

DISSERTATION

Livelihoods in the Lake Gariep Region: A Study of Socio-Economic Conditions in Post-1994 Rural South Africa

'ubomi obungcono'

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A thesis submitted in fulfillment of the requirements of the Degree of Doctor of Philosophy,
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Certification

I acknowledge that I have submitted this doctoral thesis to the University of Vienna as part of a co-tutelle agreement with Macquarie University.

I certify that the thesis is an original piece of research and that it has been written by me. Any help or assistance has been properly acknowledged.

Hermine Stelzhammer

Abstract

The core empirical research of this thesis investigates livelihoods in three rural communities at Lake Gariep, South Africa's biggest water body. More than 6000 people are living within the study area: Venterstad and Oviston, situated in the province of the Eastern Cape; and Gariep, in the province of the Free State. Severe poverty characterizes all three locations. The fish stock at Lake Gariep is one of the most important food resources for locals. This study constitutes the first social research undertaken in the area. It contributes to the existing body of knowledge on livelihood studies and natural resources in general and in post-apartheid South Africa in particular.

A mixed methodology, combining the livelihood approach with extensive *in situ* surveys is applied. Wide-ranging socio-economic data and qualitative material on life satisfaction were generated through two large household surveys conducted in 2007 and 2011. The methodology enables a comprehensive assessment of the role of fishing for rural communities, its contribution to their well-being, and the constraints fishermen have to face. The analysis is extended to the relationship between the micro-level represented by the case study and the macro-level of the political and economic situation in contemporary South Africa. The thesis argues that the rural poor at Lake Gariep are a localised example of a broader failure to make substantial progress towards achieving major national policy objectives of economic development, food security and poverty eradication since 1994. In stark contrast to these proclaimed goals, South Africa is characterized by increasing inequality and poverty. The reasons for this are manifold: historical and global economic pressures, but principally it is a result of political and administrative failure.

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iii

Dedication

For Tilda

Table of Content

Abstract	i
Acknowledgements	ii
List of Figures	viii
List of Tables	x
List of Photos	xi
Chapter 1 Introduction	1
1.1 Theme and Research Context	1
1.3 Scope and Structure of the Thesis	11
1.4 Objectives	15
1.4 Methods	18
Chapter 2 History, Politics and Economics in Post-1994 South Africa	20
2.1 Introduction	20
2.2 The legacy of apartheid	21
2.3 Policy and Poverty	25
2.4 Growth	38
Chapter 3. Lake Gariep: Geography, History, Fishing	41
3.1 Geography	41
3.2 Regional History	44
3.3 Study Area	49
3.4 Fishing	55
Chapter 4 Methodology	59
4.1 Introduction	60
4.1.1 The Livelihood Approach	61
4.1.3 Theoretical Background	68
4.2 Case Study	69

4.3 Pragmatism - Methodological Pluralism	72
4.4 Study Design	80
4.4.1 Survey and Questionnaire 2007	83
4.4.2 Survey and Questionnaire 2011	87
Chapter 5 Human and Financial Assets	88
5.1 Introduction	88
5.2 Human Assets	90
5.2.1 Demographic Profile 2007	90
5.2.2 Comparison between Population Composition and Changes between 2011	
5.2.3 Age-Sex Distribution and Dependency Ratios 2007	97
5.2.4 Age-Sex Distribution and Dependency Ratios 2011	100
5.2.5 Household Composition 2007	102
5.2.6 Household Composition and Change 2011	104
5.3 Economic Assets	105
5.3.1 Household Income and Occupation 2007	106
5.3.2 Household Income and Occupation 2011	114
5.3.3 Education Levels	124
5.3.4 Ownership of Assets/Equipment 2007/2011	128
Chapter 6 Natural and Social Assets	130
6.1 Natural Assets	130
6.1.1 Fishing (2007 Fieldwork)	130
6.1.1.1 Subsistence Fishing Households	133
6.1.2 Fishing (2011 Fieldwork)	134
6.1.2.1 Temporal Comparison of Subsistence Fishing Households	135
6.1.3 Farming and Livestock	148
6.1.4 Food Security	149
6.2.1 Life Satisfaction Indicators 2007 and 2011	152
6.2.2 Changes after 1994	153
6.2.3 Life Satisfaction Indicators 2011	

6.2.4 Changes after 1994	155
6.2.5 Housing	156
Chapter 7 Discussion	158
7.1 Macro-Level Policy and Economic Context	159
7.2 Micro-Level - Lake Gariep	162
Chapter 8 Conclusion	182
Bibliography	200

List of Figures

Figure 1 Gini Coefficient In South Africa (Total-National) Compared with the Gini
Coefficient in the Eastern Cape Province (Total – Eastern Cape) from 1995-2010
(Eastern Cape Socio Economic Consultation Council 2012) 50
Figure 2 Gariep Local Municipality (Eastern Cape): Gini coefficient from 1995-2010)
(Eastern Cape Socio Economic Consultation Council 2012) 50
Figure 3 Methodology of the case study
Figure 4 Percentage of households, respectively household members, (y-axis; in total)
according to their length of residence in the area (x-axis)
Figure 5 Unemployment, employment, and distribution of social Grants in
Venterstad, Oviston and Hydro Park
Figure 6 Percentage of household members (x-axis) and their occupational status 110
Figure 7 Occupational status according to gender
Figure 8 Real Income and Required Income per Month per Household (total HH)
2007112
Figure 9 Real Income and Required Income per Month per Household (total HH),
Venterstad 2007
Figure 10 Real Income and Required Income per Month per Household (total HH),
Oviston 2007
Figure 11 Unemployment/Employment/Social Grants Profile (Percentage of
Households)114
Figure 12 Real Income and required Income per Month per Household (total HH),
2011119
Figure 13 Real Income and Required Income per Month per Household (total HH),
Venterstad 2011
Figure 14 Real Income and Required Income per Month per Household (total HH),
Oviston 2011
Figure 15 Income per Household (HH) per Month 2007 and Income per Household
(HH) per Month 2011121
Figure 16 Education levels of sampled population eighteen years or older (n 203). 125
Figure 17 Gender and Education Levels (N 203)
Figure 18 Regression of level of education against level of occupation

Figure 19 Educational Levels relative to Age Cohort
Figure 20 Education levels of female residents
Figure 21 Comparison of Household Possession 2007/2011
Figure 22 Comparison of Household Possession (Fishing versus Non Fishing
Households) 2007/2011
Figure 23 Income Sources of Fishing/Non-fishing Households (HH) in Venterstad
2011
Figure 24 Income sources of Fishing/Non-fishing Households (HH) in Oviston 136
Figure 25 Food Security 2007 - Consumption of meat and fish by households that
consider themselves food secure
Figure 26 Food Insecurity 2007 - Consumption of meat and fish by households that
consider themselves food insecure. Note at bottom says consume meat (only) 150
Figure 27 Food Security 2011. Consumption of meat and fish by households that
consider themselves food secure
Figure 28 Food Insecurity 2011. Consumption of meat and fish by households that
consider themselves food insecure
Figure 29 Perceptions of residents on the most positive changes since 1994 153
Figure 30 Changes after 1994 (2011)

List of Tables

Table 1: Macroeconomic Indicators, GEAR targets and performance, 1996-2000 37
Table 4 presents the system of inquiry into livelihoods at Lake Gariep. Note:
Livelihood resources are identified as human, financial, natural, and social
assets. Data on household composition and age cohorts are presented. For a
comprehensive understanding various categories for the analysis are applied90
Table 5 Summary statistics for counted households and sampled households in total
numbers and percentage of sampled households91
Table 4 Summary Statistics for the Communities, respectively Households (HH) 91
Table 7 Population size, Statistics South Africa (2003)
Table 8 Population Size 200792
Table 9 Means and Confidence Intervals (Cl) for Population Composition and
Changes 2007/201196
Table 10 Number (N) and percentage (%) of the sampled Population in Venterstad,
Oviston, Hydro Park, and total number of sampled population divided by age
cohorts
Table 11 Data on child dependency ratios, old aged ratios and total dependency ratios
of Venterstad, Oviston and Hydro Park, as well as corresponding national data
(Statistics South Africa 2003) for comparison
Table 12 Number (N) and percentage (%) of sampled population in Venterstad and
Oviston and total number of sampled population divided by age group category.101
Table 13 Data on child dependency ratio, old aged ratio and total dependency ratio,
corresponding national data ports data on the age and sex structure of these
communities, as well as corresponding national data (Statistics South Africa
2003) for comparison
Table 14 Summarised statistics for the mean number of individuals and children per
household and the child dependency ratio for Venterstad, Oviston and Hydro
Park
Table 15 Summary statistics for mean number of individuals and children per
household as determined during the 2011 survey, including the child dependency
ratio for Venterstad and Oviston
Table 16 Mean and Confidence Intervals (Cl) for Household Structure 105

Table 1/ Ntsigo, Life Story10
Table 18 Income Categories 2011
Table 19 Sampled Fishing versus Non-Fishing Households Venterstad, Oviston and
Hydro Park
Table 20 Household numbers and fishing frequency in Venterstad, Oviston and
Hydro Park
Table 21 Fishing frequency from the household survey conducted in Venterstad and
Oviston
Table 22 Verbatim responses by local people on why they do not fish (Afrikaan
responses translated)
Table 23 Life Satisfaction: Perceptions about Quality of Life, Venterstad and Oviston
2007
Table 24 Life Satisfaction: Quality Of Life Perceptions from Venterstad and Ovistor
2011
List of Maps
Map 1 Provinces of South Africa. (The dot indicates Lake Gariep)40
Map 2 Location of Lake Gariep in South Africa and map of Gariep
Dam41
Map 3 Roads in the sampling
areas
List of Photos
Photo 1 Venterstad, 200753
Photo 2 Fisherman with his catch, Lake Gariep 200713

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Chapter 1 Introduction

1.1 Theme and Research Context

Many scholarly accounts (Clark and Worger 2004; Lodge 2003; Terreblanche 2002; Waldmeir 1997; Mulholland 1998) have addressed the period during which the African National Congress (ANC) emerged as a legal political party and went on to win the first free elections held in South Africa. A congruence of forces contributed to the establishment of the new democratic system. Geopolitical transformation caused by the end of bipolarity and the dissolution of the Soviet Union greatly weakened the position of the apartheid state. Economic crisis was accompanied by burgeoning international and internal pressure on the National Party (NP) government to allow peaceful political and social change. The daily struggle and protest of millions of disadvantaged South Africans, declared non-citizens, further impelled non-violent transition. The catalyst was the remarkable figure of Madiba, Nelson Mandela. Apartheid officially came to an end with the elections in 1994.

The first nation-wide poverty survey, conducted under the auspices of the South African Labour and Development Research Unit in 1993, revealed that with a Gini coefficient of 0.58, South Africa had one of the highest levels of inequality in the world (Project for Statistics on Living Standards and Development (PSLSD) 1994). The apartheid state had dispossessed the majority of its population and restricted their ability to participate in the economic framework (Lipton 1985; Bernstein et al. 1992; Bernstein 1996; Bernstein 1998; Bond 2001; Lodge 2003; Agregraad and Birch-Thomsen 2006; Marais 2011). The demise of that regime left vast inequalities, huge poverty gaps between rural and urban citizens, and an economy with high dependence on cheap labour. By engendering a situation of inequitable access to employment, services, and resources for the native African population, apartheid policies resulted in poverty being characterized by a strong racial dimension. Poverty was also geographically concentrated, with seventy-two per cent of the poor residing in rural areas, especially the former homelands

(PSLSD 1994). The majority of South Africans were unskilled and their access to health facilities, education, safe water, sanitation and housing was limited. Up to sixty per cent of South Africa's households were caught in a poverty trap (Du Toit 2005).

The ANC's Reconstruction and Development Program (RDP), was central to the strategy delineated in the party's manifesto for the 1994 election. Meeting basic needs, developing human resources, building the economy, democratising the state and society, and implementing the RDP¹, were the five main policy programmes for the renewal of South Africa, those upon which many aspirations and expectations rested for an improved future (ANC 1994). The RDP proclaimed that:

No political democracy can survive and flourish if the majority of its people remain in poverty, without land, without their basic needs being met and without tangible prospects for a better life. Attacking poverty and deprivation will therefore be the first priority of the democratic Government (Government of National Unity 1994: 5).

