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**CONSTRUCTIONS OF NATURE AND ENVIRONMENTAL
JUSTICE IN DRIFTSANDS NATURE RESERVE, SOUTH
AFRICA**



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Declaration

I, Anis Izzat Anis Saleh Mustafa Abdelrazeq Daraghma, hereby declare that this thesis is my own work both in conception and execution. The view expressed and conclusions researched are my responsibility.

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List of abbreviations

CAPE	Cape Action for People and the Environment
CBD	Central Business District
CCT	City of Cape Town
CLUTP	Committee for Land Usage and Transport Planning
CMA	Cape Metropolitan Area
CMC	Cape Metropolitan Council
CMCA	Catchment Management Department of the CMCA (now City of Cape Town)
CMOSS	Cape Metropolitan Open Space System
CN	Cape Nature
CNdV	Chittenden Nicks de Villiers
CTIA	Cape Town International Airport
DEC	Driftsands Environmental Centre
DECAS	Directorate for the Department of Environmental, Cultural Affairs and Sports
DNR	Driftsands Provincial Nature Reserve
DWAF	Department of Water Affairs and Forestry
IMEMS	Integrated Metropolitan Environmental Management Strategy
IMEP	Integrated Metropolitan Environmental Policy
MCDP	Ministry of Constitutional Development and Planning (former)
MOSS	Metropolitan Open Space System
MPPA	Ministry of Planning and Provincial Affairs
MSDF	Metropolitan Spatial Development Framework of 1996
NGO	Non-Governmental Organisation
PA	Provincial Administration of the Cape of Good Hope (the Western Cape)
PGNEC	Provincial Government, Department of Nature and Environmental Conservation
RSA	Republic of South Africa
RSC	Western Cape Regional Services Council
TMBHU	Ticket Mosaic Board Habitat Unit
WCNCB	Western Cape Nature Conservation Board
WSSD	World Summit on Sustainable Development

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Abstract

This thesis provides an analysis of the discourses of nature conservation in South Africa and Driftsands provincial nature reserve from constructionist and environmental justice perspectives. At the outset I examine the theoretical framework on the social construction of nature and that of environmental justice. I then discuss the history of nature conservation in South Africa. Finally I analyse the discourse (nature conservation and local communities) surrounding the Driftsands Provincial Nature Reserve (DNR). This nature reserve is located one kilometre east of Cape Town International Airport, in the Western Cape, South Africa.

My analysis of the first theoretical framework (the social construction of nature) confirms that a) the idea of nature is constructed over time; b) nature, as a concept and a phenomenon, is complex; c) nature discourses reveal, hide, and create 'truths' about nature which are accepted as being truthful yet are a question of social struggle and power politics; d) humans have amassed countless definitions of the word 'nature'. Those definitions are categorised by Castree and Braun (2001) into three groups: external, intrinsic, and universal. My analysis of the second theoretical framework (environmental justice) suggests that the idea of nature can be used constructively or negatively depending on who uses it and why. The link between both theoretical frameworks suggests that nature is bound up with agendas. Humans construct natures to pursue individual, social or political agendas. From this standpoint the focus of the thesis shifts from debating whether or not nature is socially constructed to examining what type of agendas were pursued to achieve those 'natural' constructions, and what their consequences were for local communities living in and around protected areas. In order to achieve this, I employed four interlinked analytical methods (stakeholder, discourse, critical and ideological analysis).

My analysis of the case study of DNR and that of the history of nature conservation in South Africa suggests ideological similarities. First, in both cases nature conservation is inspired by external environmental views. In the colonial period of South Africa, nature conservation policies and practices were shaped by English and Afrikaner protectionist ideas and aimed also to address the demand of their naturalists, sportsmen, and explorers for hunting and exploiting wild animals. In post-apartheid South Africa, nature has been

constructed in protected areas according to universalised environmental views and to some extent has been proactive, meaning that it aimed to address some of the social challenges. Likewise, at DNR, nature conservation was adopted in the early 1980s by the white government to pursue political agendas. In the late 1980s nature conservation began to be influenced by universalised environmental views.

Second, the ideological nexus of both discourses regarding nature and local communities suggests conformity with global environmental models. Under these models the normal course is: a) to fence local communities from protected areas or to fence protected areas from local communities, b) to maximise the boundaries of protected areas, or to minimise the settlements of local communities in protected areas, c) to regulate local communities' access to protected areas and natural resources, d) to promote persuasive concepts of ecotourism to achieve nature conservation goals through community participation, co-benefiting local communities from protected areas, co-managing protected areas with local communities, and local socio-economic development, e) to aim for the removal of the on-site communities from protected areas.

The impoverishment of the DNR on-site communities has been effected by means of three ideological principles. Since 1990, DNR's on-site communities have been labouring under a state of emergency – the state of living below the flood line; the state of high level of house robbery and a worrying level of rape and child abuse. Their dispossession has led to the spaces of temporality – a state of informality and limited public services and hopelessness (there is no hope of sustaining settlements on the site). Currently, these communities are cornered between two choices. Either they voluntarily relocate their shacks into the surrounding townships or they live with the state of emergency, hopelessness and temporality. Local communities of other protected areas in South Africa have been similarly impoverished by these states of emergency, temporality and hopelessness.

During the colonial period, South Africa's conservation discourses were predominantly white-based. Whites constructed the common sense among themselves that they own the land and wildlife. Constructing the idea that they are the people of the land meant also suppressing the non-white sovereignty over land and natural resources. For example, "Until late in the twentieth century [South African children's literature in English]

usually endorsed the assumption held by whites that they had exclusive ownership of the land and wildlife” (Jenkins, 2004: 107). While whites were protecting South Africa’s wildlife, they also alienated blacks from nature. It is just recently, after 1994 that, “English-Language children’s writers and translators of indigenous folktales for children have begun to explore traditional beliefs about and practices in conservation” (Jenkins, 2004: 107). These statements do not state or imply that English literature on human-nature discourse began to explore the idea of harmony where indigenous people live and depend on wildlife. In South Africa, it is typical for non-white communities living in or around protected areas to be relocated voluntarily or by force from their land or their settlements, and to be denied resources they had traditionally used within protected areas.

Finally, both contemporary discourses continue to be in line with various universalised conservation models. Although both discourses have evolved over time, the status quo of local communities has remained the same: impoverished by exclusion from protected areas, permitted participation in only insignificant co-management models and recipients of intangible benefits. Although the contemporary discourse on nature conservation appears to be more considerate of local communities, I suggest that it is early days for this young discourse to achieve harmony between people and nature. It is up to local and national governmental and non-governmental agencies to modify global environmental views rather than fully adopting them, in order to be more respectful and accommodating of local communities.

Chapter 1: Introduction to DNR and the social construction of nature

The aim of this thesis is to unpack the argument that nature conservation is variable, hegemonic, appealing, and contributes towards the creation and maintenance of unjust environments among some, not all, local communities living in and around protected areas. The thesis acknowledges that nature, as a concept and a phenomenon, is complex. Humans have accumulated universal, regional, national, and local ideas and vocabularies about nature. Furthermore, humans developed ideologies concerning the natures of things, individuals, and groups, whether they are humans, animals, part of the flora or fauna, or the atmosphere. The accumulative ideas, vocabularies and ideologies about nature are not necessarily an identical representation of what natures are about but they match the common sense among humans on what nature is. Therefore, what humans conserve, protect and reserve as natures is mostly in line with their ideas of what nature is and how it should be used and managed. Foucault hints that in history pure construction does not exist. There is no “correct, clean, conceptually aseptic kind of history” (Foucault 1980: 64). What is there in the history of human construction is the history of competing agendas. What is there is construction that is motivated by “political meaning, utility, and effectiveness [that] “has some kind of involvement with the struggles taking place in the area in question” (Foucault 1980: 64). In support of the general and the particular argument of this thesis I unpacked theories about the social construction of nature and those of environmental justice. At the empirical level, I examine the nature conservation discourse in Driftsands Provincial Nature Reserve (DNR) in the Western Cape, South Africa and its consequences on neighbouring communities.

The thesis appreciates that there are different views on nature. These include the views that nature is constructed, not discovered, historically produced and known (Haraway 1991; Escobar 1996), beyond people’s grasp and is the first inner principle of all that belongs to the existence of things (Immanuel Kant). Nature is a human mirror (Wagenbaur 1995), God’s made mirror (the holy Quran), and came from the history of the cognitive (Eden 1996). It is also a political tool (Harvey 1974 and 2000; Wilson 1991; Blaikie et al 1994; Kong and Yeoh 1996; Proctor 1998; Araujo 2000; Delaney 2001; Kant, Immanuel, 1724-1804), an “expression of purpose; purpose is that which

finds expression in determinate sequence” (Morgan 2005: 185). Views on nature also hold that nature is humans’ motherhood (Semple 1911), a ‘fixed domain’, is externalised, universalised, and intrinsic (Cloud 1988; Castree and Braun 2001; Lenton and Oijen 2002), and appears as a globalised commodity (Eden 2001). Malthusians see nature as “precarious and unforgiving, vulnerable and constraining on human agency (Hass 2002: 3).

The analysis in this thesis is informed by the work of critical human geographers (such as Maano Ramutsindela, Leslie Gray, William Moseley, William Cronon, Noel Castree, David Demeritt, Derek Gregory, Piers Blaikie, and Neil Smith) and the sociologists Robert Bullard who questions the morality of nature discourses. These scholars seek to expose how ideas about nature are universalised with negative consequences to local communities, especially those in developing countries. The thesis confirms that ideas about nature, and therefore the environment, are developed and constructed from universal, instinctive or external ideas through knowing nature, engaging with nature and remaking nature (Castree and Braun 2001). Specifically, the thesis draws on knowledge from two bodies of work, namely, the social construction of nature and environmental justice. Both account for the deliberate construction of unjust environments among local communities during the process of creating protected areas. They also consider time, space, local communities, the social ends of environmental policies, and environmental discourses; themes that are relevant to the understanding of the socio-political aspects of DNR. Two important lessons can be drawn from research on the social construction of nature and environmental justice. First, human beings naturalise space to achieve certain agendas, such as enriching themselves, impoverishing others, excluding themselves from others, or excluding others from themselves. Second, over time the process of naturalising spaces affects people living in and around those spaces. For these reasons, the study assesses the construction of DNR as a conservation space over twenty-three years and distinguishes discourses in three historical periods: 1983-1993, 1994-2006, and post-2006.

The approach of this thesis in analysing the construction of nature at DNR over a period of time is in line with Blaikie’s (2001) argument that the more appropriate approach to the analysis of environmental policy is to specify social ends of environmental policy in a more accountable way, and to incorporate formerly marginalised voices. Blaikie

suggests that analysts of environmental discourses should look beyond nature conservation cliché such as ‘local economic development’, ‘community participation’, and ‘ecotourism opportunities’, co-management and the co-benefiting of local communities in the process of constructing protected areas. Analysts of environmental discourses should look at time and its ends (social effects of constructing protected areas), space, local communities, the dominant environmental discourses and their authors. These should be the focus of research during the process of deconstructing environmental discourses.

In reality, the construction of protected areas among local communities is not highly appreciated. Local communities seem to gain a handful of low-paid jobs while their local knowledge is used (exploited) by conservation agencies (Passoff 1991; Bookbinder et al 1998; Anstey 2001; Hulme and Murphree 2001; Pujadas and Castillo 2006; Klein et al 2007; Dunkel 2007; Brayn 2009). Furthermore, nature conservation has frequently led to the relocation of local communities from their land, the destruction of their self-sufficient systems, and has contributed to the collapse of their moral values (Yeld 1997; Neumann 1998, Schroeder 1999; Honey 1999; Dowie 2006). Local communities who are expelled from their lands have found themselves subjected to the exigencies of temporary residency for long periods, emergency and exclusion (Ghimire and Pimbert 1997; Neumann 1998, Castro and Nielsen 2001; Dowie 2006; Mburu and Birner 2007). As will be shown in the various chapters of this thesis, local communities have found themselves relocated to inferior land around protected areas: areas of limited public services, areas below the flood line, areas near dumping sites, areas of low fertility, areas of high incidence of fire, and areas of low levels of security.

1.1 Theoretical orientation of the study

The study draws on literature both on the social construction of nature and on environmental justice, the aim being to understand the creation of unjust environments. This literature highlights that some social ills are associated with certain ideas of nature. However, research on environmental justice and the social construction of nature arrives at this same conclusion from different angles. On one hand, the general body of work on the social construction of nature focuses on the conceptions and ideologies of nature

(Gerber 1997); social and environmental problems (Conca 1995; Hannigan 1995; Demeritt 2002); scientific knowledge and the phenomena of nature (Woolgar 1988; Demeritt 2002); and the material manifestation of nature (Castree and Braun 2001; Latour 2004).

On the other hand, the general body of work on environmental justice focuses on the deliberate impoverishment of local communities and the environmental discourses underpinning this theme. It is concerned with the negative effects on social groups, some of which are subjected to state of temporality, emergency and hopelessness in these circumstances. The case study of this thesis illustrates just such an outcome. The theoretical framework of work on the social construction of nature complements that of environmental justice: the first is about people's perspectives of constructions of nature (Castree and Braun 2001). Both frameworks are essential to scrutinise unjust environments. Constructionists argue for unblocking the 'realities' based on the perspectives from which discourses of nature are constructed; and as much as those discourses appear natural, they also have the potential to hide, distort, or create some truths, which are unjust for some social groups. Thereafter, constructionists denaturalise- or deconstruct the idea of what is natural and accepted – static, unfair, or unjust 'natural' constructions; and the arguments of constructionists of environmental justice provide remedies to unblock those static, unfair, or unjust environments. On these grounds, the thesis draws on Castree's work and that of other critical scholars in order to establish and demonstrate the links between constructions of nature and environmental justice.

Castree and Braun's book, *Social Nature* (2001), focuses on the common thinking among contemporary radical human geographers who argue that discourses of nature are human creations. The practical side of the society-nature nexus is that societies in the past and in the present have physically interacted with nature in different ways. The form and the consequences of this interaction are a key concern for both the technocratic and eco-centric approaches to nature in geography. However, both approaches tend to see nature, in the physical sense, as non-social. It is this notion of non-social nature that underpins the familiar geographical vocabulary of society 'impacting on,' 'interfering with,' or 'destroying' environments. Against this, many critical geographers insist that it is impossible to physically disentangle the social and the natural. In reality, our ideas, views and practices on nature are socially constructed. In other words, humans socialise

nature. Socialising nature does not mean denying “the material reality of those things we routinely call nature – be they trees, rivers, animals, or anything else. Rather it’s an instance that the physical opportunities and constraints nature presents societies with can only be defined relative to specific sets of economic, cultural, and technical relations and capacities” (Castree and Braun 2001: 13).

Therefore, the physical characteristics of nature are contingent upon social practices: they are not fixed. Critical geographers have, in recent years, made this important argument in four main topical areas: a) hazards can only be defined relative to the vulnerability of different groups in the society (Blaikie et al 1994); b) natural events like drought mainly trigger famines but do not cause them (Yapa 1996); c) the way poor communities use (and abuse) local resources depends as much upon extra-local, economic, political, and social forces, as it does upon the natural resources themselves (Watts 1983); d) siting of noxious facilities appears not to be accidental but a deliberate action leading to the construction of unjust environments (Bullard 1990).

More recently many human geographers in the United States of America, the United Kingdom, and other Western countries have shown that exposure of vulnerable people to pollution and impoverishing realities is not accidental but affected by the social, political and economic environment (Bullard 1990 and 1993). Bullard cited the Agency for Toxic Substances Disease Registry (ATSDR) in 1988 to argue that “between 3 to 4 million children in the United States - most of whom are African-Americans and Latinos who live in urban area [are affected by environmental health problems]. The ATSDR found that for families earning less than \$6,000 annually, 68 percent of African-Americans children had lead poisoning compared with 36 percent for white children” (Bullard 1993: 23). As the founder of the Environmental Justice Resource Center in Atlanta, Georgia, Robert Bullard, argues that, “people of color in all regions of the [United States of America] bear a disproportionate share of the nation's environmental problems” (Environmental Justice Resource Center, <http://www.ejrc.cau.edu>). Accordingly, Blaikie et al (1994) reassert the significance of the human factor in disasters. Many disasters are a complex mix of natural hazards and human actions, reinforcing the fact that the social, political, and economic environment is as much a cause of disasters as the natural environment. In the book *At Risk* the argument of Blaikie et al differs in its approach from the common assumption that “disasters are departures from ‘normal’ social

functioning, and that recovery means a return to normal” (p. 11). This alternative approach, which emerged in the early 1970s, “does not deny the significance of natural hazards as trigger events, but puts the main emphasis on the various ways in which social systems operate to generate disasters by making people vulnerable” (p. 11). *At Risk* suggests that “disasters must be analysed as the result of the impact of hazards on vulnerable people” (p. 46).

In line with Bullard’s and Blaikie et al’s arguments, Castree and Braun (2001) concluded that waste incinerators were sited near communities with the lowest capacity to contest them in the political legal system. Interestingly, nature conservation is not exceptional in illustrating these tendencies. Analyses have shown that nature conservation can be used as a platform for pursuing a range of political and economical agendas that are not socially and sometimes environmentally friendly (Harvey 1974; Demeritt 1994; Neumann 1998, Castree and Braun 2001; Smith and Bell 2003; and Ramutsindela 2003), such as land disposition, regulating local communities’ access to natural resources, distancing marginalised communities from rich ones, and segregating marginalised communities from each other and from natural resources.

It is from this socially considerate stand that the study seeks to analyse the discourse of nature conservation in the Driftsands Nature Reserve. I approach the analysis of the case study by way of: a) examining the discourses on Driftsands during three distinct periods: 1983-1993, 1994-2006, and contemporary period; and b) filling the gap in the social discourse of Driftsands through conducting a survey and interviews among members of the on-site communities on issues related to their perspective on previous and current proposed land-uses for DNR. The research also teases out residents’ views on issues related to their social environment since their early time of settlement until the present time.

1.2 Study aims and objectives and research questions

The aim of this study is to account for the deliberate creation of unjust environments at Driftsands Provincial Nature Reserve (DNR) through analysing the process of constructing DNR and its social environments. It is important to understand the process

of constructing protected areas in order to: a) avoid creating unjust environments among local communities living in or around protected areas; b) denaturalise unjust environments among local communities living in or around protected areas: unjust environments should not be regarded as normal or acceptable; and c) encourage governments and mainstream nature conservation to formulate and develop socially sensitive nature conservation designs and practices.

To examine the construction of nature at DNR, the study focuses on the following questions:

1. Why was DNR established in 1981? This question allows the study to examine the social, political, economical and environmental discourses of DNR around 1981. The aim is to account for the discourse that inspired the Provincial Government of the Western Cape to proclaim Driftsands a protected area.
2. Who construct and participate in the construction of Driftsands nature conservation and for what purpose? The answer to this question helps to understand the discourses, particularly the agendas, of those who make laws in Driftsands. It will bring together environmental and socio-economic elements of nature conservation. It is assumed that nature conservation serves more than one purpose.
3. How do stakeholders contribute to constructing nature at DNR? This question helps to understand the roles played by various actors in the establishment of DNR.
4. What have been the results of different conceptions and constructions of protected areas on local communities living in and around DNR in comparison with the history of nature conservation in South Africa? Given that there are different ideas about nature, this study aims to tease out different conceptions of nature in the study area and in the context of the South African situation.

1.3 Study area: Driftsands Provincial Nature Reserve

Driftsands Provincial Nature Reserve (DNR) is situated in the province of the Western Cape, South Africa (see Figure 1.1). The DNR is located at approximately 18° 38' east and 33° 44' south (Enviro Dinamik, et al 2001: 9). It is located less than 20 km from the centre of Cape Town, and less than 1km from Cape Town International Airport (CTIA).

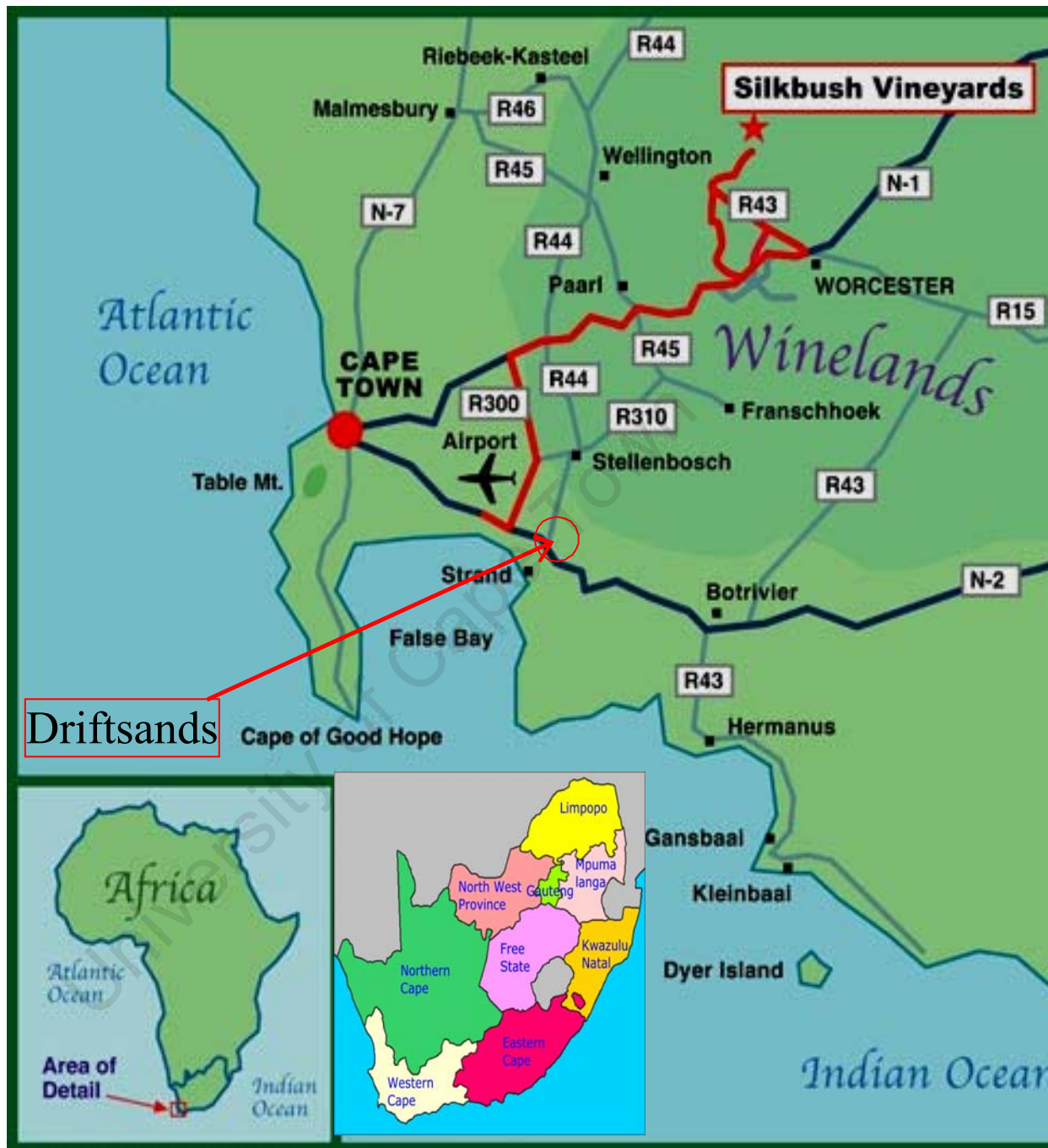
DNR and the CTIA are separated by Delft, a coloured township of 6 000 houses (Settlement Planning Services et al 1998).

The 530ha Driftsands Nature Reserve was proclaimed in 1981 in accordance with the Nature and Environmental Conservation Ordinance, 1974 (see appendix I). The Cape Provincial Administration, the owner of the land, aimed to use DNR to conserve dune veld as well as the wetlands associated with the Kuils River (Western Cape Regional Services Council 1992). As this study will show, these objectives were later to clash with evolving aspirations and other interests in the area designated as DNR.

1.4 Methodology and approach

This research is conducted by applying four interlinked analytical methods (stakeholder, discourse, critical and ideological analysis). The first analytical method – stakeholder analysis – is used to build the DNR stakeholders' map. Discourse analysis, on the other hand, aids in reconstructing the discourses on Driftsands stakeholders into sub-discourses, based on their respective positions on issues related to local communities, especially the issues of co-benefits, co-management, and co-existence. In order to fill the gap in the discourse of Driftsands I conducted 30 semi structured interviews among Driftsands stakeholders. Most of the names of informants and people consulted are available (see Table 1.1). In order to maintain confidentiality, some of the names are not reflected in the text but are available in the Department of Environmental and Geographical Science at UCT. Furthermore, ideological analysis is employed to examine the positions of DNR's stakeholders. Finally, critical analysis is employed to examine the validity of arguments that shape the discourse and the ideology of nature conservation. In the following sections, I elaborate on the use of each of the four analytical methods.

Figure 1.1. Location of Driftsands in the Western Cape



Source: www.silkbush.net

Table 1.1. Name of DNR interviewees

Category	Numbers	Names
Driftsands Environmental Centre (DEC)	4	Ian Allen, General Manager of DEC, 2) Bongani Mhlongo, Project Coordinator; 3) Aisha Solomon, DEC Community Officer; 4) Brian Reddy, DEAT Project Coordinator at DEC;
Driftsands local communities	5	Raymond Mtati, Linda Mtshwelo, Situlo Hobe, Vuyani Singama, Mgidi Londoloza
Cape Nature	2	1) Gail Cleaver, Manager of the Cape Nature Business Unit in the Western Cape; 2) Trevor Farr, Youth Development Programme Manager for the board, Cape Nature Conservation
Members of provincial government	3	Official 1 from the premier office Official 2 from the Premier office Official 3 from the Premier office
City of Cape Town, Metropolitan Office	4	Official 1 from the City of Cape Town Official 2 from the City of Cape Town Official 3 from the City of Cape Town Official 4 from the City of Cape Town
Cape Peninsula National Park	1	Quintus Thom
Zoologist and nature conservationists	3	Zoologist 1 Zoologist 2 Zoologist 3
Academics	5	1) Dr William Moseley, 2) Dr Fan Cloete, Stellenbosch University, Performance Indicator on Sustainable Development; 3) Professor Bruce Hewitson, NRF Chair for Climate Change, Department of Environmental and Geographical Science (UCT); 4) Professor Mike Meadows, Head of Department, EGS, UCT; 5) Professor Wilfried Scharf, Head of the Institute of Criminology, Department of Law, UCT
Social NGOs	2	1) Director of social NGO in the Western Cape 2) Dr Heidi Grunebaum, Director of Education and Research Department at the Direct Action Centre for Peace and Memory
Politicians	2	1) Parliamentarian 1 2) Parliamentarian 2
Others	4	1) Joan Paul, Public Health Researcher, UCT; 2) Thomas Alberts, Researcher, Department of Political Studies, UCT.
Total	30	

Source: Author

To assess the unrecorded perspectives of the DNR local communities themselves, the researcher regularly conducted semi-structured interviews with members of DNR local communities on relevant issues. Accordingly, the researcher conducted seventy

structured interviews in June 2006 among members of local communities to solicit their views on the future of Driftsands. Conducting these two types of interviews allow for the drawing of a DNR stakeholders' variable map with its total social and institutional environment.

Prior to designing structured and semi-structured interviews, I had to develop the research analytical strategy. This analytical strategy aimed to prioritise the following tasks: classifying critical documents; identifying the main authors of discourses; classifying and analysing stakeholders' main standpoints and discourses; interviewing stakeholders regularly to reconstruct their ideologies at the time; identifying and accounting for the shift in stakeholders' standpoints; identifying the political background behind those ideological shifts; and, finally, debating those ideologies and their discourses on the subject of constructing DNR.

Approach

I approached this research in six steps. First, I aimed to collect every report available about Driftsands Nature Reserve (DNR). After some discussion sessions with my supervisor, Associated Professor Ramutsindela, I realized the need to define the boundaries of the study area. Thereafter, I went to Driftsands Environmental Centre (DEC) to submit two requirements: to access to the Centre's data base and to request for a staff member from the Centre assigned to introduce me to members of Driftsands' on-site and surrounding communities. Both requirements were addressed by the management of the Centre at the time. Access was granted and a community officer from the Centre instructed to accompany me during my first few visits to Driftsands' on-site and surrounding communities. During this phase, data collections were expanded to include but not to be limit to reports on DNR at the libraries of the University of Cape Town, City Council, the Cape Metropolitan Council, and Cape Nature.

Second, I started collecting documents about DNR (about 400) and classified them according to authors and the groups they represent. This enabled me to build DNR's draft stakeholders map by using method of stakeholder analysis (section 1.4.1). Afterwards, I distinguished four groups of stakeholders that shaped the discourse of DNR: nature conservation NGOs and nature conservationists, government agencies, Driftsands on-site and surrounding communities, and

consulting agencies. In conjunction with this phase, I had to allocate some time to learn about the method of stakeholder analysis.

Third, I grouped stakeholders' views towards the future projection for the site by using method of discourse analysis (section 1.4.2). The first group (nature conservation NGOs and individuals) generate a nature conservation discourse, which revolves around building a nature reserve at the site. The second group (governmental agencies) generate a multidimensional discourse. It focuses on providing low-income houses for local communities; building an industrial area; providing ecotourism activities (to address tourists interest in natural beauty and cultural diversity); and accommodating Africans with ties to the former apartheid regime on part of the site. The third group (Driftsands on-site and surrounding communities) are associated with a social discourse. They looked at Driftsands' potentials to address some of their impoverishing environments. For them, the DNR is a site for low-income housing at which their existing informal townships could be formalised, public services provided; formal and informal townships integrated; and a place for income and job opportunities. The fourth group (consulting agencies) generate a justification discourses. This group rationalise government and NGOs agendas for Driftsands. Indeed their discourses form part of the discourse that seeks to involve government agencies and nature conservation NGOs. From the discourse analysis point of view there are only two groups of stakeholders: those who construct laws and those who should obey those laws once constructed. Therefore, the discourse of government agencies involves nature conservation NGOs, and consulting firms as the constructors of Driftsands laws while the on-site and surrounding communities had to obey the laws flowing from a discourse of the others.

Fourth, I developed the theoretical framework of this thesis to focus on human-nature nexus (Chapter 2) based on national literature on the issue (Chapter 3). The focus on academic literature on nature conservation was about the essence of nature conservation and environmental justice. How local communicates affected protected areas and how nature conservation affected local communities. However the focus on Chapter Three is about South Africa's experience on the issue, especially the evolution and consequences of nature conservation in the country.

Fifth, I observed at the missing perspectives in Driftsands' discourses, which inspired me to start the second phase of data collection. During this phase a questionnaire was designed to record the perspectives of the on-site communities on the future of Driftsands. Further specific structured and semi-structured interviews were designed to gain insight into the social environment of Driftsand's on-site communities and to record contemporary views of both government agencies and nature conservation NGOs on the future of Driftsands. After going through this step I was

able to understand stakeholders' discourses on DNR in three time periods, namely, before 1994, after 1994 and post-2006.

Sixth, I employed method of critical and ideological analysis (see section 1.4.3 and 1.4.4) to evaluate stakeholders' ideologies on the issues of nature and local communities. The questions guiding the analysis were how local communities in and around Driftsands are perceived, and treated. What options are available for them?

1.4.1. Stakeholder analysis

Stakeholder analysis is employed to understand the DNR stakeholders' maps. It helps "to have a clear understanding of who the stakeholders are, what their roles involve, and how they ... affect project [Driftsands in this case] development" (Pan 2005: 175). It also helps to construct the link between the development of DNR nature conservation discourse and that of national and global environmental changes over time. In this regard, "it has become increasingly evident that the causes and impacts of, and responses to global environmental change are linked to local environments and human actions" (Pan 2005: 175). Furthermore, stakeholder analysis helps to group the total social and institutional environments for DNR. In this regard, "stakeholder analysis enables researchers and policy makers to better grasp how their decisions relate to the total social and institutional environment" (Gass 1997:115).

Essentially, "The word 'stakeholder' was first recorded in 1708 referring to a person who holds the stake or stakes in a bet. [Hence,] systems analysts prefer to use the term "actors" while sociologists talk of "social actors" (Mushove et al 2004). However, "The concept of the stakeholder was first introduced in the early work of system theorists, by Freeman (1984), who brought the stakeholder theory to the forefront of academic research" (Pan 2005).

Technically, "the whole stakeholder theory is reducible to this one idea of Freeman's framework, which comprises two stages: identification and evaluation" (Pan 2005). A stakeholder is "any group or individual who can affect or is affected by the achievement

of the organisation's objectives" (Boonstra 2004: 38), or a developmental project, such as in the case of DNR.

In order to identify DNR's stakeholders, the researcher addresses three general questions: Who are they? (This question concerns their attributes.) What do they want? (This question concerns their ends.) How are they going to try to get it? (This question concerns their means) (Frooman 1999). Bearing in mind that stakeholder analysis or mapping is a dynamic exercise full of interactions, Kamann (2007) suggests that stakeholder attributes (1) are variable, and not in a steady state; (2) are socially constructed, and not part of objective reality; and (3) may or may not reflect consciousness and exercise of will.

In the case of DNR, each stakeholder pursues his or her own agenda during the construction of DNR through variable discourses. It is nevertheless important to separate the discourse of the on-site communities from those of the surrounding communities, as each group has different views on the future land use of Driftsands. For example, the people of Khayelitsha are likely to have different perspectives on what it means to proclaim their backyard a nature reserve from residents of Green Park, who live in Driftsands. On the other hand, Khayelitsha residents' discourse is likely to be closer to the discourse of Green Park squatters than to those of local, provincial, and national government agencies, and staff members of nature conservation NGOs. In this way, distinguishing the standpoint of each group of stakeholders is required to understand DNR's total social and institutional environment.

In summary, Driftsands stakeholder analysis suggests that the discourse is shaped by four groups of stakeholders (see Table 1.2): nature conservation NGOs, government agencies, consulting agencies, and Driftsands on-site and surrounding communities. The essence of clustering Driftsands stakeholders into four groups of stakeholders is to tease out the ideas and goals of each stakeholder. For example, government agencies aim **to govern the public and public assets** (government aim to govern the site and its local and surrounding communities, DNR in this case is a tool to govern public goods); nature conservation NGOs aim **to conserve nature** (they aim to conserve nature at DNR and protect nature from local communities), local communities **aim to survive** (DNR is a resources to survive on in early stage, thereafter they will use it to construct their

progressive social environments); and local consultants **aim for profitability** (both government and conservation groups are clients for those consultants).

Table 1.2. Driftsands stakeholders

Stakeholders Groups	Stakeholders
Nature Conservation NGOs	Department of Botany, University of Western Cape National Botanical Institute The Botanical Society of South Africa Department of Zoology, University of Cape Town. Western Cape Nature Conservation Board Table Mountain Fund Driftsands Task Group Driftsands Conservation Manager Driftsands Forum
Government Agencies and Departments	Ministry of Constitutional Development and Planning Western Cape Regional Services Council Ministry of Environmental Affairs and Water Affairs Department of Housing and Planning Committee for Land Usage & Transportation City of Cape Town Cape Town City Council Province of the Cape of Good Hope Cape Metropolitan Council City of Tygerberg. G Kruger Oostenberg Municipality Medical Research Centre
Consulting Agencies	MLH Architects and Planners Derek Chittenden & Associates C.S Appleton cc. Consultant CSIR Water Technology Zille Shandler Associates. Public Affairs Consultants Ninham Shand. Consulting Engineers Chittenden Nicks de Villiers. Urban design, environmental planning, landscape architecture ENVIRO DINAMIK
On-site and Surrounding Communities	On-site informal settlements: Green Park, Los Angeles, Amsterdam, Unathi Bush Surrounding communities: Sikhumbule, Khayelitsha (sites B, C, and D) to the north, Delft to the west, Brentwood Park and West Bank to the north, Mfuleni to the east

The research is based on the assumption that the ideology of each group toward DNR is distinct from the other group: each group of stakeholder pursues a very different package of agendas than the other three groups of stakeholders. Available documents on Driftsands suggest that government agencies pursue different and sometimes competing agendas but they follow directives from offices at the top. Similarly, DNR local communities, whether on-site or the surrounding communities, share an agenda different from that of the government. Creating a nature reserve at Driftsands leads to difficulties

for both the on-site and the surrounding communities, as the reserve affects their daily life. However, for the government it affects planning. Most of the local nature conservation NGOs share a mono vision toward Driftsands, which is about maximising nature conservation areas while at the same time dismissing any other proposal regardless of valid reasons. Finally, local consultants are classified as a separate group of stakeholders from those of the government, local communities and nature conservation NGOs. Overall, local consultants aim to justify their clients' plans, arguments, and visions.

1.4.2. Discourse analysis

This section discusses the components of discourse analysis, especially the factors that control the production of discourse. These include a) the order of discourse, b) the articulated data of discourse, c) the mechanisms of power, d) the stakeholders of discourse (those who set laws and those who obey these laws once they are set), and e) the nature of the dynamic of discourse. These factors are drawn from Foucault work on the language of "*Power/Knowledge*" (1970).

In interview conducted by Lucette Finas, Foucault clarifies that the order of discourse is based on "articulating the data of discourse with the mechanisms of power". Power in this case is perceived in its traditional form as "an essentially judicial mechanism, as that which lays down the law, which prohibits, which refuses and which has a whole range of negative effects: exclusion, rejection, denial, obstruction, occultation, etc." (Foucault 1972: 183). This implies that in order to reconstruct the order of discourse, Driftsands nature conservation discourse in this case, the research should identify and categorize stakeholders into: those who make laws and those who should obey these man-made laws. Based on Foucault's definition of power, the discourse of Driftsands suggests that laws at the site are made and maintained by powerful groups working on the site (nature conservationists, academics and NGOs, local, provincial, and national governmental agencies, and landscape consultants and design companies). This group hold the power to exclude, reject, deny, obstruct, occult, and lay down the law within the boundaries of Driftsands in order to construct, develop and protect nature at the site from 'others': the inhabitants of the space of invisibility, emergency, and temporality. The 'others' are the

on-site impoverished communities (Green Park, Los Angeles, Driftsands, Amsterdam, Rotterdam, and Unathi Bush) and the site potential impoverished squatters from the rest of the Western Cape and other parts of South Africa.

Furthermore, Foucault demonstrates that the discourse mechanism revolves around exclusion and rejection. In his book *“Madness and Civilisation”* Foucault explains that “During the Classical age power over madness was, in its most important manifestation at least, exercise in the form of exclusion; thus one sees madness caught up in a great movement of rejection” (Foucault 1970: 184). This implies that the key words of madness and civilisation discourse in the eighteenth century were about rejection and exclusion which seems to Foucault a negative form of discourse mechanism. Similarly, the mechanism of discourse of Driftsands and nature conservation is about exclusion and rejection, and is vivid in the hegemonic ideas among nature conservation groups at DNR and in contemporary nature conservation discourse. It is about excluding local communities from protected areas, regulating their access to protected areas’ natural resources. Rejection is also about moving people from protected areas. However, the similarity between the discourse of madness and that of nature conservation does not mean that they are identical. Both discourses are also similar to the discourse of colonialism and that of radicalism, purity, cosmopolitan, and others. Furthermore, it is important to realise that discourse mechanism is not about social counteraction to dominant ideas and practices but about stated dominant ideas. In short, the mechanism of discourse on nature conservation is about dominant ideas among nature conservation groups rather than local communities’ counteractions with those dominant hegemonic ideas and practices.

Discourse dominant ideas and their origin are the articulated data of the discourse that distinguishes a discourse. A discourse “encompasses sets of ideas, statements or knowledge which are dominant at a particular time among particular sets of people (e.g. ‘expert professionals’) and which are held in relation to other sets of individuals (e.g. patients or offenders)” (Jupp 1993). After distinguishing dominant ideas of discourse, researcher should find the origin of these dominant ideas. Do they come from local, national, regional, or universal social, political, economical, ecological, or technological discourses? All of these discourses have the potential to spark in the mind of each individual at the same time for each instant. This understanding is symmetrical to the

common understanding among discourse technologists that “individuals are fishes swimming in a sea of various discourses, namely political, social, class, race and gender, all of which constitute a reservoir of discourse used by individuals to construct, support, and maintain discourses of their concerns” (Jupp 1993).

Conceptually, documents on the case study and the theoretical chapter of this thesis are therefore the articulated data of this thesis. This study is therefore a document oriented research. Incorporated documents include but are not to be limited to: official documents and records, newspaper articles, news and archival documents, interviews and statistics. All of these are considered documents that belong to DNR stakeholders who pursue the order of discourse. In other words, all available and potential documents (e.g. interviews and statistics) that deal with DNR can be categorised as DNR discourse. These documents are written text. Jupp (1993: 104) explains that “documents can have a number of features. For example they may be made up exclusively of written words, or they may include statistics, as in a survey research report. Documents may refer to particular individuals, as with school records and reports about pupils and contemporary events and issues, as in the case of newspapers daily reports”. Furthermore, all incorporated academic books and journals that tackle theories on the social construction of nature and environmental justice form part of the articulated data of the discourse of nature conservation.

Part of this academic exercise of reconstructing the order of discourse is that comprehensive perspectives of the discourses of stakeholders should be incorporated into the analysis. Therefore, missing perspectives should be regenerated and old perspectives should be updated. Furthermore, missing perspectives should be distinguished and stakeholders map should be developed. In other words, an agency should be interviewed either because of the absence of its perspectives from official documents, whether deliberately excluded or not; or because he or she was involved with some development related to shaping the discourse of DNR.

Briefly, this research is based on document-text analysis, since deconstructing the order of discourse is about analysing documents as texts. “Analyzing texts is inseparable from social analysis; in fact, linguistic or textual analysis is one of many ways through which we can look at the discourse-society intersection” (Manning and Weninger 2004: 303).

“Text is examined by geographers as a complex form of communication that often seamlessly builds understandings and realities” Wilson (2009: 220). Under the caption of ‘text’, human geographers have identified various discourses: “city-growth coalition discourses, mayoral and politician pronouncements, family storytelling, linguistic utterances of planners, community architectural styles, everyday newspaper reportage, informal banter on the streets, federal codifying of housing policy, and many other things. Geographers currently apply multiple interpretations to how text made and used is powerful (Wilson 2009: 220). Overall, discourse analysis is inseparable from textual analysis

Not only is discourse analysis based on textual analysis but also critical and ideological analyses are based on textual analysis. “Discourses can be identified in text analysis based on vocabulary, metaphors and semantic relations between words as ways of enforcing certain reconstructed classificatory schemes (Manning and Weninger 2004: 304). This logic work also backward: analysing text means also placing the text in a discourse or interacted discourses, and then looks at the ideology of the text to confirm symmetry or similarity to associate discourse(s). Likewise, critical analysis is employed to examine discourses or ideologies and their arguments.

Therefore, discourse analysis, like critical and ideological analysis, is based on analysing scripts or textual materials and documents. Hannigan (1995: 36) emphasises the point that “discourse is the most general category of linguistic production and subsumes a number of other tactics and devices including narrative (the writing and telling of stories) and rhetoric.” Therefore, studying environmental discourses is about studying relevant environmental narrative and rhetoric, which is basically a script and therefore, texts, because a “[s]cript is the written expression of a spoken language and therefore contains a ‘text’. The text is the central and most obvious feature of a document, and a book may be considered a paradigm of a document” (Scott 1995: 5). In this regard, DNR documents, official documents and records, interviews, statistics, newspaper articles, news and archive documents were the objects of research.

1.4.3. Critical analysis

Critical analysis is employed in examining the validity of stakeholders' arguments in DNR's discourses. It is employed to examine whether the arguments of DNR officials are sound, problematic, or fallacious. It also brings to the forefront what is not stated, which is at least as important as what is actually stated. For example, critical analysis can uncover "assumptions which underpin any account (say, in a document) and a consideration of what other possible aspects are concealed or ruled out. Method of critical analysis involves moving beyond the documents themselves to encompass a critical analysis of the institution and social structures within which such documents are produced" (Jupp 1993: 103).

Furthermore, critical analysis dovetails with discourse analysis. Jupp (1993:45) cited Worrall (1990) to argue that, as with document and texts, discourses are concerned with communication. However, "discourse goes much further than that to embrace all aspects of communication – not only its content, but its author (who says it?), its authority (on what grounds?), its audience (to whom?), its objective (in order to achieve what?)".

According to Jupp (1993) there are five discernible assumptions that frame critical traditions. First, prevailing knowledge is viewed as being structured by existing sets of social relations which constitute social structure. Second, this structure is seen as oppressive in so far as there is an unequal relation between groups within it and in so far as one or more groups exercise power over others. Third, the inequality, power and oppression are rooted in class, race, or gender or some combination of these. Fourth, critical analysis does not take prevailing knowledge for granted or treat it as some 'truth', but traces back such knowledge to structural inequalities at a particular intersection in history. "In doing so, it is considered important to examine the role of ideology in the maintenance of oppression and control and also the way in which social processes and social institutions operate to legitimate that which is treated as knowledge. Ultimately, the aim of critical research and analysis is to confront prevailing knowledge – by providing an alternative reading and understanding of it" (Jupp 1993: 102).

Lastly, there are seven steps of argument analysis required to apply methods of discourse, critical and ideological analysis:

1. Clarification of *Meaning* (of the argument and of its components)
2. Identification of *Conclusions* (stated and unstated)
3. Portrayal of *Structure*
4. Formulation of (unstated) *Assumptions* (the “missing premises”)
5. Criticism of
 - a. The *Premises* (given and “missing”)
 - b. The *Inferences*
6. Introduction of *Other Relevant Argument*
7. *Overall Evaluation* of the argument in the light of steps 1 to 6.

The above procedure will be employed in chapters 4-6 to examine the validity of Driftsands stakeholders’ arguments against or for nature conservation in DNR. These arguments are grouped according to each stakeholder’s perspectives and the ideologies underpinning them. Thereafter the assumptions and implications of each ideology are exposed and evaluated.

1.4.4. Ideological analysis

Ideological analysis traces relations of dominance and power dynamics. It examines stakeholders’ common sense on the research-related themes: co-existing, co-managing and co-benefiting local communities from constructing the Driftsands nature environment. This particular approach of this study is based on Thompson’s (1984) reflections on theories of ideological analysis. Thompson (1984: 127) argues that, “ideology must be conceptualised within the framework of general social theory, theory which explores, among other things, the relations between action, institutions, power and domination”. In this regard Foucault (1972: 118) explains that “circumspection” is necessarily in analysing ideology for three reasons. First, ideology “always stands in virtual opposition to something else which is supposed to count truth”. The problem in ideological analysis is not about defining the line in a discourse between truth or scientifically valid argument but “in seeing historically how effects of truth produced within discourses which in themselves neither true nor false”. Second, the concept of

ideology refers to something of “the order of the subject”. Thirdly, “ideology stands in a secondary position relative to something which functions as its infrastructure, as its material, economic determinant, etc.” (Foucault 1972: 118). Therefore, analysing ideology is about analysing the circumspection’s truths of a discourse over time and the order of their subjects within an understanding of the infrastructure and determination of concerned discourses.

Therefore, “analysis of ideology is fundamentally concerned with language, for language is the principal medium of meaning (signification), which serves to sustain relations of domination” (Thompson 1984: 127). He adds that “speaking language is a way of acting” and emphasises that “ways of acting are infused with forms of power”. He further states that “language is not only an instrument of communication or even of knowledge” but also an instrument of power. One seeks not only to be understood but also to be believed, obeyed, respected, distinguished: Relations of domination are sustained by a mobilisation of meaning which legitimates, dissimulates or reifies an existing state of affairs; and meaning can be mobilized because it is an essentially open, shifting, indeterminate phenomenon” (Thompson 1984:131).

Du Toit (2005: 1) has summed up Thompson’s scheme for the ideological analysis of discourse as follows: “To study ideology is to study the ways in which meaning (or significations) serves to sustain relations of domination; ideological discourse sustains relations of domination by mobilization of meaning which legitimates, dissimulates or reifies an existing state of affairs. The analysis of ideological discourse thus bears an internal relation to the critique of domination.”

The researcher chose to analyse the ideological principles of three institutions instrumental in the development of DNR: the Cape Metropolitan Council (CMC), the Provincial Administration and Cape Nature Conservation. The ideological analysis of CMC documentation suggests that the CMC was determined to exclude the on-site communities from the natural environment of Driftsands. The ideological principles of the Provincial Administration appear again to campaign for dispossessing the on-site communities and banishing them to an undefined future by using conservation arguments that portray the negative effect of human co-existence in protected areas. Finally, the researcher deconstructs the ideological principles of Cape Nature Conservation on the

issue of constructing eco-tourism opportunities at the site. The benefit to the communities of those opportunities appears to consist solely in the creation of menial jobs.

1.4.5. Sources of information

Four sources of information are used to understand the ways in which the DNR nature conservation discourses were constructed. The first consists of all the documents (official letters, reports, press conferences and newspaper articles) found at the desk of the former director of Driftsands Environmental Centre. The second incorporates interviews conducted with key stakeholders, both official figures and members of the on-site communities. The third source is officials' speeches from their organisation websites and taken from local newspapers. The fourth consists of a survey of the views of 70 on-site community members on the future of Driftsands.

This survey was conducted in June 2006 by way of a questionnaire (structured interviews) presented in two languages, English and Xhosa. These structured interviews were conducted in Driftsands' informal settlements. In order to conduct these structured interviews, I organised meetings in each township (Los Angeles, Green Park, Sikhumbule, and Brentwood Park) and at Driftsands Environmental Centre. In these meetings I introduced the research and then discuss the questionnaire with the participants to clarify questions. Thereafter I asked each participant to fill these questionnaires. I called upon adult respondents to meet at one of their houses. One of the respondents, Raymond Mtati, offered to call upon participants and to translate the survey questions into Xhosa. On average, I spend an hour and a half with each group, to address their questions, to help them to fill the survey, and to record their comments. Respondents were chosen randomly but represent the four informal townships at the site. The aim of the survey (see Appendix IV and V) was to enrich the discourse of the on-site and surrounding communities and to refute conservationists' arguments by conducting a survey similar to that conducted by the conservation group earlier on. The results of the survey were compared with those from Ngeleza's study in 1990.

The design of the survey is based on Ngeleza's (1990) survey on local communities' perspectives towards the conservation of nature at Driftsands. The value of the survey is about its consideration of the views of local communities on the future of Driftsands. These views not only have the potential to be used by local communities themselves but have the power also to be used by Driftsands' officials to justify their positions and measures towards shaping Driftsands socio-ecological discourse. For instance, Ngeleza's survey and study is central to Barrie Low's nature conservation arguments. Low was the convenor of the Driftsands Task Group (1991) and a representative of the Department of Botany at the University of the Western Cape during the period 1989-1991. The survey is important because it is used by DNR officials as a scientific document giving credibility to their plan to suggest the physical removal of Driftsands' on-site communities from the site and to include them in Driftsands nature conservation discourse.

However, interviewees do not represent communities' common sense, but they help to re-construct communities' social, political, and economical environments. To some extent, interviews do represent community views, but they can also support researchers' pre-designed arguments. The aim is a) to reconstruct shifts in interviewees' collective sense toward nature conservation; b) to de- and re-construct nature conservation agendas at DNR; and c) to account for the environmental injustice in the area. To understand the social environment of the on-site and surrounding communities I collected data on family monthly income, individual employment patterns, and also asked questions about what it meant to have no public phones, electricity, roads, police officers, crèche, schools, and shops. I also collected data on rape, murder, and robbery as these constitute impoverished environments. Furthermore, I asked about rain and what it means for Driftsands' on-site communities, how often their shacks were flooded. Interviewing local communities at their homes, shacks in this case, is essential for reconstructing the social and the political discourse of the on-site communities, and to find out about the achievements of Driftsands nature conservation agencies in shifting the collective mind of local communities towards nature conservation. Did local communities buy into the idea that nature conservation has the potential to address some social ills or to generate income for local communities? What are the shifts in local communities' perspective towards nature conservation? Did nature conservation contribute to uplifting some of the local communities from poverty spirals?

1.5. Summary of findings

The study confirms that there is a link between constructions of nature and environmental justice (Chapter 2). Moreover, Chapter 3 suggests that since the 1890s South Africa's environmental policies were shaped by colonial views. However, the country's contemporary environmental discourse has been inspired by universalised environmental views. Currently, South Africa's environmental policies are in line with global environmental policies. Furthermore, the distinguishing features of protected areas in South Africa appear to be in line with those in other countries, where emphasis is placed on exclusion and menial work for local communities living in and around protected areas.

Furthermore, the construction of nature in DNR has changed over time (Chapters 4, 5, and 6). Indeed, the construction of nature at DNR changed between 1981 and 2006, as did the DNR nature conservation discourse. Chapters 4, 5, and 6 show that the discourse on DNR has shifted its focus over time. In 1981 the focus was to maintain the provincial proclamation of DNR as a nature reserve. This focus changed in early 1988, when the attention of DNR stakeholders shifted towards opposing the PA intention to deproclaim DNR for low-income housing. Late in 1988 the focus shifted towards an official proposal to seize the site's recreation, environmental education and aesthetic (Adams 1988b) opportunities to benefit the surrounding communities of Greater Cape Town. In the following year, the focus changed again, reflecting the CPA's intention to deproclaim a quarter of Driftsands for industrial purposes. Then, between October 1989 and October 1990, the DNR discourse changed yet again, this time to reconsider the Provincial Administration's plan to use Driftsands for development and conservation. Between 1990 and 1993 the DNR discourse focused on the possibility of allocating part of the site to house the supporters of Johnson Ngxobongwana. Meanwhile, the on-site communities in Driftsands have been passive observers of the evolving nature conservation discourse that maintained their impoverishment.

Chapter 4 analyses the social construction of nature at DNR under apartheid (1983-1994). The study suggests that the construction of nature at DNR led to the voluntary

displacement of two of the on-site communities (Amsterdam and Rotterdam) to the surrounding communities because of their isolation from road networks; the flood-prone nature of the area; and limited entitlement to public services.

During the same period, the DNR nature conservation discourse emphasised the language of sustainable use of natural resources. The aim was to conserve indigenous vegetations, green the landscape and avoid polluting the atmosphere, restrict rapid urbanisation and prevent squatters' practices of disturbing the site's nature resources (woodlots, fire, dumping solid waste, and 'black colonisation' of Driftsands), while shutting out the local communities. Furthermore, the DNR nature conservation discourse aimed at expanding Driftsands' boundaries by dismissing the possibility of providing low-income housing at the site. It prioritised regional concerns over local demands; and promoted the aesthetic, recreational, and environmental education opportunities of the site to benefit the people of the Cape Flats in particular and Greater Cape Town in general. Moreover, DNR nature conservation discourse suggested that nature conservation in Driftsands might help to address the surrounding communities' social ills such as unemployment, crime, vandalism, and gang activities among communities living within the vicinity of the site.

Conceptually, DNR's nature conservation discourse during the apartheid era (1983-1993) resonated with the apartheid policies of racial segregation and spatial planning. DNR stood as a large barrier between surrounding townships and a safe place for apartheid supporters. The 650ha exclusive DNR has segregated these townships until the present time. Driftsands was proclaimed a Provincial Nature Reserve when Khayelitsha, Belhar and Mfuleni were identified for African residential development (CNdV 1989; CNdV and CMC 2000). Thereafter, DNR stood as a barrier between these three townships. Throughout this thesis, both terms African and black are used to reflect the same group.

In post-apartheid South Africa (1994-2006), DNR's discourse did not deviate from its formal, apartheid-inspired nature conservation ideological principles to maintain exclusivity and to target maximum expansion of the site boundaries (Chapter 5). The only difference is that the discourse incorporated poverty alleviation as part of the approach by which local communities could be dealt with. More specifically, the claim of poverty alleviation was used to dampen the demand for low-income housing and

industrial development in the study area. In addition, the discourse of DNR officials incorporated the emerging universalised nature conservation views to call for community participation, to necessitate co-benefits for local communities from conservation through providing eco-tourism opportunities and aiming at local economic development.

Meanwhile, DNR discourse carried on maintaining the exclusion of local communities from the reserve by a) maintaining the entitlement of DNR townships to limited public services; b) restricting residents to geographically stressed areas; and c) fencing those townships from the reserve. Driftsands as well as the national conservation discourse incorporated external universalised environmental views in the process of constructing nature. It was only after the apartheid era that supporters of the Driftsands conservation discourse started to look at addressing some of the social challenges arising from the construction of DNR. Officials looked at Driftsands as a “physical integrator” for the surrounding communities through the social interaction of those surrounding communities: “In a green open space [...] at the sub-metropolitan scale Driftsands can potentially play a role as a physical integrator, albeit in a limited way” (MLA-Sustainable Matters 2005: 51).

