans exterminated the Herero and Nama tribes, the white settlers were suddenly left with a drastic shortage of labour power. Another important reason was related to climate. The Ovambo Region has a short rainy season and limited rainfall. When rainfall is low, livestock productivity suffers. Therefore, men saw contract labour as a potentially more reliable way of supporting their families.

Under the contract labour system, the workers migrated *en masse* into urban areas, particularly Windhoek. Although the contract labour system was abolished a decade ago, the basic economic structure has remained the same. Therefore, the trend of migration has not changed. Urbanisation gained momentum in the 1980s and has become a primary trend of society since independence in 1990 when black Namibians perceived as a reality their legal freedom of movement. The influx from rural areas is to a large extent still motivated by the search for employment in the wage-sector and remains significant. Other factors have been the prevailing drought, lack of educational and medical facilities and the non-existence of recreational facilities in remote rural communities.

2.7 Conclusion

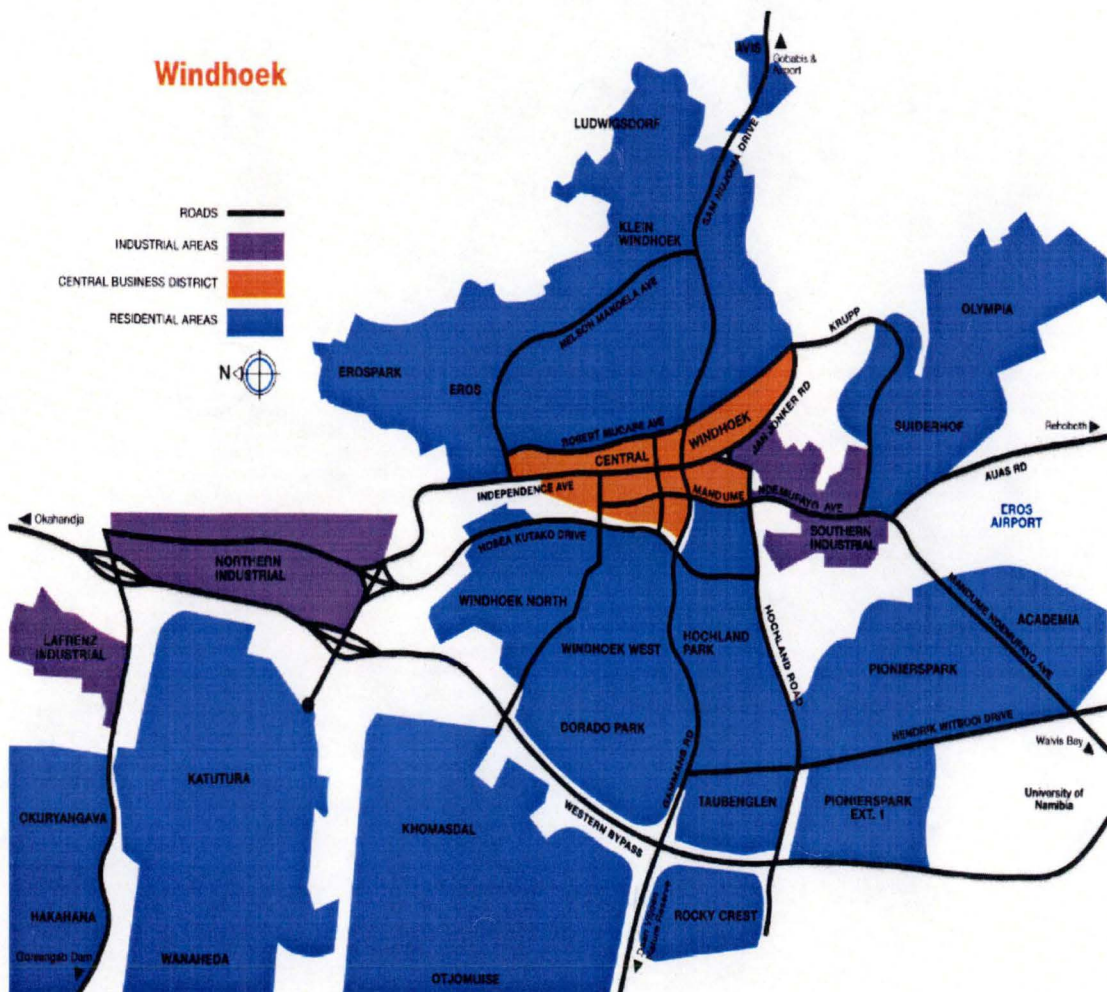
Chapter 2 was a brief description of the physiographic aspects of Namibia which in many instances directly impact on the urbanisation phenomenon forming the underlying theme of this study. This chapter also looked at those historical elements which have helped in shaping the country and its character. The following chapter will provide a profile on the capital city, Windhoek.

Chapter 3

SETTING THE CONTEXT

3.0 Introduction

Greater Windhoek is the term used in this project to denote the entire metropolitan area of the city (Map 3.1). This incorporates lower income areas of Katutura and Khomasdal, and other townships located on the northern periphery of the city.



Map 3.1 The metropolitan area of Windhoek City.

The natural advantages and central location of Windhoek has led to a considerable concentration of infrastructure and specialised health, cultural and educational facilities, and is today the major urban centre, both in terms of its location, functions and population. With this status comes international recognition and a consequent focusing of political, economic and socio-cultural power bases and events. Also, it is the seat of administrative, legislative and judicial functions as well as the focus of commercial and cultural activities. Furthermore, the city is centrally located with good infrastructure in all directions, making it readily accessible to Namibia's various regions and beyond.

However, the status of primacy is not without a darker side. Windhoek is spatially, socially and economically segregated, although no longer by law. This spatial segregation based upon ethnic lines is still a dominant feature of all Namibian urban centres. Windhoek's dominance also contributed to the highly unbalanced regional development. At a simplistic level, Namibia displays a large, but poorly developed agrarian economy. This situation of gross regional imbalance, when linked to the largely poor rural population, poses a problem that is not only of direct consequence to Windhoek, but also to the country at a national level.

3.1 Physical Setting and Land area

Physiographic factors have had particular importance in shaping the character of Windhoek. It is situated on a flood plain which is almost completely surrounded by mountains. Developable land is limited by the mountainous terrain partially enclosing the city (see Map 3.2, p21).

Three rivers which only flow for short periods in the rainy season are the Klein Windhoek, Tal and Gammams rivers, and small streambeds that branch through the city. The city has spilled over the mountains in the east, however, a significant amount of flat land to the south remains. The city lies in a semi-arid region with a low human and animal carrying capacity and is one of the least densely populated regions in the world. The municipal jurisdiction of Windhoek totals an area of approximately 47 812ha.

3.2 Character

In general, Greater Windhoek can best be described as a dualistic city, with a modern and typically "First World" sector and a less sophisticated "Third World" sector that is common of most colonial cities in Africa. Although Windhoek is an attractive town, with its distinctive blend of German, Dutch, English (Plate 3.1) and contemporary architecture set against a rugged and mountainous terrain, its political, social and economic history has ensured the development of several distinct urban characters.

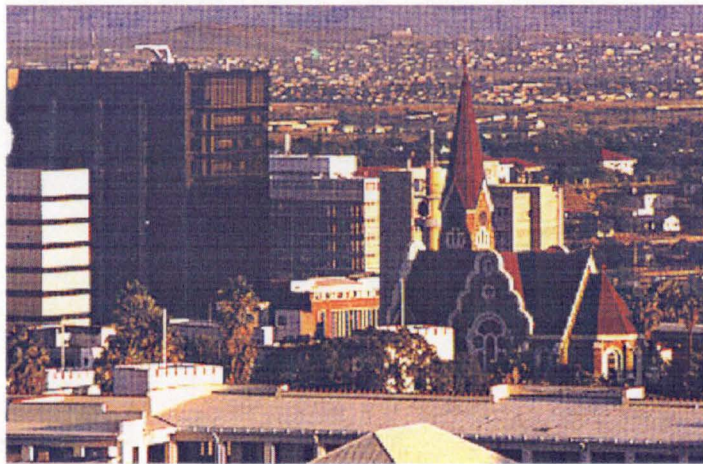


Plate 3.1 Windhoek's distinctive blend of various architectural forms.

In a general sense, the CBD is modern with high-rise buildings and offers a wide range of goods and services. Ludwigsdorf and Eros Park are the city's elite suburbs (Plate 3.2), the southern and western suburbs are the middle class areas (Plate 3.3), and Katutura, Windhoek's former "black township" housing at least 55% of the city's population, is for the most part sub-economic (Plate 3.4). Further, Katutura is spatially dislocated from the rest of the city, thus increasing travelling times and costs for the poorest residents of Windhoek.



Plate 3.2 Ludwigsdorf, one of Windhoek's elite suburbs.

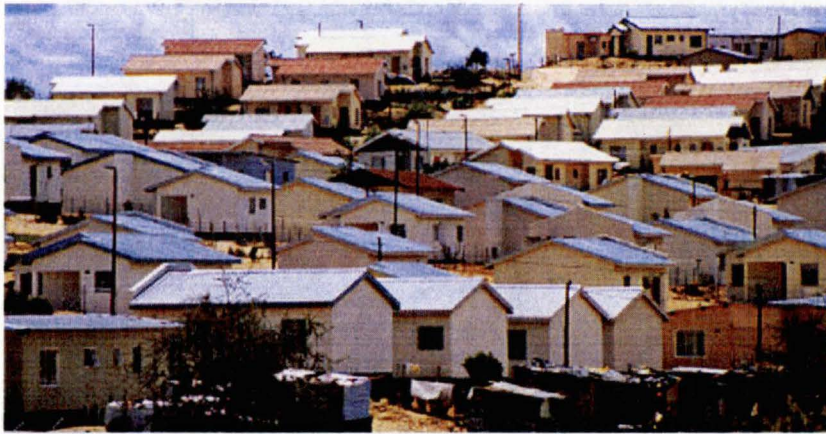
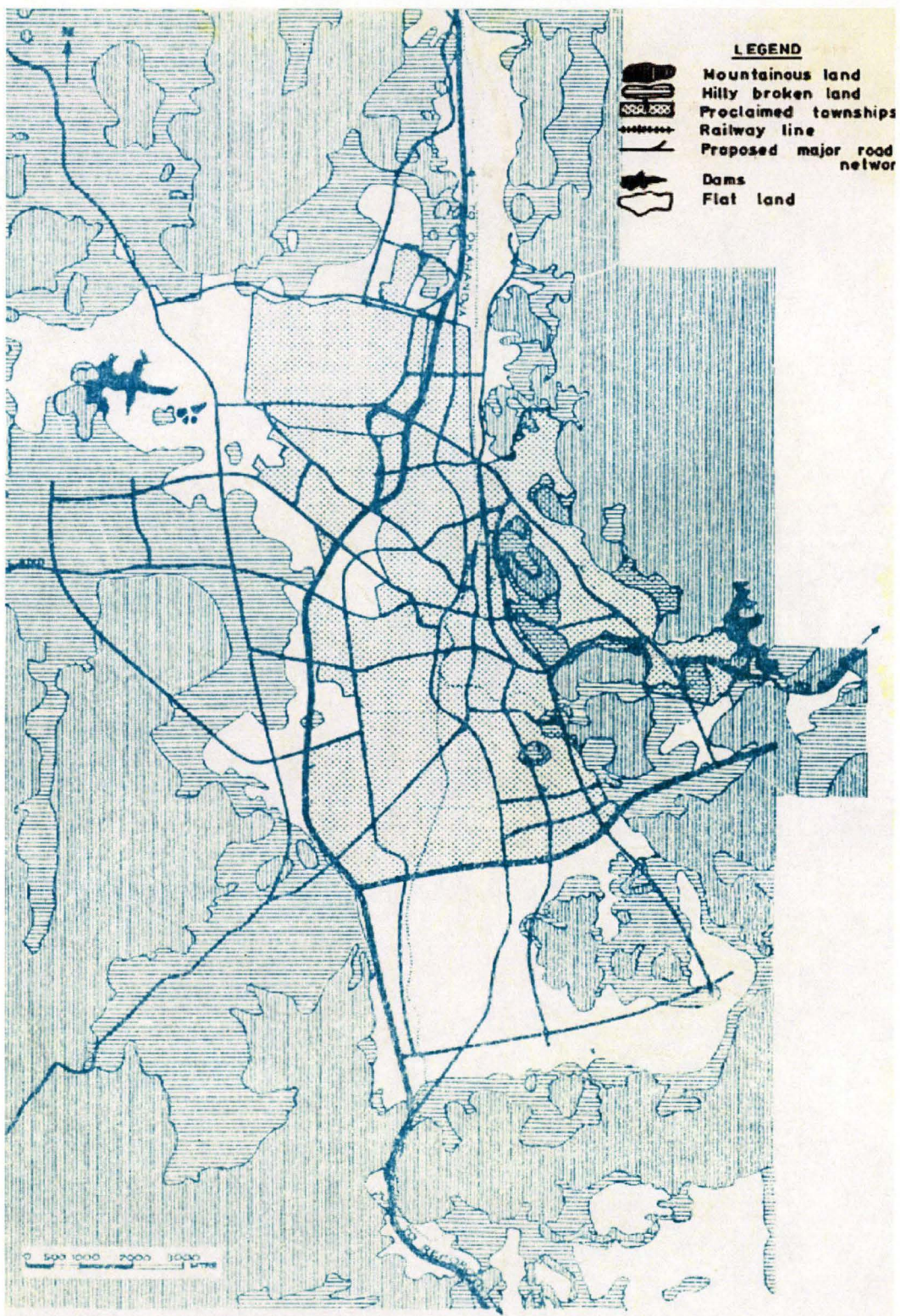


Plate 3.3 Khomasdal, an example of middle income housing.



Plate 3.4 Katutura is largely sub-economic. Taken from Pendleton 1994.



Map 3.2 Topographical base map of the Windhoek Basin.
Taken from CoW 1996.

3.3 Historical Background

Windhoek's history, from colonisation by the Germans, through to SA occupation, to its independence in 1990, have all impacted significantly on the development of the city. In order to articulate policy recommendations to provide planners with the tools necessary for building an improved and more functional city, it is necessary to assess the historic role that has shaped the urban space economy and its consequences for Windhoek's residents.

Under the command of Major Curt von Francois⁸, a fort had been constructed on a site which is today the capital city. This site was originally chosen due to the presence of one very precious commodity - water. Upon the completion of the fort in 1890, all administrative functions for the entire country were moved to Windhoek. The oldest known map for Windhoek dates back to this time.

In 1892 Klein Windhoek was set aside for settlement by smallholdings. The first erven⁹ went on sale in January 1893 and the first settlers arrived to occupy these in August that year. The population began to increase gradually thereafter. Although water and the poor soil quality has always remained a restricting factor, the growing settlement of Windhoek was for all purposes self-sufficient in those days. By 1910 the Germans were well established in Windhoek, and it was set to become the principle urban centre of German Zuid West Afrika.

When the RSA was entrusted with the LN Mandate for SWA in 1919 a military magistrate was set up in Windhoek, with a commissioner who controlled municipal affairs. Although the population of Windhoek (and indeed Namibia) was never subject to the infamous Group Areas Act which has plagued the development of SA cities since its implementation in 1950, complimentary legislation was in effect, the centrepiece of which must certainly have been the Natives (Urban Areas) Proclamation, No 56 of 1951, to ensure that Windhoek was designed and developed according to the ideals of this act.

⁸ Germany unleashed brutal military campaigns to force the indigenous people into submission. The first such expedition was led by Major von Francois in 1889.

⁹ Erf(ven) is the local English term for allotment(s).

The movement of black Namibians to and from white urban areas was controlled by the Windhoek Municipal Police and SA Police. Blacks working in the city had to be in possession of special work permits, residence permits and travel passes. The closing of the old African/Coloured township, known as the Old Location, in 1968 and the forced relocation of people to Katutura and Khomasdal was a rigid implementation of segregationist policies which were widespread in Namibia and SA at the time (Pendleton 1974). Since 1968 until the late 1970s no black person was allowed to build or own a private house in Katutura. Most contract labourers resided in single quarters and compounds. House ownership was almost non-existent in the black communities. The municipality owned all the housing in Katutura and rented it out. After the abolition of some apartheid legislation in 1981, black Namibians could both own property and houses in Windhoek.

Since 1986 Katutura has changed dramatically. The African population has tripled in size, the average number of people per household has almost doubled, the monthly cost of housing has risen twentyfold. Private housing ownership has grown from negligible to approximately 50%. The availability of government subsidised housing loans has contributed greatly to this opportunity. The Katutura population of twenty years ago was relatively unstratified, while today it has a clear socio-economic stratification.

3.4 Population

Refer to Appendix 1. Windhoek has an annual population growth of 5.4% (1995 Resident Survey) with a natural growth of 1.5% (CoW 1996). The population doubling time is approximately 13 years (CoW 1996). In 1995 38.9% of a population sample stated that they had lived in the city less than ten years. Population growth is mainly fuelled by immigration from rural areas. The northern areas alone contribute 57.6% of immigrants (CoW 1996). It has been recorded of the central northern area of Namibia that "there is considerable evidence that the land is unable to indefinitely support current numbers of people practising traditional land use management" (Oshonas, p19). One method of escape is to emigrate.

The 1991 Population Census indicated an outflow of about 60 000 people from the rural areas on the northern border of Namibia and an influx of 34 000 people into the capital city (GRN, p27-28).

The city's population will be approximately 360 000 by the year 2008, if present trends remain unchanged (CoW 1996). The population could be over 2.5 million within 50 years. Whilst there may be many factors which will influence the growth rate in the future, the important point is that, based on historical trends, large scale immigration of poorer people from rural areas may be expected.

3.5 Socio-economic Status

Per capita income distribution is highly skewed. The top 5% of the population accounts for approximately 71% of the GDP, while the poorest 55% accounts for only 3%. This split corresponds closely to capital ownership (CoW 1996).

Windhoek's productive sector consists of a well-developed formal sector which is paralleled by a poorly developed, but rapidly growing informal sector. Although Windhoek provides probably 50% of all formal employment in the country, with this sector presently entering a cycle of economic decline, it appears that the informal sector is set to expand in the immediate and longterm futures.

3.6 Housing

The shacks or squatter units accommodate approximately 28 000 people, while the rest of units accommodate 150 000 people (CoW 1996). The growth in shacks as a component of the housing stock has taken place over the period 1988 to 1996. From the income data supplied by the Primary Household Subsistence Level¹⁰ (PHSL), of N\$860 in 1995 and the 25% ratio of income for accommodation, 45% of households can afford less than N\$140 per month for housing (CoW 1996, p76). This is scarcely enough to obtain a partially serviced site. About 85% of informal settlers in shacks in the north-western area of the city live below PHSL and can theoretically afford nothing for accommodation.

¹⁰ The PHSL calculates specific household income and limits repayment to 25% of household earnings. Normal practice is not to grant a loan where the repayment exceeds the PHSL.

Migrants into Windhoek are typically less educated, have high illiteracy rates, have a high proportion of pre-school children, have low incomes and high unemployment rates. With a monthly influx of more than 500+ people, the proportion of the population in the poorer strata is growing. Approximately 50% and more of the city's housing stock is expected to be in the form of shacks within the next ten years or so. The 1995 Resident Survey Report indicated a significant number of residents prepared to accept unserviced or partially serviced sites on which they can at least erect shacks (CoW 1996).

Current housing densities range from about 3.5 dwellings per hectare to about 20 dwellings per hectare in the area typified by shacks. Presently the city faces a backlog of approximately 10 000 (CoW 1996) houses. With Windhoek's population growth rate set at 5.4%, it seems unlikely that this backlog will be ameliorated within the foreseeable future. On the contrary, it is expected to increase along with population growth.

3.7 Employment

Unemployment in the city rose by 17% between 1985 and 1995 (CoW 1996). Formal unemployment rates for Windhoek currently stands at 23%. While no concrete data exists, informal unemployment figures in Katutura were thought to be approximately 38% (NISER 1995). With the monthly arrival of about 500+ largely unskilled rural migrants, and in view of the poor economic prospects for the years to come, it is expected that this figure will increase. It is also expected that the numbers of people engaged in informal sector activities will increase. Moreover, the fact that the number of people whose survival depends on informal sector activities is as large as those employed as skilled workers (slightly more than 8%) further supports the fact that the city is indeed facing an employment crisis (NISER 1995).

Employment figures from a survey undertaken in 1992/3, in terms of value added throughout Namibia, Windhoek has 51% of manufacturing activity, 96% of utilities, 56% of construction and trade, 94% of transport and communications, 82% of finance and business services, and 68% of community and social services (NEPRU 1992, p11). Although Windhoek produces 47% of value added, estimates based preliminary data from a recent national Household Income and Expenditure Survey indicate that

"only 35% of private consumption expenditure takes place in Windhoek". That suggests that "large transfers go into the north ..." (NEPRU, p12). The implications of this are that Windhoek may expect to parallel the economic growth of Namibia as a whole; its economic development will be more stable than other regions; and that the city has little fear from decentralised development. Other regions depend upon Windhoek for monetary transfers. This dependence may be unwise and alternative regional economic opportunities are needed.

3.7.1 Informal Sector Activities

Population growth is outstripping economic growth, with the result that the levels of formal unemployment are rising steadily in the city. This has resulted in large numbers of poor people turning to the informal economy as a means of economic survival. Windhoek has inherited a model of a colonial and apartheid city, with consequent spatial, social and economic divisions of the society. This has ensured the location of the poorest people furthest away from the CBD and consequently the largest range of resources. Katutura, is the furthest residential area from the CBD and also houses the largest and poorest sectors of the urban population. Businesses there have a monopolistic status within their respective locations, and most are understocked and have a limited range of goods. Katutura residents therefore buy most of their consumer products in the CBD. This therefore promotes the opportunity for hawking.

Also, there is a very limited number of food outlets in the area, mainly due to affordability and municipal zoning restrictions. Thus hawkers can fill this market gap by selling cooked food to passers-by. In some cases hawking is the only income of an entire household. Such households are often headed by a single female who does not only provide for a number of children, but for family in rural villages, distant relatives and others (eg political returnees, or people newly arrived in Katutura).