A long-term vision was thus established. The state would create opportunities for the poor, redistribute resources, and promote an economic environment in which almost all could find employment (White Paper on Reconstruction and Development 1994). The historical trajectory of the apartheid economy would end. In stark contrast to these formulations, however, the macroeconomic policy Growth, Employment and Redistribution (GEAR), announced in 1996, resulted in a period of fiscal austerity. There was a reduction in social spending, an undermining of the public sector, job losses and social conflict (Khosa 2000; Dor and Ruiters 2000; Bond 2001; Macdonald 2002). This was the beginning of a period characterized by growing disillusionment. Very high expectations had been encouraged, but these did not transform into corresponding material achievement. In the two

¹Implementing the RDP involved processes and forms of participation by organisations outside government that were very different to the old apartheid order. To implement and coordinate the RDP required the establishment of effective governmental structures at national, provincial and local levels (ANC 1994: 6).

years from 1994 to 1996, a change in the ANC's ideological rhetoric and policies occurred. A country that had hardly begun a process of unity was again riven.

Poverty reduction and social justice are neither goals of free markets nor necessarily achieved by them. But they were explicitly declared as goals by the ANC. In government, however, the ANC failed to counteract the inequities of the liberalised economy. It did not regulate in ways that would have benefited the broad population, at least by enabling economic participation that would sustain basic living standards. The objectives of the RDP appeared far from realisation. It remained unclear how those goals would be achieved given the short period of transition. The Minerals-Energy Complex predominated as it had during apartheid (Fine and Rustomjee 1997; Fine 2008). The ANC instituted new methods with premises of less state interference and more economic liberalism. External forces, including some which had supported the democratic transition in the early 1990s, had influence on the change of policy direction. Now as the ruling party of South Africa, the ANC had itself been transformed.

With its slogan 'Change must go on at a faster pace! Vote ANC so together we can speed up the journey to a better life' (ANC 1999), the party claimed during the 1999 national election campaign that it had made substantial progress towards a better life for all. From 1994 to 1999 the ANC government had built over 500 clinics, transferred 220,000 hectares of land to 68,000 households, connected two million households to electricity, housed nearly three million people and brought water to 3 million (ANC 1999). Despite the progress in some fields, Leibbrandt et al. (2010: 10) report that South Africa's Gini coefficient rose from 0.66 in 1993 to 0.68 in 2000 and to 0.70 in 2008. The gap between the poor and the rich widened, and the black population was most affected by deepening poverty.

The National Local Economic Development Framework (LEDF) (2006), the Integrated Development Plans (IDP) (Municipal System Acts 2000), and the Provincial Growth and Development Plan (PGDP) (2004) which replaced

the Strategy Framework for Growth and Development (1996), aimed to reduce poverty and stimulate growth at local, provincial and national levels. Their implementation was intended to achieve a growth rate of between five and eight per cent per annum; to halve the unemployment rate by 2014; and to reduce the number of people suffering hunger and malnutrition by sixty to eighty per cent (PGDP 2004).

The Lake Gariep area, the location of the fieldwork conducted for this thesis, is emblematic of the discrepancy between the ANC's political objectives and actual living conditions for most people. For them, little has been achieved in overcoming structural deficits and intense poverty. Although the legacy of apartheid, because it cannot be completely expunged, has a significant role, successive ANC governments have, in practical terms, offered unsatisfactory responses to the challenges the Lake Gariep area, a microcosm of the country as a whole, has faced.

1.2 The Political Economy Debate

Two main positions on the politics and economics of post-1994 South Africa can be distilled from the relevant academic literature. Moderate interpretations consistent with one or other of these positions are joined by more ideologically driven and polarised views. Nonetheless, debates are crucial for a democracy and particularly for the post-1994 order. The first of these two positions emphasises the lack of success in reducing poverty, narrowing the gap between rich and poor, and minimizing structural deficits. The second highlights ANC accomplishments in government, generally in improving living standards of the poor (and the middle class and rich). It tends to disregard issues not adequately dealt with or the creation by the ANC of new difficulties.² The main difference in these two positions lies in the interpretation of, and more importantly, how to tackle, the fundamental problem of protracted severe poverty. The first position targets the ANC's

²18 percent of the seven million people who are reported to have been given access to water since 1994 are unable to pay their water bills. 1.26 million of these new recipients are unable to afford the water and another 1.2 million have to choose between paying for water and buying other essentials. Similar percentages apply to the 3.5 million South Africans who have been given access to electricity (McDonald 2000: 9).

responsibility as the ruling party. Adherents of the other position emphasise exogenous factors, such as capital movements, which are not controlled by the ANC, and is less critical of its response to them.

Scholarship associated with the first position (Bond, 2001; Marais 2001; Du Toit, 2005; Banks 2005; Banks 2009; Adato et al. 2006; Marais 2011) critically assesses the ANC's efficacy, arguing that the government delivered substantially wrong policies throughout a period of nearly two decades. Their structural analyses represent a critical left account of contemporary South Africa. In marked contrast to what it declared in major documents, the Freedom Charter (1955; see also Steytler 1991), the RDP (1994) and GEAR (1996), the ANC is more concerned with self-enrichment than with redistribution to benefit the poor. Again, in 2007, the ANC repeated its commitments in the 'strategy and tactics', adopted by its 52nd national conference:

The main content of the NDR (National Democratic Revolution) is the liberation of Africans in particular and blacks in general from political and socio-economic bondage. It means uplifting the quality of life of all South Africans, especially the poor, the majority of whom are African and female [...] the hierarchy of disadvantage suffered under apartheid will naturally inform the magnitude of impact of the programmes of change and the attention paid particularly to those who occupied the lowest rungs on the apartheid social ladder (ANC 2007: 4).

The ANC appears trapped in a form of idealism without cognition of the desperate material circumstances of its voters. As the survey results in this thesis confirm, many South Africans are dissatisfied with the ANC, yet it has won four successive elections. Though the party's promised socio-economic improvements have not been realised, most South Africans do not see an alternative. A possible explanation is that people still identify with the former liberation movement.

The present political course seems to lots in the Alliance as a disloyalty of the National Democratic Revolution (NDR), which outlines the history of struggle against white domination in South Africa. It refers (in very general terms) to the goal of creating a united, democratic, non-racial, non-sexist and prosperous society where the African poor and workers, led by the ANC in a broad national liberation movement, are the main motive force and of which the Reconstruction and Development Programme (RDP) is a key manifestation. The NDR has been a cornerstone of the anti-apartheid struggle, and the ANC recently reaffirmed its identity as a liberation movement and its commitment to the NDR during its second National General Council (NGC) in Tshwane in June–July 2005 (Andreasson 2006:18).

Scholars representative of the second view noted above (e.g. Moller 1999; Moller 2004; Bhorat 2005; Lundhal and Peterson 2009) argue that South Africa has experienced changes that have improved the living conditions of millions. Because it had limited space to manoeuvre, largely determined by exogenous influences, the government realistically did what was possible in balancing the interests of the electorate with international financial pressures. 'The ANC government'

proved that it was pragmatic and that it had a strong sense of down-to-earth realities on the one hand and the mood within the international financial community on the other. It had not hesitated sacrificing old ideological principles when it appeared that these would get in the way of improvements of the living standard. The road had been one of trial and error, but the government had learned from its mistakes, (Lundhal and Peterson 2009:9).

A characteristic of this view is that realities are preferred over defined aims or political goals, notwithstanding that the ANC's ruling elite abandoned some of their past political canon and replaced it with what transpired to be unsubstantiated optimism. Habib and Padayachee (2000) argue that the problem lies in the restricted possibilities available to the post-apartheid government because of international constraints. Essentially, the world

economy has disciplined the state to adopt a broadly neo-liberal policy orientation. One consequence of these influences is that labour markets do not absorb enough people to drastically reduce poverty levels.

In contrast to Lundhal and Peterson (2009), Bond and Dugard (2008: 13) criticise the ANC for adapting to neoliberalism, which they consider a new form of apartheid in which racially based exploitation and suppression has been replaced with class exploitation. The democratic changeover has given way to a transition to neoliberalism. The new ruling elite and the beneficiaries of the apartheid regime had already made common cause when the ANC came to power in 1994.

No one disputes that with at least 2.6 billion people lacking adequate sanitation and 1.1 billion lacking access to improved water sources, there is an urgent need for dramatic improvements in investment, management and affordability. In a setting as unequal as South Africa (with roughly 40 per cent unemployment and amongst the world's highest income disparities), the neoliberal policies adopted during the 1990s pushed even essential state services such as water beyond many households ability to pay; municipal services now account for a third of average household expenditures. Some of these policies were adopted before political liberation from apartheid in 1994, but many were the result of influence on Nelson Mandela's government by the World Bank, United States Agency for International Development (USAID) and other global and local neoliberals during the late 1990s

The ANC's policies did not change apartheid's legacy of a wealthy minority and an impoverished majority (Bond 2001). The ANC's shift to follow the path prescribed by the World Bank and the International Monetary Fund (IMF) contrasts with the aims of the liberation movement. Chen (2011: 115) argues that GEAR was an ambitious economic model that was initially meant to reduce poverty, although from the very beginning it was too ambiguous to achieve its goals. He recognises that neoliberalism was the orthodoxy of the time, though is vague on the reasons for the deep social

problems. Chen notes that Thabo Mbeki, President of South Africa from 1999 2008, wanted to be a symbol for the African continent but the details of poverty and despair never reached him. For Peet (2002), the Davos culture quickly emerged as predominant, causing an ideological shift from left to right, reflected in major ANC policies. In their work on poverty and policy in post-apartheid South Africa, Bhorat et al. (2006: 13) declared:

most of the gains in income through economic growth in the post-apartheid period in the form of reduced poverty levels have been dissipated through increased income inequality.

According to Marais (2011) even though changes to improve the living conditions of millions are occurring, the policies introduced by the ANC are erroneous. The ANC's social welfare system has some unintended and deleterious consequences. Poverty is so severe that in order to obtain money, some South Africans infected with the human immunodeficiency virus (HIV) deliberately stop using antiretroviral treatment to avoid losing their disability grant. Their health status functions as a criterion for access to financial support, with equally needy non-HIV affected individuals not qualifying for the grant (Marais 2011: 241).

Johnson (2010) examines the neoliberal impact on the ANC's policies after 1994. He also highlights corruption, poor leadership, maladministration, incompetence and mismanagement. In regard to health policy he states that:

It was remarkable that the ANC, whose primary constituency was the mass of poor Africans, should, despite fervent promises to the contrary, do so much so quickly to damage the public health system (2010: 470).

Johnson concludes that 'the economy and the country drifted and rolled like a rudderless ship in a storm' (2010: 651). Turok (2011: xiii) offers a nuanced analysis of inequality, unemployment and poverty. He argues that the government made serious errors in economic policy. Instead of adjustment, South Africa needs fundamental changes, which were foreshadowed in the

RDP. Turok's contribution is insightful because, unlike Johnson (2010), he does not consider South Africa to be a failed state but rather focuses on how failures can be transcended in the future. Doing this requires vision and political courage (Turok 2011: xiv).

The ANC today is not only the ruling elite that is regularly connected with allegations of corruption, self-enrichment and a disregard for the needs of the poor majority. The ANC is a broad movement with highly diverse sections and grass-roots activists. Since the mid-2000s, the South African police recorded 8000 demonstrations of social protest against poor housing, poor and expensive service delivery, water and electricity shortage, crime and poor health management, and inferior education (Alexander 2010; Mottier and Bond 2011). The scale of dissatisfaction reflects badly on the party's capacity to lead the country.

Poverty Research

Data on poverty has been assembled on a national level as well as through smaller sample fieldwork (Leibbrandt et al 2004; Aldermann et al. 2000; Bhorat et al 2006; Leibbrandt and Woolard 1999; Meth and Dias 2004; Noble et al. 2006a; Noble et al. 2006b). The first study on poverty was published shortly before the elections in 1994. It revealed that fifty-three per cent of black South African households in rural areas are poor (Carter and May 1999).

Using a national poverty line of R(2000) 322 per person per month around 58 percent of South Africa's population were categorised as being poor in 1995, a situation that had not changed by 2000, although there was a marginal decline on the poverty incidence of Africans, from 68 percent in 1995 to 67 percent (May 2010:1).

