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**The Principles of Local Agenda 21 in Windhoek:
Collective action and the urban poor**

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List of Abbreviations

ALAN	Association of Local Authorities in Namibia
CBO	Community Based Organization
CoW	City of Windhoek
GAC	Goreangab Action Committee
LA21	Local Agenda 21
MET	Ministry of Environment and Tourism
MRLGH	Ministry of Regional, Local Government and Housing
Nasboukor	National Building Corporation (now NHE)
NGO	Non Government Organization
NHAG	Namibia Housing Action Group
NHE	National Housing Enterprise (formerly Nasboukor)
RAP	Re-cycling Action Program
SABS	South African Bureau of Standards
SDFN	Shack Dwellers Federation of Namibia
WELA	Windhoek Environmental Liaison Association

Exchange Rates

On 10 December 2001, the interbank exchange rate for one Namibian dollar was approximately:

0.093 US\$, or
0.065 UK£, or
0.104 European€

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Executive summary

This study demonstrates how communities in Windhoek have been initiating Local Agenda 21-type activity through identifying their needs and priorities, and organizing around finding solutions to them. They have developed a relationship with the City of Windhoek Local Authority which, although in early stages, fulfills the principles of Agenda 21 through addressing environmental issues in partnership with all stakeholders. By 'environmental', this paper means household environment issues such as access to water, sanitation and solid waste rather than the more usual 'green' interpretation.

The national context setting out the country's overview and government initiatives leading up to and following from the Rio Summit in 1992 provide background to the study. The capital city, Windhoek is situated in an arid to semi-arid climate. The apartheid policy of the South Africans dominated its development up to Independence with the concept of separate development. Thus the "white" areas has well developed infrastructure, while the "black" areas were not so well developed.

Before Independence in 1990, the government policy forbade natural urban expansion in the "black" suburbs of towns. This resulted in grossly overcrowded conditions, often with an entire family living in one small room. This changed with the first fully democratic government, and people began moving out into their own homes – usually shacks on the periphery of the towns. At the same time others perceived the opportunity for betterment and migrated from rural areas.

So from no informal settlements in Windhoek eleven years ago, the informal settlement area has grown to some 28 000 residents. Clearly the demand on land, infrastructure and housing in the city has expanded phenomenally.

By far the most vulnerable group requiring land and security of tenure are the women who are mostly domestic servants. Average incomes in the informal areas are N\$ 820*, for men; N\$ 1 152 and for women only N\$ 761.

During 1987 a group of women formed a CBO called Saamstaan** aimed at helping themselves. This became the first savings group in Namibia, with the aim of using the money to help themselves build houses. Conventional approaches to house construction and group membership did not work. The members could not sustain the building approach and the dependency on the CBO, and later Namibia Housing Action Group (NHAG) a voluntary association, was not that effective.

The membership was small and only reached a few homeless people in Namibia. From the beginning the members established dialogue with other homeless organizations throughout the world. Learning through these members discovered that they would be

* This is measured in Namibian Dollars.

** meaning Stand Together

more effective by changing to a more people driven process, rather than organization driven. In 1998, the Shack Dwellers Federation of Namibia (SDFN) was launched and NHAG took on a support role.

While savings had always been an integral part of the activities, it took a new role when they began with daily savings and made this central to their entire organization.

The change in membership within one year was phenomenal. In 1998 there were 839 members and a year later membership was almost 3000. By the end of 2001 membership has expanded over 8 100 in 42 towns and villages, with some 4 000 members being resident in Windhoek alone.

From their international exchanges, the SDFN realized that learning by doing was by far the most effective way of sharing information. They have put together an action plan that involves all member groups. The Plan included the following:

1. Organizing communities through savings schemes.
2. Learning from each other while doing the work.
3. Making land, infrastructure and services affordable.
4. Accessing funds from the savings scheme for income generation, housing and services.
5. The construction of houses.
6. Improving the living environment.

The SDFN, together with the support of NHAG, have made decisive inroads into the issue of land acquisition and housing for the most disadvantaged groups, predominantly women. Through working in groups the members have become more self-sufficient than when they were dealing with the problems in isolation. The rate of progress within each group depends upon the group themselves.

The Federation has identified health and the environment as issues in the groups. The immediate objective is to raise awareness concerning the health of residents that will result in activities to improve the environmental health. Members have also undertaken training in urban agriculture, suitable to living in an arid environment.

The SDFN and City of Windhoek have recently entered into a new relationship that marked the beginning of a partnership. These are significant landmarks in the improvement of living conditions for the urban poor, since through the close cooperation with the Sustainable Development division of the city, and also membership on the Windhoek Environmental Liaison Association the poor have direct channels of communication for their issues. Through this emerging partnership, plans for a more integrated city might also be realizable with careful strategizing about how the city can successfully secure better located sites for low-income families in ways that demonstrate the win-win benefits for all of Windhoek's residents.

1. Introduction

This report focuses on activities that promote the sustainable development of Windhoek, the capital of Namibia, through processes and principles consistent with Local Agenda 21 (LA21). LA21 was part of the plan of action (Agenda 21) adopted at the Rio Summit of 1992, where it was emphasised that environmental action must become an integral part of policy and planning at the local level if the international goals of sustainable development are to be achieved. Agenda 21 attempted to outline the full range of environmental and development activities that need to be undertaken to ensure sustainable development in the 21st Century. LA21s were seen as the means through which local action plans could be developed within each city and town, so as to ensure a better quality of life for present and future residents and help contribute to sustainable development nationally and even globally. No template was provided, but LA21 was presented as an inclusive and consultative process, taking up the recommendations of Agenda 21 while responding to local needs and priorities and building on local partnerships.

This report examines initiatives at national, municipal and community levels. Particular attention is paid to approaches taken by grassroots organisations and their relevance for the most marginalised members of the community. Community organisation is essential in the Namibian context. Many of the most serious environmental issues in Windhoek are located in deprived communities in the north-western suburbs, where inadequate housing, water, sanitation and solid waste management combine to threaten the health and livelihood of local residents. These environmental issues, highlighted in Agenda 21, are being addressed not only by local authorities but also by urban grassroots organisations, who may not even have heard of LA21, and often do not gain the acknowledgement which development from below deserves.

Communities in Windhoek have been initiating LA21-type activities through identifying their own needs and priorities, and organising around finding solutions to them. They also have a working relationship with the City of Windhoek local authority which, although still not fully developed, is building on principles central to LA21, with its emphasis on addressing environmental issues in partnership with key stakeholders.

1.1. Background to the political structure of Windhoek local authority

The City of Windhoek (CoW) is widely regarded as the most progressive and adaptable local authority in Namibia. The tradition of innovation is not new; it was firmly in place before Independence in 1990. This tradition paved the way for the comparatively rapid acceptance of new strategies to cope with the challenges facing the city, including its history of racial segregation and oppression.

Prior to Namibian Independence, CoW had a system of 'white' representation, whereby 'white' residents of Windhoek elected a council for a period of five years. The 'blacks' had their own form of council in Katutura, the so-called 'black' location, and 'coloureds' had their council in Khomasdal, the so-called 'coloured' location. These were both governed separately. Feedback, if regarded as necessary, was given to the main Windhoek council through respective representatives from the 'black' and 'coloured' councils who themselves had no voting power on the main council.

This changed at Independence to a system of political representation whereby the party with the highest number of votes had the most seats on the council. Each year the mayor is re-elected by the councillors themselves. Thus the mayor's term may be only one year in duration or may span two or three years, depending on how the council votes.

Currently, the three areas of CoW that were previously racially divided are consolidated and managed under one council. As a result, representation on the council reflects a better balance of the residents. The previously marginalised areas of the city are receiving more attention in an attempt to address the former imbalances. Thus, new infrastructure, such as shopping complexes, markets (for more informal trading), tarred roads and street lighting are being developed in Khomasdal and Katutura.

Since Independence, councillors have consistently appeared to agree on the need to divert development into the previously marginalised areas of Windhoek. However, it is difficult to link individual mayors and his or her terms of office with particular sets of innovations or initiatives. In interviews, officials of the council are noncommittal.

Discussions with council officials also indicate that CoW staff working behind the scenes are often the driving force behind initiatives that appear, in public statements, to originate from council decisions. There is, however, the potential for sustainable development initiatives, through LA21-type processes, to become part of the mainstream of local politics without being tied to any particular mayor or political grouping. This could be to the advantage of the environment in the medium to long term.

An environmental section was set up within the planning department of CoW in order to make the environment a developmental priority. Unfortunately, the result seems to have been that environmental initiatives – including to some degree the formal LA21 process – have become isolated from mainstream development, with the environment section reacting to other sections' initiatives instead of actively contributing to innovations within the CoW. The environmental section is restricted since it has no funds over and above the salaries of two officials. Without an effective budget, its initiatives for improving the environment and environmental awareness, particularly in the more marginalised areas of Windhoek, cannot bring about major developmental shifts. Any attempt to understand how the CoW is responding to environment and development challenges must look beyond the environment section and the formal LA21.

Figure 1. City of Windhoek Management Structure

1.2. Structure of the report

Chapter 2, which follows this introduction, focuses on the national government's attempts to address environment and development issues, including its international engagements as well as its responses to local environmental issues. It looks back to the national initiatives for the Rio Summit and forward to the preparations for World Summit on Sustainable Development (to be held in Johannesburg in 2002) and shows how perspectives on the urban environment are changing. This is followed by the internal responses of the government to urban pressure and the environment.

The next two chapters provide background information relevant to the environmental problems facing CoW. Chapter 3 gives a brief summary of the natural bio-physical characteristics of the north-western suburbs of Windhoek, including climate, topography, geology, soil and vegetation. Chapter 4 proceeds with a review of settlement patterns from an environmental perspective, including historical developments, future needs and current plans. Particular attention is paid to issues of poverty and access to land, housing and services.

Chapters 5 and 6 examine the initiatives that have been taken to address local environmental problems. Chapter 5 introduces some of the issues and the formal LA21, focusing on the Goreangab Action Committee (GAC) and the Windhoek Environmental Liaison Committee (WELA). Chapter 6 introduces the initiatives by grassroots organisations Saamstaan and the Shack Dwellers Federation of Namibia (SDFN), as well as their support organisation, Namibia Housing Action Group (NHAG). The land and housing development initiatives that the latter have pioneered are examined in some detail. Two case studies of settlements that embrace LA21 principles, namely People's Square and United People, illustrate the extent of challenges faced and how they were dealt with. The initiatives of the poor embracing LA21 principles stand at the forefront of negotiations with CoW. The SDFN health programme and the training in permaculture indicate the extent to which marginalised urban grassroots organisations are prepared to go in dealing with environmental matters.

Chapter 7 covers the relationship between CoW and the grassroots movement, their new partnership, the planning process, the move from policies to practice, and proposals for future development. Despite current shortcomings, a platform for applying LA21 is already in place. The conclusions are summarised in Chapter 8.

2. National environmental initiatives

Namibia is one of the least densely populated countries in the world. Its land area is some 824,000 km², which is a little more than Turkey or Pakistan, both of which have over 50 million people. Namibia's population is just about two million, resulting in a density of less than two persons per square kilometre. It might seem, therefore, that Namibia does not face the population pressures that beset so many countries and can undermine their pursuit of sustainable development. But this is a false impression; the low density is accompanied by a low environmental capacity for sustaining human life. Namibia is the driest country south of the Sahara, and this aridity is coupled with relatively low primary and secondary production potentials. Just over one third of the population live in urban areas, but problems of resource availability and sustainability also apply there.

The country boasts a multi-party democracy with a national constitution that is proclaimed to be one of the most democratic in the world. There is also a free press and a relatively mature market economy. Already a model for democracy, Namibia would like to become a model of sustainable development and environmental management.