Although there are more employment opportunities for black Namibians compared to the pre-independent era, there is more competition for jobs coupled with the monthly influx of migrants. Unskilled workers have limited chances of finding work. The low level of skills and schooling, the inability to speak English or Afrikaans, as well as the generally limited employment situation in

Windhoek all contribute to this. Ovambo men sitting on street corners waiting for prospective employers to offer them day work is a common sight in the streets of Windhoek today. Few have earned money at the end of the day. Table 3.3 below provides a picture of the work status of the Katutura residents:

Table 3.1 Population Work Status for 1991

Work Status	People	Percentage
Working	611	58
Not Working	74	7
Seeking Work	367	35
Total	1052	100

Source: Katutura Survey 1991

Many people now earn a living "informally" in small scale activities which they carry out with very little capital. Due to the relative ease with which people can access the informal market and the low capital requirements, the informal sector provides one means of survival to the urban poor. These businesses are unlicensed and not registered with the Receiver of Revenue.

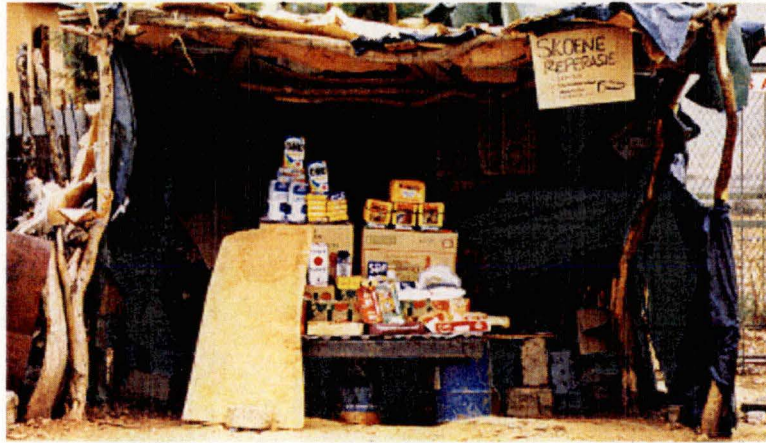
The five major areas of informal employment in Katutura is:

1. Street trading (including selling cooked food, alcoholic beverages fruit and vegetables, and miscellaneous items such as clothes, cigarettes, sweets, etc).
2. General repair activities and construction work, especially masons, backyard mechanics and metal works.
3. Taxi services.
4. Shebeens¹¹ at private houses.
5. Various other home-based activities (dressmaking, tailoring, day-caring for children, etc).

(Frayne 1992).

A recent study on the informal sector (Norval and Namoya 1992, p25-34) showed that those people employed in the informal sector are primarily rural migrants of which the majority is from the Ovambo Region, although it is not unusual to find large numbers of long time operators who are simply unable to break out of the informal sector. It also reported that almost half of those rural migrants work in the informal sector to survive, and the other half support between five and ten people with their earnings.

¹¹ Shebeen is the local commonly used term for drinking house.



Plates 3.5 (above) and 3.6 (below).

Informal businesses operating in Katutura.



Plate 3.6 Taken from Pendleton 1994.

The informal sector is presently regarded as embarrassing, unsightly and undesirable. Trying to get rid of it will not solve the problem, but requires that the informal sector be addressed holistically and not just the individual entrepreneurs. Informal sector activities do not just provide a means of survival to the poor, but I believe that it has the potential to significantly contribute to the urban economy.

3.8 The Space Economy and Landuse

The effects of town planning are particularly evident in cities with a strong colonial heritage, and have perhaps been taken to their extreme in southern Africa. Windhoek certainly provides no exception, and its population have been segregated on the basis of race, with Africans having been economically and socially deprived, and for the most part, politically prejudiced. The drive to ensure the supply of cheap labour to the colonial powers of the day underpinned the need to systematically force people off land while ensuring the costs of accommodating them in the urban areas was kept to a minimum. Here the infamous implementation of a colonial and apartheid ideology in one form or another has ensured the physical and social engineering of a highly skewed space economy.

The first evidence of the implementation of formal town plans in Windhoek date back to the early 1890s, and clearly show class and racial segregation already in place. This "process was systematised, as in other European colonial territories, through the establishment of private property rights under a capitalist land market based on individual freehold and leasehold tenure" (Simon 1991). In view of the appalling economic differentiations which existed essentially between the settlers and the Africans, the market would in itself have worked as a very effective segregatory mechanism. However, segregation was taken one step further, and was absolutely ensured by the introduction of various native policies under which "Africans were prevented from owning urban property, thus being reduced to occupying tied accommodation of appallingly low standard, or renting plots (and later, under SA control, dwellings) from local authorities" (Simon 1991).

In response to a growing population, the initial town plan was extended in 1906, 1909 and 1911. However, it was only in 1954 that the first Town Planning Ordinance was promulgated, and in 1976 that the first formally adopted Town Planning Scheme came into effect. The scheme was based on South African legislation which in turn was based on the British Town and Country Planning Act of 1932, and thus had (and still has) a preoccupation with zoning and a total disregard for regional planning. This served to formalise the statutory provisions relating to landuse and urban

development, and have consequently been central to the subsequent urban growth of the city¹².

City development up to 1930 consisted predominantly of spatial in-filling within the existing urban fabric with the notable exception of the African township, the Old Location. This township was in fact formalised and reorganised in 1932 with streets being laid out in grids and the land subdivided according to ethnic affiliation (Simon 1991).

The most significant urban expansion which occurred after the 1930s was undoubtedly the development of Katutura and Khomasdal. These townships were essentially not only to expand and improve the housing stock of the Old Location, but to also allow further development of the city. "The Old Location was restricting westward expansion of the white city, and such close proximity of a large African population to white suburbs was deemed undesirable" (Simon 1991).

As discussed before, 1968 saw the demolition of the Old location and the forced relocation of former residents to the new townships of Katutura and Khomasdal. Thus, in response to an increasing housing backlog amongst the white population, a new white middle class suburb was proclaimed in the mid 1960s and named Pioneers Park. It filled rapidly and a total of 960 houses were built and occupied between 1968 and 1970 (Frayne 1992). Development of the residential suburbs of Academia, Eros Park, Olympia and Ludwigsdorf followed and are still growing to some extent today. Newer suburbs such as Hochland Park, Dorado park, Rocky Crest, etc have sprung up in recent years and are spreading rapidly to the west of the city (refer to Map 3.2, p21).

Early development in Windhoek on any street map appears to be generally haphazard and irregular with blocks of differing sizes and streets running at strange angles to each other often with peculiar intersections (Figure 3.1, p31). This pattern is a result of the topographical constraints rather than the accidental, organic urban development.

¹² The Town Planning Ordinance and Town Planning Scheme still dictate all aspects of development within Greater Windhoek, and are therefore coming under increased criticism as inappropriate to the needs of present day and future Windhoek.

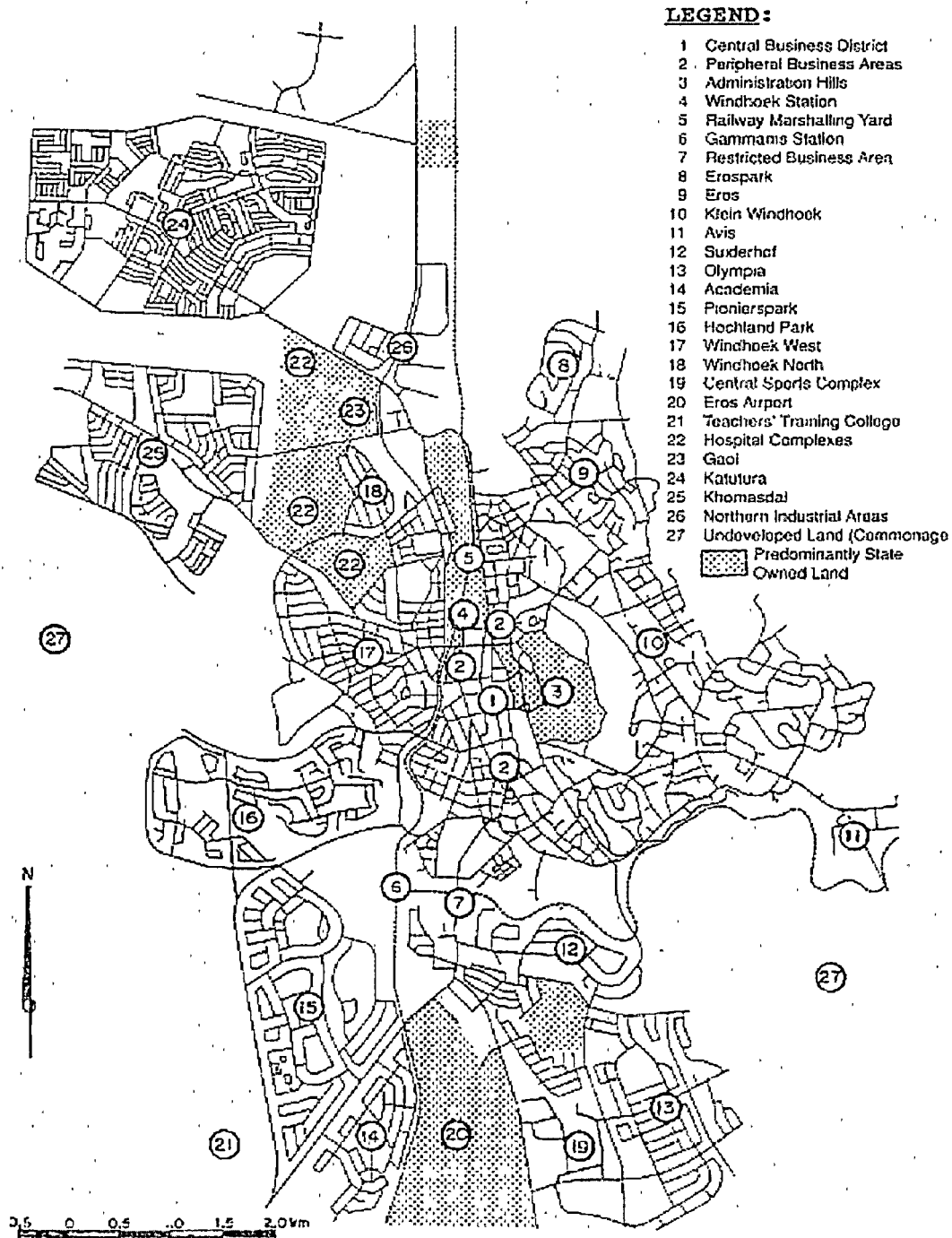


Figure 3.1 Windhoek's irregular development pattern.

The more recent development has occurred primarily on flat land, and is thus identifiable by the systematised street layouts, in accordance with the present Town Planning Scheme and regulations (Map 3.3, p32).

Town planning in Windhoek today is further characterised by the low density and mono-functional land use patterns which the zoning and high building standards have helped to achieve. Cellular horizontal expansion is not conducive to the promotion of an efficient urban economy, and has been exacerbated in Windhoek with the introduction of large urban wedges of vacant land which have served as the statutory buffer strips required to aid in the spatial segregation of different races.

The city does, however, face the constraint of limited flat land which is suitable for residential development. This factor has and continues to play a significant role in the development of the urban space economy and has partly contributed to the cellular nature of contemporary urban development.



Map 3.3 Generalised landuse map for Windhoek. Taken from Windhoek Guide Plan 1980.

Generally, land which has a gradient greater than 1:6 is not suitable for residential development, and in particular low income housing where costs need to be kept to the minimum. However, in Windhoek less than 20% of all land which falls within the municipal boundary has a slope of less than 1:6, with less than half of that suitable for higher density residential development (CoW 1996).

These physical factors impose considerable constraints to improving the efficiency of the urban space economy in Windhoek. Nonetheless, the amount of open land suitable for mixed density residential development within the Windhoek Basin is almost equal to that already given over to other urban uses (CoW 1996). This represents a potential for doubling of the urban fabric with no increase in densities across the existing urban space.

Although the aggregate land use budget for the Windhoek Basin suggests that the city has developed in a reasonably efficient fashion despite its colonial heritage, the development which occurred during the 1960s and 1970s has been space extensive and guided very much by prevailing planning ideology of the time, and apartheid objectives of the colonial government. Although the 1980s saw a change in this trend, the city has continued to develop as it did in the past.

3.9 Natural Systems

Inherent in the natural environment are a number of potentials and constraints which shape urban development in any context. Historically, architecture and spatial organisation around the world have responded in a very direct way to the natural environment, utilising local materials, topography, etc to best economic, practical and social advantage. However, with the technological advancement and the consequent technocratic approach to planning, the form of the built environment has changed considerably.

Population pressures together with mass urbanisation across the world have further fuelled the move towards seeking out more time efficient ways of building cities. Many natural constraints have been overcome through the development of various technologies, but often at the cost of not only the natural environment, but also of space, comfort, and in some instances, at great financial cost. For example, Singapore with its very limited land surface and its large population had to resort to reclaiming land from the sea on which tower block apartments were built to accommodate people. This example is somewhat extreme, and fortunately, Windhoek has not as yet experienced these kinds of problems. However, the relatively small population of this country, with its annual growth rate of 5.4%, is set to expand rapidly in the

near future. This factor together with the likely urbanisation trends that are and will continue to take place, will place the city under increasing pressure to provide a built infrastructure capable of catering for this growth.

Windhoek experiences a high frequency of temperature inversions and low wind speeds for most of the year. The natural low level of ventilation of the Windhoek Basin is a result of its topography, and thus the dominance of atmospheric conditions which are conducive to the build-up of atmospheric pollutants. The sources of these pollutants are generally attributed to vehicle and power station emissions, but also from domestic sources. The use of firewood and coal-burning stoves by the city's township populations is clearly evident in the mornings and evenings when thick smog blankets those areas. Windhoek's atmosphere is not considered serious at the moment. However, as the city continues to grow, related increases in vehicle use, industrial growth, power demand, and domestic fuelwood use, increasing problems of atmospheric pollution can be expected.

The Katutura surrounds have been widely cleared for fuelwood as many households there depend largely upon fuelwood as their energy source for cooking. Clearing of wood species degrades the environment through increased soil erosion, increased surface runoff and the removal of a component vital for the functioning of the ecological system. Trees are also important for the provision of shade, especially in such a harsh climate, as well as their inherent aesthetic qualities.

Improving the living conditions of residents in the overcrowded Katutura township will certainly imply encroachment onto undeveloped land. Land suitable for development is limited within the Windhoek Basin, and thus the issue will become increasingly significant in the future. Three principal factors highlight the problem. Migration into the city will place further strains on available land resources. Reducing the existing overcrowding problem will require lower density residential areas, and thirdly, a growth in the number of middle class residents as opportunities expand will inevitably mean further demand for higher class residential erven. These potential demands have to be balanced against the level of available financial and spatial resources. Service infrastructure will have to not only be maintained, but expanded and improved in terms of the quality of life which Windhoek's aspiring residents expect.

Where new construction is to take place note should be taken of the local topography. For example, Windhoek is characterised by outcrops of rocks in many areas which provide their own micro-climates on which certain plant species depend for shade and moisture. To enhance the human environment and general aesthetics and also to protect the local environment, such natural features should be incorporated within the overall design wherever possible.

Urban development in dryland climates face very particular constraints, the most critical of which is usually the availability and supply of water. Water availability in Windhoek depends largely on its supply from various parts of the country which in turn depend ultimately upon favourable climatic conditions to replenish and recharge water sources. This then, is a good example of regional physical factors which pose direct constraints and threats to the future growth and development of Windhoek. In fact, the constraints and potentials imposed by the natural environment are not only instrumental in determining limits to city growth, but they affect factors such as density and the overall space economy.

3.10 Utility Service Infrastructure

3.10.1 Water Supply

No planning report on Windhoek can fail to mention the city's fragile water situation. Namibia has a dryland climate; water is its scarcest and most valuable resource. Rainfall is highly variable and unreliable. Windhoek has an average of between 300 – 400mm per annum (National Atlas of SWA map 10). Settlement took place in Windhoek because of the presence of natural springs. The supply of water from the natural springs soon proved insufficient and by 1912 boreholes became necessary due to the population growth.

There are 46 operational boreholes at present. The supply of the Municipality's boreholes had been so good as to enable them to function as virtually the sole supplier of water up until 1960 when population growth escalated even more and the Goreangab Dam had to be built to supplement existing water supplies. The major water sources presently serving the city are illustrated in Table 3.2, p36.

Table 3.2 Windhoek's Present Water Sources

Water Source	% Contribution
Von Bach Dam	50
46 Boreholes	25
Goreangab Dam	15
Reclamation works	6 – 10
Avis Dam	unpredictable

Source: Department of Water Affairs 1980

The main water supply comes from the northern edge of the city either from reclamation works or from the Department of Water Affairs' pipeline exit on the southern edge of the Northern Industrial Area. This is supported by boreholes concentrated on aquifers in the southern half of the city. These sources are located far from the city and with the construction of dams, administration and pumping required, water has become increasingly expensive.

Windhoek has for many years relied on external water sources to supply its needs. The supply of water to the city's consumers, ie residents and industry, must be considered from a national perspective, development of the more densely populated regions such as the Ovambo Region depends on an equitable distribution of available water resources. Windhoek's continued population growth is an anomaly in light of the needs of the less developed regions within the country. The majority of the population are concentrated in the northern regions of the country and survive by subsistence farming. Their survival depends upon favourable climatic conditions to meet their water requirements. Water availability is therefore a major constraint for sustainable development throughout Namibia and requires careful management.

The supply of water has become a major problem, as in many other countries. Environmental and population factors in Windhoek are beginning to indicate that a clean, plentiful and healthy supply of water is in jeopardy. Global warming, the poor quality of groundwater, the growing population, together with the fact that Windhoek "imports" a large percentage of its domestic water requirements from other areas of the country where this resource is coming under ever increasing pressure, are all contributing factors.

Water conservation measures are being instituted by the City of Windhoek (CoW). Presently gardens are prohibited from all new developments. If the current migratory trends continue even more drastic curbs and rationing and eventually the elimination of any remaining water consuming industries will become necessary. In the meantime, it is expected of the government that it will make necessary capital investment to supply the city with water from the Okavango River. It is only with this expectation that planning for future growth can take place. The development of a secondary growth centre is of paramount importance in Namibia. It is highly doubtful whether Windhoek has the economic, social or environmental resources to permit unconstrained growth to continue, and indeed it is arguable if it is advantageous to do so. The manner for rationalisation of water resources in the city may include, for example, the transfer of water from lower to higher value industries, increasing the efficiency of water utilisation through the adoption of water saving technologies, greater recycling, water rationing and possibly higher water tariffs.

3.10.2 Sewage Purification and Disposal

Provision is made for stormwater runoff throughout the built-up area of Windhoek (with the exception of illegal squatter settlements) although the networks could be improved within the city's townships. Stormwater and sewers follow clearly outlined drainage channels (water courses) to outfall points into a dam and two water treatment works respectively at the northern edge of the Basin. A third treatment works was under construction in 1996. Extensions beyond the Basin will new water treatment works at distances related to the catchment areas and the economics of their provision. The extension of the sewer network in the southern half of the city is particularly important since aquifers must be protected. Many existing sewers in older areas are running at full capacity and will require need replacement to accommodate growth (CoW 1996).

At present, as with most services, Windhoek's residents enjoy a high level of service with regard to sewage disposal. The system is waterborne, with toilets mostly being located indoors and some being outdoor wet-core units. The main treatment works for predominantly domestic sewage employs single stage biological filtration with aeration followed by tertiary treatment in nine

maturation ponds. This produces a high standard of treated effluent. These works are presently being extended, utilising the activated sludge process. Industrial effluents are treated in a stabilisation pond system with future plans for irrigation. Supplies of water from the Goreangab Dam are periodically curtailed due to excessive pollution emanating from residuals borne by stormwater runoff. This problem requires immediate remedial action.

As early as 1954 attention was drawn to the prominent role which reclaimable water would have on the future development of Windhoek. The Division of Water Affairs of the SWA Administration and the City Engineer's and Health Departments of Windhoek Municipality extensively investigated the replanning of the Sewage Purification Works, the advanced purification of reclaimable water and its re-use potential for domestic, industrial and agricultural purposes. It became clear that refinement of reclaimable water was most essential for successful augmentation of future water supply resources in Windhoek. These principles formed the basis of the planning and siting of the Gammams Sewage Purification Works in the Goreangab Dam catchment area.

It is fair to say that the majority of urban dwellers in Windhoek enjoy sanitation facilities which are comparable with any city in the developed world. The only notable exception is the Single Quarters in Katutura where many of the drains are constantly blocked. This, however, is not the result of an inadequate system rather that of an overloaded system.

3.10.3 Electricity

The city's supply is provided by NAMPOWER through a national grid which includes a power station on the fringe of the Northern Industrial Area. NAMPOWER maintains a 23 Mw power station, the Windhoek Power Station and the 120 Mw Van Eck Power Station. Although most of Greater Windhoek's electrical power supply is generated in the city by the Van Eck Station, some power is drawn from the Ruacana Hydro-electric Scheme in the northern part of the country and Eskom (Electricity Supply Commission) in the RSA. Although the Van Eck power plant is coal-burning there are very little visible signs of atmospheric pollution. While the plant has the generative potential to supply half of Namibia's

electricity requirements, due to various factors, not least of which is cost, the station is used only to supply the needs of the city. Electrical power capacity at the end of 1996 was 216 Mw (CoW 1996). The maximum power consumption of 95.6 Megawatt occurred in July 1994. Electrical consumption is distributed as follows: 46% domestic, 32% commercial, and 9% industrial users.