A basic problem for many studies of poverty in South Africa is that the data used for measurement is either incomplete or there is a lack of consensus on its validity. Entire debates are then constructed on data that is flawed or at least disputed. Du Toit (2005: 4-5) has illuminated this concern:

Most of the current debate about poverty trends in South Africa is focused on the social surveys and censuses that have been put into the field since 1994 by Statistics South Africa. Here, some caution is obviously needed. Developing a national statistics service that can accurately deliver reliable data on changing social profiles for the country as a whole has been a difficult process. Not least of the problems has been the insufficiencies of earlier censuses, which mean that until the late 1990s, national surveys were not guided by any adequate national sampling frame

The South African official statistics agency periodically publishes census and other surveys on households, labour and living standards, in order to identify key deficiencies of the population. The October Household Surveys, produced annually from 1994 until 1999 (Statistics South Africa 1995), were followed by Income and Expenditure Surveys, conducted every five years (Statistics South Africa 2001, 2006), and the General Household Surveys from 2002 onwards (Statistics South Africa 2003). However, like Du Toit's (2005) reservations above, the quality of their records and results are very much disputed, with concerns about the accuracy of data sets on poverty and inequality (Daniel et al. 2010; Van der Berg 2008; Leibbrandt et al. 2010). Meth (2006: 436) argues that

Unless satisfactory progress is made [...] credible estimates of progress in the struggle against poverty in the country as a whole, let alone at the level of the province will continue to be difficult, if not impossible, to make.

These shortcomings and knowledge gaps are of major importance for this study and its empirical work. There are serious ramifications for policy formulation when a government that has a massive challenge to alleviate poverty, and purports to be addressing it unequivocally, relies on data that is dubious or definitely inaccurate. Statistics on poverty, inequality and unemployment have great policy relevance and disregard for accuracy belongs under rubric of incompetence. Instead of perpetuating assumptions resulting

from questionable data, the thesis includes an original and independent baseline study.

There is also a deficiency of research on rural livelihoods. Although a number of national level surveys (PSLSD 1994; May et al. 1998) have been conducted, little intensive scholarhsip exists on rural communities at the household and individual level. How rural people respond to poverty, how it influences livelihood choices, what effect government policies have, and whether living conditions are improving or deteriorating, remain largely unexplored and unanswered topics. Papers on post-1994 rural economic development have been produced by Bernstein (1996), De Wet (2000), Bank (2002), Aliber (2003); Fabricius (2004), Cousins (2005), Du Toit (2004; 2005; 2006), Bank (2005), Lahiff (2002; 2003; 2005), Ruiters (2007), Sheckelton et al. (2009) and Ruiters (2011). However, the extent to which these studies actually focus on livelihoods is limited. Ideological standpoints and diverging world views lead to a variety of assumptions on the causes and the nature of persistent poverty in South Africa. Hence it is necessary to analyse the livelihood strategies in general of the rural poor and the drivers that lead to, further deepen, or might positively address the living conditions of poorer South Africans.

1.3 Scope and Structure of the Thesis

This thesis combines empirical research on the socio-economic situation of the rural poor in a particular region with a wider analysis of the post-1994 economic and political context in South Africa. The geographic scope of the localised study is the area around Lake Gariep, South Africa's biggest water impoundment. Two communities, Venterstad and Oviston, are in the Eastern Cape; Hydro Park, the third town investigated, is located in the Free State. These towns were selected because of their proximity to the lake. The inquiry is limited to residential households, with the household per se being the principal component of the livelihood analysis.

The survey and qualitative interview research encompasses two sampling periods, October 2007 and January 2011. The research obtained original data on natural, social, human and economic assets at Lake Gariep. To comprehend the reasons for the socio-economic conditions there, more general trends are drawn from the results due to the interdependence between the localised study area, macro-economic factors, and government policies. The thesis contributes to filling part of the gap on livelihood research in rural areas. In doing so it addresses what Leibbrandt et al. (2010: 70) note is 'a common criticism of existing South African dataset's:

They do not include enough detail across multiple areas of interest to allow for certain types of analysis. For example, those with detailed information on labour do not include enough detail on income, or health, or education for some types of analysis to be possible.

The surveys undertaken deliver extensive detail on income, assets, education, and occupational status. The material is used to analyse how the people of three rural communities survive in a context that, despite promises to eliminate effects of (any) oppressive and exploitative systems, perpetuates elements of the pre-1994 era in recast form, mainly because of ineffective and contradictory policies.

During the pre-1994 era, subsistence fishing was legal only in the former homeland areas (Andrew 2001). The ANC's long-term vision for South Africa was to redistribute income and opportunities in favour of the poor and to guide an economic environment that created sufficient jobs for all who sought them (White Paper on Reconstruction and Development 1994). However, during the process of reformulating South Africa's new fishing policy, inland fisheries were not part of this policy arena (White Paper on a Marine Fisheries Policy for South Africa 1997). People located around inland water bodies were not considered a priority.

The thesis has eight chapters. Chapter one gives an overview of the study, historical detail and background debates, outlines the research objectives, and identifies gaps in knowledge.

Chapter two presents a political and economic analysis of major policy formulations and their impact since 1994, and highlights an overview of the discourses that have emerged since 1994. It involves an extensive literature review and an engagement with relevant academic debates.

Chapter three outlines the epistemological as well as methodological theories for the two surveys. It expands on the livelihood approach and its main principles as applied in the study. It further outlines the sampling frame and procedure, design, data collection techniques and the analysis undertaken.

Chapter four introduces the study area, the history of dam development as well as the Orange River project of which Lake Gariep forms a major component. Both provinces, the Eastern Cape and the Free State, are introduced, and a description of the relevant townships is included. The last part of the chapter deals with fish as a natural asset in the area and highlights the importance of fishing for the rural poor.

Chapter five analyses the financial and human assets of the rural population in the Lake Gariep area. It presents economic profiles of the study area and data on social welfare dependency due to high levels of unemployment.

Chapter six focuses on the natural and social assets of the rural population included in the survey. The 'quality of life' component of the surveys provide extensive opinions on living situations, conditions, infrastructure in the study area

Chapter seven discusses major results and findings of both surveys and interrogates the relationship of the micro-level Lake Gariep case study with the national political and economic situation.

Chapter eight concludes the thesis. The remaining sections of the conclusion summaries the thesis's findings and suggests how its research agenda could be further expanded.

1.4 Objectives

Baseline Study

Little social research has been undertaken to investigate the correlation between fishing and poverty, both at Lake Gariep and in the country as a whole. To address this shortcoming, a baseline study was conducted at Lake Gariep. The empirical focus is on local households, the structure that regulates daily life, as the main social unit. An actor-oriented perspective, which puts people and their agency at the centre, is employed. This brings to the fore the particularities and diversities of livelihoods at Lake Gariep. The research also aimed to determine the contribution of the fishing activities to the livelihoods of the population, the demand for freshwater fish in three towns in the vicinity, and consumption patterns.

The first objective was to provide a comprehensive socio-economic profile of the area, including determining the population size of the townships. This involved clarifying demographic trends, and obtaining fresh data on education levels, employment and unemployment, household revenues, poverty indicators, housing and infrastructure, social welfare provision, and perceptions on the quality of life. Broadly defined, the four livelihood research areas are natural, financial, social and human assets. The study also situates the research findings in broader contexts of socio-economic development, institutional change, policy formulation and implementation, and political culture in South Africa.

Poverty reduction

The second objective deals with the ANC's political goals to eradicate poverty and whether or not tangible results have been achieved. Considering a wide range of measures, the most optimistic interpretation of the data for South Africa is that poverty has remained stagnant. A less favourable view would be that poverty has deepened, that inequality has increased, and that benefits of economic growth have not reached the poorest (Whiteford and van Seventer 2000; Hoogeveen and Oezler 2005). The persistence and even worsening of

poverty raises important questions on policy frameworks, for example GEAR, and in relation to national debates about economic growth and job creation. The thesis provides a specific localised examination of rural poverty over a four-year period. Socio-economic data obtained during 2007 was compared with data from the survey conducted in 2011. Changes in the socio-economic make-up between the two surveys and impacts of the government's anti-poverty measures are analysed.

Welfare

Individuals eligible for welfare grants are assumed to be the most vulnerable: children, old people, the sick and the handicapped. Unemployed South Africans are not entitled to substantial state support, though the government has introduced the Unemployment Insurance Fund (UIF). This is a short-term financial support that marginally improves the socio-economic condition of the unemployed. Less than forty per cent of the South African work force is covered by the UIF. The fund pays insurance to less than six per cent of the unemployed. Given the high unemployment rates, the fund is not properly targeting those in need (Coleman and Tregenna 2002).

Because of these arrangements, many unemployed people depend on grants paid to those in need for other reasons. The third objective investigates the impact social grants have on the region's households. I explore how unemployed people without state support are able to survive, variance in household structure and composition, and whether households that receive social grants carry a higher economic burden than household that do not receive them. The government's inability to reduce poverty and promote job creation not only affects the unemployed but also many others. If individuals who, due to old age, bad health, or because they are children, are economically inactive but nonetheless support whole families, then Marias (2011) and Bond (2000) are correct in arguing that South Africa's welfare system is inadequate in its ostensible purpose of relieving the daily struggles of the poor.

Fishing

Within the substantial body of research on socio-economic development in post-apartheid South Africa, inland fishing has received comparatively little scholarly attention, and that on the pursuance of fishing as a livelihood strategy is scarce. Andrew et al. (2000), Weyl et al. (2007) and Ellender et al. (2010) are among the few exceptions. Commensurate with the lack of specialised academic work, successive ANC governments have, following their apartheid-era predecessors, largely neglected inland fishing industries and the communities dependent upon it in favour of the marine fishing sector and other food sources, including wild resources, livestock and crop production (Turner et al. 2009). Very few, if any, insights exist into how and if fishing could improve rural livelihoods and contribute towards reducing poverty in a poverty-stricken rural area. The role of fishing within the livelihoods of the rural poor is thus the fourth research objective. The importance of fishing to the rural poor for sustenance, as an occupation, as recreation, and as a potential business option is investigated.

An Integrated Development Plan (2007) has been put in place without dealing with this. Fishing as a livelihood activity is absent from documents produced by the municipalities and provinces. The development of rural areas should build on any successful existing means of promoting growth and reducing poverty, but also look for new possibilities. Despite its potential, the government has overlooked the inland fishing sector (Stelzhammer and Wood 2012).

Part of the reason for this lack of innovation is that, for the ANC, short-term objectives are of more importance than long term development goals. Short-term programmes can enhance livelihoods, but the development of long-term projects will have more sustainable positive effects. In terms of economic input by the government, it would be more cost-effective to establish formally what locals have already established informally. Instead of creating additional reliance on state funding through Expanded Public Work Programmes (EPWP), the policy focus of the local, regional and national

governmental bodies should encourage the agency of local people in ways that generate employment independent of the state. The prospects of investment in the local fishing industry study is compared with the effect of state-funded work programmes in the area.

1.4 Methods

Contemporary scholarship on poverty regards approaches that privilege financial metrics as insufficient to understand the multi-dimensionality of human deprivation (Alkire 2002). Sen (1993) developed the conceptual widening of poverty research in the direction of functions and capabilities in order to obtain more detailed understandings. Various aspects are recognised, not merely income or the lack thereof. Quality of life, housing, infrastructure, access to health services and education are essential when attempting to capture different facets of life in poverty.

To comprehend livelihood realities, their diversification strategies, their vulnerabilities to external influences and impacts, as well as material and non-material assets, a mixed methodological approach has been applied here. Quantitative data collection was combined with qualitative in-depth interviews and used to gain insights into people's living conditions and their own perspectives on them. The livelihood approach (Chambers and Convey 1994; Haan 2000; Ellis 2000) is used to analyse the constraints people in rural environments face on a daily basis. This subjective, participatory approach towards poverty research

rejects the income and consumption approach as a narrow reductionist view, serving the technocratic needs of development professionals, while failing to understand the complex, diverse, local realities in which the poor live (Chambers 1992: 32).

The livelihood approach emphasizes the need to endorse solutions to poverty that are economically sustainable and that recognise the importance of enhancing the asset base of the poor (Chambers and Convey 1998: 92). It

refers in particular to the means of gaining a living. Actors develop strategies around what are often called assets. For this thesis, four asset categories were drawn on: human, natural, economic (financial) and social assets. Livelihoods are defined as:

Capabilities, assets (including both material and social resources) and activities required for a means of living. A livelihood is sustainable when it can cope with or recover from stresses and shocks, maintain or enhance its capabilities and assets, while not undermining the resource base (Chambers and Convey 1998: 92).