Finally, the focus of Chapter 6 is to analyse DNR’s contemporary discourses on nature and society (2006 – 2007). The analysis takes place against current environmental agendas and ideas prevailing at global, national and provincial levels. On 24 May 2006, the DNR nature conservation discourse shifted its strategy toward developing Driftsands as permanent exclusive nature reserve by suggesting the relocation of the on-site communities to an area outside the reserve. Tasneem Essop, the provincial Minister for Environmental Affairs at the time, initiated the project and received approval from the Provincial Parliament to relocate two (Green Park and Los Angeles) of Driftsands three informal settlements (Green Park, Los Angeles and the backyarders of Sikhumbule), from the site routines of disaster (City of Cape Town, 2006: 2) to the appealing space of empowerment. The aim was to move the two townships from the space of informality, invisibility, of limited public services, of an inconvenient past, and of a dismissive future, to the appealing space of empowerment. Such an exclusionist discourse calls for fencing poor communities from protected areas or fencing protected areas from poor communities in order to conserve nature and to empower the surrounding communities. In this regard, the two communities would change their status from being on-site

communities to being part of the surrounding communities. Such an initiative signalled a departure from the plan to construct a nature reserve where humans (impoverished communities) could exist, co-benefit, and co-manage from within to one where this would take place from outside the reserve.

Essop's proposal, to reward the voluntary displacement of Driftsands 'squatters' to impoverishing areas of the Cape Flats, is problematic but corresponds with contemporary global conservation views on co-existence, co-benefits, and co-management. This represents a shift from the fortress conservation of the past. The emphasis is on allocating intangible benefits to communities surrounding protected areas, and currently conservation groups are targeting 'fair and equitable distribution' of benefits.

This analysis of DNR challenges notions of co-benefits between nature conservation and local communities. It confirms the view that global nature conservation discourses favour nature conservation at the expense of local communities. Where such communities are involved in nature conservation, they are more labourers than equal partners.

1.6. Limitations of the study

Each research project has its own limitations. In my case, language was a serious communication barrier both for me and my informants. I had to interview local communities who can hardly speak English. Most of Driftsands local communities speak Xhosa and Afrikaans and a few spoke English. So I always needed to hire a translator to explain myself and to hear what informants say about the issues under investigation.

Developing a theoretical framework for a critical study was not an easy process for me. I had to employ two unfamiliar concepts: environmental justice and social construction of nature. Beyond my unfamiliarity with both concepts, environmental justice is a new concept, compared to that of justice. For example, South African literature is not rich on environmental justice. So I had to survey international literature to come to grasp the concept of environmental justice. Equally, the concept of social construction of nature confused and troubled me. If nature is socially constructed, then everything is socially constructed, including God. This shook my understanding and belief in one God and 23

prophets. I also had to answer the question of what is the benefit of saying that nature is socially constructed when everything is socially constructed. I only became confident of using the constructionist perspective after appreciating the benefits of employing the notion of social nature. The concept is used in many disciplines such as sociology, anthropology, linguistics, environmental studies, and political studies. It can be investigated from various methodological approaches such as discourse analysis, ideological analysis, and critical analysis. Every method works and every approach leads to the absurd understanding that everything people communicate about is socially constructed and the essences of things are empty. The focus becomes not so much about the essence of things but about how a thing is constructed, how common sense becomes common, who constructs common sense and who benefit from these constructions?

Data collection for this study had its own limitations. Access to information from governmental departments and from nature conservation NGOs was a difficult task. It took me time to develop networks and connections that would open doors for my data collection. Therefore, collecting data and information from those agencies was a function of building relationships with these agencies. Some agencies opened many doors; other agencies opened few doors and some agencies opened no doors. So, I ended up having more information from some agencies like Driftsands Environmental Centre and little information from Cape Nature and too little information from the premier's office.

Chapter 2: The social construction of nature and its links with environmental justice

This chapter discusses the social construction of nature and its links with environmental justice. The discussion arises from the observation that analyses of constructions of nature do not sufficiently incorporate insights from literature on environmental justice despite the fact that constructions of nature have a direct impact on perpetuating environmental injustices. The approach of the chapter is four-fold. First, I unpacked the concept of nature in order to lay the foundation for discussing different views on nature. To this end, I bring together the works of Castree and Braun (2001), Foucault (1980), Williams (1988), Cronon (1996), Hall (1992, 1997a, 1997b), Latour, Nash, Tuan, Smith, and Haraway (1991). My stand in this thesis is inspired by these writers and their views on nature as ‘constructed’ rather than ‘discovered’. This view is central to analyses of the social constructions of nature in this thesis. It is therefore important to clarify what is commonly meant by ‘the social construction of nature’ – what kinds of constructionist views are there, and what the outcomes of those views are.

Second, I elaborate on constructionists’ views about the deliberate construction of unjust environments. This views are clear in the works of Foucault (1980), Bird (1987), Donna Haraway (1991), Livingstone (1994), Hannigan (1995), Immanuel Kant (cited by Wagenbaur, 1995), Cronon (1996), Davis (1996), Eden (1996), Escobar (1996), Price (1996), Slater (1996), Hall (1997a), Neumann (1998), Proctor (1998), Harré et al (1999), Buckley (2000), Redclift and Woodgate (2000), Demeritt (2002), Holden & Sparrowhawk (2002), Crist (2004), White (2004), and Bresler (1996 and 2007). The point of this discussion is to show, ultimately, a link between viewpoints on the social construction of nature and those on environmental justice. Both seem to agree not only that ‘good’ natures have been constructed, in terms of their impact on people (or on the environment), but also that impoverishing natures have also been deliberately constructed. Both views are incorporated to form part of the theoretical framework of this thesis. The thesis proceeds from the premise that establishing protected areas at the global, national and local scale (DNR for instance) has led, in a significant number of

cases, to the creation of self-perpetuating unjust environments for the communities living in and around those areas.

Third, I refer to the historical development of ‘environmental justice’ in order to highlight the circumstances that triggered the concept of environmental justice in both the United States of America and South Africa. In order to unpack the definition of environmental justice, I incorporate the works of Bryant (1995), Bullard (1997), Phillips and Sexton (1999), Smith et al (2003), Baden et al (2002), and Faber and McCarthy (2003). Literature suggests that the environmental justice movement originated in the United States and then spread to Europe, European colonies, and other parts of the world (Barkin 2001, Cole et al 2001, Bullard 2002, Agyeman and Evans 2004, and Holifield 2004). Constructionist viewpoints suggest that issues of environmental justice in South Africa gained prominence through efforts to address unjust environments among local people during the process of constructing nature in general, and establishing protected areas in particular. The core of their views of South African unjust environment is about land disposition, polluting African physical environment in the colonial period, and distorting African views of their environment (The general work of Ramutsindela and Bullard, Hannigan 1995, South African Environmental Justice Networking Forum 1997, Martinez-Alier’s 2001, McDonald 2002, Khan 2002, Bond 2002, Khan 2002, Ruiters 2002, and Ndungane 2002).

Finally, views on the social constructions of nature are linked to variations in the definition of nature. Both theoretical frameworks are concerned with the social consequences of the construction of nature: environmental justice deals with ecological problems that reflect and are the product of fundamental social inequalities. They argue that environmental justice emerged as a response to the deliberate construction of unjust environments (Blaikie et al 1994, Hall 1997b, Brulle 2000, Braun and Moeckli 2001, Anderson 2001, Gregory 2001, Kurtz 2003, and ORION magazine in 2003).

2.1. Defining nature?

The stand that nature is constructed seems to be dogmatic and dismissive; it is actually concern with the totality of humans’ collective definitions and understanding of the term

nature, which appear to vary over time, yet humans perceive nature to be static. The term “nature”, in English, is associated with countless meanings. It is used in all sorts of loose ways (Roberts 1982), from Godless (Williams 1988) to God, from humans to physical environment (Williams 1988), from “the sense of origin” (Tuan 1978:1) to the pattern of the process (Williams 1988), from destiny (the Holy Quran) to human interest and fantasies (Tuan 1989), from a subject and object (Immanuel Kant) to a social and individual parameter (Williams 1988), and more. Humans accumulated meanings and their significance to construct nature in a deterministic ways as if we can know nature (Hegel), as if nature is not an empty term (Kant).

However, humans incorporate countless meanings to the term nature. Williams (1988: 26) explains that “what can be done [and has been done] is necessarily limited by the long time-scale of revision which that, among other factor, imposes meanings or select some meanings and drop other ones”. This is to say, that peoples’ accumulative knowledge in general and vocabulary in particular is not only restrictive but is also selective.

One of the common uses of the term nature is associated with “the sense of origin” (Tuan 1978:1). This seems to have to incited humans’ interests and fantasies for a long time to the degree that humans posses studying and discovering nature’s laws (Williams 1988). Humans are moulding, constructing, and engineering their interests and fantasies about nature, not only in the West but also in Middle East and Persia as is clear from the science and aesthetics of the two regions. Yi-Fu Tuan argues that “humans feel that nature is plasticine to be moulded in whichever ways are useful to them or catch their fantasy” (Tuan, 1989: 275). Nature is a “source of aesthetic value” mainly for Occidentals argued Neumann (1998). Tuan explains that humans employ their technique and skills to know and control nature.

Meanwhile, the first use of the term “nature” is extracted from the word “naturalism” which appeared first in English in the seventeenth century “as a term in religion and philosophical arguments” (Williams, 1988: 216). The term naturalism had been preceded by naturalist, in the same context, and then followed by “particular sense of NATURE, in which there was a contrast with *God* or *spirit*. In the eighteenth century, the early debate about nature inspired Immanuel Kant to argue in his book, *Theoretical Philosophy after*

1781, as follows: “If the word nature is taken simply in its formal meaning, where it means the first inner principle of all that belongs to the existence of things, then there can be as many different natural sciences as there are specifically different things, each of which contains its own peculiar inner principle of the determinations belonging to its existence” (Kant 1781: 183). This is to say that each phenomenon has its own nature; which requires a specific scientific language to describe its essence. Thereafter, if we attempt to describe the natures of things we will accumulate countless scientific definitions, uses and vocabulary to the term natures: more than the number of the existing things.

As humans produced knowledges, they also embodied countless meanings of the term nature. Foucault commented that “if I, made a list of all the sciences, knowledge and domains which I should mention and don’t, which I border on in one way or another, the list would be practically endless” (Foucault 1980: 64). There are countless knowledges, sciences and domains each of which revolves around a unique nature. This implies that we are processing countless meanings of natures.

Humans’ knowledges of nature vary by time and are a function of countless influences. Kant’s discussion of the term nature suggested also that, “[W]e cannot know things as they are in themselves and ... our knowledge is subject to the conditions of our experience” (Encyclopaedia of Philosophy). Therefore, our attempts to describe the variable natures of things correlate with our variable knowledge and experience that change through time along, and with the accumulation of our knowledges and experiences. In other words, our ideas of nature change over time. We will therefore end up debating our early definitions of the nature of things; and we will generate more definitions of *natures* of things than the number of existing things. For example, the nature of something, wind dynamics in Cape Town for example, is a function of countless influences such as the atmosphere, topography, water resources, significant and insignificant pollution, energy production and consumption in Cape Town, South Africa, the continent and the globe, and much more. Therefore, the nature of wind in Cape Town is a function of the natures of all these influences, all of which are changeable. In this sense, attempts to describe the nature of wind in Cape Town will be fruitless if we do not understand the complexity of the wind system.

However, humans' accumulated a complex common sense about nature. Hegel argues that the knowledge of nature is beyond people's understanding, as the essences of things are empty. This is so because "the thing-in-itself therefore is the empty substratum for these predicates of relation" (Encyclopaedia of Philosophical Science). Wall and Williams argue that the term nature is "perhaps the most complex in the [English] language" (cited in Demeritt 2001a: 29). Nature is a complex concept not just because it refers to many different entities – from the weather through to animals and human 'nature' and beyond – but because it also has multiple meanings and dimensions. Therefore, nature is both a concept and all those physical things to which the concept refers (Demeritt 2001a).

Therefore, our ideas about nature are our own common sense, understanding, interpretations, perspectives and emphases of what nature is about. There are different emphases of nature; for example, humans predicate nature on parts of their bodies to simplify the "vast, complex, and threatening" nature. So they say: "headlands, foothills, mouth of a river, spine of a ridge, shoulder of a valley, arm of the sea, and so on" (Tuan 2003:135). Furthermore, 'nature conservation' is a "biological emphasis and concern for perpetuating biological diversity that distinguishes the new discipline of conservation biology from traditional natural resource conservation and the environmental movement" (Millar and Ford 1988: 456). Arbitrary clusters of definitions of nature can be used to aid our understanding of nature.

The definitions of nature are clustered into three groups of definitions: external, intrinsic, and universal (Castree and Braun 2001). The first cluster of definitions is the earliest use of the term nature that externalises nature and makes it different from society. Nature in this case is inherently non-social and nonhuman encountered in geography as 'landscapes', 'wilderness' and the term 'the environment'. For example, the U.S. Wilderness Act proclaims that wilderness is "a place where man is a visitor" and a space of wild is "a tract or region uncultivated and uninhabited by human beings" (Slater 1996: 117). The dominant idea in using the concept "wilderness" is the "absence of man and his work" argues Roderick Nash (1976). In Canada "wildest nature was a nurturer of the few humans who ventured there, while in Australia, untamed nature was regarded as terrifying dangerous" (Jenkins 2004: 111). In Spanish, wilderness is "the absence of cultivation or agriculture". In French, it is the (deserted place) a lonely uncultivated

place. Italians associate the concept of wilderness with confusion and disorder, where some people feel alien in an area where they are (Nash. 1976). Nature in this sense is distant from civilisation. Cronon (1996) explains in his essay “The trouble with wilderness” that wilderness for many Americans stands “as the last remaining place of civilization, that all too human disease, has not fully infected the earth. Nature is an island in the polluted sea of urban-industrial modernity, the one place we can turn for escape from our own too-muchness [from our own history]... it is the best antidote to our human selves, a refuge we must some-how recover if we hope to save the planet” Cronon (1996: 69). But wilderness is not quite as it seems for many Americans- “Far from being the one place on earth that stands apart from humanity ... a pristine sanctuary, the nonhuman world” (Cronon 1996: 69-70). This perception is a complex new cultural invention that evolved significantly over time. Perceiving nature as an external object is a hierarchical representation wherein “nature” forms the base, the mode of production constitutes the structure, and ideology the superstructure (Neumann 1998).

In the late eighteenth century the most common use of the word “wilderness” in the English language “referred to landscapes that generally carried adjectives far different from the ones attractive today. To be a wilderness then was to be “deserted,” “savage,” “desolate,” “barren”—in short, a “waste,” the world’s nearest synonym” (Cronon 1996: 70). This implies that wilderness for European and Americans, before 250 years, “was anything but positive, it is a place where one feels “bewilderment”— or terror”.

In the late eighteenth century, the concept wilderness used in a biblical metaphor to mean negative space—the dark place. Americans and Europeans used the word “wilderness” to “refer to places on the margins of civilisation where it is too easy to lose oneself in moral confusions and despair were biblical”, argues Cronon (1996:70). In Christianity “The wilderness was where Moses had wandered with his people for forty years and where they had nearly abandoned their God to worship a golden idol”. Furthermore, Adam and Eve were driven from that garden, and then entered to wilderness that only their labor and pain could redeem.

After late eighteenth century, the above biblical metaphor changed to mean the opposite, the garden and the park. Wilderness represents an escape from the burden of civilisation.

Wilderness becomes a “flight from history”; it offered humans the illusion that “we can escape the cares and troubles of the world in which our past has ensnared us” (Cronon 1996:79-80). This also implies that we do not live in wilderness and when we go to the wild we feel natural, to suggest that there is no nature where we live. Therefore, our ideas about wilderness as external nature, whether the abandoned space or the space of fantasy and escape, deny the existence of nature in our worlds.

Perceiving wilderness a place where people do not live is a western one, other regions perceived wilderness as an inhabited place. “It is generally believed that in most non-western societies, human were seen as integral part of nature – a society-nature relationship that allowed the co-existence between people and their physical environment” (Ramutsindela 2004: 32). This idea seems to distinguish those who live in nature (non-western society) from those who visit and invest in nature (western society) and to question the claim that those who live in nature live in harmony with nature. Currently this western idea of externalising nature become the hegemonic approach toward nature conservation on a global scale is a western format based on separating humans from nature and a) “has seriously disrupted the ways in which non-western societies have always interacted with nature”, b) have been called into the service of global apartheid.

Currently it is a well-established understanding among human geographers that externalising nature is an act of construction in itself. For example, Cronon (1996:79) argues that “there is nothing natural about the concept of wilderness. It is entirely a creation of the culture that holds it dear, a product of the very history it seeks to deny”. Humans’ perception of nature is their metaphorical framing of an ‘outside’ in contrast to an ‘inside’. ‘Outside’ seemingly points quite literally to the out-of-doors, or the ‘Big Outside’. So, perceiving nature as being ‘external’ to society is a categorisation of nature that contrasts to ‘the social’ or ‘the human’. This means that nature is not physically external to but categorically, metaphysically exclusive of the human (Delaney 2001).

So, cultures use the term nature to refer to their unfamiliar world: the space of unfamiliar different mechanisms and laws. Tuan explains that “outside humans’ familiar world of people and setting is nature: the primordial and chaotic bush or forest haunted by

demons, witches, and strangers” (1986: 11). This chaotic externalised world is “pristine (Neumann 1998: 255), God-given, and autonomous” (Castree and Braun 2001: 6).

Conceptually, the term nature is an “expression of purpose; purpose is that which finds expression in determinate sequence” (Morgan. 2005: 185). The idea of an external nature appears in the European Enlightenment, which associates nature with other dualisms such as rural-urban, country-city, and wilderness-civilisation. This is the course of self-reflective reason that took nature as its counterpart or ‘mirror’, argues Wagenbaur (1995).

In geography this view of external nature evolved in the early twentieth century from environmental determination towards protecting natural resources in the mid- twentieth century. During this period geographers shifted their focus to ways in which the activities of the industrialised West were increasingly impacting upon local and international resources. In other words, nature perspectives were resource-oriented. Today, some human geographers focus on a) ‘human impacts on the environment,’ meaning that nature perspectives have shifted towards protecting natural resources, and b) the impacts of environmental discourses on disadvantaged communities vivid in environmental justice work in the early 1980s. For example, the term wilderness is perceived by Ramutsindela to refer to both the control and the use of nature – a foundation upon which the national park idea is build. “A practical step towards the preservation of the unspoiled natural environment was to designate areas for national parks” (Ramutsindela 2004: 6). In summary, the shift from environmental determinism to natural resources protection, and the human impacts on the environment imply that society and nature are related but ultimately distinct (Castree and Braun 2001).

The second cluster of definitions considers nature as ‘an inherent and essential quality’ of something. Here nature is seen as (i) fixed and unchanging and (ii) defined by one or another ‘essential’ quality or attribute (Castree and Braun 2001). The idea of intrinsic nature is applied to both ‘human nature’ and ‘external nature’, and implies that external nature shapes the nature of human beings and of other existing things. For example, “northern peoples of Europe are energetic, provident, serious, thoughtful rather than emotional, cautious rather than impulsive; and that is also why the southerners of the sub-tropical Mediterranean basin are easy-going, improvident except under pressing

necessity, gay, emotional, imaginative, all qualities which among the negroes of the equatorial belt degenerate into grave racial faults” (Semple 1911: 620). Semple’s argument implies that Europeans have fixed and better natures than Mediterranean people who also possess fixed nature. Humans of both regions are product of the earth and the nature of such an earth shaped their fixed natures. Natures are shaped by mother nature. Semple confirms this thesis of fixed nature by arguing that “man is a product of the earth’s surface. Nature mothered humans; it set them tasks, directed their thoughts, confronted them with difficulties that strengthened their bodies, shaped their wits, gave them their problems of navigation or irrigation, and at the same time whispered hints for their mind and soul” (Semple 1911: 620). Semple implies that human nature is fixed and unchangeable.

In geography, ideas of nature as a ‘fixed domain’ continue to be reproduced from the distant past to the present time. For example, the Malthusian approach toward natural resources is of persistent concern, giving rise to “the fear that natural resources are becoming increasingly scarce. Pressures of an expanding population combined with the assumption that increasing costs characterize natural resource production, perhaps periodically staved-off by technological breakthroughs, have been sufficient to raise the threat of reduced economic growth and deterioration of human welfare” (Milliman 1963: 182). In line with the thesis of resources scarcity, “technology can overcome increasing shortages of natural resources ad infinitum” (Burton and Kates 1964: 82).

The Malthusian approach towards perceiving nature as a fixed domain coalesced with the Occidental rationalisation of nature, argues Raymond Murphy (1994). The Occidental rationalisation of nature “advocates a world image based on the intrinsic value of nature and re-enchantment of the world through a return to the rituals and institutions characteristic of primal peoples” (Murphy 1994: iii). Moreover, it is argued that “there’s still a good deal of research on hazards – like floods and earthquakes – that sees them as, essentially, ‘natural events’ governed by physical laws and processes” (Castree and Braun 2001). For example, Brink et al (2008: 2) writes about the “acceleration of the cyclic nature of earthquakes”; De la Cruz-Reyna and Tilling (2007) argue that volcanic eruptions and other potentially hazardous natural phenomena occur independently of any human actions. However, “hazard refers to natural events that may affect different places singly or in different combination at different times” and they may be caused by both

nature and humans. “Disasters are a result of the interaction of both: there cannot be a disaster if there are hazards but vulnerability is (theoretically) nil, or if there is a vulnerable population but no hazard event” (Wisner et al 1994: 49).

The third cluster presents nature as a universal dimension, and emphasizes two aspects, namely, nature as universal and nature as a general phenomenon (Castree and Braun 2001). The aspect of nature as universal is captured by the use of the terms such as Gaia, biosphere and ecosphere as names for the global environment or ecosystem. According to Huggett (1999) there are different ways in which the first aspect is expressed. For example, the concept biosphere is used to mean the totality of living things residing on the Earth, the space occupied by living things, or life and life-support systems (atmosphere, hydrosphere, lithosphere, and pedosphere). The term ecosphere is used as a synonym of biosphere and as a term of zones in the universe. Finally, the term ‘Gaia’, like ecosphere, is a name for the sum of living things and their supporting environment. Gaia is similar to biosphere (in the sense of life and life-support systems) and ecosphere (in the sense of biosphere as life and life-support systems), but in its most extreme entity (Huggett 1999). Meanwhile, it is well known among nature observers that “Earth’s spheres of activity maintain or systematically renew a harmonic balance within themselves and among one another” (Cloud 1988: 1716). Conceptually, Gaia is a complex adaptive system in terms of its behaviour. The system is self-organising but does not reside in a critical state. The system has always recovered without losing the capacity for large-scale free energy capture and recycling of essential elements (Lenton and Oijen 2002: 683).

With regards to the second aspect of nature as general, scientists see natural characteristics as general rather than particular. For example, “a hydrologist studying how pesticides leak from fields of a certain soil type into rivers might use a general theory of soil-water movement. The assumption, here, is that all fields with this soil type – regardless of location – behave in similar ways vis-à-vis water percolation” (Castree and Braun 2001: 7). This is common to applied sciences such as hydrology, soil engineering and mechanical engineering which rely on generalisations to describe natural processes.

Put together, clusters of definitions of nature suggest, first, that the quest to know nature ‘in itself’ generates different perspectives. Second, whether nature is fixed or not, we perceive it to be fixed or moulded: humans perceive nature to be more-or-less unchangeable, which ultimately restricts and constrains them. This idea of an intransigent nature frequently occurs in mainstream resource management, where restrictions on human activities are legitimated in terms of the need to conserve finite (non-renewable) species or resources (Castree and Braun 2001). Not only is nature often depicted as “unmalleable [but also] dauntingly autonomous” (Rowen 1978: 360). The idea of intransigent nature is stated vividly in medicine, especially in transferring genes into human cells. “Although it is important to maximise gene-transfer to endothelial cells in such categories primary human endothelial cells have proven to be rather intransigent to a variety of transfection techniques both in vitro and in vivo” (Martin and Murray 1999: 223). In support of this idea, Snowden and Grove (1998) stated that “essentially the good candidate diseases are those arising from inherited mutations in the genetic sequence and which are intransigent to current therapies”.

Definitions of nature are often invoked to ground value judgments about what is deemed ‘good’ and ‘bad’, ‘normal’ and ‘abnormal’, ‘better’ or ‘worse’ – either socially or ecologically. Robert (1982) argues that all of these uses of nature can be traced back to ancient usage. The Greek early fathers or philosophers of the chairs were concerned about the meaning of nature and they used the word “Nature” (capital N) to mean God and with a lowercase ‘n’ when referring to the universe. In the Middle Age Greek world, nature referred to “a beautiful appearance attractive to behold”. More strangely, in Greek antiquity, the word nature had a very precise meaning in a highly technical philosophical language. It meant “a source of principle from which the movement and possession proceed” (Robert 1982: 135). Examples of this abound in both the eco-centric and people-and-environment tradition. For instance, the preservation of natural environments is usually taken to be inherently and self-evidently valuable. Therefore, nature conservation is also inherently valuable

The problem with these definitions is that they are circular. “[I]n geography and beyond, whether one’s perspective is technocratic or green, it is possible to (i) identify supposedly objective facts about nature and environment, leading to (ii) explanations of

how far and in what ways societies are affecting, or being affected by them, in turn generating (iii) an evaluation of society-nature relations on scientific or moral grounds, leading to policy formulations or some shift in society-nature relations at one or more spatial scales ” (Castree and Braun 2001: 9).

There are a number of disadvantages of seeing nature as external, intrinsic and/or universal. First, “the ‘facts’ of nature never speak for themselves” and the knowledge of nature is beyond our realisation. Therefore, what counts as the truth about nature varies depending on the perspective of the analyst. Even when we pursue rigorous scientific investigations, we cannot “separate objective observations from social biases and political interests” (Castree and Braun 2001: 9). Therefore, “constructing statements about nature say as much about who is doing the talking, and what their individual group interests are, as they say about nature tout court” (Castree and Braun 2001: 9). In this sense, constructing nature reserves in South Africa during the apartheid era says something about the sense of superiority and the drive to control those reserves and the inferiority and impoverishment among the others (the non-white population) living in or around protected areas. If the ‘others’ were to build nature reserves, they would not build them in such ways, neither would they be instruments of their own impoverishment for the sake of nature and future generations.

It is often the case that claims about nature – and actions based upon those claims – can serve as instruments of power and domination. Consider, for example, the wildlife conservation movement in the developing world, which has both an eco-centric and technocratic element. For over a century, in countries like Kenya, indigenous peoples have been forcibly removed from, or denied access to, traditional territories because conservationists “provide no suggestion of any retreat from the spatial segregation of nature and society” (Neumann 1998: 211). This practice perpetuates exclusive natures – exclusive of the local communities living in and around protected areas that lead to the construction of their unjust environments. Chapters 4, 5, and 6 will illustrate the creation of an unjust environment for Driftsands local communities as a result of a particular form of constructing nature at the site.

Therefore, we need to understand the roots of different views on nature and how those views are translated into practice. For example, what is the implication of nature as

'natural' on setting the boundaries of nature reserves, the design of nature conservation policies and natural resources and natural resource management? Some comments on the social construction of nature and views arising from that process are helpful in contextualising the discussion on DNR in Chapters 4, 5, and 6 of this thesis.

2.2. The social construction of nature and related views on 'nature'

Everything is socially constructed from Niagara Falls to Yosemite. They are build up scales, radically shaped by design, for those who come to stand as monuments of nature untouched by human artifice (Spirn 1996: 91). They are designed to amaze us. To make us feel or say to each other "Waw! and Ahhh!" (Price 1996: 186). Bresler suggests that nature literature "reveals that nature has the following effects on human beings: restoration, competence building, symbolic meaning, and stimulation or curiosity" (Bresler, 2007: 169). The breakdown of Bresler observation is taken from (Buckley 2000 and Holden & Sparrowhawk 2002) who suggest that peoples' motivation to visit nature is about generating the following feelings: relaxation, excitement (55%), social interaction, self esteem and development, and fulfilment (95%) (Bresler, 2007: 170). Bresler explains also that the aim of overseas visitors to visit Africa's protected areas is to have "a genuine, authentic nature experience and to live, as it were, in a fantasy world for a few days: to see Africa as they imagined it once was, even if they knew it was not like that anymore" (Bresler 2007: 173). This experience is classified by Bresler as "existential authentic" states of being. Visitors of some protected areas in South Africa states that they found themselves authentic during their visit, because "they had engaged in non-ordinary activities characterised as nostalgic or romantic" (Bresler 2007: 172).

Nature landscapers design nature to generate some preferable feelings among potential visitors to protected areas rather than resorting to nature for the sake of nature. Nature is reconstructed to bring in us "the feeling of wonder... the smile to the child inside" each of us (Davis 1996: 204). These uses, feelings, and sayings help us to define and find ourselves, our identities and worlds. These uses are imitations, constructions, reproduction of our ideas on nature. They are not "natural or felicitous, serendipitous products of culture, but artful wilderness" (Spirn 1996: 91). We make them not from the

oldest book but from our immediate, ongoing and evolving perceptions and understandings of what nature is about.

Nature is not something out there that we easily can reproduce, control, and describe accurately even when we are highly skilled by scientific language. Even “Scientific knowledge should not be regarded as a *representation* of nature, but rather as a socially constructed interpretation [of] an already socially constructed natural technical object of inquiry” (Bird, 1987:255). The implication of constructivists argument is that everything we describe and understand to be natural is socially constructed including and not limited to the Niagara Falls, Yosemite (Spirn 1996), nature reserves in general and natural products in particular (Price. 1996), and natural narratives (Slater 1996). These constructions can not be natural, but design to match clients or public common senses, perceptions, and ideas of what appeal to us as natural or part of nature. That is why what we see in and say about nature “reveals as much about who we think we are as about what nature is about” (Cronon 1996: 219). This also implies that ‘natural’ companies are not more natural than plastic companies. They do not hold nature or touch base with nature but aim at commodifying our ideas in general and fantasies in particular to what nature is about. Therefore, both type of companies’ package, manufacture, process, and label products to match our ideas about nature.

For some academics the idea of “social construction of nature” is intellectually narrow and politically unpalatable (Crist 2004: 6). Constructivists arguments are perceived by some natural scientists and other scholars as “dangerous flirtation with relativism” (Proctor 1998: 352, White, 2004). Crist, also, sees “constructivism functions as an ideology [a] dangerous [one] to the goals of conservation, preservation, and restoration of natural systems as bulldozers and chainsaws” (Crist 2004:7), but aim to humanise the earth. The last view is supported by James Proctor who has argued that the argument of social construction of nature “strikes to the epistemological core of environmentalism’s moral and political campaign” (Proctor 1998: 353). However, Crist has argued that the common ground among constructivists is that people beliefs and perspectives about nature are “not immutable or universal, but relative to the locations and time of their production” (but did not prove why constructivism beliefs about nature(s) are wrong).

Overly, the ‘battle’ between constructionists and ‘anticonstructionists’ is about the role of language and power in the construction of social ‘realities’. Robert White (2004: 7) explains that “Social constructionism rests on the philosophical assumptions that multiple versions of the world are legitimate; that texts are open to multiple readings; and that language is non-representational”. For example, post-structuralism “treats language not as the reflection of ‘reality’ but as a construction of it” (Escobar 1996: 326). Anticonstructionists charge constructionists argument on social construction of nature to be “thoroughly relativistic, which so called constructivists have typically countered that anticonstructionists are simply worried about loosing their hegemonic role over what counts as “truth”” (Proctor 1998: 353). In other words, constructionist arguments shake the ground of mainstream environmentalism not for the sake of taking over but to make it more considerate in regards to human being as not the clients of natural products: tourists, hunters, sportsmen, the bourgeoisies and the immerging bourgeoisies.

Indeed the term “social construction of nature” is not a familiar term among the public, the majority of academics, and probably it is a taboo reflection in conservative societies. This term is a crude one “used to describe very different understandings of nature, knowledge and the world” Demeritt (2002: 766). Some theorists use the term to “refute false belief about the world [such as average radical human geographers] ... and [to] question the culture/nature, subject/object, representation/reality dualisms” (Demeritt 2002: 766). Stuart Hall, for example, questions humans expressions, meanings, and signification for things and phenomena and the nature of these signified things and phenomena. Hall explains that any object such as a tree has no meaning in itself; it is we who attach meaning to trees by fixing our language to make us think about tree when we mention the word TREE. Hall’s (1997a: 20-21) argument is that “the objects in the world themselves embody and fix in some way their ‘true’ meaning. But it is not at all clear that real trees *know* that they are trees, and even less clear that they know that the word in English which represents the concept of themselves is written TREE whereas in French it is written ARBRE!” and in Arabic Shajarah. There is no meaning in trees themselves, or in the word TREE, ABREE, or Shajarah. “It is we who fix meaning so firmly that, after a while, it comes to seem natural and inevitable. The meaning is constructed by the system of representation”. It is constructed and fixed by the *code*, which sets up the correlation between our conceptual system and our language system in such a way that, every time English speaking people think of a tree, the code tells them

to use the English word TREE. The code tells them that, in our culture- that is, in our conceptual and language codes – the concept ‘tree’ is represented by the letters T,R,E,E, arranged in a certain sequence,” just as the sign V stands for victory, likewise, in the language of traffic Green=Go and Red=Stop!.

The accepted wisdom among constructionists towards the meanings and natures of things is that “there is no real nature out there” and “nature is historically produced and known” (Escobar, 1996: 325). Hall (1997a: 24), for example, convincingly argues that “there is no absolute or final fixing of meaning” like those associated with the term nature. One of Hall’s justifications for this argument is that “social and linguistic conventions do change over time”. Overall, not only the nature(s) of things change over time but also our linguistic and social meanings to the nature of a thing change also. “Words shift their meanings”, [actually we shift the meanings of words], they are not permanently fixed by cultural codes argued Saussure (Hall 1997a: 32). The main point in constructionists talk is that meaning in general and those associated with the term nature, for example, “does not inhere *in* things, in the word. It is constructed, produced. It is the result of a signifying practice- a practice that *produces* meaning, that *makes* things mean” something to us (Hall 1997a: 24). There are three approaches to meanings. The first is the **reflective approach** toward meaning, in which “the meaning is thought to lie in the object, person, idea or event in the real world, and language functions like a mirror, to *reflect* the true meaning as it already exists [appear to us] in the word” (Hall 1997a: 25). Here meaning mirror or imitate nature.

The second approach to meaning is the **intentional approach**, the agenda one, which is in line with Kant’s view. Hall sees the speaker, the author, or the politician imposing his or her unique meanings on the world through language and other form of signification and manipulation to achieve an agenda, a gain, to win. Words mean what the author intendeds they should mean.

The third approach to meaning is called the **constructivist or constructionist approach** to meaning in language. “Accourting to this approach, we must not confuse the *material* word, where things and people exist, and the *symbolic* practices and process through which representation, meaning and language operate” (Hall, 1997a: 25). Constructionists do not deny “the existence of the material world”. But believe that the material world do

not convey the meaning: “it is the language system or whatever system we are using to represent our concepts” (Hall, 1997a: 25) that conveys the meaning.

Academics distinguish two broad kinds of construction talk in the social sciences: construction-as-refutation and construction-as-philosophical-critique (Demeritt 2002). The first refutes beliefs about the natural world by questioning the consistency of those beliefs with philosophical principles, such as positivism and realism – Those who “want to lay down the law for each and every science” (Foucault 19980: 64). Constructionists refute beliefs and particular claims about the world and its ‘naturalness’ through questioning their representations and by exposing the bases on which those beliefs and claims are made as faulty. In doing so, constructionists destabilise ideas and common beliefs. Therefore, the refutation of constructionist arguments involves an implicit call for action: actions of denaturalising or deconstructing those beliefs. For sure, constructionists view might destabilise human ideas or common beliefs about nature by categorising their ideas about nature “in social, political and economic circumstance, and ... [exposing] the rhetoric in moral, political, and aesthetic appeals to what is ‘natural’” (Livingstone 1994: 128). Their message is that not everything about nature is natural.

Latour refutes the green movements’ argument for ecology by suggesting that “nature is rabidly invading politics; nature has countless nuances, there is an innumerable bond between nature and politics; and political ecology has enough substance to compete with “the age-old practice of politics as usual” (2004:2). But these innumerable bonds are woven by members of the ecological movements argues Latour. Meanwhile, Latour’s main argument is based on the hypothesis that political ecology “has not yet began to exist” (p 2); political ecology has nothing to do with nature (p. 4): the interest of the movement is too “powerful”: too enthusiastic. Political ecology is an unsuccessful emerging discourse that revolves around creating a combination between two “related but ultimately distinct” (Latour 2004: 2) discourses. The two terms ‘ecology’ and ‘politics’ have simply been juxtaposed without thoughtful examination of either term. The first (ecology) is a young discourse while the second (politics) is old. The first tries to balance the second, while the first forms part of the second. Such a juxtaposing is confusing and mistaken. As a result, we can draw no conclusions from the experiences of the ‘ecology movements’ until now, neither their past failures nor their possible successes. Political ecology is “incapable to produce thought, unable to provide new

foundation of morality, epistemology and democracy can not produce”. The reason for the failure is very simple. People have been much too quick to believe that it was sufficient to recycle, unchallenged, the old concepts of nature and politics, in order to establish the rights and manners of political ecology. They did not notice that the notions of nature and politics had been developed over centuries in such a way as to make any juxtaposition, synthesis or combination of the two terms impossible. “Political ecology is therefore incapable of producing meaningful thought, or providing a new foundation for morality, epistemology, and democracy. The way forward is to slow down, to deal simultaneously with science, with nature, and with politics, in the plural” (Latour 2004: 3).

In summary, both Gerber and Latour refute mistaken ideas of nature and provide remedies that require action to address the faults of those constructions. They ‘denaturalise’ nature by showing that some aspects of it are bad or unsuccessful, or do not make sense. They argue that we would be better off if these aspects were radically changed. This task becomes possible once we realise that nature is socially constructed and therefore changing it lies within our power. Demeritt (2002: 768) thus considers ‘construction-as-refutation’ to be “the latest fashion in a long-standing tradition of speaking truth to power”.

Likewise, Kant’s views about our ideas of nature are the counterpart or the ‘mirror’ of human beings, while the human construction of this mirror is ‘purposiveness’ fall within constructionist refutation approach to our meanings that destabilise our believes. Kant argues that “Our perception of the beauty of nature may be considered to be its purposiveness. This is valid as an aesthetic judgment. Its moral interest determines actions with and in nature; its aesthetic interest determines art as nature” (Kant, cited by Wagenbaur, 1995: 369). Unsettling beliefs and claims about nature in turn create tensions in society. For example, the Islamic view of nature, which broadly corresponds to Kant’s perspective on nature, holds that nature is a mirror, but a God-made one. God created the world and its systems and creatures, including human beings, and then gave them or ‘inserted’ their natures.

قال بل ربكم رب السماوات والارض الذي فطرهن وانا على ذلكم من الشاهدين

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The above statement (56) of chapter 21 (Profits) of the Holy Quran states that Allah is the God of Earth and spheres: of the total existence since infinity and forever; God created their natures. The fact that the Holy Quran refers to nature, indirectly and only once indicates that questioning nature (as Western culture does) is irrelevant to Islamists' beliefs. In Islamic faith, nature is God-made, and questioning it is a sin; it might cause the questioner to be expelled from the Islamic world, in much the same way as Salman Rushdie.

Actor Network Theory (ANT) and discursive constructionism. Phenomenological construction departs from the stand that social and environmental problems are products. The second type of constructionist talk, construction-as-philosophical critique, appears in various forms such as phenomenological and Sociology of Scientific Knowledge (SSK). For example, "in the Western countries, nearly 30 years of public environmental debate have thus led to the emergence of specific normative standards of 'adequate' problems perception and environmental behaviour" (Redclift and Woodgate 2000: 4). So, the Western environmental discourse for 30 years created or identified enough environmental problems for European and the non-western countries to be busy with. These problems are not actually the physical and even the total environment but the one created by or immersed from the West. Not necessarily for negative agenda but it did not come from Africa or the Middle East. For Redclift and Woodgate this is a fact not a refutation. They are not saying that the West should stop generating problems for everyone but more, their argument generates all sort of inspirations, some of which are motivational.

Unlike construction by refutation, "phenomenological constructionists seek mainly to describe the world, not to judge it or change it" (Demeritt 2002: 772). Therefore, remedies are not provided but 'hinted' at and "culture groups ... construct and redefine their realities ... through ongoing social interactions" (Demeritt 2002: 771). The phenomenological approach is commonly used by sociologists, who describe social and environmental problems as products of particular constructions of social realities, rather than necessarily of actual physical conditions (Demeritt 2002). They distinguish between 'social realities' and 'actual physical conditions' to show the differences between the existence of the problems under investigation and the truths of any claims about them by

research subjects. For example, Eden (1996) describes the relationship between nature and society to be one of domination and argues that the history of the social construction of nature is always the history of cognitive, moral and aesthetic interaction with nature. The social construction of nature is always part of a human history of nature, which cannot be reduced to a mere history of domination. For example, Marx (as cited by Eden 1996) measures the reproduction of society against a standard of adaptability, the standard of the control over the resources that make survival in nature possible. Marx's argument seems to imply that the social construction of nature is reduced to the social appropriation of nature, its evolution accelerated by cognitive learning processes. The development of productive forces, technical progress and the increasing division of labour are thus expressions of adaptation, mainly to survive. To survive is the main natural social construction, in Marx thesis, which if compared to Kant, they complement each other; one speaks (Marx) about the motive behind the construction of the working class, which is about survival, and the other (Kant) speaks about the motive of individuality and those who live in democracy to be of purpose.

Hannigan (1995), another phenomenological constructionist, describes the social construction of environmental problems and argues that it is problematic to define environmental problems in a similar way as defining social problems that are based "on the existing structures of economic and political power" (40). He argues: "If the social constructionist perspective is compatible with any other approach to the environment, it is probably that of political economy" (40). Meanwhile, environmental problems in general are similar in many ways to social problems; however, in other ways they are different. First, "while social problems cross over from a medical discourse to the arenas of public discourse and action, they derive much of their rhetorical power from moral rather than factual arguments. In contrast, environmental problems such as pesticide poisoning or global warming are tied to scientific findings. Second, although they are traceable to human agents, environmental problems have a more imposing physical basis than social problems, which are more rooted in personal troubles that become converted into public issues" (Hannigan: 1995: 63).

The second type of the construction-as-philosophical-critique, in the social sciences and in the humanities, is Sociology of Scientific Knowledge (SSK). "By adopting the 'symmetry principle', the strong programme in SSK extended sociologists' traditional

concerns with non-scientific beliefs to explaining socially the once sacrosanct and epistemologically self-evident belief in scientifically valid knowledge and phenomena” (Demeritt 2002: 772). For example, Woolgar (1988) argues that science is socially constructed and its attached values are constructed religiously to be conventionally real. Science is a strong construction because it is “well developed, highly funded and protected by powerful institutions in modern society”. It is strong to the degree that “‘science’ permeates every aspects of modern life” and is commonly perceived to be “producing reliable knowledge”. In science, one’s arguments are seen as valid if they can be shown to be scientifically sound, and one’s products will sell more if their marketing is scientifically sound as well. Woolgar points out that “adverts try to persuade us of the attractions of a new brand of toothpaste based upon scientific evidence”. However, Woolgar concludes that although our ‘common sense’ sees science as a means of producing reliable knowledge, actually there are “no essential differences between science and other forms of knowledge production”. Finally, Woolgar expresses his worries about the dominant belief in the unassailability of science; he sees science as “a project which is neither safe nor comfortable”. Science as a way of producing knowledge is symmetrical in its essence to other projects of knowledge in that there is no separation between social science and the object of the study. Furthermore, it is based on Cartesian dualism between the self and other, between subject and object, representation and reality.

Actor-Network theory (ANT) represents the third form of construction-as- philosophical-critique. Feminist Donna Haraway (1991) used the ANT method to argue that feminism, ‘us’, nature, and collective social formulas are socially constructed, not discovered. Haraway famously argues: “There is nothing about being ‘female’ that naturally binds women. There is not even such a state as ‘being’ female, itself a highly complex category constructed in contested sexual scientific discourses and other social practices” (155). Haraway approaches her argument on feminism by embracing cyborg (a fictional being that is part human, part robot) imagery to unsettle the ontological purity of nature and society. She examines feminist struggles (the women do not appear where they should) over the modes of producing knowledge about, and the meanings of, the behaviour and the social lives of monkeys and apes; the contests for the power to determine stories about ‘nature’ and ‘experience’; and the cyborg embodiment, the fate of various feminist concepts of gender, reappropriations of metaphors of vision for feminist ethical and

epistemological purposes, and the immune system as a biopolitical map of the chief systems of 'difference' in a postmodern world. Thus, Haraway does not call women to eschew their belief in feminism but explains that feminism is constructed, not discovered. Furthermore, Haraway argues that: "The pronouns embedded in sentences about contestations for what may count as nature are themselves political tools, expressing hopes, fears, and contradictory histories". She "treats constructions of nature as a crucial cultural process for people who need and hope to live in a world less riddled by the domination of race, colonialism, class, gender, and sexuality" (1991: 2). Haraway concludes: "Feminism is, partly, a project for the reconstruction of public life and public meanings; feminism is therefore a search for new stories, and so for a language which names a new vision of possibilities and limits". That is, "feminism, like science, is a myth, a contest for public knowledge". Finally, "scientific debate about monkeys, apes, and human beings; that is, about primates, is a social process of producing stories, important stories that constitute public meaning".

A fourth and last form of construction-as-philosophical-critique appears as discursive constructionism. Discursive construction emphasises "the role of language in the construction of social reality" (Demeritt 2002). Foucault writes about the ideology of discursive formation which also represents a major foundation for ANT. In his book *The Archaeology of Knowledge* Foucault distinguishes the main ideology of discursive formation: it "must be grasped in the form of a system of regular dispersion of statements" (Foucault 1980: 63). So it is about Diaspora inspirations that come out from, those who are not living on the land or among the people they grow up with. They are the children of emigrants, refugees, or radicals. Or they have been exposed to and later become part of radical environments. They always produce radical constructions. Whether they are or they become radicals they continue to generate radical arguments all the time, whether intentionally or unintentionally they generate radical inspirations. Not only to change their world but also to describe the world.

The main approach to discursive construction of nature is "indebted to Foucaultian ideas of power/knowledge relations 'by which the "inert abjectness" of nature [is] constructed'" (Demeritt 2002: 773-775). Evidently, discursive constructionists are concerned with power and its effects in the process of constructing nature. For example, Harré et al (1999) look at environmental discourse, or "*Greenspeak*", as "a technical

language of linguistics”. Harré et al focus on “linguistic and philosophical, psychological and cultural-historical aspects of environmental discourse, the dialectic of Greenspeak”. Those radical opponents of conservatism and Foucault looked at language beyond reflections, but as a tool that “shapes, distorts and even creates realities”. Language plays a role in refining “linguistic powers” in the process of developing environmental issues. Conceptually, Harré et al unpack environmental discourse from its presentation to argue that “the presentation of environmental matters in a rhetoric of urgency and crisis invokes complex temporal structures to the analysis” (Harré et al, 1999: x) of environmental matters. Understanding the way concepts of time and space are used, and analysing their linguistic manifestations, is a recurring theme of” Harré et al’s analysis of environmental discourses.

For example, “what is green or environmental friendly here and now may cause damage elsewhere (eg, clean fuel in British cities contributing to pollution in remote countrysides) or at a future point in time (clean nuclear fuel causing undesirable effects in 1,000 years’ time)” (Harré et al, 1999: x). Therefore, it is crucial to understand environmental discourses’ variables such as time, space and their linguistic manifestations, argue Harré et al. They believe that “ecological and environmental studies need to take a linguistic turn” (Harré et al., 1999: x).

Abstractly, this study takes its cue partly from the discursive constructionist analysis. It sees the presentations of environmental discourse as reflecting the intention of their authors, which are intricately tied to political, social and individual agendas. Furthermore, the consequences of constructing environmental discourses should be examined in terms of long-term effects, and with regard not only to the physical environment but also to the social one. When it comes to examining the social environment, it becomes essential to include language in the analysis of environmental discourses and to consider its presentation as related to the scientific, economic, moral and aesthetic discourses and to time and scale.

2.3. Social construction of time, space, and landscape

Constructionist viewpoints have extended beyond perceiving nature to be socially constructed to demonstrate that not only is nature socially constructed but the totality and the particularity of the physical and social constructions, among them time, space, and landscapes are also socially constructed. Araujo (2000) argues that understanding how time is socially constructed is crucial to understanding how nature is socially constructed. In contrast to the common sense that time is unproblematic, independent, “out there”, and unlinear, time follows its own arrow. A long-standing tradition of research in the social sciences points out that time is socially constructed and that in any society a repertoire of chronological codes is employed (Araujo, 2000: 103).

Likewise, analysing how space is socially constructed is essential in analysing the process of the social construction of nature. “Each social formation constructs objective conceptions of space and time sufficient unto its own needs and purposes of material and social production and organized practices in accordance with those conceptions” Harvey (1990: 419). In this regard, Kant’s argument that humans construct space to achieve pre-designed objectives is in line with Harvey’s view. Generally, Kant argues that “if we discover an argument in nature, which seems to have been instituted for a specific purpose, since the general properties of matter on their own could not produce such an order, then we regard this provision as contingent and as the product of choice” (cited in Wolford 2002:139-140). Kant elaborates that if we signify things based on their usefulness, then “we judge them in the same way to be contingent and a product of choice” (Wolford 2002:139-140). For example, the landscape reflects the self-definitions of the people within a particular cultural context. Attention is directed to transform the physical environment into landscapes that reflect people’s definitions of themselves and how these landscapes are reconstructed in response to people’s changing definitions of themselves (Greider et al 1994). For instance, “for most educated European, the landscape of Arusha National Park [in Tanzania] represents a remnant of ‘nature’ in Africa” argued Neumann (1998: 50). The writer argued further that European constructs nature and say this is how Africa should look like. In other words, people mirror themselves in the landscape as they (de/re)construct it for their direct/indirect interest(s).

Some social constructionist perspectives define ‘landscape’ as the symbolic environment created by a human act of grafting meaning onto nature and the environment.

Finally, environmental conflicts are also socially constructed. Hass (2002) argues that doctrines of resource scarcity are flawed, and are selectively invoked by policy makers and inattentive academics in order to justify pre-existing state goals. The same can be said about the construction of poverty, unemployment, terrorism, etc. and probably they too can be rationalised.

Conceptually, meanings of ‘time,’ landscapes (Demeritt 1994), environmental problems (Hannigan 1995) and nature (Wilson 1991, Burgess and Harrison 1994, Castree 1995, Kong and Yeoh 1996, Gerber 1997, Proctor 1998) have social contexts and are based on the observer’s standpoint at particular times. The emphasis is on the standpoint and the agenda of the observer: who sees and deconstructs what? Constructionists propose that attention needs to be turned away from trying to ascertain ‘objective conditions’ through more data and better science, towards understanding the plurality of constructions, how various assertions are made, how these are related to various interests of stakeholder groups and how outcomes are affected by power relations (Samantha 2002: 248). Plurality matters in the social constructions of nature and other things as context or the elements of a construction is multidimensional and in most cases the construction is build up with many stakeholders, each of which live in and reflect also a package of discourses. Because various assertions are made, they are also related to the interests and the wishes of those who made them, and as such affect the power relations surrounding the construction, of which the nature of that construction is a function of the asserting agency or to the creators of that construction. At this stage it becomes crucial to address questions such as what will we do with the knowledge of the social construction of knowledge; why is there concern whether nature is socially constructed or not; and what is the connection between the social construction of nature and environmental justice?

2.4. Critique of the social construction of nature

There is more than what humans see and interpret as nature (Demeritt 2001a). The external world affects both the human perspective of nature and the physical process of

the evolution of nature. There are two schools of thought associated with Demeritt's argument; the first is led by Castree and Braun, who speak of nature as a physical entity and of its contingent nature. The second school of thought focuses on the external world, which is beyond physical nature and the contingent processes.

Castree and Braun (2001) argue that there is never any way to access, evaluate, and affect nature that does not involve specific social knowledges and practices. In other words, however social nature is, it would be difficult to deny the reality of those myriad things societies define as 'nature'. Following this thought, Castree and Braun hint that there is the physical or material nature, and there is the nature that is a product of power relations or a "set of culturally generated symbols" (Greider et al 1994).

In fact nature is a social concept "with different cultures having different ways of viewing and comprehending it and thus appreciating its value" all of which changes over time, argued Ghimire and Pimbert (1997: 162). More importantly, there is no single nature. Both the physical or material and the human production of nature are evolving constantly: they are in constant dynamic process, and not in stasis. The meaning of 'nature' is thus a function of circumstances and time. The implication is that what is socially recognised and dealt with as 'nature' is a function of human interpretation and physical circumstances – and thus also a product of human production of meaning. And the interpretations – or meanings – of "nature" are an expression of varied interests and objectives. What societies thus classify as nature is nothing more than social perspectives or meanings attached to physical entities. Finally, a single 'nature', being a product of human discourses/ideologies, is not an entity that exists 'out there' independent of human agency; rather, it is a product of the human gaze. Moreover, any essence that one might ascribe as inherent to nature is beyond human knowledge. Firstly, there is the Kantian perspective (as discussed above): there are as many natures as there are things, each of which requires its own system of information to be described correctly.

If nature is socially constructed through both cognitive and physical processes (Scarce 1997), what is the construction of nature? Nature then amounts to human interpretations of the non-human world and the physical ways in which humans have shaped even areas that they think of as "natural" (Peterson 1999). It is also the essence of a thing, but not in

an essentialist way; rather, the essence consist of the forces or laws internal to something, thus really the external real world (Demeritt 2001a).

Some natural scientists perceive constructionist arguments as a dangerous flirtation with relativism (Proctor 1998). For example, Gandy (1996: 31) critique the established link between social constructionism, relativism and environmental discourse. He cited Bird (1987) to argue that “poststructuralist epistemologies break off any link with an external reality or ‘foundation’ to which human knowledge can be based. For the poststructuralist, scientific knowledge about nature is not therefore representation of something which exists outside society, but rather a number of relative truths ‘governed by a particular scientific paradigm’”. This is to say that reality does not exist ‘out there’ but is merely a product of discourse, as changes in knowledge lead to changes in physical reality.

Others argue that social constructions of nature “say things about the environment that can be tested” (Brockington et al 2001:449). Some argue that constructionist ideology is misleading because it denies the physical reality and autonomy of nature from societies; it ignores the fact that some aspects of nature – like geology – are simply not amenable to physical alternation; it also ignores the fact that natural phenomena are not completely subject to social control, because their characteristics and processes are not completely predictable, like GM seeds (Castree and Braun 2001). Other critiques emerge from an environmental ethic study that examines the doctrine of nature as a “social construction” that employs social and linguistic capabilities to achieve pre-existing goal(s): constructionists attempt to assimilate nature to an exclusively anthropocentric “reality”, and that it should be seen as expressing long-term industrialist tendencies to separate the “human” and the “natural” realms and assimilate the latter to the former (Kidner 2000: 339). By doing so, constructionists incorporate cultural influences into environmental studies, or theories, in Kidner’s terminology.

One should note that critiques of post-constructionist perspectives on the social construction of nature rely heavily on scientific rationality. However, post-constructionists argue beyond rationalisation of ‘nature.’ What is rationalised as nature is a manipulation of ‘nature’ to achieve pre-existing ends. If nature is only an idea, then we end up with the absurd conclusion that natures are whatever they are constructed for. But

that leaves the door open to questioning every social meaning: of things, time, space, human existence, faith and spirituality.

2.5. Outcomes of the social construction of nature

For this study, the main outcome of studies on the social construction of nature is the development of a comprehensive analytical technique by which to deconstruct unjust environments. Constructionists' analytical techniques help in at least five ways: firstly, to denaturalise unjust environments; secondly, to show that unjust environments are human-made and thus that humans bear the responsibility for deconstructing unjust environments; thirdly, it can help policy makers, socially conscious governments, non-governmental organisations and academics to avoid constructing unjust environments; fourthly, it also provides a framework that conceptualises the diversity of 'natures'. Constructionist views "help us to appreciate better the diversity of 'natures' and 'environments' that we carry around in our heads, in our policies and institutional structures" (Eden 2001: 82). And, fifthly, constructionist work has helped to formalise or has pre-empted work on environmental justice. For example, environmental justice has been used as an underlying principle in challenges of corporate power's dominant assumptions of a 'right to pollute' (Eden 2001).