There are proposals to utilise hydro-electric power from the plant at Ruacana and the future plant at Epupa Falls in the Caprivi to supply the northern areas of Namibia which are presently undersupplied. A 66 Kv high tension electrical ring grid is planned and nearly completed for supply of power to all points in the city and to facilitate extensions within the Windhoek Basin. Major substations are located on the ring. A major extension of the 66 Kv line with a new load centre will be needed to handle the city centre's growth. The implication of this for the city is that even more energy will be potentially available for local use.

Windhoek is a rare example of a developing country's capital city in that almost all its inhabitants enjoy access to electrical power. Street lighting is widespread (with the limited exception of some areas of Katutura) as is the supply to individual housing units. Moreover, the surplus is such that the needs of any future urban expansion that might occur, both industrial and domestic, can be readily met. The potential of this plant alone ensures that the city can grow to at least twice its present size and still meet its power needs.

Although all the components of the city might well be adequately supplied with an electrical network, not all people are able to afford the costs of being a power consumer. The following table gives a breakdown of average costs per erf:

Table 3.3 Power, Installation & Supply Costs

Installation Cost	• R3000/erf ¹³
Supply Cost	• Max. Demand: R19/kw • Unit: R425/unit (kwh)

Source: SWAWEK 1990

¹³ All currency was in SA Rand for the period 1986 – 1993 when the Namibian Dollar was introduced. The average exchange rate for \$AUD/SAR was 2.1574 for 1991.

The issue of affordability goes beyond that of income alone, and is very much related to the technologies put in place. At present the system is an underground cable distribution system which is not only expensive, but also involves costly road designs which in turn result in expensive maintenance. The capital and maintenance costs of providing electricity via an underground distribution system are high and inappropriate to the city's low-income population. Thus many Katutura residents have had their electricity disconnected. Although this is the result of not paying, the issue is clouded by its political dimension. Some residents refuse to pay for energy, demanding that it be state subsidised, others are simply unable to pay for the service. The implications of this situation for future expansion are that although the city has the potential to supply all its power needs well into the next century, the growing poor urban population will increasingly be unable to afford it.

3.10.4 Roads

Transportation and movement are of a sufficiently small scale in Windhoek not to have posed a major constraint on the development and functioning of the city in the past. This situation is however changing with the increase in population growth over the last decade. Moreover, as the city begins to expand horizontally, the issue of transportation will become increasingly important, particularly as the lower income groups will tend to locate where land and development costs are lowest, which will be on the urban fringe, furthest away from the primary employment centres.

The road system in Greater Windhoek is extensive, with a clear order of hierarchy. This hierarchy of roads consists of freeways, major and minor arterial roads, major and minor collectors/distributors, local streets and cul-de-sacs. The Western Bypass and Sam Nujoma Drive provide north-south and east-west movement around the city, while arterial roads cater for the movement through the city or from one major sector of the city to another. The collector/distributor roads have the function of "collecting" traffic from adjacent local streets and conveying it to various local destinations or to arterial roads. Local streets cater for access to abutting individual erven connecting these erven with roads higher up in the hierarchy. Most of the roads in

the city are sealed with the most notable exception in the minor collector roads and local streets of Katutura.

The geography of the surrounding mountain range, the Khomas Hochland, has also influenced transport routes and the location of the international airport. Roads and railway lines thread through hilly ground along the easiest paths to reach the Windhoek Basin. The two nearest towns to the city are Okahandja, 70kms to the north, and Rehoboth, 90kms to the south. The distribution of population in Namibia is heavily weighted towards the north. The city's major transport links to the coast run through Okahandja. These two factors combined with the northern sources of the water supply naturally tilt urban settlement towards expansion along the main road to the north. The main North-South road along the valley floor is expected to remain the main channel for intensive development.

3.11 Social Infrastructure

3.11.1 Education

With Windhoek being the largest population centre in Namibia, the fact that the University of Namibia as well as the Technikon and Distance Teaching Unit are situated in Windhoek all suggest that the capital is the prime educational centre. Although certain sectors of the population enjoy good facilities and a high standard of education, there are currently insufficient educational institutions to cater for the needs of the city's inhabitants. Furthermore, differential access to educational facilities being partly the result of past racial and ethnic divisions as well as rapid population growth amongst the poorest sectors of the population, it is the urban poor in Windhoek who have the lowest levels of access to schools, with the largest pressures being felt in the pre-school and primary school levels. A high correlation is often found between levels of income, levels of employment and unemployment, and levels of education.

Approximately 61% of migrants have settled in Windhoek within the last 10 years (NISER 1991). They have effectively increased the proportion of poorly educated people and young children in the city and have caused the general level of education to decrease proportionally. This area of concern is currently not being addressed by planning and is associated with poorer or often non-

existent education in the rural areas, coupled with the growing need for adult educational programmes for both literacy and the development of basic skills which would increase competitiveness in the market place and thereby increasing chances of economic survival. A survey revealed that about 11% of adults in Katutura above the age of 16 years have no educational training at all, and 70% have eight or less (NISER 1991).

3.11.2 Health

The city has two state-run hospitals and subsidised hospitals, the Windhoek and Katutura hospitals, that are understaffed but well equipped. These have a regional and national catchment and as such are the most important medical facilities in the country. They are also centrally located and therefore highly accessible to the majority of Windhoek's population. In addition to general hospital functions, both have maternity and psychiatric facilities. However, they are unable to cope with certain major surgical requirements and in most cases patients needing this kind of treatment are referred to hospitals in the RSA. A private hospital, Medicity, which is a part of a RSA based enterprise is operating in the city. Although the standard of service, facilities and staff are high at Medicity, the fees are well beyond the reach of the majority of the population.

The two state hospitals will become increasingly unable to cope with the demand for medical services generated by the current growth and the expected future increases in population in the city. Moreover, these hospitals emphasise curative treatment rather than preventative treatment, an inappropriate approach for a rapidly growing and very poor population.

3.11.2 Community Facilities

The term "community facilities" refers to churches, old age homes, community halls and centres, and creches. These will be discussed only briefly.

Greater Windhoek is well served by churches of all denominations. They proliferate in the urban fabric and are not focused in favour of any particular part of the city. Further, there is land currently

zoned for religious purposes, and it would seem that there is no need to increase this at present.

Windhoek is not well served by old age homes, and the state has traditionally failed to provide this type of service. Retirement villages are expensive to establish and run, and although a need exists for such facilities, it is unlikely that the state will take on the responsibility within the current economic climate.

There are a number of community halls in Windhoek, although there is only one fully developed community centre located in Katutura. The aim here is to only provide a brief description of the city's social facilities, and an evaluation of the need for additional community centres goes beyond the scope of this project. Although it is likely that the community would benefit from an increase in such facilities, the capital and running costs are likely to be prohibitive to the immediate further development of such facilities. It is possible for underutilised school halls to serve a dual function of being both a school and community hall. This does occur to a limited extent in Katutura at present.

It was not possible to conduct a survey on the existing creche and pre-school facilities in the city, partly due to the time factor, but more importantly due to the fact that many of the creches operating presently do so from private homes, and are as such part of the informal sector. Consequently, quantification of this activity is almost impossible. However, it does appear that there is a large number of people (mainly women) who are attempting to meet the demand for such facilities from their own homes. Nonetheless, informal discussions with various sectors of the community revealed that there is a pressing need for creche and pre-primary facilities throughout Windhoek. Again, the costs of the state-run operations are high, and it is not likely that this need will be alleviated through government action.

Thus, it is important for people who wish to provide any of these services that land use and licence regulations controlling the establishment of creches and pre-primary facilities be made as flexible and accessible as possible. However, the realm of service is vulnerable to exploitation, and as such it is important that some form of control be retained. Also, the potential nuisance created by such facilities in residential areas must also be considered. Although town planning regulations are designed for this purpose, they tend to be somewhat inflexible and prohibit the consideration of individual cases on the basis of situation and

merit. It is possible to ease the controls in this regard, particularly as such action will ultimately benefit the community as a whole, with stricter reliance being placed on municipal bylaws for the control of noise pollution, traffic congestion, etc.

3.11.4 Recreation

Windhoek has an abundance of rough terrain available for certain open space recreational uses. This land is unfortunately sensitive and may easily be damaged by public use. Consequently, the planning authorities have included conservation zones in the development of the city wide recreational system. The amount of good flat land available to schools and sports is extremely limited, much of it having already been used within developed townships.

The city has a reasonable and fairly well managed open space system which is accessible to all people in the urban environment. Further, the available infrastructure ensures that there is a well developed hierarchy of facilities and spaces across the urban landscape. Although it has been said that the recreational infrastructure of Windhoek appears to be adequate, the quality some of the infrastructure is problematic. This relates in particular to the local open spaces in Katutura. They are for the most part bare sand, littered and have few, if any, facilities. As such these spaces are practically unusable, at least for the purpose for which they have been planned and built. The other side of the argument is that the costs of maintaining high quality open spaces is often prohibitive to lower income communities. Also, in a society in which vandalism tends to be high, the introduction of trees, plants and street furniture is often futile and costly for any local authority. Thus, if any attempts are to be made to upgrade the open space system in Katutura, it will have to include community action and their ongoing participation in the development and maintenance of the program itself.

3.12 Conclusion

This chapter highlighted how the political and socio-economic history of Windhoek has resulted in very particular and rigid land use patterns. This historical heritage directly impacts on the manner the city is presently functioning, and also the extent to which it is and will be able to adjust to new demands as it continues to grow. The following chapter will address the urbanisation phenomenon, which has been briefly touched upon, in greater detail.

Chapter 4

THE URBANISATION DYNAMIC

4.0 Introduction

Marx 1883 describes modern history as the "urbanisation of the countryside" (Fisher and Marek 1970). Certainly one of the most challenging aspects of growth is that of urbanisation. Namibia is undergoing intensive urbanisation which is hardly surprising given the breakdown of many traditional agricultural systems, exacerbated by the climate and frequent droughts. A brief description of Namibia, Windhoek in particular, was given - its demographics and an account of the socio-economic and political history that shaped the existing urban fabric. Urbanisation directly impacts on the urban housing situation, and this chapter will therefore seek to provide an understanding of that process in Namibia, the primary reasons responsible for fuelling that process, and also determine the implications caused by such migratory patterns with specific reference to Greater Windhoek.

4.1 Macro Perspective

Urbanisation is often regarded as a typically urban process, but in reality it is only a symptom of a much broader process and complex processes at work which in fact stem from the economic and social aspects of the rural or regional sectors of a country. The nature of urbanisation at regional level is therefore briefly discussed as this will inform the reader of the likely nature and scale of urbanisation that Windhoek is to experience.

4.1.1 Population Growth

Namibia's population growth rate is 3.1% per annum (NEPRU 1995) which is a very high figure by world standards, and implies that the population is set to double within the next two decades. Table 4.1, p47 indicates the population doubling times for various countries.

In the northern communal areas population growth appears to be very uneven. The continued serious problem of drought and unemployment is the major reason for this. Many people, including former soldiers, left these northern towns after independence.

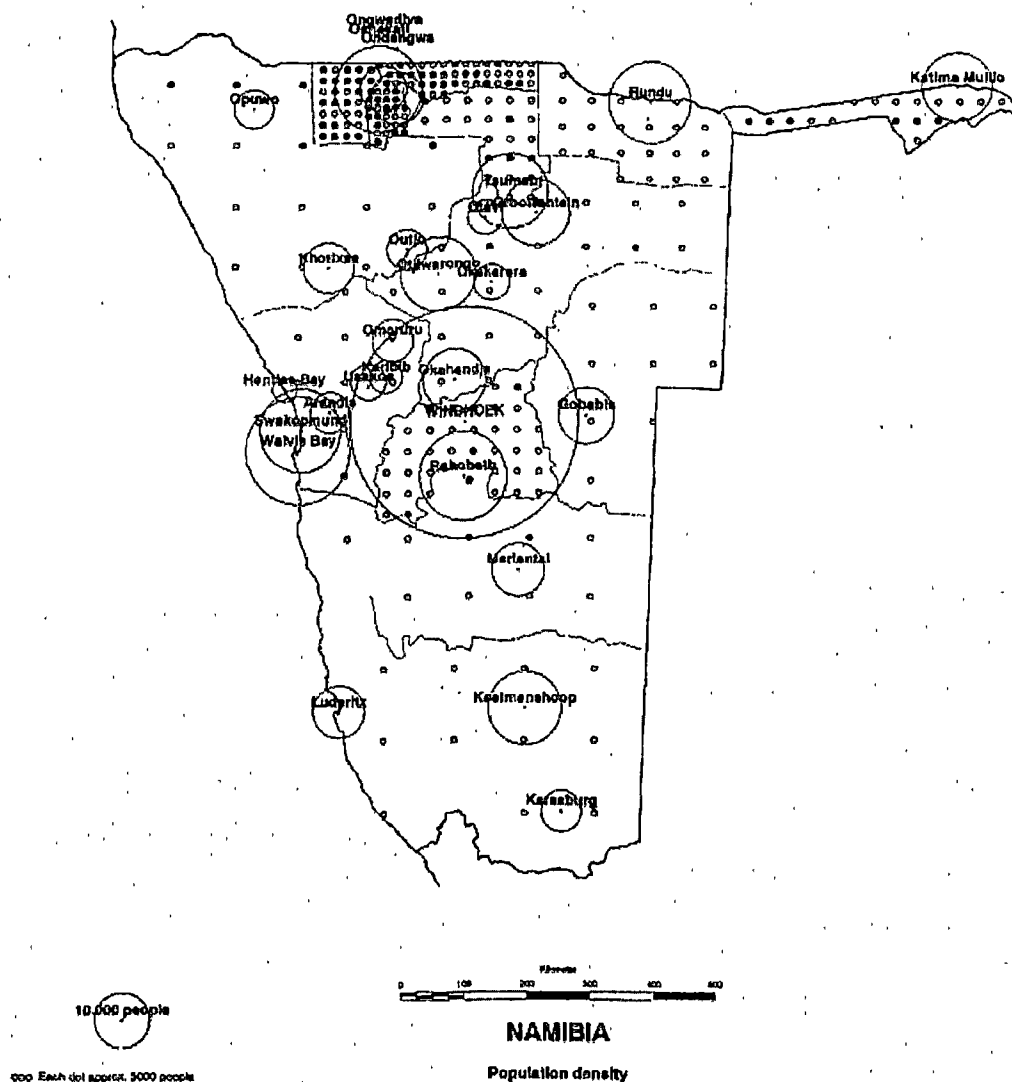
Table 4.1 Population Doubling Times for Various Countries

Country	Pop. Doubling Time (yrs)
Kenya	17
Zimbabwe	18
Swaziland	20
Namibia	21
South Africa	23
Mozambique	26
Angola	27
Mexico	27
India	32
Indonesia	32
Columbia	33
United States	100
United Kingdom	630

Source: Adapted from NBIC 1986.

There seems to be a trend for moving to the main urban centres of Windhoek and Walvis Bay. Walvis Bay is Namibia's largest port and is also the second major urban growth point in country due to its (perceived) employment opportunities. In addition, the existence of secondary urban centres with basic services, eg Outapi and Eenhana, have provided alternative migration forces thus slowing down the rate of migration to the two main urban centres (NEPRU 1995, p9).

Windhoek is the largest urban centre as illustrated by Map 4.1, p48. The urbanisation rate seems to be stronger in Rundu and Katima Mulilo. There are no obvious reasons for this as the unemployment problem is equally serious in those towns. However, people from these areas do not follow the same trend for migrating to Windhoek as people from the Ovambo Region. Equally important is the lack of secondary urban centres in the regions of Okavango and Caprivi.



Map 4.1 National and urban population densities. Taken from SSD 1995.

4.1. 2 Population Distribution

The larger concentrations of rural population in the northern communal areas is contrasted with the very sparse population of the southern and western districts. This distribution coincides with the occurrence of rainfall and groundwater throughout Namibia. The uneven distribution of urban of settlements is illustrated in Table 4.2 below, based on the 1991 National population Census. (Refer to Map 2.2, p9 for a guide to Namibia's 13 electorate regions).

Table 4.2 Urbanisation in Namibia by Region

Country/ Region	Urban Pop. (#)	Urban Pop. (%)	Pop. Density (km ²)	Pop. Centres (2000+)
Namibia	382 680	28	1.7	51
Karas	22 732	37	0.4	4
Hardap	29 020	44	0.6	5
Khomas	149 056	88	4.4	3
Erongo	35 062	63	0.9	6
Otjozond- jupa	47 021	46	0.9	5
Omaheke	8 340	16	0.6	4
Oshikoto	16 211	13	4.8	2
Oshana	35 726	26	26.0	6
Omusati	0	0	15.1	2
Ohang- wena	0	0	17.9	7
Okavango	19 366	17	2.7	3
Caprivi	13 377	15	4.9	1
Kunene	8 769	14	0.5	3

Source: National Population and Housing Census 1991 (NPC 1994a).

The north is relatively densely populated housing about 60% of the population, especially the Ovambo Region followed by the Kavango and Caprivi districts. The majority of the population in the northern districts are engaged in rural activities and are largely dependent on subsistence farming. Approximately 7% of the population reside in the southern districts. The rest of the population live in the central parts of the country (NPC 1992).

The age distribution is particularly noteworthy. The economically active population is concentrated in urban areas, while there is a disproportionate number of younger and older people in rural areas (NPC 1995). Map 4.1, p48 shows the distribution of urban centres across Namibia, together with their relative sizes. Windhoek's primacy with regard to location and population is immediately apparent. This situation of dominance has profound implications on the development of the city as well as the rest of the country and will be discussed further on.

4.1.3 Age structure

Figure 4.1 illustrates the age/sex ratio of the Namibian population based on the 1981 National Population Census. A meaningful discussion of the age structure is complicated by the fact that age data from the 1991 Population Census was not available.

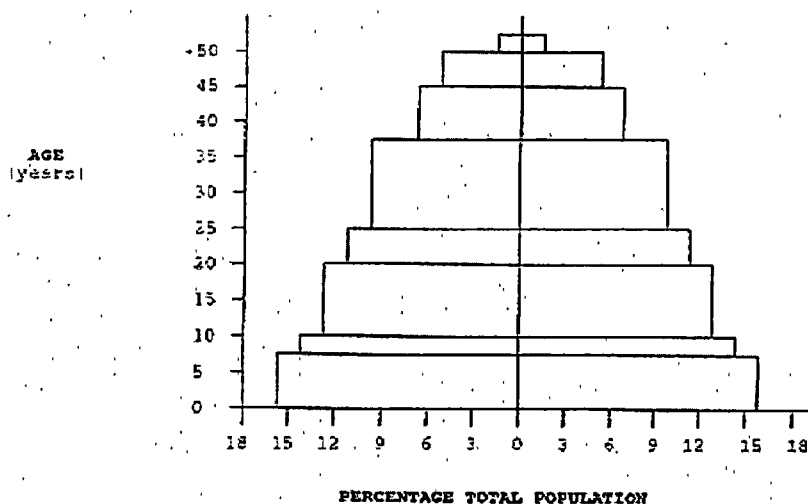


Figure 4.1 Generalised age/sex distribution. Cow 1981.

However, as the preliminary report on the 1991 census, the National Population Report (1993), points out, changes in the overall composition of the population is unlikely to have been significant. I therefore drew conclusions from the 1981 census. It reveals a young and growing population characteristic of developing countries with a high growth rate and declining infant mortality rate. The Namibian population is also characterised by high fertility rates. In contrast to this, the proportion of people over 65 is quite low.

The implications of the above scenario is that the country's dependent population will continue to exert increasing pressure on all social services; especially health and education. The associated increase on the demand for food will be placed on the economically active population for whom, in a climate of rising unemployment and increasing levels of poverty, it will be difficult to meet such demands. An additional problem fuelled by such a high dependency ratio is that of a rapid increase in the number of people who will be looking for work which will in all likelihood continue to exceed the ability of the formal economy to meet such demand.

4.1.4 Recent Migration Patterns

(refer to Chapter 4, s4.1.3)

Urbanisation gained momentum in the 1980s and has become a fundamental trend of society since independence when black Namibians realised their legal freedom of movement.

Namibia does not seem to have serious problems with international migration. However, the political returnees could suggest that international migration might be imminent. As previously discussed (see Chapter 2) internal migration is very much shaped by the colonial past of the country. Economic, social, political and natural factors are central to internal migration in the country. As in many other countries there is a tendency in Namibia towards migrating from rural areas to major urban centres that offer more employment opportunities, more advanced educational and health services, and recreational facilities. Official statistics on migrants in these urban areas are not yet established. However, there are general indicators that the population in some areas has increased significantly in recent years. This trend is likely to continue unless the government and business sector intervene to narrow the gap between the flourishing urban centres and the remote rural areas.

4.2 Micro Perspective

The impact of rural-urban migration into Windhoek is dramatic. Windhoek alone accounts for 33% of the country's total population and is the single most urbanised district in Namibia. The 1995 Resident Survey indicated that in-migration accounts for 3.9% of the total population growth of Windhoek which is overall 5.4% per annum. The northern areas of Namibia are unable to indefinitely support the current numbers of people practising traditional land use management (Oshonas, p19). One method of escape is to emigrate.