The underlying concept is holistic, and actively supports individual perceptions. It seeks to identify what the poor have rather than what they do not have (Sen 1981). The core research units, households, are perceived as actors who choose their livelihood strategy based on rational decisions. Earlier empirical works show that the poor are managers of complex asset portfolios (Moser 1998), although they are restricted by factors outside the sphere of household influence. Still, structures can change through human agency. De Haan (2003a: 3) refers to this as:

People's capacity to integrate experience on to their livelihood strategies and to look for outlets of aspiration, ambitions and solutions to problems. Human agency enables man to reshape social conditions. Agency is embodied in the individual but embedded in social relations through whom it can become effective.

The livelihood approach is illuminated by a notion of development that focuses on people's strategies to survive options to build on assets people have. Links between individual or household assets, the activities in which households engage with a given asset profile, and mediating processes including institutions, regulations and policies that govern access to assets and to alternative activities, are emphasised (Allison and Ellis 2004: 21).

Chapter 2 History, Politics and Economics in Post-1994 South Africa

2.1 Introduction

This chapter examines the political and economic context in South Africa since the country's transition to democracy eighteen years ago. It begins by assessing the so-called legacy of apartheid hypothesis. It then focuses on policies implemented by the ANC government to minimize poverty and inequality and their effectiveness in doing so. The first two major policy frameworks were RDP and GEAR,—followed by the Accelerated and Shared Growth Initiative for South Africa (ASGISA 2006) and the New Economic Growth Path in 2010. Integrated with this analysis of policy and politics, the chapter reviews academic work on South African political economy, assesses the major *leitmotifs*, and engages with relevant debates.

Within the public and academic discourse that emerged since 1994, three main positions or asserted reasons for the social and economic situation can be identified. The first identifies apartheid as the cause of persisting deep structural inequalities. Despite the formal dissolution of racial segregation policies, the ANC has argued that the shortcomings faced by South Africa's population in the present are derived directly from Apartheid (The Presidency 2010). A variant argues that the political path chosen by the ANC has diverged from their proclaimed development strategy and contributes to this situation, and has even generated an expansion of inequality.

The second position centres on the macroeconomic strategies adopted by the ANC as leading to jobless growth instead of attacking poverty. High unemployment levels since 1994 indicate that the government is not able to minimize the problem, or, as Schüssler (2011) argues, the problem is not accurately understood at all. The third view reflects profound disaffection with the ANC and its alliance with global corporatism and neo-liberalism suggests that the ANC's irrational rhetoric (endless optimism) on one the side, and the actual socio-economic reality on the other, can be regarded as a pretext for the postponement and even the abandonment of social questions (Terreblanche 2008). The ANC deliberately chose a pro-business, pro-capitalist route over people-centred development that explicitly excludes the majority of South Africa's population. I now address these arguments in more depth.

2.2 The legacy of apartheid

The 'legacy of apartheid' is a discourse whereby current issues and economic debates are framed against a background of the predecessor state and its continuing influence. This legacy permeates key features of contemporary South Africa, and ANC policy fields ostensibly intended to solve inherent problems, including: poverty; employment and unemployment; resource wealth; rich minority and poor majority; and health, especially the AIDS epidemic.

From the mid-seventeenth century onwards, black people in South Africa were gradually dispossessed of most of their land through armed conquest and economic pressure. This pattern was formalized in the Land Act of 1913, which restricted African land ownership to seven per cent of the total land area (Lipton 1984). The new law made it a crime for any blacks but servants to live on farms owned by whites and ordered the eviction of squatters. In 1936, land allocation to black people was extended to thirteen per cent under the Native Trust and Land Act. A rational land use policy referred to as betterment planning was introduced to combat erosion, conserve the environment and develop the agriculture in the homelands. Betterment schemes were designed to transform land use patterns and involved a range of measures, such as fencing grazing areas. Substantial resettlement of black people took place after World War II.

During the apartheid era, virtually all wealth, infrastructure and political power was controlled by whites (Lipton 1984). Blacks, Coloureds and Indians³ were marginalized. While institutionalizing the policy of apartheid in 1948, the Nationalist government created Bantustans or self-governing homelands for the African population and during the next three decades, forced removals took place on a large scale. It has been estimated that between 1960 and 1985, more than 3.5 million people were forcibly removed from their native land to overcrowded 'homelands' (Ramphele et al 1991: 5). Rural locations were divided into residential, arable and grazing units, and homesteads were grouped together into village-like settlements forcing people onto smaller units of land. In most areas, people affected by the process came to associate the schemes with reductions in the availability of arable land and loss of livestock due to limited grazing area. Neither did the betterment planning relieve the pressure on the land. 'The scheme was too uniform and inflexible, and coupled with land pressure already existing, it had a predictably negative environmental, economic and social affect' (De Wet 1994: 362).

Bantu⁴ education refers to separate curricula based on race. The educational system implemented for blacks in 1955 focused mainly on inferior skills compared to the white curricula and was governed by the Department of Native Affairs. It was prohibited for black students to attend white schools (Parsons 1993). Nkabine (1997: 6) describes the National Party's aim 'to provide'

some basic education for blacks, a system of education that enforced ethnicity, to divide permanently the black population into manageable compartments and to provide a form of education that promoted technical training at the expense of

³Some readers may wonder why South African citizens are referred to by race and skin colour. Non-Whites, and especially blacks, were legally discriminated against. Hence in the following the reference to skin colour is a way of how to address social inequalities in contemporary South Africa.

⁴Bantu means people in the nguni language family. The word was used to describe all black Africans during the apartheid era.

critical thinking or education geared towards active participation in shaping one's own life.

Blacks were prepared for unskilled (low-paid) jobs, such as domestic workers, gardeners or in mining. The National Party government's aim was to produce a g class of people that would fulfil the work necessary to sustain and increase the wealth of whites. It was intended to keep the educational profile on a very basic level. The status of the whites would not be challenged, as critical investigations and questioning of implemented hierarchies and power structures was not part of the Bantu Education (Nkabine 1997). The results of Bantu education (Christie and Collins 1984) are that many South Africans only possess basic skills.

Every sphere of society was characterised by racial divisions: education, health facilities, employment, and land ownership (Lipton 1985). Non-whites, as defined by the state, had only restricted access to services. A minority of whites was able to accumulate riches, while simultaneously curtailing the majority's ability to meet daily necessities. The National Party actively created an unequal state based on racial segregation and severe inequality. Consequences of this institutionalized discrimination were underdevelopment, dispossession and exclusion for the majority of South Africans (Hunter et al. 2003). Another series of laws was introduced to consolidate apartheid policies. They included: The Prohibition of Mixed Marriage Act of 1949; The Population Registration Act of 1950, which required that all South Africans be racially classified; The Group Areas Act of 1950s, which designated specific areas for occupation by specific racial groups; The Natives Representative Act of 1954, which led to the removal of 58000 Africans to Soweto; The Natives (Abolition of Passes and coordination of Documents) Act of 1952, which consolidated the pass laws into a more comprehensive and stricter system; and The Promotion of Bantu Self-Government Act of 1959, which provided for the establishment of eight (later ten) Bantu homelands (Emmet and Hagg 2008: 302)

Prior to 1994, 22 million out of a population of 40 million, including 7.5 million people living in urban areas, lacked sufficient sanitation. Twelve million people had no clean drinking water, 23 million had no access to electricity, and some two million children did not attend school. Almost half of all households in South Africa lived below the poverty line; a quarter lived on an income of less than half of what was considered to be at the poverty line, and some eight million were estimated to be completely destitute. Around 30 per cent of the population was illiterate (Meredith 2006).

Apartheid's legacy confronted the ANC, and the new South Africa as a whole, with immense challenges. But the ongoing validity of the legacy of apartheid hypothesis *ad infinitum* has to be interrogated on the basis of what ANC governments have achieved. These governments promised to decrease artificially induced poverty. Their platforms over several years reiterated a goal to substantially improve living conditions. However, historical wrongs cannot act as a *carte blanche* explanation for current policy failures. The struggle of today is not against a state based on racial segregation but to meet the basic needs of millions. ANC rhetoric has not been backed by contemporary substance.

2.3 Policy and Poverty

The most striking constant in South Africa's economy is the high level of unemployment. According to data from Statistics South Africa (1998), the official (narrow) unemployment rate in 1994 was 20 per cent. The broad unemployment rate, which includes discouraged job seekers and those who are not actively looking for work, was 31.5 per cent. In 1995 a minor decrease in the number of job seekers occurred, officially to 16.9 per cent, while the broad figure remained roughly similar, a narrow unemployment rate (including discouraged jobseekers) of 29.2 per cent. Since 1996, the economic fissure between those who are formally employed and those who are unemployed has expanded (Statistics South Africa 1998). In 2007, the broad unemployment rate stood at 38.3 per cent. In 2009 an official unemployment rate of 23.6 per cent was reported. The broad number stagnated at 32.5 per cent (The Presidency 2009).

In 1998, Statistics South Africa⁵, then known as the Central Statistical Service (CSS), revised its description of the official unemployment. According to the new definition, the unemployed are those people within the economically active population who: (a) did not work during the seven days prior to the interview; (b) want to work and are available to start work within a week of the interview; and (c) have taken active steps to look for work or to start some form of self-employment in the four weeks prior to the interview. The economically active population consists of employed and unemployed people. The number of the unemployment varies according to the definition of unemployment used. The official unemployment rate is calculated as the percentage of the economically active population that is unemployed. The official definition of the unemployment rate corresponds to what Statistics South Africa previously called the strict unemployment rate, i.e. using criterion (c) as well as (a) and (b), set out above. By contrast, the expanded unemployment rate requires only criteria (a) and (b), and was the basis of the

⁵ Statistics South Africa is an organization mandated by Government, in terms of the Statistics Act, 1999 (Act No. 6 of 1999), to collect and disseminate official statistics, which are used to assist with socio-economic planning and development.

official definition used until 1998 (Statistics South Africa 1998). The main consequence of the definitions of unemployment is that lower unemployment rates reflect positively on the government.⁶ Statistics South Africa is a public service agency that represents the interests of the ruling party.

South Africa has one of the most skewed – and increasingly more so – juxtapositions of per capita income and Human Development Index (HDI) ranking. A wealthy minority of about 14-16 per cent of the population have access to quality education and health services. They participate in the formal economy and own consumer goods. The contrast between this minority and the disadvantaged majority is stark. In 2004, South Africa's annual per capita Gross Domestic Product (GDP) was US\$11200, making it the 55th wealthiest country in the world. However, in the same year it had an HDI ranking of 121st out of 177 countries (UNDP 2006: 283-287). The difference of 66 between the GDP and HDI rankings was the third largest in the world after Equatorial Guinea (90) and Botswana (74). South Africa's HDI ranking declined from 85th in 1990 to 121st in 2004 (UNDP 2006: 283). The downward trend reflects a severe deterioration of the socio-economic situation for a large proportion of the population. This is a chronic problem with no foreseeable solution, and which even ANC rhetoric cannot disregard.

Exacerbating these conditions, South Africa is the epicentre of the global AIDS epidemic (Marias 2011). The public health system is understaffed. At Lake Gariep, one doctor is available for a population in excess of 6000, and only once a week and at irregular intervals. This is replicated in many parts of the country.

Seventy-five per cent of generalist doctors and 84% of pharmacists work in the private sector, serving a maximum of 36% of the population using the most generous assumptions possible. However, most of their clients come

⁶For the Lake Gariep case study, data on employment and unemployment of residents was gathered (see Chapter 5). The definition used by Statistics South Africa was not strictly applied due to the fact that, especially in rural areas, people could enter the work force but automatically become unemployed due to a lack of job opportunities. The definition used by Statistics South Africa excludes long term unemployed, even if job seekers are fairly young.

from the 15% of the population covered by medical schemes. Eighty per cent of specialist doctors reportedly now work in the private sector and they serve almost exclusively medical scheme members (i.e. less than fifteen per cent of the population) (McIntyre et al. 2007: 44).

The racially based education system has been abolished but the prospects of receiving a good quality education are distributed along highly discriminatory class and racial lines (Marias 2001: 324). In post-1994 South African schools, socio-economic status still influence access to infrastructure (Tayler and Yu 2008). In 2008, as part of a fifteen year review, the presidency stated that South Africa's education system performs poorly and produces output that is weak overall (Policy Coordination and Advisory Services (PCAS) 2008: 85). Even compared to less well-resourced counterparts in other African countries, South African schools underperform in literary, numeric and cognitive skills, an outcome that perpetuates poverty and disadvantage (PCAS 2008: 24).