Constructionists of nature highlight the deliberate constructions of unjust environments. Some constructionists engage with nature to argue that the physical characteristics of nature are contingent upon social practices – that some unfair/unjust 'natural' realities are, in effect, constructed deliberately, based on four topics:

a) It is argued that hazards can only be defined relative to the vulnerability of different groups in society (Blaikie et al, 1994 and Bullard 1990 and 1997).

b) Several human geographers have sought to question conventional understandings of particularly distressing phenomena that, sadly, remain a reality for millions today, such as famine. Yapa (1996) has argued that natural events like drought mainly trigger famines, but do not cause them. He shows that some people starve during droughts not because of absolute food shortages, but because they lack the economic 'entitlement' to

purchase much-needed food within their own country or community. Starvation, for Yapa, is thus a class-specific phenomenon.

c) The way poor communities use (and abuse) local resources depends as much upon local, economical, political and social forces as it does upon the nature of the resources themselves. The implication of the argument suggests that overabundance for sections of society is manufactured in some circumstances – for example, by colonial forces’ undermining of traditional agricultural techniques and replacing them with commercial production, which subjects local communities to foreign markets (Castree and Braun 2001).

d) The general work of Kurtz (2003) and Sexton (1998) suggests that the polluted environment of some lower economic income groups is not accidental, but has been deliberately and systematically constructed by governments and business agencies, as lower income groups cannot afford legal protection and are therefore the easiest to exploit. It has become apparent that economically ‘disadvantaged groups’ are likely to be both systematically more exposed and more susceptible to environmental pollution (Sexton 1998). Likewise, the disproportionate exposure of black and working-class Americans to toxic waste and pollution cannot be purely ‘accidental’: “Rather it is due to the deliberate siting of noxious facilities – for instance, waste incinerators – in or near communities with the lowest capacity to contest them in the political or legal system” (Bullard 1990).

A similar example of the deliberate construction of unjust environments is provided by Eden (2001: 80), who argues that postcolonial investigations of environmental questions have turned instead into interpretations of nature and particularly the ‘naturalisation’ of aboriginal people. The concern for researchers is to show how such groups are effectively erased from the debate by being themselves locked within the category of the ‘natural’. Anderson (2001) explores how the early hobbyists of natural history in Australia naturalised selected aboriginal people and their artefacts by describing them in the same analytical styles as those used for animals. Likewise, as part of an eco-Marxist analysis of the Bering Sea sealing at the turn of the last century, Castree and Braun (1997) consider how the Aleut people were largely excluded from the debate as ‘natural’ natives.

Metaphorically, the salient points of the above arguments on the deliberate construction of unjust environments dovetail with Fanon's (1950) analysis of the deliberate constructions of inferiority among Africans by western colonial systems: "... millions of poor and disempowered racial groups, [...] have been and continue to be collectively dispossessed and/or systematically subjected to fear, despair, debasement and displacement, made to suffer servility, inferiority complexes and trepidation for no sin other than being born into the 'wrong race'" (Fanon 1950). The point of Fanon's analysis is that these people are indigenous to an area whose natural resources are desirable to a more powerful foreign political establishment. Thus, Fanon's intellectual contribution has relevance to the work of critical scholars on the subject such as Castree and Braun, Harvey, Sexton, Bullard, Kurt, McDowell, Ramutsindela, and Khan. Furthermore, the idea that static and unfair social phenomena are deliberately constructed is not new. It at least existed before 1950, when Fanon wrote *Black Skin White Mask*, a book in which he argues intensely against the deliberate construction of inferiority among local people by foreign agencies.

Constructionists have considered how politically and economically more powerful entities construct environmental discourses and abuse local people and conditions: McCarthy (1998) discusses how the Wise Use movement in North America attacks mainstream environmentalism by challenging its neglect of local people and conditions; and McAfee (1999) shows how nature is turned into a commodity, abstracted and globalised by the market economy, especially through the discourse and activities of the World Bank (Eden 2001).

2.6. Defining environmental justice?

Environmental justice remains a difficult, vague and abstract concept that cannot be easily defined, at least for certain actors, mainly scientists and policy makers (Phillips and Sexton 1999: 9). Environmental justice is not as simple and as clear as it may appear in the general consensus in which it is taken to mean some notion of adequate protection for everyone from the adverse effects of environmental pollution, regardless of age, culture, ethnicity, gender, race, or socio-economic condition. Environmental justice is

multi-dimensional in terms of stakeholders' (social groups, political establishment, and the private sector) conflicting interests, perspectives, and values. Currently, environmental justice incorporates also the notions of sustainability and social justice, both of which are multi-dimensional and independently complex. Faber and McCarthy (2003) argue that environmental justice and sustainable development "are tightly linked since the forces that undermine sustainability are the same as those that undermine social and environmental justice". Sustainable Development sees nature as resilient within a context of some range of parameters that are themselves dynamic (Holling 1987; Clark and Munn 1986; and Holdren 1991). Nature is manageable so long as its limits are taken into account, either by conscious "holding back" or by application of ecological principles to human affairs (Jordan and O'Riordan 1997).

Environmental justice grew out of the second wave of modern environmentalism. While first-stage environmental disputes were typically over access to natural environmental resources such as water, forests, minerals and oil reserves (United Nations 1994). The second stage of modern environmentalism saw the movement towards environmental justice issues, most evident in the conflicts over environmental planning decisions (Smith et al 2003).

Furthermore, much of the current literature on environmental justice is based on comparisons of exposure and risk between different populations, rather than on the toxicological and biological impacts of those exposures (Bryant 1995). Another definition focuses on environmental outcomes but as a multi-dimensional complex of power relations. Environmental justice incorporates applying labels of 'fair' and 'unfair' to the outcomes produced by complex interactions among economic, social, and historical forces (Baden et al 2002). Moreover, Bullard (1997) perceives environmental justice in the form of "the right to a safe, healthy, productive, and sustainable environment for all humans". Essentially, Bullard calls for the progressive access of all humans to the holistic environment. Therefore, Bullard suggests that unjust environments are those that restrict the access of a community or an individual to the holistic environment or those that lead to the construction of an unsafe, unhealthy, unproductive or unsustainable environment.

2.7. Environmental justice in the USA

Environmental justice discourses are young. Formal concerns about environmental justice appeared first in 1982 in the United States of America (USA), and later in the United Kingdom (UK), “as a new vocabulary underpinning action by community organisations campaign against environmental injustices” (Agyeman and Evans 2004: 155). Subsequently, it spread to Europe and European colonies, and then to the rest of the world. This formal discourse of environmental justice is reported to have started with the establishment of an American environmental justice movement, which in its turn was part of an urban social movement (Agyeman et al 2003), “around autumn 1982, when a large protest happened in Warren County, North Carolina. The state wanted to dump more than 6,000 lorry-loads of soil contaminated with ‘PCBs’ into what was euphemistically described as ‘a secure landfill’” (Agyeman 2002: 35).

Ten years later, the American environmental justice movement held the “First National People of Color Environmental Leadership Summit” in 1991 in Washington DC (Agyeman 2002). The summit aimed at building “a national movement of all peoples of color to fight the destruction of [their] lands and communities” (University of Washington). Their struggle for just environments is also seen as part of their general struggle for “political, economic and cultural liberation that has been denied for over 500 years of colonization and oppression, resulting in the poisoning of [their] communities and land and the genocide of [their] peoples” (University of Washington). The 1991 summit affirmed and adopted seventeen Principles of Environmental Justice (see Appendix I). Their essence is the call for self-determination, participation and compensation for their losses.

In response to the growing public concern, former President Clinton issued Executive Order 12898, “Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations,” on February 11, 1994. This order attempts to address environmental injustice from within existing federal laws and regulations (Bullard 2002). Its fundamental objective is to call “all federal agencies to begin identifying and addressing, as appropriate, disproportionately high and adverse human

health or environmental affects of [their] programs, policies and activities on minority populations and low-income populations” (Holifield 2004: 286).

Despite former President Clinton’s good intentions, his Order focuses on democracy as a veil or foil by which to shift focus from the real demands of the 1991 summit and to avoid federal responsibility for environmental injustices that occur – deliberately or not – as a product of federal practices. The Order’s reference to “adverse human health” does not address past pollutions as demanded by the People of Color Environmental Leadership Summit in 1991. It actually does not hold the federal government responsible for addressing past and future environmental injustices, but calls for building trust between federal governments and communities seeking environmental justice. The benefit of the Order is not about addressing injustices of constructing nature or environmental discourse, but recognises the victims and their discourses in order for the federal government to understand, investigate and take measures. So, to issue the Order is the first step towards addressing the issue, which in return will take time to be resolved. It seems to be the case that Clinton was the first American president to recognise environmental injustices and their victims.

So, the first benefit of Clinton’s Order is to institutionalise the discourse of environmental justice in the American legal system. The underlying dynamic informing federal government transformed the movement for environmental justice into a broader struggle for ecological democracy in the United States (Barkin 2001). Therefore, the most important issue of environmental justice in the United States of America is the element of democratic decision-making, or community self-determination (Cole et al 2001). In effect, Clinton’s Order was developed to counteract the action of the victims of environmental injustices, that action being a response to the government’s dumping of polluted soil in the neighbourhood of racially discriminated groups.

However, the causal dynamic of the Order proposes good intentions and calls for sharing of the “nation’s environmental hazards” (Holifield 2004: 285), it seems unwilling to take responsibility for addressing the past construction of environmental injustices. These issues seem to be understood by various American academics and civil voices as a failure of the Clinton administration to take responsibility for the past. Instead of instituting a managed redistribution of environmental risk – a conceivable collectivist approach to

environmental justice – this strategy revolved around efforts to empower and build trust in environmental justice communities (Holifield 2004). Since community-based movements “are committed to reversing past practices that had the effect of placing disproportionately large ecological and economic burdens on working-class families and communities of color” (Barkin 2001: 130), the 1991 summit in Washington called for addressing past, present and future oppression and impoverishment, which is precisely what Clinton’s Executive Order 12898 failed to do. Instead, it called on the federal government to cooperate with environmental justice movements.

2.8. Environmental justice in South Africa

Unlike the US environmental justice discourses, which, in the case discussed, focused on the disproportionate allocation of pollution in low-income groups (Bullard’s general work), self-determination, participation, compensation for their losses (First National People of Color Environmental Leadership Summit 1991), and social inequalities (Hannigan 1995:37), South Africa’s environmental justice is diverse. Advocates for environmental justices in South Africa incorporate issues of both forced and voluntary removal of non-white communities from protected areas, the exposure of non-white communities to the pollution of development projects, the exclusion of non-white communities from protected areas, subjugations of non-white communities to racially discriminatory laws, and the prioritisation of the protection of flora and fauna over protecting non-white communities from ecological disasters.

The discourse of environmental justice in South Africa is younger than that of the USA. Until the early 1990s, environmentalism in South Africa appealed mostly to the white minority and neglected the basic rights of the majority: non-white social groups. At best, the environment was seen to be a white, urban suburban issue of little relevance to the anti-apartheid struggle. At worst, environmental policy was seen as an explicit tool of racially based oppression (McDonald 2002). During the apartheid era, racism persisted and was echoed in the environmental discourse through racially discriminatory laws, punitive conservation regulations, and discriminatory land legislation, which preceded apartheid proper, dating back to the 1913 Natives Land Act (Ramutsindela 2003). This

naturally influenced the attitudes of South Africa's historically marginalised communities towards environmental issues (Khan 2002).

The discourse of environmental justice correlates with the developmental one in South Africa. Martinez-Alier's (2001) analysis of the conflict arising from South Africa's mining practices suggests that "such a conflict is fought out in many languages and the economic valuation damage [for black communities] is only one of such languages" (2001: 153). Martinez-Alier shows that certain UK and USA mining companies exposed some black communities to pollution, resulting in negative economic and health impacts, and the displacement of these local black communities (Martinez-Alier 2001).

South Africa's discourse of environmental justice speaks also about the deliberate construction of injustices among non-white communities. Martinez-Alier bases his argument on the assumption that "environmental conflicts in South Africa are often phrased in the language of environmental justice" (2001: 164) and uses four cases to support his argument that the disproportionate level of pollution in African neighbourhoods is not accidental. The first case study (late 1990s) focuses on the development of an industrial zone in Port Elizabeth: a new harbour, and a smelter of zinc for export, owned by Billiton, a British firm. The Billiton project has costs in terms of tourist revenues because of the threats to a proposed extension to a nearby national elephant park, as well as to beaches, estuaries, islands and whales. Martinez-Alier argues that a small improvement in the economic situation of people would be obtained at high social and environmental cost, because of the displacement of people, and also because of increased levels of sulphur dioxide, heavy metals, dust, and liquid effluents in their environment.

The second case study focuses on the well-known 'asbestos scandal,' which features international litigation initiated by victims of asbestosis against British companies, particularly Cape, a firm that has produced and distributed asbestos products since 1931 (Martinez-Alier 2001). Nearly 2,000 persons asked for compensation because of personal damages as a result of Cape's negligence in supervising, producing and distributing asbestos products. Asbestos levels in this mill in 1948 were almost 30 times the maximum UK limit. There are other reported cases of asbestos contamination in South Africa, by companies such as Msauli and GEFCO, at locations such as Mafefe, Pomfret,

Barberton, and Badplass. The side effect of exposing local communities for radically dangerous levels of asbestos forms part of environmental justice discourse that focuses on polluting the environment of marginalised communities in South Africa.

The third case study focuses on mercury contamination. In April 1990, a massive concentration of mercury was detected in the Umgeweni River near Thor Chemicals' Cato Ridge plant. Thor Chemicals imports mercury waste into South Africa, partly supplied by Cyanamid, a US company (Martinez-Alier 2001: 165).

Briefly, Martinez-Alier's argument revolves around the exploitation of African natural and human resources by Occidental firms through employing national discourses of 'unemployment'. Occidental firms seek "to take advantage of the region's desperate need for employment to enable construction of a highly polluting facility that would never be allowed adjacent to a major population center in the UK or any other European country" (Martinez-Alier 2001: 164).

Since early 1990s, environmental justice in South Africa has incorporated issues related to the basic needs of impoverished communities. It is becoming more common to recognise the rights of people to a clean and healthy lifestyle as part of broader environmental goals (Lukey 1995; Hallowes 1993; Khan 2002; Ramphele and McDowell 1991; Cock et al 1991). For example, the quarterly newsletter of the South African Environmental Justice Networking Forum (EJNF) calls for the recognition of basic human needs and the democratic rights of black people, as well as the need to oppose abuse of power:

Environmental justice is about social transformation directed towards meeting basic human needs and enhancing our quality of life – economic quality, health care, housing, human rights, environmental protection, and democracy. In linking environmental and social justice issues, the environmental justice approach seeks to challenge the abuse of power that results in poor people having to suffer the effects of environmental damage caused by the greed of others. This includes the situation where workers and communities exist without firewood, grazing and water. In recognising that environmental damage has the greatest impact upon poor people, EJNF seeks to ensure the rights of those most affected to participate at all levels of environmental decision-making (EJNF 1997).

EJNF distinguishes the 'environment' as an entity independent from the social (human rights) and the political (democracy) environments. EJNF also refers to the need for protection from "environmental damage caused by the greed of others" (EJNF 1996). In other words, it perceives a dual dynamic to be in operation: the dynamic between the different South African racial groups, and that between those racial groups and the 'environment'. The dynamic between the racial groups revolves around addressing basic human needs of black people, while the dynamic between these racial groups and the environment centres on environmental protection and its implications: environmental damages and pollution.

Environmental justice in South Africa evolved by time; it moved from addressing health damages under apartheid to concern with addressing basic needs in the post-apartheid era. A shift towards meeting basic human needs and granting democratic rights has been recognised by Ramutsindela (2003), Bond (2002), and Khan (2002) to be taking place in post-apartheid South Africa. In the past, South Africa's dominant environmental ideology followed the 'preservationist' approach well into the 1990s. Preservationists argue that "wilderness and wildlife must be protected from human incursion because they have inherent spiritual and aesthetic value" (Hannigan 1995: 37).

After 1994, this ideology shifted its focus toward marginalised communities and those of its historical appeal to the white minority in the 'post-apartheid' political environment (Khan 2002; Ramutsindela 2003). The focus therefore becomes one of winning a broad-based acceptance in order to achieve a wide range of conservation objectives – to move on beyond whites concerns and to incorporate the concerns of the black majority (Khan 2002). Bond (2002) confirms that the environmental movement in post-apartheid South Africa has been rational, progressive and capable of the nuance required to transcend the 'Not In My Back Yard' (the 'Nimby') defence with 'Not in Anyone's Back Yard'.

Indeed, the environmental justice discourse is grounded in values so well recognized that they were included in the South African Constitution's Bill of Rights in 1996: everyone has the right to an environment that is not harmful to their health or well-being ... everyone has the right to have access to healthcare services, including reproductive health care; sufficient food and water; and social security (Bond 2002).

An alternative reading of South Africa's discourse of environmental justice suggests that the real question is not simply about, say, the fair distribution of pollution/hazards; rather, the real issue is how to deal with environmental justice as a multi-dimensional and complex process. "A deeper approach to environmental justice requires a focus on the *production* and *prevention* of injustices.... Justice is a process – a complex product of existing local knowledge, identity, the balance of class and collective forces, experience, and the definition of future goals" (Ruiters 2002: 112). Ruiters views the 'right' approach to achieving environmental justice as being through a multi-dimensional process without favouring or pursuing particular aspects. Emphasis is often (wrongly) placed on the distribution of environmental hazards, the struggle for improved regulations, fiercer enforcement, or better access to information about industries, their products, and workplace conditions (Ruiters 2002). Two inferences can be drawn from Ruiters' argument. First, a one-dimensional approach to environmental justice, say pollution, is a limited approach even if it appears to be multi-dimensional. Secondly, the current discourse of environmental justice in South Africa departs from focusing on the redistribution of pollution to address racial inequalities.

Empirically, South Africa's environmental justice movement arose from a concern about the exploitation of South Africa's human and natural resources by foreign Western agencies; inequitable distribution of environmental hazards (eg, waste dumps, sewage treatment plants, and industry), and to focus on addressing the greatest challenge facing South Africa: "to eradicate poverty and develop its people while the natural environment is not destroyed in the process" (Ndungane 2002: 13).

2.9. Linking social construction and environmental justice

This theoretical chapter contributes to knowledge on environmental justice and social construction of nature, and how the two could be linked together. Both discourses are concerned about the morality of human constructions especially those that emerge from environmental discourses and discourses that appear to be natural but impoverishing the least powerful communities. Both discourses are distinct and mutually reinforcing. On one hand, environmental justice deals with social problems of ecological discourses that reflect and are the product of fundamental social inequalities (Brulle 2000). On the other

hand, constructionists developed an analytical technique to unpack contemporary depriving realities, not necessarily the ones that depart from environmental discourses, and claim that some social groups are victimised in the process of constructing natures. Constructionists also describe and denaturalise ‘natural’ phenomena such as gender, sex, race, religion, God, and Godless to argue that they are all man-made.

This chapter questions the ‘natural’ in nature conservation and in the discourses that support the creation of ‘natural spaces’ by alienating local residents. Ideas of the ‘natural’ are not limited to ‘environmental discourses’, but are also related to social ills such as poverty, inferiority, racial discrimination, displacement, and dispossession. In some ways, both social ills whether correlated to the environmental, developmental, or pure political discourses are forms of unjust environments imposed by powerful groups over less powerful groups through employing ‘natural’ discourses. For example, inferior status of blacks to that of the Western nations is linked to the ‘natural’ order of things (Hall 1997b: 243) through employing racialised discourse which was instructed by a set of binary opposition:

There is the powerful opposition between ‘civilization’ (white) and ‘savagery’ (black). There is the opposition between the biological or bodily characteristics of the ‘black’ and ‘white’ ‘race’, polarized into their extreme opposites – each the signifiers of an absolute difference between human ‘types’ or species. There are the rich distinctions which cluster around the link, on the one hand, between the ‘white’ races’ and intellectual development – refinement, learning, and knowledge, a believe in reason, the presence of developed institutions, formal government and law, and a ‘civilized restraint’ in their emotional, sexual and civil life, all of which are associated to ‘culture’; and on the other hand, the link between the black ‘races’ and whatever is instinctual – the open expression of emotion and feeling rather than intellect, a lack of ‘civilized refinement’ in sexual and social life, a reliance on custom and ritual, and the lack of developed civil institutions, all of which are linked to ‘Nature’. Finally there is a polarized opposition between racial ‘**purity**’ on the one hand, and the ‘**pollution**’ which comes from intermarriage, racial hybridity and interbreeding.

Hall’s argument forms the foundation of the connection between environmental justice and social construction of nature between the West and the rest. Since the first recorded contact between European traders and the West African kingdoms, in the sixteenth-century, naturalized discourse were employed. Such a discourse emphasized the “historical case against the black man based on his supposed failure to develop a civilized way of life in Africa” (243). Africans are presented as incapable of producing a civilized world in Africa because of their inherent mental and physical inferiority. Part of black man’s inferiority is about polluting nature. So, the connection is about the West

socially constructing the inferiority of blacks, part of this inferiority is about polluting nature and the incapability to develop civilised way of life. Blacks are projected as naturally inferior and polluter of nature.

This theoretical chapter contributes to the knowledge that constructing injustices is rooted in science, in Western mindsets since the West 's first interaction with the other. For example, it helps to show that the West uses science and natural discourses to empower the self and impoverish the others. Braun and Moeckli (2001), Anderson (2001), Blaikie (1994), and Gregory (2001) explore racial and colonial knowledges of nature to argue that discourses of nature do not reveal or hide the truth of nature, but rather create their own truths/myths. Our daily 'natural' discourses, at least since Darwin's ideas about 'natural selection' among species, are employed to support the 'fight for survival' among different racial, class and/or gender groups. The effect of Darwin's ideas on natural selection – which may be said to focus on survival – was the promotion of the idea of 'the survival of the fittest'. This can be seen to imply, also, that those unfit to survive will, 'naturally', end up inhabiting inferior environments.

This chapter provide one of the frameworks that characterises the link between environmental justice and the social construction of nature. Critical work on the social construction of nature seeks to denaturalise nature, while work on environmental justice deals precisely with the negative consequences of certain social constructions of nature. Historically, environmental justice emerged as a response to the construction of unjust natures in the environmental discourse, but now considers various social ills. As discussed above, environmental justice emerged in the United States of America as part of a discourse dealing with the dumping of contaminated waste in poor neighbourhoods. At that time, it was 'natural' to dump contaminated soil in poor neighbourhoods. That action did not seem natural to the poor community, however, nor to the concerned social scientists such as Bullard, who later argued that these constructions were deliberate acts pursued by the American federal government to naturalise impoverishment among poor Afro-Americans. The discourse of environmental justice thus emerged from local communities, while the discourse on what is considered natural emerged from the American government. Both perceive two different meanings for the same nature. Environmental justice discourse, however, proceeds in questioning the consequences of (certain) natural constructions. Conceptually then, environmental justice in this instance

sought to denaturalise – or deconstruct the idea of what is natural and accepted – pollution in marginalised neighbourhoods. It has currently evolved to incorporate issues beyond pollution, as seen in the discourse of South Africa’s environmental justice – land distribution, natural catastrophes, and the negative consequences of constructing nature reserves on local communities living in or around nature reserves. Environmental justice thus provides remedies – or seeks solutions at least – for unfair or unjust ‘naturalised’ constructions. In this sense those who speak about environmental justices are constructionists, they provide first the argument by which to challenge the unfair or unjust ‘natural’ constructions, while environmental justice provides, second the remedy for actual change.

This chapter shows also that contemporary environmental justice discourse is not only concerned with cases of injustices at the national level, but also with universalised environmental views, environmental policies, and environmental theories. Kurtz (2003) argues that the concept of environmental injustice raises difficult questions about how best to measure and address environmental inequities across space. Environmental justice politics is characterised by considerable debate over the nature and spatial extent of both problems and possible solutions. Following this, ORION magazine in 2003 called for a broader, ecologically sound moral framework by which to address injustice on global scale:

Yet those of us who see the world in ecological terms realise that, more than ever, we need an altogether new way of living. We recognize an undeniable link between the injustice inflicted on the nature world and the injustices toward people – whether they be done in the name of progress, patriotism, or terrorism. The crises currently consuming world affairs will only be resolved, we believe, through a broader, ecologically sound, moral framework (ORION 2003: 1)

Other proposals suggest a modern analytical and managerial method by policy makers and researchers approaching environmental injustice. Instead of applying ‘rational’ policy models, a more appropriate approach to policy might be to specify social ends to environmental policy in a more accountable way, and to incorporate hitherto marginalised voices. “If a conventional rationalist approach to the analysis of environmental policy is adopted, then scientific and authoritative evidence will form the basis of truth claims. On the other hand, if a knowledge-power approach is taken, then the deconstruction of authoritative and powerful truth claims about nature becomes the

focus. Finally, if a more justice-based approach is taken, then evidence from the economic, cultural, and social impacts of policy will be given prominence” (Blaikie et al 1994).

Generally, the discourse of environmental justice is large and flexible enough to incorporate a range of issues: sustainability and social justice; conflict of interests, perspectives, values; scope, victims’ and policy makers’ discourses; the definition of ‘fairness’ and ‘justice’; and victims’ rights to safe, healthy, productive and sustainable environments. Further studies suggest that environmental justice incorporates also issues related to industrialisation, and colonialism. However, all of these are multidimensional, complex and independently debatable. One cannot therefore claim or propose a global definition of environmental justice. One may discern, though, the meaning of environmental justice in the purview of a particular social group or establishment.

2.10. Conclusion

Overall, the link between theories and practices of social construction of nature and environmental justice is useful because it can help socially concerned governments, non-governmental organisations and academics to a) avoid constructing unjust environments; b) progressively deal with a colonial, impoverishing legacy of social ills; c) denaturalise social ills; d) suggest remedies for social ills; and e) recognise that social ills are human-made and thus that humans bear the responsibility for deconstructing unjust environments.

In this study, the link between the two will be used to deconstruct Driftsands Provincial Nature Reserve (DNR) and to denaturalise the extreme poverty among the inhabitants of DNR’s informal townships during the process of constructing nature at the site (Chapters 4, 5, and 6). This aim will be approached in two steps. First, I will examine the social environments of DNR: are the social environments of the inhabitants of Driftsands townships similar to those of neighbouring African and coloured townships (Khayelitsha, Mfuleni, Delft, West Bank and Philippi)? Answers to this question should be based on examining four parameters suggested by Robert Bullard: safety, health, productivity, and sustainability. Every community has the right to access to public transport and public

services, and the right to be relocated away from a flood-prone area. Communities should also not be isolated socially, economically or politically. Secondly, I will examine the social consequences of constructing nature conservation policies at the site. They should simulate their nature conservation policies to examine whether those policies will lead to normalised unjust or just environments among the inhabitants of their juridical boundaries, based on the four parameters suggested above.

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Chapter 3: South Africa's environmental policy: a mirror of global environmental views

Many of the conservationist ideas that were of such importance at the Cape had evolved elsewhere – in Britain, the United States, India and the settler Commonwealth. The Cape was probably the first colonial state in Africa to develop a sophisticated bureaucracy with an overarching modernist agenda and to elaborate many of the functions that become familiar in Africa during [the] colonial period. The approach and policies pursued were transferred to neighbouring southern African colonial states, and to some extent further afield. Conflicts over developmentalist, conservationist patterns of intervention, so evident during the late colonial period in African countries, were a feature of Cape and later Union politics, among both white and black communities (Beinart 2003: xiv).

Indeed, nature conservation in South Africa had social and political connotations, especially under colonial and apartheid rule. Nowhere are the various social and political meanings of nature more clearer than in national parks and nature reserves. As Chapters 4 and 5 of this thesis will show, social and political connotations of nature permeate protected areas. In post-apartheid South Africa, nature has been constructed in protected areas according to universalised environmental views and to some extent has been proactive, meaning that it aimed to address some of the social challenges. The attachment of social and political values to protected areas in different historical moments suggest that nature in South Africa has not been immune from external environmental views that originated from the Occident, for the benefit of the Occidentals, and processed in Occidental formats. In the past, South Africa's conservation policies were shaped by English, American and Afrikaner protectionist ideas (Carruthers 1993, 1997). Beinart's assertion above summarises the essence of South Africa's conservation discourse during the colonial period (1648–1948) which a) came from the West either directly or indirectly through India; b) started in the Cape colony and then spread to the neighbouring colonial states and African countries; c) were made to benefit Western immigrants; and d) led to losses for local black African communities. Beinart's view of South Africa's conservation discourses is that they have been predominantly white and have aimed to suppress non-white sovereignty over land and natural resources. Analysts who concur with Beinart's view include Stocking (1985), Ramphela and McDowell (1991), Council for the Environment (1993), Carruthers (1993, 1997), Ellis (1994), Khan (1994, 1997), Robinson et al (1995), Yeld (1997), Honey (1999), Delius and Schirmer (2000), Goolam (2000), Houghton (2004), and the general

work of Ramutsindela. Following this point of view, Yeld (1997: 16) argues that while whites were 'protecting' South Africa's wildlife, they 'ignored' "the interest and feelings of local communities, who were denied resources they had traditionally used and were sometimes even forced to relocate".

Currently, South Africa's nature conservation discourses are influenced by universalised conservation views, with more moderate losses for local communities in comparison to their losses during the colonial period. Universalised environmental views are substantially incorporated into the environmental policies of the Department of Environmental Affairs and Tourism (DEAT 1999), the African National Congress (ANC 1991), and the President's Council on a National Environmental Management System (1993). From a practical point of view, global nature conservation discourses are richer and diverse than those of colonial times and local conservation models.

My aim in this chapter is a) to examine South Africa's conservation history, with the four-pronged argument as suggested by Beinart above, and, b) to show shifts in South Africa's conservation policies. From the 1970s onwards, there was a significant shift from colonial environmental policies mainly as a result of prevailing nature conservation discourses and the resurgence of the importance of indigenous knowledge systems.

3.1. South Africa's protective policy, 1880-1900

Carruthers' (1993) analysis provides a rich background to South Africa's conservation history, which has relevance to the theme of this thesis. Her historical analysis covers the evolution of conservation policies on national and local scales during South Africa's colonial and apartheid periods. Carruthers shows that conservation in South Africa was prompted by English and Afrikaner hunters who sought to commercialise hunting through subjugating wildlife and its non-white inhabitants to their economic interests, profitability in Marx's terminology. She traces the development of protective policy towards wild animals in the Transvaal during these decades [1880-1900] to argue that the game protection policies did not emerge from deliberate protectionist intentions, but from profitability. Western immigrants were in charge of the colonial provincial states and "responsible for law-making". Conceptually, South Africa's wildlife protection

policies and private protected areas have been shaped by external and competing social, economic, and political circumstances – among which industrialisation must be included, since the discovery of minerals revolutionised Africa and its wildlife “formed a focus for the divergent interests of Africans, Afrikaner settlers and British immigrants” (Carruthers 1993: 1-2).

To some extent, Carruther’s argument that South Africa’s nature conservation discourse is shaped by and for the benefit of Western bourgeois and royal agencies falls in line with Foucault argument that “Right in the West is the King’s right” (1972: 94). “In the West, since Medieval times it has been royal power that has provided the essential focus around which legal thought has been elaborated. It is in response to the demands of royal power, for its profit and to serve as its instrument or juridical edifice of our own society has been developed” (Foucault 1972: 94). As well nature conservation in South Africa has been made by the bourgeois not the proletarian, to address aristocratic western fantasies and interests not the locals’ demand to survive. It has been developed by Western masters not by African impoverished societies.

Like nature conservation policies and practices in South Africa, also the rest of Africa and North America has been shaped by Western fantasies, fascination (Bresler 2007: 165) and profitability. “In Africa, national parks are being subjected to [Western visual representation and conquest], particularly in countries only recently liberated from minority European settler control, such as Zimbabwe and South Africa” (Neumann 1998: 31). In his book ‘Imposing wilderness’, Neumann further argued that Africa’s parks are “symbolic for the construction of national identity for European settlers” (Neumann 1998: 32). Carruthers (1993) has shown that the Kruger National Park in South Africa served as a unifying symbol for white national identity. Furthermore, the historical cases of North America suggest also the “importance of national parks to the formation of a national identity for the dominant settler culture, an identity forged through a mythologized encounter with nature” (Neumann 1998: 32). The essence of Neumann’s argument is the importance of national parks in Africa and North America to function “in the formation of a colonial national identity”. National parks in the two regions form part of the imperial landscape painting. This is vivid in “the imperial European conceptual map of the world, Europe was culture and the colonies were nature” (Neumann 1998: 32).

Furthermore, Carruthers (1993: 3, 6) emphasises that the colonial state of South Africa designed wildlife protective policies to benefit Afrikaner and British “naturalists, sportsmen, and explorers” for hunting and exploiting wild animals. Hunting was important for British and Afrikaner immigrants in the Transvaal before the discovery of minerals for both commercial and sport hunting. This goal was financially rewarding for British immigrants because sport hunting was considered in Britain to be the pastime of the better class of Englishmen. For instance, English literature considers killing wild animals for pleasure to be good, civilised and a prerogative of the upper classes (Carruthers 1993).

Commercial hunting by English immigrants was a joint effort between English immigrants, writers and the colonial government. For example, the English heritage of hunting literature by visitor-sportsmen such as William Cornwallis Harris in 1836 contributed to encouraging commercial and sports hunting by Englishmen. The long-term effect of the writings of Harris and his successors was to publicise hunting opportunities in the Transvaal. Eventually, sport and commercial hunting took off in the Transvaal. The mercantile economy of the Transvaal was initially mainly based on the wildlife of the region. Thereafter, protective state policies with regards to wild animals aimed to make hunting by whites in frontier areas unrestricted. Even before then, during the pre-colonial period, the Volksraad of Andries Ohrigstad passed a resolution on January 1846 that was essentially designed to allow the maximum number of Boer settlers to benefit from commercial hunting (Carruthers 1993)

Africa’s colonial protective state policies concerning wild animals were prohibitive and signalled deprivation for Africans (Beinart 2003). They began “alienating blacks from nature” (Carruthers 1993: 2). “Most of the 1858 laws related to preventing blacks from having easy access to marketable wild animals, and game set on its way towards becoming a resource for exclusive use of whites” (Carruthers 1993: 5). This dynamic is confirmed by Khan (1994), Yeld (1997), Bond (2002), Jenkins (2004), and Ramutsindela (2004). Meanwhile, these policies aimed to encourage African “groups to join the growing proletariat” to work for maximising whites’ profits from hunting wild animals. Commercial and sport hunters constructed a common sense that the larger the number of blacks assisting in hunting (sometimes as many as two or three hundred per hunter), the

greater the benefits for the white hunters: the greater number of wild animals that were likely to be killed (Carruthers 1993: 5). White hunters required the “dispossession” (Carruthers 1993: 2) of land and resources from Africans in order to maximise their profits. This is to say that commercial hunting by white South Africans led to a) dispossession of land, b) the criminalisation of African hunting and the c) the expansion of land for Whites and wild animals. Indeed, whites’ protective wild animal policies aimed not only to restrict hunting for blacks but also to demean their hunting activities in order to justify the criminalisation of black hunters. Protective wild animal policies aimed to make “hunting by using traps and hide hunters” illegal and poaching to be “criminalised (Law number 10)”. The hunting of wild animals “for the market or for food alone” (Carruthers 1993: 8) was considered to be “evil, primitive, savage, and [belongs] to lower classes”, and subsistence hunting as “an act of “laziness”. In addition, the policies aimed to deprive blacks of game products” (Carruthers 1993).

Furthermore, “the predatory character of settler and imperial hunting in southern Africa” (Beinart 2000: 272) led not only to the impoverishment of African societies who were driven into smaller, inferior areas of land, but also to “catastrophically reduced wildlife and was responsible for the final extermination of a couple of mammal species, the quagga and the blue antelope” (Beinart 2000: 272). Ellis (1994: 54) confirms the degradation of wildlife in South Africa while “white South Africans are generally proud of their record of nature conservation and the natural beauty of their land. While by the late nineteenth century white men with firearms had virtually wiped out the vast herds of wild animals which had roamed the country a century before”.

Overall, Carruthers (1993) argues that Transvaal wildlife protection policies (1880-1900) were designed to construct preservationist measures that tended to suppress subsistence hunting and to favour white hunting for recreation, sport and business. “Subsistence and market hunters, whether rural blacks or destitute, landless whites, were increasingly denied the right to hunt”. During the above-mentioned decades, whites’ wildlife preservationist laws were based on ‘blaming’ “African hunters for significant wildlife destruction, and measures were suggested which would have the effect of future ensuring that killing of wild animals became the depredations of whites’ alone” (Carruthers 1993: 9-10, 12).

3.2. The shifts in South Africa's conservation policies

In 1995 the Natal Parks Board celebrated the century of the establishment of the Zululand game reserves by hosting a lavish function at the elegant Hilltop camp in the Umfolozi Game Reserve. While the assembled conservationists were congratulating themselves for doing 'a superlative job ... over the past 100 years, a large group of Africans from nearby villages burst into the party – and into the television coverage of the event – toying and carrying placards with a contradictory message. For them conservation had meant a century of oppression and forced removals. In other parts of the country at the same time, the Makuleke community in the Northern Province was strategizing what has become South Africa's largest contested rural land claim in terms of the 1994 Restitution of Land Rights Act (Carruthers 1997).

Carruthers' (1997) historical analysis of the Umfolozi Game Reserve conservation discourse suggests normality with a national conservation paradigm that was originally created to benefit Western immigrants through the radical exploitation of the human and natural resources of protected areas. It can be argued that conservation in South Africa was from the earliest times a foreign, exclusionary industry. Protected areas or parks were 'islands under siege' in the perspective and the reality of black South Africans. "On the other side of the fence from the relatively intact protected ecosystems with its lush grassland, abundant wildlife and luxury tourist lodges, live impoverished communities, desperate for land and access to natural resources" (Carruthers 1997: 2). In the following paragraphs, I elaborate on some of the major shifts (1918, 1948, 1968, 1982, and 1994) in South Africa's conservation policies that revolve around maximising whites' profitability while supportive to building inferiority among Africans, especially those Africans living in or around protected areas.

Khan (1994) claims that the first shift in South Africa's nature conservation discourse took place with the establishment of the Native Farmers Association (NFA) in 1918: a pro-active black ethical conservation social movement. According to her, NFA was "the first organisation to espouse a formal conservation ethic among blacks, as opposed to traditional cultural mechanisms and beliefs which had the unplanned consequence of protecting the environment" (Khan 1994: 449). The focus of its struggle was to secure

land rights and agricultural training for blacks and to rid conservation of its racial ideology. The organisation represented “a major paradigmatic shift in the wildlife-centred, preservationist conservation ideology prevailing among non-governmental organisations at the time” (Khan 1994: 449). Khan argues that this shift was intended to replace the Eurocentric approach towards nature with a holistic one (Africa’s style): an approach that considers and balances the social, economical, political and environmental concerns in the process of protecting ‘nature’.

Khan (1994) states that the second shift in the country’s conservation policies took place in 1948 and consisted of two features. The first was the way South Africa’s conservation policies around 1948 contributed to further distortion of Africans’ perceptions of the environment. The focus of conservation and environmental policies was subsequently affected by the circumstances prevailing in 1948, the year in which apartheid was formally imposed in South Africa (Khan 1994). The imposition of apartheid contributed to the further “distortion” of black perceptions of the environment and of course the displacement and the alienation of more Africans from their homelands.

Stocking (1985) adds that such a distortion was triggered by a foreign, Eurocentric investment which necessitated creating awareness of conservation in Africa. Moreover, the institutionalisation of “the colonial process of land dispossession through conquest and expansion, by physically alienating blacks from the land, and by spiritually estranging them from their cultural and religious links with the environment, had an extremely negative effect on the environmental perceptions of blacks” (Khan 1994: 450). As a result, black environmental perceptions and attitudes become “distorted” and the “South African environmental movement faced major obstacles to its growth as apathy and hostility on the part of many blacks” (Khan 1994: 450). This distortion is consistent with recent findings by Mkhize (1999) who concluded that “black people do not see why they should go to nature reserves”, because they are and some of them were living in nature before the arrival of the white man. Houghton (2004: 426) supports this view as follows:

Conservation was previously a white-dominated activity and was viewed by other race groups as a means of controlling access to natural resources. The conservation authority has a strong presence along the south coast of KwaZulu-Natal, and the power of this authority is being challenged strongly in many areas. Poor communities within the

locality continue to view the conservation authority as a predominantly white, preservationist organisation that wields power over the use of local resources (Houghton 2004: 426).

Houghton's (2004) thesis summarises the main characteristics of South Africa's environmental history. It was predominantly white, preservationist and aimed at exclusive use of natural resources; it also required controlling of access of local communities to, and use by them of, natural resources. Khan supports Houghton's thesis, but uses a different terminology (she talks of 'Eurocentric' instead of 'white'). She also examines how the suppression of blacks by whites influenced black perceptions. While Houghton focuses on resources dynamics, Khan argues that South Africa's environmental history was shaped by the move to establish whites' superiority, the concomitant of which in turn was black inferiority and exclusion. The exclusion of blacks meant two things. First, the views and experiences of, and perceptions held by blacks with regard to nature were not incorporated into nature conservation policies. Secondly, their experiences in dealing with nature were marginalised from mainstream environmental discourses. The marginalisation of their history of nature conservation is in line with general dismissal of black history as no history, and with the subordinate position of blacks in society.

Beinart, Edgecombe and Guest (2003: 215) argue thus: "environmental history written on South Africa has been strongest, firstly, on state regulation of natural resources and, secondly, on conflicts between the state and rural people over such policies". The emphasis of state regulation fell on the preservation of land occupied by wildlife, which led to the creation of numerous parks and reserves. Hunting was not allowed in the parks and tourism activities were limited and regulated (Honey 1999). Consequently, local communities found themselves in conflict with the colonial state as they found themselves entitled to marginal natural resources.

For example, the environmental history of the Western Cape was shaped by Scottish settlers (Beinart (2003) and Grove 1995). These included "the interests and concerns of Robert Moffat, the missionary; Thomas Pringle, the settler, writer and political activist; and John Croumbie Brown, the missionary, botanist and writer" (Edgecombe and Guest 2003: 216). In the Cape, settlers and officials had to come to terms with a new environment. The environmental history of the Kruger National Park was largely

influenced by the Afrikaners (Carruthers 1993). In the Transvaal, “hunting regulation was a major preoccupation by the mid-nineteenth century, while “the English settler farmers were the first to develop a systematic critique of the impact of livestock on the semi-arid environment of the Cape” (Edgecombe and Guest 2003: 217).

The second shift in nature conservation policies in 1948 is related to the investment of four European states in constructing conservation awareness in nine African countries, including South Africa. Stocking (1985: 152) elaborate that in 1948 at Goma in the Belgian Congo, an inter-African conference was convened to discuss soil conservation and land utilisation. This conference was followed by a meeting in London of representatives of six colonial governments – those of Belgium, Britain, France, Portugal, Southern Rhodesia and South Africa – in order to form an Inter-Governmental Commission for Technical Cooperation in Africa South of the Sahara (known by its French acronym, CCTA). CCTA held its first meeting in 1950 in Paris and organised four regional committees for conservation in east, west, central and southern Africa. Only one committee, the Southern African Regional Committee on Utilisation of the Soil (SARCCS), functioned effectively. Both CCTA and SARCCS were highly funded and tasked with drawing attention to the growing problems of soil erosion (Stocking 1985).

Bear in mind that until the late nineteenth century, the nature of South African environmental discourse was similar to its “counterpart elsewhere in Africa, based on a wildlife-centred, preservationist approach” (Khan 1994: 453). Delius and Schirmer (2000) also observe that “the formulation and implementation of strategies of soil conservation in South Africa during the period 1930-1970 were powerfully influenced by racist attitudes and by the differential political and economic position of whites and blacks within the systems of segregation and apartheid”. Similarly, “White privilege, power and possession, as extensions of the colonial paradigm, formed the foundation of the conservation ideology then being forged, as did the perception that blacks were environmentally destructive” (Khan 1994: 449).

The third shift in South Africa’s nature conservation and environmental policies took place in 1968. Their focus was fundamentally affected by the establishment of the national branch of the World Wild Fund for Nature (WWF International) in 1968. Ellis (1994) states that the first president of WWF International, Prince Bernhard of the

Netherlands, suggested to Dr Anton Rupert that he establish a South African national branch of the WWF. Rupert liked the idea, and duly set up the Southern African Nature Foundation (SANF), the South African chapter of the WWF International, of which he became the president, persuading South African businessmen to join its board of trustees. Rupert himself became a member of the Board of Trustees of WWF International, and in 1971 a member of its executive committee. From 1980 to 1989 the chief executive of the SANF was Frans Stroebel, a former diplomat who had previously been the private secretary of Foreign Affairs Minister Pik Botha (Ellis 1994).

The main component of the third shift is geographical, in which the influence over South Africa shifted from one region (Europe in this case) to another (North America). Beinart (2003: 215) has argued that South African environmental policies have been shaped in part by “comparative material on, respectively, the Anglophone settler world and colonial Africa” shifting its focus in 1970s towards North America’s environmental comparative materials. “Historiography has focused on expanding settler capitalist societies that draw deeply on the exploitation of natural resource frontiers, from bison and beavers to forests and pastures. Dispossession of indigenous people has been a co-equal concern. North American literature also searches out the antecedents of modern environmentalism. Some proponents of the natural world were influenced by aesthetic or preservationist priorities; most were concerned about the efficient use of natural resources and their long-term viability” (Edgecombe and Guest 2003).

The fourth important development that affected the focus of South African conservation and environmental policies took place in the period from the early 1980s to the Rio Earth Summit in 1992. During the early 1980s the government started to incorporate the theme of sustainable development into its national policy at the time when the United Nations started to popularise the practice of sustainable development. After the late 1980s, South Africa’s environmental policy shifted its focus from adopting Afrikaans, American, Scottish and English environmental management practices toward adopting universalised environmental views on sustainable development. Essentially, the phrase “sustainable development” originated in German forest management practices during the 19th century, but was popularised worldwide in the 1980s (Yeld 1995).

Mrs Gro Harlem Brundtland, the Norwegian Prime Minister, in her foreword to *Our Common Future*, highlights the background to the term 'sustainable development'. In December 1982, Brundtland was urgently called by the Secretary-General of the United Nations to establish and chair the World Commission on Environment and Development. The main task of the urgent call was "to recommend ways in which concern for the environment may be translated into greater co-operation among developing countries and between countries at different stages of economic and social development and lead to the achievement of common and mutually supportive objectives that take account of the interrelationships between people, resources, environment and development" (World Commission on Environment and Development 1987). The call for greater co-operation on those major issues emerges from the 1972 UN Conference on the Human Environment which "brought the industrialized and developing nations together to delineate the 'rights' of the human family to a healthy and productive environment". Further meetings were organised by the UN on the "rights of people to adequate food, sound housing, to safe water, to access to means of choosing the size of their families". Brundtland sees the problem that "environmental degradation, first seen as mainly a problem of the rich nations and the side effect of industrial wealth, has become a survival issue for developing nations". Conceptually, *Our Common Future* is aimed at addressing the ecological and economic decline in many of the poorest nations.

In a sense, environmental degradation forms part of the discourse on sustainable growth and/or development. The focus is to make development and/or growth activities environmentally sustainable. Such a discourse seems to be globally acceptable. Brundtland describes "a new era of economic growth — growth that is forceful and at the same time [aim at] socially and environmentally sustainable [growth]." This can be seen from the Brundtland Report and the Commission's proposals for the global definition for sustainable development. It is the "development that meets the needs of the present without compromising the ability of the future generations to meet their own needs" (World Commission on Environment and Development 1987: 42). Such a strategy is built on social problems such as poverty; it does not address past problems, but places emphasis on the future.

Since the early 1990s South Africa became inspired by the Brundtland Report and the Commission's views on sustainable development; resulting in every government

department adopting the language of sustainable development. At the Rio Earth Summit in 1992, 178 countries, including South Africa, agreed on Agenda 21 and its principles. By reaching this agreement, governments all around the world committed themselves to introducing environmental issues in socio-economic decision making and, therefore, in their policies (DEAT, April 1999: 15, 16). The UN Department of Economic and Social Affairs (UNESA) claims that “Agenda 21 is a comprehensive plan of action to be taken globally, nationally and locally by organizations of the United Nations System, Governments, and Major Groups in every area in which humans impact on the environment” (UNESA 2008). The UNDP promotes Agenda 21 as “a statement of willingness by countries to strive for a form of development that recognizes the essential links between economic growth, social equity and environmental protection”. The UNDP promotes Agenda 21 as the blueprint for sustainable development, which “seeks to ensure that development meets the needs of the present without compromising the ability of future generations to meet their needs” (UNDP 2003). Both the DEAT (1999) and Yeld (1997) suggest that sustainable development was popularised through the World Commission on Environment and Development’s report, ‘Our Common Future’, submitted to the United Nations in 1987, in which the idea of ‘sustainable development’ was expanded upon. After Rio, many international conservation bodies such as the UN and IUCN started to popularise the practice of sustainable development.

The fifth important development that affected the focus of South African conservation and environmental policies took place in the early 1990s, when South Africa started finalising the process of a post-apartheid reconciliation between all of its racial groups. McDonald (2002) argues that South Africa’s policy makers were working towards making environmental issues “a concern for all South Africans – from white, suburban housewives to black male unionists”. They were working towards ensuring that concern for the environment “cuts across race, class and gender divides, pervades environmental discourse in the country”.

Between 1994 and 2000, South Africa has seen a great deal of environmental legislation aimed at constructing equity (Goolam 2000). Such an emphasis is clear in section 24 of the Constitution of the Republic of South Africa, Act 108 of 1996, which states that “[e]veryone has the right (a) to an environment that is not harmful to their health or well-being; and (b) to have the environment protected, for the benefit of present and future

generations, through reasonable legislative and other measures.” Similar emphasis on constructing equity is seen in the national Water Act, 36, of 1998, which was drafted with the vision that “one day all of South Africa’s people will be served with water”. “The Act replaces the Water Act 54 of 1956, and repeals more than a hundred other Acts dealing with water. The new Act drastically changes the basic concepts of water law in South Africa” (Goolam 2000: 125).

3.3. Linking the global to the national

In this section, I argue that South Africa’s democratic government is keen to join the global discourses, including the global environmental discourse. This is clear in its numerous environmental treaties and agreements that have directed national environmental policy makers to commit governmental departments to integrate and implement global environmental views. In post-apartheid South Africa, national conservation discourse has shifted its focus towards institutionalising global environmental views on sustainable development. “Sensibly, the Reconstruction and Development Programme (RDP) has been rooted firmly in the notions of sustainable development and environmental protection” (Yeld 1997: 17). Indeed, central to the RDP “is the concept of achieving sustainable development” (Department of Environmental and Cultural Affairs 1996: 1). The RDP is committed to a programme of sustainable development which addresses the needs of our people without compromising the interests of future generations (Department of Environmental and Cultural Affairs 1996).

The RDP is also inspired by the theme of Agenda 21 of sustainable development. In his foreword, General BH Holomisa, then Deputy Minister of South Africa’s Department of Environmental and Cultural Affairs, stated that: “The RDP proposes, among others, to implement the types of activities that are advocated in Agenda 21. [In this regard,] many actions are already taking place.” At the same time, Holomisa argues that “although the path of implementing Agenda 21 in South Africa will be a difficult one, a vision, strategy and a framework for achieving sustainable development in South Africa are thus already in place” (Department of Environmental and Cultural Affairs 1995).

Three years after Rio, South Africa started the process of fully institutionalising global environmental views on sustainable development into environmental policy at all scales: national, provincial and local. By May 1995, Holomisa identified the urgent need for a new national environmental policy. Such an idea was supported by the government of the time. By October 1996, the government drafted and distributed 40,000 copies of the Green Paper for reviews countrywide. And by January 1997, the government had incorporated reviewers' comments into the Green Paper and redeveloped it to become the White Paper (DEAT 1999). Thereafter, the government finalised the White Paper and its chapters of a new vision, approach and legislation, which all revolve around the government's commitment to institutionalise sustainable development.

The vision is of a society that is in harmony with the environments. To achieve this vision, South Africa needs an integrated and holistic environmental management system that aims to achieve sustainable development (DEAT 1999).

Furthermore, South Africa had already laid down the vision, strategy and a framework to achieve sustainable development. This is clear in the responsibilities of the Committee for Environmental Coordination (CEC), which "was established in terms of the Environment Conservation Act, 1989 to promote effective coordination of environmental matters within the entire government sector" (Department of Environmental and Cultural Affairs 1995: 12-13). This committee functions under the chairmanship of the DEAT and has to report periodically on the state of the environment, not only to the government, but also in terms of Agenda 21. The CEC is reported to be in charge of the development of measures, policy and guidelines for the coordination of the eleven environmental issues, most of which involve integrating international environmental treaties, including that of the Rio Summit. For example, in terms of biodiversity, the CEC is responsible for the maintenance of South Africa's biodiversity and the implementation of the principles of the international Convention on Biodiversity. In terms of fauna and flora, the CEC is responsible for the implementation of the principles of the Convention on the International Trade in Endangered Species of Wild Fauna and Flora (CITES) and the Convention on the Conservation of Migratory Species of Wild Animals (CMS). In terms of sustainable development the CEC is responsible for the coordination of South Africa's implementation of Agenda 21.

South Africa's government committed its departments to adopt global environmental views on sustainable development from 1995 onwards. "The development of a national coordinated strategy for the implementation of Agenda 21 is now [1997] receiving attention at the highest level. In a statement to the fifth Session of the United Nations Commission on Sustainable Development, (7-25 April 1997), Dr Pallo Jordan, Minister of Environmental affairs and Tourism, supported the objective that all the governments should have national strategies on sustainable development in place by the year 2002" (DEAT 1998: 2).

Even before Rio, South Africa was keen to design and implement environmental policies that were in line with international environmental conventions and agreements. "Despite its isolation for many years and exclusion from the Rio Earth Summit, South Africa has pursued international philosophy and trends in environmental matters" (Department of Environmental and Cultural Affairs 1995: 11). However, South Africa was keen to participate in Rio's Summit in 1992; it only participated for the first time in the Commission for Sustainable Development's (CSD) meetings in 1995.

Practically, South Africa has signed numerous international environmental conventions and treaties, which all reflect the conformity of South Africa's environmental discourse with global views. This is evident in the DEAT's stated responsibilities. The DEAT is held responsible "for the overall administration and management of the numerous international treaties and conventions to ensure that their objectives are nationally coordinated and achieved, and that appropriate legislation is in place" (Department of Environmental and Cultural Affairs 1995: 13-15). By 1995, South Africa signed twenty-four international environmental treaties, conventions, and agreements. Furthermore, South Africa also became a member of two international environmental organisations in 1995: The World Conservation Union (IUCN) and the World Meteorological Organisation (WMO). Moreover, "there are 26 international agreements (17 conventions, four protocols, three treaties, two agreements) which pertain to integrated pollution and waste management. Of these 26 agreements, 19 have been acceded to or ratified by South Africa" (DEAT 1998: 17).

Moreover, South Africa's environmental definitions, objectives, guidelines, organisational responsibilities of national parks, and development of the primary

objectives of the National Parks Board were influenced by those of the IUCN. In this regard, Robinson G.A. (1995) states: “A definition of a national park accepted internationally and endorsed by National Parks Board was formulated by the IUCN in 1994” (Robinson et al 1995: 7).

Furthermore, several of South African political parties and non-governmental organisations have published policies supportive of global environmental views of adopting sustainable development. For example, “a resolution passed at the 1991 National Conference of the African National Congress (ANC) states [that] an overall goal of its economic policy [is] to ensure that growth takes place in ways which harness the environment in a constructive, sustainable and responsible manner” (Department of Environmental and Cultural Affairs 1992: 6).

Likewise, many national acts direct the DEAT to follow similar approaches to those of the international community to address its environmental challenges. “These activities culminated in the Environment Conservation Act (1989), the extensive report of the President’s Council (1991) that resulted in the White Paper on National Environmental Management Systems for South Africa (1993) and the declared General Environmental Policy (1994)” (Department of Environmental and Cultural Affairs 1995: 11). The Environment Conservation Act (No. 73 of 1989) is a typical example based on sustainable development principles, which were specified in detail in the draft Bill (Department of Environmental and Cultural Affairs 1992: 5).