2.1. National initiatives for the Rio Summit

Within Namibia, preparations for the United Nations Conference on Environment and Development held in Rio de Janeiro in 1992 were led by the Ministry of the Environment and Tourism (MET). The minister's consultation group aimed to be involved with a wide sphere of decision makers, including the government and NGOs. However, input from the urban sector was completely lacking. As a result, very little attention was given to the urban environments where many Namibians live.

Ten of the 18 government ministries were involved, most of whom dealt directly with natural resources; such as the Ministry of Fisheries and Marine Resources, the Ministry of Lands, Resettlement and Rehabilitation and the Ministry of Agriculture, Water and Rural Development. The Ministry of Regional and Local Government and Housing, which is directly responsible for urban areas, was not included. Three academic institutions were also involved, one of which has an explicit natural environment orientation, namely the Desert Ecological Research Unit of Namibia. Thirteen of the 15 NGO/CBOs involved were orientated towards rural environmental development. The other two were groups of school children who were interested in their local environments, namely Concordia College and the Recycling Action Programme (RAP).

Figure 2. List of organisations involved in developing Namibia's Green Plan

However, the plan entitled 'Namibia's Green Plan: Environment and Development', drafted by the Ministry of Environment and Tourism and submitted at the Summit, did embrace some broad environmental principles which were subsequently made part of LA21 and should therefore not be ignored within Namibia. They have direct bearing on the urban environment, as well as the rural areas. These include the following:

“Our health and the environment are inseparable.”

Personal health, including physical, mental and spiritual well-being and economic health (namely the sustainability of the economy and the equitability of wealth), are closely intertwined with the health of the environment. Any loss of environmental health reduces options for development and fosters dependency of people. At the same time, environmental health is dependent on the health of people, society and the economy. The poor constitute some 95% of the population but generate only about 11.3% of the national income. They are intimately involved with the environment and are usually aware of environmental degradation but feel powerless to do much about their situation. Decision makers need to ensure that development plans address the needs of poor people and actively contribute to improving their quality of life.

“Continuing action to protect our water.”

In a semi-arid to arid climate, rainfall is the key factor that drives all the important ecological processes that all humans depend upon. But rainfall is very variable and it is difficult to predict how much will fall and when. At the same time, there are almost no natural permanent surface water bodies in the entire central part of the country, least of all near Windhoek. The early development of towns and cities in Namibia centred on reliable water sources and Windhoek is such an example, being situated at the site of an artesian spring. In more recent years, however, the expansion of the capital city has outgrown the local water supplies making it necessary to import water over large distances.

It is increasingly apparent that, as demand increases, it is not possible to guarantee supply from a single, often drought affected, source. Windhoek has three main reservoirs, all of which are some distance from each other and do not share the same short-term droughts. This increases the effective reliability of the surface water sources. In addition, Windhoek can draw water from its own sub-artesian groundwater reserves for a short time, provided that the reserves can be rested from time to time. A sewage water recycling plant, one of the largest in the world, has been developed in Windhoek and has been used to augment water supplies.

Future phases in the development of the water supply infrastructure will involve the tapping of the Karstveld limestone aquifer 400 kilometres north-east of Windhoek and, at a later stage, a pipeline to the perennial Okavango river in the far north, which will prevent over-exploitation of the Karstveld groundwater reserves. Thus Windhoek has, for many years, been looking ahead at the water situation and taken steps to deal with the short- to medium-term demands. These, however, are finite and in the medium- to long-term future there is still going to be a crisis in the water demand in Windhoek, particularly with the high rate of urbanisation.

Evaporation has been identified as a particularly high source of loss from the water resources. Therefore, there is a need to promote projects that keep evaporation losses

from water supply reserves to a minimum. The SDFN has recently undertaken training in urban agriculture suitable for an arid environment. For more on this see section 6.2

“Keeping toxins out of the environment.”

Namibia’s goal is to reduce its use of harmful persistent toxic substances and to find alternative chemicals and control methods that are more environmentally friendly. Most of the toxins relate to rural activities such as the use of pesticides for agriculture, DDT for controlling malaria and Dieldrin for tsetse flies. The urban-generated toxins, including industrial effluents, are largely unmeasured and ignored.

“Cutting back on wastes.”

Namibia’s Green Plan states that there should be a national policy of “reduce, reuse and recycle”, particularly where domestic refuse is concerned. The city of Windhoek produced 37,000 tons of refuse during 1990, very little of which was recycled. A clean-up campaign of a dry river bed in Windhoek during 1990 collected an average of 10.6kg of waste per square meter, made up of 80% building rubble, 18% garden refuse and 2% domestic refuse. The proportion of domestic refuse increased to 10% in sections of the river adjoining low-income settlements. Clearly, the residents of low-income areas, as well as the municipality, can address this aspect of bettering the environment.

“Poverty, a major threat to sustainable development.”

Poverty in Namibia has many causes, the most evident of which is the historical apartheid policies which were directed at isolating the population into ethnic groups (10 homelands were set up in the regions and in urban areas the groups were isolated according to ethnic locations). It is also acknowledged that the interaction between poverty and the environment can lead to a downward spiral of degradation, since those who are poor and hungry will often have to use the resources of their immediate environment beyond long-term levels of sustainability in order to survive.

2.2. Government response to urban pressure and the environment

As previously mentioned, the national presentation to the Rio Summit was perceived as purely rural, culminating in Namibia’s Green Plan, which was presented to the summit, and later applied in Namibia to some extent (although it was never formally approved by parliament). The concept of sustainable development formed a major theme to the country’s second five-year National Physical Development Plan. Delegates from the Ministry of Regional, Local Government and Housing (including the minister), the Association of Local Authorities, and the City of Windhoek (including the mayor) also attended the summit. They all returned with positive attitudes regarding the environment and the summit, preparing the way for future development. By 1998 the first city-based environmental association was formed, using LA21 objectives as guidance. (For more on this refer to the section 5.2.)

In short, Namibia was conducive to the concept of sustainable development in general and LA21 in particular. However, the Green Plan was an ambitious undertaking with a very strong ‘green’ focus, and did not receive sufficient political support to acquire legal

status. A revised edition is in the process of being completed, in preparation for the World Summit on Sustainable Development (once labelled Rio +10) to be held next year.

In order to respond to the environmental agenda outlined in the Green Plan, the City of Windhoek promptly set up a subsection in their planning department, solely for environmental matters. There are three members of staff in this division. The shortcoming of this environmental section in CoW is that, since it is a separate division, staff are isolated from the mainstream of development activities. It is indicative that they are even separate from the Sustainable Development division in the planning department, which deals with the town planning and development of the low income areas.

2.3. National housing strategy of action

The development of housing policies and strategies occurs in the context of widespread poverty and a highly skewed income distribution in Namibia. Accordingly, most people cannot be expected to pay much for their shelter. The government (at all levels), the private sector and non-governmental organisations were faced with the challenge of extending access to affordable shelter to as many people as possible. Therefore, in 1994, the Ministry of Regional, Local Government and Housing (MRLGH) formed a National Habitat Committee comprising a wide representative cross-section of stakeholders to compile a national plan of action for housing in Namibia.

With support from Habitat*, the main principles developed since 1992, contained in the plan were as follows:

- housing should be responsive to people's needs;
- people should be at the centre of the housing process;
- people should be involved in, and be in control of, the whole process;
- people should take decisions and initiate action;
- emphasis should be on the process of housing rather than the product.

The Build Together housing programme arose from the plan of action aimed to assist households that, on account of their low incomes, had no access to housing delivered by private sector developers or the National Housing Enterprise (NHE). The private sector caters for the middle- and upper-income groups, the NHE the lower middle-income groups. The Build Together programme was designed for the low-income target group and is a translation of the National Housing Policy principles into a practical programme of action which aims to improve the living environment of the poor through security of tenure and housing.

Since 1998 the Build Together programme has made N\$65,054,000 available for housing and 3,883 houses were built in 2001. Although the Build Together programme has been successful in meeting the housing needs of the lowest income groups, including the SDFN, at a level affordable** by the beneficiaries, it cannot depend on central government for funding in the long-term. Therefore, a revolving fund was

* UNCHS/90/018; 1992

** By affordable, it is meant that the beneficiaries are able to sustain repayments over the required period of time, without being financially worse off at the end of the period.

proposed. It is estimated the projected level of funding continues to be available over a 10 year period and a loan recovery rate of 80 per cent is maintained that the funds could become revolving and self-sustaining after a decade.

While the National Plan of Action failed to address environmental issues per se, these were later incorporated into The Namibia Country Report for Istanbul+5*. In this report, proposals are made to:

- promote geographically balanced settlement structures;
- manage supply and demand for water in an effective manner;
- reduce urban pollution;
- rebuild settlements and prevent disasters;
- promote effective and environmentally sound transportation systems; and
- support mechanisms for the preparation and implementation of local environmental plans and LA21 initiatives.

2.4. Preparations for the World Summit on Sustainable Development

It would appear that there was no single champion for the urban environmental context regarding the Rio Summit. Neither the MRLGH, nor the Association of Local Authorities of Namibia (ALAN) was organised sufficiently to represent urban issues. The National Habitat Committee (NHC), which deals with housing and indirectly, urbanisation, had not yet been formed.

However, it was beneficial that representations from these bodies were made at the Rio Summit, at both political and technical levels. When the NHC was formed in 1994, the LA21 principles were not embraced as essential components to urban living. However, the Namibia Country Report for Istanbul+5* published in 2000, contains acknowledgement of LA21 and actively incorporates its principles, especially concerning sustainable human settlements.

Similarly, ALAN, although still a weak organisation, has recently begun considering LA21 seriously and the different local authorities have had varying levels of success in trying to incorporate these principles into their daily administration. Windhoek is probably the most successful to date. It has the advantage of having had a track record of confronting some critical environmental issues before Independence, such as obtaining sufficient water to deal with the increasing population from beyond the boundaries of the city, sewage disposal and recycling water.

* Istanbul +5 was held in New York in 2000 to follow up on Habitat II – the global conference on human settlements, held in Istanbul during 1995.

3. The natural environment and built infrastructure of the city of Windhoek

3.1. The natural biophysical environment

Climate

The north-western suburbs of Windhoek, made up mostly of informal settlements and housing a large share of Windhoek's population, are situated in semi-arid highlands. The average rainfall is between 350 to 400mm per year. The rainfall is variable and unpredictable, occurring mostly as thunderstorms. In the rainy season, usually from December to March, the run-off can strip and erode bare land. According to the Department of Water Affairs, as much as 83% of the meager rainfall evaporates, 2% enters drainage systems and only 1% recharges the ground water sources. Together the low rainfall and high evaporation restricts the growth and recovery of woody plants. Later in the report, it will be shown how the informal settlers have recognised this and are taking means to address this issue through the use of permaculture, a form of urban agriculture.

December is the hottest month, with an average daily maximum of 31 degrees Centigrade, while July usually has the coldest weather with an average daily minimum temperature of 2-3 degrees Centigrade. The variations are extreme, and should be considered when building houses. At present, the shacks are most often built of corrugated iron that is freezing cold in winter and boiling hot in summer. The more permanent housing is usually built of concrete brick and corrugated iron, without a ceiling, and even this offers scant protection against the seasonal temperature variations.

Topography

Three main topographical features are common in the north-western suburbs. These are slopes, ridges and ephemeral rivers or drainage courses. These have combined in a hilly undulating characteristic that makes it difficult to plan and develop cost-effective and sustainable land use activities, especially for the most marginalised communities who are expected to live here.

Geology

The rock formations are composed of mica-rich and quartz-rich schist, or quartzite, that has many fractured quartz veins. All these rock formations belong to the Kuiseb formation of the Damara Sequence, dating back 700 million years. The schist has many very thin layers, or foliation, made up of different quartz rich and mica rich layers. Mica is a softish rock, which is suitable for building on but is not suitable for use as a building material.

There are numerous faults in the north-western region, with some of the rivers and streams following the fault lines. Most of these result in east-west fractures and shear zones. Weathering along faults may affect foundations, thus it is advisable to avoid building along the larger fault lines.