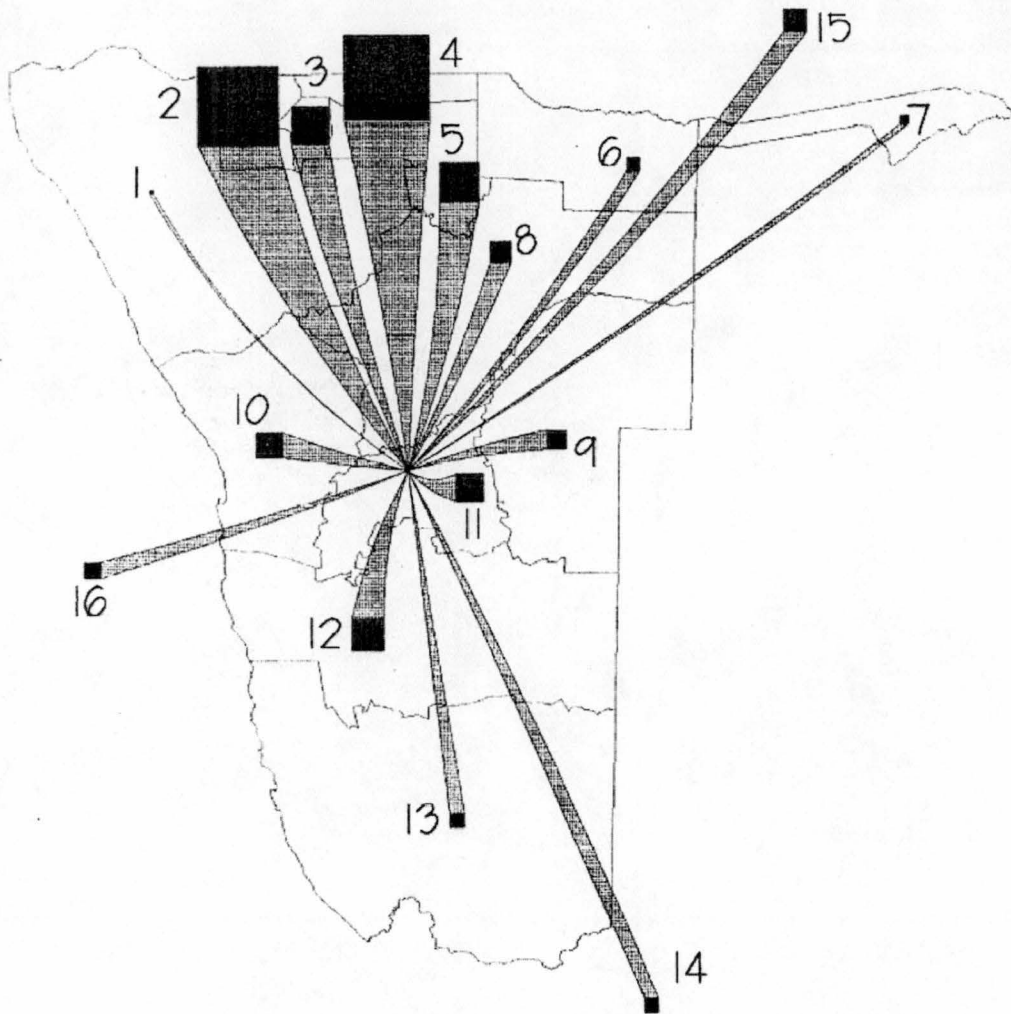
Windhoek has recorded a growth of 50 000 people between 1985 and 1991 (CoW 1996), a 1/3 of its population in 1991. This suggests that much of this migration has taken place recently. Unemployment in the city also increased from 5% in 1985 to 22% in

1995 (CoW 1996, p46-47). Several factors influence the growth rate, but the fact remains that based on historical trends large-scale immigration of poorer people mainly from rural areas to the capital city is the single most significant source of migrants and this trend is expected to continue.

4.2.1 Who are the Migrants?

We need to look more closely at the types of people who migrate and how they do so before we can ask why migration occurs. When considering the sources of migration, it is not limited to the informal areas only. Map 4.2, p53 illustrates the regional sources of migration to Windhoek over the last ten years. It shows that the main source of migrants over the past decade were from the regions of Omusati, Oshana, Ohangwena and Oshikoto who mainly settled in Katutura and the informal areas. These areas represent 52.1% of migrants to Windhoek. Migrants coming from outside Namibia was only 11.8%, ie 5% from SA, 3.2% from neighbouring African countries, and 3.6% from abroad.

Windhoek is a major drawcard for the economically active population coming from the rural areas. This is understandable in view of the socio-economic disadvantaged nature of those parts. In Windhoek the Ovambo ethnic group dominates rural-urban settlement. The Katutura population in 1995 was approximately 42% Ovambos, 19% Damaras, 19% Hereros, and 10% Namas (NEPRU 1995). The proportion of Ovambos among post-independence migrants is considerably higher. This is partly due to the fact the Ovambos, constituting the largest ethnic group in the country, (refer to s2.7) are largely dependent on subsistence farming.



Map 4.2 Regional sources of migration. To be interpreted with Table 4.3, p54. Taken from the 1995 Resident Survey Report, Vol. 2.

Consequently, they are driven by the declining agricultural sector, and also because of their strong rural-urban links¹⁴. It is easier for families with such links to settle than those which are isolated.

According to Hansohm 1997 poverty is related to gender. Female-headed households are often worse off than male-headed households and are disproportionately represented among the poor. Pre-independent Namibia was characterised by a distinct difference in the volume of male and female immigration.

¹⁴ Rural-urban links are an important survival strategy. Most households in urban areas maintain strong social and economic links with their rural areas of origin. They financially support their families there, and there is continuous transfer of resources between urban and rural households.

Table 4.3 Regional Sources of Migration

Code	Regions	Number Of Migrants	%	Cumulative
1	Kunene	103	0.7	103
2	Omusati	2409	17.2	2512
3	Oshana	1141	8.1	3653
4	Ohangwena	2578	18.4	6231
5	Oshikoto	1186	8.4	7417
6	Okavango	420	3.0	7837
7	Caprivi	258	1.8	8095
8	Otjozondjupa	653	4.7	8748
9	Omaheke	595	4.2	9343
10	Erongo	775	5.5	10118
11	Khomas	851	6.1	10969
12	Hardap	976	7.0	11945
13	Karas	434	3.1	12379
14	South Africa	706	5.0	13085
15	Other African States	443	3.2	13528
16	Overseas	504	3.6	14032

Source: 1995 Resident Survey Report, Vol 2.

Young men often went to towns first and were away from home for most of the year leaving the wives responsible for the young, the old and the family's few acres. Sometimes the men would send for their families upon establishing themselves, however, in some instances this was not the case. The trend has now changed as Namibian women have joined the rush to urban areas. According to Pendleton migrant women make up a substantial part of the city's population (MDRC 1997). Subsequently, female-centred households have increased since 1991 and now contribute 33% of all Katutura households (MDRC 1997).

4.2.2 How

During the late 19th century Ravenstein 1834 formulated laws of migration based on British census returns during the industrial revolution. One of his conclusions was that a characteristic form of migration was by steps. Migrants tended to move short distances *en route* for a major pole of attraction. This type of step migration can be distinguished from stage migration by which a migrant moves a short distance from his home area toward a pole of attraction, while others move on from where he has arrived to other destinations closer to the pole of attraction.

Both types of migration occur in Namibia. Step migration is a common feature among rural populations making a first move to a nearby town, and then directly to the capital. Stage migration also occurs, eg net migratory current flows from the north which in turn contributes a net migration flow to the next area south, and then from there massive net migration to Windhoek. A similar flow with less intensity can be traced from the south. Direct migration is encouraged not only by the much greater attractions of Windhoek, but also direct communications to the city are often better than in smaller towns. Travel by bus is relatively cheap, and the migrant has few household goods to move.

Temporary and seasonal migration¹⁵ have important bearings on the duration of stay. Findings from the 1995 Resident Survey Report indicated that most urban migrants have strong links with their areas of origin. As many as 73% of migrants maintain parts of their rural households, 88% have access to land and farms, and 39% own cattle (NEPRU 1995). The importance attached to rural areas is explained by the lack of land ownership, infrastructure, etc in the urban setting. About 90% of informal settlers visit their rural area of origin at least once a year (mostly during harvesting seasons) (Peyroux et al 1995).

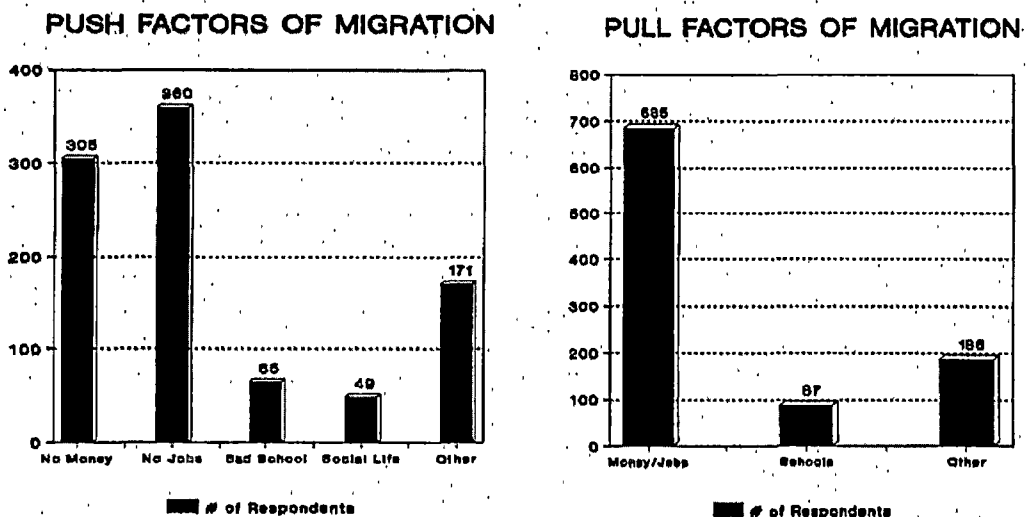
The relatively short duration of stay indicates a high level of mobility in migration patterns. An intricate support system exists between rural and urban areas as 85% of respondents from the

¹⁵ This strategy allows for longer periods of absence from farms and implies that migrants return home at intervals or send part of their income to help support family members on their farms. Farms however small act as insurance in times of unemployment or illness in rural areas in the absence of government provided insurance schemes.

abovementioned survey indicated that they are responsible for monetary transfers to their families in the countryside. Approximately 50% of informal settlers with dependents still living in rural areas indicated that they will not join them in Windhoek, however, this situation seems to be permanent in many cases (1995 Resident Survey Report).

4.2.3 Why

The motives for migration are multiple in dimension, though there is a general underlying economic motivation. When people decide to move two main factors come into play. Firstly, the individual household's opportunity situation *per se* (education, employment opportunity, economic resources). Secondly, the other is the household's contacts and social network in urban areas. The importance of this is evident in all Namibian urban centres. Other factors attributable to this process are drought, lack of educational and medical services, and the non-existence of recreational facilities in the remote rural communities. But the fact remains that the overwhelming reasons are economic (see Figures 4.2 and 4.3 below).



Figures 4.2 and 4.3 Factors influencing migration from rural areas to Windhoek. Taken from Frayne 1992.

It is necessary to bear in mind that migration occurs against the background of a fast growing population and poverty. Namibia is a largely traditional peasant sector in which temporary, seasonal and even permanent migration becomes an essential means of

survival. The poor are predominantly located in the northern communal farming areas and are largely dependent on subsistence farming. Poor farming techniques result in low agricultural outputs, soils are low in fertility and rainfall is low and erratic. Frequent droughts undermine food security and prevent subsistence farmers from accumulating surpluses and escaping poverty. Migration therefore becomes a necessary strategy for survival. Farmers are also badly located to supply urban markets in competition with imports and coastal production. Returns from the sale of crops are meagre because of low prices and high transport costs.

Therefore, it is often easier to sell labour than by growing cash crops. The movement to Windhoek is often a disappointment when reality fails to live up to expectations. Some join the army of workers in the construction industry as unskilled labourers, others join the ranks of the poorly paid domestic workers. A lot are self-employed as street hawkers or cleaners and become part of the informal sector. Many remain unemployed and even more can only find work for occasional short periods. The 1995 Resident Survey concluded that even though the quality of city life was not as expected, a significant number of people are unlikely to return to their areas of origin.

Poverty also has an important bearing on housing. The lack of welfare benefits, secure housing, unemployment pay, etc often force people to move out of desperation. Poverty severely affects the national ability to obtain and sustain services such as water, waste disposal, energy and shelter as well as the ability to find productive employment. A low density rural population adds to the costs of providing public services and facilities.

The attraction of Windhoek as a migration destination is easy to understand. Migrants perceive Windhoek to be a place of opportunity and jobs. Migrants have better access to education, health, water, electricity, etc. Namibia is characterised by the centralisation of private and public sector activities in Windhoek. The importance of Windhoek as a source of employment is demonstrated by the fact that it accounts for 40% of the total labour force in the country, ie formal and informal economic sectors (Central Statistics Office 1996). The Namibian development budgets for recent years also reflect the dominance of the Khomas Region including Windhoek. The per capita spending on development projects in this region for 1995-96 was double the per capita expenditure in other regions, and

similar levels of expenditure were reported for 1996-97 and 1997-98 MDRC 1997). The importance of decentralising development away from the city is imperative to Namibia's future if sustainable and a more balanced regional development is to be achieved.

4.2.4 Planning Implications for Greater Windhoek

While the urbanisation phenomenon is not restricted to Greater Windhoek alone, the nature of this problem in the city is somewhat unique. Windhoek has specific circumstances making it particularly vulnerable to rural-urban migration.

Briefly, it is located in an arid area and has a low annual rainfall of between 300 - 400mm with alternative water supplies. The annual evaporation rate is ten times that of the annual rainfall (Department of Water Affairs 1991). Its water supplies cannot be guaranteed and current consumption levels are not viable. Windhoek's poor soil conditions and low agricultural potential restrict general agriculture, except stock farming. The low agricultural potential is indicated by the low carrying capacity of between 8 - 15ha per cattle unit (CoW 1996). The mountainous topography enclosing the city limits developable land suitable for low-income settlement. Once settlement has filled the Windhoek Basin, further large-scale growth would have to be accommodated on mountainous terrain at a distance of 14km to the north and south of the city. This would significantly increase infrastructure costs, as well as travelling costs and times for the poorest urbanites. Windhoek also falls short in natural resources which could form the basis of a manufacturing industry, and depends for its economic viability on its importance as a distributional and government centre.

Furthermore, the swelling urban population puts enormous pressure on the urban fabric. The influx into Windhoek has resulted in immense increases in water consumption and strains on the waste water systems. Massive investment in the provision of potable water supply and sewerage has often been unable to keep pace with the growing demand of a rapidly expanding population. Sustained in-migration of low-income people will soon limit the ability of LAs to supply water to its inhabitants while a lack of energy, waste management and sewage facilities will increase deforestation and pollution to alarming levels.

The explosion of squatter settlements is a consequence of rapid urban growth fuelled by migration making housing the most critical issue. Demand has increasingly been met by the creation of squatter settlements which currently contain 50 000 of the city's total population (CoW 1998). Squatter settlements have now spread widely in and around Windhoek, stretching up to 50kms from the CBD. These are almost entirely low status in terms of the occupants and incomes of their inhabitants. Densities are not high. Squatter settlements generally comprise one-storey buildings and rarely more than two.

The population is growing more rapidly than the economy. Consequently, it becomes more difficult to offer people a decent income and living. Most migrants fail to find formal sector employment and it is anticipated that the informal sector will grow substantially. However, increased unemployment (currently 23% for Greater Windhoek) will continue to make poor quality of life a reality for many migrants. At the same time, Katutura will continue to exhibit considerable economic diversity.

On the other hand, in-migration is also associated with positive aspects. It has made the growth of towns and cities, particularly Windhoek which would never have been achieved without such influx. Urban migration has mobilised a labour force for industry, commerce and the provision of services, and some would agree that it has helped to mobilise a reserve army of labour which has kept down wages by maintaining high rates of unemployment. Urbanisation is a means of preserving a fragile ecology in rural areas known to have a very low carrying capacity and already being over-exploited for future generations and sustained tourist attraction.

Opportunities for entrepreneurs and job creation are better in an urban setting and many people streaming into Windhoek have realised this. Collectively, the poor can make a considerable contribution to the urban economy. Also services, particularly those of a social nature, are subsidised by the more affluent part of the population and can therefore be provided more cost-effectively in an urban than in a rural setting. A concentration of consumers makes production more profitable and provides an incentive for building manufacturing capacity.

4.3 Conclusion

The urbanisation dynamic facing Windhoek is less critical than in many other developing countries, but does require urgent and concerted efforts to prevent it from reaching unmanageable proportions.

Migration to Windhoek, particularly Katutura, has profound effects on the urban environment in terms of spatial, social, environmental and economic aspects. This chapter suggested that people migrate to Windhoek for various reasons, but are mainly driven by economic motives. Migrants are largely unskilled and most fail to find employment within the formal sector. Nevertheless, it is anticipated that the informal sector will grow considerably. The question however is whether Windhoek has the necessary resources available to meet the future needs of an expanding and increasingly dependent population. The existing social infrastructure is for the most part adequate, however, it does require proactive planning as the city continues to grow. One of the most critical issues is that of potable water and will become even more so if growth continues at present rates.

There is no indication that current migration trends will decline in the foreseeable future. Most of the growth will stem from migration from the northern parts of Namibia and consequently Katutura will be unable to absorb that growth. A pro-rural strategy is unlikely to counteract the current migration trends and therefore the most pragmatic step would be to meet the most basic needs of the present and future urban populations. Urbanisation can be turned into a vehicle of national development and individual betterment. It could also end in disaster if nothing is done to direct it or harness its potential.

Part Two

THE CHALLENGE

Chapter 5

URBAN HOUSING

5.0 Introduction

Compared to most sub-Saharan countries, urban housing needs in Namibia are relatively modest. Providing shelter is a more manageable problem in relation to the country's resources and skills, but the government faces major problems in satisfying the gap between post-independence expectations and the ability to facilitate a very rapid rate of urban growth. Despite the available financial institutions, expertise, etc there exists a growing shortfall in providing housing for the lower income groups.

This chapter investigates the nature and true impact of the housing crisis in Windhoek. It discusses the issues surrounding the existing housing crisis, looks at the institutional framework, quantifies the housing demand, and provides a critique on existing low-income projects.

5.1 Housing Attributes

5.1.1 Existing Housing Stock

A 1992 inventory of housing in Windhoek identified 53 000 urban dwellings on legal lots which are fully serviced (A World Bank Study 1992). According to this inventory the white population of approximately 85 000 people is housed in 20 000 spacious, high quality dwellings while 78 000 black people are crammed into 33 000 dwellings representing more than 2.4 households in two to three room dwellings¹⁶. About 38% of the present black-occupied dwellings were built within the last 10 years at low cost, but still requiring government subsidies of over 50%. During the pre-independent era the National Building and Investment Corporation (NBIC) built minimal one and two bedroom dwellings with rough finishes, floors, sanitary facilities, water and electricity. The largest number was built in Katutura. Later, to achieve the lowest

¹⁶ Note has to be taken that these figures were taken from an outdated source and that figures have increased ever since.

possible costs, builders eliminated all finishes - no painting, electricity, or even finished floors. Only dirt floors are provided.

The July 1995 housing stock deducted from a sample excluding institutional housing such as schools and hostels, is as follows:

Table 5.1 Most Updated Housing Inventory

Type	Number of Units	% of Total
Detached houses	25 405	66.8
Semi-detached houses	2 375	6.2
Flats	2 605	6.9
Backyard flats	785	2.1
Shacks (squatter units)	6 847	18.2
Total	38 017	

Source: City of Windhoek 1996, p71.

Shacks or squatter units accommodate approximately 50 000 people, while the rest of the units accommodate about 150 000 people (CoW 1996). The growth in those squatter units as a component of the housing stock took place over the period 1988 - 1996.

5.1.2 Existing Housing Conditions

The prevailing housing conditions are characterised by two extreme levels of differentiation (refer to Plates 3.2, 3.3 and 3.4, p20). On the one hand there are luxury residential areas with very low densities. An example of such an area is Ludwigsdorf where lots have a minimum size of 900m². On average a household in that area consists of three people, living in a large family unit. Such a house often has outer buildings for the use of domestic servants and garages. Infrastructure-wise these areas are well developed. Roads are sealed and well illuminated, water pipes and electrical cables are underground. Shopping centres are not necessarily within walking distance, but within easy reach by car. Public transport services are generally low, and only run in the mornings and afternoons and are mainly used by domestic workers.

On the other hand there are the everincreasing squatter settlements, controlled and uncontrolled, without decent shelter or small, hopelessly overcrowded houses in insufficiently developed areas. Lots are at the most 300m². This type of housing lacks sanitation, water taps, sewerage or electricity. The average household size in Katutura is about seven persons. In the illegal squatter settlements around Katutura conditions get worse. There are no tarred roads, no street lighting, no shopping and working facilities of the formal sector.

Various other levels exist between the two abovementioned extremes. Hochland Park, Pioneers Park, etc are low density areas, but with smaller lots compared to those in Ludwigsdorf. These suburbs represent middle class residential areas. In Khomasdal, as in Luxury Hill in Katutura, larger houses exist than in the rest of Katutura. But compared to the other residential areas in Windhoek Central the disadvantage of peripheral location still remains. In the more recently established parts of Katutura, such as Wanaheda and Hakahana, the standard of housing is slightly higher than in the older parts of the township. Sanitary facilities are integrated into the houses which are connected to water points, sewerage and electricity. Most streets are unsealed and the older parts generally offer poor living conditions. Most of the housing stock date back to the 1930s and are generally decayed and in dire need of renovation. These buildings are overcrowded as a result of the natural increase over the last 3 decades combined with the urbanisation process at work.

Even amongst the squatter areas there seems to be different standards in regards to infrastructure provision. On the one hand there are "site-and-service" areas to cater for those in the process of securing land and housing. The occupants have to pay a small fee to the local authority for services such as demarcated lots, communal water points and toilets, and graded roads. Currently the number of squatters exceeds the number of available lots by far in those designated areas. Consequently, those newly arrived and those who cannot afford to pay for the minimum services have to live far away from all infrastructure.

In order to cater for those newcomers the municipality established so-called Reception Areas¹⁷ (RAs). Normally those people are resettled and integrated into the formal housing sectors upon finding employment, in order to make place for other incoming migrants. However, urbanisation has resulted in a continuous and rapid population growth occurring faster than employment opportunities. The chances of finding and securing a regular income are very low, hence the mushrooming of illegal squatter settlements which are beyond the control of the authorities and do not enjoy minimal services for obvious reasons (Plate 5.1).