Lastly, the DEAT re-commits South Africa to working within the global approach towards achieving sustainable development through implementing Agenda 21 and its amendment. In this regard, the DEAT committed South Africa “to the global partnership established at the UNCED and to the continuous dialogue and action inspired by the need to achieve a more efficient and equitable world economy; as a means to provide a supportive international climate for achieving environment and development goals” (Department of Environmental and Cultural Affairs 1997: 4).

3.4. Strategic value of adopting global environmental views

It is strategic for South Africa's government to modify international expressions on sustainable living to match South Africa's circumstances, argues Dr Colin Cameron, the Director-General of the DEAT and Chairman of the Committee for Environmental Coordination. He states that, "the ultimate objective must be to give practical expression to the international credo of sustainable living according to objectives of the RDP and aligned with the universal directives of Agenda 21" (DEAT 1995: Introduction). Likewise, South Africa's Council for the Environment argues that in order for the Council to plan and implement a successful national environmental education programme, it needs to link South Africa's local needs with global views. "The significance of providing a framework for local reinterpretation is as much a recognition of the importance of global issues being linked to local needs, as the growing need for increased participatory cooperation in the education planning process" (Council for the Environment 1993: 3). In addition, the Secretary of the Council for the Environment argues that, "since its inception in the late 1960s, environmental education has tended to be viewed as an approach to promoting a fuller understanding of our environment and how we relate to it. This was implicit in the messages from international conferences (Stockholm 1972; Belgrade 1975; Tbilisi 1977; Moscow 1987; Rio 1992) and in the South African White Paper on Environmental Education of 1989" (Council for the Environment 1993: 6, 7).

It is strategically important for South Africa to incorporate global environmental views, argues Peter Mokaba, the former Deputy Minister of Environmental Affairs and Tourism. In the late 1990s, he argued in the White Paper that "[i]n South Africa, we realise that we can only guarantee democracy and good governance if we have a sound economic and social framework, and one that is also environmentally sustainable" (DEAT 1999b: V). Mokaba believes that "[t]he Rio agreements are moving people closer to the idea that we should live in harmony with our environment" and are also in line with the RDP and Ubuntu ideology. Therefore, Mokaba's environmental strategy is mainly globally oriented, and to some extent proactive. "At Rio, we all agreed that development and environmental issues are both parts of the same thing. This means [to Mokaba] that sustainable development depends on good environmental management, and

good environmental management depends on sustainable development” (DEAT 1999b: i). By using the words ‘we all agreed’, Mokaba confirmed the South African authorities’ approach that its environmental policies should be in line with the global approach, according to the Rio principle of sustainable development.

So, South Africa aligns its environmental policies with global environmental views to gain access to global markets. Mokaba confirms this by stating that “since the conference in Rio, world trends have shown that our present and future prosperity, as well as our ability to live peacefully with other people and countries, depends on: Access to markets, and access to natural resources, exclusion from them and control over them” (DEAT 1999b: ii).

Practically, international views drive South Africa’s environmental policies towards change. Eininger and Norberg, (2000) elaborates on how international forces lead to changes in environmental policies in South Africa. For example, South Africa needs to trade with other countries in order to bring in foreign exchange and to grow the economy. In the past, environmental policy changes included the conversion of large areas of natural habitat to areas of agricultural production, and the development of mining and manufacturing industries, which often had polluting effects. Consequently, the government laid down new environmental policies to reduce pollution.

Furthermore, international agreements and conventions can also be powerful forces driving national policy and activities. Ratification of the Montreal Protocol in 1990 committed South Africa to phasing out production of ozone-depleting substances by 2030. The response has been to phase out certain substances (eg, chlorofluorocarbons and carbon tetrachloride), a process that has been ongoing since 1992.

In summary, what drove the changes in South Africa’s conservation policies after 1994 were the RDP and its adaptation of the universalised environmental views on sustainable development, global environmental views and their evolution, international environmental treaties, national demands; and (former, colonial) views on commodifying nature.

3.5. The articulation of environmental policies through the poverty-environmental discourse

Fighting poverty is a central part of the global quest for sustainable development, and South Africa has taken this on board through its environmental policy and poverty relief programmes. As a catalyst for these programmes, the Department of Environmental Affairs and Tourism (DEAT) had hoped to create more than 67 300 job opportunities (and 740 300 training days) by 2007 (Van Schalkwyk 2004). In doing so, the government attempts to mediate between global environmental views and demands — particularly on nature conservation — and the pressing national demands for poverty alleviation, skills development, and reversal of general disempowerment, particularly among women and the youth. Meanwhile, “many people argue that it is not ethical to use wildlife as a sustainable resource for fighting poverty” (Lötter, 2005: 775), despite the fact that “African wildlife has been a major resource in the struggle for human survival on the African continent for centuries” (Löter 2005: 806), probably since the early settlement of humans in Africa. My intention in this section is not to question human morality to use wildlife and natural resources for sustaining the life of impoverished people but to show that such an idea emerged from the West, and that it is strategic for the South African government to construct such a vision. However, using this formula in South Africa did not led to poverty alleviation for a significant number of desperate people. Briefly, my argument here is three-fold. First, the West formulated the global economic systems, including those universalised environmental views. Secondly, South Africa geared its environmental policies towards participation in global economic systems. Finally, the South African government’s adoption of the universalised economic-social-environmental views did not alleviate poverty or reduce unemployment.

First, the universalised environmental views form part of the West formulations of global economic systems and the agendas for such participation. The West’s discourse of sustainable growth is connected to the programmes of poverty alleviation and local economic development. This connection arises from the Western perspective on the relationship between poverty and environmental degradation, mainly the degradation of natural resources, argue Gray and Moseley (2005). For example the poor “are unable and often unwilling to invest in natural resources management ... (World Bank 1996), the

poor are more likely to engage in environmental deleterious behaviour because they are incapable of thinking beyond the next meal... [the poor were also identified in Africa and Asia colonial time] as key causes of soil degradation, wasteful burning practices and deforestation” (Gray and Moseley 2005: 9).

Such connection between environmental discourse and poverty alleviation is normalised in South African government documents. For example, the South Africa’s White Paper argues that, “in the 1980s, the International Union for the Conservation of Nature (IUCN) introduced the idea of sustainable development, which brought together ecological and economic concerns. Thereafter, the World Commission on Environmental Development (WCED) modified the idea of ‘sustainable development’ in a report called *Our Common Future* (1987) that eventually was submitted to the United Nation in 1987 (DEAT 1999: 15), and which sought to mediate between the economic growth and the environmental and social concerns of developing countries. *Our Common Future*, discussed in the previous section, developed the term sustainable development to mediate between meeting the “essential needs of vast numbers of people in developing countries – for food, clothing, shelter, jobs – [...] achieving full growth potential, [and to protect] the environment (the WCED 1987: 43-4). This implies that both the DEAT and the White Paper recognise that international organisations developed the term sustainable development to link economic growth, environmental and poverty concerns.

Patrick Bond argues that the West popularised the term sustainable development, aiming for “the commodification of nature and amplified under-development of the Third World through highlighting globalisation” (Bond 2002: 9). At the same time, the purported aim of sustainable development is that “environmental externalities such as pollution should be brought into [the] marketplace. By doing so, regulators assure that these costs are adequately accounted in ‘polluter-pays’ profit-loss calculations” (Bond 2002: 30). Thereafter, the argument on behalf of sustainable development was “endorsed by high-profile politicians like Margaret Thatcher and Al Gore” (Bond 2002: 30).

Bond elaborates further that the West developed the link between economic growth, environmental concerns and poverty alleviation to rationalise its interventions in developing countries through publicising globalisation. The report of *Our Common Future* quotes a US-based development, environment, and pollution NGO that aims for

‘Making Common Cause’ by arguing that, “We recognize that poverty, environmental degradation and population growth are inextricably related and that none of these fundamental problems can be successfully addressed in isolation. We will succeed or fail together” (WCED 1987: 45).

The World Bank also benefits from popularising the notion of sustainable development and poverty alleviation. On July 2005, Paul Wolfowitz, the new head of the World Bank Group, committed himself to put the whole world on the path of sustainable development and to reduce poverty rates beyond Asia and Latin America. Wolfowitz argues that “sustained economic growth is essential for development and reducing poverty” (Wolfowitz 2005b). His argument suggests that economic growth leads to the eradication of poverty, but reducing poverty does not necessarily lead to economic growth. Therefore, his argument works only in one direction. Thereafter, the aim is to globalise economic growth and its forms such as sustainable development, not to eradicate poverty: a project that is planned to come to fruition between 5 and 10 years from 2005.

If five or ten years from now, we can all look back and say this was the year when the whole world got on a path of sustainable development and this trend in the reduction of poverty extended beyond Asia and Latin America to encompass everyone, that would be truly satisfying (Wolfowitz 2005a).

Wolfowitz’s assertion suggests that it is the World Bank’s aim to see all governments adopting and implementing policies that connect sustainable development and poverty relief programmes. But this does not imply that doing so will in fact decrease or even stabilise poverty in developing and under-developed countries. What it does say is that Wolfowitz’s aim is to call all countries that sign agreements with the World Bank, including South Africa, to modify their environmental policies to pursue sustainable development and to adhere to the latest government programs on poverty alleviation.

Understanding how the World Bank contributes in publicising ideas of sustainable development on a universal scale is crucial to analysing how poverty alleviation is tied to sustainable development. The World Bank promotes sustainable development, poverty alleviation and economic growth through its direct or facilitated funding opportunities. Currently, the World Bank funds 178 countries, including South Africa (World Bank 2008). At the World Bank’s website for South Africa, three programmes are highlighted,

all of which are about sustainable development: 1) Renewable Energy Market Transformation; 2) Durban Landfill Gas-to-Electricity Project; and, 3) ZA-C.A.P.E.: Biodiversity Conservation and Sustainable Development Project. The overall cost of the three projects is US\$87.13 million, of which US\$55.13 million (63.27%) is earmarked for the third project. This implies that more than two thirds of the World Bank investment in South Africa aims directly to publicise the theme of sustainable development. Indeed, the rest of the countries receiving World Bank funding are exposed to a similar if not identical ideology.

Former President George W Bush also supports sustainable development and economic growth, and the end of poverty in developing countries. He claimed that “overcoming extreme poverty goes hand-in-hand with improving the environment. Overcoming extreme poverty will require greater trade. While aid and debt relief can create better conditions for development, it is trade that provides the engine for development” (Bush 2005).

Likewise, John W. Snow, former United States Treasury Secretary, also emphasised the link between poverty eradication and sustainable development. Snow argued on 17 April 2005 thus: “Economic growth, led by the private sector, is the most effective means of promoting sustainable development and reducing poverty.” Snow emphasised that “while increased growth rates in sub-Saharan Africa are welcome, high and sustained growth rates are needed over an extended period of time to reduce poverty significantly” (Snow 2005).

Importantly, the focus of the above-mentioned Western agencies cannot deviate from the vision of the International Monetary Fund (IMF). The IMF argues that the improved economic growth trend across Africa is helping to reduce poverty. “The evidence suggests that higher growth rates of Gross Domestic Product (GDP) per capita experienced by Sub-Sahara Africa (SSA) in recent years have been strongly correlated with poverty reduction” (International Monetary Fund 2005: 6). More precisely, “After years of colonization and Marxism and racism, Africa is on the threshold of great advances. Economic growth is at the highest level in eight years” (Bush, 2005). The IMF supported governments in their approaches to challenges of persistent high unemployment, widespread poverty, large wealth disparities, and a high incidence of

HIV/AIDS (International Monetary Fund 2005: 6). Overly, “an overseas activist who wants to conserve wildlife at all costs takes the war path” (Lötter, 2005: 777). However, Lötter’s idea sounds radical but it makes sense when we look at the nature of the agenda of Western agencies referred to above.

Secondly, South Africa geared its environmental policies towards participation in global economic systems. For instance, the “Convention on Biological Diversity (CDB) has been translated into national policy” (DEAT 1999: 6). South Africa’s White Paper embraces all the three objectives of the CDB of the United Nations Environmental Programme, which formally began in February 1991 and concluded in May 1992. Indeed, South Africa’s government does not hide its belief that “sustainable development is the best way to use and manage natural resources in South Africa. [Therefore,] the government adopts environmental sustainability in its policy and practice” (DEAT 1999: 6).

In line with the above views, the DEAT acknowledges the “need of growth and development to improve the quality of people’s lives, at the [same] time of using environmental resources in a sustainable way” (DEAT 1999b: 17). Similarly, it is no surprise to see a national environmental agency stating and aiming for similar goals as those of the World Bank, the IMF and IUCN. It is normal to see national environmental agencies sourcing funds, inspiration and frameworks of ideas from such global agencies. Since the late 1970s, national environmental policies have been sourced from global developmental agencies.

Furthermore, South Africa is contributing towards publicising the universalised environmental views. South Africa participated in the UN series of sponsored conference on sustainable development since early 1990s (Rio, Cairo, Copenhagen, Beijing, Istanbul and Johannesburg). In all these sponsored conferences the UN “have elaborated the notion of sustainable development, each often reiterating the conventional wisdom regarding poverty-environment interactions” (Gray and Moseley 2005: 10). In 2002, the UN sponsored the World Summit on Sustainable Development (WSSD) in Johannesburg. Beyond participating and hosting the summit South Africa, played a leading role in popularising the concept of sustainable development in the Millennium Declaration. Former President Thabo Mbeki stated that the Millennium Declaration aims

“to create an environment — at the national and global levels alike — which is conducive to development and to the elimination of poverty” (Mbeki 2001).

Finally, adopting the universalised environmental views in particular and the global economic-social-environmental views did not alleviate poverty or stabilise or reduce unemployment rates in South Africa. There are risks in applying the views of Snow, Bush and Wolfowitz, and the IMF to Africa. The risks are fourfold: Firstly, their view depends on maximising the extraction of the continent’s natural resources, therefore leading to accelerated depletion of those resources. Critics suggest that the UN and the West’s universalised environmental-poverty alleviation vision “have only allowed the neoliberal economic agenda to increasingly co-opt environment and development thinking, not to mention the discourse of poverty-environment interactions” (Gray and Moseley 2005: 10). This is to say that however the UN vision focuses on poverty-environment interaction, the implementation is limited to development and the environment. Secondly, it makes Africa dependent on exporting natural resources to the Occident in order to address internal challenges. Ultimately, when these resources are depleted, African states will be held responsible for overcoming Africa’s possible deeper socio-economic challenges, but with depleted natural resources. Thirdly, it takes for granted that economic growth leads to the upliftment of the poor from extreme poverty. Yet maximising exports to the Occident could very well lead to increase profits for some African elites, African multinational corporations and some African governments, but not the already impoverished majority. Fourthly, it is not necessarily true that economic growth will trickle down to the poor. Contradicting the growth/poverty reduction statement, while “[e]conomic growth is at the highest level in eight years” (Bush 2005), poverty is increasing in Africa, the number of children out of school is increasing, unemployment is increasing, and HIV infections and mortality rates are increasing.

Adopting the World Bank goal of connecting sustainable development with poverty alleviation, while protecting the environment, does not necessarily work to alleviate poverty in developing and under-developed countries, argues Tatyana Soubbotina, an education specialist at the World Bank Institute: “History offers a number of examples where economic growth was not followed by similar progress in human development. Instead growth was achieved at the cost of greater inequality, higher unemployment, weakened democracy, loss of identity, or overconsumption of natural resources needed

by future generations” (Soubotina and Sheram 2004). Moseley (2004) elaborates on cases where the West “employed the notion of poverty-induced environmental degradation to argue that the continued expansion of export-oriented cotton production is the best way to reduce poverty and encourage conservation in the region (because of the wealth it would generate for potential environmental efforts)” (Gray and Moseley 2005: 10). Overly, developing and under developing nation find themselves caught in the West wise presentation, while the west is increasingly subjugating their resources and the rest is getting poorer.

Effectively, sustainable development has been intensively institutionalised in South Africa’s national discourse since the mid-1990s, but unemployment and poverty rates persist. Over the last decade, for instance, South Africa has experienced a steady increase in levels of unemployment and poverty. The proportion of black Africans living below the poverty line “rose dramatically during the period 1993-2001, from 50% to 62%” (Bond 2002: 27). Furthermore, “unemployment rose from 34.3% of the total working age population in September 2000 to 40.5 % in March 2005. The likelihood of being employed in South Africa is still heavily influenced by race, geographic location, sex and levels of skill” (Frye 2006). By considering these deterioration indicators, Bond concludes that South Africa’s three main incorporated environmental discourses (neoliberalism, sustainable development, and environmental justice) fail to slow down the rate of increase in unemployment and poverty among black Africans of South Africa.

Similar scenarios are found in the rest of Africa. “Between 1990 and 1999, the number of the poor in the region increased by one-quarter, or over six million per year. If current trends continue, Africa will be the only region where the number of poor people in 2015 will be higher than in 1990. It will then account for nearly half of the poor in the developing world, up from less than a fifth in 1990” (UNDP and UNICEF 2002: 4). Meanwhile, the vision of the World Bank, IMF and former President Bush to connect sustainable development with poverty alleviation and environmental protection is more widely adopted in Africa today than ten years ago. In contradiction to their vision, though, social ills continue to accumulate and intensify regardless of these universalised economic, environmental and social views.

In summary, the DEAT's aim to link sustainable development with a poverty alleviation programme is sourced from the United Nations, the World Bank and similar international agencies, all of whose policies are based on the interests of four Occidental countries – France, Germany, the United Kingdom and the United States – and Japan. It is thus safe to claim that the World Bank's universalised environmental, developmental and social policies emerge mainly from the West.

The common philosophy among the agencies and persons on the issue of addressing poverty and environmental challenges in Africa revolves around economic growth and its engineered formula of sustainable development. The proponents are the World Bank, the IMF, United Nation and its Developmental programs, the G8 and the EU, former President George W Bush, former UK Prime Minister Tony Blair, NEPAD, former South Africa President Thabo Mbeki, South African Ministry of Environment, Ministry of Water, and Ministry of Foreign affairs, official 1 from the Premier office (Interview 1, 23 June 2005), and official 2 from the Premier office (Interview 2, 23 June 2005). Their common view is that economic growth is the answer, and that it is the proper approach to a range of challenges facing Africa, among them extreme poverty and environmental degradation.

Overall, then, poverty is increasing in South Africa (and generally in Africa) even when sustainable development is central to national policies. Both the DEAT and former President Mbeki saw that the way forward in alleviating poverty was by targeting economic growth and sustainable development, in line with the vision of George W Bush, of the UK's foreign policy concerning Africa, the World Bank, IMF, World Trade Organisation (WTO), the UN and its 'Millennium Development Goals' and the G8. The goal of economic growth, sustainable development and their ties to poverty alleviation seems to be a hegemonic one and highly incorporated into governments policies. But their aim for social development does not seem to have made significant strides in lifting Africans from levels of extreme poverty. Either their social programmes are not effective, or they are not truly targeting poverty alleviation.

3.6. Exclusivist nature conservation discourse

In South Africa, it is typical for non-white communities living in or around protected areas to be relocated voluntarily or by force from their land or their unchallenged settlements: settlement on public land for more than four years. At Embangweni corridor, in Durban, people were forcefully removed during the apartheid era from areas where they used to live. Currently, people are living with the fear of being forcefully removed from the area again as rumours (of conservationist plans) abound that the corridor will be rezoned into the Mputaland National Park (GEM Monitoring 1994: 4). A similar experience is reported among local communities at the Kosi Bay Nature Reserve in KwaZulu-Natal where local communities were also forcefully removed from the reserve (GEM Monitoring 1994: 5).

Likewise, exclusion of local communities from protected areas is normalised in Uganda. According to Dowie's (2006) account, conservation led to the forceful expulsion of the Ugandan indigenous ethnic nation of Batwa in the early 1990s. In the 1930s, Ugandan leaders were persuaded by international conservationists that this area (remote valleys of south-western Uganda) was threatened by loggers, miners, and other extractive interests. In response, three forest reserves were created – the Mgahinga, the Echuya, and the Bwindi – all of which overlapped with the Batwa's ancestral territory. For sixty years these reserves simply existed on paper, which kept them off-limits to extractors. And the Batwa stayed on, living as they had for generations, in reciprocity with the diverse biota that first drew conservationists to the region. However, when the reserves were formally designated as national parks in 1991 and a bureaucracy was created and funded by the World Bank's Global Environment Facility to manage them, a rumour circulated that the Batwa were hunting and eating silverback gorillas. By that time these gorillas were widely recognised as a threatened species and also, increasingly, as a featured attraction for eco-tourists from Europe and America. Gorillas were being disturbed and even poached, the Batwa admitted, but by Bahutu, Batutsi, Bantu, and other ethnic nationalities who invaded the forest from outside villages. The Batwa, who felt a strong kinship with the great apes, adamantly denied killing them. Nonetheless, under pressure from traditional Western conservationists, who had come to believe that wilderness and

human community were incompatible, the Batwa were forcibly expelled from their homeland (Dowie 2006). Since then the Batwa people have been impoverished by “living in shabby squatter camps on the perimeter of the parks, without running water or sanitation” (Dowie 2006).

Africa’s conservation literature hints also that the disposition of local communities from protected areas has become part of a common language among Africa’s conservation societies, as can be seen from the adoption of the WWF demand to increase protected areas by 8%: “During the 1990s the African nation of Chad increased the amount of national land under protection from 0.1 to 9.1%. All of that land had been previously inhabited by what are now an estimated 600,000 conservation refugees. No other country besides India, which officially admits to 1.6 million, is even counting this growing new class of refugees. World estimates offered by the UN, IUCN, and a few anthropologists range from 5 million to tens of millions. Charles Geisler, a sociologist at Cornell University who has studied displacements in Africa, is certain the number on that continent alone exceeds 14 million” (Dowie 2006).

The exclusion of local communities from protected areas is also normalised in India. “Expulsions continue around the world to this day. The Indian government, which evicted 100,000 adivasis (rural peoples) in Assam between April and July of 2002, estimates that 2 or 3 million more will be displaced over the next decade. The policy is largely in response to a 1993 lawsuit brought by WWF, which demanded that the government increase protected areas by 8%, mostly in order to protect tiger habitat” (Dowie 2006).

Exclusion of local communities from protected areas is also normalised in Mexico. A more immediate threat involves the impending removal of several Mayan communities from the Montes Azules region of Chiapas, Mexico, a process that began in the mid-1970s with the intent to preserve virgin tropical forest. This plan is still at risk of sparking a civil war. Conservation International is deeply immersed in that controversy, as are a host of extractive industries” (Dowie 2006). At present, in most of Mexico’s 34 biosphere reserves covering more than 10 million hectares, “local participation is considered low or nonexistent” (Pujadas and Castillo 2006: 58). However, “[b]iosphere reserves protect ecosystems in a context that recognizes that humans must be included in

conservation efforts” (Pujadas and Castillo 2006: 57). “Biosphere reserves are a special category of protected areas, created to integrate ecosystem conservation with social development, through the participation of local people in conservation efforts” (Pujadas and Castillo, 2006: 58).

3.7. Conclusion

The importance of this chapter is not about showing a ‘judgmental’ or objective position of the history and the evolution of South Africa’s environmental discourse. Rather, it is a) to state the obvious: to show that both national and local environmental views and policies evolved over time as any other discourse, b) to inspire concerned groups about what is not stated in western environmental views and policies, c) to show that western environmental views have been tied to the western political and economic discourses. The three discourses are shaped by the same agencies that share common agenda. Not only is South Africa environmental policies and practices inspired by the hegemonic Western environmental views and ideologies but the country’s economic discourse and political discourses have been inspired by hegemonic Western discourses. The battle of non-white South Africans against natural conservation and environmental discourses forms part of a general battle between the West and the rest, South Africa in this case. South Africa’s environmental literature states that conservation in the country led to the displacement of four million South Africans from land they inhabited for a significant time.

However, the South African government’s environmental policies are inspired by global views of tying economic growth to sustainable development and poverty alleviation. A review of South Africa’s environmental discourse suggests that the country environmental policies are based on commodifying nature and are directed towards participation in the global economic system. Both the government’s environmental policies and the activities of non-governmental environmental organisations are influenced by western funding and influential agencies that formulate the agendas for such participation in such a way that the government’s approach and that of NGOs are about commodifying nature. One of the ‘benefits’ of adopting such an approach is that South Africa’s public position within the global capitalist economy is enhanced. South

Africa has made significant moves towards incorporating the notion of “sustainable development” as expressed in Agenda 21, in national environmental and economic policies, at least since the Mbeki administration. Since the early 2000s the messages and rhetoric of the “sustainable development” movement have been subverted by US/Europ/G8 economic interests, where the language of "sustainable development" was co-opted to position economic “growth as the development solution for poverty”. The “sustainable development” arguments presented by the World Bank, IMF, NEPAD and local political leadership seek to promote and validate their position, which reflects the sentiments of US and IMF policy: “Economic growth, led by the private sector, is the most effective means of promoting sustainable development and reducing poverty” (US Treasury Secretary Snow 2005).

In practice, implementing the universalised threefold discourse of sustainable development, economic growth and poverty alleviation did not lead to poverty alleviation in South Africa. Even the former US administration acknowledged that the fruits of strong economic growth do not equally benefit poor and uneducated Americans (Weisman 2005). At the same time, growing evidence largely contradicts the correlation between economic growth and poverty reduction, particularly in Africa and South Africa. At least in conception, the South African government has since the 1980s adopted, into its policies, large swathes of the more prominent universalized notions and practices of sustainable development, economic growth and poverty alleviation. The habit of the SA government – and that of many other developing countries – to be thus predisposed to adopting current global “sustainable development” policy wholesale has become a potentially problematic issue, especially where politically led assertions dominate discourse in environmental and poverty-alleviation policymaking. Indeed South Africa’s environmental policy is not only in line with global environmental views, but actually global environmental views are specifically translated into national environmental policies.

One of the problems associated with modify global environmental views on national scale is that it diverts local and national government from national and local issues and problem solving. Adopting global environmental or economical views to address national ills means approaching problems from top down, not from bottom up. For example, adopting global model of protecting nature in the Western Cape will not

necessarily lead to address poverty among locals living in and around protected areas in the Western Cape.

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Chapter 4: The emergence of DNR during apartheid: 1983-1993

The purpose of this chapter is to account for the creation of Driftsands Provincial Nature Reserve (DNR) in the final decade of apartheid rule (1983-1993), and to highlight the ideology underpinning Driftsands discourses during the same period. The chapter suggests that Driftsands was proclaimed a provincial nature reserve by the Western Cape provincial government in 1983 (see proclamation, appendix II and III) in order to separate existing and future townships from each other; to protect those who supported the apartheid government from those who fought against it, and to prevent further land invasion by African and coloured communities. The nature reserve can be seen, in other words, as a barrier against surrounding townships and a buffer zone between coloured and black settlements. Two main discourses emerged in DNR between 1983 and 1993. The first discourse was used by nature conservationists and is referred to in this chapter as a conservation discourse. I refer to proponents of the conservation discourse as a conservation group. The second discourse that was supported by the developmental group focused on the basic needs of local communities. The two groups had competing agendas for DNR. These discourses were associated with competing agendas. For example, the conservation group pursued a nature-conservation agenda while the developmental group called for provision of low-income housing and industrial zoning of part or all of Driftsands.

The conservation group, which aimed at preserving the site, emphasised the need to conserve indigenous vegetation and to green the landscape, and it opposed urbanisation. It wished to highlight the aesthetic, recreational and environmental values of the reserve for the benefit of the people of the Cape Flats in particular and of Greater Cape Town in general. It sought to discourage land invasion and to encourage the relocation of informal townships from Driftsands. It also aims to promote community participation, especially those neighbouring the reserve, regulate their access to and from the reserve while attending to the disturbances by squatters.

By promoting the above mentioned conservation agenda, the conservation discourse sought to limit and regulate the participation and access of local communities in line with the global model of fortress conservation prevailing at the time. Fortress conservation

either fence protected areas from local communities or fence communities from protected areas (see Chapters 5 and 6). Although conservationists are often divided on the consumptive use of protected areas' natural resources, the conservation group in DNR subscribed to the view that protected areas could be used for profit: for example, that revenue from such areas could contribute towards meeting the administrative and management costs of protected areas (cost recovery), and of local economic development through ecotourism.

For its part, the developmental group promoted the view that the site on which DNR was located could be used for housing purposes, especially the provision of low-income housing for the influx of immigrant African and coloured communities in the Cape Flats. It also recognised the possibility of moving industries from Crossroads to the reserve. The competing agendas and opposing views held by the conservation and the developmental group illustrate, broadly, the conservation-development debate. The chapter will conclude that the conservation discourse was dominant in DNR throughout the apartheid decade in question.

4.1. The origin of DNR

The proclamation of DNR reads as follows:

Under section 6(1) of Nature and Environmental Conservation Ordinance, 1974 (Ordinance 19 of 1974), I hereby establish the Provincial nature reserves referred to in the Schedule, assign thereto respectively the names set out in the Schedule and define the boundaries thereof as set out in the Schedule. Dated at Cape Town this nineteenth day of July 1983. E. LOUW, Administrator. Driftsands Nature Reserve is situated in the administrative district of Kuils River and the boundaries whereof are as indicated on diagram ANO. 16/32/3/1 which is filed on file ANO 6/3/2 in the office of the Director: Nature and Environmental Conservation; Provincial Building, Dorp Street, Cape Town, and copies of which are available for inspection at the office of the Officer-in-Charge, Jonkershoek Nature Conservation Station, Stellenbosch, and the office of the Secretary of the Divisional Council of the Cape.

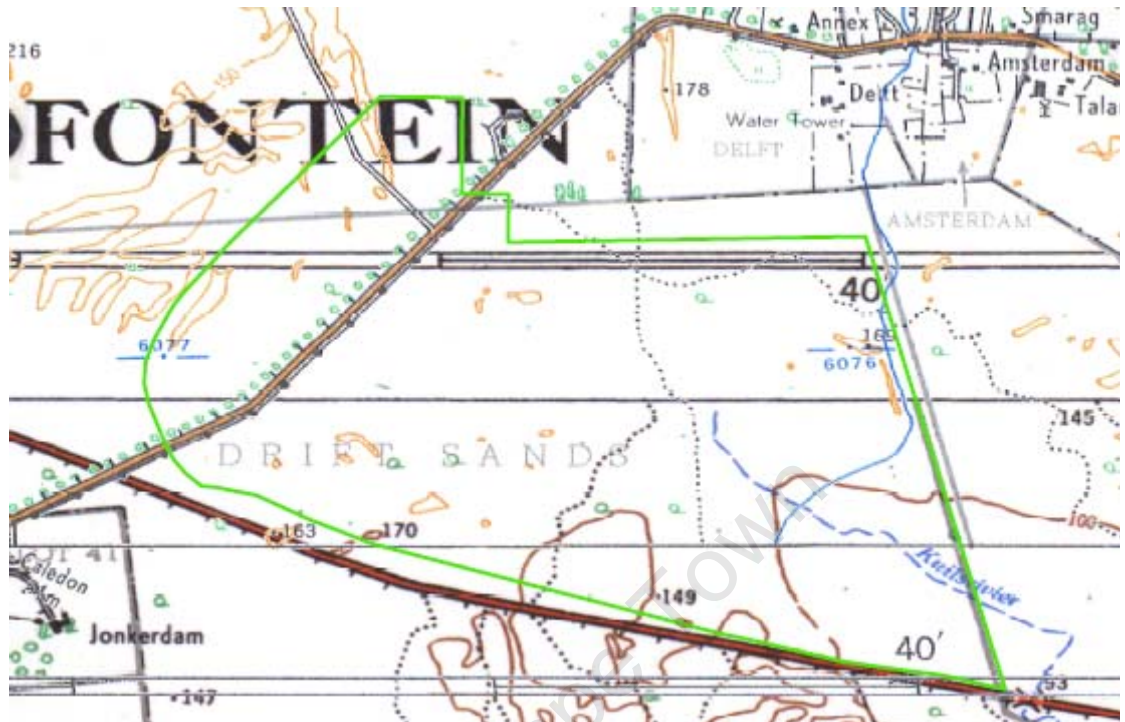
The above proclamation means that Driftsands officially became a provincial nature reserve in July 1983. Given the political climate and the overall segregationist strategies of the time, the proclamation of DNR formed part of the political agenda of the Cape

Provincial Administration (CPA) of racial segregation and spatial planning on the Cape Flats, namely the segregation between African and coloured communities.

Prior to the creation of the reserve, there were proposals to use the site for expanding the CPA hospital services as the following official source suggests: “This reserve is situated on land originally acquired by the CPA for hospital purposes. The management of the property was transferred to the Chief Directorate Nature and Environmental Conservation in 1981, after which the property was proclaimed as the Driftsands Nature Reserve” (The Province of the Cape of the Good Hope 1990). Interest in conserving the area can be traced back to the 1970s when researchers at universities of the Cape Town, Stellenbosch and the Western Cape “showed interest” in Driftsands (Driftsands 1989). Thereafter, in 1979, representatives from UCT and the CPA visited the site and came up with the idea to “transfer the site from hospital services to [a] nature conservation area” (Driftsands 1989). Before the remarkable visit of UCT’s conservation scholars and the establishment of Delft animal centre at the site, Driftsands was an empty land (see Figure 4.1). Therefore, the order of interest in Driftsands departs from unutilised public land, toward becoming a wild animal research area and to a provincial nature reserve of a political, conservational, and developmental nature.

By establishing DNR, the CPA made the site a secured buffer zone between white settlements and a cluster of non-white townships of the Cape Flats. By proclaiming DNR, the CPA gained exclusive access to “±450 hectare” (Driftsands 1989) between urban townships by fencing the site in “± 1980 – 1985/6” (Driftsands 1989). Therefore, it was strategic for the CPA to turn Driftsands into a nature reserve instead of earmarking it for low-income housing.

Figure 4.1. DNR in 1953 (Chief Directorate of Surveys and Mapping, RSA)



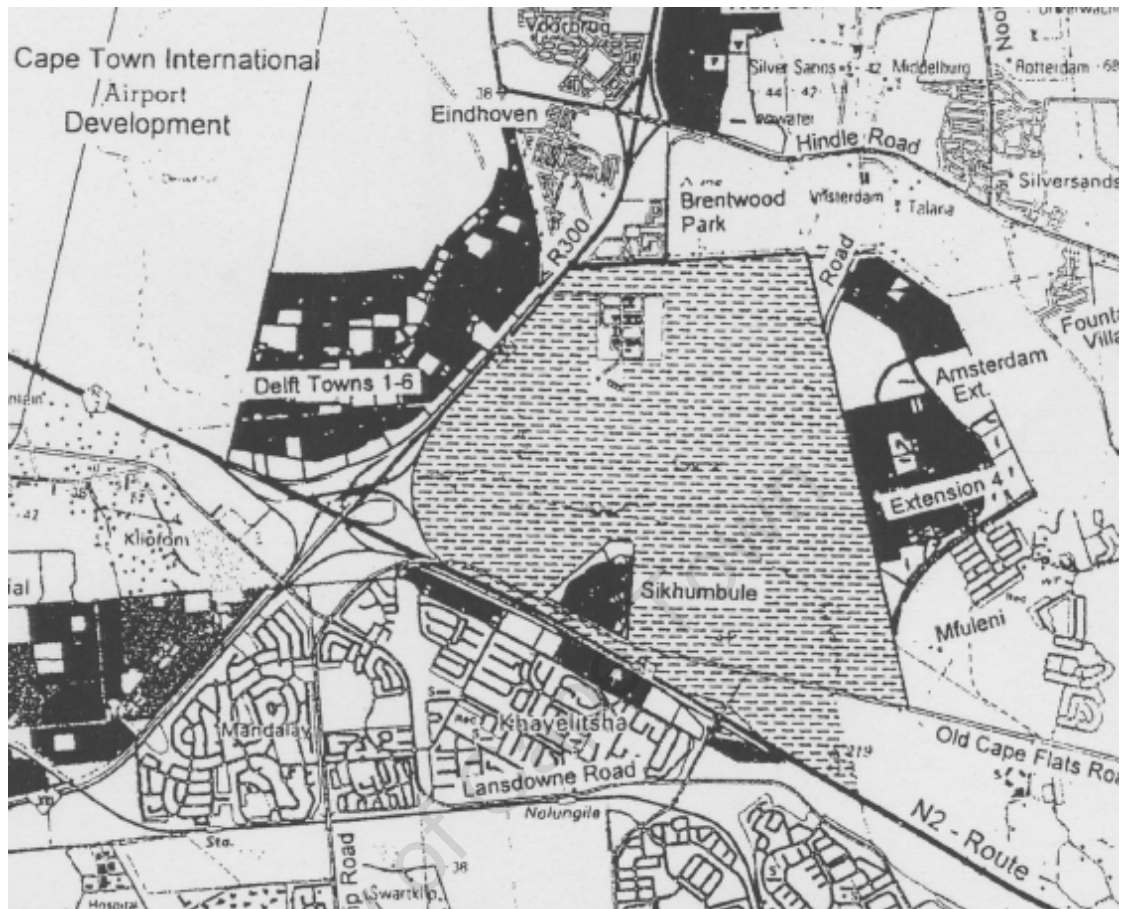
However, in early 1970s the Cape Metropolitan Council (CMC) looked at addressing some of the region's emerging requirement for land for housing. The CMC was looking for vacant lands outside Cape Town to address the "severe housing crisis" that had been facing the Cape Metropolitan Area (CMA) since the development of Belhar and Mfuleni in 1970 (CNdV and CMC 2000: 9). The CMC claimed that the severity of the housing shortage was likely to continue, as the Regional Housing Board was unable to allocate housing subsidies "in... [the] near future [where]. approximately 180 000 housing units will be required to accommodate the backlog and future growth in the CMA. About 45 000 housing units [were] required in the City of Tygerberg in which Driftsands is located" (CNdV and CMC 2000: 9).

Until early 1970, Driftsands was a wide wetland extending from the Cape Flats to False Bay. From that time, the CPA attempted to deproclaim part of, or the whole of, the site for housing and industrial development purposes. Driftsands was proclaimed a provincial nature reserve in conjunction with Wolfgat Nature Reserve to protect the Kuils River wetlands from urbanisation. In June 1992, Adams, the Chief Directorate of the

Department of Nature and Environmental Conservation, Province of the Cape of Good Hope, responded to A Walker, an anonymous botanist from Somerset West, on the issue of the protection of Kuils River wetlands and surrounding areas. He stated: “Expanding urbanisation is placing increasing pressure on the few remaining natural areas on the Cape Flats. This Administration recognised the importance of the wetlands associated with the Kuils River more than 15 years ago [in 1977] and [was] able to initiate certain actions which have assisted in protecting these areas. These actions include the protection of the Driftsands Nature Reserve and the Wolfgat Nature Reserve, as well as initiating structure plans for this area” (Adams 1992b).

It was also spatially strategic for the CPA to proclaim DNR to create a buffer zone between five emerging African and coloured townships: Khayelitsha, Mfuleni, Philippi, West Bank, and Delft. Driftsands forms a triangulated, fenced, and wet barrier for the surrounding impoverished communities. The DNR is ‘triangulated’ (see figure 4.2) by the south-north stretch of the National Route (N2); the R300 regional freeway to the west; and the north-south flow of the Kuils River. This triangulation means that Driftsands exists as an “island” (Derek Chittenden & Associates 1991: 2) between major developing hubs. Furthermore, the reserve is ringed with 14,970 meters of woven galvanised fence aimed at keeping unwelcome human and animal activities out and retains reserve animals (particularly game species) within the reserve (CMC 1999: 8). Moreover, the CMC recommended electric fencing as it turns out to be “the cheapest form of fencing” (CMC 1999: 9).

Figure 4.2. Driftsands and Cape Town International Airport (Setplan 1998)



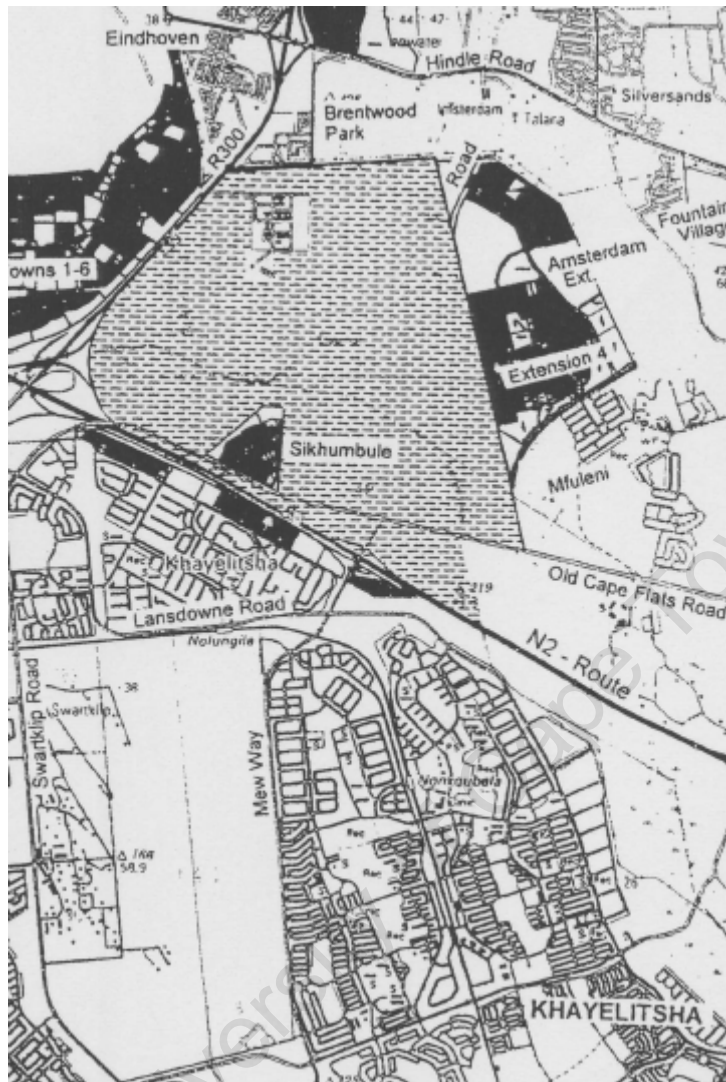
Conceptually, the triangulated, fenced and wet Driftsands forms a barrier against the surrounding communities. It is located in the midst of squatter settlements (Delft Medical Research Council (2006). It separates Khayelitsha (sites B, C, and D) to the north, Delft to the west, Brentwood Park and West Bank to the north, and Mfuleni to the east (see Figure 4.2). People from these communities cannot cross the reserve in car or on foot from the south or the east to reach the north or the west without obtaining a permit from Driftsands Environmental Centre.

The link between Driftsands and Khayelitsha feature in the Provincial government's discussion documents. For example it is stated that Driftsands was proclaimed a provincial nature reserve "after Khayelitsha was identified for African residential development in the early 1980s" (Chittenden Nicks de Villiers, November 1997). Khayelitsha was established in 1984 during the war that broke out in K.T.C. and Crossroads informal settlement (Etownship 2008), a year after the proclamation of

Driftsands as a provincial reserve. Moreover, the Provincial Administration of the time (under Minister Piet Koornhof, 1979) attempted to retain Cape Town as a traditional white residential area. The plan was to relocate residents from all African townships in Metropolitan Cape Town to Swartklip/Driftsands [see Figure 4.2], now Khayelitsha (isiXhosa for ‘our home’). Although the original intention was to pursue a voluntary and peaceful relocation, “the process became marred with force and violence” (Muzondo et al, 2002). Minister Koornhof aimed at segregating African and coloured townships from white residential areas. During this period, Crossroads was divided into two groups: those who supported the apartheid government, like the former MPL Johnson Ngxobongwana and his followers, and those who resisted the apartheid government (Interview, Situlo, 26 March 2004).

“In 1979, the Minister of Plural Relations, Dr Piet Koornhof, devised a strategy to divide Crossroads in order to gain political control” (Lawyers Committee for Human Rights, 1988: 12). This plan succeeded in driving a wedge into the formerly united Crossroads community. However, new settlers continued to join the existing Crossroads, while continuous shifts in state policy meant they lived in constant uncertainty (Lawyers Committee for Human Rights, 1988: 13). In 1983, a new strategy to deal with the black population in the Cape Peninsula was devised; having failed to remove black inhabitants completely, the authorities would try to consolidate their settlements into one area for easier control. This area, which would have both government-built and more particularly, self-built houses, was the Swartklip/Driftsands area now known as Khayelitsha (see Figure 4.3). As an incentive to move there, the undertaking was given that Khayelitsha would “have an orderly layout for houses, taps and toilets, street lighting etc, in short, a promise of improved infrastructure” (Muzondo et al, 2002).

Figure 4.3. Driftsands and Khayelitsha (Setplan 1998)



Interestingly, the institutionalisation of racial segregation on a national scale appears to have begun in 1652. “Since the establishment of the Cape of Good Hope by the Dutch East Indian Company, [under] European pioneer Jan van Riebeeck in 1652, laws governing land administration were divided on racial lines. In the apartheid period from 1948 to 1979 (31 years), the national government policy promoted strict racial segregation in all spheres (economic, civil, and political) and spatial planning” (Interview, director of a social NGO in the Western Cape, 22 July 2004). In cities, native locations, precursors to today’s townships, were established after the passing of the Natives (Urban Areas) Act of 1923 (Oldfield 2001).

4.2. Nature conservation or low-income housing

After 1983, the Driftsands discourse revolved around two proposed land usages: whether it should be used for low-income housing or for conservation. In 1984, the City Council of Cape Town proposed to deproclaim Driftsands in order to house some of the estimated one million impoverished immigrants who had moved to Cape Town from elsewhere in South Africa. In response, the Chief Directorate of Nature and Environmental Conservation at the Provincial Administration “strongly opposed to deproclaim the reserve and use it for housing” (Yeld 1989).

Opposition to the deplamation was supported by the Cape Metropolitan Council and botanist Barrie Low. The CMC argued that Driftsands was too small for housing purposes. The CMC proposed to increase the residential density of Khayelitsha instead to compensate for the Driftsands land. Furthermore, the loss of Driftsands for housing would mean losing “a vital green lung” (Low 1988 a & b) in the Cape Flats. The urbanisation of Driftsands was seen as incompatible with the principles of nature conservation (Low 1988a). Finally, the CMC argued that Driftsands should not be proclaimed for housing and “local communities should be involved in utilising reserves” (Low 1988b).

The CMC argued that “in 1987 the metropolitan backlog of housing and provision was estimated to be 230 000 dwelling units which would have required approximately 8 000 hectares of land to accommodate housing at a [sic] average density of approximately 22du/ha. Actual land available at that time was 7 800 ha which had been marked for only 90 000 housing units. [Therefore,] the entire available land would address 40% of the required target. The reason for this was excessive low densities of 14du/ha at which it was proposed that townships should be developed” (CNdV and CMC 1999a: 6).

In 1988, a supporter of the Driftsands conservation debate, Low, argued that losing Driftsands to housing would mean that “the Cape Flats will lose its largest conservation area, but more importantly, current and future communities will be much poorer for losing a vital green lung” (Low 1988b). Urbanising the site would mean fewer green areas in the Cape Flats, which would increase pollution in the already polluted area. But

it was strategic for Low to place Driftsands in the context of the Cape Flats to compose a multi-dimensional argument. At that time, he saw “great demands being placed on open land for housing, [in which] areas such as Driftsands have come under close scrutiny for this very purpose. Indeed there appears to be a very real threat that Driftsands might not be assured of long-term protection” (Low 1988b). Furthermore, Low predicted that “some 200km² or 400 000 housing units will be required by the turn of the century [...] much, if not most of this development will occur on the Cape Flats” (Low 1988b).

Low also argued that urbanising Driftsands was incompatible with the principles of nature conservation. In his capacity as a staff member of the Botany Department, he organised an excursion for 60 participants to study urbanisation in the Cape Flats. He reported to the Administrator of the Cape the unanimous view of all the participants in these words: “All of the 60 or so participants were alarmed and shocked at the apparent violation [of areas] that were being stripped of their plant cover and the underlying sand loaded into large trucks to be carted away to the construction of the nearby Khayelitsha/N2 interchange” (Low 1988a). In this sense, Low advanced the DNR conservation discourse by implying that the incompatibility of urbanising Driftsands with nature conservation was about stripping the reserve’s plant cover and loading off its sand.

In summary, Low’s report conveyed three sentiments to the office of the Administrator: 1) the group was “extremely alarmed that practices not remotely compatible with nature conservation are taking place within DNR”; 2) the group considered removing sand from DNR “to be in direct conflict with the aims and the objectives of nature reserve as laid down in the Provincial Ordinance;” 3) the group’s aim was “to ensure the [continued existence of the] only large nature reserve [that offers] adequate protection for a part of the threatened and unique central Cape flats ecosystem” (Low 1988a).

Low referred to the notion of community participation to support his conservation argument. In July 1988, he called for initiating “a Driftsands Working Committee which would have as one of its major objectives the involvement of local communities in the Reserve” (Low 1988b). Since then, Low has been advocating local community participation in conserving nature. For instance, he wrote to the provincial chairman of Nature and Environmental Conservation (NEC) that “local communities should be

involved in utilising Cape Flats reserves” (Low 1988b) including DNR. In another instance, Low wrote a letter to the provincial Chief Director of NEC (Mr P J le Roux) to suggest that “local community representatives could have a major say in activities such as alien wood removal, trail planning and utilisation, and environmental education programmes” (Low 1988b).

A year later, Low argued that the underlining effort of applying “appropriate conservation measures” is the philosophy that “conservation, if possible, must be community-oriented and preferably community-based” (Low 1989b). In both instances Low endorsed community-based conservation, but in a system that provided opportunities for menial jobs (to remove alien vegetation, to build trails) and to attend environmental education programmes at the site. These initiatives conform to universalised environmental views but did not address the survival needs of Driftsands’s surrounding communities for shelter and public services. Instead, they but corresponded with Low’s conservation vision. Low’s notion of community participation as a factor shaping the ecological discourse is in line with Agenda 21 and the Forest Principles of Earth Summit in Rio in June 1992, “both of which stress the importance of the participation of local communities and indigenous peoples in the process of sustainable development” (Younis, 1997).

4.3. Nature conservation or development

In 1988, the Driftsands discourse revolved around “strong signs of deproclaiming Driftsands for development” (Driftsands 1989): to provide low-income housing and industrial zoning of part or the entire site. Furthermore, the DNR debate expanded to cover other issues. In May 1994, the CPA, through its Chief Director of Nature and Environmental Conservation (NEC), proposed to harness the site’s “recreation, environmental education and aesthetic” opportunities to benefit the surrounding communities of Greater Cape Town (Adams 1988a).

This view was supported by Low, who argued that “the Lower Kuils River and its adjacent dune lands [namely Driftsands] has untapped potential as a recreation and education area” (Low 1999b). Furthermore, the CCT supported Adams’s proposal “to

seize the site's recreation and environmental education opportunities; drop the CPA's proposal to seize the site's aesthetic opportunity; and called for conserving one section of the reserve while industrialising another in order to avoid housing people at the site" (Riley 1989).

Low argued against another form of urbanising the site, claiming that a) the "major housing development [of Khayelitsha] has led to the complete destruction of unique dune veld in the area" (Low 1989b); b) "Natural open space on the Cape Flats has shrunk rapidly in the face of unchecked urbanisation and objective environmental input appears to have been omitted from structure plans in this area" (Low 1999b); and c) "Driftsands is the largest proclaimed reserve on the Cape Flats and was seen as vital to the education and social well-being of the Cape Flats housing schemes, which ultimately houses over a million people" (Low 1999b).

In May 1988, in his capacity as the Chief Director of the executive committee of the NEC, Adams acknowledged Low's assertion that the "reserve has a vital role to play amongst communities on the Cape Flats particularly with regard to recreation and environmental education" (Adams 1988b). At a morning session organised by a local environmental NGO, Adams addressed the participants "on the ecological importance of the Reserve and its value to the community in terms of education, recreation and aesthetics" (Adams 1988b). By using the term "aesthetic" and referring to Greater Cape Town, Adams could be regarded as taking both an ecological and a metropolitan stick to Driftsands' shareholders. He confirmed his vision of providing recreational facilities at the site by proposing that the Kuils River be dammed, which "will be a great asset in this regard [as it] will enhance to a large degree the existing attributes of the reserve" (Adams 1988a). Damming the river would "attenuate floods and therefore reduce the risk of flooding in the Lower Kuils River valley; and [would] provide by means of a permanent shallow lake, a recreation facility for the large population that is being established in the area" (Adams 1988c).

Meanwhile, the possibility of damming the river had been raised in Driftsands discourse two years before Adams's session (May 1988). Damming the lower Kuils River at DNR for recreational purposes seems to have faced two technical constraints. First, it was documented that the "quality of water in the lower Kuils River does not satisfy

international standards of suitability for recreational purposes but it compares favourably with the water quality in wet recreational areas in the Cape Town such as Sandvlei and Zeekoeivlei” (Ninham Shand 1987). Secondly, Silberbaner (1989), an associate of Driftsands Task Group, advised the CPA that “a detention pond or dam would simulate the temporary pans or vleis that occur around here, because it would periodically dry up” (Silberbaner 1989).

Two months later, in July 1988, Adams approved Low’s application “to set up Driftsands Conservation Committee”. He also approved Low’s suggestion that incorporating the “concept of local involvement [is] of critical importance in nature and environmental conservation” (Adams 1988e). Adams’s rationale suggested that conservation cannot be forced on local communities. Conservation requires the support and involvement of local communities. “Fortunately, there are always concerned members of the public who are prepared to act as catalysts in the formulation of local interest groups”. Moreover, “local communities are making significant contribution towards nature and environmental conservation”. Therefore, he welcomed Low’s initiative to establish a Driftsands environmental and conservation committee and promised that Cape Nature will “gladly liaise” with these groups.

In August 1988, the City of Cape Town (CCT) supported the CPA’s proposal to provide educational and recreational opportunities at the site for the sake of the surrounding communities. Driftsands is located within a “densely settled and low-income urban area” (Riley 1989), making it ideally placed to function as an educational and recreational opportunity for the surrounding communities. Moreover, the CCT suggested conserving Driftsands’ share from the region’s ecological assets. Driftsands is “a valuable reserve for its unique and irreversible genetic resources of indigenous (fynbos) flora and fauna in the south-western Cape” (Riley 1989).

Meanwhile, the CCT claimed to be concerned about addressing social ills by the allocation of land for industrial purposes either in Driftsands or in the Philippi industrial area. The CCT recognised that such allocation was important to contributing to the generation of jobs for the 1.8 million people living within the vicinity of Driftsands. However, “if industrial land [Philippi’s industrial area in this case] is to be lost, serious attention should be given to limiting the extent of this loss, to replace such industrial land

in the near vicinity and to provide work opportunities in the new housing fabric” (Riley 1989).

The CCT, however, through its department of city planners, argued that the site was not suitable for housing. First, the site was “located within a Noise Index of 70” (Riley 1989), which suggests that it is not a healthy area for housing people. The noise levels generated in such an area will have “severe negative consequences particularly on psychological and social welfare. It is an established international practice to use such high noise areas only for non-residential purposes” (Riley 1989). “The noise from the aircraft affects mostly (Sikhumbule) the south-west corner of the site (i.e. the 2026 60 and 65 NI (Noise Index isolines measured in dBA)). [Bear in mind that] the international accepted maximum noise allowed for residential area is 65dBA” (MLA 2005: 13).

Secondly, since Driftsands is located within a “densely settled and low-income urban area, it will be unlikely that residents of housing in such an area would be able to afford the high cost of sound sealing with its attendant artificial ventilation requirement” (Riley 1989) and (Official from DNR, Interview, 1 February 2004).

During this period, the Cape Metropolitan Guide Plan also rejected the possibility of housing squatters at DNR. The Cape Metropolitan Guide Plan (Peninsula) (1988) states that: “With regard to the reservation of land for nature areas ... the need for land for urbanization should also be considered. It is primarily against this background that consideration will have to be given to the future utilization of the existing Driftsands Nature Reserve ... for urban development instead of nature conservation” (Adams 1988b).

In May 1988, Barrie Low supported conservation of the site by opposing the provision of housing at DNR and mining of its sand for developmental purposes. Low stated that it was “sad to note that reserves such as Driftsands are being threatened almost daily with housing and other developments” (Low 1988a). Mining sand for Khayelitsha’s “major housing development ... has led to the complete destruction of unique dune veld in the area” (Low 1989b). Low suggested that the ongoing housing development of Khayelitsha led to the destruction of Driftsands’ “dune veld.”