Soil

The soil cover in the north-western region of Windhoek is either extremely thin, less than 0.5 metres thick, or absent over large parts. Should sanitation systems of a pit latrine or similar type be installed, it would function below this level, with the result that the effect of soil on filtration would be negligible.

Although the soil cover is generally classified as soft excavation, according to the South African Bureau of Standards (SABS), the schist that occurs in the upper 0.5 metres is intermediate hard excavation. This means that it is difficult to excavate by hand and any excavation below one metre will need power tools or blasting.

The following implications for development are as a result of the soil characteristics:

- There is high erosion potential on the thin soils, particularly where the slope is steep.
- On-site sanitation systems will be problematic due to the thin soils and poor permeability of the residual schist.
- Manual labour will be limited due to the hard characteristics of the schists.

Box 1. Habitat II settlement and environmental constraints to their development

Habitat II is one of the self-help housing schemes developed by the SFDN. It owns a block of land virtually covered in mica. Where the land is steep, it is impossible to build any housing and the installation of sewers and water pipes is extremely difficult for members of the group, who use hand tools and manual labour for excavation. Thus the costs of developing housing on the land have escalated beyond what was originally believed to be the case.

Vegetation

The north-western suburbs of Windhoek occur in the Highveld savannah vegetation zone. Here a variety of acacias, such as *Acacia erubescence*, *A. erilobia*, and other species such as *Combretum apiculatum* and *Boscia albetrunca* occur. Vegetation differs on the slopes and ridges to the riverbeds. The shrubby forms of acacia characterise the slopes and ridges. Many ferns, mosses, lichens and other shade-loving plant species are found under rocks and crevices. Most of the area, however, is covered with grass, such as *Stipagrostis* and *Enneapogon* species. The ground cover is usually in the region of 10%.

The riverbeds host a more abundant range of vegetation, with taller acacia trees, and mostly short-lived grasses, weedy herb species and creepers. The vegetation cover ranges from 5% to no cover at all. The trees and shrubs from areas preparing for development are usually all removed. This is taken as a norm and communities expect it.

3.2. Infrastructure

Water supply and sanitation

Windhoek is in the privileged position of having water and water-borne sewage reticulation systems that extend across most of the city. Water is supplied up to the townland boundary by Namwater, the water parastatal, and reticulated throughout the city via the CoW water and sanitation department. The area to the north and north-west is probably the least well serviced. However, the city regards it as an ongoing challenge to keep up with the continual immigration and the demands for water and sewage into these areas.

Windhoek's water engineer has mapped in detail the city's entire system of water and sewage reticulation. The areas to the north and north-west have also been mapped on a house-to-house basis, to show the water reticulation. Where full reticulation is not available, the water points are indicated. Similarly, the sewage reticulation is mapped. The maps indicate all the sites of the water-borne sewage system, including where communal toilet blocks are constructed. At present, the engineers claim that there is only a portion of one informal settlement that does not have any access to communal latrines; namely Havana Section Two. However, it is doubtful whether all settlements actually make use of these latrines, and there are unresolved issues of 'ownership' and responsibility for maintaining the latrines. All recognised informal settlements also have access to communal water points.

Communal toilets are not always successful. In the case of United People the communal toilets were demolished due to a lack of agreement amongst user group members regarding their maintenance and cleaning. While residents of the settlement are gradually building their own housing, with water and sanitation included, many of its residents have no option at present apart from using the bush for these bodily functions. Thus unhygienic conditions, with faeces and flies a prominent feature, characterise the settlement.

CoW is working with the informal settlers to determine what they can afford, rather than trying to impose unrealistic standards. Thus, before any water point or latrine is sited, CoW aims to communicate with the residents to ensure that it meets their needs, as well as ensuring that the residents understand the purpose and responsibility of the facility. It is important for the shack dwellers themselves to be the owners, and in control, of the communal facilities in their block.

The officials of CoW do, however, state that vandalism of communal facilities occurs. This is a particular problem for the water and sanitation department. To overcome this difficulty, the CoW has a team of workers in community development trained in matters of civic responsibility. The community development staff, in turn, are meant to train and guide residents in their rights and duties. For many immigrants this is the first time in their lives that they have lived in an urban environment, one quite different from their former rural, low-density settlements, which posed very different social demands.

The road network, storm water drainage and flood management

Windhoek is situated some 1,800 metres above sea level. It has a hilly topography with some rather steep slopes that are difficult to build on. The CoW is fortunate in that major flooding is unlikely to occur. When Windhoek experiences flooding, it is usually a flash flood, which is over just as quickly as it started. However, as a safeguard against these floods, the municipality does prohibit development below the 50-year flood line of all major rivers. If property situated on minor streams is sold to private individuals or organisations, there is a flood warning in the title deed.

Storm water drainage is usually designed and constructed at the time of road construction. The standard of drainage is linked to the standards of the roads. For example, gutters are built where tar roads are made, while the water is left to drain away down slopes alongside gravel roads. The floodwater is then able to drain away naturally into river courses and underground water chambers, without the need for any pumping stations.

The engineers of Windhoek prefer to install the road and storm water infrastructures before anyone takes up residence on the land. This follows the normal township establishment procedure. However, this is not always possible in the case of informal settlements. The installation of services tends to be slowed down when negotiations have to be made regarding relocation of housing to accommodate the roads.

Electrical supply

Electricity is widely available throughout the city of Windhoek. One can generally say that all formal development is serviced with electricity. Within the informal developments, however, electricity is an exception rather than the rule.

When the price of land is calculated the cost of electricity is usually included. However, to keep the price as low and affordable as possible for low-income households, electricity is excluded from the calculation of their land price. This means that an alternative measure of connection and repayment has been set up to make the transition into urban life more affordable. The main network supply, per household calculated at N\$2,400, is fully inclusive of the connection, pre-payment meter box and VAT. This stands in sharp contrast to the cost per electrical installation for an individual freestanding plot which is N\$500.

The residents of two communal blocks of land, who are members of the SDFN, were not required to pay any deposit for the installation of electricity. Therefore, to overcome the vast difference in the payment and the network supply, residents pay an extra 39 Namibian cents per kilowatt-hour, which is encoded into their individual prepayment card. In other words the low-income households who have access to electricity in their homes pay a marginally higher cost per kilowatt-hour than do residents in the rest of the city. But, at the same time, they do not have to pay the large lump-sum connection fees. They have 15 years to repay the full installation of the electricity.

Even in most areas where the shack dwellers reside, all institutional and formal business developments are electrified. In addition, street lighting or high mast installations* are

* Electricity is provided above the ground at a high level with overhead cabling.

part of the infrastructure in the settlements. This is regarded as important for security purposes. It is only in the new low-income areas that are being developed in the north-western parts of Windhoek that electricity is not accessible to all households.

Generally, Windhoek boasts high standards of servicing and supplies in all of its departments. The new approach towards dealing with informal settlement development is also probably one of the most proactive worldwide, and there is an increasingly strong cohesive movement amongst the shack dwellers. Moreover, CoW is fortunate in having a relatively small population and a relatively well developed and maintained infrastructural base. The remaining problems are serious, but they need not be insurmountable.

3.3. Environmental issues of special concern in the informal settlements

Environmental health has become a major problem in the informal settlements, largely due to a lack of adequate sanitation facilities. The Ministry of Health and Social Services (1998) claimed that unsafe disposal of human excreta in the north-western suburbs contributed to the transmission of diarrhoea, schistosomiasis and cholera, as well as other infectious diseases. It is generally agreed that poor sanitation is a major contributor to both morbidity and mortality, especially among young children.

Personal hygiene is also difficult to uphold when there are just a few taps to be shared by many households. It is acknowledged that humans have a basic right to privacy and personal hygiene, but these, especially sanitation, are not adequately addressed in the mushrooming informal developments within Windhoek and are cause for concern amongst the SDFN members.

The consumption of wood for fuel, in the absence of other readily available alternatives, is causing a wide range of impacts on the environment. Firstly, the increasing scarcity of natural vegetation and subsequent greater traveling distances required to obtain fuel puts more pressure on women. Wood burning also generates air pollution. This is particularly bad over the north-western suburbs during winter, when the pollutants are trapped just above the ground due to a temperature inversion. A lid of warm air covers the area, stopping air currents from above coming down and dispersing the pollution. The emissions levels and concentrations of different pollutants in the ambient air have never been adequately measured. As a result, Windhoek lacks baseline information for monitoring pollution changes. Industrial emissions, such as from the Van Eck Power Station in the northern industrial area, are also an unknown factor. There are no current plans to investigate further.

4. Windhoek's settlement patterns in an environmental context

4.1. Historical socio-economic development

As Namibia's capital, Windhoek is by far the biggest city in the country. The population is estimated at about 250,000, more than 10 times the size of Walvis Bay, Oshakati or Rehoboth, the three next biggest towns. It is here that the country's political (parliament and legislature), economic and socio-cultural power bases are concentrated, as are most of the major facilities, such as the major international airport, the biggest state hospitals, national theatre, industries, communications network and physical infrastructures.

Windhoek is situated on a large flood plain that is surrounded by mountains. Although the city has spilled over the mountains to the north-east, there is still some flattish land to the south. The town lands, which are owned by the municipality, cover some 47,812 hectares of land, excluding that of Brakwater to the north. Of this, some 97.5 hectares are located in the north-western suburbs, which are the low cost informal housing areas.

The CoW is a classic dualistic city, with clear divisions between the highly sophisticated 'First World' sector and that of the 'Third World'. The central business district is modern, with high-rise buildings and a wide range of goods and services on offer. There are elite suburbs to the east, sporting large mansions, and more middle class areas to the south and south-west. While the suburbs to the north and north-west, are predominantly inhabited by low-income people. Here, at least 71% of Windhoek's population is housed. In addition, Katutura (the former black township) and the newer suburbs to the east and north-east are spatially separated from the rest of the city in a typical apartheid planning approach. This is achieved through massive buffers of freeways, industrial development, hospital, jail and other major institutional buildings.

The city of Windhoek generally has a high standard of infrastructure that is divided into different development levels. The informal settlements tend to be situated in the areas with the least infrastructure development.

Figure 3. Location of the north western suburbs in relation to the physical layout of Windhoek

4.2. Background to the present situation

The national policy of pre-Independence apartheid did not allow for urban immigration until 1977. The spontaneous development of settlements was regulated and residential growth in the poorer areas of Windhoek – namely Katutura, the only black apartheid township at the time – was prohibited. So what tended to happen was that the formal low-cost houses in Katutura became grossly over-crowded. Often an entire family would live in one tiny room. At times, backyard shacks were constructed to accommodate some of the family, or rented out to friends, relatives or others who were desperate for accommodation. The structures had to be skilfully disguised as an old car or a chicken run, to try to deceive the authorities about the fact that people were actually living there.

During 1978, with the formation of Nasboukor (the national building corporation) new suburbs were built thus allowing for private ownership by 'blacks' for the first time. Areas such as Wanaheda, Hakahana and Okuryangava Extension One developed.

The laws relaxed with Independence. People perceived the new freedom of movement as an opportunity to improve their life situation. As a result, many of those living in overcrowded conditions in Katutura moved onto vacant land nearby, and many others migrated in from impoverished rural areas. What was a small trickle at first soon became a massive movement, with noticeable changes from week to week. There was no social cohesion amongst those who moved in to Windhoek, and even less communication with the CoW. The newly-settled urban residents were vulnerable, had no security of tenure and lived in very unhygienic conditions, with no easily accessible water or sewage facilities.

At the same time, CoW was powerless to stem the tide, as the new constitution stated that people were free to move within the country as they wished. This rapid urbanisation was a new phenomenon in Windhoek, and indeed Namibia, so it was hardly surprising that it took a while for the municipality, as well as the national government, to come to terms with it. Independence was 11 years ago, and, it is only recently that the municipality has started to address the issues associated with urbanisation and upgrade some of the settlements.