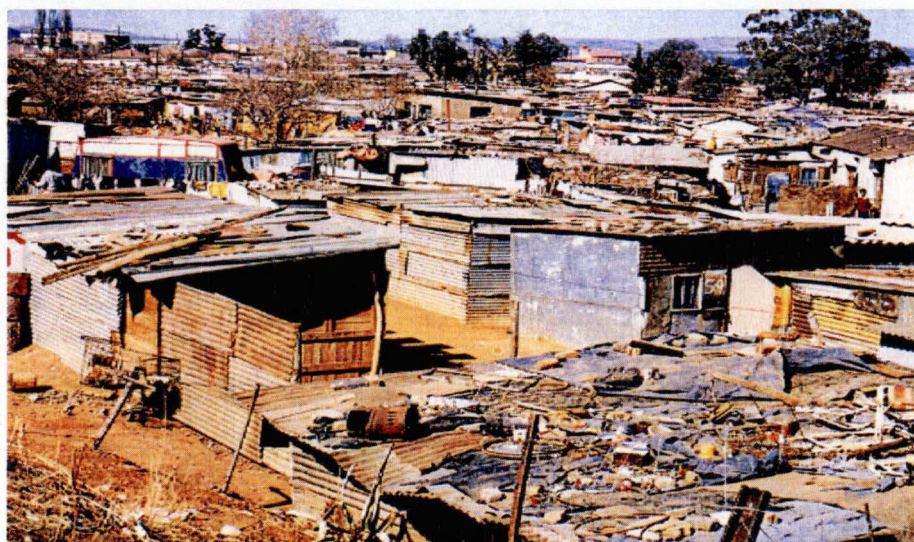


Plate 5.1 Squatter settlements are fast becoming a common sight around Windhoek City.

5.1.3 Housing Demand and Urban Growth

Most recent housing needs estimate based on the 1991 statistics for the numbers of people living in poor housing is estimated at around 37 000 (NDP1, Vol. 1 p465). In addition, there is a current deficit of 45 000. Those households represented by this figure are in the meantime solving their shelter needs by squatting with family or friends, occupying temporary structures in the backyards

¹⁷ RAs have basic community services such as communal water points, sanitation, refuse collection, gravel roads and drainage channels. These are reserved for the reception of the poorest families without the option of purchase. The duration of stay is confined to a maximum period which can be extended by contract. A family's socio-economic situation determines eligibility for transitional settlement. The establishment of permanent structures are prohibited, however, dwellings can be moved to other areas.

of family or friends, occupying temporary structures on partially serviced sites provided by local authorities, or squatting in temporary structures.

There is physical evidence that informal settlements are expanding rapidly on the city's fringes and there is no indication that this phenomenon is about to slow down. This has increased the demand for housing resulting in an estimated 180 000 squatters in urban locations, primarily Windhoek. These squatters live in makeshift shelters, mostly of corrugated iron with no services.

Existing housing programmes are struggling to keep up with the existing backlog, nor can it keep pace with the growing demand. The National Development Plan (NDP) aims at providing housing to 70% of the population by the year 2010. NHE is to produce 3500 shelters between 1996 and 2000. The Build Together Program (BTP) aims at constructing 15 000 houses over the same period (NDP1, Vol. 1 p472). Assuming the production rate is met, it may only be sufficient to have halved the backlog by the year 2000 as it does not regard the annual population growth rate. It seems unlikely that this backlog will be ameliorated within the foreseeable future when taking into account the annual growth rate. Therefore, the housing backlog for the poor will have increased to a level where conventional methods of housing delivery will not be able to meet the growing demand. "The city may expect ... 50% or more of its housing stock in the form of shacks within the next 10 years" (CoW 1996). Indications from the 1995 Resident Survey Report suggested that a significant number of residents are prepared to accept unserviced or partially serviced sites on which they can at least erect shacks.

5.1.4 Housing and Densities

The CoW makes use of density controls in conjunction with bulk, coverage and height controls as used in the USA and the RSA. A characteristic of local modern day town planning is the low density and mono-functional land use development patterns which the zoning has helped to achieve. By any standards, existing residential densities in the city are very low. Current Gross Housing Densities range from about 3.5 dwellings to about 20 dwellings per hectare in areas characterised by shacks. An average for all residential areas in the city may be taken as 10

dwellings per hectare (CoW 1996, p11-34). If informal settlement increases significantly, then the Gross Residential Density will also increase.

The prevailing densities are not high enough to support the most basic public transport system. The heavily subsidised municipal bus service supports this statement. The majority of the higher order functions and facilities are concentrated in the CBD rather than the suburbs indicating the inefficient nature of the low densities around the city. The spatially dislocated poorer sectors of Katutura, which was established as a high density area, are most disadvantaged by this system and its residents do not have the necessary resources to overcome the problems created by distance and poor supportive thresholds created by low densities. Furthermore, the topography of Windhoek's low-income suburb makes it more difficult and expensive for development than in other parts of the city.

The present demand for formal housing in Windhoek continues to concentrate on detached housing. The city does, however, face the constraint of limited flat, developable land for residential purposes. Development will locate further and further away from the city centre requiring longer and more costly journeys. Density increases are to be expected. The most practical and sustainable housing option for Windhoek would be higher density housing types with smaller frontages and gardens (if any) considering the limited water resources and limited flat land. Present policies encourage increases in residential densities which are supported by the adoption of a linear pattern. This linear model proposes higher density housing, typified by flats and townhouses located along the edge of the linear commercial development corridor. Densification not only provides a means of decreasing construction costs of housing itself, but also increases urban performance while improving the survival chances of the urban poor.

5.1.5 Housing and Affordability

Affordability is defined as, "...to supply, to be able to give, grant, buy ..." (Cambridge English Dictionary 1990). Within the housing context it refers to the amount of money a household can afford to pay for housing and services on a regular, normally monthly, basis.

Housing affordability depends on the costs of the dwelling, available financial instruments and the income of the prospective buyer. Available income distribution data indicates that the poorest third of households earn between N\$1500 and N\$2800 per year (A World Bank Country Study 1992). From past experiences households have proven that they can contribute only 1/4 of their income towards housing. This guideline indicates the poorest third of households can afford to contribute between N\$375 and N\$700 per year for housing. Income data supplied by the 1995 Resident Survey and PHSL indicated that 45% of households can afford only N\$140 per month for housing which is barely enough to obtain a partially serviced erf.

Approximately 85% of all informal settlers in the city live below the PHSL and can basically contribute nothing towards accommodation. These migrants are typically less educated with high illiteracy rates, high proportion of pre-school children, low incomes and high unemployment rates. With about 500+ migrants coming into the city every month, the proportion of the poorer population is continuing to grow at alarming rates. With the present economic climate, it is clear that the only strategy to ameliorate the current housing backlog amongst the poor will be in the form of site-and-service schemes requiring subsidisation to enable the poorer population to have access to it.

5.2 Land Restrictions

Windhoek is located in an approximate 10km wide valley, the Windhoek Basin, stretching for about 70kms. This valley is enclosed by mountainous terrain towards the east, west and in the south (refer to Map 3.2, p21). The Basin is expected to accommodate possibly 400 000 people (CoW 1997). Windhoek's current population stands at 200 000. The history of growth is recorded in Appendix 1 together with future population projections. If present population trends continue, the urban population may be expected to double within the next decade and a half. This growth will take urban development up to the periphery of the Basin.

The City Valuer recorded 46 000 registered erven for Windhoek at the end of 1996 (CoW 1997). Residential erven comprised 90% of this figure. In addition, the substantial areas occupied by informal settlers total 50 000 people alone. In broad terms, approximately

50 000 residential sites are occupied by the current 200 000 residents and about 50 000 more sites can still be provided within the Basin. Once settlement has filled the Windhoek Basin, further growth would have to be accommodated within the mountainous periphery of the Basin up to a distance of 14kms from the CBD.

The average gross residential density for Windhoek is presently 10 dwellings per hectare, however, in the informal settlement areas this reaches 20 dwellings per hectare (CoW 1996). If the proportion of informal settlements increases so would the average residential density for the city. An increase in density would allow settlement for a greater population within the Basin.

5.3 National Housing Policy

Apart from education, health, agriculture and rural development, housing is one of the GRN's four main priorities. Furthermore, it is also recognised that the building and housing component of development is an important activity for generating employment and income. The GRN started addressing the shortcomings in the housing sector by recently adopting a national housing policy. This document forms the basis for all future operation within the housing sector, and emphasises access, equity, participation, and accountability.

The central goal of the National Housing Policy (NHP) is:

"To make resources available and to direct their use into production of infrastructure and facilities so that every Namibian will be given a fair opportunity to acquire land with access to potable water, energy and waste disposal system, and to have access to acceptable shelter in a suitable location at a cost and standard which is affordable to the individual ..."

(NHP 1991, p11).

A sub-goal is to provide 70% of the urban population with appropriate shelter by the year 2000 (MRLGH 1992). In order to realise this goal, the Ministry of Regional and Local Government and Housing (MRLGH) started a national housing programme, as spelled out in the NHP, and provides loan capital at a subsidised rate. Two such programmes, the BTP and the NHE, form the principal instruments of the NHP.

In the NHP the government strongly supports the principle of home ownership as a means of providing security and stability to families. The policy also states that it will ensure that legislation, institutional arrangements, funding, etc meet the necessary conditions to enable individuals to build and own their own houses. All new participants in self-help schemes will operate on a cost recoverable basis for the first year. Thereafter, they should be motivated to buy their own lots. People are encouraged to make use of programmes such as BTP and NHE. The NHP undertakes to provide formal RAs to all urban locations. Therefore, uncontrolled and spontaneous squatting is considered illegal.

The policy identifies the following as the key players in facilitating the housing delivery process within the local and regional context:

- The MRLGH to act as facilitator rather than direct provider and administrator;
- The NHE for provision of shelter where the private sector is lacking; and
- Local Authorities to develop serviced land and RAs to be either sold or leased.

5.4 Institutional Arrangements and Policy

5.4.1 Key Organisations

Various institutions are ultimately responsible for housing delivery and management in Greater Windhoek. The participants are mainly the following:

1. The MRLGH

The GRN assigned housing responsibility to the MRLGH. The MRLGH is the most important housing institution in the city, identifying housing projects and providing and coordinating finance and expertise. Its housing policy has a strong economic component, with minimal subsidisation to only those who cannot afford essential costs of housing. This is designed to reduce any external debt and dependence. The main tasks of the MRLGH are:

- to provide a framework for dealing with the dimensions and implications of the nation's housing issues;
- to establish a basis for decision making;

- to implement and facilitate housing programmes catering for the needs of all income groups;
- be attentive to housing complaints; and
- encourage self-help housing and assist in the upgrading of informal settlements.

(Frayne 1992, p136-137).

2. The National Planning Commission

The National Planning Commission (NPC) was established in 1991 by the Constitution to fulfil the planning of the priorities and determining the direction of national development. The NPC is involved in the preparation of the National Planning Act. However, the cumbersome nature of bureaucratic procedures, combined with the fact that the NPC is still undergoing a "settling period", has ensured that it has not fully moved into the realm of policy formulation yet. This is partly due to the ambiguous and consequently poorly defined role of the NPC within the broader Central Government context. Precedent has clearly shown that the road to national development is indeed fraught with difficulties. However, it is believed that the experience of other countries in Africa and the Developing World in general provides a sound base for the development of an appropriate and functional policy framework within which national development can be implemented.

3. The NHE

This semi-public agency was established in terms of Proclamation Act AG 60 of 1978 and became effective in 1981 as the principal parastatal vehicle for national financing and production of low-income housing. The NHE (previously known as NBIC) is a non-profit organisation and performs the role of implementor within the housing delivery system. The NHE primarily caters for households with a monthly income of between N\$1250 - N\$3000 constituting 38% of those in need of shelter (NDP 1994, p15). The organisation is government funded which has become reduced over time. The implications of this for low-income housing are not desirable as all self-generated and borrowed funding must be recoverable to ensure the organisation's ongoing operation. During the 1995/6 financial year "NHE financed projects dropped by 62.2% ... mainly due to the lack of funds and high interest rates" (NHE EO 1996, p9).

The NHE works under the motto "helping people to house themselves". Its main task is enabling disadvantaged groups to

The NHE works under the motto "helping people to house themselves". Its main task is enabling disadvantaged groups to provide themselves with acceptable and affordable shelter. The NHE believes in the participatory approach in its process of housing delivery, and its policies are very similar to those of the MRLGH with regards to housing. The housing policy of the NHE is as follows:

- views housing as a process rather than an end product;
- targets those in need and who do not have access to the housing market;
- supports home ownership;
- encourages and strives for public sector involvement;
- strives towards affordability and encourages self-help;
- sets up appropriate training programs for community development, project management and the design and construction of infrastructural services;
- engages in research and provides policy advice;
- undertakes initiation, financing, construction, and purchase of finished houses; and
- supports small builders by awarding training and small building contracts.

(MRLGH 1991, p38-39).

4. Local Authority

Local Authorities (LAs) have been established by the Local Authorities Act 23 of 1992. The NHP has assigned specific tasks and responsibilities to LAs. The role with regard to housing is to provide an overall framework for development, and to oversee all town planning procedures and that those criteria are adhered to. CoW was actively involved in housing delivery for low-income groups until 1979. The previous government then felt it necessary to address the housing backlog by establishing the NBIC which took over local government responsibilities with regards to the provision of lower income housing. From then onwards the CoW received no more subsidisation from the Central Government to actively partake in the housing delivery process, except in the provision of land and municipal services.

Therefore, the principal function of the CoW is the provision of land and utility services and does not undertake building projects on its own. The CoW's town planning department is the key player with regard to the provision of necessary authority for housing development within Windhoek. The CoW's housing policy is

largely concerned with spatial location and the provision of services. The trend was to develop areas mainly north of the city, parallel to Katutura. Those northern areas are not well-suited topographically for development and require special earthworks and stormwater drainage exacerbating the problem of high development costs. In an attempt to maintain housing as affordable as possible, the prevailing land use policy is to retain flat land for low-income housing development, and encourage high income residential development on the more hilly areas normally associated with much higher development costs.

5. The Private Sector

The private sector in regards to housing consists of three broad categories of stakeholders:

1. *Individual building sector* comprising of households actively participating in the construction process.
2. *Informal sector builders* which are largely supported by the NHP and is increasingly becoming more and more significant in terms of providing employment and reducing building costs for sub-economic groups.
3. *Formal sector agencies* which are of little significance to the low-income sector. Financial institutions grant loans to a minimum amount of N\$40 000 and demand a deposit of 10 - 20%. These conditions prohibit the poorer sections of the population from entering the private housing market. Until recently these profit conscious societies did not consider low-income groups as a market due to the high risk and low profit margin. However, NHE promotes joint ventures with these societies as they possess the funds to grant a great number of small loans. Therefore, some low-income developers mobilise this capital by entering into treaties with banks and building societies.

6. Non-governmental Organisation

Non-governmental Organisations (NGOs) represent about 1/3 of the housing sector apart from the government and the private enterprises. These are not profit orientated and financing depends on local and international donors. The NGOs within the Namibian housing sector are actively involved in the mobilisation of resources and the construction of housing. There are currently 12 local NGOs pursuing the improvement of housing in Namibia.

These are called CBOs and operate as self-help projects to initiate and carry out the construction of houses. The entire planning process from the start to completion of houses are done by the members themselves. This includes the production of building material. The CBOs joined forces with the Namibian Housing Action Group (NAHG) in 1992. This association seeks the promotion of the cooperation between communities, training and funding. "Saamstaan¹⁸ Housing Co-operative" is the principal local CBO engaged in low income housing and has proved successful so far, albeit slowly. However, it seems to be constrained by the poor communication links with housing institutions such as NHE and MRLGH, a range of complex planning and building regulations, etc. This raises the very important issue of public participation in the development process.

7. The Public Sector

Two mechanisms have been integrated into the planning process in an attempt to give the public a voice. Firstly, two "advisory boards" were established in the townships of Katutura and Khomasdal. These boards assess all development proposals within their municipal jurisdictions for comment before referring it to the CoW for final recommendations. This, however, has no statutory backing and is merely "... a token gesture of little political significance" (Frayne 1992, p142). Secondly, the Town Planning Ordinance requires that all rezonings or special consent applications be advertised in three local newspapers for public comment. This is effective to some degree, however, it presumes high levels of literacy, daily access to local newspapers, some understanding of town planning procedures, etc making it difficult for low-income communities to participate in the planning process.

5.4.2 Informal Settlement Policy

Squatting in the city is escalating alarmingly and the present effort to control this phenomenon seems like a lost battle. This problem is exacerbated by the uncontrolled influx of people into Windhoek. Following a review of the situation, the CoW adopted a strategy on informal settlement in Windhoek in 1993. It was decided that a RA be created at a minimum cost in order to

¹⁸ Saamstaan translates to "stand together" in Afrikaans.

accommodate incoming migrants temporarily and facilitate orderly informal settlement. Subsequently the Informal Settlement Policy was formulated. Important aspects of the policy were:

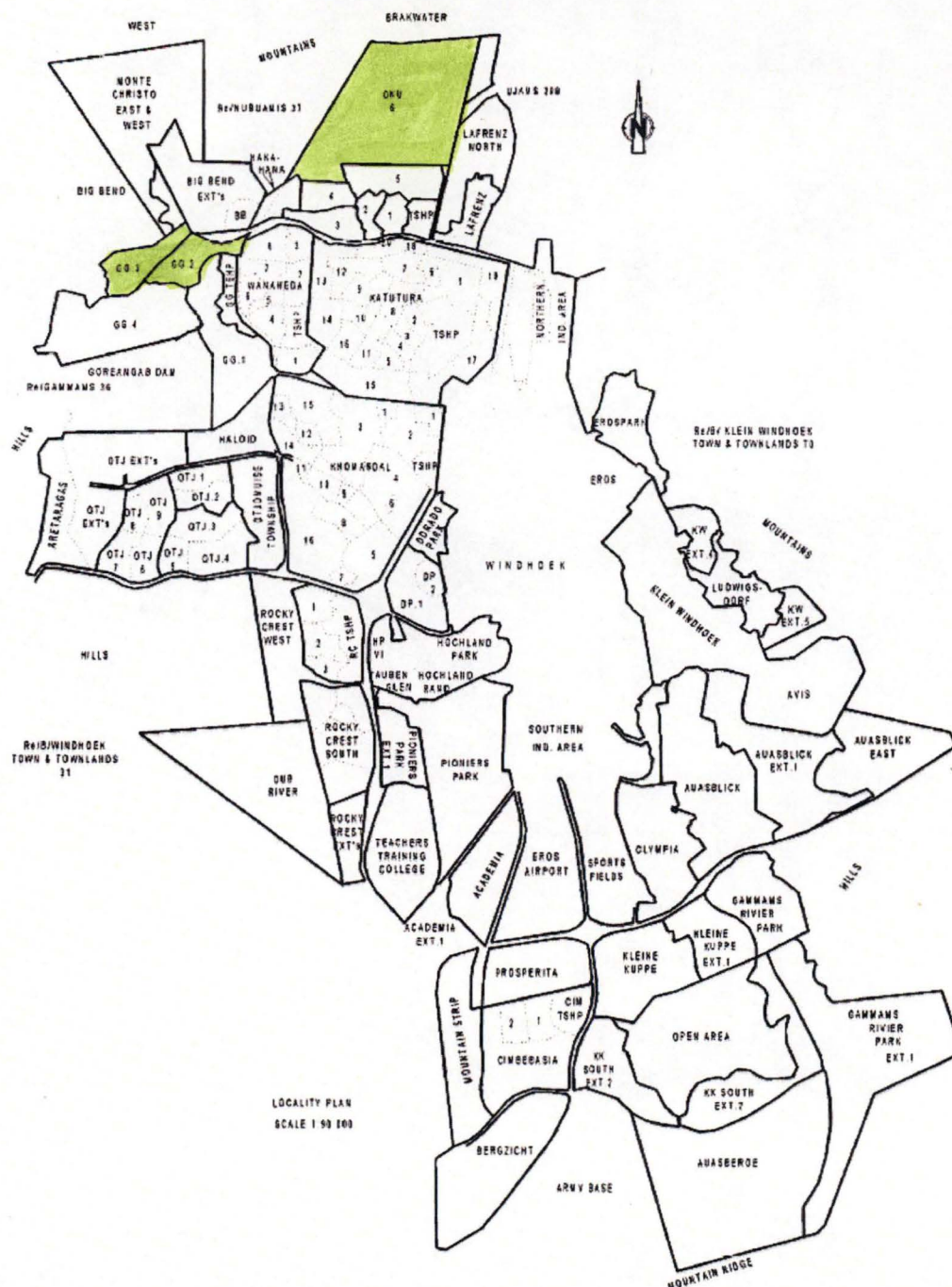
- erf sizes in the designated RA be a minimum of 150m²;
- no permanent structures be erected; and
- only basic communal services and facilities be supplied and erven be leased at approximately N\$50 per month. No services would be provided free of charge as this would simply encourage squatters to remain in the RA.

In terms of the policy, squatters had to be relocated from other areas in the city to the designated RA. Community Liaison Officers provided the communication and information links with the informal settlers to obtain cooperation with the relocating process. Goreangab extensions 2 and 3 (refer to Map 5.1, p75) were made available to those who wanted the option of buying serviced lots. The basic aim was to establish a form of control and recover development costs and services. However, the success achieved by the policy was disappointing as people refused to pay for services, and the cooperation from squatters to relocate to the RA was not successfully negotiated.

The township of Okuryangava Ext. 6 (Map 5.1, p75) was identified as a RA. In terms of the policy, all illegal settlers (16 groups of ±3000 families) from various parts of the city were to be resettled to the township. This approach resulted in a number of municipal and community problems. The most important hurdle appeared to have been unsatisfactory consultation with the communities concerned. Settlers held the opinion that their needs were not being taken into account as they were not involved in the planning stages regarding the establishment of the RA (CoW 1996).

The "forced" relocation of people to the designated RA resulted in illegal settlers refusing to cooperate with municipal officers insisting on staying where they were, because they were not paying for the site. Other community factors could be ascribed to the fact that permanency was not guaranteed; some settlers were of the opinion of Council only wanted to move them for control purposes thereby infringing their freedom; and also very limited options that were made available to them, ie to either buy a lot or be relocated.