Three months later, Low challenged the local developmental argument by arguing that using Driftsands for industrial purposes meant decreasing urban open spaces in the Cape Flats. He pointed out that, “Natur[al] open space on the Cape Flats has shrunk rapidly in the face of unchecked urbanisation and objective environmental input appears to have been omitted from structure plans in this area” (Low 1999b). He also reminded interest groups that “Driftsands is the largest proclaimed reserve on the Cape Flats and was seen as vital to the education and social well-being of five major housing schemes: Khayelitsha, Mfuleni, Blue Downs, Delft and Skietbaan, which ultimately houses well over a million people” (Low 1999b). This remark implied that Driftsands was important neither for housing, nor for industrial zoning, but for “the conservation of rapidly dwindling dune areas on the Cape lowlands, [and] more so as an area for recreation and education of local communities” (Low 1999b).

Low also argued that the urban development of Driftsands would sacrifice untapped recreational and educational potential: “the Lower Kuils River and its adjacent dune lands ... has untapped potential as a recreation and education area” (Low 1999b). He therefore proposed exploiting its potential for recreational and educational opportunities to serve the future interests of the people of Cape Town, mainly, the surrounding communities who should not be allowed to ‘squat’ at the site in the meantime.

In addition, Low argued that allocating Driftsands for urban development meant losing a green lung in high-density suburbia. Driftsands’ function as a “green lung will be invaluable in the midst of what will become high-density suburbia with probably more than 1 million people living in the immediate vicinity by the turn of the century” (Low 1999b). Turning Driftsands over for urban development would negatively affect the quality of air in its immediate vicinity. Consequently, Low proposed greening Driftsands instead of housing people there or allowing industrial zoning of the site.

4.4. Nature conservation housing or industrial zoning

Between June and October 1989, the debate among Driftsands officials centred on the CPA’s move to deproclaim a quarter of Driftsands for industrial purposes. This move had met strong resistance from the Driftsands conservation group. In the same year

(i.e.1989), the CPA deproclaimed “a quarter of [Driftsands] for industrial purpose as a quid pro quo of rezoned industrial land east of Philippi to house people of Crossroads” (Yeld 1989). On 25 July 1989, the CPA “submitted an application to the Director General of the Department of Planning for consideration to amend the Guide Plan to allow, inter alia, for the Driftsands Nature Reserve to be utilised for industrial purposes. This was to replace industrial land which had been allocated for industrial development in Philippi/Crossroads area” (MLH Architects and Planners & Ninham Shand 1992: 45).

In response, the City Planner, Mr Neville Riley, reported to the city council that the CPA’s proposal was cause for concern. “First, Driftsands is a valuable reserve for the indigenous (fynbos) flora and fauna that is a unique feature in the south-western Cape. These genetic resources are irreplaceable and without them the area will lose much of its character. Second, the location of the reserve beside the Kuils River puts it in a sensitive position with respect to the potential pollution of the river from the proposed industrial activity. In spite of stringent protective legislations, storm-water run-off, industrial spills and other discharges can be expected in any industrial area and the potential for ecological damage not only in the Kuils River but also in the Eerste River estuary – and ultimately the False Bay itself – cannot be ignored.” Riley said that the most biologically significant parts of Driftsands should be maintained, allowing the remainder to be put to industrial use if such land was lost in Philippi (Yeld 1989). In summary, Riley’s refutation of the CPA’s proposal was based on the principle of conservation and resources protection.

Furthermore, the Driftsands conservation group took further determined action by formally constituting the Driftsands Task Group (DTG) in 29 August 1989. The meeting at which the DTG was established was attended by the Wildlife Society, the Botanical Society, the Cape Bird Club, UWC [Environmental Education and Resources Unit], UCT [Zoology Department], the City Council’s Parks and Forests Department, the Department of Environmental Affairs and planners from the private sector (Municipal Reporter 1989). Barrie Low and Jan Glazewski were elected as convenors of the DTG. The main task of the DTG was to retain Driftsands as a green space in the burgeoning urban development of the Cape Flats” (Driftsands Task Group 1993a).

Meanwhile, Low claimed that DTG was established in response “to the growing pressure being placed on the reserve” (Low 1993a). The latter had seen a 50% reduction in open space between 1983 and 1989, highlighting the importance of the remaining green space. Loss of such space “bodes ill for the environmental quality of this area for the people who were in many cases forced to live here, far from easy access to the Western Cape’s mountains and beaches” (Low 1993a).

Another member of Driftsands conservation group, the Western Cape Regional Services Council (RSC), also took determined steps. The RSC approved a recommendation in September 1989 from its Committee of Land Usage and Transport Planning (CLUTP) “to reject the CPA’s proposal, and to support instead an alternative proposal by the RSC engineers to establish a regional recreational park as a long-term need for the Cape Flats” (Yeld 1989). The goal of this proposal was to conserve Driftsands’ ecological assets (the Kuils River, the Cape Flats Aquifer, and the breeding ground of birds and water fowl); and to look at “the nature reserve’s greatest potential (which) lies in its utilization as a recreational/environmental awareness educational facility on a regional scale” (CLUTP 1989).

In the CLUTP report the RSC stated that Driftsands possessed long-term metropolitan importance with a major impact on the character of the region. The RSC argued that the choice of the Driftsands site as a replacement for Philippi industrial land could be seen as “being motivated by local economic considerations rather than long-term and strategic economic considerations from a metropolitan perspective” (CLUTP 1989).

The CLUTP argued that “a definite need, however, exists for the creation of job opportunities in close proximity to the labour market, especially with regard to the lower income group. [It is essential to construct an industrial area in the Cape Flats, because] the further reduction of industrially zoned land in Philippi can lead to an increased feeling of insecurity amongst the surviving industries, resulting in the possible closing of industries and the loss of job opportunities” (CLUTP 1989). Therefore, it was not strategic, from a metropolitan point of view, to decrease the size of the Philippi industrial area, as it would lead to the loss of job opportunities within the labour market and increase the feeling of insecurity among young businesses.

Moreover, the CLUTP argued that deproclamation of “a portion of the Philippi industrial area as a Black Development Area” was not strategically necessary, because the demand for residential areas could be addressed in Khayelitsha. In addition, “factional groupings in Black communities, such as is the case in the Philippi area, lead to segregated settlement patterns that is to a large extent responsible for the development pressure currently exerted on adjacent vacant land for black residential purposes”.

This creates to a situation where the need for African residential land conflict with the availability of land; leading to the trade-off between available zoned industrial land and the demand for land for Black residential development, respecially in the Philippi area (CLUTP 1989). In the view of the CLUPT, the housing demand should not determine the availability of land but should consider the suitability of such land (CLUTP 1989). It was deemed better to keep the industrial area in Philippi and to address the housing demand in Khayelitsha.

Another reason for the CLUTP’s rejection of the industrial use of Driftsands was because of its ecological importance. The CLUTP regarded Driftsands as a “breeding ground for numerous species of birds and water fowl; a sponge to replenish the Cape Flats Aquifer; [however the indigenous flora of Driftsands is] not rated highly as far as conservation measures are concerned; [nor as] a natural storm water catchments and retention area” (CLUTP 1989).

In brief, these three ecological concerns revolved around the basin of the Kuils River: the banks and the downstream of the Kuils River is the place where birds breed (Adams1992a), the Cape Flats groundwater system is replenished and the Kuils River floods the national Road (N2). Therefore, the recommendation for conservation of the site appeared to encompass only a portion of the reserve and not necessarily the whole site. However, the CLUTP projected these three concerns to cover the whole area of Driftsands, while specifying that a portion of the site was important for conservation and flood management.

The CLUTP claimed that Driftsands met all the criteria for a regional recreational facility and that the nature reserve has its greatest potential as a recreational/environmental awareness educational facility at a regional scale (CLUTP 1989). Its reasons were

twofold. First, it held the view that the demand for recreational facilities is disproportional to the increase in population. In Driftsands, the demand was increasing as the resources were decreasing. It considered the natural resources of Cape Town and its surrounding areas as non-replenishable.

Second, it endorsed the report of the Cape Metropolitan Planning Committee in a report on the recreational, conservation and development potential of the Cape Metropolitan Coastline which proposed the provision of a large inland regional recreational area as a counterbalance for coastal recreational facilities. The CLUTP considered the location of a recreational site on the Cape Flats as critical in relation to the False Bay coastline in view of the lack of mobility of the target population due to socio-economic conditions (CLUTP 1989).

4.5. Nature conservation or development

During the period between October 1989 and October 1990, the debate among Driftsands stakeholders concerning the future of the site was centred on conservation and development. On one hand the Administration of Cape of Good Hope reconsidered [Driftsands for] development and conservation” (Van Wyk 1989). This review became action when the Provincial Administration tasked the Western Cape Regional Services Council (RSC) “to do a detailed planning study to identify future land-use in the whole lower Kuils River basin, including Driftsands” (Van Wyk 1989). The result, eight months later, was the RSC’s proposal to zone 150 ha at Driftsands for industrial purposes; to establish a conservation regional recreational facility on a large part of Driftsands; and to establish a hospital on the south-western corner of Driftsands (MLH 1992). Thereafter, the RSC instructed the MLH Architecture and Planners, on 11 June 1990,

to prepare a Section 4(6) Structure Plan for consideration and adaptation. The consultant was briefed that the breakdown of the Structural Plan should: address the future uses for the site; identify approximately 150 ha of land for industrial use; investigate the recreational potential of the proposed detention dam on the Kuils River; identify the conservation/recreational potential of a large part of the Nature Reserve with a view to establishing a regional recreational facility; establish the viability of a hospital site in the south-western corner of the Nature Reserve; investigate the traffic implications of

industrial and other developments north of the N2; [and] analyse the location of industrial land in the study area within a metropolitan context”(MLH 1992: 2,3).

On the other hand, Driftsands conservation group interpreted the Administration’s proposal to be a replacement of conservation with development. Driftsands conservation group produced scientific research to restate the conservation value of the site and propose multi-purpose usage, excluding housing and industrial zoning. Furthermore, the then Ministry of Constitutional Development and Planning (the former Ministry of Planning and Provincial Affairs) proposed, on May 1990, to seize Driftsands as a natural asset; opposed allocating the area for housing and industrial use; and called for accommodating recreational and tourist-related activities. The background for this proposal lay in the approach of the Department of Development Planning, which was concerned with the coordination of overall spatial development policy by way of guide planning in terms of section 6A of the Physical Planning Act, 1976 (Act 88 of 1967) (Heunis 1989). The Guide Plan emphasised the ecological importance of coastal areas, mountain areas, river banks, streams and other expanses of water, vlei areas and other sensitive nature areas. These areas were to be used for a variety of recreational and tourism purposes in consistent with the overall principles of conservation (Heunis 1989).

Likewise, the Chief Directorate of Nature and Environmental Conservation, Dr Johan Neethling, countered the proposal of the CPA and the RSC by stating: “Driftsands is unique and it must be protected. We will fight tooth and nail any attempts to deproclaim this reserve” (cited in Yeld 1989). Neethling thus illustrated how the language of conservation played a major part in developments in the region.

A third member of Driftsands conservation group, the Western Cape Department of Environmental Affairs, proposed incorporating Driftsands into the provincial urban scheme as natural open space instead of a pure nature reserve (Low 1989c). In other words, the department favoured deproclaiming the reserve but retaining it as a natural open space without the possibility of development.

A fourth member of Driftsands conservation group, Barrie Low, released a scientific survey of public preference of choices of eight proposed land uses to support his stand against the development of Driftsands. This survey was conducted in 1990 by Low’s

student (Ngeleza) at the Botany Department of the University of the Western Cape to reflect and incorporate the divergent views among the communities surrounding Driftsands on the future of the site. Ngeleza targeted 43 residents from Khayelitsha Township and 19 geography teachers working within the vicinity of Driftsands. Low made use of Ngeleza's survey to suggest, among other things, prioritising education opportunities over housing (Low 1993a). Low employed the preference of choices of the 19 geography teachers (see Table 4.1) to pursue a conservation agenda. He pointed out that the geography teachers responded in the affirmative to education to be high on their list of land use preferences (Low 1991b). On the basis of the survey, he argued that the allocation of Driftsands for environmental education opportunities was a local preference. This way, Low's view normalises and justifies the displacement of local communities from protected areas and also promotes the need for educating local communities about protecting nature on land from which they were displaced, namely, Driftsands. He represents ideologies that are common in protected areas in different parts of the world. So we should not judge Low about implementing a nature conservation principle. He should not be blamed for a global-national-local discourse. In a bigger picture we should not blame Low for the displacement of four million South Africans from land they inhabited for a significant time for the sake of conservation.

Table 4.1. Survey preference of choices of 19 geography teachers living within the vicinity of Driftsands on eight proposed land uses of DNR (Ngeleza 1990)

	Preference of choice	VI	I	LI	UI	VI+I	NI+U D	total	%VI+I	%NI+UD
1	Education centre	13	2	0	1	15	1	16	78.9%	6.3%
2	Housing	11	2	1	0	13	1	14	68.4%	7.1%
3	Nature Area	5	7	1	3	12	4	16	63.2%	25.0%
4	Sports Area	1	11	0	2	12	2	14	63.2%	14.3%
5	Industry	1	7	5	2	8	7	15	42.1%	46.7%
6	Shopping Centre	2	5	3	4	7	7	14	36.8%	50.0%
7	Initiation	0	5	3	5	5	8	13	26.3%	61.5%
8	Woodlot	0	3	3	7	3	10	13	23.1%	76.9%
	Total	33	42	16	24	75	40	115	65.2%	34.8%
VI: Very Important, I: Important, LI: Little Important, UI: Un Important,										

Indeed, the teachers prioritised accommodating an education centre within a relatively short distance from their schools over housing squatters at the site, because they were ‘outsiders’. They neither lived in Driftsands nor were they severely poor like those living on the site, as they were employed and could afford to buy or rent houses or shacks.

Similarly, Low interpreted the preferences of the 43 Khayelitsha residents interviewed (see Table 4.2) to be pro-conservation, particularly the construction of environmental education centre at the site, even when they least preferred providing a nature area at the site. He argued that their objection to keeping the reserve in its present (1990) form arose from the lack of information and an attitude which regards reserves as fenced-off areas with restricted access (Low 1991b). Their lack of knowledge about nature conservation is a problem that can be addressed by educating them about nature conservation; which requires, among other things, building an education facility.

Table 4.2. Survey preference of choices of 43 residents from Khayelitsha on eight proposed land uses of DNR (Ngeleza 1990)

	Preference of choice	Very Important	Important	Little imp.	unimp.	VI+I	NI+U	Total	%VI+I	%NI+U
1	Housing	39	4	0	0	43	0	43	100.0%	0.0%
2	Education centre	35	8	0	0	43	0	43	100.0%	0.0%
3	Shopping Centre	28	15	0	0	43	0	43	100.0%	0.0%
4	Sports Area	28	14	0	0	42	0	42	97.7%	0.0%
5	Industry	28	14	0	0	42	0	42	97.7%	0.0%
6	Initiation	21	3	7	10	24	17	41	55.8%	41.5%
7	Woodlot	6	9	4	22	15	26	41	34.9%	63.4%
8	Nature Area	2	6	10	20	8	30	38	18.6%	78.9%
	Total	187	73	21	52	260	73	290	89.7%	25.2%

Meanwhile, Ngeleza’s survey and Low’s interpretation were weighted in favour of prioritising environmental education over housing. Both Low and Ngeleza were working at the Environmental Education Unit at the University of the Western Cape (UWC) in 1990 and Low played a key role in conserving Driftsands. Ngeleza’s survey results for the preferences of choice for 43 Khayelitsha residents on eight proposed land uses at

Driftsands (see Table 4.2) indicates prioritising housing over conservation, in the following order: housing, education centre, shopping centre, sports area, industry, initiation, woodlot, nature area and others. Overall, Ngeleza's survey indicated that both the geography teachers and the residents from Khayelitsha regarded Driftsands as the answer to the Cape Flat's challenges. The teachers did not limit their view on the future of Driftsands to Ngeleza's eight proposed land uses. They suggested other opportunities spanning cemeteries, health and recreational facilities. The residents from Khayelitsha looked to Driftsands to provide them with the following needs: "clinics, training centre, play grounds, community halls, police stations, hospitals, filling stations, cinemas, parks and post office" (Low 1993a). Low claimed that most of these services were absent in Khayelitsha at the time (Low 1993a).

4.6. Politicising nature (1990-1993)

During the period between 1990 and 1993, the Driftsands discourse was impacted on by the Administrator's attempt to deproclaim part of DNR for housing (Low 1993b), specifically the area of Sikhumbule that was earmarked for housing Johnson Ngxobongwana's supporters. In September 1990, Driftsands received the first wave of Crossroads refugees. More than 100 families, all supporters of Ngxobongwana, fled to Driftsands [in September 1990] after their shacks were torched in the continuing conflict in Crossroads (Moloinyane, 1990). This situation was hinted at by Yeld, an environmental reporter for the *Cape Argus* newspaper, who claimed that "part of the reserve has been occupied by squatters since 1990, following political upheavals in Crossroads" (Yeld 1993). Such a move was supported by Mr Kobus Meiring, the Administrator of the Cape at that time. A month later, Meiring ruled out using bulldozers to force some of Crossroads squatters to move to Driftsands. On 24 October 1990, he stated that "the Provincial Administration will not force them to leave the bush near Khayelitsha against their will and consultation" (Moloinyane 1990). This implies that Sikhumbule was established by the Provincial Administrator in order to provide a safe space for Ngxobongwana supporters who fled from Crossroads to Driftsands. This claim is confirmed by the government's subsequent action: in 1990, "approximately R20 million was earmarked for the servicing of Driftsands through a national housing loan administered by the Provincial Administration. Some of these funds were used to

formalise the informal settlement in 1993, when the township, today known as Sikhumbule, was developed” (Moloinyane 1990).

Thereafter, the debate among Driftsands conservation group revolved around the continued presence of Squatters in the [DNR] (Low 1991a) and reclaiming Sikhumbule for conservation (Adams 1988d). In this regard, Low wrote to Neethling, the Chief Director of the Provincial Department of Nature and Environmental Conservation, to draw his “attention to the fact that the area is a declared nature reserve [and] the Draft Structure Plan for the Kuils River makes no provision for informal settlements” (Low 1991a).

Neethling responded to Low in a formal letter, proposing to liaise with Low and DTG in order to campaign against Meiring’s initiative to formalise Sikhumbule and to limit further apportioning of DNR lands for informal settlements. He wrote that:

We took all the legal steps necessary to have the squatters evicted – without success and as you point out the negotiations around their move to Philippi have now reached a stalemate. We are nevertheless continuing with our efforts [to have the squatters evicted]. Your Task Group appears to be influential in the area and I would appreciate your intervention with the leaders of the squatters on Driftsands to persuade them to move. They may be more amenable to a NGO pointing out negative effects of their presence on the environment and fauna and flora (Neethling 1991).

Neethling’s argument suggests that a) both Cape Nature and Driftsands Task Group were keen to have the “squatters” evicted; b) Cape Nature had run out of legal steps to have the “squatters” evicted and Neethling was seeking an alternative route to the same end; c) there was no point in proceeding with negotiations with the “squatters”, since these negotiations had reached a stalemate; and d) there was no reason why a task that could not be carried out through Cape Nature legal channels or negotiation should not be allocated to a sympathetic NGO that also aimed to have the “squatters” evicted from the site.

Neethling set out three persuasive ideological principles to justify reclaiming the site for conservation: 1) the end justifies the means; 2) there was no harm in employing ecological arguments to achieve political goals, and 3) the on-site communities were not discerning or critically conscious and could be persuaded by NGO arguments to move

out from the site. In relation to the first ideological principle, namely, the “end justifies the means”, Neethling assumed that his vision for the future of Driftsands corresponded with that of Low and Driftsands Task Group (DTG). Neethling lobbied with local ‘NGOs and individuals’ to achieve goals that were not attainable through legal channels, because “the negotiations [with Driftsands squatters] around their move to Philippi have now reached a stalemate” (Neethling 1991). He offered Low a persuasive argument to enlist his help to achieve what was legally unachievable by the CPA. In so doing, he ignored the ‘traditional’ role of NGOs, which was to present the interests of civil society and the natural environment to official agencies. Conceptually, he reconstructed the moral nature of their role to implement a governmental agenda. In other words, he viewed local environmental NGOs and their discourse on nature conservation as a means to achieve goals that were not attainable through legal channels or through negotiation with the Driftsands dwellers.

The second ideological principle suggests normalising the employment of ecological arguments to have squatters evicted from DNR. Neethling provided Low with stated and implied premises to direct him toward a specific action — “pointing out the negative effects of [the] presence [of squatters] on the environment and fauna and flora” (Neethling 1991). His argument was aimed at achieving a presupposed desired end, rather than at convincing Low that the removal of informal settlers to an undefined destiny was justifiable.

In fact, Neethling did not argue that squatters had a negative effect on the environment, but he provided Low with an alternative argument, difficult to dismiss, that could be used to achieve their eventual eviction. His attitude was not in fact that they were having a negative effect on the environment; rather, they were in the way of his vision of exclusionism, in which people were supposed to live outside the reserve and therefore had to be removed. He was directing Low to campaign on squatters’ negative impact on the environment, but his argument, although persuasive, was fallacious. The premises of having exhausted all legal steps and of negotiations having reached a stalemate, along with his acknowledgement that Low’s Task Group was influential in the area, did not necessarily combine to justify a campaign to evict impoverished local immigrants from ‘squatting’ on public land.

The combination of supportive statements and a direct request forms the essence of persuasive communication. The action intended by Neethling was twofold: Low should intervene with the leaders of the squatters and he should campaign on] the negative effects of their presence on the environment (Neethling 1991). In this case Neethling was the inducing agent; Low's Task Group was the induced agent and the induced ideology was the exclusion of impoverished communities from nature reserves, in the light of the environmental discourse on nature conservation or, more precisely, the discourse surrounding the negative effects of human presence on the natural environment. The existence of the four persuasive components (induced action, persuasive agency, persuaded agency and persuasive argument) in Neethling's argument made it structurally a persuasive argument, rather than a sound one.

The third ideological principle assumes the inferiority of Driftsands on-site dwellers by stereotyping them as people who are easy to persuade and absorb irrational and unethical arguments. Neethling appeared to regard it as common knowledge that people, "squatters" in this case, were normally predisposed to accept the "nature conservation" discourse of NGOs rather than statements of governmental policy. But "squatters" are as critically conscious as those who live in formalised settlements: they do not absorb persuasive environmental discourse more readily than people who live in formal settlements. The "squatters" in this case would not move from Driftsands to Philippi as a result of Low's discourse on nature conservation and their negative impact on the surrounding natural environment. They would, instead, attempt to reduce their negative impact to a reasonably acceptable scale.

A further consideration was that it was risky to attempt to move Driftsands "squatters" to Philippi, as they might not be welcomed in the area because of their ties to Johnson Ngxobongwana. Sikhumbule "squatters" appeared to be critically aware of what was taking place. Their refusal to move from Driftsands to Philippi was confirmed by Johnson Ngxobongwana, who attended a Driftsands Task Group meeting at Ninham Shand on 6 March 1991. He stated that his "community would be unhappy to move if they were not convinced that conditions at their new home would be substantially better than those of Driftsands" (Ninham Shand 1991).

For the Driftsands “squatters” Philippi did not appear to be the right alternative environment, for four reasons identified by Aisha Slamang, the Driftsands Community Conservation Manager, on 12 May 2004 (Slamang 2004). First, Driftsands provided a convenient grazing field for their cattle, while the proposed site at Philippi was tiny by comparison. Second, Sikhumbule was close to main transport amenities, while the proposed section in Philippi (Victoria Mgenge) was remote from them. Third, the Driftsands “squatters” were afraid of ‘cross-sectional fighting’ between the surrounding communities of Driftsands. And finally, they were worried about the consequences of being associated with Ngxobongwana, who, along with his supporters, were evicted from Crossroads, which shared a border with Philippi. These four reasons made it thoroughly unacceptable for Sikhumbule dwellers to move to Philippi.

In line with Neethling’s campaign, DTG called for retaining Driftsands as a green space in the burgeoning urban environment of the Cape Flats. On 22 February 1990, DTG produced a strategic plan to have the Sikhumbule squatters evicted. The DTG recognised the “need to involve local communities to evict squatters in a short time”. The local communities referred to were the people of Crossroads and Khayelitsha who were in conflict with Ngxobongwana’s supporters squatting in Sikhumbule. The DTG also called for fencing of the squatters’ area ... to promote ‘black advancement conservation’ and to “promote Driftsands as a ‘community asset’” (Driftsands Task Group 1991 and Law 1991c).

The Cape Town Metropolitan Council (CMC) put forward a multi-usage proposal for Driftsands in 1991. The CME encouraged the eviction of Driftsands “squatters” from Sikhumbule and the creation of recreational and educational opportunities to serve tourists and the surrounding communities. The CMC proposed the following in 2000:

To provide educational, recreational, agricultural, economic and ecotourism opportunities in the natural environment, in order to serve the needs of the approximately one million residents living in the surrounding urban area, while protecting the existing natural resources.

On first reading, this vision seems to imply that the CMC was constructing DNR as a positive response to social and ecological needs. However, on closer inspection, and applying critical analysis, it becomes apparent that the construction of DNR would

achieve minimal and marginal social gains. Essentially, these gains translated into a package of menial jobs, such as jobs for cleaners at the reserve's tourist accommodations, traders at the shopping centre, car guards at its parking spaces, builders of its footpaths, clearers of its alien plants, and guardians of its animals, that would potentially be killed by members of the surrounding communities. These people would thus become tools for the construction and operation of Driftsands as a permanent nature reserve, to the direct or indirect financial benefit of no more than 6 percent of local households (Chapters 5 and 6).

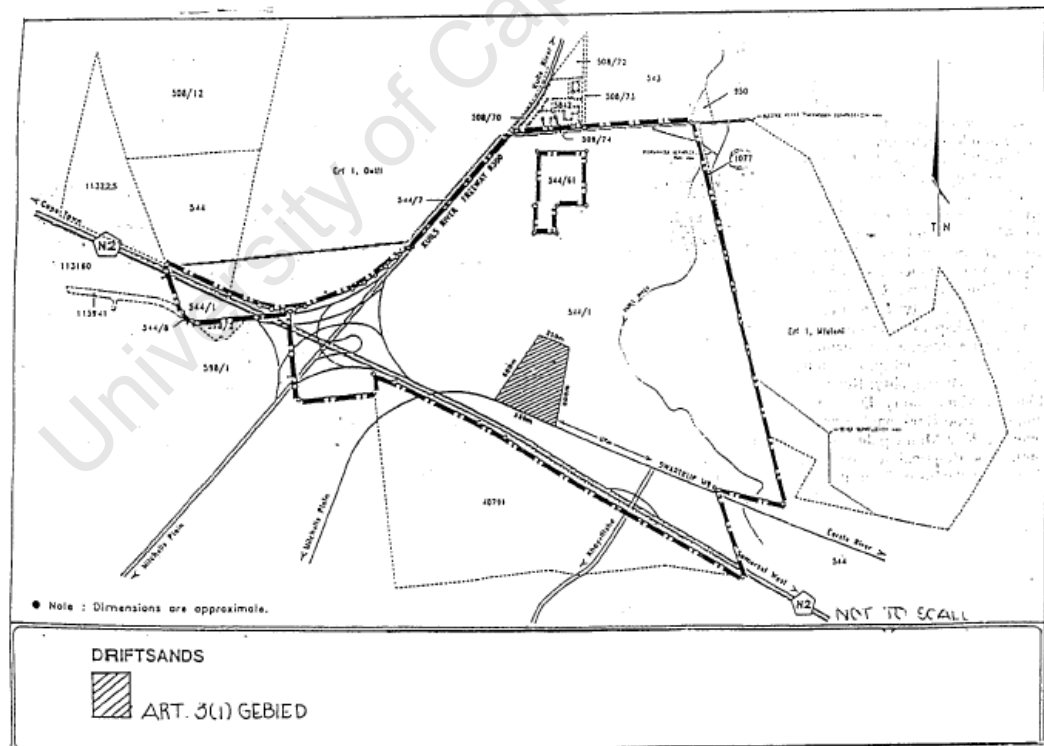
Moreover, in 1992 the Western Cape Regional Services Council (RSC) looked at Driftsands as a "mixed use Nature Area" in support of Neethling's argument. The RSC modified the CMC proposal for providing four ecotourism opportunities. On 8 July 1992, the RSC supported the Driftsands and Environ Technical Report (Adams 1992b) which dropped the proposal to allocate part of Driftsands for industrial purposes and the other part for a hospital in favour of a "mixed use nature area". This mixed-used nature area included flood control, river management, a source for woodlots and herbal medicine as well as cultural initiation practices. It also suggested building a detention dam for recreational and flood control purposes in certain less environmentally sensitive sections of Driftsands. Moreover, it called for establishing an Educational Centre at Driftsands in order to promote the DNR as an environmental classroom for schools in the surrounding areas (MLH 1992).

On July 1992, the RSC was called by the CPA to play a conservational role in Driftsands. The legality of the call was based on the 1967 Physical Planning Act, section 6A(12). The Act states that the RSC is the responsible agency "to ensure that any changes in [the] land use in [such as Driftsands] is consistent with the guidelines of the Guide Plan, of the Cape Metropolitan Area" (Heunis 1989). After 1983 the Council responded to two calls from the CPA. The first position opposed the Guide Plan for zoning of a large portion of Driftsands Nature Reserve for urban development (Van Wyk 1989). This implied that the CPA called the Council to allocate Driftsands for residential and industrial zoning.

In 1993, the CPA deproclaimed part of Driftsands (Sikhumbule) for housing (Low 1993b). This deproclamation was 'corrected' in 1995 to indicate that the deproclamation

was based on the Less Formal Township Establishment Act 113 of 1991 (Province of the Western Cape 1995). Figure (4.4) shows the Provincial plan to excise part of Driftsands for housing. According to Chittenden Nicks de Villiers, the CPA formalised Sikhumbule in 1993 by using some of the R20 million provincial loan funds set aside in 1990. This deproclamation generated a wave of opposition. In a statement, the Serviced Land Project said the proposed deproclamation followed months of negotiation with a range of relevant stakeholders. “It recognised the urgent need for a negotiated structural plan for Driftsands because of increasing pressure on the land and the risk of large-scale occupation. Experience has shown that the proclamation of an area as a nature reserve is generally ineffective in preventing land occupations in the context of severe land shortages” (Yeld 1993).

Figure 4.4. Designation for an informal settlement area: Driftsands (Province of the Western Cape 1991)



In 1993 members of DTG were worried about losing the whole area to housing. “In its objection, the task group said there was no guarantee about the areas’ [sic] fate after deproclamation” (Yeld 1993). The DTG argued for “a settlement with built-in guarantees

that the whole area will not be lost to development after deproclamation has been negotiated” (Yeld 1993). It described the action of housing “squatters” at the site as an act of “colonisation”, which led to “alienat(ing) the Reserve” (Low 1993a). The implication of this argument was that the informal residents were the colonialists of the land and DTG was the defender. Those “colonialists” invaded the reserve by squatting there and also by “cutting wood” (Driftsands Task Group 1993). In both cases, Driftsands dwellers were represented as endangering and colonising the reserve.

4.7. Conclusion

This chapter suggests that Driftsands was proclaimed a provincial nature reserve to protect natural resources and to achieve spatial planning in the area in line with the racist political agendas of the time. The area was proclaimed a provincial nature reserve in the same year in which Khayelitsha was identified and established as an African residential area in 1983 for political reasons. Proclaiming Driftsands a provincial nature reserve contributed towards the impoverishment of the surrounding townships, which was a goal for the white government during the apartheid era. Fencing Driftsands led to the segregation of Driftsands’ surrounding townships. Furthermore, the DNR is a buffer zone, an island in the midst of the surrounding non-white townships. Both the development and the conservation discourse of Driftsands were based on a racist ideology. It was strategic for the CPA to proclaim DNR instead of identifying Driftsands for low-income housing in order to render the site’s neighbouring townships inferior through overcrowding them. Proclaiming DNR meant limiting the housing for about 900 000 Africans in Khayelitsha (Development Bank of South Africa 2005).

This chapter also confirms that the discourse of DNR evolved over time. For instance, DNR’s discourses processed four important turns between 1983 and 1993. The first turn occurred between 1983 and 1988, when the DNR conservation agenda challenged the developmental agenda that sought to deproclaim part of the site for low-income housing. After 1988, the Driftsands conservation agenda shifted its focus towards seizing the site’s recreation, environmental education and aesthetic opportunities to benefit the surrounding communities of the Greater Cape Town. The second shift occurred in 1989 when the CPA deproclaimed a quarter of Driftsands for industrial purposes, as part of a

quid pro quo of rezoning industrial land east of Philippi to house people of Crossroads. This proclamation was challenged by the conservation agenda, which pursued a sub-agendum of conservation of indigenous (fynbos) flora and fauna, while highlighting the risk of potential pollution of the river from proposed industrial activity. Furthermore, the conservation group established Driftsands Task Group in 1989 to strengthen their conservation arguments. The third shift took place in October 1989, when the Administration of the Cape of Good Hope reconsidered Driftsands for development and conservation. In response, the conservation group called for accommodating recreational and tourist-related activities. The conservation agenda is partly based on a scientific survey of local communities preferences for eight proposed land uses to support nature conservation against development. Moreover, the Western Cape Department of Environmental Affairs proposed incorporating Driftsands into the provincial urban scheme as natural open space and not as a nature reserve. The fourth shift happened between 1990 and 1993 when the Provincial Administrator, Mr Kobus Meiring, excised part of the site to house the supporters of Johnson Ngxobongwana. In response, the conservation group stated that a) both Cape Nature and the Driftsands Task Group were keen to have the squatters evicted; b) there was no point in proceeding with negotiations with the squatters because these negotiations had reached a stalemate; c) there was no reason not to use persuasion to evict the squatters; (d) the Cape Town Metropolitan Council (CMC) put forward a multi-usage proposal for Driftsands to provide educational, recreational, agricultural, economic, and ecotourism opportunities in the natural environment; and e) the Western Cape Regional Services Council looked at the site as a mixed-use nature area.

This chapter concludes that exclusions of local communities from protected areas was normalised in the process of constructing nature at DNR. The principle of exclusion was a common feature of the Driftsands nature conservation discourses between 1983 and 1993. The first exclusionary measure was the building of a wire fence around DNR in 1983. The second such measure was initiated by the CPA in 1993 and constructed in 1994, after the establishment of Sikhumbule: the CPA allocated land on the south tip of the reserve, and then built a fence between the reserve and Sikhumbule. The third exclusionist measure followed the establishment of Green Park and Los Angeles informal settlements on the site, when the CPA fenced these two communities. Conceptually, the pursuit of exclusionism meant impoverishing the on-site communities

in order to encourage their voluntary departure from protected areas, through dispossessing them to a status of temporary dwellers without hope or home.

University of Cape Town

Chapter 5: Driftsands in Post-apartheid South Africa: 1994-2006

The aim of this chapter is to deconstruct the DNR discourse in post-apartheid South Africa and to highlight its differences from that of the final decade of apartheid rule. In post-apartheid South Africa, Driftsands appeared among the informal settlements identified by former President Nelson Mandela as areas that required immediate reconstruction and development. As well as Driftsands, settlements included Gugulethu, Langa, Nyanga, Philippi East, Brown's Farm, South Delft, KTC, Crossroads, Weltevreden Valley, and Millers Camp in the Western Cape (*Cape Argus*, 26 March 2002). The findings of this chapter confirm the importance of Mandela's statement to demand the immediate reconstruction and development of Driftsands.

Both Driftsands informal and formal settlements had been deliberately marginalised by DNR's political, conservational and developmental groups. As we have seen in Chapter 4, Driftsands communities had been expelled from Crossroads due to their association with and support for Johnson Ngxobongwana, the appointed black former mayor of Crossroads by the white government of the time. They were subsequently stereotyped and metaphorically isolated by the surrounding communities. In addition, they had been physically isolated by the site fence and encouraged to settle on areas below the 1:50 year flood line defined by the proponents of the Driftsands conservation discourse.

It is suggested in this chapter that the official discourse on constructing nature in DNR in post-apartheid South Africa differs from that of the previous years in both approach and context. For example, instead of directly dismissing the site's potential to house more "squatters", officials debated the issue of providing low-income housing and accommodating the Philippi industrial area on a quarter of the site. On one hand, the site developmental group (the CPA and Tygerberg municipality) and Driftsands on-site residents and some of the surrounding communities called for providing low-income housing at Driftsands. On the other hand, the conservation group (the CMC, the Western Cape Nature Conservation Board, the Botany Department of the University of the Western Cape and Delft Medical Research Centre) opposed providing low-income housing at the site.

In post-apartheid South Africa, the proponents of the Driftsands housing discourse emphasised formalising the existing two housing schemes (Green Park and Driftsands); recognising legal protection that local communities enjoy as a result of their period of on-site residency; formalising these housing schemes within a consolidated area, preferably by increasing resident densities in Sikhumbule; and acknowledging the need to provide these housing schemes with public services.

Meanwhile, the proponents of the Driftsands conservation group stood against housing 'squatters' at the site by aiming for up-scaling Driftsands conservation activity boundaries and by downscaling the activity boundaries of the on-site communities. This DNR conservation group approached this goal in the following ways: introduce the concept of community participations (CapeNature 2004); provide ecotourism opportunities (section 5.2) to achieve local economic development (the Cape Flats), with its package of menial benefits; restrict residents' movement to geographically stressed areas; obtain their exclusion from the site's nature environment and from the on-site environmental education opportunities; and entrench their entitlement to limited public service.

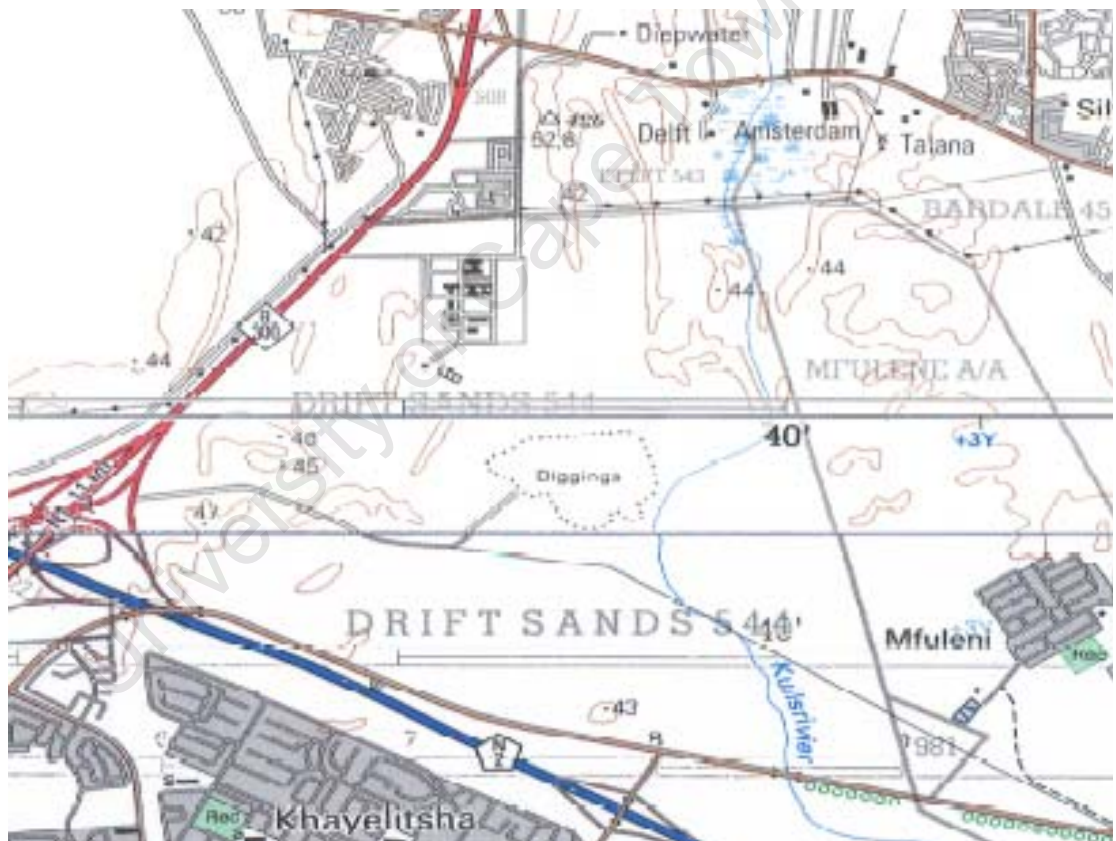
Consequently, Driftsands on-site communities were isolated socially, geographically and politically. Politically, they were neglected – illustrated by their being entitled to limited public services. Socially they were stereotyped as Ngxobongwana's associates. Geographically their shacks flood every rainy day: they live below the flood line. During the period of 24 years (1990-2004), the framers and members of the three discourses (political: government; social: Crossroads and Kayelitsha; and conservational agencies) invested and contributed to, or at least participated in, normalising or naturalising neglect, stereotyping, natural emergency, and isolation. In such an environment, it does not take a long time to recognise the high level of unemployment, sickness, crime against the self and the others, depression and hopelessness. They look at the time when things become better; they believe that they are not in a good place, they are on the move, not protected, and every domestic need is a mission.

5.1. Competing discourses

5.1.1. Low-income housing

This section examines the DNR's housing discourse in post-apartheid South Africa. The emphasis is on the significant increase of informal townships at the site and the strong calls for formalising the existing two informal townships (Los Angeles and Green Park) and to deal with the impact of these townships on DNR as a conservation area (see Figure 5.1.).

Figure 5.1. DNR in 1994



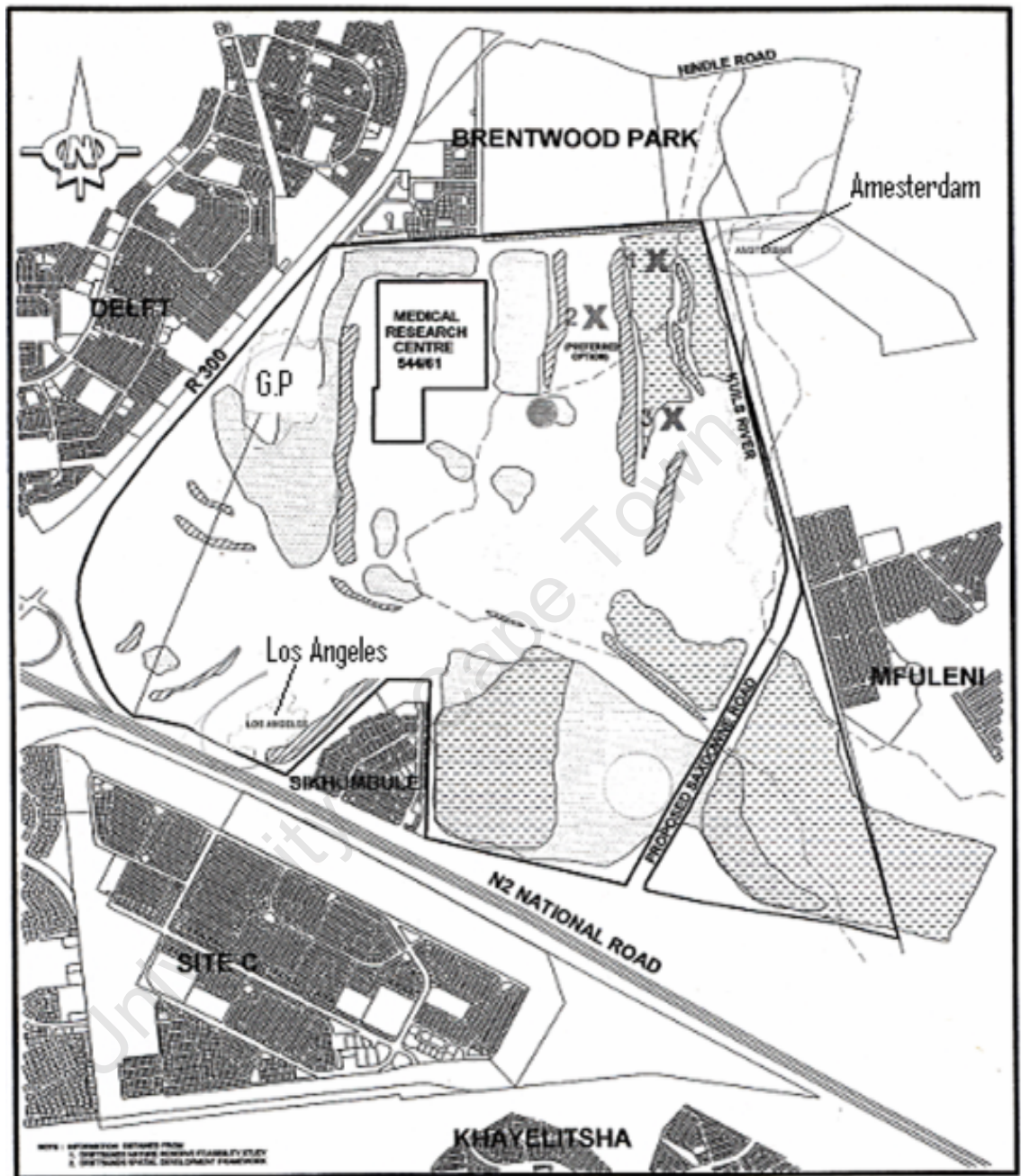
Source: Chief Directorate of Surveys and Mapping, RSA

In post-apartheid South Africa, it is claimed that four new informal townships have been established at the site. Currently, only two out of the four townships have maintained their residential status (Green Park and Los Angeles). Residents of the other two townships (Amsterdam and Unathi Bush: appears in most of the attached figures but

hardly appear in official documents) have been amalgamated with the on-site and the surrounding housing schemes (Official from DNR, *Email*, 16 October 2006). Figure 5.2 shows Green Park (G.P.) adjacent to R300, Amsterdam outside DNR juridical boundaries of 2000 and Los Angeles in the south part of DNR. There is no record of the location of Unathi Bush.

Green Park was the first informal township to be established at Driftsands after Sikhumbule. It was established “immediately after the national election, on 14 August 1994,” (Interview, Situlo, 14 June 2006). Green Park occupies 30 hectares of the 658-hectare nature reserve (City of Cape Town, 2006) and is adjacent to the R300 at the west side of the reserve. In 1994, Green Park had 350 households (Setplan, 1998; CNdV and CMC 2000) and the number increased to 480 in 2006 (Interview, Mtati, 14 July 2006). Green Park houses people who were expelled from Crossroads with MNP Johnson Ngxobongwana in 1990 to settle in Sikhumbule and moved to Green Park in 1994. The motive behind establishing Green Park appears to have been political. The residents of these informal settlements were reported to be the “original followers of Mr Ngxobongwana” (CNdV and CMC 1999a: 2). Originally the community settled in “Sikhumbule but later the community left the area to Green Park for political reasons” (CNdV and CMC 1999a: 6). Green Park was established when Ngxobongwana was expelled from Sikhumbule in 1994. He took with him a large number of his followers and invaded land in present-day Green Park. Despite being neighbours and sharing a bitter history of state oppression, Sikhumbule and Green Park do not enjoy a progressive relationship. The fact that Green Park is a National Party stronghold has not endeared the residents to the ANC-dominant Sikhumbule (CNdV and CMC 2000).

Figure 5.2. Driftsands' proposed land use plan (Enviro Dinamik 2001)



The second established informal township at the site is called Los Angeles by some of DNR stakeholders; others call it Driftsands. No matter what its name is, the township is located to the north backyard of Sikhumbule and houses people with close ties to Sikhumbule as well. They are either members of a family that cannot be accommodated in the family home or people who want to live near people they are familiar with (CNDV

and CMC 2000). Therefore, Los Angeles comprises people who were also forced to move from Crossroads in 1990 to settle in Sikhumbule for eight years. In 1998 they moved out to establish the Los Angeles informal settlement (Interview, Situlo, 14 June 2004). At the time, it was estimated that 150 households resided within Driftsands (Setplan, 1998). By 2006, Los Angeles had about 350 households (Interview, Mtati, 10 April 2006). Currently, the Los Angeles settlement occupies 25 hectares of the 658 hectare nature reserve (City of Cape Town 2006) and it is located on a disaster-prone area, west of the Medical Research Centre (MLA et al 2005).

Amsterdam was the third informal township to be established at the site after Sikhumbule and to be amalgamated completely with the surrounding communities in 2004. Amsterdam is located in the north east sector of Driftsands. Its “residents have links to Mfuleni although at the present they have chosen to live in a fairly isolated location” (CNdV and CMC 2000: 6). Essentially, the development of “1200 housing units in Mfuleni is intended [by CMC] to eventually incorporate Amsterdam. [However,] the community of Amsterdam prefers an autonomous development in the area” (CNdV and CMC 1999a: 18). In 1997, the Mfuleni Town Council was willing “to accommodate the surrounding informal settlements of Amsterdam ” (CNdV and CMC 1997). Since 2004, there is no record that indicates the existence of Amsterdam at the site. On 14 June 2004, I visited Amsterdam with Aisha Solomon, community traditional conservation manager at Cape Nature Conservation, who confirmed that there was a community called Amsterdam located between Mfuleni and the Kuils River, but its residents amalgamated with the surrounding communities (Interview, Solomon, 16 October 2006).

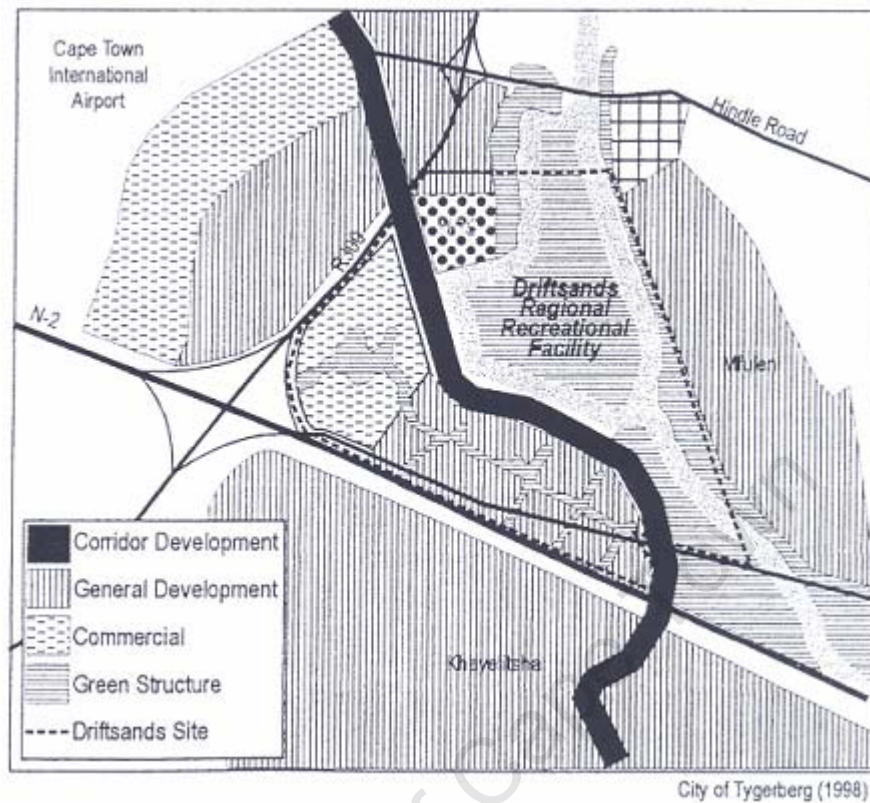
Finally, Unathi Bush was the last informal township to be established at the site after Sikhumbule and also to be amalgamated completely with the surrounding communities. Unathi Bush comprises people who came from Crossroads. They “had been forcefully removed from Crossroads where their houses had been burnt and they had to run for their lives”. They also had no other option but to remain in Driftsands where at least they felt safe (Low 1991b). Unathi Bush is only mentioned in Barrie Low’s document in which it is reported to have organised an offer of a “subsidy of R7500 for each family from Unathi Bush to move to Philippi (Low 1991b). I could not find any other document that indicates the size, location or the population of Unathi Bush.

Meanwhile, the City of Tygerberg appears to play a key role in the debate around providing low-income housing at Driftsands. After the formation of the new local government structures in 1997, Driftsands fell within the jurisdiction of the City of Tygerberg. The City of Tygerberg was one of the first to develop the Tygerberg Driftsands draft Spatial Development Framework.

The City of Tygerberg used its jurisdictional clout to propose four development activities to be carried out at Driftsands (see Figure 5.3), including housing residents of Green Park and Driftsands: 1) A Metropolitan activity corridor traversing the site (Khayelitsha-Bellville link). 2) An urban development (including housing) in the southern portion of the site. 3) A high order commercial development in the south-western portion of the site. 4) The development of regional recreational facilities in the north and the eastern portion of the site including a conservation area, active and passive recreation areas and extensive water body (Setplan 1998). Housing the three local communities were to be considered as a short term plan (Setplan 1998).

During the process of compiling DSDF, the City of Tygerberg asked for and later incorporated local and sub-regional perspectives on its four proposed activities to be carried out at the site. The output of this process is summarised in the conclusion of DSDF as: to provide an open space at the site and to formalise the existing two informal townships. Based on those local and sub-regional perspectives, the City of Tygerberg concludes that “environmentally Driftsands is of metropolitan and local significance” (Setplan 1998: 65). Within the context of the metropolitan spatial environment, “Driftsands offers significant opportunities for ‘open space’ related activities including active and passive recreation, environmental education, urban agriculture, cultural events and propagation of indigenous and traditional plants. This potential emanates from the site’s attribute, its central locality, its approximately 1.5 million people and the absence of inland recreation and environmental education facilities within the Metro South East (MSE)” (Setplan 1998: 59).

Figure 5.3. DNR proposed developmental corridor (City of Tygerberg 1998)



Subsequently, the City of Tygerberg concluded that Driftsands remains unsuitable as a major housing opportunity but that formalising the existing communities was a project worth investing in (Setplan 1998). The City of Tygerberg recognises 1) the absence of housing alternatives; 2) the legal protection that local communities enjoy as a result of their period of on-site residency; and 3) prior housing undertakings made to local residents by the statutory authorities. It concludes that “existing communities need to be formally accommodated within Driftsands” (Setplan 1998: 70).

Although the City of Tygerberg thus appears to be eager to provide low-income housing, its actual long-term plan is to distance townships from white areas and to “formalise both Green Park and Driftsands (Los Angeles) communities, within a consolidated [and contained] residential area on ... 10% of the reserve” (Setplan 1998: 75). Inhabitants of those consolidated and contained low-income houses would enjoy actual access to only 15% of DNR; the rest of the land would be fenced. The DSDF’s report suggests “allocating the west corner of the reserve (about 10%, Figure 5.3) for low-income

housing” and fencing the reserve (the open space) along the proposed low-income residential area from Driftsands’ share “of the Kuils River biological corridor and the Cape Metropolitan Open Space System (CMOSS)” (Setplan 1998). It calls for fencing the humans (occupying 10% of the area) from the a shallow river and a protected area which constitute 90% of the area. Thus, in its 1998 DSDF the City of Tygerberg also aims at excluding the low-income inhabitants from the ‘natural environment’ of Driftsands.

Furthermore, the City of Tygerberg report gives the impression that it is not only concerned with the ecology of area but also takes social issues seriously. In the short term, its strategy is to secure and improve the reserve while also addressing the need of the on-site communities. It considers “amendment of Sikhumbule and drawing up a housing social compact with the community of Green Park” (Setplan 1998: 80). It calls for conserving the 85% and combining both Sikhumbule and Green Park residents. But residents of Green Park had been expelled from, or they voluntarily left, Sikhumbule in 1994.

The City of Tygerberg’s proposal to house, fence and distance black people from white residential areas seems to correspond with the approach of the authors of the municipality policies. The proponents of the City of Tygerberg proposal appear to be white or motivated by white perspectives. After the election of a democratic government in South Africa, the Cape Metropolitan Council (CMC) undertook the process of demarcating its regions, including the City of Tygerberg. The central assumption underlying the process of demarcation was the recognition of black and coloured township residents as urban citizens. Local governments were to provide these citizens with efficient and effective basic services such as water, electricity, basic sanitation and refuse collection. Implicit in the debate between the CMC, the City of Tygerberg, local authorities and administrations was the “understanding that all areas of the city had the right to a minimum level of key basic services, necessary to sustain urban living” (Visser 2003: 102). Consequently, the City of Tygerberg became responsible for accommodating residents and for providing basic public services for the emerging townships.

Thereafter, the City of Tygerberg chose to provide low-income housing in DNR: a distance away from white areas. The white public of the City of Tygerberg interpreted

the CMC's demarcation proposal in a far more fragmented and disconnected manner. For them, the black townships were distant, unfamiliar places with no 'connection' to 'their' (White) urban world" (Visser 2003: 103), filled with rural people who had been allowed to move into the city. There were squatters and the fear was that Tygerberg might become one big squatter area.