The high poverty rates in this resource-rich country are stunning. South Africa possesses one of world's richest stores of minerals, with forty-four per cent of the world diamond reserves, eighty-two per cent of manganese reserves and sixty-four per cent of platinum-group metal reserves. It is the world's largest producer of gold, mining one-third of world production (Meredith 2006).

The national wealth of our country, the heritage of South Africans, shall be restored to the people; the mineral wealth beneath the soil, the banks and monopoly industry shall be transferred to the ownership of the people as a whole All other industry and trade shall be controlled to assist the well-being of the people, (Freedom Charter of 1955).

The ANC's long history of combating apartheid, and its Marxist orientation, raised expectations that it was going to greatly improve the living conditions of the poor (Peet: 2002). The electoral manifesto of the ANC and of over 100 members from democratic movement organizations (May 2003) noted:

An election victory is only a first step. No political democracy can survive and flourish if the mass of our people remain in poverty, without land, without tangible prospects for a better life. Attacking poverty and deprivation must therefore be the first priority of a democratic government (RDP 1994: 1.2.9).

The ANC was given a clear electoral mandate, with 62.5 per cent of all votes in favour of the party.⁷ It was anticipated that macroeconomic policies canvassed in the RDP would be implemented. The ANC asserted that if the South African economy was not fundamentally reorganized, socio-economic remnants of apartheid could not be resolved (RDP 1994: 4.1.1).

This programme will both meet basic needs and open up previously suppressed economic and human potential in urban and rural areas. In turn this will lead to an increased output in all sectors of the economy, and by modernizing our infrastructure and human resource development we will also enhance export capacity (ANC 1994: 6).

Six principles framed the ANC's policy: an integral and sustainable program; a people-driven process; peace and security for all; nation-building; the linking of reconstruction with development; and the democratization of South Africa (Peet, 2002). A restructuring of the economy would eliminate its pro-white and pro-rich orientation and transform it to become pro-black and pro-poor. Within the four main chapters of the RDP⁸, Building the Economy, Meeting Basic Needs, Developing our Human Resources and Democratizing State and Society (RDP 1994), the government laid out their future perspective for South Africa.

⁷ At the polls, the ANC won a resounding victory. Its 62.5 per cent of the vote earned it 252 of 400 National Assembly seats, putting it well clear of the National Party (20.4 per cent) and the IFP (10.5 per cent) (Marais 2011: 76).

⁸ The White Paper laid out a new direction towards development-oriented work, but it committed also to the continuation of social assistance as one route to poverty alleviations. It encouraged individual financial responsibility where possible, but said that all South Africans should have the right to a reasonable standard of living, taking the lead from the constitutional right of access to social security (ANC 1994).

The RDP officially became government policy in November 1994, but the White Paper differed from the original manuscript in placing greater weight on financial and monetary discipline, the establishment of an economic environment conducive to economic growth, the trade and industry policies designed to foster a greater outward orientation (Government of the Republic of South Africa 1994: 21, quoted in Peet 2002: 71). The RDP gave a detailed account of how its goals should be achieved, namely through a five year plan: one million new low-cost homes would be available to the poorest South Africans, electrification of 2.5 million houses, hundreds of thousands of new jobs, redistribution of 30 per cent of good agricultural land, clean water and sanitation for all, a cleaner environment, universal primary health care and social welfare, a massive education initiative, and more (Bond and Khosa 1994: 5). It drew on the Keynesian paradigm (Adelzadeh 1996), although the ambitious social and economic aims were always going to be tested, given the government's resource constraints and the economic outlook at that time (Marais 2011). The economic growth rate dropped from 3 per cent in 1996 to 1.7 per cent in 1997, was 0.6 per cent in 1998, 1.2 per cent in 1999, and similar in 2000. The broad unemployment rate was at 37.6 per cent (Peet 2000). Causes for this downturn depend on what ideology is used to interpret them. Due to capital flight, mainly from the minerals-energy sector (Fine and Rustomjee 1997; Fine 2008), the country lost valuable revenues. Others argue that GEAR's target principally was set at a very high level (Natrass 2001).

Two years after an office was established to administer RDP projects, it was liquidated. Bond (2004: 45) argued that the ANC had two possible routes forward. It abandoned the first – which was people-centred and based on social justice and redistribution – in favour of a neoliberal path. This resulted in limited contestation of global capitalism and cemented an economic policy based on principles of neoliberalism. Bond (2004) contends that this moved previous state policies of racial apartheid into the realm of class apartheid. The RDP was abandoned in favour of GEAR, a fiscally conservative, monetarist-inspired programme perceived by many as a home grown Structural Adjustment Programme (Hart 2002, Bond 2000b, Marais 2001). With this

economic policy the ANC adopted the liberal stance of the so called Washington Consensus (Adato et al. 2007: 227). Neoliberal policy-making is more concerned with the deregulation and enhancement of free markets, the integration of domestic markets with the international economic system, rather than moderating how market forces intervene in an unequal society like South Africa, where race and gender distinguishes above all on the entrance chances to equally participate within the formal economic structures.

According to Habib (2004: 5), the policy shift of the ANC in 1997 was the greatest in its history. The ANC denied that RDP has been replaced by GEAR on the grounds that the programme had been sufficiently embedded in the government's nine ministries. During the 1998 South African Communist Party (SACP) Congress, President Mbeki refuted assertions concerning the replacement of the RDP. He argued that that the government was still pursuing the RDP's five-year targets and categorically labelled the assertion that the government had abandoned the RDP as false (Bond 2000).

A key consideration in this context is the lack of political will to comprehensively implement the RDP. The initial amount set aside for the directives was clearly insufficient for the enormous task. The estimated total cost ranged between R39 billion to R79 billion, but in its first year in operation R2.5 billion was provided (Munslow and Fitzgerald 1995). In 1996, the government closed down the institutional home of the RDP, a Ministry without portfolio. The government argued that there had been a strategic shift to integrate the RDP into all levels of government operations. In essence, the RDP was superseded by GEAR. A strict fiscal policy was prioritised over the endeavour to reduce poverty (Creamer 2008).

Peet (2002) claims that the leadership of the ANC was secretly moving towards neoliberalism well before the 1994 elections. Between 1990 and 1994, Walter Sisulu, Thabo Mbeki, and others shifted their ideological stance and abandoned plans for nationalization. The end of the cold war, crucial to the change in geopolitical conditions that assisted the ANC's ascent to power, also challenged the ANC cadres by fostering the belief that a more market-

friendly macroeconomic policy had to be implemented (Peet 2002). Other scholars argue that did not possess high degrees of economic literacy. Thus the ANC's electoral victory did not diminish the capacity of international organizations to strongly influence policy formulation. Peet (2002), Bond (1999), Marais (2001) and others have informed that considerable pressure was applied by business organizations and the media from inside South Africa and by the World Bank and the IMF from outside. Two years after his release from prison in 1990, Mandela, not yet the first freely elected president of South Africa, attended the world economic forum in Davos, Switzerland (Peet 2002). The ANC was already under pressure to reassure international markets of its prudence and market orientation (May 2005: 11). Despite the General Agreement on Tariffs and Trade (GATT⁹), executives informing that exportled growth, while beneficial to balance of payments, was unlikely to immediately affect levels of unemployment, given that labour-intensive downstream industries can be developed (Marais 2011). Nattrass (1997: 29) summarized that the GEAR vision was based on the following reasoning:

Introduce a set of orthodox, outward-oriented, investor-friendly stabilization and adjustment policies; make the labour market more flexible, cut government-consumption spending, and boost investment by the government and parastatels; this will send positive signals to the market and thus will boost investor confidence.

With its strategy of reducing the deficit and the measure of cutting corporate tax from 45 per cent to 25.5 per cent, GEAR was accompanied by a slump in growth and job creation and a decrease in social expenditures

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⁹ The path chosen by the ANC and dictated by the IMF actually weakened the country by actively permitting capital flight and eroding national sovereignty; silencing calls for nationalization; committing to the repayment of apartheid debt; ratifying the General Agreement on Tariffs and Trade (GATT)⁹ and moving faster than required; abolishing exchange control; freeing up to independence of the Reserve Bank and allowing local and South Africa's biggest companies to move their financial headquarters outside of South Africa to London (Bond 2004: 54). According to a 1993 report by the World Bank and OECD, GATT would cost South Africa \$400 million in net annual lost trade revenues by the year 2002 (due to declining prices of exports), not including the social costs of associated unemployment and adjustment, or the lost import tariff revenues (equivalent to a one per cent increase in the Value Added Tax) (Bond 2004: 81).

(Macdonald 2002; Nattrass 1996). Even the least negative poverty estimation, the South African Human Development Report of the United Nations, stated that the total number of poor had increased from 20.2 million in 1995 to 21.9 million in 2002 (UNDP 2002; Table 2.20). Within the first seven years of ANC government, poverty became more severe. The Gini coefficient for South Africa increased from 0.665 in 1994 to 0.685 in 2006 (The Presidency 2007: 21). Terreblanche (2008) claims that not only were too many wrong policy choices made, but also the wrong systematic choices.

Neither the apartheid system, nor the new power constellation after 1994, nor the new economic system of 1996 served the population at large. In the late 1980s, the economic strategies of the National Party changed from its previous import subsidized strategy to a more export-oriented program called Normative Economic Model (NEM), which reflects on GEAR, again directing to the IMF policy recommendations for South Africa. Not even a decade later, the ANC began moving towards a position compatible with NEM and the IMF (Peet 2002). Social equity was not prominent in the new macroeconomic plan. The second grand strategy of the government aimed to achieve an economic growth of 6 per cent and annual job creation of 400,000.

In this integrated macroeconomic strategy, employment growth accelerates, reaching 409,000 jobs annually in the year 2000 and reversing the upward tendency in the unemployment rate. Over the next five years some 833,000 more jobs are created in the higher growth strategy than would otherwise be possible (GEAR 1996:18).

GEAR did not affirm reducing inequality as a policy objective. Instead, it stressed that the goal was to enhance economic growth, which would create more jobs (Makgetla 2004). The ANC's logic was that by regulating incentives through economic growth, employment options were going to be created, and poverty reduction would be a side effect. Given the amount of unemployed in South Africa, it was a short-sighted solution based on

economic models, which, even according to GEAR (1996:5), involve uncertainties.

The GATT was ratified quickly, exchange controls abolished, the Reserve Bank became officially independent and South African companies were able to move their financial headquarters to places like London (Bond 2004: 54). These measures were instituted to enable South Africa to become part of the global economy.

The challenge facing the government and its social partners is to ensure that a national agreement underpins rapid growth, job creation, and development. This will need to break current constraints and catapult the economy to the higher levels of growth, development and employment needed to provide a better life for all South Africans (GEAR 1996:2).

The results have been mixed. Adato (2007) argues that the ANC and its allies in the trade unions and the NGO (Non-Governmental Organisation) sector had positioned their programme originally to direct government responsibility for meeting basic human needs.

With its emphasis on fiscal discipline and incentives for private investment, South Africa under GEAR was clearly betting that time would prove to be an ally of the poor on the playing field of an expanding free market economy. In retrospect, this confidence in time as a supporter appears to have been misplaced (Adato 2007).

A review of income and expenditure data between 1995 and 2002 shows that the proportion of people living below the 1995 poverty rate of R354 per adult equivalent per month declined slightly from 51 per cent to 48 per cent, but the actual number increased by more than a million. The number of people living in extreme poverty – defined as a dollar a day at purchasing power parity – increased from 9.4 per cent (3.7 million) to 10.5 per cent (4.7 million) (UNDP 2003; Du Toit 2005: 5).

There are four capacity-related reasons for divergence between promise and reality: lack of political will, lack of financial/fiscal resources, lack of administrative capacity and logistical difficulties (Bond 1999). All four have persisted since 1994. The reconstruction path the ANC chose hardly resolved striking poverty rates (Terreblanche 2008). Fine (2008) argues that the major issues of political and economic power are not addressed, and formulating a policy response is a necessity. Currently, the South African conglomerates may not make policy but they do heavily influence its scope and impact. Any chances for success depend upon their commitment, voluntary, coerced and/or transformed, to social and economic restructuring in South Africa.