The annual growth rate in Windhoek is currently 5.4%, of which 3.9% is in-migration. This translates into some 600 people moving into Windhoek each month. Roughly one third of the migrants settle into the informal areas, namely the north-western suburbs that developed from Katutura township. As indicate above, more than 70% of Windhoek's population is already housed in this part of the city. These suburbs are predominantly low-income.

However, it is argued by the SDFN, who conducted a survey in the informal settlements during 2001, that those living there have been resident in the informal settlements for an average of 5.2 years and Windhoek itself for 12.4 years. This suggests that informal urban growth is not so much due to new rural immigrants building shacks in informal settlements as to people previously living in overcrowded conditions in the city searching out more space for themselves and their families. The SDFN is discussed in more detail in part 6.3 of this paper.

It was estimated by Urban Dynamics, a local town planning firm, in a recent feasibility study (2001), that some 28,000 residents are currently accommodated in these informal

settlements. This is a phenomenal change since 12 years ago at Independence when there were no informal settlements at all in Windhoek. One of the major reasons given for movement into Windhoek is unemployment, and at least 43% of the settlers come in order to obtain employment. Another reason for immigration is better living conditions, such as access to schooling and health care. The informal settlers are predominantly economically active, with 72% being between 20 and 44 years old.

In addition to these statistics is the harsh reality of land scarcity. Each new area for settlement is located further and further away from the places of employment opportunity, so more and more time and money is spent in getting to places of work and work opportunities. At the same time, the expansion is spilling over into new drainage basins and this means that new infrastructure, such as water, sewage and storm water provisions, have to be planned and constructed anew, or at least contingency plans have to be made to meet the need for basic services.

In summary, the physical and economic picture for residents in the north and north-east of Windhoek is bleak. At the same time, the city of Windhoek is battling to keep up with the demand for land, services and infrastructure. Perhaps inevitably, the CoW cannot respond quickly enough to the needs of immigrants. Between 1991 and 2001, the CoW council provided 6,000 serviced plots, well below the scale of existing need even before new immigrants were considered. In the absence of alternatives, informal settlements have grown, primarily around the existing low-income areas.

In the second half of the 1990s officials and politicians recognised the need to put in place a policy that would enable all residents to have access to basic services and the opportunity to secure a home in the city. They understood that if the scale of need was to be addressed without subsidies, the existing development practices would have to change.

Prior to Independence, self-help housing in the formal urban sector was an unusual concept among families living in low-income areas. Movement controls ensured that those living in urban areas had formal employment and were either allocated rented housing that was owned by the municipality, or could purchase housing from the Government parastatal, Nasboukor.

Whilst Windhoek, and indeed Namibia itself, is blessed with a very low population when compared to other countries of the same size, it nevertheless has severe problems housing its more deprived residents. Both the residents and the municipal officials are trying, from different perspectives, to grapple with these challenges. Slowly, attempts are being made to address the backlog, promote developments that will work for the poorest, and come to terms with future needs and priorities. Such issues are central to the goals of LA21 and, more generally, sustainable human settlement development. Recent partnerships and the Policy on Access to Land and Housing (discussed later in this report) are both significant positive steps in addressing these challenges.

Figure 4. Settlement information plan

4.3. Analysis of future need

The CoW estimates of need include a backlog of 8,000 serviced plots and, as mentioned above, coping strategies for a high influx of immigrants each month. The policy recognises the need for low-cost land to be made available. The lack of income, combined with limited access to subsidies necessitates the adoption of incremental development. In the Policy on Access to Land and Housing, the municipality recognises that access to secure land with communal water and sanitation provision is a first minimum step, intended to lead on to concrete block housing, individual water and sewage drains, electricity and eventually tarred roads with storm water drainage.

The CoW is concerned that 16% of informal households may have incomes that are too low to contribute anything to the cost of services. That is to say that these households earn less than N\$100 per month. A further 22% are thought to earn between N\$100 and N\$166 and are therefore only able to make very limited contributions.

In order to increase availability the CoW has developed two options for those with particularly limited resources. The lowest cost option of all is to rent a plot of about 180 square metres serviced with communal water and toilet blocks, with the rental charge designed to simply compensate the financing cost of the investment in the land. The second lowest cost option is for a group to purchase a block of land, again only with communal services, for division within the group.

Although the minimum plot (erf) is 300 square metres in Namibia, according to the National Policy on Housing, CoW recognises that families may rather meet their shelter needs in smaller areas, if this reduces their shelter expenses. They therefore allow groups who collectively buy land to settle at densities that are higher than this. In some cases they allow two families to settle on, or jointly purchase, an individual plot designed for a single household unit. The Minister of Regional and Local Government and Housing has agreed to this approach, as long as it is recognised that the solution is temporary.

Figure 5. Township development plan

4.4. Land and affordability

Need is closely linked to affordability. CoW has designed a system of 'development levels' that define the level of services that are provided (as shown in Table 1). Associated with the development levels is an analysis of affordability that links family income to a development level. It is assumed that up to 25% of income can be used for shelter (land title and housing) if the family earns less than N\$1,500, or a minimum of 20 per cent thereafter. CoW does not have access to regular state subsidies for land acquisition and bulk service supply, let alone the specific provision of infrastructure to the poor. Hence, while the CoW policies recognise the need to make services available, they also emphasise the need to find solutions in the absence of subsidies. Without subsidies, CoW policy is to charge the residents the costs incurred in providing the services to the land.

The market for land, of both high and low value, operates imperfectly in greater Windhoek. In the case of undeveloped land, the City of Windhoek has a monopoly on supply since they own large tracts of what are referred to as 'townlands' that at this stage are still undeveloped. They are not allowed to sell land that has not been serviced. Plots designed for higher-income families are auctioned to developers or directly to individual households. Serviced plots for lower- and lower middle-income families are sold to developers, in the case of lower middle-income families, or directly to individuals or groups that are too poor to buy a house that is already built. In the costing exercise itself (see below) no intrinsic value is attributed to the land. That is, under CoW policy, land is sold to the poor at a price that is just sufficient to recoup the value of the infrastructure investment in the land. Land prices are essentially managed by CoW which determines the level of infrastructure investment, identifies the contractor (either private or municipal) and controls the number of plots that are made available for sale at any one time. Within this approach there is considerable scope for households to access plots with minimal levels of service in order to increase affordability.

Table 1. Development options in the city of Windhoek

Income level N\$ per month	% of city population	Development level	Provision of services and infrastructure	Access to land
N\$0-166	22	0	Communal water points with payment by meter and private refuse collection.	No access.
N\$167-666	32	1	Communal water and latrines (two per 80 people). Some roads gravelled where possible. Private refuse collection.	Rent and purchase by group is possible.
N\$667-1,202	28	2	Communal water and latrines with full reticulation planned. Some roads gravelled where possible. Private refuse collection.	Individual erven, two families per plot and group purchase possible.
N\$1,203-2,814	14	3	Individual water taps and sewerage connection. Some roads gravelled where possible. Private refuse collection.	Individual erven and group purchase possible.
N\$2,185-3,436	2	4	Individual water taps and sewerage connections. All access roads surfaced, others gravelled. Individual collection by bin system.	Individual plots.
N\$3,437-4,505	1	5	As above, but individual sewer connections for flush toilets.	Individual erven.
N\$4506 plus	1	6	As above, but roads fully serviced and individual sewer connections for flush toilets.	Individual toilets.

CoW Policy and Strategy stress the importance of social organisation. They attempt to stimulate local organisations, in the case of individual houses placed in areas with communal services. The families are required to set up neighbourhood committees, with 20 to 30 households sharing the same toilet block. The committees meet together to form settlement groups that elect a steering committee.

Figure 6. Detailed service standards for development levels 1-6

4.5. Current plans and locations

Communally owned land in urban areas has been developed and used by the community and is continuing to occur, in spite of the absence of legislation. The opportunity to take out house-building loans is one means by which their tenure is made secure.

The concentration of low-income neighbourhoods in an extended area of the city to the north-west has resulted in evident problems related to transport costs and transport time, especially if gravel roads mean that residents have to walk before getting onto a bus. Further problems are a lack of informal markets and trading opportunities. Box 2 below describes some of the problems facing one group, Ipelegeng Bomma, who are members of the SDFN.

Due to factors such as those discussed below, and the cost of extending bulk services to such areas, both planners and low-income communities alike believe that better located land should be identified for further settlements.

Box 2. The cost of resettlement for Ipelegeng Bomma *

There are 48 families living in the community of Ipelegeng Bomma. The need for resettlement from the central location of the Single Quarters in the middle of Katutura, arose in 2000 when families had to leave the area where they had been living for an average of 11 years. The residents of Ipelegeng Bomma were temporarily located on land owned by the National Housing Enterprise (NHE). Members of the community created a daily savings group through their involvement with the SDFN, in order to organise themselves and create new development options. Towards the end of 2000, the City of Windhoek, under pressure from the NHE, offered the residents land behind Havana 3 informal settlement. This land is situated on the outskirts of Katutura to the north-west. The 48 households that form Ipelegeng Bomma entered into an agreement to purchase this land. The members began to move there in February 2001.

These households now occupy approximately one hectare of land, which has been subdivided into 24 plots of 300 square metres each. Two households share each stand, so that a single household pays N\$67 per month for the land and the services. The community can obtain water through using a pre-paid card at any one of the three water pumps. There are also three communal toilets.

Many of the Ipelegeng Bomma households are small and headed by women. Women head more than three out of every five households, and 50% of women-headed households were composed of two persons or less. Single-person households accounted for almost one third of all households and, of the 13 single-person households surveyed, 12 were women living by themselves. 40% of the residents were children between the ages of 0 and seven years.

Average annual incomes are N\$820, with the male average being \$1,152 and the female average N\$761. These figures are considerably lower than incomes prior to the move

* Nichols, C. Jy's meer Arm (I am poorer): a preliminary investigation about the quality of life for a resettled community in Windhoek (unpublished), Windhoek, July 2000.

when combined formal and informal sector earnings enabled average incomes to reach N\$1,886. In this new location, families have struggled to maintain informal sector activities. Some families have abandoned small enterprises and others have moved into other activities.

The distance of the settlement from services in more central locations, such as clinics, schools and shops, also causes hardship. For those having to travel daily into Windhoek, the cost of transport is about 10-15% of their average wage. The majority of children walk more than an hour each way to school on a daily basis.

One difficulty in the development of new sites is that CoW assigns space for health centres and schools, but does not ensure the central government line ministries undertake the actual construction in a timely fashion. As a consequence, there are often considerable delays before these services are provided to families. These delays result in obvious difficulties, especially for those who have children. There does not appear to be coordinated lobbying of the state ministries by the municipality and grassroots organisations to speed up the provision of services.

Better located and relatively flat land is available in both the south and west of the city. The planning professionals consider that there are two difficulties in the development of low-income settlements on both localities. Firstly, the land feeds the water supply (aquifers) of the city and hence there is a reluctance to have anything other than water-borne sewage in the area. Whilst at present all sewage is water-borne, CoW is at present exploring lower-cost non-water borne options. There is a concern that the southern areas are unsuitable to such methods. A related concern is that, even with water-borne sewage, some low-income residents may continue to use the bush (although there is little evidence that this is a serious problem).

Secondly, CoW is aware that existing residents are likely to object to the development of low-income settlements as has already been the case in some of the proposed developments to the west of the city. With little historical experience of integrated cities, better off residents lobby against the location of low-income settlements close to their neighbourhoods. This reaction appears to have some influence among those responsible for managing the city and there is no assertive policy to change this historical experience of urban planning and secure better located land for the urban poor. The officials suggest that resistance might be less if concrete blockhouses, rather than shacks, were to be erected, but this supposition has not been tested.

4.6. Current investment strategies for infrastructure, services and housing

The current City of Windhoek investment strategy rests on three premises:

- the need to expand the availability of plots;
- the lack of spending capacity among many of the low-income residents; and
- full-cost pricing in the absence of subsidies.