In response to the City of Tygerberg's DSDF, the Department of Housing and Planning restated its position based on the Cape Metropolitan Area Structure of 1988, which earmarked the Driftsands area (excluding the river corridor) for urban development. The directorate attached paragraph 4.4.2 of the 1988 Cape Metropolitan Area Structure to support its proposal to use Driftsands for housing. It states: "[W]ith regard to the reservation of nature areas, it is important that when their size and quality are being determined, the need for land for urbanisation should also be considered. A sound balance between these land uses must therefore be found. It is primarily against this background that consideration will have to be given to the future utilisation of the existing Driftsands Nature Reserve for urban development instead of nature conservation. The area concerned is therefore indicated on the Guide Plan figure as an area which may be urbanised in the future" (Directorate of Planning of Services: Housing and Planning, 1998).

In addition, the regional director of the Department of the Water Affairs and Forestry supported the City of Tygerberg's proposal to manage Driftsands as a multi-purpose open space forming part of the Kuils River environmental corridor and MOSS. Four points were emphasised, however, including a proposal that the existing residential communities be accommodated on site and adequate services installed for them. However, using the area for large-scale housing development was not considered desirable (Department of Water Affairs and Forestry 1998) and DNR's housing component should therefore be considered only for the existing communities, with the aim of providing them with public services.

Furthermore, the Cape Nature Conservation supported in principle the finding of the City of Tygerberg report that the DNR was still of metropolitan and local environmental significance. The CNC supported the conclusion of the report that Driftsands was considered unsuitable as a major metropolitan housing opportunity. The CNC agreed

also that the existing communities had to be formally accommodated. But it was inappropriate from an environmental point of view to allocate land north of Sikhumbule for housing, as it would inevitably lead to additional infill. To avoid such a scenario, the CNC suggested increasing the residential densities in Sikhumbule rather than expanding and separating residential areas over the site (Cape Nature Conservation 1998). Ten months later, in April 1999, the Cape Metropolitan Council (CMC) began discussions with the City of Tygerberg to address three related issues: a) to provide low-income housing only in the west portion of the reserve; b) to conserve the rest; and c) to affirm exclusivity for the on-site communities. The result of those discussions was released in the CNdV and CMC (November 1999) report, which “evaluated the feasibility of a multi-purpose environmental and recreational nature reserve at Driftsands and [assessed] the desirability of using approximately 100 hectares of the western portion of Driftsands outside of the 1:50 year flood line for urban development purposes: low-income housing with supporting facilities” (CNdV and CMC 1999a: 1).

In response to the CMC proposal, the City of Tygerberg’s executive committee passed a resolution in April 1999 “to pursue [an exclusive] urban Development in Driftsands particularly for low-income housing purposes” (CNdV and CMC 1999a: 3). The City of Tygerberg sought to achieve exclusion by modifying CMC’s proposal of 1999 (to use approximately 100 hectares of the western portion of Driftsands outside of the 1:50 year flood line for low-income housing with supporting infrastructure, and to conserve the rest of the site), to use “91 hectares on the west portion of Driftsands to accommodate 5 000 units at an average density of 60 dwelling units per hectare” (CNdV and CMC 2000: 9). In total, Tygerberg aimed to build 45 000 housing units within its jurisdictional boundaries at DNR (Setplan 1998; CNdV and CMC 2000).

Both documents propose that human settlements be fenced from the nature reserve in what is called by the CMC the ‘Hard Edge’ that separates the low-income residential area from the rest of the reserve (CNdV and CMC 1999a). Such a proposal generated tension between the City of Tygerberg and the CMC: the City of Tygerberg was calling for distancing black townships, even though land for housing was expensive in that area; while the CMC had the responsibility of accommodating more black people at the least cost.

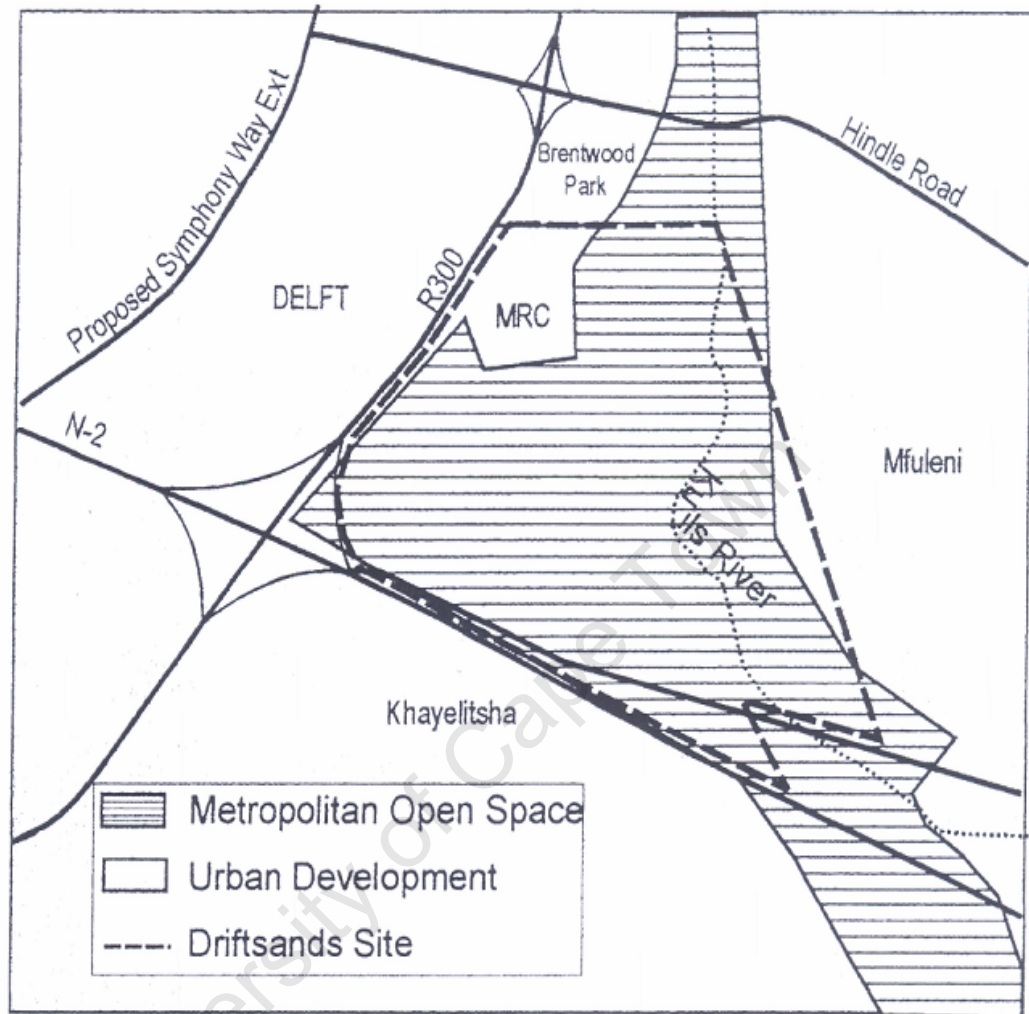
In its document the CMC argues that providing low-income housing at Driftsands is unviable for the following reasons. First, housing at DNR is “illegal” and exists because the surrounding urban settlements such as Mfuleni, Sikhumbule, Brentwood Park, Delft and Site C, had “poached” on Driftsands (CNdV and CMC 2000: 3). Second, it argued that the masses will always need housing that can only be provided at the expense of urban nature reserves in the province (CNdV and CMC 2000). Therefore it is not necessary to use Driftsands’ entire land to address the ongoing, unstable demand for housing in the Western Cape. Third, housing at DNR will be financially problematic because “almost 50% of Driftsands dwellers look at housing subsidies [but] cannot afford the monthly repayments and other obligations that participating in such a scheme incurs” (CNdV and CMC 2000: 9). The dwellers are unlikely to afford their monthly payments and the government will have to pay for them. Fourth, DNR housing is not financially strategic, because there are sufficient funds to construct only 47% of the required units to fulfil the need for housing. Therefore, it will be more effective to use the money to build housing in a less problematic geographical location. Fifth, housing in DNR is expensive for residents, because the site is “an isolated area, cut off from major transport routes by the surrounding freeway system and the river corridor” (CNdV and CMC 2000: 9) and transport to essential public facilities, work, and shopping is more expensive and difficult than from other communities such as Philippi. Finally, it is dangerous to erect housing at DNR, because “[r]esidents will expose themselves to death while attempting to cross the surrounding freeway systems on foot” (CNdV and CMC 2000: 10). West Bank is cited as an example where the R300 freeway abutting the settlement is fast becoming one of the Cape Metropolitan Area’s major black spots due to the number of pedestrian deaths as a result of people, especially children, trying to cross to the Delft area (CNdV and CMC 2000).

5.1.2. Socialising nature (physical integrator)

As I explained in Chapter 3, nature, particularly nature conservation, has been socialised in the colonial and apartheid periods by external, Western environmental views to benefit Western immigrants. In post-apartheid South Africa nature, particularly nature conservation, has been socialised mainly by external universalised environmental views while partially addressing local demands. Similarly, nature at DNR was “socialised”

during the apartheid period to function as an impoverishing, confrontational problem, fuelling the dysfunctionality of the non-white surrounding and on-site communities. However, in post-apartheid South Africa, the DNR discourse of local governments pays attention to the social contribution of nature according to the universalised ideas on environmental and local community relations. There is therefore the willingness to ameliorate the dysfunctionality of the DNR's surrounding communities by allocating part of DNR to community use. It is envisaged that using DNR for this purpose will help to create a physical integrator for the surrounding communities, though this plan has not yet come to fruition. DNR still today remains an island amidst the surrounding communities. In 2005, Marlene Laros & Associates of Sustainable Matters (MLA), a local consultancy employed by the Provincial Administration, attempted to socialise nature at Driftsands by addressing social issue and conservation issues simulataneously. The focus was to address the negative effect of the apartheid creation of dysfunctionality of the surrounding communities through constructing a green open space at DNR, and to conserve the site and its habitats that were endangered and disappearing owing to the destructive existence of local communities on the site. The MLA proposal for Driftsands consists of two chapters: the dysfunctionality of DNR's surrounding communities; and the endangered and disappearing habitats, vegetation and ecosystem of the metropolitan area. The first chapter consists of the MLA proposal to address the dysfunctionality of the communities through constructing a Metropolitan green open space at the site (see Figure 5.4). Thereafter, Driftsands could "potentially play a social role as a physical integrator, at the sub-metropolitan scale, albeit in a limited way". The MLA acknowledges that the "site will never meaningfully play a role at a physical level due to the barriers on its edges but with minor [changes] and managed positively, green open spaces such as Driftsands have the potential to bind communities and individuals" (MLA 2005: 51). For the MLA, the site is dysfunctional because of the "barriers on its edges". Those barriers are physical barriers: they are the national road (N2) and the regional highway (R300), which triangulate and isolate the site and act as a barrier for the surrounding communities. Therefore, in its existing physical form, Driftsands represents a dysfunctional space for the surrounding communities.

Figure 5.4. DNR as a physical integrator (Cape Metropolitan Council 1996)



Cape Metropolitan Council (1996)

Once a “green open space” is constructed at Driftsands, the surrounding communities will have access to a “physical integrator”. This “physical integrator” will provide the surrounding communities with “visual relief” from the outside and “visual access to other green systems” from the inside (MLA 2005: 51). Furthermore, through the greening of the site, the impoverishment of the people will be relieved because “the site will generate the potential of productive landscape (small scale urban agriculture and livestock keeping), tourism development etc., film shoots and many other things”(MLA 2005: 51). In this way, the MLA is attempting to address a physical problem with a luxurious solution!

At the time, the dysfunctionality of Driftsands was about the “barriers on its edges”: the N2 and the R300; a condition which leads to Driftsands residents incurring considerable

transport costs (CNdV and CMC 1999a). Furthermore, Driftsands forms an “island for the surrounding communities”. This indicates that residents would also incur considerable transport costs to connect with the rest of Driftsands’ surrounding communities. So, in fact, the dysfunctionality of Driftsands has more to do with incurring considerable daily transport costs for both the on-site and the surrounding communities. The problem consists in daily barriers – considerable transport costs, caused by the barrier of Driftsands – while the solution consists in providing “visual relief” for outside communities and “visual access to other green systems” for the site visitors and the on-site communities during their leisure hours.

The question of the visual connectivity of Driftsands communities appears also in the discourse of the Cape Peninsula National Parks (CPNP). During a meeting between the CNdV representative, S Nicks, and a representative of the CPNP, R Selikowitz, it was stated that “the advanced state of the Driftsands Proposal should be considered a great advantage and will assist to create a linkage between the mountains and a network of developed urban green space on the Cape Flats” (CNdV and CMC 1999b). The idea of connecting DNR with Table Mountain through an urban green space is in line with “bioregional planning”, a term used by nature conservationists (see Smith & Wolfson 2004; Brunckhorst 2002). Bioregional planning is meant to reconnect ecological systems beyond man-made political boundaries (Tonn et al 2006). It is based on employing a “holistic view of the environment as far as current and proposed land-use practices are concerned, [is] justifiably gaining ground worldwide including South Africa” (Smith and Wolfson 2004). Therefore, bioregional planning represents a departure from traditional governmental approaches of planning with their jurisdictions in mind.

Similarly, the CMC argued that the idea of constructing a regional green open space emerged from “various workshops that have been held regarding future policy for the Park, [where] the sentiment that there should be strong linkages between environmental experiences that are accessible to most people of the Cape Town living on the Cape Flats and the mountain was expressed strongly” (CNdV and CMC 1999b). This argument supports the idea of a network of parks located relatively close to where the majority of the people live, within a strong linkage managed by the CPNP. In short, it is important for the CPNP to create an urban green open space out of DNR, in the Cape Flats, to root the idea of conservation in the mind of the people of the Cape Flats by linking

conservation at DNR and Table Mountain. Thus, the connection does not centre on the dysfunctionality of the Cape Flats people caused by DNR; it centres on an external agency pursuing a luxurious nature conservation idea for an impoverished region such as the Cape Flats. The Cape Flats is inhabited by the vast bulk of low income to middle income Coloured and African residents of Cape town (Visser 2003).

The question of the negative effects on the communities surrounding DNR caused by fencing the site also appears in the discourse of the City of Tygerberg. In 1999, the City of Tygerberg identified the need to connect the northern urban areas of the City of Tygerberg (the majority of the residents of this area are coloured and black) and Khayelitsha in the south through a proposed “activity corridor which crossed through Driftsands Nature Reserve between Delft and Site C” (CNdV and CMC 1999a: 2). The Tygerberg Spatial Development Framework for Driftsands (DSDF) “proposes linking Khayelitsha in the south with Bellville in the north by means of an activity corridor (Setplan 1988).

The DSDF aims hopes to integrate Tygerberg at both the physical and socio-economic levels” (Setplan 1998: 36) through a development corridor (Setplan 1988). The plan was subsequently evaluated and compared to the proposal in the MSDF. The MSDF proposed to extend the development corridor into Philippi (CNdV and CMC 1999a). The result of an economic analysis conducted by CMC and the City of Tygerberg shows that the proposal for a corridor of this nature through Driftsands “would be unviable and the idea was subsequently dropped” (CNdV and CMC 1999a: 2).

The second chapter of MLA’s proposal discusses conserving the site’s endangered and disappearing habitats and vegetations by constructing a “green open space” at Driftsands. The site is an ecosystem with a variety of habitats and vegetation types, and thus plays an extremely important role in biodiversity conservation. It also provides a natural open space within the city. Because the predominant vegetation type, the Cape Flats Dune Strandveld, is listed as endangered at the national level, and occurs almost exclusively within the metropolitan area, the site is considered to have an internationally and nationally significant role in bio-diversity conservation (MLA 2005).

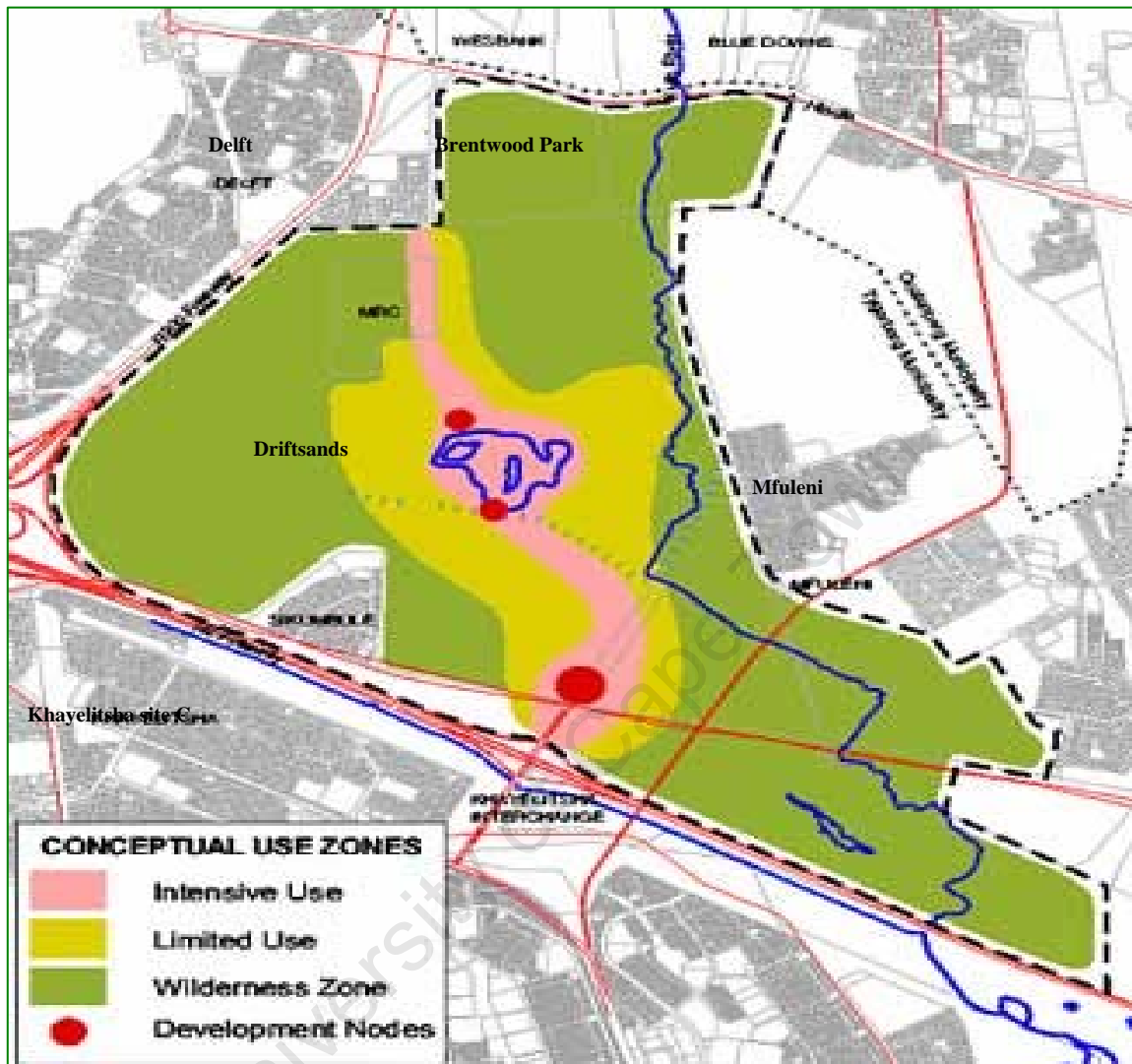
While the City of Tygerberg regards the conservation of Driftsands's biodiversity on a metropolitan scale, the MLA, as representative of the Provincial Administration, looks at it from a national and international viewpoint. In addition, the MLA views Driftsands' open spaces as having the potential to form a visual corridor, while the City of Tygerberg regards it as part of the Kuils River biological corridor, which heads towards False Bay, not Table Mountain.

The MLA also argues that the loss of further tracts of Cape Flats Dune Strandveld will reduce the City's capacity to conserve a representative portion of endangered vegetation types. At the regional level, the vegetation type is known as the Cape Flats Fynbos/Ticket Mosaic Board Habitat Unit (TMBHU). The historical extent of this TMBHU falls entirely within the CCT boundary and originally covered an area of 6 729.86 ha, of which the C.A.P.E project estimates only 7 384 ha remains. The target listed in the C.A.P.E report is 100% of the extant area. The Biodiversity Network currently covers only 4 749ha of TMBHU (substantially less than the target set by C.A.P.E) (MLA 2005).

5.2. Commodifying nature (Ecotourism)

The CMC's proposal for DNR was guided by the following vision: "To provide educational, recreational, agricultural and ecotourism opportunities in the natural environment, in order to serve the needs of the approximately one million residents living in the surrounding urban area, while protecting the existing natural resources" (CNdV and CMC 2000: 3). Figure 5.5 shows the CMC's proposal for land use.

Figure 5.5. CMC's proposed land use in Driftsands (CNdV and CMC 2000)



The aim of this section is to analyse the Cape Metropolitan Council (CMC)'s proposal (made in the year 2000) to provide four ecotourism opportunities at DNR to benefit the 'surrounding communities' while conserving the site's natural environment. Although the CMC's land uses proposal appears to aim at advancing the social discourse of the surrounding communities while conserving the natural environment, my analysis shows that the order of the CMC's proposal is in fact reversed: the CMC aimed to conserve the site's nature environment through employing the surrounding communities.

It is quite vivid that the idea of proposing ecotourism activities at DNR is extracted from global environmental views. For instance, Kepe (2001) has argued that touring areas of

natural beauty has recently been seen as one of the fastest growing tourism activities in many countries around the world. That tourism is central to concepts such as 'ecotourism', 'green tourism', 'responsible tourism' and so fourth". Ecotourism is not a local invention but has an international root. It was promoted by international development agencies and NGOs in the 1960s and 1970s. Subsequently, it has now been adopted as one of several key economic growth strategies by many-industrialized countries (Kepe 2001).

It seems to be a universalised common knowledge that it is strategic to construct ecotourism activities not only to sustain financing protected areas but also to bring in foreign currencies that contribute to stabilising national economies and currencies. Kepe (2001), for instance argues that ecotourism in relatively poor countries is seen as a way to attract tourists from wealthier countries and to boost foreign exchange earnings. The main segment of international tourism, including travelling for wildlife and scenic attractions "comes from rich countries: Britain, Germany, the USA and the Netherlands" (Bresler 2007: 166).

Ecotourism is an international industry that reproduces nature and for its commodification (Schroeder 1999; Castree 2001). It is about industrialising nature in a socio-ecological friendly cliché, based on providing opportunities that necessitate community participation, co-benefiting and co-managing protected areas with local communities in a form that renders local communities simply passive beneficiaries (Schroeder 1999; Ramutsindela 2004).

Most analysts claim that the ecotourism undermines the dependence, sovereignty, and knowledge of local communities in areas allocated to ecotourism (see Chapter 6). It reflects, they allege, the practice of domination by a powerful governing group over a less powerful social group. A sense of symmetry seems to exist between the views of the global proponents of ecotourism and those of DNR on the role of local communities in the process of constructing nature: both aim to allocate menial jobs for local communities; call for educating the surrounding communities on nature conservation; emphasise community participation; and undermine the need of local communities for the land and its resources that has become a protected area. Following this view, I argue

that the CMC's proposal to provide ecotourism activities is an expression of global environmental views on ecotourism.

The CMC proposal for DNR is based on providing four ecotourism opportunities: "a cultural emporium, an upmarket tourist accommodation, an ecological corridor of a large variety of flora and fauna, and another ecological corridor to conserve the Driftsands share of Kuils River" (CNdV and CMC 2000: 4). My analysis suggests that this proposal is fallacious: it is appealing, but it is designed to generate scant benefits for the surrounding communities.

The CMC proposal for DNR is misleading on several grounds. First, the CMC claims that providing ecotourism opportunities at the site will benefit the craft peoples, musicians, artists, restaurant owners and domestic workers" (CNdV and CMC 2000) who live in the urban areas surrounding Driftsands. A closer look at the CMC proposal indicates that the large bulk of those promised benefits have the potential to leak into the pockets of Cape Town tour operators, hotel owners and travel agencies, not the impoverished local communities of the Cape Flats. Both the direct benefit and the perspective of local communities are mentioned in the breakdown of the CMC's vision to DNR, but the perspective of the tourist agencies on the location of DNR is the one that is mentioned in the proposal. The CMC argues that the tourist agencies perceive the location of Driftsands to be a strategic one: "close to the airport, the national road (N2) and Cape Town CBD" (CNdV and CMC 2000: 4).

Second, the CMC proposal bases its argument on a flawed assumption. The CMC proposes a cultural emporium that will "include aspects of Sotho, Xhosa and urban culture. These cultures are considered to be particularly underrepresented in Cape Town at present" (CNdV 2000: 4). The reader has to accept that the two racial groups "are underrepresented". We are not told by whom they are considered to be underrepresented. We are also not told anything about the reasoning behind such 'popular wisdom', nor the nature of their alleged underrepresentation: are they culturally, spiritually, socially, politically, artistically or economically underrepresented?

Conceptually, the CMC used the needs of X (in this case, the Xhosa and Sotho) to address the demands of Y (tourist demands for a cultural emporium and upmarket

accommodation). This argument is carefully worded to imply wise and careful thinking: not only will the emporium contribute to improving the representation of these groups, but it will also address the tourists' demand for a more easily accessible natural reserve. Tourism opportunities are thus promoted in the guise of benefiting local communities.

Moreover, one should not necessarily accept that the key operators of Cape Town's tourism industry have identified the need for a cultural emporium out of a desire to increase Sotho and Xhosa representation in the Cape, unless one assumes that the Cape tourist industry is socially conscious and aims to combat the under representation of racial groups generally. When one notes that the Khoi San people are also 'grossly underrepresented' in tourism awareness campaigns, this appears not to be the case.

Third, the CMC proposal is misleading because its intention is falsely stated: constructing a multi-purpose urban park at Driftsands is presented as a way to benefit the surrounding communities but in fact it is aimed at addressing the demand of the Cape Town tourism industry. In the CMC's proposal, the activity boundaries of Driftsands will be expanded to Cape Town International Airport, the V&A Waterfront and the Cape Town CBD, because a "location away from existing tourist nodes such as the Waterfront and the Cape Town CBD is considered appropriate and the Driftsands location close to the airport reinforces this proposal" (see Figure 1.2). Driftsands' activity boundaries will also be expanded to incorporate "a partnership of Cape Town tourism operators on the one hand and crafts peoples, musicians, artists, restaurant [owners], and others who have identified a need for a major cultural emporiums in the city" (CNdV and CMC 2000: 3, 4).

Fourth, the CMC's proposal to construct an environmental education centre is also misleading, since it intends to raise 19% of the running expenses from the school children of the surrounding communities. The CMC proposal reports that the environmental education centre will aim to provide an opportunity for at least one visit per year by approximately 200 000 to 250 000 school-going children living within a 5- to 10-kilometre radius. This part of the proposal is designed to meet the needs expressed by the region's teachers, the requirements in the 2005 curriculum and the dearth of environmental education facilities of any description in the Cape Metropolitan Area, in particular, facilities conveniently located for schools that lack the means to pay for

expensive bus trips, as I explained in the previous chapter. A survey was conducted among 17 of the 45 schools within a 5-km radius of Driftsands. This need expressed by the geography teachers seems to be taken from Ngeleza's (1990) study, which appears to be predetermined to advance nature conservation in Driftsands over the social needs. It surveys geography teachers of the surrounding schools on the possible construction of two environmental education centres at the site! The response is all but given — of course geography teachers will support convenient access to environmental educational facilities. Although geography teachers form only a minuscule proportion of the population, the CMC considers only their perspective and omits to canvass the rest, while implying that the views of all the surrounding communities have been sought.

The CMC therefore does not take into account the opinions of the on-site communities on the issue. It does not make sense to exclude the on-site communities from this questionnaire while expecting the rest of the surrounding population to favour two environmental education centres, particularly since the construction and expansion of the natural environment is likely to cause exclusion and restriction of their access to Driftsands. Furthermore, it is possible that the on-site communities will be dispossessed and relocated to an undefined location: yet there is no mention of their views.

Fifth, the CMC's proposal to provide recreational opportunities to benefit the surrounding communities is persuasive. These opportunities include "picnic sites in certain areas which will cater for walking, bird watching and relaxing. There is also a possibility of horse riding, although this must be fully investigated" (CNdV 2000: 4). But these are luxurious activities for impoverished communities of both Driftsands and the Cape Flats.

a) The CMC argument is worded to suggest that approximately one million residents will benefit from these passive recreational opportunities, while in fact the impoverished (black and coloured) peoples of the Cape Flats will hardly benefit from these opportunities at all. However, the population of the surrounding communities is largely made up of impoverished blacks and coloureds. According to the Settlement Planning Services (Setplan) in 1998: "In terms of socio-economic conditions, the abutting areas of Delft and Mfuleni represent the 'worst-off' 20% rating within the entire MSE" (Setplan 1998). Moreover, "Driftsands reflects the socio-economic conditions of the Metro South

East (MSE) including high levels of crime, ineffective policing, intimidation, high levels of poverty and unemployment, inadequate shelter and services, low literacy levels, meagre recreational facilities and inadequate schooling” (Chittenden Nicks Partnership, 1997).

b) The proposed activities of horse riding, bird watching and picnicking are mainly associated with, and traditionally restricted to, tourists and South Africans of the first economy who can afford related expenses (travel, picnics, horse-riding equipment and binoculars). “Research shows that less than 12% of South African visitors to national parks are black people” (McLeod 2004a) at a time when black people form the majority of South Africa’s population. Mkhize writes in his 1999 PhD research that, “I discovered that black people are not really adventurous in terms of tourism.... Black people don’t see why they should go to nature reserves” (Mkhize 1999). Mkhize links blacks’ perceptions of, and participation in, tourism and nature conservation activities to their place of origin and low level of affordability. Four out of Mkhize’s six hypotheses hint that affordability and place of origin determine the flow of blacks toward tourism and conservation areas. 1) “Blacks prefer to visit places where they can be accommodated by friends or relatives” (Mkhize 1999:181). They consequently avoid activities that require accommodation expenses. 2) “Blacks regard visiting friends and relatives who stay long distances [away] as part of touring” (Mkhize 1999:181). 3) Black people’s experience of tourism “is more regional than national” (Mkhize 1999:181). This suggests that many black people cannot afford to travel nationally for tourism purposes. 4) “Black people prefer to visit urban destinations than rural areas” (Mkhize 1999:181). His view is that the majority of blacks come from rural areas and therefore tend to prefer urban experiences when they travel as tourists.

The question of the low proportion of black visitors to South African national parks remains a Cabinet agenda issue today, and the former Minister of Environmental Affairs and Tourism (Van Schalkwyk 2004), Valli Moosa, “himself said that the failure to get a significant number of blacks to enjoy the parks was one of the shortfalls of his otherwise successful tenure” (cited in Macleod 2004b).

c) The proposed opportunities created for the surrounding communities also sound promising, but in fact boil down to a few menial jobs that in no way can be said to

significantly benefit the whole of the surrounding communities. However, certain local people might benefit from the creation of jobs associated with these activities, like car guards, domestic workers and carriers.

The CMC's proposal for providing three urban agricultural opportunities (plant propagation, vegetable growing and cattle grazing) at the site is similarly also persuasive. One is supposed to conclude that the approximately one million residents of the surrounding communities mentioned earlier in the text will benefit from those opportunities. But, once again, this conclusion is hinted at but not confirmed by the text, which states only that these opportunities will arise, but not for whom.

In fact, though, the CMC's proposal for accommodating agricultural opportunities at the site confirms the opposite. It proposes that the grazing of cattle should be phased out, which is the only activity that can be associated with the surrounding communities; people do not take their cattle far afield to graze, for reasons of practicality and efficiency. While the CMC proposal suggests that "the grazing of cattle [of both the surrounding and the on-site communities] should be phased out", the Medical Research Centre meanwhile has been grazing horses in sections of the reserve and this activity in particular *could be accommodated*. And yet cattle grazing by the Driftsands communities *could not be accommodated* by the socio-environmentally friendly CMC proposal. Grazing is justifiable only for research animals but not for domestic animals. It is worth asking how the people who have been grazing their livestock on this land are expected to benefit from the withdrawal of that resource.

The two other urban agricultural opportunities (plant propagation and vegetable growing) seem to have been inserted for cosmetic reasons rather than through an attempt at practically addressing the needs of the surrounding communities. Plant propagation (arum lilies, thatching reed and a number of indigenous species) and vegetable growing appear, on the surface, to have been designed to benefit the surrounding communities. Looking more closely at the report, however, the reader will see that neither activity is included in the estimated capital and fixed operation cost or the estimated potential income of the CMC's report. In the meantime, the cost, expenses, and potential income of the other proposed activities (environmental education programmes, a cultural emporium and tourism accommodation) are prominently displayed. In other words,

although plant propagation and vegetable growing are mentioned as opportunities, they do not appear in the financial section of the CMC's Driftsands business plan, and none of the beneficiaries of these activities is identified. Could the CMC really have been unaware of the costs and potential income of these activities? The idea is given prominence in the 'vision' section of the proposal but given absolutely no weight or credibility in the financial section.

Furthermore, plant propagation and vegetable growing at the sandy site is not realistic (Interview, Official from DNR, 10 August 2005). This official from DNR pointed out that the Driftsands Environmental Education Centre (DEEC) had allocated a small proportion of the land to educate the surrounding communities on plant propagation and vegetable growing, where 1.2 square metres was allocated at the site for each participant, but the land is sandy and "lacks inherent soil fertility due to the presence of underground water" (CNdV and CMC 2000: 4). Therefore the DEEC was obliged to water the plants. Furthermore, it appeared to this official from DNR that it was not feasible to grow vegetables at the site and the soil was not fertile for growing herbs. So, the DEEC ended up training local communities to grow cheap vegetables, which could hardly be considered a reliable or significant source of income.

Moreover, vegetable growing appears not to have been feasible at Green Park Community House either. For three years the garden of Green Park Community House was planted with cabbage to comply with the agricultural activities proposed by the CMC and other environmental NGOs who appeared to support organic farming. Each season at the Community House would not exceed the output of 40 cabbages, which would bring in R80-R160. In sum, therefore, vegetable growing does not seem to be a sound proposition at the site because of the poor soil characteristics and the lack of water resources.

Another issue that seems to rule out the possibility that the surrounding communities will benefit from the "urban agricultural opportunities" created is the question of where the activities are proposed to take place. The land uses proposed by the CMC are defined in the section of the report dedicated to 'conceptual use zones' (see Figure 5.3), and the proposed functions of each area are clearly explained. According to the figure, the bulk of Driftsands will be a 'wilderness zone', "which maintained primary ecological recharge

opportunities for the resources disturbed in the intense and moderate use zones” (CNdV and CMC 2000: 5). In the centre, around the water supply, is the ‘intensive use zone’, “where all building and development will be found” (CNdV and CMC 2000: 5). The allocated area for ‘agriculture opportunity’ is not defined in the CMC proposal. The only area left whose precise function is not specified is the ‘limited use zone’, which forms (about) 15% of Driftsands. It is demarcated for agriculture opportunities. But, if this were genuinely an area where local people would be allowed to grow vegetables, it would more likely be labelled something along the lines of “Urban Agriculture Zone,” which it was not.

Furthermore, it will be up to the management of the DEEC to decide at the appropriate time whether to allow anyone from the surrounding communities to make use of the “Limited Use Zone” for their vegetable growing needs. Because Driftsands will be a closed eco-system and access to it intended to generate funds, its boundaries will be closed and access regulated. Practically, the surrounding 1.5 million people will not be able to walk in and construct their ‘urban agriculture’ activities, even if there were space allotted for them to do so. The management of that time will assumedly be alert to the problem of potential chaos if it does not control access to its proposed “Limited Use Zone.”

In practical terms, plant propagation and vegetable growing activities will have to be managed and regulated if they are to advance the overall plan and not to threaten its success. Eventually, a small proportion of the Driftsands site will be demarcated as a “*limited* use zone”, and the management of the reserve will negotiate access and control the nature of the activities taking place there. In terms of “opportunities”, it seems most likely that the DEEC management will hire some workers, possibly, but not necessarily from the surrounding communities. In other words, the activity of plant propagation and vegetable growing may create some small farming opportunities, but these are most likely to be for perhaps 10 to 20 menial workers, and by no means the majority of the surrounding communities.

In summary, the report markets its proposed “Urban Agricultural” activities (plant propagation, vegetable growing and cattle grazing) as opportunities available to the population of the surrounding communities. However, in fact the CMC’s proposal

designates a small portion of Driftsands to an unspecified “Limited Use Zone”, which is represented as having the potential to accommodate the three “Urban Agriculture” sub-activities. However, animal grazing is restricted to the Medical Research Centre, while the other two activities have the potential to create 10 to 20 farm job opportunities, which might, but not necessarily, benefit the surrounding communities.

It is noteworthy that Cape Nature Conservation, the conservation management authority in the Province since 2000, was also looking at Driftsands as one of the region’s bases to promote ecotourism activities to serve as “a key component of local economic development process in the province [Its aim was] to actively promote conservation and maintenance of the ecological systems and historical features of Driftsands, with an emphasis on bio-diversity, endemism and support viable commercial ecotourism ventures that will contribute to local economic development, in partnership with neighbours, local communities and government and others” (MLA, 2005: 53).

This vision seems to centre on economic conservation in the development of the Province, a view that reflects the approach of Cape Nature Conservation in general, that is, of turning nature into a commodity: “to establish a Conservation Economy in the Western Cape and turn bio-diversity conservation into a key component of local economic development process in the province” (MLA, 2005: 53). However, Cape Nature Conservation lacked the resources to fulfil its mandate during the 80s and 90s. As a result, conservation concerns were kept alive largely “through the efforts of NGOs such as the Botanical Society and the Green Coalition” (CNdV and CMC 1999a: 2).

5.3. Culturing nature (Initiation Village)

There is currently a global movement towards a unified vision of landscape, focussing on the integration of culture and incorporating the conservation of the identities of people and places (Müller 2008: 119).

So, ‘culturing nature’ is not yet universally unified. There are many different forms of culturing nature or conserving human culture and the physical environment. Culturing nature at DNR, for instance, is a unique process. It is not about restoration of

archaeological space or about reconstruction of cultural activities but about accommodating cultural practice that was not performed at the site before. Driftsands' nature conservation group looks at accommodating a solo cultural practice that focuses only on Xhosa youth: to accommodate an initiation village to manhood by young Xhosa men. The beneficiaries of Driftsands' proposed initiation will be Xhosa young men. Women, children, and old people do not form part of this proposed construction.

The significance of DNR's discourse on culturing nature revolves around pioneer regulating and commodifying cultural practices in protected areas in South Africa. This is clear from the statement made by the Minister of Environmental Affairs and Tourism, Marthinus Van Schalkwyk, at the World Summit for Sustainable Development in Johannesburg in 2002. He elaborated on the idea by stating that "In terms of responsible and sustainable cultural tourism, projects like the planned cultural village at Driftsands, which will offer an authentic cultural experience, and the Lookout Hill development will bring much-needed tourism income to communities in need." (Van Schalkwyk 2002). By stating so, the Ministry of Environment Affairs and Tourism aimed at marketing South Africa culture at the global, national and local scales. Presenting the idea of culturing nature at Driftsands as a new idea correlates with Muller's argument that culturing nature is a new or ignored idea and practice nation wide. "Within the development industry in South Africa, the concept and realities of presenting intangible heritage [culture] are still misunderstood, with the role of memory and meaning of place largely ignored in conservation policies" (Müller 2008:118).

This section analyses the discourse of Driftsands officials in post-apartheid South Africa on the proposal (see Figure 5.6.) to accommodate, but not yet established the cultural practice of initiating Xhosa youth at DNR. One of the ideological principles of the Xhosa clan (of which Nelson Mandela is a member) is to teach its youth about manhood in the natural environment, away from residential areas. DNR officials claimed that constructing an initiation village at the site was 'required' by Driftsands surrounding communities. In respond to this requirement, the proponents of Driftsands nature conservation discourse entertained the idea.

Figure 5.6. Driftsands proposed initiation village at (CNdV and CMC 2000)



According to the autobiography of former president Nelson Mandela, is “a kind of spiritual preparation for the trials of manhood.” Initiation forms part of the Xhosa culture, “who make up about 17% of South Africa’s 45 million people. In the past, boys waited until they were at least 18 before approaching their fathers for permission to be circumcised” (Zavis, 2006). Currently, Xhosa young men are initiated, for a period of one month, at the age of 14- to 18-years old.

On 2 March 2004, the Western Cape provincial government launched an initiative to establish an initiation village for urban Xhosa at Driftsands. Spokesperson for the Western Cape’s environment affairs department Ossie Gibson stated that “the idea of an

initiation village followed a workshop held at Langa in March 2001, and a series of public participation meetings...The department had provided R1.2-million seed money towards the project, which would take shape on an allocated site of a few hectares within the 650ha Driftsands nature reserve near Khayelitsha” (iAfrica, 2006). Gibson market the idea of an initiation village at DNR to be “the first in the country, [seeking] to provide space for what is essentially a rural custom in a city setting...In its purest form, groups of newly circumcised young men are required to spend a period isolated in makeshift shelters in the bush or veld, a ritual difficult to observe on the periphery of crowded townships...”

In the same year (i.e. 2001), the Western Cape National Conservation Board (WCNCB) and the Sub-Directorate of the Department of Environmental, Cultural Affairs and Sports (DECAS) identified the need for a space and proper facilities for initiation villages in the Western Cape. They supported the idea of constructing “fixed or permanent structures to accommodate ±100 initiates per season, on 15 hectares of DNR”. They supported this idea to “discourage the invasion of open spaces by initiates and the regular use of plastics for building the shacks during initiation season along the National Roads” (Enviro Dinamik, 2001: 3 and 19). The idea of an initiation village was considered a pilot project which, if successful, could be extended to other urban settings in the country (Enviro Dinamik 2001).

But how does the idea of an initiation village feed into the conservation discourse at DNR? First, it is desirable to regulate initiation to reduce the high death rate of Xhosa youth during their initiation. Zavis (2006) argues that the debate rages on because young men continue to die during circumcision (initiation). On a national scale Zavis claims “more than 200 young men have been reported killed since 2001 [40/year] as a result of botched circumcisions. Others die of dehydration, hunger, exposure and disease during the month they spend recovering and learning the secrets of adulthood at initiation schools held in rudimentary huts at the height of the South African winter.”

In the Eastern Cape “fourteen of this year’s deaths took place in a small, remote region inhabited by the Pondo clan.” Zavis implies that those incidents were associated with initiation and have “horrified government officials, health workers and traditional leaders.” Moreover, the risk of endangering lives of young Xhosa men during their

initiation is increased every winter in South Africa. It was reported that four initiates died in the Eastern Cape at the start of the winter season in June 2005 (Cape Times, 24 June 2005). Four days later (i.e. 28 June 2005), the number rose to six, including the death of a 15-year-old boy in Transkei. (Cape Times, June 28, 2005). Consequently, authorities have sought to regulate the practice in order to minimize the risks associated with initiation.

The intention to regulate initiation practices at Driftsands is evidenced in the CMC and the CPA proposals. This proposal also can be seen in the budget speech of Johan Gelderblom, the former provincial Minister of Environment, Planning and Economic Development, who spoke about the department project of “Driftsands Initiation Village” (Gelderblom 2003), which he claimed was exhibited at the WSSD.

Today more members of Driftsands communities favour establishing an initiation village at the site than in the early 1990s. In 1990, Ngeleza’s survey indicated that only 26.3 percent of 17 geography teachers and 55.8 percent of 43 Khayelitsha community members favoured establishing initiation activities at Driftsands. More recently, this researcher’s survey in June 2006 indicated that 55 out of 70 members of Driftsands on-site communities indicated that they believed it to be ‘very important’ and ‘important’ to establish initiation opportunities at the site. The comparison between this survey and Ngeleza’s one, using an ‘identical questionnaire’, indicates that there has been a progressive evolution in local communities perspective (from 47% to 78.6%), over the last 16 years on the issue of initiation activities at the site.

Although comparison of the two surveys above might suggest that currently Xhosa communities are more dedicated to establishing initiation activities than before, it is observed that fewer Xhosa young men are participants in initiation activities than before. Metshwelo, a 48-year-old Xhosa caterer at Driftsands Environmental Centre, claims that she did not permit her son to be circumcised because “he learns adulthood at school and at home” (Interview, 14 June 2006) She suggests that there is no need to risk the health and the life of Xhosa young men in order to gain spiritual knowledge when they can be educated about manhood at school and at their homes.

On 22 May 2006, Whitey Jacobs, the Provincial Minister of Cultural Affairs, Sports and Recreation, pronounced “the erection of a permanent initiation school in Driftsands”

during his budget speech at Parliament in Cape Town. Although he supported “the idea of identifying initiation sites and to regulate them,” he opposed “the idea of a permanent building. [He claims that the initiation issue] must be treated with utmost care and due consideration for the people that are affected. Jacobs justifies his stand for monitoring initiation activities by pointing at the hospitalization and death of initiates in the Eastern Cape in December 2005 (Jacobs 2006).

Establishing a Xhosa initiation village at Driftsands supports the conservation discourse of Driftsands. In 2005, Cape Nature worked on a scoping process and public participation to determine a suitable site for a pilot initiation village — the first attempt at a permanent initiation structure within a conservation area. Cape Nature argues that there has been overwhelming support for this initiative from traditional leaders (Cape Nature, 2005). This is an attempt to address the needs of the surrounding communities to provide a safe shelter for initiation and to promote Cape Nature’s vision to manage Driftsands as a multi-functional natural area. The implication of this argument is that the idea is being examined as it is the first attempt of its kind. Meanwhile, accommodating an initiation village at a nature reserve might contradict or might support the discourse of nature conservation.

On one hand, the establishment of initiation villages involves building a village and the burning huts built from existing plants and vegetations. On the other hand, the establishment of initiation villages strengthens the discourse of nature conservation – provided it is regulated. When conservation agencies regulate and contain initiation practices, they reduce the practice of burning wildlife vegetation and they attract more visitors. Cape Nature argues that the idea of accommodating initiation villages, when regulated, feeds into the discourse of nature conservation. For example, in 2005 Cape Nature proposed accommodating an initiation village at the site and the CPA proposed constructing a green open space to conserve endangered and disappearing habitats and vegetations and to house Sikhumbule and another 10,000 people from Driftsands and its surrounding communities.

5.4. Co-existing with nature

In post-apartheid South Africa, proponents of DNR's nature conservation discourse examined many land-use proposals for Driftsands with the intention of excluding and keeping impoverished on-site communities. For example, in 2001, the City of Cape Town formally adopted the identification of the Botanical Society for Driftsands as one of the original identified core botanical sites which forms part the city's Bio-diversity Network (Official 4, City of Cape Town). The implication of adopting such a proposal is to make a protected area out of Driftsands: protected from humans. Furthermore, on 31 October 2001, the CMC formally adopted the Integrated Metropolitan Environmental Policy (IMEP) along with its implementation strategy, the Integrated Metropolitan Environmental Management Strategy (IMEMS). The IMEMS requires that the CCT/CMC develop detailed sectoral strategies to meet the commitments made in the sectoral approaches by giving effect to the environmental principles in IMEP. The implication of adopting a bio-diversity strategy is to adopt Driftsands as a botanical area.

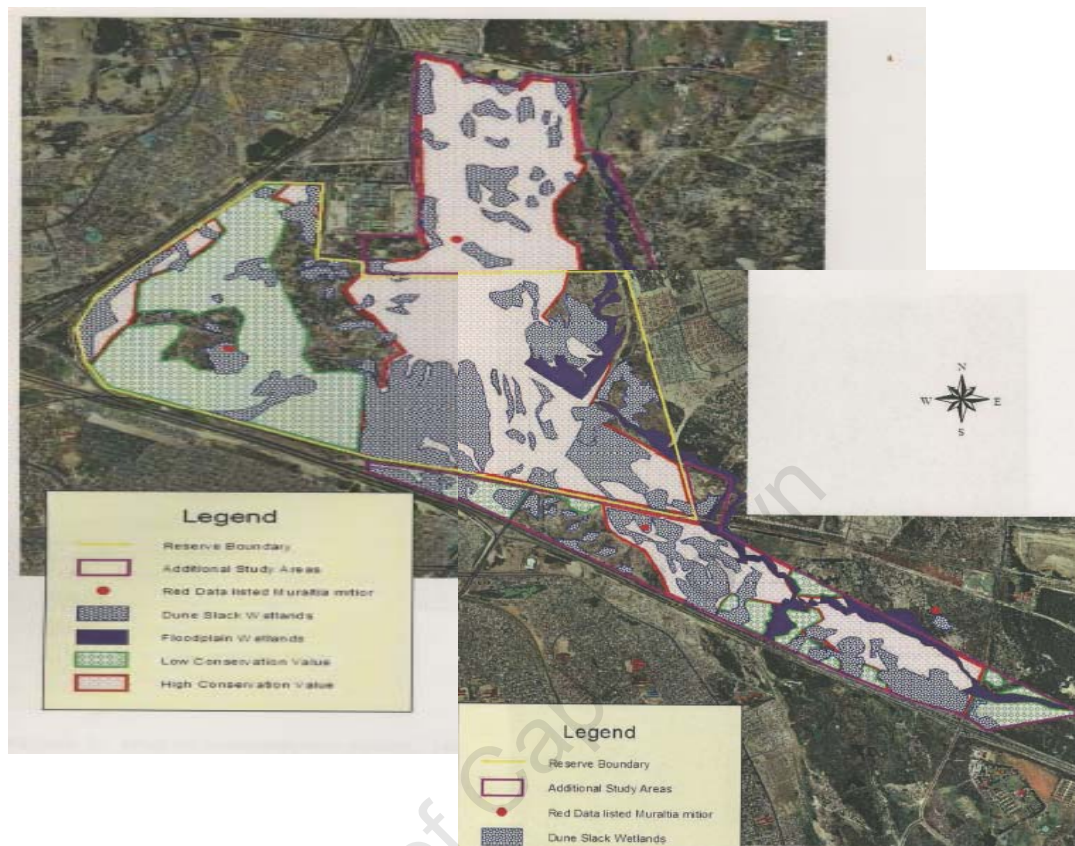
Meanwhile, in 2001 the Western Cape Nature Conservation Board (WCNCB) argued that the site was essential for conservation; that it was under pressure for occupation of housing; and that it was ecologically and culturally strategic to accommodate an initiation village on 15 hectares of the site. The WCNCB identified Driftsands as one of fifteen core conservation areas essential for conserving plant species of the Cape Flats (WCNCB 2001; Cape Nature). The implication of WCNCB's argument that Driftsands was "under pressure for occupation of housing" and that it was essential for conservation is that housing and conservation cannot co-exist. They should be separated. By separating the site's informal settlements from its natural environment, access of the residents of these informal townships should be regulated in a similar way to those of the site's surrounding communities. The result would be that the on-site communities would be denied free access to DNR.

Indeed the Cape Nature Conservation (CNC) is not hiding its ideological principle of excluding local communities from protected areas. For example, the CNC excluded Driftsands' on-site communities from its life skills workshop that was held in September

2001. It offered a “life skills workshop based on plant propagation to members of [Driftsands] local community. The workshop formed part of the Cape Nature initiative to launch Driftsands Environmental Education Centre in 2002. On the 10th and the 11th of October 2001, 15 members from the local community, including Delft, Mfuleni, West Bank and Khayelitsha and 15 learners from Manzomthombo Secondary School attended the plant propagation workshops at Driftsands Environmental Centre” (Cape Nature 2002). None of those communities was living on the site. Essentially the CNC does not recognise Los Angeles or Green Park in its maps of DNR (see Figure 5.7). Furthermore, none of the CNC reports dealing with Driftsands recognises the existence of the on-site communities. Therefore, by excluding the on-site communities from the CMC’s life skills workshop, and by not recognising those communities in its maps, the CNC confirmed its exclusionary position towards the on-site communities.

In 2001, Cape Nature embarked on the theme of community participation to conserve Driftsands. Cape Nature described the initiative in the following words: “The Driftsands Community Initiative is an outstanding example of our collaborative efforts to reach out to communities. The Board’s vision for Driftsands is to serve these communities by providing opportunities for environmental education, recreation and ecotourism in a natural environment, while protecting existing natural resources. A public participation process, which aims to determine a suitable site for the performance of initiation rites, is well underway. There has been overwhelming support for this initiative from community leaders. Driftsands is our only urban nature reserve and is situated in the midst of largely impoverished communities on the outskirts of Cape Town” (Cape Nature 2001).

Figure 5.7. DNR vegetation



Source: Nick Helme Botanical Surveys 2006

Furthermore, community participation was conceptualised by the Ministry of Environmental Affairs and Tourism in 1998. “Section B of the ‘White Paper’ provides that co-ordination and integration are required for development planning, there is a need for community participation in local government matters, and it is the responsibility of local government to provide sustainable service delivery at an affordable level” (McEwan et al 2003). Low framed (1998b) his argument to match the format of the White Paper, South Africa’s 1994 reconciliation process, and Agenda 21, to pursue his aim to conserve the site wity the participation of the surrounding communities.

On 31 March 2002, the Chief Directorate of Environmental Affairs adopted the entire CMC proposal for multi-purpose uses of the site that would benefit the Driftsands community by: the establishment of a well-managed integrated natural area (urban park); environmental education facilities and educational opportunities on the doorstep of a

densely populated area; recreational opportunities; small-scale urban agriculture; marketing of traditional remedies cultivated in local nurseries; ecotourism opportunities attracting finance into the area; job creation and secondary job opportunities; cultural emporium creating a vibrant focal point for local arts and crafts; up market tourism accommodation; offices, housing conservation institutions; and access to an initiation village (Malatsi 2002).

David Malatsi, the Chief Director of Environmental Affairs, was allocated an amount of R77,052m for the financial year 2002/03, an increase of 4,08% over the previous year's allocation. The Driftsands project was considered one of the demonstration projects of the department. The responsibilities of the Chief Directorate included the identification, promotion and facilitation of community based natural resources in the Western Cape for which an amount of R10m was allocated. The sub-directorate encourages communities to efficiently and effectively utilise natural resources. In addition, it facilitates provincial strategy on the implementation of conventional biological diversity and reporting on the state of environment.

Not all the government departments call for excluding local communities from protected areas. For example, the former Department of Water Affairs and Forestry (DWAF) used its Working for Water Programme to promote local development. Under the patron of Nelson Mandela, the Working for Water Programme is a multi-departmental, poverty relief and social-development initiative to clean invading alien plants. It is recognised as the biggest environmental conservation programme in Africa which reflects the government's commitment to job creation and combating poverty. Its five main objectives are hydrological, ecological, social, natural resources and economic in nature. What matters to this thesis are the social and the economic objectives: to develop the economic benefits from cleaning these plants by facilitating training, economic empowerment and the development of secondary industry (Department of Water Affairs and Forestry 2005). The result of the DWAF programme in Driftsands are a cleaner site but with continued impoverishment among the majority of DWAF-employed community members. For instance, 60 people from the surrounding communities were contracted by the DWAF to clear the site of alien vegetations. Five of them are contractors, who were paid for their time and their cars (bakkies in this case) R199.206 per working day. R200 hardly cover car maintenance, family expenses and the expenses of the owner of these cars. Ten

Chanson operators were paid R75 per day, this small salary is below the minimum wage R80 per day per person, it can hardly buy for food and pay for health care, communication and transportation costs. At the end of this casual work chanson operators found themselves in the same place as those who have empty pockets. Fifteen site applicators were paid R47 per day while 30 general workers were paid R43.16 per day. This wage is also too little and below the minimum wage in South Africa. At the end of this casual job, the workers again found themselves unemployed. On average each of the 60 contracted workers generated R62.5 per working day, which amounted to R37.4 per person per day (calculated over seven days a week). This low-income level (R37.4 per person per day) cannot uplift families from poverty but do provide them with sufficient income to prevent them from to levels of abject poverty for as long as they are contracted.

The ongoing poverty relief programme of the DWAF contributes to holding the residents in a poverty spiral, preventing their access to a better life. At the end of this casual contract, every employed person will find himself/herself in the same impoverished position. Though they earned some income from DWAF projects as casual workers, their ability to put food on the table disappears with the end of the projects. At the end of their casual jobs they find themselves in the same income and work position as before they started their job at DNR.