GEAR was developed behind closed doors. Its underlying growth scenario models have not been published and no wider audience could participate in the process. Adelzadeh (1996: 70) notes that the Labour Market Commission concluded that in respect of employment, both the analytical framework and the policy orientation of the model are unduly negligent of RDP-type objectives and concerns. The economic development model was oriented towards becoming globally competitive with premises that project domestic economic growth as deriving from an export-led approach (Lowitt and Altmann 2008). Fedderke (2002) argues that in the 1990s, the pattern of growth compared to prior-1994 was reversed: growth in labour input contributed negatively and growth in capital input contributed relatively weakly to the economy.

According to Bond (2000: 54) RDP mainly stands for the feasibility of combining a social welfare state in the developmental sphere with neo-liberalism in the economic system. In short, the economic formula for the ANC was job creation through export-oriented growth.

Nevertheless, in terms of the three components of the government's macroeconomic strategy – growth, employment, and redistribution – only growth shows any evidence of positive performance, and even this falls well below the expectations of what the South African economy is truly capable

of. The Striking differences between GEAR and RDP: the government emphasized to bring about a more equal income distribution (Gumede 2008: 37).

Van Seventer (2005) argues that domestic demand is more labour-intensive than foreign demand. Lowitt and Altmann (2006: 56) suggest that

In the current economic framework, GDP growth driven by domestic consumption and investment expenditure will create more employment than growth driven by exports, especially, with respect to employment at the lower skills level.

Given the enormous numbers of South Africans without basic training or knowledge for more advanced jobs, a clear mismatch between the policies applied and the real problem of unemployment exists. Outcomes were correspondingly disappointing. Abedian (2004) argues that the more rapid the rate of economic growth, the more rapidly structural transformation of the economy will take place and demand for unskilled labour will fall. Notwithstanding assertions that employment options would result from GEAR, more than 500,000 jobs vanished within six years (The Economist: 2000). ANC economic policies have clearly failed to address the unemployment crisis. The paradigm, as stated in the RDP, was that even modest growth should have been beneficial to the poor.

The RDP takes the view that neither economic growth by itself or redistribution on its own will resolve the promotion of a more equitable pattern of growth, an equitable distribution of assets... the maintenance of macro-economic stability (RDP 1994: 22).

Hope for trickle-down effects including basic needs, employment, social safety nets, and land redistribution were components in the ANC's framework. Nevertheless, the degree of inequality has deepened. The poorest 20 per cent of households received 1.63 per cent of total income, whereas the richest 20 per cent of households received 35 per cent (Du Toit 2003). Given

the importance of race in South Africa's history, alterations in earnings within the historical racial classifications of the apartheid government should be noted. A national survey produced by Statistics South Africa (2002) titled 'Earning and Spending in South Africa' revealed that in real terms average black African household income declined by 19 per cent between 1995-2000, while white household income increased by 15 per cent. Households with an income of less than R670 per month – mainly of black African, Coloured or Asian descent – increased from 20 per cent of the population in 1995 to 28 per cent in 2000.

The export-oriented paradigm that has been applied by the government since 1996 has deepened the structural problem of unemployment and instead reducing it. Lewis (2001) concludes that a mass increase in the demand of low-skilled or unskilled labour is not a component of South Africa's macroeconomic strategy. Reducing public employment exacerbated the problem.

State interventions would be needed to turn around this process. From 1994 to 2000, the decrease of total employment ¹⁰ was smaller than the decrease in the private sector. Since 2000, the ANC drastically reduced public employment (Fedderke 2002), which reversed the total *vis-a-vis* private employment patterns, and the decrease in public employment grew faster than in the private sector. Instead of softening or reversing the unemployment crisis, the structural problem deepened. An increasing rate of unemployment has serious social consequences that go beyond the loss of income of the newly jobless. Because of these social costs to unemployment, there is a clear role for public policy, including public employment, in addressing the problem in a way to reduce unemployment instead of creating more unemployed due to incorrect policies (Heintz 2003).

¹⁰But hiring more civil servants as a politico-bureaucratic route to small-scale accumulation was potholed by neoliberalism. The shrinkage of the national and especially provincial civil services mandated by GEAR began with 100,000 civil service job cuts from 1994-99 (Bond 2010:30).

Table 1: Macroeconomic Indicators, GEAR targets and performance, 1996-2000.

	1996	1997	1998	1999	2000	1996-2000
1. GDP growth	3.50	2.90	3.80	4.90	6.10	4.20
actual	2.50	1.10	-0.50			
2. Inflation	8.00	9.70	8.10	7.70	7.60	8.20
actual	7.30	7.70	5.50			
3. Employment growth (private)	1.30	3.00	2.70	3.50	4.30	3.00
actual	-2.40	-3.30	-8.70			
4. Real Wage growth	-0.50	1.00	1.00	1.00	1.00	0.70
actual	0.20	2.00	8.80			
				-	_	
5. Fiscal deficit	-5.10	-4.00	-3.50	3.00	3.00	-3.70
actual	-5.30	-5.20	-3.70	-2	-2.7	

Source: GEAR 1996, Reserve Bank of South Africa 1999

Note: Table 1 indicates macro-economic indicator from 1996 till 2000. Indicators are clearly under the 'calculated' performance of the national economy, the government proclaimed to realize within their first years of governance.

Since 2001, the government raised its budget for social welfare expenditure (Hirsch 2005). The 2001 budget prioritised investment in roads, water and sanitation, employment and an expanded public works program (Padayachee and Valodia, 2001; Habib, 2004). For example, transfers from national to local government have increased, albeit slowly, from a low 2.7 per cent in 1999/20000 (Intergovernmental Fiscal Review 2003) to 7.6 per cent in 2007/08. Local government is getting a rapidly rising proportion of nationally raised revenue, although it is starting from a low base. This shift shows that the provision of basic services like water, sanitation and electricity is becoming more of a government priority (Ibid: 54).

However, the government made a u-turn in 2001. The principle that all services had to be paid for was reversed; there appeared to be a softening in government thinking regarding its aggressive pro-privatisation policy stance, and a movement towards a more interventionist, Keynesian type of approach

took place (Gumede 2005; Padayachee and Valodia 2001; National Treasury 2004). Gumede (2005) and Padayachee and Valodia (2001) explain this policy reversal similarly when pointing to declining traction of the Washington consensus; policy debates following the 1997/8 global financial crisis; pressures within the tripartite alliance, particularly regarding GEAR's impact on delaying social and economic transformation; and the increasingly embarrassing indices of poverty, inequality, underdevelopment and unemployment.

2.4 Growth

Prior to 1994, apartheid was not only characterized by racial separation but also by a clear division between those who benefited from the system, hence representing the system, and those who were intentionally excluded from the country's wealth. The ANC removed the politics of racial separation and thus a clear goal was to empower poor blacks. If after more than a decade South Africans are still struggling to satisfy their basic needs, then obviously the ANC has failed to complete its mandate. Either their economic policy completely failed, or failures during the implementation of economic policies led to the status quo. Although the transition from apartheid to democracy was a success story (Turok 2011), real economic restructuring has not even started. Millions are still excluded and a new generation is growing up without adequate education and health services. In 2006, the then Deputy President, Phumzile Mlambo-Ngcuka, released a new economic plan, ASGISA, to replace GEAR, which had run for a decade. It was proclaimed that at a minimum unemployment should be halved from 28 per cent in 2004 to 14 per cent by 2014 (ASGISA 2005: 3). In the same period, poverty would shrink by at least 50 per cent.

With this programme we can achieve our social objectives and we can more than meet the Millennium Development Goals. Our second decade of freedom will be the decade in which we radically reduce inequality and virtually eliminate poverty (ASGISA 2005: 17).

These objectives are similar to GEAR or RDP, both of which failed to reduce poverty. Intentions and rhetoric alone do not constitute sound economic policies. ASGISA did not change the mode of employment and unemployed structures (Johnson 2009). Employment has been created for high skilled job seekers but not for low skilled or unskilled. Instead of improving education and employment chances for the majority, ASGISA has not had strong impact. In the past two years, there have been no annual reports published on ASGISA.

The main approach by which the ANC wanted to reduce poverty has always been economic growth. More jobs would be created and more people would be able to participate in the first economy and improve their living conditions. Quality of life would be enhanced and unequal wealth distribution moderated. After more than a decade of this paradigm, apparently no ANC politician is wondering whether this strategy is appropriate. No major achievement in fighting poverty is evident.

Shifts in the sectoral composition of output and of trade between 1990 and 2003 have led to a 'skills twist in the labour force, where jobs have been created for highly-skilled workers at a relatively rapid rate but unemployment amongst low-skilled workers has grown. This is at the heart of the social crisis in South Africa (OECD 2010). While somewhere between 1.4 million and 2 million new jobs have been created, greater increases in labour supply mean that the overall unemployment rate also increased (Casale et al. 2005). During the second half of the 1990s, overall levels of gross income inequality increased (Leibhard and Woolard 20001; Seekings et al. 2003) though some have argued that an analysis of expenditure data does not support this conclusion (Fedderke et al. 2004). The overall picture is one that indicates that much less progress has been made in terms of poverty reduction than was anticipated.

In its report on economic status, the OECD (2010) states that the narrow unemployment rate in 2010 was higher than 25 per cent. Including discouraged job seekers, it is even higher than 30 per cent. The unemployment

crisis affects the most vulnerable. Black youth unemployment is at levels of more than 50 per cent. These are the highest numbers ever since the ANC came to power. Taking into account the global economic downturn in 2008, these numbers are nonetheless comparable to other emerging economies, far above average (OECD 2010). One reason of concern might be that when the formal economy shrinks and this results in higher unemployment in the formal sector, then more jobs may also be lost in the second economy, i.e. the informal sector consisting of domestic workers, security guards, gardeners etc. possibly even loses more jobs. Makgetla (2011) estimates that around fifteen per cent of informal jobs have been lost since 2008.

The inequities that decide the fate of millions continue to be reproduced underfoot. As long as this persists, the biggest challenge for the ANC, the state and capital is how to maintain legitimacy, reproduce consent and achieve social and political stability. Above all, this has to be achieved in an economy that seems structurally incapable of providing jobs on the scale and terms required and where large parts of the public service are oxymoronic, inequality has widened precariousness is routine and a palpable sense of unfairness is rampant (Marais 2011:4)

The overall picture is one that indicates that much less progress has been made in terms of poverty reduction than was anticipated. Clear policy shifts are necessary to overcome the 'decade of unemployment'.

Chapter 3. Lake Gariep: Geography, History, Fishing

This chapter introduces the geographic location of the field study, Lake Gariep. It then addresses the historical and political background to the Lake's creation and the towns under investigation. This is followed by a review of social and economic conditions in the Venterstad, Oviston and Gariep Dam municipalities. Poverty indicators in the provinces of Eastern Cape and Free State are presented. Finally, the section on fishing examines a major livelihood activity of the residents in the area, and why the inland fishing sector, especially at Lake Gariep, is underdeveloped, despite fishing being a widely used survival tactic.

3.1 Geography

South Africa's largest internal water body, Lake Gariep, covers 360km² (WCD 2000) and is located between the provinces of Northern Cape, Eastern Cape, and the Free State (see Map 1). Lake Gariep, an impoundment on the upper Orange River constructed for the purpose of hydropower generation, has a shoreline of approximately 400km, which falls under the jurisdiction of two local nature conservation authorities, the Eastern Cape Parks Board and the Free State Nature Conservation (Map 2). The climate in the area is semi-arid and rainfall occurs mainly in summer. Most of the shoreline is closed to angling but two open-access fishing sections, Gariep Dam Fishing Area (GDFA) and Venterstad Fishing Area (VSFA) (Map 2), each about 35km long, have been designated for recreational and subsistence fishermen. In these areas, fishermen can fish between 6am and 6pm.

The Oviston Nature Reserve consists of a strip of land, situated in the north-eastern part of the Eastern Cape, on the southern shoreline of Lake Gariep. The reserve extends from the dam wall in the west to the Bethulie road bridge in the east, and is situated northeast and northwest of Venterstad. The area makes up around 16,000ha. In the early 1960s, the state acquired the

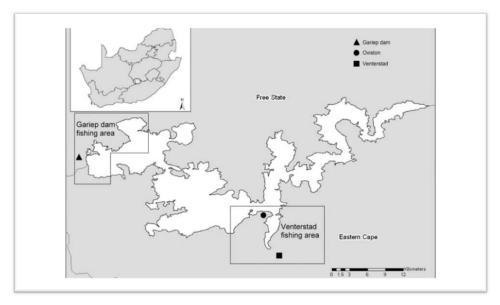
Oviston Nature Reserve in order to construct the dam (Eastern Capes Parks Board 2009). The National Protected Areas Act (2003) promotes participation of local communities in the management of protected areas, where appropriate (Ibid: 12) and the sustainable utilisation of protected areas for the benefit of people, in a manner that would preserve the ecological character of such areas; Moreover.

when preparing a management plan for a protected area, the management authority concerned must consult municipalities, other organs of state, local communities and other affected parties which have an interest in the area' (Ibid: 40).