As noted above, the authorities recognise the need for essential services to be provided within the limitations identified above. At the lowest and second lowest development

levels this means block sanitation and communal water taps with gravel roads and a centralised refuse collection system with bags being carried to a single point.

At the same time, it is accepted that there is a need for incremental housing. The Build Together programme, which is funded by central government and now decentralised to the local authorities, included some N\$4 million for the current financial year (2001). With individual housing loans of up to N\$26,000, very few families are able to obtain loans. However, it appears accepted that the poorest families find it hard to afford housing loan repayments alongside repayments for infrastructure.

At the lowest development levels, plots are made available to groups and individuals at prices calculated to include all services – including city planning and surveying, which is costed at government gazetted prices, contractor or municipal installation of bulk and block services, gravel roads and administration, plus a charge for the arterial roads. Additional costs may be incurred for street lighting, parks and tarmac internal roads. To purchase serviced land requires a deposit of 5% with subsequent monthly repayments at 15% interest over a period of up to eight years. The intention of both the CoW and the purchasers is that the community will upgrade the land, as it is affordable to the residents.

To further reduce the cost, no formal subdivision of the land in 300 square metre plots is required. In the case of rental land, this restriction of 300 square metre plots does not apply. As a result, CoW may design areas of 150 to 180 square metres for rent. In the case of block purchase, the legal owner of the land is the organisation that has purchased the block. This organisation may then divide the area in the block into individual plots, although planning permission has also to be obtained from the CoW.

4.7. The City of Windhoek's own innovations

A few years after Independence the City of Windhoek began to realise that its focus must be shifted from one of township and housing provision to one of more appropriately meeting the needs of the poorest residents. Ideally, they also had to start preparing for the immigration before it happened, through providing new and vacant land with communal services of water and toilets. This would then be ready for the immigrants to settle on as soon as they arrived in the city. Linked to this ideal, is the notion that reception areas should be set up to meet and record and help immigrants to settle.

However, with bureaucracies things take time and ideas are slow to take root. In 1993 CoW officials received a visit from the informal settlements in Oshakati. This visit impressed the City because it showed that, with a little NGO help, the residents did not have to wait for the local authority to provide land or housing. The visitors were also able to demonstrate that they were capable of mapping and preparing a township layout for their settlement. Perhaps a return visit of CoW to Oshakati would enable the municipal staff and councillors to see what has happened on the ground. These groups from Oshakati were members of the NHAG, an NGO supporting the SDFN, and were instrumental in pioneering the SDFN itself.

In April 2000, a group of municipal councillors, staff and members of NHAG visited Port Elizabeth and Durban in South Africa. They were able to observe the principle of savings schemes and the extent of self-help in these two large centres. This exchange marked a

turning point in the approach by CoW and from that time onwards, more significant changes have started to take place.

At first the innovators of the new approach in CoW found it difficult to get support from all departments. Many argued that the way things had been done in past worked, so there was no reason to change. However, with persistence and some political pressure, new approaches have gained acceptance, and there is confidence within CoW that the city is now working towards a common goal of meeting the challenges for affordable land, services and housing.

The inadequacy in the number of serviced plots combined with pressing (and sometimes vocal) demands for improvement has resulted in a commitment by the municipality to design a new Policy on Access to Land and Housing, together with a strategy for development and upgrading. This was completed at the beginning of 2000. The council decided to use a participatory process with broad consultation on the content of the document. In particular, the Policy Department sought to work with those involved (the users) and their support agencies, for the most part NGOs to: "Secure a vision that all low-income residents in the city of Windhoek have adequate and affordable access to land with security of land tenure, housing and services as a means to reduce poverty and increase the quality of life." Page 2, Agenda 21 states that this can be done through full cost recovery in high-income areas and subsidies limited to low income areas. However, in Windhoek, the poor themselves have had to find ways of affording infrastructure as will be seen later in the paper.

With an open acknowledgement of the right of all residents to a place in the city, the challenge was to find a strategy that enabled this right to be realised. The Development and Upgrading Strategy that emerged from the consultation process seeks to:

- strive to provide all lower-income target groups of the city with a range of land development options in accordance with their ability to pay;
- establish uniform service standards for each of the development options; and
- set parameters for orderly incremental upgrading.

Awareness of the importance of self-help groups in achieving improved housing, particularly the inputs by the SDFN and the NHAG, has resulted in CoW including a section in the Strategy defining their specific contribution. The Strategy encourages the formation of self-help groups for the benefits that they offer. Such groups are encouraged to purchase land with bulk service connections in order to provide themselves with service improvements at the lowest possible cost. The CoW itself is willing to negotiate service standards within these areas in order to increase access, even for the very poor.

5. 'Green' environmental issues and LA21

In Windhoek, the CoW initiated an environmental programme in the Goreangab area, initially cooperating with NGOs and community committees. Consultations were held with NGOs, CBOs and within CoW, as well as interested private bodies. The main objectives have been to deal with environmental degradation and environmental education, and to ensure that environmental assets are utilised to the full advantage, for the benefits of all residents.

5.1. Goreangab Action Committee

The Goreangab Action Committee (GAC) received international support through partnership with the International Council for Local Environmental Initiatives (ICLEI). From February 1999 to May 2000 strategic planning and other support was obtained through the Incentive Grant Project (IGP) via the Africa office of ICLEI in Harare, Zimbabwe. It is one of the few explicit attempts to apply the LA21 principles in a marginalised community in Namibia. It has formal LA21 status. The project was recognised as a major achievement. The project was initiated through a team comprising:

- A representative from the Windhoek City Council;
- Green Space, a Windhoek NGO;
- The Ministry of Environment and Tourism, through the Directorate of Environmental Affairs;
- The Regional Councillor for the Wanaheda and Goreangab area;
- The Greenwell Matongo Development Committee;
- The Polytechnic of Namibia;
- The Penduka Crafts and textile co-operative at Goreangab Dam;
- The University of Namibia (UNAM); and
- The Botanical Society of Namibia.

The Goreangab dam has long had water pollution problems, due to effluents from sewage treatment works and neighbouring residents. At the same time, it is a potential source of environmental beauty with its rare water body in an arid environment, the natural environment of trees, grasses and other vegetation as well as bird and aquatic life.

The GAC attempted to establish a foundation for the future of the dam and drainage areas. They aim to build relationships between different organisations and the residents of Goreangab.

A project of reed beds and aquaponics (agriculture using water) were established at the entrance to the dam. Faulty manhole covers were replaced and leaking sewage pipes repaired. Dustbins were provided to improve the collection and management of household waste. A parking site for day visitors was fenced off and one-day clean-up events have been held regularly in an attempt to increase environmental awareness amongst the residents. The CoW requested tenders for a community based organisation to manage the area and these are still in process. Although the initial approach of

involving different organisations was promising, the NGOs felt that they were not informed about progress and are no longer actively taking part in the process.

5.2. Windhoek Environmental Liaison Association

Another LA21 initiative from the City of Windhoek resulted in the establishment of the Windhoek Environmental Liaison Association (WELA). Preparation for this initiative started in 1998 and both NHAG and the SDFN have been represented since last year.

During 1998 CoW held a public meeting to gather stakeholders interested in LA21 issues, with the purpose of forming an LA21 committee representative of all residents of Windhoek. This meeting followed the LA21 report on environmental issues that stated: "So many of the problems and solutions being addressed.....have their roots in local activities." This was the first step in Windhoek towards setting up a partnership between the relevant stakeholders in the city under a formal LA21 process.

WELA is a channel of communication between the citizens of Windhoek and the CoW council. It also aims at promoting grassroots participation in decision-making in the city. Currently, there is a broad spectrum of representation including environmental groups, informal housing settlements and housing groups, councillors, city planners, artists, youth, hawkers and shebeens^{1*} associations.

During this time WELA has achieved, amongst other things, consultation from CoW on their draft policies of noise control, open spaces, neighbourhood parks, advertising boards and the Goreangab dam. They have also raised the problems of poor sanitation problems in the informal settlements, especially to the north-west. In addition to the dialogue between the committee and CoW, the committee has facilitated a forum for networking between other members on the committee. Issues like waste management, recycling and alternative and renewable energy sources have also been addressed.

* informal drinking houses.

6. LA21-type activities led by grassroots organisations

Development agents frequently facilitate the establishment of community committees to enable consultation and involvement from the community. Ideally, the community has the opportunity to explore and articulate their needs through these committees, which can then work in partnership with the development agents to ensure priority needs are met.

This also occurred in Windhoek in the mid-1990s, when community committees were elected and a leader represented the community on the steering committee, thus enabling the consultation process. Members of the community committee were also responsible for the collection of water payments. These structures helped the municipality to communicate with the inhabitants of informal settlements. Another type of involvement emerged from the communities themselves as they embarked on steps to improve their own living conditions. This eventually resulted in a national movement of grassroots organisations. The background provided below.

6.1. Saamstaan

Amongst the first initiatives, around the time of Independence, was from Saamstaan, which means literally 'stand together'. Formed in 1988 the group was a first of its kind in the country. A social worker, with support of the Catholic Church, collected all homeless people living in Katutura and formed the organisation. It was a CBO - driven predominantly by a group of domestic employees living in overcrowded conditions in rented rooms and backyard structures.

They could not afford the high costs of land or housing on their meagre salaries. The first houses were built mostly from donor funding on individual plots. But it was soon realised that this was unsustainable, and the next groups had to face the challenges of securing land, saving, producing their own cement blocks, as well as preparing their own services, without major donor inputs.

As a group they began thinking of alternative ways that they could secure land and houses. They knew that they could not afford the price of individual plots or even the houses built by the NHE. Although the initial concept of NHE had been to build low-cost housing, these were unaffordable to most domestic workers.

International donors assisted Saamstaan to meet some of the payments required for early developments. Later, donations were also received for a cement mixer, a brick mould and lorry, as well as helping the members to build a corrugated iron community centre. However, the cement mixer was too small, slowing down the work. So the group members turned to income generation activities, such as barbeques at weekends, and each member saved N\$20 per month for five months to be able to buy a bigger mixer.

From 1987 to 1997, the Saamstaan staff were responsible for the finance, and opened various accounts for water, land and so forth. They established the first credit union in Namibia. The members, however, could not cope with the management of the Credit Union, and the project relied upon one staff member. Furthermore, the members were unable to link the savings to housing loans. Saamstaan then tried forming a separate advance savings as a safety net for house loans, while some of the other member

groups of NHAG followed their own saving approach, which usually concentrated more on fundraising. But in 1997 the members of Saamstaan realised that their funds were being misappropriated and this led to the services of the staff being terminated, and the Saamstaan groups taking control over the management of their own funds.

6.2. Namibia Housing Action Group

During 1992 some low-income groups established the Namibia Housing Action Group (NHAG) to address their housing needs. This became a voluntary association that served the needs of the members and had its own constitution. They held regular board meetings and a management committee that prepared the meetings. Low-income housing groups applied to become members and paid a membership fee. It was the role of the board to approve their application and to ensure that they understood the role of the association.

The association also employed staff to provide support services for the member groups. Later, a Support Service Committee, which included group members and professionals, was established to give attention to matters concerning the Support Service. This helped to free the board members to deal more fully with the groups' issues.

By the middle of the 1990s the groups had established a saving and loan scheme, which they decided to call the Twahangana Scheme which means united scheme. The scheme had its own administrative base and was managed by the members themselves. Prior to the Twahangana Scheme, local savings schemes were ad hoc. Over time and through exchanges with the South African Homeless Peoples Federation, the Namibians learned how savings schemes could help communities to organise themselves. The Twahangana Scheme began to open doors for mobilising communities.

Although the association grew from three to 33 groups between 1992 and 1998, the outreach was still relatively small with only 800 low-income families saving, out of the more than 60,000 urban families estimated to be living in shacks in Namibia. The tendency in the early years of NHAG was for the groups to be organised into separate housing projects, and formal management procedures were adopted. However, the national organisation and the Support Service, which was made up of professionals, found that the formal procedures meant that managing the organisations became a time consuming activity. It did not take long before the focus of NHAG, as an association, was more on the formal procedures than on improving the lives of the poor.