5.5. Conservation and community perspectives

This section analyses the perspective of Driftsands local communities on the proposed land uses of the site. The official discourse examined eleven possible land uses for the site between 1994 and 2006: housing, tourism, environmental education, recreational area, shopping centre, sports area, agricultural areas, industrial area, initiation, nature reserve, and woodlot. In regard to establishing a **protected area** at Driftsands, local communities appear to be aware of the common aim of the conservation group to exclude local communities from protected areas in South Africa. This research suggests that communities are reluctant to conserve nature at the site. Mtati, the Chairperson of Driftsands community forum, claims that the reason for their reluctance has to do with their fear of being excluded from the proposed protected area. This fear arises from their

awareness of the consequences of establishing protected areas on black and coloured communities in South Africa. For local communities a protected area is a space that accommodates native plants, trees and wild animals. It is a place where black people are allowed neither to build houses nor to make use of or domesticate wild animals (Interview, Mtati, 14 July 2006).

Such a fear of protected areas seems to be rooted in the mind of local communities. Only a small proportion of Driftsands' surrounding communities and the geography teachers of that area were in favour of allocating a proportion of the land for nature spaces during the apartheid era (Ngeleza 1990). Ngeleza's survey indicates that 24 out of 43 Khayelitsha residents and 5 out of the 19 geography teachers were in favour of allocating a proportion of the land for natural open spaces.

This fear among Driftsands local communities persists today. Currently, establishing a protected area at Driftsands is the least-favoured choice for the on-site communities. A higher percentage of them favour conservation at the site than at the time of Ngeleza's (1990) survey. In July 2006, I surveyed the preference of choices of Driftsands on-site communities of eleven (and other) proposed land usages. The survey (see Table 5.1) indicates that their preference of choices reads in the following order: Housing, Tourist Destination, Environmental Education, Recreational Area, Shopping Centre, Sports Area, Agricultural Areas, Industrial Area, Initiation, Nature Reserve, Woodlot and others (transport facilitation: roads, bridges and taxi rank; security facilities: police station; public services: cleanliness, tidiness, proper sanitation, fire department and electricity; public health facilities: hospital and clinic; educational facilities: schools, crèches and a library; income facilities: hotel, introduction of wildlife and conserving the Kuils River to maintain proper fishing). Furthermore, the researcher's survey suggests that a higher percentage of the on-site people interviewed are in favour of nature conservation in comparison with the Ngeleza survey in 1990: 54 out of 70 interviewees indicate that it is "very important" and "important" to conserve Driftsands. The reason for such a move might be related to the positive effect of Driftsands Environmental Centre (DEC) on local communities.

Table 5.1. Survey preference of choices of 70 residents from Driftsands’ formal and informal settlements

	Preference of choice	Very Important	Important	Not important	Undecided	VI+I	NI+UD	total	%VI+I	%NI+UD
1	Housing Tourist	56	12	0	0	68	0	68	100.0%	0.0%
2	Destination Environmental	53	13	1	3	66	4	70	94.3%	5.7%
3	Education Recreational	53	12	3	1	65	4	69	94.2%	5.8%
4	Area Shopping Centre	47	17	5	0	64	5	69	92.8%	7.2%
5	Sports Area	52	12	3	2	64	5	69	92.8%	7.2%
6	Agricultural Areas	52	10	6	2	62	8	70	88.6%	11.4%
7	Industrial Area	50	7	11	2	57	13	70	81.4%	18.6%
8	Initiation Nature Reserve	40	15	8	6	55	14	69	79.7%	20.3%
9	Woodlot	32	22	12	3	54	15	69	78.3%	21.7%
10	Others	11	25	28	4	36	32	68	52.9%	47.1%
11		40				40	0	40	100.0%	0.0%
12	Total	540	155	81	24	695	105	800	86.9%	13.1%

Source: Author

In regard to the **environmental education opportunity** at the site, the on-site communities seem to favour such a proposal, as they see themselves benefiting from the existing environmental education centre at DNR. Their response suggests prioritising the accommodation of environmental educational opportunities at the site: 65 out of 70 interviewed agencies indicated that it is ‘very important’ and ‘important’ to accommodate environmental education opportunities at the site. At first, it might appear strange that survivalist communities suffering from extreme levels of poverty would prioritise environmental education opportunities as their third option. However, the idea of such opportunities at Driftsands Environmental Centre (DEC) seems to generate fruitful inspiration in the mind of the on-site communities. Sometimes members of local communities can be seen winning environmentally related nominal jobs and attending environmental educational activities at the DEC. In both cases, participants are usually served with hot beverages and meals. In this way, the DEC addresses two of their major social challenges: the high level of unemployment and hunger. Furthermore, the DEC plays a ‘progressive’ social role in providing a safe space for social interactions. The site lacks public social facilities: Driftsands dwellers meet mainly at the reserve centre and at

the church. In both cases, they are provided with safe platforms to interact progressively. Overall, accommodating environmental education opportunities at DEC means more job opportunities, simple food, hot drinks and progressive social interaction for local dwellers.

With regard to the allocation of portion of Driftsands for a **shopping centre**, the on-site communities appear to favour such a proposal. The findings by this researcher suggest that the lack of convenient shops and/or a shopping centre at the site seems to trouble local dwellers: 64 out of 70 interviewees indicate that it is ‘very important’ and ‘important’ to accommodate a shopping centre at the site. The lack of a shopping centre contributes to their poverty by adding transport expenses and exposing them to unsafe environments during their attempts to walk to the nearest shopping centres. There are only two small shops at the site: one shop forms part of the adjacent BP Garage and the other is located in Green Park. They sell basics such as cool drinks, sugar, bread, salt and soup.

Concerning the allocation of a portion of Driftsands for **sport activities**, the on-site communities appear to favour such a proposal. The on-site and surrounding communities prioritised accommodating sport activities at the site: 64 out of 70 interviewees indicated that it was ‘very important’ or ‘important’ to allocate some land for sport activities at the site. In the Ngeleza (1990) survey, 42 out of 43 informants from the surrounding communities confirmed the public view of the importance of allocating some of Driftsands area to accommodate sport activities (Ngeleza, 1990).

When coming to **woodlot**, the Driftsands dwellers are divided on the issue of allowing the on-site communities and the surrounding ones to harvest wood from the site: 36 out of 70 interviewed agencies indicate that it is ‘very important’ and ‘important’ to accommodate woodlot opportunities at the site. However, 32 out of 70 oppose such an initiative. In fact, only 11 interviewees indicate that it is very important to accommodate this activity at the site. In comparison, Ngeleza’s (1990) survey indicated that a small proportion of the surrounding communities and the geography teachers of that area regarded accommodating woodlot opportunities at the site. That survey indicated that 15 of the 43 residents and 3 of the 19 teachers were in favour of accommodating woodlot opportunities at the site.

With regard to providing low-income **housing** at the site, Driftsands on-site communities score this as their first choice of the eight proposed land uses. The findings by this researcher support Ngeleza’s (1990) survey, which addressed the same question to 43 Khayelitsha residents and 19 geography teachers from the surrounding communities. Table 5.2 summarises the outputs of the two researches.

Table 5.2. Sectarian performance of choice on housing at Driftsands

Housing	Very important	Important	Not important	Undecided	N
Driftsands residents (Daraghma 2006)	56	12	0	2	7
Khayelitsha residents (Ngeleza 1990)	39	4	0	0	4
Geography teachers (Ngeleza 1990)	11	2	5	1	1

Source: Author

The above Table (i.e. 5.2) indicates that individuals interviewed from Driftsands communities and Khayelitsha responded in the affirmative to housing. The study found that 68 out of the 70 interviewed respondents see housing as ‘very important (56)’ and ‘important (12)’ activities that should be accommodated at the site. This suggests that they regard housing-related problems as the most urgent issue to be addressed at the site in order to relieve them from their impoverished ‘order’. In this way, members of the Driftsands community seem to prioritise stabilising both their formal and informal housing needs above the other 22 listed items of their hierarchy of basic social needs. Currently, the housing scheme of Driftsands is legally, physically and economically problematic.

They are economically problematic in that they contribute to normalising poverty among the on-site communities. “Driftsands is a prison for its residents and a barrier for its surrounding communities” (Interview, Mtati, 14 July 2006). Mtati’s perspective is confirmed by the CMC argument that “Driftsands is isolated by a national and a regional freeway (N2 and R300). Therefore it is neither feasible nor sustainable to use it for

housing” (CNdV and CMC, 2000: 13) unless the CMC invests in connecting Driftsands with the surrounding urban areas with proper roads. However the CMC persists in dismissing the potential for low-income housing at the site by focusing on the existing conditions of the man-made isolation of the site and avoiding describing the potential to connect it with the surrounding urban areas.

Furthermore, the housing scheme of Driftsands is geographically problematic. For example, Los Angeles is located below the 1:50 year flood line. After a week of heavy rain in August 2004, community members approached the *Cape Times* newspaper to draw public and governmental attention to their housing scheme problems. They claimed that other townships were also affected by the heavy rain but those townships they received help from local government except theirs: “But there is never any mention of Los Angeles” (*Cape Argus* 16 August 2004). Community members of Los Angeles wondered why they did not receive attention or help even though they voted for the ANC

Moreover, the housing scheme of Driftsands is spatially problematic. Driftsands is connected with the poor surrounding communities, not to the N2 or R300, but by two narrow, caged pedestrian bridges and a paved road in the north. Conceptually, life in Driftsands means the residents’ potential to connect progressively with the first economy is blocked. This blocking is caused by several factors. The first is the lack of proper access to the surrounding communities and the city centres. Residents need a taxi rank and two car bridges to connect conveniently with the surrounding communities and the city centres. Second, Driftsands is inhabited by poor people. About ten percent of the interviewed subjects are employed at the rate of R43 per day to work at the nature reserve. The rest of the interviewed subjects are unemployed: the elderly, children and mothers with children. Third, the site lacks basic communication facilities (public telephones and post office), which makes it inconvenient for Driftsands dwellers to communicate with the surrounding world and the city job centres. Consequently, a progressive presence of the on-site communities is dismissed, in the language of Gregory (2004) by their man-made naturalised state of inconvenience.

Driftsands housing schemes seem to be problematic (Blood 2006) for its residents and for the reserve’s official agencies. For the residents of the two informal on-site settlements (Green Park, Los Angeles), it is impractical to live in small, recycled wooden

and steel shacks between 6 and 16 square metres in size. Those shacks are cold in winter and hot in summer; easy to break into, and to catch fire. In addition, it is expensive in terms of cost and time to obtain access to transport routes. Furthermore, residents of Driftsands' two formal settlements (Sikhumbule and Brentwood Park) seem to be troubled by the lack of taxi ranks and general transport facilities. Their houses are small in scale, 25-36 square metres, and are not connected to public services such as the fire department, hospitals, crèches and libraries. Also, their houses are built in considerably dangerous surroundings where they are fenced by concrete barriers connected with caged pedestrian bridges. They also lack adequate policing, and the area is attracting impoverished immigrants.

Overall, the preference for the land use of Driftsands corresponds with residents' basic survival needs for housing, jobs and public services. Driftsands on-site communities are short of all public services mentioned in the previous paragraph; they also suffer from a very high level of unemployment (98 %) and they are short of proper housing. Conceptually, the response of the on-site communities suggests prioritising income-generating opportunities rather than receiving government grants to build their future. They look at generating income from six opportunities: tourism, environmental education, agricultural areas, industrial areas, conservation of the river for fishing and the introduction of wildlife. The six income-generating opportunities emphasise their wish to uplift themselves out of the Driftsands impoverishing circumstances.

5.6. Conclusion

This chapter confirms that in post-apartheid South Africa, the discourse of Driftsands incorporated new issues such as providing low-income houses for non-white communities at part of the site; supported the establishment of an initiation village for Xhosa youth at the site; moved towards using Driftsands as a physical integrator for the surrounding impoverished communities; and embraced ecotourism opportunities for purposes of conservation and the empowerment of local communities. Both the initiation village and the provision of low-income houses with public services are new ideas which did not prevail in the apartheid era. For example, conservation groups of apartheid era were not concerned about accommodating cultural practice such as an initiation village

in protected areas. In post-apartheid South Africa conservation groups and officials became sensitive to the socio-economic needs and aspirations of local communities, hence their call for low-income houses with public services and the settlement of African communities above the flood line.

This chapter has shown that post-apartheid discourses in Driftsands have been dominated by the issue of housing and the need to preserve the nature reserve. There were two different views on housing in the area. The first view, supported by the City of Tygerberg, holds that it is necessary to provide low-income housing in consolidated areas above the 1:50 year flood line; to provide these housing schemes and Sikhumbule with basic public services; to fence these housing schemes; to distance them from white areas; and to lay them out in a way that prevented further expansion.

The CMC promoted the second view, which supported nature conservation and dismissed the idea of building housing at Driftsands. The CMC argued that housing at Driftsands was a) unviable; b) financially problematic, as half of Driftsands dwellers would require housing subsidies and could not afford to pay their housing instalments; c) geographically problematic and dangerous, as Driftsands was “an isolated area, cut off from major transport routes by the surrounding freeway system and the river corridor which make the area dangerous for housing; residents will expose themselves to road accidents while attempting to cross the surrounding freeway systems on foot”; d) pointless, since the masses will always need housing and therefore there was no point in sacrificing a nature reserve to meet an ongoing housing demand; and e) illegal, and therefore the act of settling in this township would be considered an act of poaching. These views are different as far as the nature and extent of housing are concerned, but they both form part of the developmental discourse. It can be suggested that although the developmental discourse was dominant in the first years of post-apartheid South Africa, it did not completely silence the conservation discourse. Chapter 6 explains why this is so.

Chapter 6: Contemporary Discourses of Driftsands and Global models on Nature and Society and the Future of Driftsands

This chapter aims to examine the argument that the contemporary Driftsands nature conservation discourse continues to be in line with various global conservation models. It suggests that the social constructions of nature at DNR have evolved over time while the status quo of local communities has remained the same: impoverished by exclusion from DNR, permitted participation in insignificant co-management models and recipients of intangible benefits. With regard to the exclusion of local communities from protected areas, both the Driftsands and the global conservation models work towards the voluntary or induced relocation of local communities from protected areas, and regulating their access to and from protected areas and their natural resources. To achieve this exclusion, the Driftsands conservation groups create an impression of the conservation crisis. Consequently, the on-site communities have to consider either voluntary relocation, as did the Amsterdam community, or opt to live in Driftsands' impoverishing environment, as did the Los Angeles and Green Park communities. Such a discourse places emphasis on the language of co-managing and co-benefiting local communities from protected areas.

Global conservation societies promote the concept and model of co-managing protected areas in order to: a) to protect the natural environment; b) conduct ecological research and; c) maintain the status quo that no human communities live inside protected areas (Pujadas and Castillo 2006). Co-management practices are also reported at DNR. Driftsands conservation group proposed working activities such as the removal of alien vegetation, trail planning and utilisation, and protective activities such as attending environmental education programme(s) (Low 1988b). However, Driftsands conservation group did not employ local communities to conduct ecological surveys, but they surveyed the opinion of the surrounding, not the on-site communities, to support their conservation agendas. As we noted earlier on, Barrie Low organised a survey among members of the surrounding communities, from Khayelitsha, on their preference for the future of Driftsands (see Chapters 4 and 5) to rationalise conservation at DNR and to restate the value of the reserve for providing environmental education activities, aimed at protecting the reserve from the 'surrounding communities'. Thereafter, Driftsands

conservation group incorporated Low's survey, on a provincial scale, not only to justify providing environmental education opportunities but also to justify exclusivity.

Conservationists started to popularise the concept of sharing protected areas' benefits with local communities in the 1990s; and are considering ways of allocating fair and equitable benefits to local communities from protected areas. Likewise, the Driftsands conservation group proposed and did not implement sharing benefits with the surrounding communities during the apartheid era, but in post-apartheid South Africa, the group *did* look at sharing benefits with the surrounding communities through proposals providing them with menial jobs. In mid-2006 the group looked at providing those communities with 'decent' housing schemes outside the protected areas and offering five conservation trainees, not to improve the skills of local communities but to become conservation officers.

6.1. Exclusivity and Nature Conservation

As discussed in the previous three chapters, exclusivity in nature conservation discourses involves the separation of local communities from the affairs of protected areas and from the benefits that accrue from nature conservation as a whole. Such an approach seems to persist even today. On 20 April 2007, the manager of the Cape Nature Business Unit in the Western Cape, Gail Cleaver, confirmed that the provincial government of the Western Cape had endorsed the proposal by the Provincial Minister of Environment, Planning and Economic Development (Tasneem Essop) on 24 May 2006 to develop Driftsands as an exclusive nature reserve: excluding the on-site and the surrounding communities. The proposal aims to relocate Driftsands' two informal settlements (Green Park and Los Angeles) from the site's routine of disasters (City of Cape Town, 2006: 2); from the space of informality, invisibility, limited public services, of inconvenience and uncertainty to the appealing space of empowerment and availability of public services. It also aims at regulating the access of the surrounding communities to the reserve.

Before discussing the essence of Essop's proposal, it is important to highlight the national, regional and global reasons behind the call for excluding local communities from protected areas. During colonialism in South Africa (Chapter 3), African

communities were excluded from game reserves to maximise whites' benefits from existing natural resources (Carruthers 1993); reserves were established to control access of local communities to natural resources (Houghton 2004).

On a regional scale, exclusivity was normalised in Africa's former colonial conservation policies. For instance, Mburu and Birner (2007) trace back the colonial wildlife policy in Kenya, "which placed emphasis on the preservation of land occupied by wildlife and led to the creation of numerous National Parks and Reserves. This policy was possible because the local communities never participated in the establishment of the protected areas; the policy neither provided for their interests nor gave them access to wildlife benefits" (Mburu and Birner, 2007: 380).

On a global scale, millions of indigenous people are excluded by being displaced from their places of origin for the sake of conservation. Mark Dowie argues that "millions of indigenous peoples around the world have been pushed off their land to make room for [not only] big oil, big metal, big timber, and big agriculture companies, but [also] they have been displaced for a much nobler cause: land and wildlife conservation. In the early twentieth century, biologists barely noticed the existence of indigenous people. They were, as one naturalist noted, "part of the fauna" (Dowie 2006).

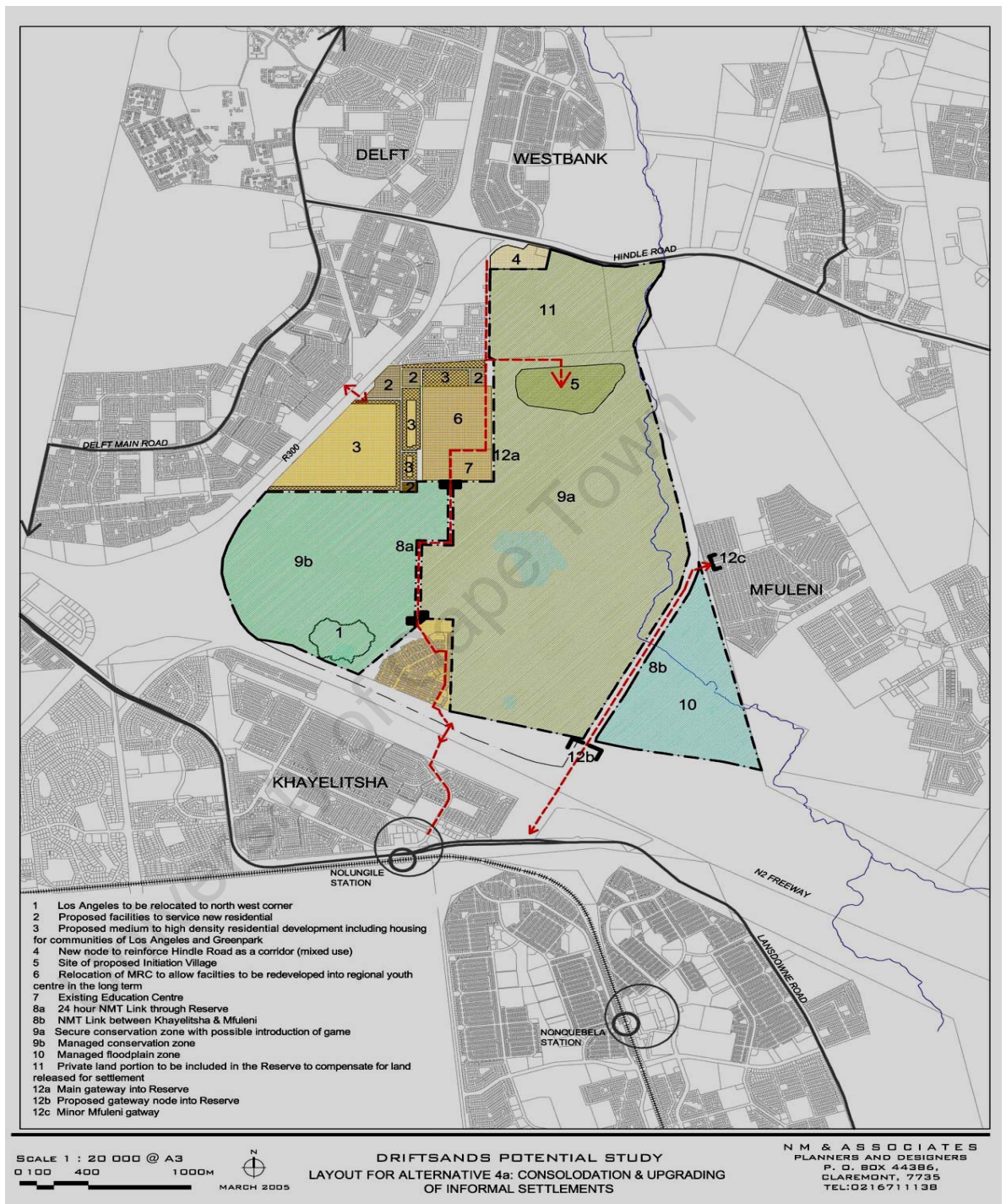
In the past, exclusivity at DNR was part of the policy of segregation (see Chapters 4 and 5). In addition, DNR conservation groups excluded the on-site communities from the "life skills workshops" provided at Driftsands Environmental Education Centre and ignored their perspectives in conservation discourse. Currently, Essop's proposal (see Figure 6.1) for DNR also suggests voluntary relocation for the residents of Green Park and Los Angeles from the reserve. This implies that Los Angeles and Green Park will be landscaped by 'indigenous' vegetation. Furthermore, cattle grazing, harvesting fuel wood and access to tourism will be negotiated. By accepting this proposal, both communities will lose their right to their residency and their access to the reserve to become part of the regulated access of the surrounding communities. Both informal townships will be fenced off from the reserve, like the rest of the surrounding communities. Such an exclusionist proposal is naturalised among global conservation models that call for the fencing of poor communities from protected areas in order to conserve nature and to 'empower' the surrounding communities.

Moreover, conservation not only led to displacement of millions of local people but also intensified poverty among communities. Local communities at the Kosi Bay Nature Reserve in KwaZulu-Natal were forcefully removed from the reserve, and therefore have been “transformed from independent and self-sustaining people into deeply dependent and poor communities” (Dowie 2006). Similarly, the conservation movement in Bhekabantu reserve/Embangweni also led to the dispossession and impoverishment of the local community. The people of the Bhekabantu reserve/Embangweni had also “to leave all the resources that could allow them to earn a living.... Only women were allowed to go back in for the purpose of fetching water only.” Men can only enter the reserve when there is no woman in the family to fetch water, but they will be thoroughly searched on entry. Grazing lands were rezoned and pans and rivers were fenced to protect the game. Access to building materials for the construction of houses was also prohibited” (GEM Monitoring 1994: 4).

Indeed, Essop’s exclusionist proposal is in line with global environmental views, which are moving away from the ideological principle of pure conservation of the 1990s and the subsequent focus on allocating intangible benefits to communities surrounding protected areas. Today the focus is on achieving fair and equitable distribution of intangible benefits to the surrounding communities of protected areas, which might help those communities to address some of their social challenges. Consequently, the future of nature conservation discourses locally and globally is likely to have more social weight in the process of constructing nature.

Essentially, the principle of exclusion is naturalised, based on the inconvenient co-existence of nature and society, and voluntary and induced resettlement of the on-site communities to beyond the proposed new boundaries of DNR. The appealing part of the DNR proposal is the offer to generate four positive outcomes for the site’s communities and the natural environment to: mitigate Los Angeles’ vulnerability to flooding. Meanwhile, Green Park is also vulnerable to flooding “in every rainy day” (Interview, Official from DNR, 20 May 2007); rehabilitate the wetland and dune areas occupied by Los Angeles; achieve security of tenure for Green Park and Los Angeles; and provide both housing schemes with public services (eg, schools, a clinic, a library, a post office, a multi-purpose hall and sports fields).

Figure 6.1. Lay out for consolidation and upgrading of Driftsands' informal settlement



Source: N M & Associates Planners and Designers 2006

It was inconvenient to have squatters living on the site as they disturbed its natural environment. Most parts of the reserve (and much of the adjacent area too) are moderately to heavily disturbed areas by a combination of frequent fires, alien plant invasions, grazing, illegal dumping and mechanical soil disturbances (often associated with infrastructure developed by the City of Cape Town). These inconvenient disturbances have occurred primarily in the last thirty years, with dramatic increases in the frequency of fires, dumping and grazing in the last fifteen years (Nick Helme Botanical Surveys 2006). This implies that these “inconvenient disturbances” of the DNR nature environment have been caused by three agencies. The mechanical soil disturbance is caused by the City of Cape Town. For example, “sand was mined in 1999 for the Khayelitsha major housing development [which] has led to the complete destruction of unique dune veld in the area” (Low, 1999a). The disturbance to the landscape caused by alien plant invasion is not blamed on specific individuals as the origin of such species cannot be easily traced. The dramatic increase in the frequency of fire, dumping, and grazing in the last fifteen years has been caused – the text suggests – by the on-site communities after their move from Crossroads to Driftsands.

Currently, Driftsands on-site communities disturb the site’s natural environment by dumping and burning solid waste due to their lack of public services. From 1994 onwards, they were recognised as informal settlers, ‘squatters’ in the discourse of the apartheid provincial government. As such, they were entitled only to limited public services (communal water taps and toilets). The site never had schools, clinics, libraries, post offices, community houses, and sport fields (City of Cape Town 2006). The Driftsands conservation group campaigned against the negative impacts of human beings on the natural environment of Driftsands, arguing that: impacts on the settlements are several-fold, including human waste, grazing, and dumping rubbish” (Low 1998a: i). Meanwhile, the CCT provision of services (solid waste collection) is limited to Sikhumbule only where “solid waste disposal (household and garden) within Driftsands’ three settlements is via waste containers in Sikhumbule and burning/burial in Driftsands (Los Angeles) and Green Park” (Setplan 1998: 19). Therefore, it was the absence of the provision of services by the CCT for Green Park and Los Angeles that led to pollution of the natural environment of Driftsands, and not vice versa. But it is a survival practice to dump and burn refuse and therefore ‘disturb the natural environment’ of DNR. There is no municipal agency that collects refuse from the Driftsands informal settlements of Los

Angeles and Green Park. Therefore, the community members have to deal with the waste in their 'primitive' way, which is perceived by conservationists to be polluting nature.

Indeed, Driftsands conservation discourse revolves around maintaining and even intensifying poverty among Driftsands informal communities. Parts of their impoverishment derives from their lack of access to roads, bridges over the N2 and R300, taxi ranks, a police station, proper sanitation and refuse collection system, fire department and electricity, hospital and clinic, schools, crèches and a library; and they lack income-generating opportunities. For example, the absence of electricity leads to additional transport expenses, argues Mtati (28 February 2007). The dwellers pay R7 for transport to charge their cell-phones at Mitchells Plain and Delft garages (gas stations), where they pay R10 to charge their phones, and the next day they pay another R7 in travelling costs to collect their charged phones. In total, it costs these dwellers R24 to charge their phones once. These phones are important for job hunting in urban areas.

Meanwhile, forms of exclusion have changed over time in DNR. Essop's proposal changes the form of exclusion at DNR from the negative – where the communities faced informality, vulnerability to flooding and invisibility – to the positive – where their future exclusion seemed appealing. At the present time, Driftsands on-site communities are living in invisible and informal townships with limited public services. Both Los Angeles (see figure 6.1: area 1) and Green Park (see figure 6.1: area around number 9b) are hidden by the vertical concrete slabs of the R300 and the N2 and by the DNR hills. In addition, the voices of the communities are hardly heard in Driftsands debates. Their voices are heard only when they require answers (Interview, Mtati, April 2007). Neumann (1998: 30) argued that “local voices in the process of nature protection are suppressed, principally because of their lack of access to the institutions that generate historiographies or they have been permanently silenced”. Meanwhile, Essop offers a formalised and serviced housing scheme for both informal settlements, provided they are excluded then from DNR.

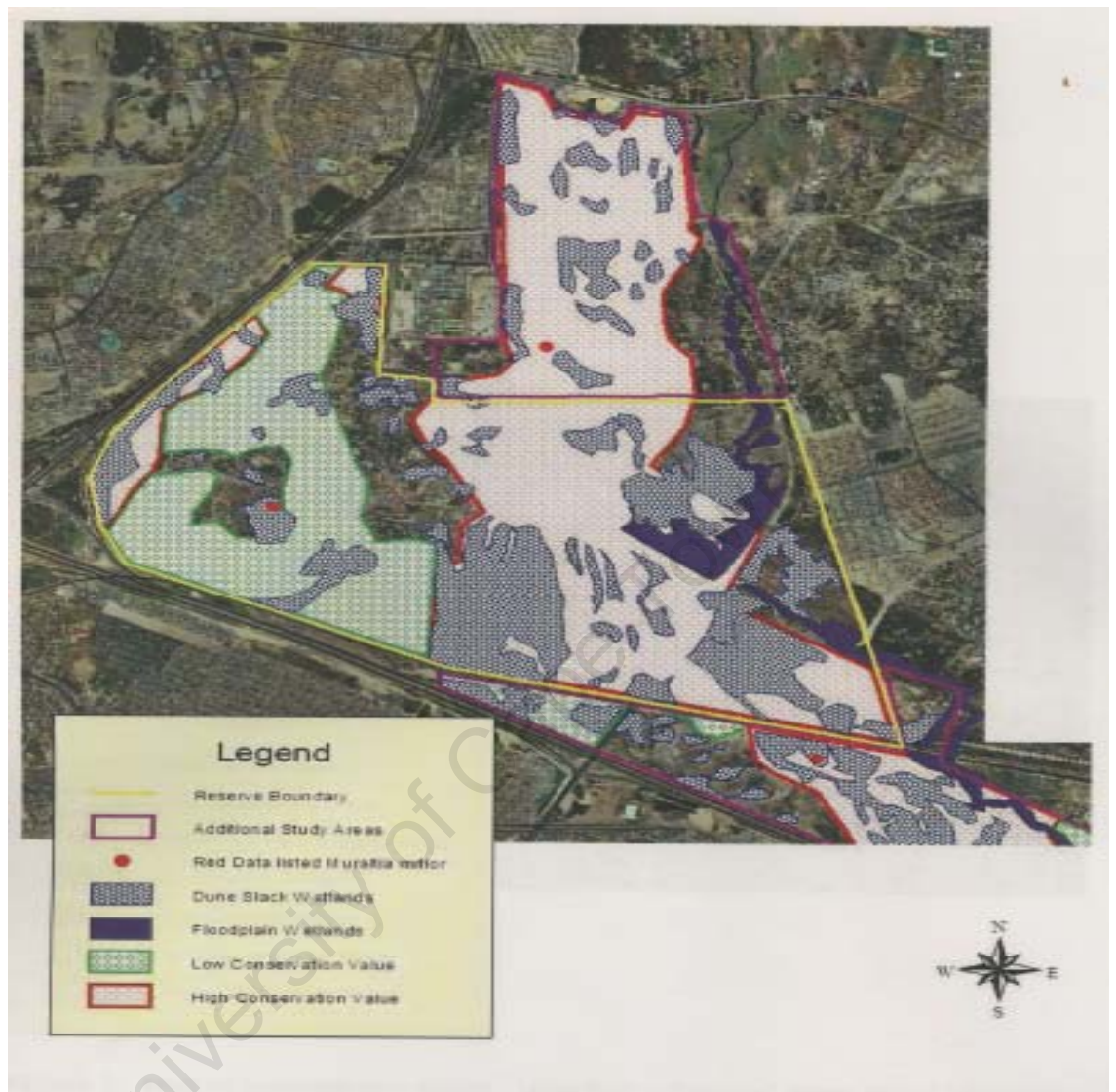
Similarly, the vulnerability of local communities living below the flood line was also exploited to achieve their exclusion from DNR. The two informal settlements were directed to settle in areas “vulnerable to flooding” (City of Cape Town 2006: 2), particularly in the rainy season. However, it is impractical for local government to

provide public services to regularly flooded areas; communities should be relocated to areas above the flood line. By following this strategy, local government and the DNR conservation group naturalise the status quo of emergency and temporality among the on-site communities to encourage voluntary relocation.

Moreover, the exclusion of the on-site communities from DNR through voluntary resettlements is based on their desperation. First, they have been severely impoverished since they moved to Driftsands in the early 1990s by the continuing status of temporality, a series of ‘natural’ disasters, emergencies, inconveniences, and an uncertain future (see also Chapter 5 on the maintenance of poverty by official conservation policies). They also have been promised less impoverished but nevertheless remote areas. The City of Cape Town, Ministry of Environment, Planning and Economic Development, and Cape Nature promise them secure tenures and public services. However, the framework of these promises is undefined. It is possible that the provision of services may begin only after the completion of the coloured housing scheme at the west portion of the reserve. In addition, achieving exclusion corresponds with achieving profitability (expansionism in this case). The following attached figure (see Figure 6.2) from Cape Nature shows that the optimum plan is to expand DNR towards the east and the south. The yellow line is the existing boundary of DNR. However the red line marks the proposed boundaries of DNR. Within both boundaries there is no evidence of human settlements.

In addition, exclusion at DNR is influenced by the existing local conservation perspectives. Based on the site’s vegetation sensitivity study, commissioned by Cape Nature, both Los Angeles and Green Park are located within areas of ‘Low Conservation Value’ with “no record of rare species in these areas and none being likely. [Actually, Cape Nature consultants suggest that] if any form of development were to be considered anywhere in the study areas, this is clearly the area where this should be focused” (Nick Helme Botanical Surveys, 2006: 7, 8). This implies that conservation at DNR is not an essential goal, since neither of the communities is settled on areas containing rare species.

Figure 6.2. DNR vegetation



Source: Nick Helme Botanical Surveys 2006

Overall, DNR supports only one rare species (*Muraltia mitior*), which suggests that there is no need to conserve all 650 hectares. This researcher's view, therefore, is that the drive behind conserving nature at DNR is partially conservational but mainly political. DNR "was identified as a Core Flora Conservation Site within the City of Cape Town" (Maze and Rebelo 1999), primarily because it is considered by some conservation groups to be one of the largest remaining patches of Cape Flats Dune Strandveld, and not because it displays special botanical elements. The reserve has never been known to support any unique floristic elements, nor even any significant populations of rare plants (McDowell

and Low 1990). In fact Rebelo (1990) lists only one rare species (*Muraltia mitior*) “that is validly recorded from this reserve” (Nick Helme Botanical Surveys 2006: 1, 8) (see Figure 6.2). Therefore, from a strict conservation point of view, it is not necessary to protect the entire site for the sake of a single rare species; it is more likely that the aim is to support a hidden political agenda.

The question then is what *is* the current political agenda behind conserving nature at DNR? Conserving nature at DNR contributes to three political gains: first, it puts an end to further squatting at the site. Secondly, it regulates the movement of poor people (the destructive agencies) and biological resources from and into the reserve. Thirdly, it frees Driftsands officials from addressing the contemporary challenge (faced by conservation societies globally) to normalise the existence of poor communities within protected areas or to restore human existence with nature. Driftsands officials overcame this dilemma by establishing a closed conservation system and by changing the status of the two informal on-site communities to formal, neighbouring communities, similar to the other one million poor people living in close proximity to the reserve.

Although the DNR proposal is based on a fallacious argument, it conforms normality to the contemporary universal conservation discourse, which endorses the exclusion of impoverished communities from protected areas. Both discourses call for such exclusion and for the exposure of these communities to intangible packages of benefits (see section 6.3). The point of departure for this argument is “an understanding of the local costs of conservation in low-income nations [and social groups in the case of DNR]: those who bear the costs of conservation typically are poor and those who enjoy the benefits typically are rich” (Ferraro 2002: 262). Haywood (2007) for example, looked at some game reserves in South Africa that reverted from commercial farms to indigenous bushes where indigenous species are reintroduced. However, this implies that Indigenous people are “either excluded by game fences and economics, or become semi-visible servants working in lodges which are often Hollywood inspired versions of colonial fantasy architecture” (Haywood 2007: 195).

Eventually, relocating DNR on-site communities to the north-west corner of the site and fencing it will dilute their potential to benefit from the DNR. Their potential will be similar to that of the one million poor people living within the surrounding areas of

DNR. Their future probably will be in line with that of Mburu and Birner's (2007) argument: "the local communities, who bear both the direct and indirect costs of living with wildlife, remained excluded from direct cash benefits that could be derived from wildlife living on their private and communally owned lands" (Mburu and Birner 2007: 381).

Overall, exclusionism is universal and is based on blaming "the poor for environmental degradation, ignoring the role of other processes and actors at various scales in causing environmental degradation" (Gray and Moseley 2005: 9). Exclusion of communities from protected areas forms part of the universal phenomenon of exclusion which holds that nature cannot be conserved in the presence of local communities, and that local communities pollute the natural environment. Such a perception persists among international organisation. For example the World Bank report in 1996 states that "poverty is also a factor in accelerating environmental degradation, since the poor, with shorter time horizon ... are unable and often unwilling to invest in natural resources management ..." (Gray and Moseley 2005: 9). Likewise, former US President George W Bush confirms the universalised view on negative interaction between the poor and the environment. He quoted Indira Gandhi's remark that poverty and need are the greatest polluters and stated:

People who lack food and shelter and sanitation cannot be expected to preserve the environment at the expense of their own survival. Poor societies cannot afford to invest in cleaner, more efficient technologies. Indira Gandhi spoke of poverty and need as the greatest polluters. The long-term answer to environmental challenges is the rapid, sustained economic progress of poor nations (Bush 2005).

Bush's argument, though persuasive, is based on weak grounds: he twisted Gandhi's remark to serve one of his own agendas. Poor nations and poor people own less, consume less, and produce less waste than industrialised countries. Actually, poor communities contribute in recycling the waste of rich communities. In addition, poor people and poor nations consume 'organic' food and therefore produce degradable waste, all of which constitutes degradable 'resources'. They 'dirty' the nature environment rather than pollute it. Such an approach seems to be reflected in the US intention to address poverty, diseases and environmental threats on the African continent while

simultaneously calling for increasing Africa's exports and import to and from what Said called the 'Occident'.

6.2. Co-managing nature reserves

The argument of this section suggests that contemporary global conservation discourses emphasise that it is unsustainable to exclude local communities from managing protected areas. Conservation groups argue that it is sustainable to co-manage protected areas with local communities through involving them in planning and implementing conservation projects of protected areas to reduce their threat to natural environments. By definition, the term co-management refers to joint decision-making by the state and communities (or other interest groups) about one or more aspects of natural resource access or use. The term is used to signify local political claims to the right to share resource management power and responsibility with the state. Co-management is a situation in which two or more social actors negotiate, define, and guarantee amongst themselves an equitable sharing of the management functions, entitlements, and responsibilities for a given territory or set of natural resources (Castro and Nielsen 2001). Before analysing the emphasis of contemporary global conservation discourse on the notion of co-management, it is worth explaining what co-management of nature resources means and the different types of co-management that exist. Co-management has gained prominence due to the interest in participatory forms of natural resources management (Parkins and Mitchell 2005, Plummer and Fennell 2006). In the world of democracy, the involvement of communities in managing natural resources "is of fundamental importance because it is consistent with the principles of participatory democracy, improves planning and decision making, helps resolve conflict and makes difficult political decisions more acceptable" (Plummer and Fennell 2006: 529).

The term co-management or the sharing of management, power and responsibility usually refers to a dual-link between community and government (Berkes 2004) in the participatory forms of natural resources management. But the participatory forms of natural resources management are expressed in different ways to describe one thing. Literature on natural resources management reveals similarities, differences and, at times, imprecise use of three terms: partnership, collaboration and co-management. The

final category is particularly gaining recognition as a distinct model for environmental management (Plummer and FitzGibbon 2004). Moreover, this conception of co-management does not fully capture the complexities of cross-scale interaction between communities and government, which is why co-management of natural resources may include multiple horizontal linkages. Berkes's (2004) analysis suggests that a typical conservation case may involve (1) three levels of organisation, community, regional or national, and international; (2) a number of local groups at the intra-community level; (3) a variety of NGOs and government agencies; and (4) one or more international groups. Hence co-management in practice is not limited to local communities and government agencies sharing management, power or responsibilities of a nature resource.

Therefore, the nature of the co-management dynamic is defined not only by governmental agencies and local communities but also by donors, NGOs and the private sector. "In fact, community participation and the sharing of benefits have become a condition for funding by most donor agencies" (Ramutsindela 2004: 106). Generally, the examination by Plummer and Fennel (2006: 944) of more than 100 articles and chapters on co-management published since 2000 suggests that not long ago environmental social theory was "characterized by a lack of theoretical approaches, [and] the current situation, perhaps, represents an overload of theory."

Literature on natural resources management reveals various forms of co-management that involve local communities. Co-management "is the idea that responsibilities for allocating and uses nature resources are shared among multiple parties" (Plummer and Armitage 2007: 62). The attempts to reconnect local communities to protected areas revolve around the need to repair the damage that protected areas caused to local population and vis-à-vis; to create conducive conditions for the protection of biodiversity. Local communities in this sense play the role of gateways (social fencing) to protected areas. Furthermore, local communities are expected to provide needed services for visitors, economic and political support for the protected areas and their natural resources. This is to say that conservation involves local communities to build tourist infrastructure in protected areas (Ramutsindela 2004). In addition, forms of co-management consider local participation in decision making, which appear to Castro and Nielsen (2001) to be very limited. However, co-management agreement among indigenous communities, state and other stakeholders "offer substantial promise" as a

way of dealing with conflicts over natural resources through participatory and equitable management. It may lead to strengthening of the state's control over resource policy, management, and allocation. Instead of contributing to local empowerment, such arrangements may further marginalise communities and resource users (Castro and Nielsen 2001). Moreover, local communities are reported to be involved in planning management plans for protected areas, in developing ecological guidelines to regulate hunting, fishing, grazing, wood cutting, and agricultural activities in order to monitor and regulate local communities interaction with the nature environment of protected areas in particular and natural resources in general. Finally local communities are involved in conducting ecological research.

Co-management is a preventive measure. The essence of such a preventive vision appears in the conservation discourse of Nigeria. The Nature Conservancy argues that the roles of local communities in co-managing Abuja National Park in Nigeria suggest that “the sustainable conservation of the proposed park can only be achieved if a management scheme that will integrate, empower and involve the local communities in the planning and implementation of the park management programme is put in place” (Gbadegesin and Ayileka 2000: 89).

Furthermore, the Nature Conservancy emphasises also the sustainability of involving local communities in planning and implementing forest guard programmes and regulatory guidelines for local communities. In Nicaragua, the Conservancy has worked with the communities to establish a forest guard programme and to develop ecological guidelines that define appropriate uses for different zones of the reserve, including rules for hunting, fishing and agriculture. Last year the Nicaraguan parliament passed legislation outlining how indigenous communities can win title to their land. “Much of that language was based on the work the Conservancy and its partners have carried out since the early 90s” (The Nature Conservancy, 2007).

In addition, Anstey (2001) discussed the Tchuma Tchato community conservation initiative in Mozambique in 1993, suggesting that conservation groups employed a limited view of co-management of protected areas. The outcome of two years' negotiation between two governmental conservation officers and local communities was setting up of informal 'community councils' elected democratically; reaching a decision

that the council would control illegal hunting and manage any economic revenues earned; and an agreement that the council would treble the trophy fees for hunting in specific areas and allocate a portion of those fees to local communities. By 1995 almost all illegal hunting had ceased and in 1996 the community earned US\$15,000 from trophy fees. Moreover, local communities recovered a sense of local control over their future, reflected in the name they gave to the initiative of Tchuma Tchato (Our Wealth).

In addition, the WWF and the World Bank co-guard forests with indigenous communities. “Through a World Bank loan to the Nicaraguan government, WWF shows via on-the-ground implementation to indigenous communities, that [the] Forest Stewardship Council-certified forest management can compete with other land uses. This work is leading to a paradigm shift in forest management in the region, by increasing local control over resources, and a reduction in the threats to biodiversity. It is also leading to the development of several key community forest management protocols” (WWF 2007). The outcome of this project is increased local control over forests resources, a reduction in the threat [of local communities] to biodiversity, and the broadening of the WWF-World Bank protocol on subjugating local communities to sustainable conservation of forests.

At the Chamela-Cuixmala Biosphere Reserve in Mexico, Pujadas and Alicia Castillo (2006) report on the persistence of the 1970s management model of nature reserves, which limits its activities to protecting the nature environment; conducting ecological researches; and maintaining the status quo that “no human communities live inside the reserve” (Pujadas and Castillo 2006: 63). However, “the perspective presented in government documents recognizes the need to develop strong links with the human communities surrounding the Chamela-Cuixmala Biosphere Reserve and to support the development of sustainable forms of managing ecosystems” (Pujadas and Castillo 2006: 65). Nevertheless, Ejido San Mateo claims that impoverished local communities living outside the reserve “obtained no benefits from the University’s presence apart from a few jobs for local people at the research station” (Pujadas and Castillo 2006: 66). The researcher reports that this Biosphere Reserve is managed by a local NGO and the University of Mexico.

In South Africa, the WWF conservation discourse claims to plan and implement WWF Eco-regions programmes in conjunction with local communities to ensure that some nature reserves are 'living landscapes'. WWF South Africa is engaging the people of the Karoo "to secure the birds' overall status and reduce threats" (WWF-SA, 2006: 68) through the WWF Eco-regions programme, "the WWF plays an important role in ensuring that these regions remain 'living landscapes' from which communities can benefit" (WWF-SA, 2006: 68). Essentially, the WWF believes that people resent and vandalise the natural environment (WWF International, 2002).

In the Western Cape, WWF aims to co-manage eight indigenous gardens. In doing so, it aims to "awaken an environmental awareness amongst the impoverished peoples living in this Biosphere Reserve, to evaluate the success and to facilitate community buy-in to the concept of growing and using indigenous crops, crafts and medicinal plants as a substitute for expensive commercial products" (WWF 2007) and to prevent squatters from poaching in the Macasar nature reserve near Driftsands. The result of the WWF initiative of these eight 'indigenous domestic gardens' in the Overberg region, and the Fynbos Biodiversity hot spot in the Western Cape, is firstly to sustain a progressive establishment of the reserve; secondly, to block local communities from poaching in the Macasar nature reserve; and, thirdly, to test WWF's programme of facilitating community buy-in to the concept of growing and using indigenous crops. In short, the nature of WWF's programme is "top-down", built to further WWF's goals, and not based on local aspirations.

A DNR conservation group suggests co-managing the reserve with local communities by "capacitating officials' initiatives" such as clearing the reserve of alien vegetations, building a trail within the reserve, and attending environmental education programmes. Currently there are projects that shape the future of DNR and therefore the human-nature conservation interface. These include the alien-clearing project, funded by the Ministry of Water Affairs and Forestry Affairs, which is related to the 'Working for Water Programme:' where five contractors and 63 community members are involved in clearing alien vegetation within the reserve. The second project by the Ministry of Environment, Planning and Economic Development (DEPED) looks at combining nature conservation programs with those of poverty relief ones. The government has granted DEPED R8m to invest in Driftsands for upgrading the environmental education centre;

building a hiking trail within the reserve, which is linked to potential guiding opportunities for tourism, ecotourism etc; building an amphitheatre, which will be used by Cape Nature and the centre during environmental education programmes. It will also be used for open-air concerts to generate income for the reserve and the surrounding community and will provide environmental resources for school groups and local communities who are likely to use the facility; and empowering individuals in various fields: finance, marketing (there are five community conservation trainees). Some Driftsands local community members have been up-skilled to take up jobs in the community, facilitating projects, running their own projects, etc; building an initiation village at the site. Gail Cleaver claims that a safe and healthy initiation school will be built in a very remote area at the reserve; a part of the reserve will be de-proclaimed for housing; and g) Cape Nature is building a summary document with Driftsands local communities to hand a new version of building a cultural emporium at the site to the Minister of Sports and Culture. The new version is called a wilderness centre. It will be dedicated to tourism, a clinic and traditional healers. The project is aimed for completion in 2010.

To conclude, co-management of protected areas is in its early stage of development. Co-management arrangements can offer a socially and environmentally appropriate means of increasing local participation in decision making involving natural resources (Castro and Nielsen 2001). But in practice co-management has many meanings, some of which are negative for local communities, no matter how appealingly they are presented.

6.3. Sharing benefits with local communities

The term 'sharing benefits with local communities' is also common among conservation groups, and is expressed in the language of socio-economic development. Currently, both the WWF and the Nature Conservancy promote 'compatible local economic development' among neighbouring communities of the Valdivian Coastal Reserve of the coastal temperate rainforest in southern Chile (WWF 2005). Furthermore, the WWF in New Caledonia and 'Kalimantan of Indonesia' (WWF 2007b) speaks of ensuring "long-term management of natural resources in a way which contributes to New Caledonian communities' social and economic development" (WWF 2006, October 20).

The aim of this section is to engage the idea of ‘sharing benefits with local communities’. Practically this section aims to analyse global models of nature conservation and that of DNR during the two years, 2006 and 2007, in terms of their emphasis on the issue of sharing benefits with local communities. The study finds that the current and the future projection of DNR nature conservation discourse on sharing benefits with local communities are central to the hegemonic contemporary global “models on packaging local community benefits from protected areas. [Likewise,] most of the benefits that should accrue to communities in southern Africa are pre-determined in accordance with models that have been constructed at the global level” (Ramutsindela 2004: 106).

Conservation models popularise the allocation of pre-determined, intangible, and appealing benefits to local communities from protected areas. They argue that it is strategic to share benefits with local communities in order to compensate local communities for their losses from the establishment of nature reserves; sustainably co-manage the reserve once created (section 6.2); and to universalise the concept of separating local communities from protected areas and for regulating their access to conservation areas. Such approaches towards nature reserves are hegemonic. Its appealing language of sharing benefits, strength and future opportunities for all dominates the one of losses and threats to local communities. Furthermore, the discourse of fencing, physically separating, and regulating access of local communities to and from protected areas dominates the one of reinserting local communities into protected areas.

The universalising of these global conservation models is evident in the Driftsands nature conservation discourse. At DNR, the general manager of Driftsands Environmental Centre (Ian Allen) implements the guidelines suggested by top officials from the Western Cape Nature Conservation Board (Interview, anonymous, 20 May 2007). The emphasis is on the universal language of ‘conservation economy’ and ‘local economic development’, which is developed by WWF. Conservation literature suggests that “the notion and the practice of local economic development came from the notion of community based conservation which was developed by WWF in 1992” (Klein et al 2006: 453). This idea developed further in the 1990s, and the so-called ‘community based natural resource management’ model became the dominant approach by the turn of the century” (Adams and Hulme (2001) cited by Klien et al (2007: 453). “In the ICDP

model the need for local economic development and the recognition of various social, economic, and cultural values are included as an integral part of conservation; local communities receive benefits for their loss of access to protected area resources” (Klein et al 2006: 453).

Metaphorically, community-based conservation is the foundation for sharing of benefits with local communities. Roe’s notion of narrative and counter-narrative characterises the evolution of the ideology of community-based conservation as laying the foundation for sharing of the benefits of protected areas with local communities. “Ideas of the need to preserve wild species, exclude humans and minimise human influence (a narrative of ‘fortress conservation’) have been supplanted by a counter-narrative that we term ‘community conservation’, which has been adopted as a central element in global conservation discourse and policy” (Hume et al 2001: 10). Roe’s argument implies that sharing benefits with local communities of protected areas is the foundation for redressing local community losses from living in and around protected areas and for sustainable managing protected areas.

In addition, Roe’s argument is that sharing benefits is also a preventive measure. In order to prevent harming nature reserves by local communities’ unregulated practices, conservation groups share economic opportunities with local communities. The concept of a biodiversity economy is one where local economic development does not harm biodiversity, and where biodiversity resources are developed into economic opportunities (Crane 2006: 1040). Crane’s argument implies that it is indeed necessary for conservation societies to facilitate creating benefits for local communities from protected areas.

In fact, global nature conservation models demand that benefits be shared with local communities to sustainably manage protected areas (Hulme and Murphree 2001). In his chapter, ‘Necessarily Vague’, on the political economy of conservation in Mozambique, Anstey (2001) provides three reasons – and the Earth Summit of 1992 demonstrates a fourth – to rationalise community participation. The first reason is to overcome the state’s weak regulatory, monitoring, and enforcement capacity and the increasing conflict with local people: to co-benefit local communities in order to institutionalise progressive conservation practices. Second, in some cases it is profitable for the state to

institutionalise the ‘narrative’ of community participation. It seems that signing up for the ‘narrative’ of community conservation was a means of increasing access to aid, funds and technical assistance at a time when conventional sources of support for forest and wildlife sector management were available: states co-benefited local communities to attract more foreign funds. Third, the early 1990s was the time when some NGOs, donors and individuals within the conservation area in Mozambique were promoting non-conventional approaches to natural resource management based on regional experiences: states started to co-benefit local communities in Africa as it is the common practice in the region. Finally, at the Earth Summit in 1992, conservation groups proposed sharing benefits with local communities to employ their traditional knowledge, innovations and practices in order to conserve biological diversity, including species diversity. The Summit adopted the Convention on Biological Diversity, which “recognizes the close dependence of many indigenous communities on biological resources and the desirability of sharing the benefits (The United Nations High Commissioner for Human Rights 1996). Therefore, global models encourage co-benefiting local communities to make use of local nature conservation knowledge.

In support of global conservation NGOs, scientists of the Nature Conservancy (NC) rationalised the general view of sharing management and benefits with local communities of protected areas, in order to employ their indigenous knowledge, practices, and innovations. In this regard, “satellite images of a one-million-acre region were given to indigenous communities in the Amazon, and community members used coloured pencils to highlight landscape features, animal and plant populations, and environmental stress points. The community was able to show conservationists where they traditionally hunted, where they noticed declines in certain animal populations, and where villages had stood and moved over the years” (The Nature Conservancy 2007).

Furthermore, the NC handed cameras to local communities “to record their daily interactions with nature”. The photos, along with personal stories, were given to conservation site planners, public officials and other stakeholders allowing the communities to have a voice in conservation planning. The NC thereafter built a database to archive photo-voice and scientific data that would “help guide its conservation efforts in northwest Yunnan” (The Nature Conservancy 2007).

Bear in mind that before the 1990s, international conservation societies did not consider allocating benefits to local communities from protected areas. Empirical studies show that “protected areas in Africa [were] usually established without the participation or consent of local people and many times involved forced removals (Hulme and Murphree 2001: 32). Currently, conservation societies discuss the allocation of ‘fair’ and equitable benefits to local communities from protected areas. In March 2006, the Conference of the Parties to the Convention on Biological Diversity, adopted article (9.2.1) to frame the boundaries of allocating benefits to local communities. The article suggests “developing and implementing ways and means to share in a fair and equitable way with indigenous and local communities the benefits arising from use of their traditional knowledge, innovations and practices” (The Eighth Convention on Biological Diversity 2006: 16).

6.3.1. Reasons behind sharing benefits with local communities

Indeed, it is strategically prudent for global conservation societies to encourage the sharing of benefits of protected areas with local communities. Hulme and Murphree (2001) analyse conservation cases in Uganda to argue that it is not only strategic to share these benefits but also inevitable. The aim is to “allow consumptive use of resources within national parks. The high population densities around many parks made this inevitable”. At Mgahinga and Bwindi Forest Reserves, “local communities made it clear that support [for conservation] would only be given if resources used within these areas were permitted to continue. [In response to such a conditional statement] the UNDP agreed, and a policy allowing up to 20 per cent of the area of a national park to be used for sustainable resource harvesting was adopted” (Hulme and Murphree 2001: 66).

The first strategic advantage of sharing benefits with local communities is to reduce the costs of law enforcement in protected areas, so that the costs may be offset by savings, argue Hulme and Murphree (2001: 33). To achieve conservation, it is necessary to co-manage protected areas with local communities and co-benefit them from protected areas once they are established, argued Zoologist 1 (Interview 23 April 2007). As a result, nature conservation societies ceased the practice of hiring community guards with guns to prevent local communities from accessing and using natural resources within protected areas. It also makes strategic sense, and is far more affordable, to share benefits

with local communities than to police one-fifth of the world population living in and around protected areas. The IUCN figure suggests that there are “1.1 billion people – 20% of the world’s population – living within the 25 biodiversity hotspots” (IUCN 2007).