WINDHOEK TOWNSHIP EXTENSIONS



Map 5.1 Boundaries within Windhoek. CoW 1996.

The relocation process is very expensive in terms of transport and therefore frustratingly slow. With the limited available manpower, a maximum of 50 families only could be moved on a weekly basis (CoW 1996). Council was losing financially as it cannot afford to make services available freely. This problem is exacerbated by

unregistered or illegal settlers who also make use of the same facilities and not contribute anything towards the costs. The vandalising of communal toilet facilities was common, especially in areas where settlers were not relocated immediately. With the establishment of the RA a new trend seem to have surfaced. Existing residents resort to squatting while leasing their own houses to other people. There is a common perception that the quickest and easiest way to obtain land in the city is through squatting (CoW 1996).

New Informal Settlement Guidelines

Taking into account all aspects as described above CoW implemented a new policy for informal settlement. The principal aim of the policy is poverty alleviation. Experience through similar schemes elsewhere has proven that full cost recovery is not possible. The policy suggests that clear targets for cost recovery be set. This strategy strongly emphasises the views, needs and financial situations and capabilities of the beneficiary communities. The new approach is based on "bottom-to-top" communication flows enabling informal settlers to decide on their own priorities, their advice on where they would like to stay, and their choice of erf and service options. The policy recommends the following:

- the emphasis must be community based and orientated;
- community consultation is essential with regard to various options for settlement and associated costs;
- with the guidance of Council, communities will be given a choice to construct areas themselves;
- depending on the community choice, blocks may be leased or purchased once proclamation of the relevant township has occurred;
- technical approach to the Informal Settlement Project is underpinned by two processes, namely resettlement and upgrading;
- existing settlements will as far as possible be accommodated where they are currently located. However, relocation of some communities is imperative due to sites in precarious areas such as floodplains, steep areas, areas with drainage problems. Other groups are unsuitably located in future service corridors, high density areas, and public land;
- specific areas for resettlement to be identified;
- basic standards for orderly settlement complying with basic health, sanitation and fire standards be followed. The focus,

however, will be on self-determination rather than strict control;

- community input will determine timespan during which development, ie shelters, services and development control matters, will take place;
- different monthly tariffs for services rendered will have to be determined for various levels of services;
- initial control will be exercised by means of aerial photographs on a regular basis, and later less frequently as control function improves;
- after extensive community consultation and acceptance, a cut-off date will be determined. From cut-off date settlers will have to start paying for services provided;
- new settlers will have to register and not be allowed to erect a shack anywhere except where allocated;
- the choice of permanency will be determined by relevant communities;
- acceptable level of performance in meeting service charges, rates and rental payments will be discussed with communities and agreed upon before any area is upgraded;
- reliable sources for funding need to be established and committed for the implementation of the above process.

(Paper delivered at Land and Housing Conference 1997)

5.5 Low Income Housing

There is no set definition for "low-income housing". Developers targeting low income groups charged between N\$8000 and N\$80 000 in 1994 for the construction of low cost housing. Some developers such as NHE make use of the PHSI as a standard. Other developers define it according to their perception of poverty, eg the MRLGH defined low-income households as those whose total income is at or below a level which is needed to secure unsubsidised housing through normal market delivery and financing systems. Such households are recognised by the NHP as "... disadvantaged household(s) and as such, ... entitled to special subsidies or assistance through the public housing program" (MRLGH 1994, p44). The maximum monthly income in order to qualify for this program is set at N\$1250. When using this figure, 62.2% of the urban population fall in this income category (NPC 1994, p11-12). The Council defines low-income areas as those areas with only minimum infrastructure and small units on small erven. However, not all developers define low-cost housing by

monthly earnings. Private developers use the costs of the finished product as a measure.

Table 5.2 Potential Housing Investments of Windhoek Residents

Standard of Housing	Total Population of Windhoek (%)
Higher	5%
Middle	35%
Lower	60%

Source: Statements of private entrepreneurs, 1994. Adapted from NEPRU Occasional Paper No. 9, 1997.

From the above table 60% of households belong to the low-income sector who can afford up to N\$80 000 only for shelter. According to an expert in the private construction sector, within this group, about 20% can afford houses between N\$40 000 - N\$80 000, and 20% are able to afford houses between N\$10 000 - N\$40 000 with the rest (60%) depending on housing below N\$10 000. Only 5% of the Windhoek residents can afford to purchase houses in a higher price range (NEPRU 1997).

The financial situation amongst the poor seems to be worsening (Frayne 1992, p131). According to his calculations about 60% of poor people cannot even afford shelter above N\$3000. All parties concerned agree that 2/3 of the urban population is in dire need of special housing. As a means of providing affordable housing, cost reduction is achieved in two ways:

1. Through subsidisation from either the Namibian national budget or foreign donors.
2. Through actual cost reduction in terms of material, labour and lowering the standards of housing and infrastructure.

5.5.1 Low Income Housing Projects - A Critique

The following review of certain low cost housing projects includes various types of developments such as governmental and parastatal programmes.

1. BTP (MRLGH)

The UNCHS developed an implementation strategy for a national housing programme. This proposed a "bottom-up" approach from individual families, villages, communities, local authorities, regional councils to national level. Hence, the BTP was launched in 1992/3 financial year. The concept of the program is well accepted and recognised by the communities and is more successful in meeting the sub-economic housing needs than conventional methods. The principal aim of BTP is supporting self-building activities. It offers loans for a wide range of purposes, ie from leasing a lot in a RA to the upgrading and extension of existing housing, and the construction of new houses. It seeks to provide the opportunity and freedom to build houses according to the people's needs, choices and most importantly their level of affordability.

The BTP also focuses on community development as part of its scheme. Participating households with an income not exceeding N\$1250 per month and who do not have access to credit get interest rate subsidies and technical advice. The BTP granted 3322 loans over the past 3 years out of which 1120 shelters were fully completed (Onibokun et al 1995, p8). While a lot has been achieved, it still falls short of the plans and expectations at independence. Only 5600 families benefited from the project since its inception (NEPRU 1997). This is mainly due to financial constraints. Although the BTP has mobilised family resources for housing provision, it has not provided the beneficiaries with the necessary training. This is a project of "government assisting individual families through ... loans and the site and services to build their homes" (Onibokun et al 1995, p8), rather than guiding communities to 'build together'.

There is a lack of a sense of true 'communities' of individuals assisting each other. This scheme is also not affordable by the poorest of the poor. On the other hand, current participants have little incentives for repayment. The actual building process is also being delayed as members cannot keep up with payments. A loan of N\$115 is supposed to cover N\$70¹⁹ for land and N\$10 for services leaving only N\$35 towards building costs suggesting that a loan of N\$3500 is barely enough for a wet core and one room. The policy is also too narrowly focused on promoting home

¹⁹ This payment is for N\$3200 per lot over 5 years at a 15% interest rate. A nominal 10 % deposit was paid.

ownership, which in many cases is not an option for the poor. It does not include a wider range of options for persons seeking shelter, including renting. A much broader concept of housing policy is needed to appropriately address the need of housing for the poor.

2. People's Square (Saamstaan Housing Co-operative)

Saamstaan was the very first organisation in Namibia to address housing issues collectively with beneficiaries. This project consists of 45 participants who are almost all women, both single mothers and heads of households. Households were fairly large and dependents ranged between two to ten. This project aims at promoting the beneficiaries' process of planning, administration and the construction of houses. Houses are completely self-built, including infrastructure. Members managed to avoid the high service charges by doing their own reticulations and by not connecting to electrical services. The participants are advised and trained in building techniques and brickmaking, and the project also includes community development.

Saamstaan negotiates with Council to secure cheaper land for its beneficiaries and has been quite successful in doing that. It is highly unlikely that individual members would have had the same success in negotiating with Council. One of the critical issues during these negotiations was the affordability of members against the prices of available lots. It was also discovered that the pricing for blocks of land does not compare favourable with individual erven, but the fact that it was high density development made it more affordable. Another constraint was the fact that the Windhoek Town Planning Scheme does not recognise this type of development, and areas intended for high density development had to be identified for this purpose.

The project has only a single municipal account which is divided equally amongst members. A considerable amount is saved due to individual members sharing basic charges (basic charges are for the large subdivided lot only). Costs are also reduced because of no electricity and no use of flush toilets and showers. Water connection and transfer fees were added to the selling price and the total cost for the 45 members was about N\$40, 000. This money was paid for by donor funds, while members repay an amount of N\$50 each for a period of 18 months into the Saamstaan revolving fund. Each participant then obtained 150m² of land and entered into an agreement with the agency for

individual land rights. Most members moved into temporary shelters on their land and no longer had to pay rent for rooms or backyard shacks, as well as land and service costs while waiting for their houses to be completed. Central to this project is the incremental payment and development process as it is up to the members to decide what and how they can afford to build.

There is, however, no set loan programme for repayments. These fees must, however, be paid thereby increasing the dependence of participants on loan capital for housing. Furthermore, the project is administered as a revolving fund, and the ability of the institution to continue helping new members depends on the timely repayment of loans. However, due to various factors, many participants fell behind. This suggests that housing costs might still be too high and stresses the need for ultra low-income housing. Furthermore, some of the first members ceased their involvement and participation as part of the community project once their houses were completed. The situation has deteriorated, because no member has been evicted due to default on repayments. Saamstaan has also experienced legal problems with the evictions mainly due to the fact that the land belonged to Council and that no person could be removed from municipal land without their consent. The organisation experienced severe financial constraints and therefore remains largely dependent on donor support.

3. Oshatotwa Housing Programme (NHE and KfW)

This is a joint venture between a Namibian (NHE) and a German organisation (Kreditanstalt für Wiederaufbau – KfW), ie public and private developers. The objective is to improve living conditions in informal settlements and to reduce the housing shortage of low-income urban dwellers and incoming migrants into the city. Oshatotwa makes available similar offers as the BTP, but does not restrict itself to financing only. It includes the construction of housing as well. The NHE performs the role as guarantor and coordinates and monitors the project.

A private developer is responsible for carrying out the planning, construction and purchasing of the buildings according to Oshatotwa guidelines. It concentrates on community development and the construction of such centres. Oshatotwa Project offers a range of designs and variants to suit various needs and incomes. These are Starter Solutions consisting of shell

houses²⁰ with no internal partition walls, except for the bathroom, Core Houses which provides for the construction of a minimum initial stage of a house suitable for upgrading. Both types vary in size, however these have to be in line with the minimum erf size of 300m² as stipulated by the NHP.

Oshatotwa adjusts the PHSL, which is normally calculated for families consisting of six people, to the actual size of the household. Its loan guarantee is as unique as its joint undertaking. Loans are granted by a financial institution under softened conditions. 30% of the received amount is guaranteed by the fund which is financed with public money. No other subsidy has offered this type of insurance.

A major obstacle according to the NHE Executive Officer is the lack of serviced and affordable land and infrastructure. The same assessment was made by the NDP, "the high cost of serviced land restricts access for low income groups and is one of the main constraints ..." (NDP1, Vol.1 p465). In addition, costs are increased by factors such as geological constraints and the adoption of high infrastructure standards by local authorities. NHE has therefore repossessed 486 serviced erven due to default payments. This initiative is motivated by the scarcity of fully serviced low cost erven needed for low-income housing projects. Evicted households are temporarily accommodated on NHE erven occupied by other defaulters. This intervention serves as a warning to NHE tenants capable of paying arrears, but still making irregular payments. However, defaulters have the option of renewing their purchase contract by paying a fine and settling their arrears in full.

4. Upgrading of the Katutura Single Quarters (NHE and CoW)

This project is the only one of its kind pursuing the construction of apartments, all other projects pursue the building of houses. The former Single Quarters are currently being transformed into apartments for private ownership and targets the same income groups as the BTP project. The Single Quarters is presently hopelessly overcrowded. Some of the previous occupants had been resettled in Oshatotwa Project areas, however, most of its occupants have to be relocated to areas which still need to be

²⁰ A small nucleus structure consisting mainly of a toilet or larger wet-core facility which subsequently could be expanded by adding more rooms in further stages.

identified. About 500+ illegal squatters living in squalor in the Single Quarters urgently need to be resettled. Land availability is a crucial factor facing Council's Informal Settlement Team. The existing RAs are almost full to capacity. There is currently no alternative for land relocation (CoW Annual Report 1997). The team is now exploring all possible avenues for identifying suitable alternative land for urgent resettlement of those illegal individuals.

*Serious logistical problems almost resulted in the dissolution of the NHE in 1996. Consequently, the gaps in the above paragraphs are the result of restrictions on public access to data on NHE sponsored projects.

5.5.2 Sustainability of Low Income Housing Projects

Which is the most sustainable urban form is the biggest dilemma facing planning today. While it encapsulates a whole range of environmental issues, from which the concept "sustainability" originated, it is the issue of urbanism that seems to be the most difficult to solve. The search for the most appropriate urban form has a long history, as is the search for the most sustainable urban form. Housing forms part of and can contribute to the entire urban system through sustainable development. The Brundtland Report defines sustainability as:

"... development that meets the needs of the present without compromising the ability of future generations to meet their own needs. A process of change in which exploitation of resources of technology ..., and institutional change are all in harmony and enhance both current and future potential to meet human needs and aspirations"

(Blowers A ed., 1994).

In essence, it encapsulates the betterment of total quality of life and requires an integrated approach by all government spheres in order to ensure sustainable outcomes. Sustainable development is a vehicle for involving the broader community.

The concept can be related to urban systems. Low-income housing projects are regarded sustainable when they improve and fulfil the needs and housing situation of inhabitants in the long term without having to be dependent on permanent external

input (NEPRU Occasional Paper No. 9, 1997). By comparing the housing projects as described above, it is possible to evaluate how those differing strategies contributed towards sustainable urban development. This comparative analysis was done in tabular form (see Table 5.3, p85).

The principal difference between those projects are planning process, construction and the standard of the finished product. This explains the varying prices as can be seen from Table 5.3. Self-building projects such as People's Square and the BTP provide the cheapest options, whereas houses planned and constructed without the beneficiaries' assistance costed more, eg Oshatotwa Loan Guarantee Fund. This type of housing generally has higher standards, however, it is not possible to assume that standards increase in relation to price. The period of repayment for the Saamstaan and BTP schemes is relatively short which proves an advantage as shorter repayment terms enable participants to settle debts within their lifetime and not pass it on to children. This relates to the quoted Brundtland definition. Upon completion of repayment, families can upgrade their homes or invest in enterprise and thereby uplift their standard of living.

All discussed projects experienced default repayments. Only Saamstaan claims that threatening participants with legal action improved repayment discipline. In some cases, such as with the Oshatotwa project, social workers were involved in the program, and upon determining the inability of some households to make any repayments, alternative solutions were sought. Some projects are administered as a revolving fund, however, timely repayments proved to be problematic. The low repayment rates also produced inefficient funds resulting in an increasing dependence on external funding stressing the unsustainable nature of those projects.

The abuse and the occurrence of people with higher incomes not needing, but qualifying for housing subsidisation is quite common. This is because real monthly income cannot be proved, due to informal income. A large number of participants are dependent on an informal income which is often higher than declared. The adjustment of the PHSL as with the Oshatotwa programme was another problem.

Table 5.3 Costs, Terms and Monthly Repayment/House for 1994

Project	Devel- oper	Land and Building Costs (N\$)	Monthly Repay- ment (N\$)	Inter- est Rate (% pa)	Repay- ment Period (in years)
People's Square	Saamstaan	8 300	75	9	10
BTP	MRLGH	5 000 - 22 500 (excl. erven)	50 -280	9 - 14	20
Single Quart- ers	NHE/Muni- cipality	10 000 or 20 000	179	7	30
Oshatot- wa Starter Solution	NHE/KfW	15 000 - 35 000	150 - 500	10	30
Oshatot- wa Core Houses	NHE/KfW	26 500 - 48 900	400 - 700	17	30
Oshatot- wa Loan Guarant- ee	NHE/KfW	52 500	720	17	30

Source: Adapted from NEPRU Occasional Paper No. 9, 1997.

Conventional public sector housing programmes are very costly and therefore unaffordable by the target groups. These programmes normally require substantial government subsidies restricting the number of people who can benefit from it emphasising the need for more appropriate finance schemes for low-income earners. The misuse, high construction costs and high interest rates make affordable housing an evasive goal. In addition, the peripheral location of low-income areas, insufficient transport system, etc are not addressed by these sorts of schemes. Housing delivery alone cannot solve the broader issue of housing and needs to be planned as part of a more complete urban system. The need for improved coordination and cooperation, making available opportunities for the public to be involved, a strong and demonstrated willingness to work together toward a

workable management programme, and an integrated planning approach (multi-disciplinary) between various sectors are crucial if ultimately sustainability is to be achieved.

The above discussion emphasised the economics of housing only. This is but one aspect of the concerns about sustainability. While it encompasses a whole range of issues, for the sake of brevity this project will not extend into other obvious concerns. Fortunately, there is a growing awareness of the environmental implications of concentrations of people in Namibian urban centres.

5.6 Conclusion

This chapter raised various issues surrounding the housing debate in Windhoek. It is not clear that the scale at which the current need exists is of such a nature that it could be rectified given that appropriate and immediate actions are implemented. Certainly gains have been made, but housing and its associated measures need policies and strategies that are more responsive to the context in which it is located. That context includes economic, social and environmental constraints. Yet, the population has shown some ability, given the right circumstances, to deal with their immediate needs. In the longer term broader issues such as employment, transport, etc can become more emphasised and tackled by a similar process.

There are no easy or clear answers as to how to address those issues, but what is apparent is that housing provision does not simply entail the construction of a certain number of houses each year to accommodate the growing demand. As emphasised by the NHE housing and urban planning is a process more than an end result. It extends into the arenas of engineering, transportation, technology, institutional, economic, political and social realms. The way in which all these relate to one another will in turn affect urban performance and efficiency of the city and its ultimate well-being.

Part Three
POSSIBLE URBAN
FUTURES

Chapter 6

ALTERNATIVES IN RESPONSE

6.0 Introduction

Two main conclusions can be drawn from the findings of this study. Firstly, although the Namibian population is small by international standards, the scale of population growth within Windhoek is escalating. Consequently Windhoek, a city characterised by particular circumstances as highlighted in Chapter 4, is clearly struggling with a problem threatening to overwhelm it. This poses the challenges of poverty alleviation, assuring shelter and sanitation to all citizens, and providing access to basic social services. Secondly, the analysis indicates that there is significant scope for improving policies having direct or indirect impacts on housing. The problems stemming from the rapid population growth and mass urbanisation are set to intensify over time unless the present inadequacies of urban management policies and strategies are rectified in order to deal with those issues in an appropriate and effective manner.

As this study centres around low-income housing in Greater Windhoek, this chapter will address the housing need by putting forward policy and strategy recommendations. The foregoing study showed in many instances that the conventional approach to providing low-income housing failed. "Urban development cannot be based on standardised models" (Brundlandt Report). Each city has particular circumstances and possibilities which must be evaluated within the right context. What works successfully in one city may be inappropriate in another. Therefore, the proposed recommendations are direct responses to fairly intractable problems. These are not designed as a "comprehensive masterplan", but rather as responses to those issues arising from the dilemmas raised in the preceding chapters. As such these proposals will require regular and ongoing monitoring and review to ensure that those issues are addressed in an effective and appropriate manner.

6.1 Policy and Strategy Recommendations

6.1.1 The Pursuance of a Variety of Housing Tenures

In-migration to Windhoek is not going to decrease within the foreseeable future. Population growth already outstrips the ability of the CoW to provide urban land and services to accommodate the everincreasing population (City of Windhoek 1996). Conventional "product" orientated erf delivery systems have proved to be unaffordable by those in need of housing. From previous discussions, it is clear that the options made available to the needy were extremely limited and consequently led to a variety of problems. The current pursuance of site-and-service schemes, which are essentially self-help, and relocation programmes, should not be exclusively sought, but rather form part of a wider range of options.

Although the NHP gives priority to home ownership rather than rental accommodation, renting should be an option for communities. Home ownership is often not possible for the poor, and the existing policy should cater for people seeking temporary shelter by making available a wider range of options. There are no available statistics on the demand for rental accommodation, however, many households consist of seasonal migrants and are only in the city on a temporary basis. "... as many as 89% of households return to their rural area of origin at least once a year, with only 10% visiting occasionally or never. Equally important is the fact that near(ly) half (48%) stay in the rural area one month or more (mostly during harvesting seasons) ..." (NEPRU 1997). The fact that a large proportion of Katutura residents who are "renting" cannot, and will probably never, own property suggests the need for creating a rental housing market.

Furthermore, subletting rooms in Katutura is very common. The security of tenure in Katutura is already low as most inhabitants do not own property and/or are not protected by any form of legislative eviction control. Such people are therefore subject to the determinants of market forces, and exploitation by landlords. There are currently thousands such people residing in Katutura. The existing housing policy ignores the needs and difficulties of this section of the population who cannot afford to buy real estate, or who are not able/interested in permanent shelter or in partaking in low income housing schemes. Statutory backing is needed to protect such people living with the constant fear of eviction or

resettlement which suggest the need for the NHP to be revised. The subletting of rooms, flats and houses by house-owners should be promoted as this not only provides an opportunity for house-owners to generate an income, but is also a way of accommodating the growing number of people. Given the importance attached to shelter, the Government should as a matter of priority adopt a realistic policy geared towards promoting rental accommodation. Security of tenure is an important aspect of accommodating informal settlers into the urban environment and is a positive approach towards meaningful integration into society.

Recommendations

1. The Namibian Government is to revise the NHP to include a wider range of housing tenure options in order to appropriately address the housing need of the low income market.
2. Housing options aimed at the lower income market should include the following types of housing:
 - controlled informal housing;
 - site-and service schemes;
 - core housing;
 - shell housing;
 - semi-detached housing;
 - combination of completed houses; and
 - promoting rental accommodation.
3. The construction of high density flats should predominantly occur in the inner city areas so as to increase usage of existing infrastructure, increase residential densities, increase access to a wide range of urban resources, and thus improve overall urban performance.