The identity and 'ownership' of the association was often confusing for both the public and the members associated with the organisation. The Support Service, and not the community, was often regarded as constituting NHAG. The Support Service of NHAG was seen as an outside benefactor, responsible for accessing resources and developing the housing groups. Members came to expect service delivery, while the leaders of the NHAG groups and the Support Service were trying to promote a people driven organisation.

The savings activities were growing stronger, but involvement of poor communities remained limited. The formal NHAG procedures, requiring membership approval of the board before the community could participate in NHAG activities, did not encourage active participation by poor communities. A further barrier was created by the almost

exclusive emphasis on meeting housing needs, since other needs, such as income generation, were often perceived as more important by the poor.

Learning from exchanges other grassroots organisations – namely low-income saving groups in South Africa, Zimbabwe and India – the active leaders of NHAG and their Support Service came to realise that the housing groups would be more effective if NHAG developed structures more suitable to a people driven organisation. An evaluation in September 1998 resulted in the saving scheme members and the staff of the Support Service discussing these problems. The process opened the door to major structural changes.

6.3. The Shack Dwellers Federation of Namibia

In October 1998, the 33 member groups of the voluntary association NHAG initiated the structural changes that led to the formation of the Shack Dwellers' Federation of Namibia (SDFN). The federation is essentially an informal network of housing saving schemes. Members of the saving schemes facilitate the work of the federation, thereby showing that it is a people driven process. Their aim is to be a people's organisation and concentrates on practical activities that result in easier access to resources and making a change to lives of the poor. Most importantly, what was a separate savings activity became the core of the federation. Members of the saving schemes have clearly identified themselves with their own people's movement and their activities have become very dynamic. The members themselves are now empowered to drive the federation and the process is facilitated through exchanges locally, nationally and internationally.

The results of the developing people's organisation, even after one year, were phenomenal. The number of households involved could be counted in their thousands and there were almost 3,000 members, whereas in the previous six years the households involved in NHAG groups were counted in the hundreds (in October 1998 there were 839 members). Although there were only 1.7 million people living in Namibia, the SDFN was concerned at the alarming increases in the urban population, already estimated to account for one third of the total population. They live predominantly in informal settlements and have very limited amenities. The previous structural arrangement of NHAG, that confused the roles of the people's organisation with its Support Service, could never have addressed these issues on such a large scale.

By establishing the federation, changing the emphasis from the provision of housing to daily savings, and enabling each group to focus on their real needs, a dynamic people's movement could be brought into being by the communities themselves.

In the earlier years, the members of NHAG attended regular workshops facilitated by the Support Service. Participatory techniques were followed and plans of actions were generated, but these were seldom followed by the local groups. The action of taking people out of their community to a pleasant workshop location – often an alien type of setting – to discuss the problems of the community and make decisions on behalf of their group had limited results. The realisation that poor people can learn best by doing activities themselves, with less discussion, was a major breakthrough in the development of the SDFN. The trainings for savings schemes, for example, are held under trees in the communities or in shacks. They are led by members of an existing savings scheme who has hands-on experience with savings in their own community.

Learning from each other forms an important part of the life of the SDFN members – as told by a member of People’s Force:

“I feel very happy to have my own house. I am also glad that I joined the group, because I have learnt many things, such as the importance of togetherness, addressing our needs and working out ways to solve our problems. We can really learn so much from each other.”

The members realised collectively that to become strong they had to start showing their respective municipalities that they were serious about getting secure land ownership and housing. In order to do this they promoted daily savings. By November 2001 they had saved N\$1,021,956 nationally.

The shack dwellers were no longer a group to be ignored by the local authorities. They had become a recognised force to be dealt with. Today the SDFN is a strong network of savings schemes throughout Namibia. Their vision is to improve the abysmal living conditions of low-income people living in shacks, rented rooms and those who do not have accommodation at all in urban areas. The focus is also on promoting the participation of a marginalised sector of the community, namely women.

The SDFN conducted its own extensive survey into the socio-economic characteristics of 25 of the 36 informal settlements. The survey indicated that the average incomes were N\$744, with a median of N\$611 per month. The median incomes for women-headed households were even lower, at N\$550 per month, in comparison to the N\$750 per month for male-headed households. Moreover, the minimum subsistence level for a household had increased to N\$1,526, excluding the cost of housing.

The SDFN has seven major objectives that all member groups pursue. These include:

a. Organising communities through savings schemes.

Through saving the urban poor in Namibia are able to use their own resources to become financially stronger.

b. Learning from each other, while doing the work.

Awareness and skills are needed amongst the members to improve their living conditions. These are shared during local (within the same region), national (within Namibia) and international (outside the country) exchanges with people who live in similar conditions. The Namibian groups have learnt how to save daily, collect information, as well as map and plan their settlements. Most importantly the poor have realised that they can do things for themselves and their negotiation position has strengthened.

c. Making land, infrastructure and services affordable.

By saving on a daily basis, no matter how small the amount, the poor are able to use their savings to negotiate with the respective local authority to obtain affordable land. More than one thousand households, nation wide have already obtained land through successful negotiations with the local authorities.

d. Increasing access to funds for income generation, housing and services.

Through the Twahangana loan fund households are able to access loans via their respective savings scheme. In total the Twahangana fund channelled N\$3,657,509 for 304 house-related loans, while the income generating loans amounted to more than N\$400,000 benefiting 716 households.

e. House construction.

The members had completed 400 houses by the end of 2001, with a further 30 under construction. The members usually build two rooms. These average at about 34 square metres and cost in the region of N\$411 per square metre. The members also install their own water and sewer services when they buy the blocks of land.

f. Improving the living environment of the poor.

By developing and transferring skills for the building of houses, raising awareness of local building materials, resources that are available and environmental issues, such as sanitation and refuse disposal.

A support unit was established on 1 July 1999 as a separate trust and kept the name of the earlier association, NHAG. Its main aim is to support the people driven process of the SDFN Their role is to:

- facilitate the activities of the SDFN by acting as the treasury for regional and national activities, ensuring equal distribution of resources;
- advise the member groups and activity teams;
- organise international exchanges;
- open doors of formal institutions to enable the SDFN to access resources
- facilitate the SDFN inputs on policies and legislation
- document the experiences of the savings groups, and finally
- administer the Twahangana fund.

6.4. The SDFN pioneers' land and housing development

Since its inception in October 1998, the SDFN has developed a strong base for homeless people throughout the country. There are more than 182 savings schemes in 42 towns and villages nationwide. There is a total membership of over 8,100, of which Windhoek has some 4,000. The SDFN, with the support of NHAG, have made decisive inroads into the issue of land acquisition and housing for the most disadvantaged groups.

The main target for membership appears to be women, predominantly domestic workers or self-employed with some form of home based industry, such as sewing, or making and selling foodstuffs. In Namibia this group is extremely large, since women are often not supported by the men-folk, who are happy to sire offspring but reluctant to maintain relationships or take responsibility for their children. Thus the poorest women are often the sole breadwinners and heads of their respective households. The SDFN mobilises the most vulnerable members of society and sets up mechanisms that aim to support the

women and, to a lesser extent, men, to obtain secure land tenure and housing. Although the primary goal is housing, mechanisms are in place to offer a broader support to the families in times of crisis and need, as well as for business development.

Each member of the SDFN is encouraged to make daily savings that are used for the ultimate goal of land acquisition and housing, together with the services that are needed such as water and sewage. It is important to make savings on a daily basis, no matter how much one saves, with the understanding that every little bit makes a difference in the long run. When a member has saved with the SDFN it entitles her or him to make a small loan, either from personal savings or the group savings. The loan may be for schoolbooks or fees, an illness or bereavement in the family or to set up a small business.

The net result is that the members are more self-sufficient than they were when working alone. The members attend weekly meetings at which matters such as the savings, progress on the land or housing and other group related matters are discussed. Regular exchanges between groups are facilitated by the SDFN, so that members may share their experiences and learn from one another.

The level of achievement in terms of housing and physical services that some of the Windhoek groups have achieved is outlined below.

Table 2. Housing and service levels achieved by some SDFN groups in Windhoek

Name of settlement	Year of occupation	Number of members	Number of houses	Number of toilets	Number of water points
People's Square	1992	45	45	45	45
People's Force	1995	56	20	20*	3
United People	1996	80	36	36*	2
Habitat II	2000	120	42	13	5
Total		301	143	58	55

*Denotes that these are not yet connected to waterborne sewage system.

Of the 301 households that have secure titles, almost half of them have completed houses and everyone has access to water. In addition, 58 functioning toilets were installed. The other households are in the process of installing individual toilets. It is interesting to observe that less priority was placed on toilets where the surrounding development was not so dense, while more priority was given to obtaining a brick house in these areas.

It should be noted that development in the settlements is incremental and members often evaluate their priorities for development, according to their own ability to pay and needs. It took the first group five years before the members were successful in obtaining individual services and brick houses. The next two groups first paid off their loans for the land over five years and then started building. The Habitat II group began saving

immediately for houses, even before the land was formally secured and this enabled them to start building straight away once they acquired land.

The rate of progress within each group depends upon the group themselves, and may be slow or fast. Some of the older groups, for example, have still not succeeded in addressing the sanitation problems of all their houses, while some newer groups have toilets and running water installed in each completed house.

6.5. The case of People's Square

People's Square were pioneers in self-sufficiency, and unknowing proponents of the principles of Agenda 21, and the shift towards more sustainable human settlement development. Their story is told in the words of a member:

"We started in 1989 as poor people, to work together. We were mostly domestic workers, living in backyard shacks and rented rooms. We often paid half of our monthly income for accommodation alone. As a first step we decided to start saving together and to use the savings to demonstrate to the authorities that we were serious about doing things for ourselves. Our first priority was to secure our own land. In 1991, we bought the first ever communal plot in (an urban area in) Namibia.

We were so pleased with ourselves, and keen to take ownership, that we occupied the plot straight away. The same week that the members moved onto the site, they began negotiating with the municipality for water and sanitation. Each household saved N\$10 to have a communal water tap that CoW installed for us. The members worked on a voluntary basis to form the bricks and build the houses. Each household was required to make one person available to do the work. We worked well together to make bricks, build houses and save. At first the savings were used for the security of the land, but we soon learnt that daily savings for all our needs were invaluable. Together as a group, we have built the houses in two phases, we built the first two communal toilets on site, installed water and sewage reticulation and negotiated for pre-paid electricity to all our houses.

The group continued with daily savings, depending on what individual households could afford. This money is used to meet needs of the members, such as school fees, hospital or clinic charges, or funerals. Any member who is in need is free to borrow, either from the group account or their own individual savings.

In just 12 years we have achieved a lot. All 45 households have a brick house with toilet and running water. Our future plans are to enlarge the houses and convert the corrugated iron shed that we use as a hall into a brick building. Many people from Namibia and the rest of the world, places like Madagascar, Swaziland, South Africa and Zimbabwe have visited us to see what we have done."

In short, the members of People's Square are an example of a well organised group who have shown that by working together, as a group, they can achieve what at first appeared to many to be impossible. Apart from improving their own life situations, they have improved their living environment, without much input from CoW, and very much in line with the principles of LA21, of which they are still unaware.

This group received the first Best Practice award from the National Habitat Committee of Namibia on the International Habitat Day in 1999. Since then, other groups in Windhoek have taken up the challenge of securing land, housing, water and sanitation for themselves and are at various stages of achievements. These include People's Force, United People and Habitat II.

The group does regard their health as important, but have done little to deal directly with health matters. Communicable diseases, such as TB, are common. No one knows the extent of HIV/AIDS, although a member of the group has had HIV/AIDS training for some eight months. Should a death occur in the group, each household contributes N\$5 for the family of the deceased. When an illness occurs the group helps out both materially and physically as needed.