Second, it is strategically advantageous to share benefits with local communities to avoid dire consequences in famine situations. In desperate times poor local communities target biological resources of protected areas to combat hunger and poverty. Therefore, it is wise to allocate benefits to local communities to empower them and prevent unregulated access to biological resources of nature reserves Zoologist 1 (Interview 23 April 2007).

Third, the advantage of sharing the benefits with local communities helps avoid losing the land to housing. In the Western Cape, the WWF proposed sharing benefits with local communities to prevent squatting in protected areas. In its initiative for community gardens at Macasar Nature Reserve, north of DNR, the WWF and involved conservation groups called for community participation in managing these gardens in order to block the “emergence of squatters and poaching [from the reserve’s] natural resources” (WWF 2007). By doing so, the conservation group coerced local communities to conserve the natural environment of Macasar Nature Reserve. Thereafter, local communities were expected to “recognise the significance of their natural environment ... [by] bringing [the idea of conserving the nature environment] closer to their everyday lives through the development of horticultural skills to promote conservation”. The conservation group’s aim was to make local communities protect the assets and boundaries of the reserve, so they would not dare to squat there themselves.

Fourth, it is strategic for global conservation societies to promote sharing benefits with local communities as this allows them to enlarge conservation areas. Before the ‘transfrontier’ concept was adopted, nature reserves formed an insignificant proportion of the earth’s land surface. Currently, protected areas cover a significant portion of the earth’s land surface. “From a mere handful in 1900, the number of protected areas grew to over 44 000 covering more than 10% of the earth’s land surface at the end of the past century” (IUCN 2007). Such a trend is mirrored in South Africa. “South Africa set itself the target of increasing land under formal conservation from 5.4% in 1994 to 8% by 2010, and its marine protected areas from 11% to 20% by 2010. The country is well

within reach of this target, with close on 400 000 hectares of land having been added to SA's conservation areas since 1994" (South Africa 2004). Likewise, the conservation group at DNR proposes sharing benefits with local communities to enlarge the activity boundaries of DNR. By contrast, in the apartheid era, the Driftsands conservation group proposed sharing benefits with local communities to avoid losing conservation land to housing, industrial zoning, and development.

Currently, the conservation group is looking at enlarging DNR by two methods. The first is to expand DNR from 650 ha to 930 ha (see Figure 5.7, Nick Helme Botanical Survey 2006: 4) and the second is to minimise the land share of Driftsands communities through a campaign to crowd and fence the informal settlements at the north-west section of the reserve. In a sentence, sharing benefits of protected areas with local communities and increasing protected areas characterises the global, national and local discourse of nature conservation. Those three cases indicate that nature reserves grew from a handful to 44,000 in a century; almost doubling the size of nature reserves in South Africa in 12 years and enlarging the size of DNR by almost 50% in 23 years.

Fifth, it is strategic for international conservation societies to share benefits with local communities of protected areas to compensate them for their losses. Following this logic, Anstey (2001) expands on the dynamic of converting local communities' losses to intangible benefits. Anstey refers to the case of the Tchuma Tchato community conservation initiative, which was made by the Mozambican government in 1993 to find a solution to the conflicts between safari operators and the local people in the Bawa area of Tete through a process of community participation in decisions about wildlife use and the distribution of benefits.

Sixth, by compensating local communities with intangible benefits, protected areas are strengthened in terms of finance and control over resources. The above example implies that the council contributed in halting almost all illegal hunting and probably informal fuel-wood harvesting. However, crude exploration at the national level would suggest an annual value of around US\$10 million for illegal bushmeat trade. Estimates of the annual value of informal fuel-wood harvesting in Mozambique by local communities in 1997 was US\$240 million (Anstey 2001: 85). Overall, local communities' benefits of

US\$15,000 per year from trophy fees are insignificant (0.00625 %) compared to their share from the national package of bushmeat and fuel wood.

For example, local communities gained intangible benefits by participating in Gorongosa National Park in Mozambique to compensate for their tenure losses, as evidenced by the activities of this community participation project. 1) Traditional ceremonies were held at the start of the project, showing respect to the original owners of the land. 2) The field workforces were selected from candidates nominated by the traditional leadership. 3) A diplomatic approach was made to those who had settled within the park to arrange negotiated and voluntary resettlement. Law enforcement was also largely mediated through the traditional leadership rather than the formal courts. 4) During a famine local people were permitted to enter the park in rotation to harvest fish.

The result of these activities was a remarkably rapid stabilisation of what had been a highly militarised and over-exploited area (Anstey 2001; Hulme and Murphree 2001). While the local communities of Gorongosa National Park in Mozambique lost their tenures and access to bushmeat and fuel wood, they gained a package of intangible benefits, including traditional ritual rather than formal courts, and the appointment of conservation officers from within the community. This tactic enabled a diplomatic approach towards relocation of local communities, granting them access to natural resources only in case of famine.

Conceptually, local communities' benefits from protected areas are their compensation for loss of their tenure. "When protected areas were declared, governments replaced pre-existing tenure with state ownership. This exclusive ownership led to no community or resource user involvement or benefit flows except through 'theft'" (Hulme and Murphree 2001: 32). Similar experiences resulted from the allocation of benefits for local communities to compensate for their losses of land in protected areas of Sodwana Bay in KwaZulu-Natal, which is managed by Natal Parks Board. The residents' benefits derived from (a) developmental projects and (b) jobs from cleaning alien vegetations, harvesting biological products, guarding protected areas, and (c) engaging in traditional practices at the reserve. Meanwhile, local communities were forcefully removed from Sodwana Bay nature reserves. The support they received took the form of a new school built in the area and they were permitted to harvest ncema. Approximately 1 500 people per day come to

harvest the ncema. In addition, a site at KwaJobe has been zoned as a sacred site, where the people may practise their traditional activities (GEM Monitoring 1994: 8).

Local communities are paid a menial rent in order to compensate for their voluntary losses of land in establishing the protected area. “The key factors found to favour wildlife partnerships include enabling policies, the presence of organizational capacity within user groups, and the access of local communities to benefits from wildlife through land ownership” (Mburu and Birner 2007: 379). For example, The Conservancy admires the work of the African Wildlife Foundation in Kenya, which employed “techniques for protecting private lands [to relocate the Masai ethnic nationalities from Nairobi National Park to its shadow by paying the Masai ethnic nationalities \$4 an acre per year if they leave that land alone [...and permitting] only grazing their own livestock and promising to protect any wildlife. [What the Conservancy calls] to strike a mutually beneficial balance: keep the migratory corridor intact while keeping the Masai lifestyle viable” (Dunkel 2007) is an act of changing the nature of Masai landscape and entitlement from unlimited access and private ownership land to grazing rights only for own livestock and to keep intact the land’s corridors for 28 South African Rand per acre per year.

By contrast, in some cases conservation societies assisted local communities to make up for loses such as gaining title to their ancestral lands. In Nicaragua, the Conservancy reported on assisting indigenous communities in “developing legal claims to gain title to their land. The Conservancy is working with the Mayangna and Miskito people in the 1.8-million-acre Bosawas Biosphere Reserve to combat the threats of colonization, damaging agricultural practices, and deforestation. The Nature Conservancy has assisted the indigenous communities in developing legal claims to gain title of their ancestral lands” (The Nature Conservancy, 2007).

Seventh, it is also strategic to share benefits with local communities to compensate for their losses of access to nature resources. Neumann (1998: 96) observes that a “pattern of resistance to the loss of land and resources access continues to guide local responses to contemporary nature-protection laws and policies”. Meanwhile, the essence of sharing benefits with local communities in no way compensates for the ‘losses of exploitable nature resources to conservation (Hulme and Murphree 2001: 7). In their deconstruction of Lake Mburo National Park and Mgahinga Gorilla National Park in Uganda and

Tarangine National Park in Tanzania, Hulme and Murphree (2001: 7) suggest that such “initiatives can rapidly contribute to the improvement of park/people relationships and can enhance the flow of benefits of local people. However, such additional benefits in no way compensate for the ‘losses of exploitable nature resources to conservation’”. The significance of these three national protected areas does not dismiss the intangibility of local people’s benefits from those protected areas. Rather it confirms that the framework of those intangible benefits are not co-determined by local communities but predetermined by the three parks ‘conservation society’ (Governments, nature conservationists, NGOs, the private sector and donors), who seem to be inspired by contemporary global models of universalised local people’s benefits from protected areas (Ramutsindela 2004).

Overall, the attempt of conservation societies to share benefits with local communities in order to compensate for their losses is a way of polishing gains to hide the actual community losses. This is apparent when the following five dimensions are considered. Nature conservation can lead to the creation of local-community dependency on tourism. The dependency of local communities for their income on visitors to protected areas appears to be a risky business. It worried some Kenyan Masais, who told the author George Monbiot, when informed that the director of the Kenya Wildlife Services had recommended that they keep fewer cattle and make money from tourism instead:

We know there is money to be made from tourism. We already have tourists staying on our lands in tented camps. And, yes, they bring us an income. We don’t need the Kenya Wildlife Service to tell us that. But we don’t want to be dependent on these tourists. We are Masai and we want to herd cattle. If we stopped keeping cattle and depended on tourists, we would be ruined when the tourists stop coming (Monbiot cited in Ghimire and Pimbert, 1997: 163).

Local communities lose their sovereignty over their lands to conservation. For instance, “The state [Tanzania], international environmental groups and private businessmen involved in wildlife tourism and hunting concerns have asserted sovereignty over resources that were once the focal point of broad-based common property systems” (Schroeder 1999). Once an area is proclaimed a nature reserve, it becomes a platform that is managed and dominated by a nature conservation society, who replaces, or in the best possible scenario, coexists with the traditional order of the space.

6.3.2. Types of benefits (tangible and intangible)

The argument of this section suggests that, like global conservation models, the DNR's conservation discourse calls for sharing intangible benefits with local communities living within or around Driftsands. The intangibility of local communities' benefits from protected areas appears in the marginal percentage of households that earn money from protected areas. For example, only 6% of households living around the Royal Chitwan National Park in Nepal earned income directly or indirectly from the park. "Despite a 1994 visitation rate exceeding 60,000 tourists – mostly from industrial nations – the economic impact of ecotourism [activities at the park] on household income was minimal and limited to villages closest to the main park's entrance.... The Park, as it is currently structured, provides little employment potential, has a marginal effect on household income, and offers few benefits for local people" (Bookbinder et al 1998).

The second dimension of the intangibility of local communities' benefits from protected areas lies in the amount of income that remains in the hands of local communities. Nepal conservation literature suggests that minimal income remains in the rural economy of protected areas. "In the Annapurna range, Nepal's most-heavily trekked region, it is estimated that less than seven cents of every dollar spent in the region by trekkers actually remains in the rural economy" (Passoff 1991).

The third dimension of the intangibility of local communities' benefits from protected areas is evident in global conservation models that look exclusively at addressing the survival needs of local communities living around protected areas. For example, Conservation International (CI) suggests that for "indigenous people [who] depend on healthy and productive ecosystems to meet their daily needs, their very survival is at stake. We must protect the diversity of life, not only for its intrinsic value, but also because a vibrant, healthy society depends on our continued success in safeguarding our threatened natural assets" (Conservation International, 2007).

This implies that it is not in the vision of CI to work towards local economic development for the surrounding communities of protected areas but to address their survival needs only. The CI's argument suggests that it is strategic for conservation

groups to keep intact the basic ecological services that people depend on. CI “believes that conservation must benefit people and that protecting and maintaining basic ecological processes and ecosystem services are the foundation for sustainable livelihoods and economic development. CI supports human welfare throughout the hotspots by working to ensure that basic ecological services that people depend on remain intact” (Conservation International 2007). In this regard, CI thus avoids addressing the three other environmental rights of local communities suggested by Bullard (1997): the right to healthy, productive, and sustainable environments. The CI limits its social responsibilities to addressing survival needs of local communities.

Another example is drawn from the CI-USAID work on a global scale. John Hansen, the leader of the Natural Resource Management Team of the USAID chapter in Guinea, justifies USAID and CI move to enter into an alliance with a major world mining concern to protect the environment. In doing so, USAID and CI “can leverage resources to promote development in a cutting edge manner, halt other more ecologically destructive practices, and in the long term ensure a more equitable allotment of financial resources toward community development” (USAID, 2004). The CI-USAID funded programs for “the world's hotspots of biodiversity” sound promising but make no promise of an equitable allocation of financial resources to community development.

While global conservation groups look at ways to share intangible benefits with local communities, they continue marketing nature conservation in a universally appealing format. For example the IUCN claims that “[I]t is estimated that around 55% of visitors worldwide travel to visit protected areas” (IUCN 2007). However, the source of these statistics is not stated; such a statement is designed to encourage the establishment of protected areas. It suggests that a) protected areas of each country might attract 55% of the country's travellers; b) countries without nature reserves will lose 55% of the tourist market; c) countries with more protected areas and more variety of protected areas will increase the flow of tourists to their territories; and finally d) more ‘properly’ protected areas means more tourists, more foreign currency, more jobs, and more development for surrounding areas.

The appealing part of allocating benefits for local communities is based on processing burden dynamics. For example, the burden dynamics appear in the CI conservation

discourse in the proposition that local communities who do not conserve nature will be endangered, because “the loss of biodiversity impoverishes the world and humankind. It reduces the quality of life for all people and may in fact be a survival issue for communities who depend directly upon healthy and productive natural lands to meet their daily needs” (Conservation International 2007). In this way, CI uses fear tactics to prompt local communities to conserve nature.

The second chapter of the CI proposal deals with the benefits of nature-conservation efforts. It is fruitful to conserve nature because “[h]ealthy ecosystems provide people with vital natural resources, such as fresh water, fertile soil, clean air, crop pollination, and much more. But deforestation is contaminating watersheds and destroying the biodiversity rural people rely on for their food, health, and sustenance” (Conservation International 2007a).

The third chapter of the CI proposal deals with the strategic value of conserving nature. CI promotes the notion that nature conservation “can help prevent and reduce poverty by maintaining ecosystem services and supporting livelihoods” (Conservation International 2007b). In this way, CI is being ingenuous, by implying that local communities will not be impoverished and will enjoy a prosperous future if they conserve nature. The CI argues that in fact “conservation cannot succeed without the support of local people, and we continue to strengthen our commitment to them. We have dramatically increased efforts to engage the private sector to change the way they do business, and we are working effectively with governments on local, regional and national levels” (Conservation International 2007b).

Similarly, at DNR, conservation groups look at sharing intangible benefits with the local community: benefits that address some of the survival needs of the Driftsands community. At DNR menial wages are generated from a) occasionally “capacitating officials’ initiatives” (Interview, Official from DNR, 20 May 2007), such as cleaning the reserve of alien vegetation and building a hiking trail within the reserve; b) potential attendance at Driftsands Environmental Education Centre’s workshops, which are usually combined with hot meals and soft drinks (see section 5.4). Such a practice aims not to uplift local communities from a vicious spiral of poverty but to inspire local

communities to look at the officials' proposal: to participate in the construction of nature at DNR by moving out of the reserve.

The sharing of intangible benefits for local communities also appears in DNR's proposals funded by the Provincial Ministry of Environment, Planning and Economic Development and the National Poverty Relief Programme. Some R8 million has been put aside for building an amphitheatre, the refurbishing of the conference facilities, extension of the waterwise garden, the creation of murals and "art" walls, the construction of bus parking facilities, and, finally, the development of a wheelchair-friendly 4km walking trail from the centre to the artificial dam that will offer a variety of bird life for viewing. Five community conservation officers, finance and administration officer, an admissions officer, a project coordinator and a marketing officer have already been appointed. Once the environmental impact study has been completed, the process of calling for tenders for the various construction jobs will commence. It is anticipated that this will provide the local community with at least another 100 jobs (Essop 2006).

The provision of five permanent job opportunities and another 100 casual job opportunities will be insignificant for the 550,000 people housed within a 5km radius of Driftsands, as they suffer from a high (65%) level of unemployment (MLA-Sustainable Matters 2005: 47). Likewise, the effect of these job opportunities will also be insignificant for Driftsands on-site communities, who also experience a high level of unemployment (55.7%) (Survey, June 2006). Moreover, the wages attached to the 100 casual jobs will also be insignificant, as experiences from Working for Water Programme have shown (see section 5.4).

Although it is a common practice for conservation groups to call for allocating intangible benefits for local communities from protected areas, contemporary conservation discourses call for allocating more tangible benefits. Currently, "cases are reported of local communities negotiating and campaigning to require the creation of tangible benefits for local people" (Hulme and Murphree 2001: 66). The growing recognition in Uganda, Tanzania and Kenya that conservation may require the creation of tangible benefits for local people has recently (in the late 1990s) "been pushing ideas about community conservation beyond the limitations of protected areas" (Hulme and Murphree 2001: 66) to access certain resources within protected areas.

Furthermore, some conservation groups call for “legislation that permits a percentage of profits to be spent on local community development” (Bookbinder et al 1998). Essentially, sharing benefits with local communities is captured in the term ‘ecotourism’. Ecotourism is often viewed as being effective for promoting the conservation of endangered species and habitats. Through the creation of economic incentives for communities living around protected areas, local communities will be encouraged to guard, protect and sustain the use of biological resources of protected areas. Thus, “it is not a panacea for long-term biodiversity conservation in this case ... where ecotourism programs already exist without such profit-sharing mechanisms” (Bookbinder et al 1998: 1399).

6.3.3. Methods for distributing benefits

At least six methods for distributing benefits from protected areas to local communities are distinguished in nature conservation literature; all of which are intangible benefits. The first method is to permit sustainable resources harvesting. At Mgahinga and Bwindi Forest Reserves in Uganda, a conservation group policy was adopted to allow “up to 20 per cent of the area of a national park to be used for sustainable resource harvesting” (Hulme and Murphree 2001: 66). The second method is to allow the use of some of the resources during famine to avoid using all the resources. Conservation groups benefited local communities through allowing them to use available resources in protected areas in situations of famine (Zoologist 1. Interview 23 April 2007), and Conservation International (2007c) works towards addressing some of the survival needs of local communities depending on natural resources within protected areas. The third method is to train local communities about educating local communities about community gardens. Conservation groups also claim that they are benefiting local communities by the construction of community gardens in protected areas, which develop the locals’ gardening skills (WWF 2007, Zoologist 1, Interviews 23 April 2007; Cleaver 2007). The fourth method is about providing employment through the creation and maintenance of protected areas. Globally, local communities benefit from job opportunities generated by the landscaping of 10% of the earth’s land surface with protected areas (IUCN 2007). The fifth method is to reward reallocating local communities from protected areas. In

Kenya, some local communities are paid a minimal rent in order to compensate for their voluntary losses of land for conservation (Dunkel 2007). The sixth radical method is about assisting local communities to gain land rights. Radical nature conservation literature refers to cases where conservation societies assisted local communities to gain title to their ancestral lands, for example, in Nicaragua (The Nature Conservancy 2007). In brief, only recently (early 2000s) conservation literature starts to support local communities' land rights. Before that it was rare to find conservation literature showing support for local communities and their land rights. Most of the applied methods focus on profitability for conservation when distributing benefits. The focus is not about enriching local communities but to support local communities in famine and addressing their basic survival needs. Otherwise, most conservation efforts led to intensification and institutionalisation of severe levels of poverty among local communities in and around protected areas.

6.4. Conclusion

This chapter confirms that the contemporary discourses of Driftsands' nature conservation continue to be **inspired by the universalised nature conservation models** such as the WWF 1990s model of community based natural resource management, which became the dominant approach by the turn of the century (see section 6.3). Such a model incorporated the concept of community participation and local economic development which is stated intensively in the discourse of DNR. Both the universalised and the Driftsands nature conservation discourses **evolved over time** as any other discourse. Since 2000 the language in both discourses incorporated different vocabularies and constructions. The universal discourse starts to incorporate a socially friendly language such as supporting some land rights for local communities (see section 6.3.3). However, the allocation of some of the R8 million for housing some of the on-site communities in better housing conditions has not brought any tangible benefit. Members from the local communities work as domestic workers and as construction workers in ecotourism projects.

Contemporary universal discourses of nature conservation are aligned with the calls for putting aside ten percentage of the earth's land surface for nature conservation. It is for

this reason that Driftsands nature conservation discourse is supportive to proposals for larger conservation areas while limiting the possibilities for the existence of local communities in protected areas.

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Chapter 7: Conclusion

The ideological argument of this thesis seems to imply that all nature conservation work is bad, which is not true. Instead, the thesis highlights conditions and views of local communities who are under-represented in the discourse of nature conservation. They are the ones who obey nature conservation-related laws and the rest are on the side of law-makers and conservation policies. The aim is to push for a moral discourse of nature conservation. For sure local communities' views on nature conservation are different from those who promote and ensure conservation of the natural environment. The views of local communities are also different from those of people who actually visit nature reserves. Joubert and Mabunda (2007) suggest that tourists visit wilderness areas because they are keen a) to appreciate the natural landscape which contribute to their "relaxation, b) to gain the sense of achievement, c) to experience smells and sounds of the bush, d) nature inspire their personal well-being, e) to visit nature means to improve their quality of lives, f) to experience calmness from observing wild animals with no human interface invest in nature reserve as a quality of life" (Joubert and Mabunda 2007).

Meanwhile, nature conservation is a luxurious commodity. Nature appreciation is a "full stomach" phenomenon that is confined to the rich, urban and sophisticated [people]. Where as wilderness appreciation is inadvertently elitist, the private hyperwilderness is actively marketed as an exclusive tourist commodity" (Haywood 2007: 200). Exclusivity in an experience contributes to the prestige for which tourists are prepared to pay a premium. A high-quality wilderness experience can only really be enjoyed either in the absence of other people or where other tourists are similarly motivated, and engaged in similar pursuits" (Bresler 2007: 170). Conservation areas can also be a place where people are oppressed through exclusionary measures and lack of access to natural resources that local communities need for survival.

The aim of this chapter is to reflect on questions that guided this research and to summarise the responses to these questions. These questions relate to the ideology of nature conservation and its discourses; the consequences of the ideology on Driftsands and neighbouring communities; and the future of DNR. The chapter also makes

recommendations for the broader conservation society and highlights the contribution of the study to knowledge.

Ideology and discourses of nature conservation

The analysis of this thesis reveals that the discourses of nature conservation of Driftsands provincial Nature Reserve (DNR) are inspired by hegemonic western environmental views which seek to commodify nature and to expand protected areas irrespective of the consequences of such actions on local communities. Since the establishment of DNR communities in and around the reserve has experienced extreme levels of poverty. In my latest visit to DNR on Tuesday 15 October 2009 I observed the following persistent forms of impoverishment. a) DNR's on-site communities continue to be living in shacks as shown in Figure 7.1.

Figure 7.1. Shacks in Green Park



Most of these shacks are built from recycled wood, plastic and zinc sheets. The most expensive ones are those build from zinc sheets that cost at least R1 200 (+/- USD150). One can buy a complete shack with a door and a window from Khayelitsha and Mitchell Plain. These shacks are cold in winter, hot in summer, and they are not sealed from rain or sounds. For example, Figure 7.2. shows a collapsing shack, which is shorter than the average person.

Figure 7.2 Typical tiny shack



It is almost the length of a young child. A king size mattress does not fit in this shack but a single mattress will fit with some space for shoes and cloths for the dweller of this shack. It is not and has not been an inviting shack; hardly one person can fit in this shack. But, it is a 'secured' one. It protects its dweller from rain, wind, and light. Beyond the debate whether this construction is a choice or a destiny, this shack is just a shelter for a person who does not own materials and is unemployed. The owner of this cell is prisoner not in a colonial discourse but in a nature conservation one. He is prisoner of complex poverty that emerged from apartheid legacy to post apartheid stereotyping and contemporary conservation discourses. It is not a coincident that this shack belongs to a very poor handicap person who divorced his wife three years ago and rarely has a job. Since I interviewed him the first time in 2003, he speaks about the same two casual jobs: a three weeks one and a month one. Driftsands' on-site communities did not move to better shacks because they cannot afford to do so as they are dispossessed and helpless. Officials of Driftsands have been discussing the relocation of the on-site communities since the settlement of people inside the reserve.

DNR's on-site communities are also impoverished by being **vulnerable to 'floods'**. However, Green Park was flooded only four times this year and six times last year. Flood is of daily concern for the people of Green Park. For example, vulnerability to floods is in the mind of the three children (a 13 years old Marshell Swarts, his 9-year old sister Asanata, and his 7-year old brother Msimant).

Figure 7.3 Children growing up in Green Park



These children skipped school on Tuesday, 15 October, because it rained on their way to school. Apparently that was a hot day of only 10 percentage chances of rain. It only rained for 5 minutes at 7: 20 am. Mr. Situlo, H., in his late 60s speaks about flood as part of the daily experience of residents in Green Parks. According to him, there are many stories about how people coped with floods in the last 15 years. In 2009 the City of Cape Town moved the people of Green Park to a higher level in one of the four floods. The City provided residents of Green Park with some zinc sheets, plugs, and wooden poles to fix their shacks not to build new ones. The following attached picture (Figure 7.4) shows that some of Green Park's shacks are built in water channels between the site and sand dunes.

Figure 7.4. Structures built in the sand dunes



These dunes work as ‘natural’ water channels during rainy seasons (Interview, Mr. Situlo, 15 October 2009). In rainy days, the dark and flat spots, in front of the car and in the top-left corner of the picture become water bodies. This is to say that the shacks at the top will be flooded in rainy days. Driftsands officials also confirmed (see Chapters 4, 5, and 6) that Green Park is below the 50 year flood line. An official from DNR confirms that Green Park experience floods every rainy day. Living with this level of flood is bad for school learners, workers, and businesses. Conceptually, it is not a coincident that Green Park dwellers are vulnerable to flood but their conditions are a human creation. They did not choose to live under the 50 year flood line but they were forced by circumstances to squat at this site.

DNR’s on-site communities are also impoverished by being **entitled to limited public services**. On early November 2008, the police arrested 23 of the demonstrators from the on-site communities that marched on the road (i.e. R300) to protest against lack of service delivery. Since the establishment of Green Park in 1994, the township is entitled to limited public services. They were only provided with portable toilets in 2007. However, communal water taps were inserted in 1996. This is to say that Green Park’s dwellers have been and continue to be entitled only to communal water taps and portable toilets until they move out from the evolving boundaries of DNR. They are not entitled to paved roads, drainage



system, electricity or lights. Both Los Angeles and Green Park are not connected with the existing road infrastructure.

DNR's on-site communities are also impoverished by the **absence and negligence of police presence**. At the time of writing (i.e. 2009) both of Los Angeles and Green Park were not entitled to a police station or police patrol. There is no record of police presence in any of the two townships. Consequently, Los Angeles, Green Park, Mfuleni, and West Bank have established their Community Police Forum (CPF) which reviews violence occurrences and conduct surveys to address some of cases of violence. On 15 October this year I interviewed two members of the CPF (Raymond Mtati and Situlo, H.) who stated that robbery, rape, and child abuse are the most worrying factors in the four townships.

The on-site communities are also impoverished by physical boundaries. Both Los Angeles and Green Park are hidden, isolated and made invisible by the concrete walls of the reserve (see Figure 7.5).

Figure 7.5. Concrete wall separating the townships from the reserve



The above picture is a section of DNR's 2-meter high wall, which separate, hide, and isolate Green Park dwellers. They separate and hide Green Park from the National Road (N2) and the regional road (R300). Together, the concrete barriers separating DNR from Green Park and Los Angeles along the N2 and R300 make the reserve and the two on-site communities function as a close system. The entrance by car into this close system is from the north of the reserve, which is about 3 km from Green Park. However, there is a pedestrian caged bridge that connects Green Park and Delft over the R300. Because the majority of Green Park's dwellers are very poor, they have to walk to Delft first to reach

taxi ranks, or to walk to Khayelitsha for three km to get a taxi. Long walks before reaching the taxi rank and the expensive transport system form a barrier in people's mind. Such a distant, hidden, close system forms the essence of prison. Green Park dwellers are in a prison: as prison is a close system, beyond reach and escape.

DNR's on-site communities continue to be impoverished by living in **the space of hopelessness**. They are not getting the houses they were promised by the City of Cape Town's proposed "Driftsands Human Settlement Project". Some of the houses of this project have been accomplished. The proposal forms part of "an Environmental Impact Assessment (EIA) that have been taken by the City of Cape Town", and recommended by the Department of Environmental Affairs and Development Planning (CCA Environmental 2009). Driftsands' EIA proposed the relocation of Los Angeles and Green Park to the north entrance of the reserve. But the housing project seems to favour coloured communities rather than the people of Green Park or Los Angeles. People question the presentation of this project and the intention of their framers. Why Driftsands' officials promise houses for the residents of the two townships, while they are giving these houses to coloured communities not from the area? Mtati and Situlo convey the understanding that these promised houses will have a primary and high school, and a clinic on 20-25 hecter by the north entrance of DNR.

The Department of Water Affairs and Forestry provided job opportunities at the site from the Department's poverty relief programme.

Figure 7.6 Workers at Driftsands



The above picture captures the image of three ladies who works at Driftsands Environmental Centre. They are paid by the DWAF through the Centre for fetching water from the Centre to the almost empty nursery.

Figure 7.7. Nursery at Driftsands



They are paid money for doing the least productive jobs. Each of them is paid R49.12 per day, while the job of three of them can be accomplished in one hour by one of them. One can not say that R50 can relief any of the three from poverty. But one can say that each of them can use the money to buy some food and few other basic needs.

Unlike in most national and global nature conservation discourses, the history of local communities in Driftsands does not feature strongly in discourses supporting the reserve. This is because the communities were not removed from the reserve when the reserve was established. Neumann (1998: 31) argues that “parks help to conceal the violence of conquest and in so doing not only deny the other their history, but also create a new history in which the other literally has no place”. He further maintain that “national parks, as representations of a harmonious, untouched space of nature, mask the colonial dislocations and obliterate the history of those dislocations along with the history of the spaces that existed previously” (Neumann 1998: 31).

Contemporary nature conservation discourses, including the one of DNR, are becoming considerate of local communities. Currently, there is hope for better conditions for Driftsands’ on-site communities because officials and conservationists involved are

sensitive to social needs. For example, in June 2007, the CoCT appointed a team of consultants led by ARG Design to undertake the detailed planning process up to precinct level for the proposed project for consideration in the EIA process. This planning process culminated in the preparation of an *Urban Design Framework* for the Driftsands Nature Reserve, which considered both the biophysical and socio-economic aspects of the reserve and its surrounds in order to create a sustainable human settlement in the long-term. The *Urban Design Framework* identified a major issue of concern relating to the original proposal and scope of the EIA. The original proposal did not take into account the socio-economic needs of the residents and surrounding communities, which would have resulted in the creation of an isolated settlement with little economic activity and connection to the reserve surrounding communities. Therefore, the scope of the proposed project and EIA has been expanded to include all aspects of the *Urban Design Framework* inside the Driftsands Nature Reserve and not just the formulation of the Green Park and Los Angeles informal settlements. The aim is to formalise the settlement of the on-site communities as apposed to previous nature conservation proposals for DNR which deliberately isolated the on-site communities.

Furthermore, DNR's contemporary nature conservation discourse supports the expansion of Driftsands by approximately 206 hectares. The CCA Environmental Report of 2009 proposes to enlarge the physical boundaries of DNR (see Figure 7.8). The figure suggests expanding the boundaries of DNR to the east and towards R300. This is not a new expansionist proposal but confirms similar proposals that were made by Cape Nature in 2006 and 2008. The main idea is that expansionism in the discourse of DNR and nature conservation in general is based on enlarging the physical boundaries of protected areas.

Figure 7.8. Proposed expansion of DNR



Moreover, this thesis confirms also that nature at DNR is radically engineered, nursed and landscaped. Figure 7.9 captures five of DNR realities as of 15 October 2009.

Figure 7.9. The latest developments in Driftsands



The top image shows a bulldozer paving some of the site for parking. The second image is an almost empty nursery. There are some young trees at the corner of the nursery. These and others will be looked after till they are ready to be planted in the reserve to enrich the area. The third image captures an area covered with a 'foreign' soil to enhance the soil characteristics. Driftsands is actually a sand dune and this soil is bought to improve the soil quality. The fourth image is the name of a company that provides some consultation and plants for DNR. The last image is a whale's jaws bought to the site to amuse people visiting the site. It has been at the center since 2003. It was brought to the center from other nature reserve for display. However, the origin of this jaw is not defined but for sure it is not from Driftsands. This whale's jaw does not belong to Driftsands as the site is too far from both the Atlantic and the Indian oceans.

Competing agendas shaping DNR

The three main **competing agendas** that shape the discourse of DNR's nature conservation are environmental, political and social in nature. The environmental agenda was initiated, presented, maintained and headed by Barrie Low of the Botany Department of the University of the Western Cape and it embraces other environmental NGOs, local environmentalists and academics, the Directorate of Nature and Environmental Conservation, and Cape Nature. The political agenda encompasses a range of interests, each of which is presented, associated and pursued by the Provincial Administration, especially provincial ministries involved in housing, finance, tourism and infrastructure development. Finally, the social agenda is also constructed by those who make laws at the site by employing the history of the on-site communities (that they were expelled from Cross Roads due to their ties to former MPL Johnson Ngxobongwana) to justify their physical exclusions.

Conceptually, the conservation lobby aimed to construct five distinct natures, each of which is supported and funded by a group that shares a common agenda or an ideology. First, nature has been constructed by one part of the local and provincial governmental and non-governmental groups who aimed at conserving nature (i.e. endangered species) at the site. Secondly part of the group looked at Driftsands' share of regional water resources: the Kuils River and the Cape Flats aquifer. Thirdly, there was a plan to pilot and test accommodating and commodifying cultural practices in protected areas nation wide. Fourthly, conservationists looked at commodifying natures to attract tourists visiting Cape Town for a short period of time: tourists who are keen to experience Africa's wild life but have no time to travel. Fifthly, advocates for DNR entertained the idea of expelling communities from the reserve but faced the challenge of providing alternative accommodation.

The future of DNR

Though it is difficult to predict the future, three important factors will determine activities and policies in DNR. These are related to natural resources management, ecotourism, and environmental justice. From a **natural resources management** perspective, I would like to see Driftsands' share of Kuils River and the Cape Flats aquifer being protected. In terms of **ecotourism**, Driftsands' location in proximity to the airport adds value to the landscape that tourists will see and experience when flying to Cape Town. It can be designed as a window to nature conservation in the Western Cape. To construct such a conservation window a) Driftsands should be bridged toward the airport, b) stretched toward the east, c) and accommodate some mammals. It should also accommodate an initiation village at the site to support Xhosa communities to maintain their cultural practices in urban areas.

From an **environmental justice stand**, those who make laws at Driftsands should invest in releasing the on-site communities from severe levels of impoverishment: from isolation and disconnection by connecting them with the surrounding communities through roads, bridges and public phones; formalize their townships, provide these townships with decent public services; include these communities into significant job opportunities provided at the site.

From a radical **constructionist stand**, those who make laws at Driftsands should address contemporary challenges by including local communities in the discourse of nature conservation. One way to achieve this is to move towards developing appropriate relationships between protected areas and local communities. In this way DNR will be stretched with nature conservation along the N2 and with a human settlement along the R300. A circle and an entrance to the reserve and human settlement can be constructed. The dwellers of this human settlement will in time be able to benefit from tourists visiting the reserve.

Recommendations for the broader conservation society

The way forward is to denaturalise the unjust environment among local communities of protected areas, the DNR's on-site communities in this case. However, this is easier said than done. It is a rare practice to see local communities living inside protected areas, mainly those within or near urban areas. Literature that encourages the co-existence of local communities with nature is very scarce, despite the fact that in the past local communities lived with nature. It is quite a challenge and an expensive exercise for global and national conservation groups to shift their policies and public perceptions from normalising the exclusion of local communities from protected areas. There is therefore a need for more research, pilot projects and examples that support the co-existence of local communities in protected areas. These works should focus on local experiences that maintain and encourage the re-integration of local communities into protected areas, where this is possible. In other words, more research work is needed to focus on and to enrich local communities' perspectives and their participation in the process of creating protected areas in order to balance the positions of the powerful and the powerless.

Contribution to knowledge

One of the main contributions of this thesis to literature is that it pushes the boundaries of environmental justice to include various forms of injustices emanating from protected areas. It shows that the arguments for nature conservation are underpinned by various ideologies and are also linked to socio-political interests existing at the time as the case of DNR has shown. In DNR, the natural landscape there did not have the kinds of 'the natural' that is worth preserving. Instead, political and cultural aspects were prominent and defined the debate on the establishment and maintenance of a conservation area. The thesis also provides and argues for a conceptual connection between social constructionism and environmental justice that potentially create new avenues for research in these two bodies of knowledge. It contributes to a burgeoning literature on environmental justice in the Global South. Evidently, Western and universalised environmental views account for constructions of nature that leads to exclusions of (non-

white) local communities from protected areas. There is therefore a need for developing Southern models that allows for ideas of nature that are inn tune with local realities.

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Appendixes

Appendix I. The Principles of Environmental Justice (1991)

Adopted, Washington, D.C., October 1991 First National People of Color Environmental Leadership Summit

http://depts.washington.edu/envhlth/info/env_justice/principles.html

University of Washington, school of public health and community medicine

We, the People of Color, are gathered together at this First National People of Color Environmental Leadership Summit, to begin to build a national movement of all peoples of color to fight the destruction of our lands and communities, do hereby re-establish our spiritual interdependence to the sacredness of our Mother Earth; we respect and celebrate each of our cultures, languages and beliefs about the natural world and our roles in healing ourselves; to insure environmental justice; to promote economic alternatives which would contribute to the development of environmentally safe livelihoods; and to secure our political, economic and cultural liberation that has been denied for over 500 years of colonization and oppression, resulting in the poisoning of our communities and land and the genocide of our peoples, do affirm and adopt these Principles of Environmental Justice:

1. Environmental justice affirms the sacredness of Mother Earth, ecological unity and the interdependence of all species, and the right to be free from ecological destruction.
2. Environmental justice demands that public policy be based on mutual respect and justice for all peoples, free from any form of discrimination or bias.
3. Environmental justice mandates the right to ethical, balanced and responsible uses of land and renewable resources in the interest of a sustainable planet for humans and other living things.
4. Environmental justice calls for universal protection from extraction, production and disposal of toxic/hazardous wastes and poisons that threaten the fundamental right to clean air, land, water and food.
5. Environmental justice affirms the fundamental right to political, economic, cultural and environmental self-determination to all peoples.

6. Environmental justice demands the cessation of the production of all toxins, hazardous wastes, and radioactive substances, and that all past and current producers be held strictly accountable to the people for detoxification and the containment at the point of production.
7. Environmental justice demands the right to participate as equal partners at every level of decision-making including needs assessment, planning, implementation, enforcement and evaluation.
8. Environmental justice affirms the right of all workers to a safe and healthy work environment, without being forced to choose between an unsafe livelihood and unemployment. It also affirms the right of those who work at home to be free from environmental hazards.
9. Environmental justice protects the rights of victims of environmental justice to receive full compensation and reparations for damages as well as quality health care.
10. Environmental justice considers governmental acts of environmental injustice a violation of international law, the Universal Declaration on Human Rights, and the United Nations Convention on Genocide.
11. Environmental justice recognizes the special legal relationship of Native Americans to the US government through treaties, agreements, compacts, and covenants affirming their sovereignty and self-determination.
12. Environmental justice affirms the need for an urban and rural ecology to clean up and rebuild our cities and rural areas in balance with nature, honoring the cultural integrity of all our communities, and providing fair access for all to the full range of resources.
13. Environmental justice calls for the strict enforcement of principles of informed consent, and a halt to the testing of experimental reproductive and medical procedures and vaccinations on people of color.
14. Environmental justice opposes the destructive operations of multi-national corporations.
15. Environmental justice opposes military occupations, repression and exploitation of lands, peoples and cultures.
16. Environmental justice calls for the education of present and future generations which emphasizes social and environmental issues, based on our experiences and an appreciation of our diverse cultural perspectives.

17. Environmental justice requires that we, as individuals, make personal and consumer choices to consume as little of Mother Earth's resources and to produce as little waste as possible; and make the conscious decision to challenge and reprioritize our lifestyles to insure the health of the natural world for present and future generations.

The proceedings to the First National People of Color Environmental Leadership Summit are available from the United Church of Christ Commission for Racial Justice, 475 Riverside Dr. Suite 1950, New York, NY 10115.

University of Cape Town

Appendix II: Proclamation of Driftsands a provincial nature reserve 1983

1148

The Province of the Cape of Good Hope Official Gazette

4276

22 July 1983

No. 192, 1983

Kragtens artikel 6 (1) van die Ordonnansie op Natuur- en Omgevingsbewing, 1974 (Ordonnansie 19 van 1974), stig ek hierby die Provinsiale natuurreservate in die Bylae genoem, wys ek die name in die Bylae uiteengesit onderskeidelik daaraan toe en omskryf ek die grense daarvan soos in die Bylae uiteengesit.

Gedateer te Kaapstad op hede die negentiende dag van Julie 1983.

E. LOUW, ADMINISTRATEUR

BYLAE

Karoo-Natuurreservaat

Geleë in die administratiewe distrik Graaff-Reinet en waarvan die grense is soos aangedui op kaart ANO. 16/32/3/1 wat op bundel ANO. 6/3/2 in die kantoor van die Direkteur: Natuur- en Omgevingsbewing, Provinsiale Gebou, Dorpstraat, Kaapstad, geliasseer is en waarvan afskrifte ter insae beskikbaar is by die kantoor van die Verantwoordelike Beampte, Karoo-Natuurreservaat, Graaff-Reinet, en die kantoor van die Sekretaris van die Afdelingsraad van Kamdeboo te Graaff-Reinet.

Driftsands-Natuurreservaat

Geleë in die administratiewe distrik Kuilsrivier en waarvan die grense is soos aangedui op kaart ANO. 16/45/3/1 wat op bundel ANO. 6/3/2 in die kantoor van die Direkteur: Natuur- en Omgevingsbewing, Provinsiale Gebou, Dorpstraat, Kaapstad, geliasseer is en waarvan afskrifte ter insae beskikbaar is by die kantoor van die Verantwoordelike Beampte, Jonkershoek-Natuurreservaat, Stellenbosch, en die kantoor van die Sekretaris van die Afdelingsraad van Kaapstad.

No. 194, 1983

AFDELING CEDERBERG: SLUITING VAN 'N ONDERGESKIKTE PADGEDEELTE

Kragtens artikel 3 van die Ordonnansie op Paaie, 1976 (Ordonnansie 19 van 1976), verklaar ek hierby dat die gedeelte van die bestaande openbare pad in die Bylae beskrywe en binne die afdeling Cederberg geleë, waarvan die ligging en roete is soos aangedui deur middel van 'n ongebroke blou lyn gemerk A-B op plan RL.31/40 wat geliasseer is in die kantore van die Provinsiale Padingenieur, Alfredstraat 25, Kaapstad en die Afdelingsraad van Cederberg, Vanrhynsdorp, gesluit is.

Gedateer te Kaapstad op hede die 15de dag van Julie 1983.

E. LOUW, ADMINISTRATEUR

BYLAE

'n Gedeelte van Ondergeskikte Pad 136, vanaf Hoofpad 10 op die eiendom 306/132 tot by 'n punt op die eiendom 306/114: 'n lengte van ongeveer 990 m.

PROVINSIALE KENNISGEWINGS

Die volgende Provinsiale Kennisgewings word vir algemene inligting gepubliseer.

H. R. v. V. GIE, PROVINSIALE SEKRETARIS

Provinsiale Gebou,
Waalstraat,
Kaapstad.

P.K. 463/1983

22 Julie 1983

BEKENDMAKING VAN 'N GOEDGEKEURDE DORP

Hierby word bekend gemaak dat ondergenoemde dorp 'n goedgekeurde dorp is kragtens artikel 20 (6) van Ordonnansie 33 van 1934.

Naam van Dorp	Ligging	Afdeling
Athlone Uitbr. 21	Athlone	Kaap
Algemene Plan T.P. 10349		

No. 192, 1983

Under section 6 (1) of the Nature and Environmental Conservation Ordinance, 1974 (Ordinance 19 of 1974), I hereby establish the Provincial nature reserves referred to in the Schedule, assign thereto respectively the names set out in the Schedule and define the boundaries thereof as set out in the Schedule.

Dated at Cape Town this nineteenth day of July 1983.

E. LOUW, ADMINISTRATOR

SCHEDULE

Karoo Nature Reserve

Situated in the administrative district of Graaff-Reinet and the boundaries whereof are as indicated on diagram ANO. 16/32/3/1 which is filed on file ANO. 6/3/2 in the office of the Director: Nature and Environmental Conservation, Provincial Building, Dorp Street, Cape Town, and copies of which are available for inspection at the office of the Officer-in-Charge, Karoo Nature Reserve, Graaff-Reinet, and the office of the Secretary of the Kamdeboo Divisional Council at Graaff-Reinet.

Driftsands Nature Reserve

Situated in the administrative district of Kuils River and the boundaries whereof are as indicated on diagram ANO. 16/45/3/1 which is filed on file ANO. 6/3/2 in the office of the Director: Nature and Environmental Conservation, Provincial Building, Dorp Street, Cape Town, and copies of which are available for inspection at the office of the Officer-in-Charge, Jonkershoek Nature Conservation Station, Stellenbosch, and the office of the Secretary of the Divisional Council of the Cape.

No. 194, 1983

CEDERBERG DIVISION: CLOSING OF PORTION OF A MINOR ROAD

Under section 3 of the Roads Ordinance, 1976 (Ordinance 19 of 1976), I hereby declare that the portion of the existing public road described in the Schedule and situate within the Cederberg Division, the location and route of which are as indicated by means of an unbroken blue line marked A-B on plan RL.31/40 which is filed in the offices of the Provincial Roads Engineer, 25 Alfred Street, Cape Town, and the Divisional Council of Cederberg, Vanrhynsdorp, shall be closed.

Dated at Cape Town this 15th day of July 1983.

E. LOUW, ADMINISTRATOR

SCHEDULE

A portion of Minor Road 136, from Main Road 10 on the property 306/132 to a point on the property 306/114: a length of about 990 m.

PROVINCIAL NOTICES

The following Provincial Notices are published for general information.

H. R. v. V. GIE, PROVINCIAL SECRETARY

Provincial Building,
Wale Street,
Cape Town.

P.N. 463/1983

22 July 1983

NOTIFICATION OF AN APPROVED TOWNSHIP

The undermentioned township is hereby notified as an approved township in terms of section 20 (6) of Ordinance 33 of 1934.

Name of Township	Situation	Division
Athlone Ext. 21	Athlone	Cape
General Plan T.P. 10349		

Appendix III: Designation for an area for less formal settlement 1995: Driftsands

**PRORCLAMATIONS
CORRECTION NOTICE**

No. 92/1995

**DESIGNATION FOR AN AREA FOR LESS
FORMAL SETTLEMENT: DRIFTSANDS**

**LESS FORMAL TOWNSHIP ESTABLISHMENT ACT, 1991
(ACT 113 OF 1991)**

I, Hermanus Jacobus Kriel, Premier of the Province Western Cape, hereby in terms of the powers vested in me under section 3(1) of the above-mentioned Act, designate the following land situated outside the jurisdiction of a local authority for the development of a less formal settlement as from the date of publication hereof.

Description of land

A portion of Portion 1 of the farm Driftsands No. 544, 19,8824 ha in extent.

A locality plan depicting the above-mentioned land is attached for inspection. The plan is not to scale.

The designation of the above-mentioned land shall be subject to the following conditions:

1. that upon approval of the layout plan the Provincial Administration: Western Cape may impose further conditions;
2. that the regulations in respect of the less formal residential zone, as set out in Provincial Notice No. 465/1992, shall be applicable in the area; and
3. that the provisions of the National Building Regulations and Buildings Standard Act, 1977 (Act 103 of 1977), shall be applicable to all erven in the area, except for erven zoned for residential purposes.

This proclamation replaces No. 37/1995.

PROKLAMASIES

REGSTELLINGSKENNISGEWING

No. 92/1995

**AANWYSING VAN 'N GEBIED VIR MINDER
FORMELE VESTIGING: DRIFTSANDS**

**WET OP MINDER FORMELE DORPSTIGTING, 1991
(WET 113 VAN 1991)**

Ek, Hermanus Jacobus Kriel, Premier van die Provinsie Wes-Kaap, wys kragtens die bevoegdheid my verleen by artikel 3(1) van bogenelde Wet die volgende grond buite die reggebied van 'n plaaslike owerheid vanaf die datum van publikasie hiervan aan vir die ontwikkeling van 'n minder formele vestiging.

Beskrywing van grond

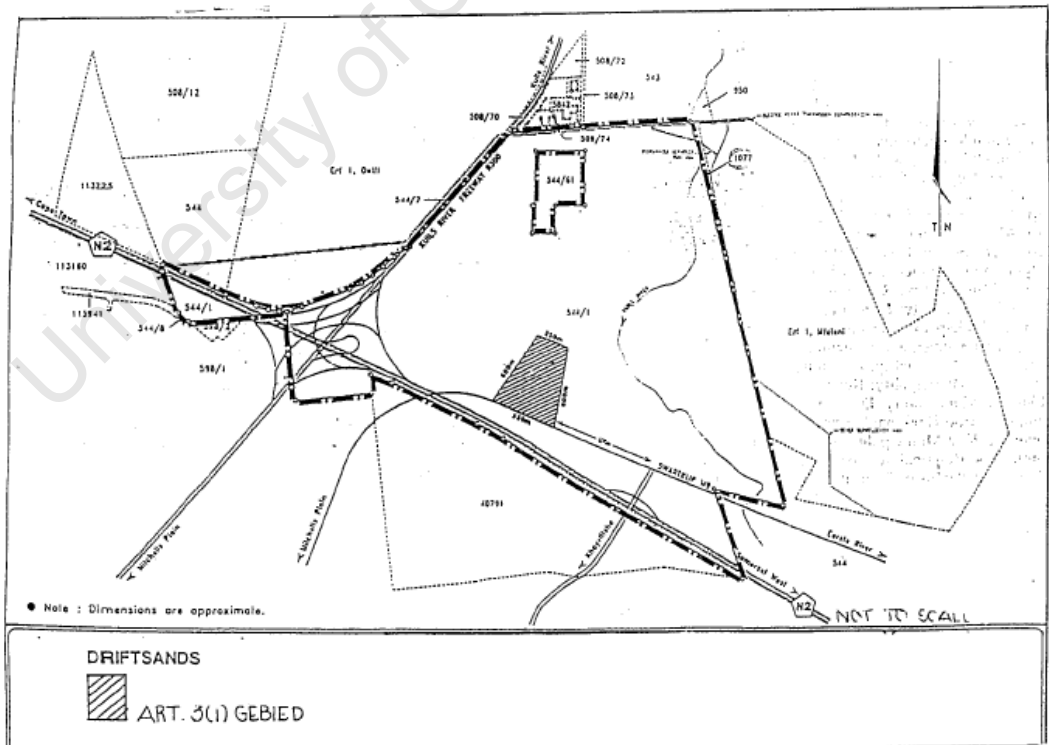
'n Gedeelte van Gedeelte 1 van die plaas Driftsands No. 544, groot 19,8824 ha.

'n Liggingsplan waarop die bogenelde grond aangedui word, word ter insae aangeheg. Die plan is nie volgens skaal nie.

Die aanwysing van bogenoemde grond is onderworpe aan die volgende voorwaardes:

1. dat alle uitlegplanne vir toekomstige ontwikkeling aan die Provinsiale Administrasie: Wes-Kaap voorgeleë word vir goedkeuring;
2. dat die regulasies ten opsigte van die minder formele residensiële sone, soos uiteengesit in Provinsiale Kennisgewing No. 465/1992 toegepas word; en
3. dat die bepalings van die Wet op Nasionale Bouregulasies en Boustandaarde, 1977 (Wet 103 van 1977), toegepas word op alle erwe in die gebied behalwe erwe gesoneer vir residensiële doeleindes.

Hierdie proklamasie vervang No. 37/1995.



Appendix IV: Questionnaire 27 June 2006 (English)

Your personal information and responses are confidential

Driftsands Nature Reserve can be developed for many purposes: indicate your preference for the development of the following uses (make a cross in the appropriate box).

	Preference of choice	Very Important	Important	Not Important	Undecided
1	Agricultural Areas				
2	Environmental education				
3	Housing				
4	Industrial area				
5	Initiation				
6	Nature Close Space				
7	Nature Open Space				
8	Recreational Area				
9	Shopping Centre				
10	Sports Area				
11	Tourist Destination				
12	Woodlot				
13	Others				

1) Name:

2) Age:

3) Sex:

4) Race:

5) Health

6) Profession (skills):

7) Occupation (family):

8) How many people do you support?

9) Where do you live (now)?

10) How long have you been living in Cape Town?

11) Where is your place of origin?

- 12) Are you working OR a casual worker OR unemployed person?
- 13) How long does it take you to arrive at your work?
- 14) How much does it cost you to go to work?
- 15) Do you receive any government support (if yes, what type?):
- 16) Why is Driftsands a nature reserve?
- 17) What are the needs of your neighbourhood?

Signature:

Date:

University of Cape Town

Appendix V: Questionnaire 22 June 2006 (Xhosa)

Your personal information and response are confidential

Driftsands proclaimed Nature Reserve can be developed for many purposes: indicate your preference for the development of the following-uses (make a cross in the appropriate box).

	Khetha Okungqinlama Nawe	Ibaluleke kakhulu	Ibalulekile	Iyibalulekanga	Andiqinisekanga
1	Imimandla Yolimo				
2	Izifundo Ngezemvelo				
3	Ezezindu				
4	Ummandla Wezoshishino				
5	Ezolwaluko				
6	Indawo Eyongelwe Indalo				
7	Indawo Evuleleke Ukusetyenziswa				
8	Indawo Zokuzonwabisa				
9	Ivenkile Zokuthenga uth				
10	Imimandla Yezemidlalo				
11	Isitishi Sabakhenkethi				
12	Ukutheza				
13	Okunye				

- | | |
|--|--------------------|
| 1) Igama: | 2) Ubudala: |
| 3) Isimi: | 4) Uhlanga Lwakho: |
| 5) Impilo | 6) Ubuchule Bakho: |
| 7) Umsebenzi: | |
| 8) Usebenza Phi? Ugqibele Nini Ukusebenza? | |
| 9) Kukuthatha Ixesha Elingakanani Ukuya Emsebenzini? | |
| 10) Uchitha Malini Ukuya Emsebenzini? | |
| 11) Uhlala Phi (ngoku)? | |
| 12) Ubusuka phi Phambi Kokuba Uze Ekapa? | |
| 13) Wondla Abantu Abangaphi? | |
| 14) Ingaba Unayo Inkxaso Oyifunama ku Rhulumente? | |

Appendix VI: Names of respondents to the DNR survey and interviews

Category	N	Names
Members of local communities	70	Bongani Mhlongo, Raymond Mtati, Zolane Matakane, Mncedisi Sogiba, Vuyani Singama, Linda Mtshwelo, Nyaniso Mbashe, Sharon @ UCT, Lindiwe, Siphon, N Manakaza, Nomgcobo Sitokwe, Mgidi Londoloza, Lulana, Lungile, Phillip Sandlo, Mawande Mqokolo, Andile Sibeko, Thandiwe, N. Mgogoshe, Nomava Yoko, Nontombiza Namnegese, Minerve Rooi, Mona, P. Willie, Cabatls, Samantha Kiessas, Hanna Lotteina, Aletta Rickett, Ann,Sharlene Kiewietz, Connie, Claire, Sinsiswa Masala, Catherine, Sibodwana Kammtemi, Situlo Hobe, Kribo Mblone, Nomandla Mlengo, Noluseye Zenzile, Thandy Ngxonguala, Fundiswa Dombuso, Weziwe Mangoy, Nombulelo Gronini, Jessie Gaedernow, Norkosi Mata, Khoicka, Mtoyptickizua, Nosipho Mashill, M. Hoe, Makatesi G., M. Mbanga, S. Madolo, V Dlala, N Majali, N. Jongi, S. Baki, P. Jokers, W. Dodwana, Nolizwe, Mzukisi Ntimbela, Cebo Mdoda, Nomtsingiselo, Thembani Thaka, Ntombenysha Mtshutshisa, Christina Nogemere, Isikolo Soutaango, Welhome Sifeyi, Igame. Yandiswe Dosi, Ntombizizikile Suka

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