6.1.2 Alternative Technologies

Conventional, factory-produced building materials are currently used for housing construction. More than 80% of these are imported from the RSA (UNCHS Report 1990). Handling charges

and transport costs greatly increase the cost of materials. Building operations are mechanised rather than labour intensive and this type of construction does not encourage self-help or community participation in the building process. On the contrary, it tends to exclude locals from the direct and downstream economic activities within the building industry. Construction materials used in modern buildings are more durable than those used in traditional buildings, but they are more expensive and require people with special skills to put them up. The NHP states that the Government will actively promote the development and use of local materials for the manufacture of building components in order to reduce dependency on imported materials and thereby reducing costs (NHP 1990, p12). The NPA also mentions that the Government will promote the development of local materials, cognisant of the fact that this must be done on a sustainable basis (NPA 1996, p35). It is not necessary for Namibia to go through an extensive research process into the use of non-conventional local materials. There are currently ample research projects which have been tried and tested. What is required is for these results to be reviewed and modified to suit the Namibian context through field trials.

Although most CBOs attempt to reduce costs through reducing space standards, their efforts have been overtaken by the high costs of materials and the mode of construction. Experience from other developing countries has shown that the use of local low cost building materials and simple construction methods with full participation of house-owners is an effective method of reducing overall costs. This approach, combined with house designs which can be developed and extended in stages with incremental development, enables more low income families to have access to better housing at lower costs.

The scarcity of timber and the unavailability of local resources has led to the development of woodless construction methods. This technology utilises clay materials for the structure, including foundations, walls, lintels and roof. As timber is unavailable locally, consideration should be given to importing logs and establishing medium-small scale timber sawmills. The same approach should be taken with steel building components. Steel door and window frames could be produced locally in small-medium sized workshops if the raw material is imported. This type of approach even in the most basic form can engender a building industry that forms a local economy.

Recommendations

1. In order to fulfil the intentions of official documents, to utilise alternative locally available materials and technologies combined with labour-intensive techniques in Namibia, it is necessary to review available trials and introduce and demonstrate the feasibility of alternative technologies through a pilot project. This could possibly be developed into a national program.
2. Existing building regulations should be reviewed in order to introduce more appropriate performance specifications which can be met by locally produced materials.
3. The Government should also review the tax structure for imported materials and determine ways in which measures might be introduced favouring the importation of raw materials such as steel and timber rather than the finished product.
4. Affordability relates to the issue of standards. Most organisations and developers still emphasise brick structures and fully serviced erven. This should be reconsidered not only to make it more affordable, but also to facilitate a more flexible site and services approach. Cheaper options such as prefab housing or insulated tents might be considered.
5. All institutions involved in the housing delivery process should adopt techniques such as incremental development combined with flexible house designs as an approach to make housing more affordable.
6. Technical schools should introduce and teach ways of promoting local building materials in their syllabi.
7. Learning from experiences elsewhere and adopting appropriate policies and practices is a step in the right direction.

6.1.3 Institutional Framework for Shelter Delivery

The institutional framework must reflect the essence of the NHP, ie that housing delivery is a **process** rather than **product** orientated process. It is thus vital that the administrative framework is designed to respond to the needs of the poor and seek their involvement rather than introduce ideas from above.

Planning and urban management is presently carried out in a piecemeal, uncoordinated and wasteful fashion, fragmented inter-departmentally as well as inter-sectorally ultimately serving narrow interests with little or no benefit to the city at large. This results in a poor level of problem and priority identification, and also the lack of a coordinated and integrated planning system.

The current structure does not facilitate an improved integration between top-down and bottom-up approaches to planning in general. In fact, it marginalises planning and reinforces the needs and wants of the status quo, despite the political changes. While independence has brought about the articulation of policy at all levels of government, policy changes are insufficient to bring about real change. At present ministerial policies, financial policies and social policies are all seemingly unrelated, with the NPC playing a largely ineffectual role. Planners often view policy as an end in itself, identifying and addressing "collective need". Planners tend to be deterministic, while social systems are typically resistant to most policy changes. If independence is to effect increased democratisation of the planning process, there needs to be a revision of the existing town planning legislation as well as the planning system itself.

Recommendations

1. In order to overcome difficulties resulting from the existing fragmented institutional framework, it is proposed that two processes (see Frayne 1992) at the most basic level be set in motion:
 - 1.1 To distinguish target groups for whom planning is pursued within the overall social and economic system. Available methods to assist in achieving realistic and targeted planning action is based on a concept put forward by USAID (USAID, Office of Housing 1976). This concept is based on the

notion that any form of planning starts with the identification of various housing needs. The next step is to identify various target groups and prioritise their needs according to different components of the urban system, for example education, health, housing, etc. This provides a prioritised development framework which is cognisant of the divergent needs of the urban population.

- 1.2 To establish an overriding interdisciplinary body capable of coordinating all urban management within the city. This necessitates the bringing together of all ministerial, municipal, public and private institutions, and coordinating and integrating their various objectives, priorities and resources in order to meet the needs of the population as identified during the initial phase, ie point 1.1 above. However, such a level of inter-sectoral coordination can only take place under the auspices and guidance of a superior body whose control function is to effect resource distribution planning within the city. It is imperative that this body constitutes an interdisciplinary team of urban managers capable of making judgements and decisions based on existing data and professional expertise. In addition, this body should have the authority to amend existing planning legislation in an attempt to both streamline the procedural system and to reduce the partial nature of the planning system. It is vital that this occurs as part of the process of integration between top-down and bottom-up approaches otherwise planning in Windhoek will continue to favour the status quo with little or no benefit to the city as a whole.

6.1.4 Administrative Reform

Cumbersome and time consuming procedures, as required in terms of the Townships and Division of Land Ordinance No. 11 of 1963, are archaic, impractical and doing very little to facilitate the speedy proclamation of land and housing development.

A person wanting to develop land for residential purposes will have to wait a minimum of 2 years from the date of lodging the application to the final approval. The existing procedure for approving firstly the need and desirability of a township and secondly the layout design requires that approvals be obtained

from LAs and the State. NamPAB and the cabinet of Ministers must approve each scheme for Greater Windhoek.

All parties concerned with housing recognised the duplicate nature of the system as a major constraint, but the question remains as to whom should be responsible for initiating and coordinating the actions necessary for addressing this unfortunate situation. The point, however, remains that there is a need for revising the township proclamation procedure currently required by law to speed up the process.

Recommendations

1. To hasten the construction and development process, the Government should limit their role to setting spatial planning policies, leaving site plan approvals to the municipal planning office and building department.
2. Doing away with the duplicity to facilitate a more rapid and less statutory process could eliminate delays in the planning process.
3. The Government should also take advantage of the experiences of other sub-Saharan countries and adopt and enact laws and standards which are appropriate, facilitatory and flexible and **NOT** restrictive and prescriptive.

6.1.5 Revision of Building Regulations and Town Planning Procedures

A major constraint facing the low-income population is the restrictive regulations governing planning and servicing standards. Existing regulations result in high development costs and the poor therefore have no choice but to live in overcrowded conditions or squat. Rigorous bulk and building requirements working against high density and the provision of more rudimentary structures, both of which would facilitate the production of cheaper and more affordable housing, are required to be met under presently outdated town planning scheme

requirements. Bulk requirements, especially, should be revised to increase habitable floor space in order to allow more people per dwelling unit. This is particularly important for low-income communities where the greatest need for this type of flexibility exists.

It was also found that the advantages of protected use-rights as imposed by zoning legislation are largely inappropriate to the needs of the lower income groups in the city (Frayne 1992). This suggests that obsolete town planning requirements would have to be revised, including the deregulation of certain residential zoning requirements, to allow more flexibility and thus non-residential activities to occur more freely on residentially zoned properties. This applies in particular to the establishment of creches, pre-primary facilities, offices, shops and some working facilities, urban agriculture, etc instead of pure residential use. Urban agriculture is a very useful tool for urban development control. If land yet to be developed is legally allocated to urban farmers for a specific term depending on when the development of the site would commence, squatting can be contained.

Recommendations

1. In order to meet the needs of the poorer population of Greater Windhoek, it is necessary to abandon mono-functional land uses.
2. Zoning and building regulations should be revised to allow a greater variety of land uses on residential properties. This should include:
 - the promotion of dual occupancy;
 - a reduction in building lines;
 - relaxation of bulk factors;
 - allowing multi-level residential/commercial development; and
 - land zoned for urban agricultural purposes.
3. Potential loss of amenity can be controlled through stricter application of by-laws.

4. LAs should adopt a flexible approach to meet required performance criteria and thereby reduce the risk of strict regulation hampering innovative design.
5. LAs should also endeavour to use innovative materials, including waste materials, and designs.
6. LAs should have the authority to grant waivers or relaxations of rigorous regulations.
7. LAs should focus more on quality of life rather than design.

6.1.6 Urban Consolidation and Densification

As already discussed in the preceding chapters, the SA apartheid regime prohibited black Africans from staying in urban areas. The Old Location, which was restricting westward expansion of the "white city" and regarded as too closely located to "white suburbs", led to the establishment of the two sub-economic townships located 6km from the CBD. It was further separated by buffer strips from the remainder of the then "white Windhoek". The spatially dislocated nature of the city is still clearly visible in the urban fabric of today.

A further characteristic of local town planning is the low density and mono-functional land use patterns due to rigorous zoning. The present tendency is for the city to grow in a space extensive and therefore very costly fashion. This is not conducive to the promotion of an efficient urban economy, which is largely exacerbated by the large wedges of open space which served as the statutory buffer strips to aid in the spatial segregation of different races. It appears as if land use in Windhoek today is still largely based on notions of segregation of both uses and race - low density/mono-functional areas still being protected (see Chapter 3). Land in Windhoek is a primary resource and its efficient and intensive utilisation should be an essential component of any planning framework. Unless housing is thought of in terms of total urban performance or function, it will be difficult to address the problems that exist in a realistic manner, with the prevailing mono-functional land use patterns that exist at the ultimate cost of the urban poor.

Furthermore, the existing densities in the city do not justify even the most basic transport system. Travel distances will continue to increase along with city growth. This is already and will continue to be more severely felt by the poor living on the outskirts of Windhoek. It has resulted in transport problems, especially in Greater Katutura. The concentration of commercial activities in the CBD rather than the suburbs further verifies the inefficiency of prevailing densities around the city. The city's linear pattern creates the opportunity for a strong and efficient public transport system along the central spine supported by side branches to suburbs. This will provide for a concentration of destinations.

Recommendations

1. In order to reduce development and servicing costs resulting from low density horizontal expansion, ways of increasing density and reducing horizontal growth of the city in favour of more dense vertical environments will need to be explored.
2. The prevailing densities in Greater Windhoek suggest the potential for urban consolidation and infill development of underutilised areas. Future spatial planning can be guided by a policy of urban consolidation as a means of increasing densities as well as a strategy for controlling the extent of horizontal expansion. This should include the following:
 - dual occupancy;
 - large mixed use developments with a mandatory residential component;
 - infill developments; and
 - recycling of buildings and land for residential purposes.
3. The city's linear layout presents an opportunity as a means of greatly improving the transport system and general accessibility in Greater Windhoek and should be taken advantage of.
4. Transport planning strategies should be developed around the concept of integrative and mixed land use principles thus increasing functional efficiency of the urban environment.

5. Transport planning strategies developed in conjunction with land use strategies in an attempt to increase overall densities will facilitate the supportive thresholds necessary for an improved transport system.

6.1.7 Service Provision

On health grounds alone dense human settlements create conditions demanding water supply, drainage, sanitation, refuse disposal, etc. An expanding urban settlement such as Windhoek increasingly puts pressure on its infrastructural networks. In regards to the provision of urban infrastructural services, Council is finding it a difficult task. The unprecedented growth of the city, together with its poor resource base, has resulted in not many urban dwellers enjoying equal levels of service.

Indeed, the issue of affordability extends beyond that of income alone, and is very much related to the existing technologies currently in place. The bulk of infrastructural services in Greater Windhoek is of a high standard and quality, the most dominant factor negating the chances of all future residents enjoying the same levels of service is that of affordability. As the population grows, it is becoming proportionally poorer, while, on the other hand provision and maintenance costs of these services are rising. The question, however, is whether the provision of services of such standards can be sustained by both the already struggling local authority and by the beneficiaries of such services.

The lack of appropriate government policies combined with restrictive regulations governing planning and servicing standards to facilitate affordable infrastructural services is a major constraint to potential low-income home-owners. The development costs of land is currently extremely high. The present cost is approximately N\$70 – N\$80/m² in Katutura, 80% of which goes toward the provision of roads and stormwater drainage (CoW 1996). The monthly service charges which include fixed charges to cover capital costs of installing water mains, sewers and electricity should be reviewed.

Also, the availability of water in Greater Windhoek is of great concern. To ensure an adequate and clean water supply to Windhoek is an immense task and cannot be achieved by the LA

alone. Assistance will have to be rendered from the Central Government to solve this problem.

Recommendations

1. Enhance the notion that a holistic approach towards the housing delivery system is imperative if sustainable outcomes are to be achieved.
2. The lowering of infrastructural services to suitable levels can be effectively achieved through the active participation and involvement of project beneficiaries. Joint decision making will increase levels of acceptance and understanding of lower standards of urban services in informal settlement areas.
3. An incremental development approach should be introduced to reduce expenses of land development through more appropriate servicing standards and the revision of pricing policies for the provision of those services.
4. Methods to reduce the cost of roads and drainage by well designed layouts which will accommodate the terrain and adopt network appropriately designed for the amount of traffic its likely to have should be sought.
5. A Proactive Infrastructural Development System (see Frayne 1992) is highly recommended. This system consists of providing newly developed, developing or proclaimed areas with the necessary trunk and distribution points from which domestic requirements can be tapped. The new dwelling, however, is not automatically connected to the grid, but rather as and when the household is in a position to afford such services. This system applies equally to afford services.
6. An alternative system for providing electricity *en masse* which is sufficiently cheap to supply to even the poorest urban dwellers should be explored. There are a number of alternative means of generating power other than burning coal as is presently done in Windhoek. Solar energy would of course be the most appropriate within the modest

Windhoek context. It is therefore suggested that a careful cost benefit analysis be conducted into this area as the longterm prospects for coal-fuelled power generation are finite and nor will it become any cheaper.

7. Emphasis should be placed on the recycling of water rather than water mining and importation. This type of system which is already in operation should be developed to its fullest potential thus meeting the future water requirements of Greater Windhoek. Other alternative and sustainable strategies for ensuring safe, clean and adequate water supplies should be devised.
8. Geotechnic research is necessary in order to determine the practicality of septic tanks and pit latrines systems in the Windhoek Basin as a cheaper alternative to the present waterborne system. The feasibility of environmentally compatible biotic waste disposal systems should be explored.

6.1.8 Public Participatory Mechanisms

Why is it that LAs insist on minimum erf sizes when informal settlers, when given the opportunity to allocate their own spaces, use smaller spaces? We are still pre-occupied with layout designs, aesthetics, technical innovation, etc instead of focusing on their need and satisfaction. Chapter 5 highlighted it clearly that the public participation mechanisms used in Namibia is largely inappropriate and ineffectual considering the local context of a large and expanding urban population. The need to devise a broader based system that involves the public in the planning process, and one where a balance between the professional input and people and/or needs input is achieved, is imperative. Such a system cannot be effective if it remains at policy level only.

Public participation is an essential element of the democratic process and therefore beneficiaries have the right to be involved in all phases of a project. Their needs and priorities have to be considered. Participation builds a self-reliant and cooperative spirit in communities. It is very much a learning process whereby people become capable of identifying and dealing actively with their problems, participating in planning, implementation

maintenance and evaluation of low income housing projects. Some low cost housing programs, as part of their policy, ensure that the level of servicing is in accordance with their financial capacity. However, the facilities provided must meet the beneficiaries' requirements.

The initial shelter of migrants into a city is usually self-built. This indicates a willingness to take initiative and their desire for security of tenure. Housing projects should aim at preserving and promoting this attitude. Squatter settlements should not be viewed as an eyesore waiting to be destroyed, but rather as fundamentals for upgrading. The advantages of self-help projects are numerous. The rationale for public participation is simple; no one knows what needs to be done and how more than those to whom and for whom it is to be done. The challenge is to identify the middleground where public participation and government initiative can effectively co-exist.

Recommendations

1. Community participation must become an institutionalised element in all stages of low-income housing projects.
2. All LAs must build the capacity for promoting community participation and providing social and technical assistance to low income communities.
3. A central resource centre for community participation in housing development should be established in cooperation with the Government's Community Development Division, to assist the municipalities in their function to promote community involvement. This body should develop a community participation support strategy, produce training materials and train personnel in community participatory techniques.
4. Explore existing experience in the development of suitable layout and standards and effective methods of providing low-cost infrastructural services in consultation with the community.
5. Incremental construction and the development of infrastructural services, which allows families to settle first

and consolidate later when they can afford to do so, should be sought.

6. Policies must both facilitate the **"people's housing process"** and develop housing schemes with less rigid requirements for eligibility.
7. The demonstration of a community participatory approach to low income housing development suitable for development into a national program.

6.1.9 Housing Finance

Unfortunately, there are and will always be a section of a population who will never be able to obtain housing within normal market conditions. The Government realised the need for establishing financial institutions to subsidise low cost housing and the required infrastructure. However, banks do not enter this arena as it will purely result in losses seen in the light of the current high costs of funding.

Subsidising is an aspect of housing which needs to be carefully investigated and considered. Subsidies are seen as necessary for ensuring a certain minimum standard of services. Redefining the minimum standard, or allowing beneficiaries to define such standards themselves relative to what they can afford, can lower the need for subsidising overall. Simply having a policy statement in this regard is not enough, as there are powerful arguments for and against subsidisation. Although this is not a sustainable longterm option, there may be alternatives which are not only able to alleviate the demand for housing, but also improve access to housing for the poor.

Presuming there is no immediate and unprecedented boom in the economy, the demand and supply for housing will continue to polarise. Thus if the existing backlog is to be seriously addressed, alternative methods will have to be explored. Such exploration will have to include the issues of affordability and innovative finance, building standards, cumbersome procedures, construction costs, utility servicing, and density.

Recommendations

1. There is an urgent need for alternative financial instruments. The following are possible alternatives:
 - 1.1 *Savings Associations*

Low income households do not have access to credit facilities, and often fall below the minimum income mark of N\$500 for programs such as those provided by the NHE. Savings associations is one possibility of providing credit access to persons with small capital of their own. Several types of savings associations are possible alternatives: housing saving schemes, credit unions, and stokvels ²¹. All of them are organised in communities as a way of self-help. These are well-tried in southern Africa and their promotion is recommended. Its flexibility allows people with an irregular income to partake in such schemes. Its democratic structure results in a strong identification of its members with the association. Both contribute to the sustainability of these types of financing.
 - 1.2 *Mobilisation of Capital*

Those institutions supplying financing to low income housing groups also experience monetary shortages. For the construction and purchase of a house the loan is a prerequisite. Developers often have to seek alternative sources as the households concerned do not have access to credit facilities. Possible sources for financing are:

 - 1.2.1 Household Savings: often lower income households accumulate savings which can be invested in housing (UNCHS 1989, p8). A study conducted in the Windhoek squatter areas revealed that settlers sometimes invest up to N\$4000 into their self-built dwellings (Graefe and Peroux 1994, p34). However, this money is not channelled into the commercial financing institutions. For this reason building societies were established, however, in Namibia they operate only in the income sectors earning above N\$2000 monthly. Furthermore, they are obliged by the Building Society Act to grant 80% loans only. A review of this act could make them accessible to the lower income groups.

²¹ This is local terminology for a "money pool".

- 1.2.2 Private Sector: next to banks, insurance companies and pension funds are significant investors, as they are subject to a permanent influx of capital to invest for the longterm. Until 1996 most of the money of Namibian insurers and pension funds was exported to mainly SA. Since then, these companies started investing more in Namibia, however, they need incentives to channel funds into the housing sector. The establishment of a second mortgage market, for instance, could help to mobilise capital from the private sector.

Furthermore, joint ventures between private and public financial institutions should be pursued. Various constraints presently prevent local building societies from subsidising low income housing. The Government should allow them to introduce a new tax free permanent share thereby encouraging local investment and cashflows to the societies. The suggested pre-condition for this investment should be that a minimum of 25% of monies introduced is used for low income housing loans. The Namibian building societies indicated a willingness to reduce their lending rate on low income housing if this is introduced (UNCHS Report 1990, p9).

- 1.2.3 Foreign Donors and NGOs: some low income housing projects are funded by overseas governments and NGOs (refer to Chapter 5). Such programs make sense only if managed in a sustainable manner, and when there is no need for additional funding after the initial grant. Otherwise it will result in a dependence on donor countries and institutions, and promote a passive attitude amongst beneficiaries, local institutes and the Government. This would result in the resurfacing of the same problems after a few years.
- 1.2.4 Public Money: the BTP is funded by public money only. This type of financing is not sustainable and will result in treasury losses if repayments are irregular. A sustainable form of capital flow when using public money is necessary. After an upfront subsidy or after granting a loan, subsidies should only be allowed in social welfare cases.

1.3 Revolving Funds

This is the most important element of a sustainable housing program. Repayments are accumulated and again channelled into the housing sector. It is secured that in future here will be sufficient funds for further projects without requiring external capital. If necessary, this can also be used to pay for community facilities or for welfare cases. A revolving fund strengthens the identification of the beneficiaries with the project. This type of fund is highly recommended for programs struggling with default repayments.

This type of scheme would enable anyone with an income as low as N\$2300 per year to purchase a basic dwelling costing N\$8000, making basic core housing affordable to the poorest of urban households, and two bedroom dwellings more affordable to those with incomes over N\$3400 per year. However, there is a drawback: the basic assumption behind this scheme is that the household income increases along with inflation. This poses a risk, however, in view of the Government's attempts to uplift the country's socio-economic status, this risk is to become correspondingly smaller.