At present the group is not as active as it once was. In the past they had income generation activities, but these have now stopped. Their future plans are to extend their houses by one or two rooms, build a community kindergarten and rebuild the hall/office with bricks. The hall is hired out for church worship.

The words of Dr. Nicky Iyambo, Minister of Regional and Local Government and Housing, at the opening of phase II of their development of 45 houses, echo the pride and sentiment of their achievement: "I am proud of what you have achieved... Let it be known that it was women who achieved this."

6.6. The case of United People

This group, consisting mostly of long-term domestic servants and Windhoek residents, started in 1990. Since they were a large group, they divided into two, and became United People with 55 members and People's Force with 80 members.

At Independence the CoW allocated land near Goreangab dam as a reception area for new urban immigrants, but these people soon fell into arrears with their payments. A portion of the land was allocated to United People in 1994, and they moved during February 1995. Those with the most severe accommodation pressures and/or building materials were the first to move onto the site.

The land cost N\$81,500 and a deposit of N\$18,000 was paid from the group savings. Each member saved N\$50 per month and contributed N\$300 towards the deposit on the land. The members themselves cleaned and tidied the plot by removing the grass, shrubs and litter that was there. Upon their arrival at the plot there was no water or toilets. A request was immediately made to CoW for a communal standpipe tap and the members built two toilets.

Members of People's Force recall how they worked together to obtain water:

"When we moved onto our land, we did not have any water. So we asked our neighbours, United People, if we could use their water. We paid them N\$70 per month for this resource. In the meanwhile we saved and collected money amongst ourselves. With the money we bought water pipes, taps and a water meter. Each member contributed N\$70. Initially we installed one tap and shared the monthly water bills

between the members. To date, we have three communal taps. It is our aim to have water in each of the houses one day.”

The group made a register for cleaning the communal toilets, but all members did not follow this and soon the toilets fell into disrepair and eventually disuse.

When all of the members were on the plot, they started with their daily savings. One of the members was elected to collect the monthly money payable to CoW, for bulk water and refuse removal. When members have saved N\$700, they apply to the Build Together programme for house loans. Each house has two rooms and a toilet. While members were primarily responsible for the building process themselves, builders were also hired to help. Twenty-three houses were built in the first round. Since the building of houses is dependant upon the individual household savings and their priorities, some members have not yet managed to save their N\$700 and still live in shacks on the plot.

Currently, there are no individual installations of water to the houses and they still rely on the communal taps. The CoW provides electricity to the houses on a pre-paid basis. The shacks can also access electricity. No deposit has been paid for electricity and members have 15 years to pay off the installations, the cost of which is recoverable from their electricity charges.

Although the problems of homelessness and landlessness are being resolved, there are other serious problems facing the group. One of the most severe is the lack of toilets. The communal toilets have been abandoned due to their unhygienic conditions. Members claim that the sewage pipes were too small to cater for the amount of sewage. Most residents of United People tend to use the bush for their toilet. This means that there is no control over where people squat. The brick houses with private toilets need to have water carried to the toilet because there is no piped water. There are five biogas toilets in the settlement, which were installed at great cost. These were piloted by the University of Namibia but are unsustainable due to the small amount of raw sewage that is deposited there.

The CoW provided three large municipal bins for refuse. They also remove the refuse. The surroundings are filthy due to a complete lack of care by many residents and neighbouring communities. From time to time, the committee from People's Force organises a clean-up and tries to emphasise the importance of a clean environment.

The members say that a clean and tidy environment is important to them, but little evidence of this is visible. They claim to have dreams of improving their situation of poverty, through such means as small business opportunities, expanding their houses to make them more comfortable and enabling those living in shacks to build brick houses.

All the activities of United People demonstrate a desire to improve their own living environment through providing adequate shelter and promoting affordable infrastructure, while focusing on the special interests of women-folk and building their capacity for decision making and economic empowerment. This is very much in line with the objectives of sustainable human settlement development outlined in Chapter 7 of Agenda 21. Through better housing, water, clean-up campaigns, and – although not yet resolved – a desire to improve their sanitation, the residents of United People have worked together as a grassroots organisation to make these improvements, with little direct input or evidence of influence from the CoW in terms of LA21, The top-down

approach, as commonly taken for granted as the *modus operandi*, does not apply here. Rather, the initiatives have all been set in motion with clear objectives and direction from the bottom up. In the words of a woman member from United People:

“We know our needs better than other people and can ease our lives if we join hands as one group to improve our own conditions. Life is not easy, and often does not turn out according to our plans; but we must always plan and move forward. A lack of planning makes our lives disorganised and without progress. I personally want to improve my living conditions. I do not want my children to sleep in a shack, therefore I work very hard to save money so that I can extend my house.”

6.7. The SDFN environment and health programme

The federation has identified health and environment as a new activity – which is very much in line with the objectives contained in section one of Chapter 6 of Agenda 21 (Protecting and Promoting Human Health). The level of cleanliness affects them directly. These issues are much more important than to better off families living in different conditions in Windhoek. In the words of a member:

“It is very important to stay healthy. We cannot build houses, or look after our children, if we do not have a long life.”

The immediate objective of the programme is firstly to raise awareness concerning the health of residents, and so promote activities improving the environmental health conditions. Other objectives are to decrease killer diseases in the community, as well as improve the care for people suffering from the major diseases. The Ministry of Health supports the Namibian Tuberculosis Association (NAMTA) to facilitate community involvement in caring for TB patients. The SDFN have health workers in each of the settlements, who work on this programme. CoW themselves are not involved in the SDFN health programmes.

Some of the activities through which SDFN aims to address environmental health issues include:

- resolving the problems of refuse;
- building toilets by residents, as soon as, if not before, they move onto their block of land;
- savings schemes to develop care-giving activities, including home-based care, such as for tuberculosis and gastroenteritis.

The SDFN works in close association with NAMTA to train members on how to deal with these issues. They meet on a weekly basis, as well as having an opportunity for raising health related matters on a daily basis with their savings groups. Among the issues raised are that standing water can result in mosquitoes breeding and spreading malaria; that refuse lying around in the environment may spread diseases; and that the use of toilets in a densely populated urban environment is essential for good health.

Since parents often find it difficult to communicate to their children regarding health and sexual behaviour, the SDFN have held pilot cultural festivals, throughout Namibia, where

traditional songs, dances and stories are used as a means of opening communication for discussion on these matters between the generations.

It is commonly presumed that shack dwellers do not regard toilets as a priority in their needs. Toilets are thought to have a low priority in their lives, with shack dwellers content to use the bush. It is also widely believed that the majority of shack dwellers are residents who have migrated from the rural areas of Namibia and thus may not have had exposure to latrines. Traditionally toilets were not built in low-density areas, even in the smaller villages and urban areas of Namibia.

From the four groups who were interviewed for this study a very different situation emerged. Either a new awareness is developing, or the conventional view of shack dwellers has been informed by prejudice.

The four groups are amongst the oldest members of the SDFN and NHAG are also long-term residents of Windhoek itself. The bulk of the older SDFN members lived in Windhoek before Independence and, due to the policies of the time, were forced to reside in backyard, or rent rooms in existing houses in Katutura. After Independence people experienced freedom of movement and started moving out of the crowded conditions and finding alternative places to live as independent family units. Many turned to building their own shacks on vacant land on the periphery of existing development in the north-western suburbs.

The majority of members in these four groups are accustomed to using toilets, and they regard toilets as a priority and recognise the need for these in their homes. From the case study of People's Force it was said:

“There is limited access to sanitation facilities. Therefore I have to use the outdoors to relieve myself. I think that we must mobilise one another about the importance of a toilet in our homes. To use the outdoors, especially in a city is dangerous. It is unsafe, and even harmful to our environment and health. Water is not a problem, even if there are not individual water facilities.”

Another environmental issue which the SDFN environmental health programme addresses concerns the use of Mbwangu Stoves. These are essentially more efficient wood burning stoves that help to reduce the amount of wood a family consumes in their daily lives, thereby reducing their costs and also the number of trees consumed as fuel. A further indirect benefit is lower emissions of particulates into the immediate atmosphere. This involves the sort of environment and development synergy advocated in Agenda 21 – reducing deforestation, managing the fragile ecosystem, and reducing toxic emissions into the environment.

Each federation group has at least one member who can raise awareness about their use and train others to make the stoves. An evaluation of the environmental health programme was held during July 2001, to determine whether the programme was on the right track. There were members from Windhoek, the national leadership, as well as NAMTA, the SDFN health team, and other ordinary members. Apart from discussing the health issues in a workshop setting, the participants also attended two community meetings where the health issues were topical. Their vision for the future was longer, healthier lives, and good neighbourly relations. They also want to reduce poverty and secure land and housing. Their methods for achieving these include working together,

sharing ideas, saving together, and dealing with their land matters together. They can sing and dance together as well as supporting each other.

Arising from the workshop, members identified a list of strengths and weaknesses. These are listed below.

Table 3. SDFN strengths and weaknesses with regard to the environmental health programme

STRENGTHS	WEAKNESSES
<p>1. The members of SDFN have taken collective actions to obtain land and build houses. They therefore have a culture of working together, that the health team can build upon.</p> <p>2. The members have accepted the health programme as part of the SDFN activities.</p> <p>3. The health team comprising 25 to 30 members meets NAMTA every fortnight.</p> <p>4. The SDFN members learn from exchanges between each other and not workshops.</p> <p>5. The members attend community meetings in their groups on a weekly basis, and use the same platform for their health matters.</p> <p>6. The group has access to NAMTA who can make technical information available.</p> <p>7. The health team is highly motivated and has begun to work with board members and clinics.</p> <p>8. The group has the opportunity for exchanges with Zimbabwe.</p> <p>9. Cultural events strengthen relations between the generations.</p>	<p>1. The health programme takes up too much time in classrooms (with lectures from NAMTA) and not enough takes place in the community.</p> <p>2. The programme focuses on providing technical information instead of dialogue between the members over matters that concern them directly.</p> <p>3. The community meetings deal with all matters of the group and health is discussed at the end, if time permits.</p> <p>4. Meetings are seen as the only way to exchange information about health matters.</p> <p>5. The programme has not yet engaged the communities and there are no community actions.</p> <p>6. NAMTA's role as pacesetter of the programme prevents ownership by the members.</p> <p>7. New women members need to be strengthened, to encourage their participation, as they are usually quiet during meetings.</p> <p>8. Minority group opinions are not well represented, nor their ideas taken seriously.</p>

After the above exercise the participants identified the opportunities and constraints of the SDFN groups with regard to what they could do towards improving the health in their living environment. These are summarised below.

Table 4. Opportunities and constraints for developing the environmental health programme

OPPORTUNITIES	CONSTRAINTS
<p>1. The programme has the possibility to bring the communities closer together, because people will help each other in times of crisis.</p> <p>2. The programme can elicit collective community action because the community will take responsibility to improve their circumstances.</p> <p>3. People with fewer resources who have problems are supported and protected by the rest of the community.</p> <p>4. Every community can control their environment and behaviour for a better way of life of their members.</p>	<p>1. Cultural differences can obstruct the collective actions to support each other.</p> <p>2. The programme can end on an awareness-raising basis and not be reactionary.</p> <p>3. The members do not always see the benefits of the programme and do not take it seriously.</p> <p>4. It takes time to change behaviour.</p>

After much discussion the participants proposed the following:

- That the programme be structured by the members themselves, with the health team doing most of the facilitation.
- That emergency actions need to be worked out in the communities.
- The community can resolve their own problems such as keeping toilets clean and picking up litter.
- The meetings need to be planned, with information given out, but the actions must come from the members themselves.
- NAMTA is a resource from which the community can obtain technical information.
- The culture festival occurs monthly and could be followed up with youth and older people's programmes.

Where communal toilets are not available within the informal settlements, the issue of toilets has become prominent in the recent health program of the SDFN.