In 1968, following the construction of the dam, the Departments of Agricultural Credit and Land Tenure and of Water Affairs ceded control and management of the property to the provincial authorities. According to an agreement signed between the Administrators of the Cape and Free State, the Free State Administration had control of and responsibility for water-related outdoor recreation on Lake Gariep (Eastern Cape Parks Board 2009).



Map 1 Provinces of South Africa. The dot indicates Lake Gariep. Obtained from www.demarcation.org.za, accessed October, 2011



Map 2 Location of Lake Gariep in South Africa (encircled in the insert) and map of Gariep Dam, including the fishing areas of Venterstad (VSFA) and Gariep Dam (GDFA)



Map 3 Roads in the sampling areas. From www.demarcation.org.za, accessed October, 2011

3.2 Regional History

Lake Gariep, the fourteenth largest dam in Africa, was established in 1971. It was initially named after the first Prime Minister of the Republic of South Africa, Hendrik Verwoerd, the grand architect of apartheid, and known as Verwoerd Dam until 1996. According to Kadar Asmal, Minister of Water Affairs in the post-apartheid state, the first duty he was honored to undertake was to rename the dam. A committee was assembled to evaluate options. Albert Luthuli was considered (Kader and Hadland 2011: 233) before Asmal decided to acknowledge the San (bushman) people and employ a San word meaning great water (Jenkins 2007). Verwoerd Dam was renamed Lake Gariep (Kadar and Hadland 2011: 233).

The apartheid regime has declared the dam as necessary for economic growth. However, development for one segment of the South African population did not alleviate but rather aggravated the poverty suffered by others. The dam's construction is interwoven with the deprived livelihoods of many if not most people in the Lake Gariep region today. The first democratic government 'understood' the deep-rooted social relationship with water but

did not act to reduce discrimination. Accessibility and management of water was critical in the history of the country (White Paper 1994; Ruiters 2006).

Historically, the conflict over water was the source of sustained colonial and apartheid oppression: for example, large dams displaced tens of thousands of people on the Zambezi river (Kariba and Cahora Bassa dams) and Orange River (Gariep Dam), (Bond 2003: 271).

According to the World Commission on Dams (WCD) (2000a: 53-54), in the early 1960s 1050 coloured and black farm workers and their families, as well as 100 white farmers and their dependents, were displaced to facilitate the building of Verwoerd dam. The Commission report indicates that farmers were adequately compensated for their land in contrast to the black and coloured people who had to relocate from their homes and work without compensation.

More than 50 per cent of the interviewees in Oviston, Venterstad and Hydro Park have been living in their townships for over 20 years. The majority of people are former construction workers who settled in the towns established during the construction of the dam. Many have never been in real employment since the dam was completed. Fishing, as an unintended byproduct of the dam's construction, became a viable, and, for some, a necessary livelihood strategy.

Lake Gariep is part of the Orange River Development Project (ORDP), one of the main irrigation projects in Africa, which was started in 1966 (Hughes 1992). Proposals for irrigation projects in the Orange River Basin were initiated in the 1920s to meet the increased need for water resources. These proposals were considered too costly to be implemented throughout the 1950s, but the development of the Orange River Basin became more of a priority for the National Party in the 1950s. Formal planning commenced in 1962, after South Africa became a republic under the leadership of Verwoerd:

Just as the grand scheme of apartheid represented the culmination of Afrikaner nationalists' political dream, the ORDP may be seen as a culmination of their economic dream of South Africa as the economic giant of the South, (WCD 2000b: 3).

The irrigation of 310,000km² of land and the creation of 400,000 jobs was intended to improve the livelihoods of some 160,000 people (WCD 2000b: 6). Two other objectives of the ORDP need to be noted. First, after the National Party came into power in 1948, Afrikaner nationalism found expression in massive constructions such as the Voortrekker monument in Pretoria and the Afrikaans language monument in Paarl. During the budget debate of 1962, when the project was extensively discussed, a Member of Parliament for Kimberly North made explicit reference to the water scheme as a testimony to National Party rule. He maintained that although Verwoerd had been in office for only three and a half years, his government had already established three major monuments: the Republic of South Africa, the granting of self-government to the Transkei, and the harnessing of the waters of the Orange River (WCD 2000b: 7).

At the time, the Department of Water Affairs assured that the major aims of the ORDP at this stage were to impede migration of the rural population to the cities. This was the second objective. It was anticipated that through the ORDP project, 9000 new farms would be established and the value of South African agricultural production increased. As ethnically separated development was a stated intend of the National Party, the establishment of stable farming communities created employment and promised to minimize the drift of the black population from the country to the cities.

The benefits of power generation came from an installed capacity of some 150 MW in total, as well as supply of water to the towns of Bloemfontein, Kimberly, De Aar, Port Elizabeth, Uitenhage, Cradock, and small towns in the southern Free State, North-Western Cape, and Eastern Cape Province. The creation of tourist and recreational facilities was also planned, as well as the

stimulation of rural development including communication facilities, schools, hospitals, roads and railway extensions (WCD 2000b: 6). Its purpose was to provide water for the irrigation of 22400 hectares of land for agricultural use. The dam is owned and operated by the Department of Water Affairs and Forestry and the power station is owned and operated by the national energy company Eskom (WCD 2000b).

The period from 1948 to 1960, which Davenport characterized as the age of social engineering, also inspired the ORDP and was an important phase in South African history and for its political economy. Although government policies differed in degree and direction, rather than in kind, from those that preceded them (Davenport 1977: 254), they were pursued with systematic thoroughness and heralded a new period. Emmett and Hagg (2001: 300) explain that it was 'featured'

by apartheid as the political platform from which the National Party fought its campaign for the 1948 election, and by intensive efforts to consolidate Afrikaner political and economic power

The National Party was closely affiliated with white farmers. The commercial farming sector received massive state support. It needed their political support of farmers and relied on agricultural capital. As Cousins (2011: 95) informs:

The growth of large scale commercial farming has to be seen as a crucial part of South Africa's history and played a particular role in the creation of a particular kind of economy

Agricultural interests were a dominant factor in the institution of apartheid (Lewis 1990) and thereby in the creation of Lake Gariep. Lowenberg and Kaempfer (1998) report that massive state interventions were used to support white farmers and firms. The ORDP was one such project, an expression of the National Party government's state-led economic nationalism and satisfying a number of its key constituencies. The scheme was also intended to

serve decentralized industrial development. The ORDP was styled as a positive initiative in contrast with more negative issues, such as the huge increase in the defense budget and the proposals for apartheid legislation (Emmett and Hagg 2001: 309).

Beck (2001), divides apartheid into three phases. The first began in 1948 with the National Party's election victory and ended in 1959 when the government introduced separate development and self-government for the African reserves. After the successive electoral victories of the National Party in 1948, 1953 and 1958

Verwoerd and his successors implemented a broad plan of political and social engineering called 'separate development or Grand Apartheid, which attempted to concentrate and limit African political rights to the respective, ethnically defined Bantustans (Emmett and Hagg 1999: 301).

This period is the classical, or baasskap (white supremacy) phase, during which apartheid ideology became law. The second phase, which lasted into the early 1970s, witnessed the implementation of separate development. This period was the high point of the apartheid state and Afrikaner nationalism. During this phase, anti-apartheid organizations adopted violent means for affecting chance. The third phase, from the late 1970s until the end of apartheid, witnessed a shift away from complete racial segregation, the granting of limited political rights to Asians and coloureds, and a relaxation of the colour bar in business and industry.

The livelihood dynamics at Lake Gariep today are partially a legacy of the political foundation of the dam. People are still dependent on the aquatic resources, as human remnants of one of the largest irrigation schemes constructed in the southern hemisphere. If apartheid enriched whites while enforcing limitations on blacks (Adam and Moddley 1993: 31), the post-1994 political regime has also done little to benefit the people at Lake Gariep.

3.3 Study Area

The area under investigation is in close proximity to Lake Gariep. The fieldwork was conducted in Oviston and Venterstad (Map 2), two villages located in the Eastern Cape, and in Gariep Dam (Hydro Park) (Map 2), a village in the Free State Province. The three villages vary in size and structure. The study focuses only on townships defined as formal or informal settlements. Black and white people still reside far apart, a phenomenon especially observable in Gariep Dam, where white people reside on a hill above the black townships.

The Eastern Cape is the heartland of the ANC. Many of the organization's national leaders (such as former presidents Nelson Mandela and Thabo Mbeki) either grew up in the Eastern Cape or were educated at Fort Hare University in Alice, in the former Ciskei. The battles for control over this region often made it a key area of conflict in the country (The Herald 8 December 2011). Eastern Cape is the second largest province in the country, covering around 13.4 per cent of South Africa's land area and is the third most populous with 6.75 million people, about 13.5 per cent of the total population (Statistics South Africa 2010). Eastern Cape has the third largest number of HIV-positive people, an epidemic still growing rapidly, with new infections doubling the number of AIDS-related deaths. Eleven per cent of the total population and one in every five adults are estimated to be HIV-positive. An estimated 110000 people were in need of antiretroviral treatment in 2008, with about 44 per cent having treatment (Nicolay 2008). The AIDS plague is still uncontrolled in the Eastern Cape and compromises developmental strategies. Its far-reaching effects include an increase in the number of orphans and great losses of human capital.

Eastern Cape is one of the poorest provinces in South Africa (PGDP 2006: 4). Figures 1 and 2 give some statistical indications of the deprivation there. They suggest that inequality levels are slightly lower in the Eastern Cape than the national average. However, this data is based on Statistics South Africa surveys, which is at variance with the author's *in situ* experience and own research findings. Since the end of apartheid, the Gini coefficient has

increased and since 2006 it has remained constant at around 0.65 to 0.66. This suggests a very uneven wealth distribution. The Gini coefficient is a statistical measure of income inequality, which varies from 0 (perfect equality where all households earn equal income) to 1 (perfect inequality where one household earns all the income and other households earn nothing) (Arnold 2007: 578)

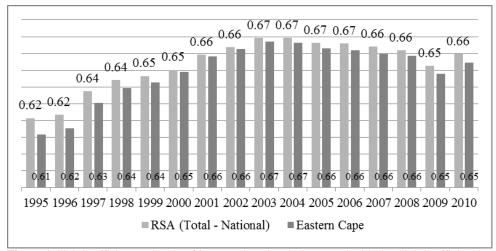


Figure 1 Gini Coefficient In South Africa (Total-National) Compared with the Gini Coefficient in the Eastern Cape Province (Total – Eastern Cape) from 1995-2010 (Eastern Cape Socio Economic Consultation Council 2012)

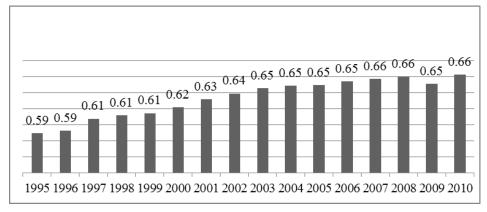


Figure 2 Gariep Local Municipality (Eastern Cape): Gini coefficient from 1995-2010) (Eastern Cape Socio Economic Consultation Council 2012)

Venterstad and Oviston are part of the Gariep Local Municipality, which has its headquarters in Burgersdorp, about 60 km away and part of the Joe Gqabi District Municipality. The Human Development Indicator (HDI) in the Joe Gqabi District Municipality has not changed much since the transition from apartheid (ECSECC 2010). In 1995, the HDI was at 0.40, increasing to 0.42 in 2000, and in 2005 to 0.44. In 2009 the HDI decreased to 0.43,

indicating that living conditions improved slightly. Shifts in the percentage of people living in poverty are similar to those in the HDI. People living in poverty in the district changed marginally from 63.8 per cent in 1995 to 62.8 per cent in 2009. More than two-thirds that district municipality's population are not provided with refuse disposal services. They use their own dumps or other methods of waste management. The decision-making power in Burgersdorp is far from Oviston, which is not represented with its own Councilor. Councilors residing in Venterstad are representing Oviston issues. The distance to Burgersdorp makes it difficult for residents in Oviston to have a voice at the municipality level when their local issues should be addressed.