1.4 Involvement of Employers

Usually government and parastatal employees are entitled to housing subsidies. This subsidy is a one time upfront cash payment to the LA or developer on behalf of the purchaser (NHP, part iv sD6(d) and (f)). However, low income government employees can hardly make full use of their maximum loan entitlements if they have no supplementary income. Their actual debt would constitute a heavy burden as it would cut with more than 30% into their household budgets (NHE 1997). This explains why so many lowly paid government workers become NHE clients for low cost housing. Employers should grant further financial assistance in the form of loans, subsidies and take over guarantees towards banks and building societies. Employers can also support employees by negotiating with LAs regarding the purchase of land and contacting financial organisations.

6.1.10 Special Support for Women

From the discussion in Chapter 4 one can safely assume that migrant women account for a substantial part of the population increase in Greater Windhoek. About 40% of all urban households are female-headed. These are often the poorest of the urban poor. The average income of female-headed households is N\$10 238 per annum (Central Statistics Office 1996). Their households are large and they often have to carry a threefold burden; earn a living, care for and educate children. Women appear to be socio-economically more fragile than men. This is accentuated by factors such as limited access to educational opportunities, gender-biased employment and recruitment systems and male labour towns. They find employment hard to come by even though they are slightly better schooled than their male counterparts (NPC 1991). Many women seek employment where the hours are long and the income low. Low-paid domestic service is almost their only large-scale employment option.

Policy guidelines and building regulations set extremely high standards for self-help housing schemes. Urban women are often the sole breadwinners and providers of housing. Namibian women receive limited support from the fathers of their children. A large proportion of children are born outside wedlock, leaving women with few legal rights to child support. In Namibia 57% of women of childbearing age (15 – 49 years) had never married (National Census 1991). These women on average had 4.9 children by the time they had reached the end of their reproductive age (NPC 1991).

Housing has been linked to overall development of urban women. "... housing should be responsive to the social, economic and physical activities of poor families..." (Dandekar 1993, p4). Housing is essential for women to fulfil both their productive and reproductive roles. Women's access to housing and land has been restricted by patriarchal traditions and laws and gender-blind policies that set out to provide housing according to the norm of the nuclear and/or extended family. These policies have neglected the fact that urban households seldom conform to these norms. Furthermore, women have particular housing needs to facilitate their productive and reproductive roles. Dandekar argues that in many Third World cultures the social environment

will not allow women a role in the public domain where an income may be generated (1994, p18). A home therefore becomes the base from which such income generating activities may occur. Housing should be seen as an income centre rather than a cost centre.

As the rate for urbanisation in Namibia increases along with the demand for urban housing, women are moving to the centrestage of various development initiatives. Linking members with the expertise of umbrella associations such as Saamstaan increases the negotiating power of women. However, housing policies are still gender blind and very little attention is being paid to the house as a place of production and reproduction. Training women in building skills contributes, at least in theory, to the social empowerment of women. However, without changes in the broader social and political environment, women, regardless of their building skills, might still find it impossible to find employment in building industries, formal and informal. Both the Government and NGOs are guilty of negligence in this regard.

Recommendations

1. Social injustice and discrimination against women have to be abolished. Women's social and legal status have to be adjusted to that of men, not only on paper. This requires strong educational efforts in legal aspects as well as family planning and planning itself.
2. Special programs to improve the income situation of women are needed. NGOs could play a role in realising this.
3. Day nurseries could lessen the heavy burden of working mothers. They need not be large scale and costly, but projects run by communities, perhaps self-help.
4. Women should not only be trained in the production of the building components, but should also be offered support in the form of financial assistance and training in business management, start-up credit and marketing to enable them to start their own enterprises in material production.
5. Landuse and licensing regulations controlling the establishment of creches should be more flexible and

accessible, as these are an integral part of the informal sector.

6.1.11 Decentralisation and Rural Development

Accelerated urbanisation presents problems on both national and local scales and should be tackled on both levels if any measure of success is expected. With a constitution guaranteeing freedom of movement to all and no urbanisation policy, it is obvious that urbanisation will continue unabated as long as the city offers a better quality of life.

In order to broaden development and alleviate rural as well as urban poverty, it is recommended that rural and agricultural development be promoted. However, due to the aridity and marginal character of agriculture in most areas of Namibia, it is not clear how large the scope of such strategy is in Namibia. Research is necessary, especially with respect to the northern parts of the country where the largest population concentrations occur. Measures need to be taken to strengthen the economic and social situation in those areas. The development of small, middle and larger urban settlements between other urban settlements and the capital city is one way of addressing the migration phenomenon.

The Decentralisation Policy (DcP) for Namibia, adopted in 1997 only, outlined the common framework defining the role and responsibilities of all institutions involved. According to the DcP the provision of housing has now become the onus of LAs. It is expected that LAs take full responsibility for their communities for all functions defined in terms of the DcP of which the administration of Informal Settlement Areas is but one example. However, the decentralisation process still has a long way to go before the actual implementation in the year 2000. This is due to a shortage of human resources and the absence of the necessary infrastructure in some of the country's 13 regions.

A pro-rural policy associated with agricultural activities might reduce urban migration. A recent project by the Directorate of Planning of the Ministry of Agriculture, Water and Rural Development promoted awareness of new methods of planting, weeding, fertilisation and awareness of new technologies to promote increased productivity and better food security.

However, there are no plans for marketing surplus crops to provide cash income from communal farming activities. If present trends continue it is expected that in less than a generation's time the northern part of Namibia would be depopulated (NEPRU 1997). The question remains as to which policies will succeed and to what extent in alleviating the migratory trend.

Recommendations

1. It is not sustainable to concentrate most resources in the capital city at the expense of the less developed regions neither does Windhoek have the resources to allow unconstrained growth to continue. It is thus of paramount importance and in the national interest that secondary growth centres in Namibia are established.
2. Measures to strengthen the DcP and thus the disadvantaged areas could be:
 - the establishment of central functions (administration, cultural) in selected towns;
 - the creation of employment opportunities in trade and industry;
 - improvement of schools and other training opportunities;
 - the development and improvement of social and recreational facilities;
 - the improvement of housing conditions; and
 - the promotion of alternative economic activities
3. Quarantine restrictions effectively preventing northern communal farmers from marketing their livestock/crops in the commercial sector should be amended accordingly.
4. As part of a rural development strategy, it is essential that people in the rural areas be sufficiently informed about the actual living situation in Windhoek in order to prevent migration based on assumptions.
5. An urbanisation policy for Namibia outlining what role the Central Government perceives LAs to have for the economic development of the country, how this role is to be implemented and the financial resources the

government is prepared to commit for such development to occur, should be an immediate priority.

6. It is unlikely that a strategy for rural development would reduce urban migration. The most pragmatic step would be to attempt to meet at least the most basic needs of the present and future generations.

6.1.12 Strengthening the Repayment Discipline

The most common form of subsidising low income housing in Windhoek is granting loans at interest rates below the market rate. The success of the financing agencies rely on the timely repayment of those loans. Most of those agencies suffer from default payments (see Chapter 5). None of the discussed projects show a 100% repayment rate, sometimes arrears exceed even more than 50% (NISER 1997). As long as this problem is not solved, no private enterprise will want to become involved in this sector. Of special importance in Namibia is the BTP as this a solely government funded and beneficiaries regard it as a matter of politics. The BTP, as several similar projects, has a model function and if this fails due to untimely repayments, so will the project.

Recommendations

1. *The adjustment of the loan to the beneficiary's financial situation.* The amount of the grant must correspond with the debtor's income and have to be set individually.
2. *Regular contact with households concerned.* Good communication links between the lending institution and the borrower can greatly contribute to higher adherence to the contract. The communities or social workers can act as mediators as it happens with the Oshatotwa Program. Default payments can be assessed and appropriate actions can be executed.
3. *Alternatives in case of default payments.* If a client is unable to make payments, it should be discussed with the financing institution in order to find new terms for the loan, or if the house is not completed, to choose a simpler design.

4. *Establishment of an emergency insurance fund.* In cases of emergencies such as job losses, illness, etc, provision should be made in the form of an insurance fund to repay the loan. It could be financed by an increase in the monthly instalments, which could essentially be problematic for the poor, or by using a revolving fund.
5. *Legal action.* If none of the above measures were successful, or if a household does not pay, not because of insolvency, but simply because they do not want to, legal action becomes necessary. Foreclosure and eviction are usually ultimate measures and is a powerful encouragement to payment. Failure to use enforcement can lead to serious and rapid deterioration in levels of collection.
6. *Informing the public.* Public campaigns that inform borrowers about the purpose and necessity of regular payments can contribute to a stronger payment discipline. The SA campaign **"Masakhane - let us build our country together"** has proved successful and should be used as a model.
7. *The nature of initial contractual process.* People occupying serviced sites or purchased housing are more likely to enter voluntarily into commitments than dwellers who benefit from site upgrading. The latter are easier to charge if legalisation of tenure is involved, since a title is a more tangible "purchase" than services.
8. *The timing of the initial contractual process.* People are more likely to honour their obligations if contractual agreements are made before they receive the benefits, eg before occupation of an erf or before service provision. Conversely, they are least likely to do so if lengthy administrative delays result in their getting the land or services initially "for nothing".
9. *The quality of maintenance.* Occupants become reluctant to pay loan instalments, charges, etc, if services are not well maintained. Poor maintenance will jeopardise cost recovery, even where this is not strictly related to services. People might default on repayment of a building materials loan, for example, because the water supplies failed.

10. *The nature of enforcement is important.* Charging interest on late payments or granting rebates on prompt payments may help to some extent. Promptness in warning defaulters is important, but more critical is what happens when all the interim and penalty procedures have failed.
11. *Political will on part of both beneficiaries and the Government.* Ultimately, effective collection is a matter of the aforementioned. Effectiveness requires a positive view by the community of the benefits secured by a shelter program, including its ongoing maintenance, and of the commitments into which it entered at inception of the scheme. It also requires a positive determination by the Government to recover its costs.

6.1.13 Income Generating Opportunities

Employment, incomes and access to housing are interrelated. The largest constraint to developing improved housing for the lowest income groups is their poverty. Poor people first and foremost need to generate an income or increase their earnings before they can improve their living conditions in general and their housing in particular. Housing delivery does not exist in a vacuum. As new townships are being planned and developed further and further away from the CBD, it must be borne in mind that industries and commercial activities form part of this from the very start.

Urban agriculture, for instance, can offer employment opportunities to a sizeable population of urbanites, thus creating an enabling environment for sustainable development. There is little possibility that urban agriculture will be mechanised due to its small economic scale. It will therefore continue to provide employment and offer a means of survival to some urban dwellers who cannot find jobs in the labour market.

Recommendations

1. Section 6.2.2 described ways in which income generating opportunities can be created through the production of local building materials. Reference is also made to community involvement in the provision, maintenance and

- management of infrastructural services in order to reduce costs and improve maintenance.
2. A strategy to increase income generating opportunities through sharing responsibility for the provision and maintenance of urban services between public and private sectors should be explored. For example, LAs might enter into contracts with communities to undertake the provision of a particular service.
 3. Land should be made available at suitable locations within housing areas for the development of markets and enterprises. Temporary structures should be allowed with renewable licences, if necessary.
 4. Sites should be set aside in residential areas for training centres and economic activities undertaken by women's groups, co-operatives and youth groups as automatically as sites are designated for churches, clinics, etc. In general, planners should anticipate the emergence of income generating activities in residential areas, especially in the remote low income areas, and see their role as promoting rather than constraining them.
 5. In regard to the provision of land for industrial and commercial activities in residential areas, negotiations with various ministries, NGOs, and private stakeholders should be made. They should be informed about the size and standing of a community so that employment opportunities can be created accordingly. This will give greater impetus to the **"Work Where You Live"** theory.
 6. Local small contractors usually lack finance, administration and technical skills, adequate equipment, etc. Concerted efforts should be made to diagnose these shortcomings and a plan of action that safeguards the efficient execution of housing projects and at the same time benefits the small contractor.
 7. With so many people earning a living in the informal sector, more effort should be directed at fostering, enhancing and sustaining productive entrepreneurship among the petty commodities producers that dominate the burgeoning informal sector. Strategies should be designed to promote these into the mainstream of economic activity. Current

pricing policies for commercial and industrial land in Windhoek push these beyond the affordability of the informal entrepreneur. Lowering the cost of such land on a dedicated basis to the informal sector will most certainly encourage mainstreaming with consequent employment generation.

8. The Town Planning Ordinance governing urban development in Windhoek should allow for the provision of "urban agriculture" as a land use. Appropriate laws, regulations and procedures should be put in place to allow for healthy and environmentally sound agricultural methods that are climatically suitable. It should be treated as a distinct industry and be given its due weight to eradicate urban poverty. LAs should encourage the practise of it around urban homes and make efforts to overcome the hurdles that hinder urban agriculture as an environmentally friendly activity. A variety of legal arrangements are suggested:

- *Economic rent or lease*: The farmer has official access to land and pays rent as a share of income earned from it.
- *Usufruct rent or lease*: Access to land is official with the condition that land is not damaged. This should be in areas reserved for public use currently not utilised.
- *Farming under permit*: The farmer gets official access in return for maintenance of land. This is recommended along rights-of-way.
- *Informal agreements*: The farmer does not have official access or tenure, but has the permission of the land owner.

6.2 Conclusion

This chapter attempted to address those contentious issues surrounding sub-economic housing in Greater Windhoek by putting forward policy and strategy recommendations. These recommendations were not based on a fixed plan or model, but is presented in a multi-point framework. This framework responds to those issues in a very open and modest manner. The recommendations were all aimed at making housing more affordable and also more accessible to the underprivileged sectors constituting most of urban households in Greater Windhoek. It is imperative that the proposals are continuously monitored and reviewed on an ongoing basis to ensure that they positively respond to the issues at hand in a changing environment.

Part Four

STUDY CONCLUSIONS

Chapter 7

SUMMARY & CONCLUSIONS

7.1 Principal Findings

The most prominent issues emanating from the foregoing analysis of this study are as follows:

Urbanisation

- supremacy of Windhoek results in high in-migration rates (accounts for 3.9% of the total urban population pa)
- high natural growth rate for the city (5.4% pa)
- major source of migrants is rural, mainly from the Ovambo Region
- high rates of unemployment (increased by 17% between 1985 and 1995, currently 23% for Windhoek)
- significant increase in female headed households (now 33% of all urban households)
- poor levels of education, migrants are typically uneducated often with no formal education
- poor household food security
- poor access to land and security of tenure

Housing

- housing industry unable to keep pace with growing demand
- inappropriate, lengthy and costly town planning procedures and regulations
- inflexible and inappropriate zoning controls
- significant scope for improving policies impacting on housing
- high costs associated with materials, construction and infrastructure
- lack of community participation
- need for a multi-disciplinary approach
- poverty pervades every housing related issue
- need for holistic approach to housing delivery
- poor levels of affordability
- need for more appropriate finance schemes
- need for more self-help programs

Legislative Framework

- lack of coordination and integration
- inappropriate local government structures
- wasted resources
- need for an overriding institutional urban management body
- lack of systemised and prioritised planning

Natural Environment/Health

- increased environmental degradation resulting from high urbanisation levels
- need for alternative, more affordable and environmentally friendly energy sources and sewage removal systems
- incentives needed to implement and encourage water management strategies
- need for appropriate policies directed at protecting the natural resource base

Economy

- centralised economy
- high unemployment and poor economic growth
- persisting regional recession drives rural-urban migration
- poor links between formal and informal sectors
- limited access to credit facilities and housing finance
- current legislation non-facilitative of informal sector activities
- poor infrastructure in low income areas restrains informal sector

7.2 Conclusions

Based on the preceding analysis, I concluded the following:

- Greater Windhoek experiencing rapid growth
- accelerated population growth mainly fuelled by high levels of urbanisation
- in-migration not to decline within the near future
- in-migration mainly driven by economics
- population growth outstripping economic growth
- dualistic socio-economic profile
- expanding informal economy

- expanding population restricted by Windhoek's physical location and lack of a natural resource base
- increased pressure on physical and social infrastructure
- unequal access to urban resources and opportunities
- space extensive and costly growth
- squatting now characteristic of Windhoek
- poorly developed institutional framework
- the need for increased promotion and support of women in urban development programs
- need for an urbanisation policy
- need for income generating opportunities, ie formal and informal
- subsidisation as a means of facilitating the urban poor
- urban poor capable of considerably contributing to urban and regional economies
- urban chaos and rural stagnation
- skewed regional imbalances

The above points indicate that the urbanisation process is more than just a relative increase in the number of people living in an urban setting and that there are a number of factors responsible for Windhoek's continued growth despite efforts to the contrary. It is clear that there is no single overriding solution and therefore we as planners should make it our task to understand that process in order to devise appropriate policies to effectively cope with the highlighted issues.

7.3 Recommendations

Alternatives in Response

There is no easy or specific answer as to how to address those issues highlighted by the preceding analysis. Housing and its associated aspects require policies and strategies that are relevant and more responsive to its local context. This study therefore attempted to address those contentious issues in a responsive manner rather than imposing a fixed plan. Such a technique offers more flexibility and adds an open-ended dimension. It also encourages and fosters greater awareness and perceptiveness of the issues at hand.

Monitoring and Review

People are continually faced by challenges in changing environments, Windhoek being no exception. There is an increasing need for understanding those changes and its consequences. Those challenges require innovative responses and management strategies that are adaptable to such changes. Regular reviewing and modification is essential to keep pace with changing environments and evolving population trends and values. The effectiveness of the proposals needs to be monitored to determine its applicability, and also to ensure that they respond appropriately to the issues in question. Constant reviews ensure increased understanding and encourage further research and courses of action. Risby 1998 writes: "Good planning is not an end-state, it is a process of regular review and assessment."

"Facilitation"

Over the last decade or so development has come to focus on skills, policy and institutions. Today the focus is that of technical assistance and "enabling" by emphasising the human dimension of development through training and education. Recent theories recommend that governments are best advised to enable the poor to help themselves. This project attempts to move away from the conventional way and emphasises the style of assistance relating to governmental, public and private institutions to act as facilitators rather than providers.

Scope of Project

This project limits itself in many instances to providing a debate on various interrelated issues. It has to be realised that the urbanisation process is merely a symptom of much broader and complex processes at work. This study does not attempt to provide answers to the questions which emerged during this project, but it has succeeded in unveiling some major problems and important housing and urban development issues.

Proposals are made based on current knowledge and are adjusted as those conditions change over time. One of the important weaknesses I experienced was that data on population indicators were outdated and only revised every ten years. Population trends tend to change continuously and thus require

data to be updated accordingly. As emphasised in the introductory chapter of this project, the availability and poor quality of data concerning urbanisation and population issues in Namibia is still inadequate and highly unreliable. This demands further research in numerous areas in order to establish a sufficient and reliable information base essential for policy making.

Further Research

Limited time and resources meant that there were some areas not covered by this study. The scope of this study also limits itself to housing in particular and although some of its associated issues were briefly highlighted, further discussion of those are necessary. Below is a list of priority areas which I feel are particularly pertinent and require more research:

- Urban Management Capacity
- Population
- Rural-urban Links
- Poverty Measurement
- Economic Resources
- Employment
- Housing and Standards
- Examples of sub-Saharan Shelter Delivery
- Alternative Technologies
- Administrative Frameworks
- Sustainability and the Natural Environment

The task of policy formulation is in its very nature an interdisciplinary, dynamic and continuous one. Research from other disciplines are essential for a fuller understanding and can play a major role in policy making. This could identify methods to assist decision-makers in their task to devise more appropriate national and regional urban policies within the Namibian context. Also, it is important to realise that up-to-date knowledge is vital for good decision making. Research can serve to monitor on-going programs and explore alternatives.

The Challenge Ahead

For decades developing countries have been borrowing techniques from developed countries, but it is becoming increasingly clear that many of those are not appropriate to the

kinds of problems that need to be addressed. Despite broad commonalities, we are dealing with fundamentally different processes stemming from differences in culture and time. These processes are the result of varying causes, producing different human consequences and rising above any superficial similarities. Foreign policies have failed to succeed and need to be put into the right context. The proposed framework therefore sought alternatives that are responsive to its local context.

The housing crisis threatening to overwhelm Windhoek is the biggest challenge facing contemporary planners. Important as it might be, it is highly unlikely that a pro-rural strategy would counteract in-migration. Experience elsewhere indicated that rural development programmes rather encourage people to move to urban areas than remaining in the agricultural sector. Thus, it appears that the most pragmatic step would be an attempt to meet the most basic needs of Namibia's present and future urban populations. Hence the challenge ahead lies in the pragmatic identification of the urbanisation issues facing Namibia. That necessitates a real understanding of that process in order to equip us with the tools necessary for good decision making.

Finally, I would like to conclude with the wise words of Stein 1966:

"The planner's subject ... is man. It is his fellows and their reaction to their environment which he must study and understand."

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Appendix 1

Census Figures

The results of various government and municipal surveys are presented in the following table.

Date of Count	Nature	Population
5 May 1936	Census	10 651
7 May 1946	Census	14 929
8 May 1951	Census	20 598
6 September 1960	Census	36 051
May 1968	Municipal Survey	50 711
6 May 1970	Census	61 260
May 1975	Municipal Survey	74 349
October 1981	Census	96 057
May 1985	Municipal 50% Sample Survey	92 048
May 1985	Adjusted Municipal Figure Based On A Household Survey	97 000
October 1991	Census: Windhoek District	147 056
June 1995	Municipal 20% Sample Survey	182 000

Population Projections

The following population projections are based on the 1995 Resident Survey. The population growth rate was recorded 5.44% and natural growth 1.52% per annum.

Year	High Projection	Low Projection
1995	182 000	182 000
1996	192 000	192 000
2000	241 000	237 000
2005	318 000	307 000
2010	421 000	393 000
2015	558 000	498 000