6.8. Members of SDFN learn about urban agriculture

Recently representatives from various member groups of SDFN attended a week-long training in permaculture, which essentially equipped them to cultivate foods and protect themselves from the harsh dry environment in which they live while approaching it holistically.

Armed with these skills, it is planned that the representatives will implement the practices learned and teach others in their community. Support from the workshop is initially envisioned and later, it is hoped that members will take over. Technical support will continue to be provided by the Polytechnic, to ensure that course participants will be

able to incorporate permaculture principles into their existing gardens, or in new gardens in the case of those who have yet to establish a garden. The technical support from the Polytechnic include monthly meetings by an agricultural specialist to address the following two objectives:

Firstly, to provide advice and encouragement that will ensure that the SDFN garden is fully planted and correctly managed, thereby becoming an inspirational model for the members. Secondly, to encourage participants in their gardening at home. This will come about through the regular exposure of each person to the others' gardens and to the technical advice that will be given.

During the training, it was proposed that encouraging course participants to work alongside people in their specific settlement areas would best ensure the replication of the ideas. Thus the participants would encourage others to assist them as they establish their own garden. Members of CoW participated in the training.

7. The relationship between the local authority and grassroots movements

7.1. The emergence of a new partnership

For the past three years there have been significant changes in the approach taken by the CoW towards low-income development. During this period, massive new developments in infrastructure have helped develop areas such as Big Bend, now known as Havana. Some 700 households were relocated and settled there at by the beginning of 2001. An additional 3,000 erven are in the process of development in the Otjomuise extensions. A further eight settlements (Havana sections One and Two, Okahandjapark A,B and C, Ongulumbashe One and Two and Twahangana situated in Goreangab) are all earmarked for upgrading and improvement of basic services.

The CoW also recognised that its conventional approach was not proving able to keep up with the demand for development of this nature and, furthermore, was not catering adequately for organised groups who wanted to play leading roles in their own self-development.

Over the same period the massive movement by low-income people, triggered by initiatives of the SDFN and NHAG has resulted in an upsurge in both individual savings and savings groups. At the end of 2000 there were more than 80 savings schemes in Windhoek alone and members had saved over N\$430,000 between them. Thus, the CoW acknowledged that these community actions needed to be brought on board to address the challenges facing the city and its low-income community.

This partnership, as yet still comfortably informal and unnamed, has been responsible for establishing an excellent dialogue between two disparate groups that were previously totally inaccessible to each other. Regular meetings are held between CoW, NHAG and the SDFN where issues of land ownership, servicing and such like are discussed, prioritised and actions taken.

While the relationship is still new, and needs a few matters to be resolved and understood by the respective parties, it is nevertheless a powerful base from which both the CoW and the SDFN can build in the medium- to long-term.

Agenda 21 states that efforts to reduce urban poverty should be taken through a number of actions, one of which is to encourage the establishment of indigenous community-based organisations that can contribute to the efforts to reduce poverty and improve the quality of life for low-income families. In Windhoek, low-income groups have formed a national network of low-income peoples and, together, they share ways of overcoming their poverty and improving their quality of life. For example, in the absence of any subsidies, people have developed strategies for affordable infrastructure. This participatory approach to sustainable development is based on local and international exchanges and 'learning by doing'. It is mostly women who are involved in this process, which also accords with Agenda 21 principles.

Without any specific intervention from CoW, communities have empowered themselves through building their own network to manage their environment – in line with Agenda 21. However, since this empowerment has emerged from the groups and their network, without any explicit support from CoW, there are no formal LA21 structures. It would,

however, be easy for CoW to incorporate these experiences into its LA21 programme for Windhoek. The logical forum for recognising this is WELA.

This cooperation between municipality and saving schemes, as reflected in Windhoek, convinced other local authorities in Namibia to give access to land to community groups. Exchanges involving local authority officials, councillors and community members who had visited Windhoek resulted in positive outcomes in other urban areas. The CoW is still the most advanced in the country in that they have adopted a strategy based on the work done by communities, and this will enable the CoW to plan in advance for the needs of a community-based organisation.

7.2. From policies to practice

In discussions with CoW and the SDFN savings schemes within Windhoek a number of emerging tensions and issues in the realisation of the Policy on Access to Land and Housing were identified. These are discussed below.

The perspective of the community groups reflects their longstanding historical position, as well as their more recent activities. Hence, they felt frustrated with the delays in securing land but at the same time they do not feel able to address the municipality as equals. "We are beggars", as one leader put it. Underlying that statement is a strong sense of powerlessness and dependency that reflects these peoples' past experiences in dealing with authority. This powerlessness is reflected in their acceptance of conditions perceived to be dictated by CoW, often without discussion or negotiation. For example, there are concerns in the SDFN about how long individuals have to be members before they are eligible to apply for land, but members have been reluctant to raise this issue with CoW. As described earlier, Ipeleng Bomma Savings Scheme shows the same dependency in their rapid acceptance of land in Havana, on the north-western edge of the city. The members have had to move to make way for middle-income housing development. However, since the land they moved to was far from their schools and places of employment and income generation, this resulted in reduced income and increased costs. This issue was not raised effectively with CoW prior to the move.

The main priority of the community leaders is to speed up the delivery of the land, along with concerns around the location of sites. The lack of services on undeveloped sites is particularly difficult for mothers anxious to secure schooling for their children. There is very little sense that obtaining land is determined as a result of negotiation and partnership with CoW – although, equally, the community leaders do not see CoW as hostile to their interests. The level of uncertainty about which savings group will access land and when has resulted in joint membership of different groups, so that individuals can maximise their chances of securing land. This obviously weakens the groups themselves and, moreover, is a problem for CoW (see below).

The cost of land purchase is not considered to be a major issue by the groups. They believe that their members can afford the existing charges, although it is questionable whether they can then also afford a loan to build a brick house. One group that has secured land is currently behind with their repayments. The SDFN leaders believe that this is a result of the process of resettlement and subsequent organisational difficulties

rather than affordability *per se*. However, when large numbers of SDFN members access land, there may be lower-income households that find the repayments difficult.

From the perspective of the CoW officials, it is difficult to scale up the delivery of serviced plots. Numerous reasons were suggested, including that the planners were concerned that funds were limited and hence development could not take place rapidly. These concerns were, interestingly, not shared by the finance department of CoW, which believes that the required funds could be raised on the capital markets. However, whatever the financial possibility, inevitably the construction industry takes time to respond to an increase in demand. During 2000 particular delays occurred because of the requirement for environmental impact assessment on all new developments, although this process has now been completed for the low-income areas that are currently developable.

More directly related to the development of low-income sites, is the fact that, at present, an expensive feasibility study is required to match interested groups to available sites. The feasibility study assists groups in determining what they can afford and which areas might be suitable. Assistance is also offered in setting up community organisations and representative structures. Consequent delays have resulted in questions being raised as to the practicality of such arrangements. As the delays lengthen, CoW faces a problem with the people trying to join multiple self-help groups in order to increase their chances of obtaining land. There appears to be a recognition that simpler and more cost-effective ways of matching applicants to land and services are needed, particularly in the case of undeveloped sites.

As discussed above, the location of land is a particular problem, with distant areas causing particular difficulties in families seeking to secure their livelihoods.

The upgrading of existing poorly serviced areas is, perhaps unexpectedly, proving to be problematic. Typically, not all residents will agree on the desirable and affordable level of service improvement. Hence, some will have to be moved out of the area to alternative sites, prior to upgrading taking place. There are obvious difficulties in securing agreement about what improvement will take place and what will happen to the families that need to be moved.

As noted earlier, land is sold to individuals or groups with repayments spread over a number of years. The credit control department of CoW is concerned that repayment levels are often poor or seriously problematic. Staff emphasised that, in their experience, low repayment reflects residents' frustrations with CoW services and the multiple demands on their meagre salaries. If repayments from an area are considered to be too low – for example, less than half of what is expected – CoW staff visit the neighbourhood for a general meeting of the local neighbourhood committee. At the meeting, which is open to all residents, it is explained why it is important that residents should pay. Any queries and complaints are answered as well. After such meetings, monthly repayments usually double for a while.

CoW's experience with repayments from self-help groups such as the SDFN is not universally good. However, they acknowledge that most of the groups are strong payers. A further advantage in working with the SDFN is that they undertake the capacity building in the grassroots organisations themselves, thereby reducing the burden on CoW staff. For example, some elements of the feasibility study information are included

in mobilisation work undertaken by these self-help groups that are organized through the SDFN.

7.3. Proposals for future development

The CoW has demonstrated a willingness to overturn conventional approaches to standards and regulations in order to reach low-income groups with improvements that are affordable to them. Its policy also acknowledges the importance of representative organisations, seeking to create and nurture them in order to strengthen local networks and group savings schemes within low-income neighbourhoods. Consequently, the foundations are in place for a cost-effective and participatory strategy that provides better housing and services for the most marginalised members of the society.

At the same time, CoW's programme faces expansion constraints because of the high cost of providing labour-intensive support for strengthening grassroots savings schemes. The repayment figures for land and services to individual plots suggest that the neighbourhood committees, facilitated by the CoW through their community development officials, have a relatively weak capacity. The long preparation period has resulted in delays in land allocation that are more than frustrating for communities. The savings schemes appear ill-informed and often confused about these delays. Without a recognised process that results in land allocations, it is difficult for groups to prepare and strengthen their members.

There would appear to be an advantage in a more formalised set of partnerships with grassroots organisations that have the capacity to prepare communities for land ownership and to strengthen the management capacity of local grassroots organisations once land is secured. Such organisations might negotiate arrangements with the council on the basis of comparative advantage in preparing groups to develop land and in managing this resource responsibly. These partnerships may also assist in areas of upgrading as the SDFN can help manage an alternative process. Rather than relocating those residents that cannot afford improvements, it might be preferable to enable each household to connect as and when they can afford the improvements. Whilst this would be difficult to monitor by an external agency, a community organised around savings might better manage the process.

Through such a partnership plans for a more integrated city might also be realisable, with careful strategising about how the municipality can successfully secure better located sites for low-income families in ways that demonstrate 'win-win' benefits for all Windhoek's residents. At the same time, coordinated lobbying of other government departments may be more effective in ensuring investment in schools and health clinics when families first move onto their undeveloped area, wherever it is situated.

8. Conclusion

The SDFN, as a grassroots organisation, has achieved a considerable amount in terms of meeting the LA21 objectives of sustainable human settlement delivery. Its link to a global alliance of poor peoples called the Shack/Slum Dwellers International (SSDI) – linking grassroots movements across Africa and Asia – offers opportunities to strengthen its actions through the sharing of experiences.

The majority of members are women – a group that is usually acknowledged as the most disadvantaged and which generally has least opportunity, in terms of income and status, to acquire secure tenure in an urban area. SDFN has co-ordinated group actions for daily savings to increase empowerment and opportunities for negotiations with CoW. SDFN has secured affordable land and housing, improved members' access to water and sanitation and addressed the issue of pollution in their living environment by organising CoW refuse collections, clean-up campaigns and promoting fuel-efficient stoves.

Finally, the strength of SDFN has demonstrated to CoW that its members are serious in their efforts and this has resulted in close cooperation with the sustainable development division of the CoW. Representation on WELA, gives SDFN a voice to raise environmental matters that concern its members at a higher city level.

The CoW, on the other hand, has a reputation for being the most progressive local authority in the country, and claims to be one of the most open minded in southern Africa. It has incorporated LA21 principles into implementations at city level, especially with regard to sustainable human settlements. It has responded well to the pressure of the SDFN and recognised it, as well as inviting members to participate in WELA. However, while some internal relationships within CoW need to be resolved, the relationships between CoW – via WELA and local stakeholders – is a good platform for LA21 activities. One of the ways to do this is for SDFN to include in its environmental focus the issues of household environment.

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Tjiramba, Agnes: Co-coordinator for NAMBTA health program.
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Evelyn Tsuses: Habitat II resident and member of SDFN.
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