In 2009, about 91 per cent of the population had access to housing, 32 per cent of which was traditional dwellings. About ten per cent of residents were staying in shacks or similar dwellings. Traditional dwellings refer to constructions at least older than twenty years, built during apartheid. Traditional dwellings are generally built better and are more robust than RDP houses (Eastern Cape Socio Economic Consultation Council 2012). Bond (2000: 251) also noted that:

compared to the hated matchbox houses of the apartheid era, the new post-apartheid houses were typically only half as large, and constructed with flimsier materials than during apartheid; located even further from jobs and community amenities; characterized by regular disconnections of water and electricity; with lower-grade state services including rare rubbish collection, inhumane sanitation, dirt roads and inadequate storm-water drainage.

Joe Gqabi District Municipality is one of the Eastern Cape's poorest, having the fourth lowest access to infrastructure in the province (Province of the Eastern Cape 2012). In 2009, 46 per cent of people, an increase of nine per cent from 2000, had access to electricity and clean water or RDP homes. According to the Department of Cooperative Governance and Traditional Affaires (DCGTA), toilets were available to 56 per cent of people in 2009, an

increase from 22 per cent in 2001. 20 per cent are still without sanitation facilities. More than 35 per cent of households do not have access to clean water. An increase in electricity connections is the municipality's biggest achievement in improved utilities provision. In 1996, household access was 28 per cent. It reached 58 per cent by 2009. Refuse removal was accessible to 18 per cent in 1996 and 27 per cent in 2009 (DCGTA 2010).

Oviston and Venterstad

Oviston, a small community of around 500 (Population Statistics, Table 5), is one township separated by a main street. Most houses are quite derelict although living conditions appear to be better than in Venterstad. Oviston has no informal area and no shacks or similar dwellings. Poor infrastructure, or the absence of any, is a major problem. There is no opportunity to purchase groceries at a reasonable price. Food is expensive and the small shop in the village essentially serves the white community. There is no public transport in the area, and walking to Venterstad, the nearest town, requires at least an hour. Segregation along racial lines is almost total.

Founded in the 1930s by a farmer named Venter, Venterstad hosts the municipality office, a small library, a public clinic, places to buy alcohol, and a butchery. It was once the centre of an extensive farming community with property owned by whites. Low-paid farm workers were allocated from the townships or lived in the vicinity of the farms. Today, few white farmers are left in the area. Venterstad makes a very poor and desperate impression. The so-called city centre was once a tidy place, but excepting some expensive small shops selling essentials and run by Pakistanis, all others have closed. Banks have departed, there are no companies, and very little visible business life. Apart from a petrol station with an ATM, there are no further amenities. Although more than 6000 people live in Venterstad, it appears as a ghost town in the middle of the Karoo.



Picture 1: Venterstad 2007 (photograph by the author)

There is also a dusty and shabby area called a sports field in Venterstad. Residents made it clear that they are very dissatisfied with it and that the municipality should improve public infrastructure. In 2007, I visited a primary school in Venterstad. The classrooms and toilet facilities were decrepit and filthy. Such an environment cannot be a positive and encouraging context for pupils. Rather it contains hazards that are indicative of an irresponsible administration.

Since Burgersdorp became the headquarters of the district municipality, Venterstad has become unattractive for business. Residents lamented that the municipality spent proportionally more money on economic development in Burgersdorp and that Venterstad is merely an addendum. People are irritated but because of political patronage and the high vote for the ANC, which runs the Burgersdorp municipality, the situation will not change for the better in the foreseeable future. Residents told the author that jobs in public work programs are only available to those who are ANC members or known to favour that party. The same occurs with the waiting time for RDP houses. The closer one is related to a municipality official the sooner one will be provided with an adequate home. The only clinic is far from the townships and is also dilapidated. Venterstad has informal settlements, where residents subsist in shacks without electricity, adequate roofs, or toilet facilities. The desperate

poverty causes some to lose hope. Disappointment with the ANC is very high. Many believe that the party has forgotten them.

Hydro Park, Gariep Dam, Free State Province

The Free State, with approximately 11 per cent of South Africa's area and 6.4 per cent of the national population, has a HDI of 0.55 and 54.7 per cent of the province's population is living in poverty (Statistics South Africa 2002). The Free State had a population growth rate of 0.72 per cent for the period 2001-2006, an economically active population of 1.09 million, a child mortality rate of 24 per cent, and a functional literacy rate of 69.2 per cent. Table (1) provides major indicators on the district economies. No up-to-date data could be obtained from major research councils or from Statistics South Africa. The Free State is considered by many to be the most *verkrampte* (conservative) part of the country.

Table 2 (Data obtained from the Free State Growth and Development Strategy, 2005)

	Free State Province	National
Land area of South Africa	$129\ 480\ km^2$	10,6 %
Population (2002)	2,95 mill.	6,4 %
Population growth (1996–2001)	1,12 %	1,52 % SA
Population growth estimated 2001–06	0,72 %	1,18 % SA
Age dependency ratio	55 %	63 % SA
Economically active population	1,09 mill.	37,3 % of population
Child mortality	24‰	13‰ SA
Functional literacy	69,2 %	72,4 % SA
HDI (2002)	0,55	0,60 SA
People living in poverty (2002)	54,7 %	48,9 % SA
Annual per capita income	R11 854	R17 164 SA
Unemployment (2002)	38,9 %	40,8 % SA
Equitable share in		
national budget allocation	6,8 %	
(1999–2002)		
Urbanisation level (2002)	71,7 %	55,4 % SA
GDP 2002	R49,1 bill.	4,9 % of SA

The Gariep Dam village was built in the early 1960's (WCD 2000b: 9). The rural area became known as *Oranjekrag* and accommodated 3500 people, all of which were involved in the construction of the dam wall. Today there are more than 600 permanent residents living in the Gariep Dam area (including white settlements), which belongs to Kopanong Local Municipality whose headquarters is in Trompsburg. Kopanong Local Municipality is part of the Xhariep District Municipality (Statistics South Africa 2010).

In contrast to the townships in the Eastern Cape, Hydro Park (the village of Gariep Dam) is clean and well looked after. Nonetheless, the author's impression was of a rather bizarre atmosphere there. The black township and the white town are separated geographically and there was a feeling that apartheid was still alive. Hydro Park is around four kilometres away from the centre of the village. Despite visiting the town several times, the author never encountered any black South Africans in the white area. The white town can be characterized as old-fashioned, conservative and very Afrikaans in a narrow sense. This part of Lake Gariep is very popular as a water sport site. Gariep Dam village is a tourist resort with facilities such as swimming pools, mini-golf, tennis, bowls, restaurants and campsites. Guided tours within the dam wall are a tourist attraction.

3.4 Fishing

Lake Gariep not only produces hydropower for the rich and wealthy. As the lake is populated by five fish species (Carp, Orange River mudfish, smallmouth yellow fish, largemouth yellowish and African sharp tooth catfish), it is also of great significance for rural people. In the following section, a brief review of inland fisheries, and the neglect of them by governments, is presented. As results (see Chapter Six) indicate, fishing is widely relied on as a survival tactic by area's rural poor. Moreover the catch is sold by the fishermen. Even though fishing is essential for the rural poor, in the next section reasons for the underdevelopment of the inland fishing sector

are highlighted. The neglect of the development of inland fisheries also leads to a neglect of rural fishermen, hence remaining poor (Chapter Seven). 'Development' does not automatically mean private, pro-business development.

Inland fisheries account for at least fifteen per cent of total global employment in capture fisheries and aquaculture. Especially in developing countries, these diverse resources are vital for people in rural areas. The Food and Agriculture Organization (FAO 2005) estimates that about ninety per cent of the thirty-eight million people recorded globally as fishermen are classified as small-scale; at least 100 million people are estimated to be involved in the small-scale post-harvest sector. In many African countries, inland water bodies provide basic resources to many households and contribute substantially to rural and sometimes national economies. Fishing also has important traditional meanings (Chirwa 1996). In Malawi inland fisheries supply about seventy per cent of the total animal protein consumption of urban and rural low-income families (FAO 1996). In north-eastern Nigeria, fisheries provide employment, income, trading opportunities and valuable protein for human consumption. Forty-two per cent to seventy per cent of rural households earned some income from fishing. On average, it contributed twenty four per cent to twenty eight per cent of their income (Smith et al. 2005: 359-383).

Béné (2003a: 17-58) identifies a clear absence of fishing and fisheries case studies in the debate on poverty. Up to 2000, the FAO had not explicitly addressed poverty in communities where fishing was a prevalent activity (FAO 2000: 3). Five years later, the FAO (2005: 5) expressed that there is little precise information about the contribution of small-scale fisheries to livelihoods and economies in developing countries:

Of particular importance is the recognition that currently available data on employment, income and value of fish production are grossly inadequate as indicators of the real numbers of people whose livelihood depends on fish, or the real contribution of fisheries to the local and national economies (FAO 2005: 63).

The literature on small-scale fishing communities tends to presume that fishermen are poor because they fish. Moreover, fishermen are members of low-status, marginalized households. The latter statement is generally accurate but simultaneously too simplistic (Béné 2003b: 949-975). The FAO (2005: 4) arrived at an optimistic view on small-scale fisheries, which could be:

broadly characterized as a dynamic and evolving sector employing labour intensive harvesting, processing and distribution technologies to exploit marine and inland water fishery resources. The activities of this subsector, conducted fulltime or part-time, or just seasonally, are often targeted on supplying fish and fishery products to local and domestic markets, and for subsistence consumption

The lack of inland fisheries development in South Africa (Weyl et al. 2007) undermines the economic potential of the country's inland water bodies (Andrew et al. 2005). The ANC's commitment to the upliftment of impoverished coastal communities through improved access to marine recourses (Bond and Khose 1994), was not extended to the inland. The Fisheries Policy Development Committee was established to formulate a new fisheries policy with the participation of all sectors of the industry. Despite their socio-economic and ecological importance, inland fisheries are often neglected in water resource planning and policies (Ellender et al. 2009: 679), for example, by the Ministry of Environment Affairs and Tourism (MEAT), which initiated the process of developing a national marine policy launch in 1994 (MEAT White Paper 1997). The marine fishing sector, which provided work for around 27000 people and had a wholesale value of R1.7 billion in the mid-1990s, represents 0.5 per cent of South Africa's National Party is prioritised (Martin and Nielson 1997). The Gariep Spatial Development Framework, a first draft baseline document, dated August 2006, is part of the Gariep Integrated Development Plan and linked to the LED Programme

(Gariep Spatial Development Framework 2006: 3). It excludes fishing, even though that could be one of the region's most important assets. While official figures have to be treated with caution, and precise details of the infrastructure are not specified, Lake Gariep's demographic and economic profile states that

high levels of dependency on subsidies and low economic growth increase dependence on state funded projects, with specific reference to housing and infrastructure (GSDF 2006: 13).

By comparison, Shackleton et al. (2006) estimated that the wild resources, livestock and crop production in the communal areas of South Africa added approximately \$2 billion in value to the gross domestic product in 1999. The small-scale inland fishing sector, included in this figure, is perceived as economically irrelevant and disregarded by the Ministry for Fisheries. Political and administrative neglect is a major reason why natural resources at inland water bodies such as Lake Gariep are under-utilized and rural fishing communities suffer underdevelopment.

Martin and Nielson (1998) argued the South African fishing industry needed to be reviewed in the light of the country's political history. The authors addressed the marine sector and related impoverishment. Prior to 1994, resource access had been removed from the traditional fishing communities and concentrated in the hands of a few large companies. The ANC government is challenged to devise a fisheries policy that addresses the issue of access rights for traditional fishermen (Martin and Nielson 1998). It will require alteration to present institutional confines.

In 1923 the Native-Urban-Areas Act restricted blacks to townships where again cheap labour could be allocated for white urban areas. The Land Act and the Native-Urban-Areas Act underpinned the segregation from 1948 onwards. Off-farm labour provided black and coloured people with an income higher than that from farming or fishing. Labour remaining in the rural areas was primarily employed for domestic purposes rather than market production. Black commercial farming

was essentially ruled out as a livelihood option with the clearance of agrarian black populations during the late nineteenth and early twentieth centuries, implemented as a conscious policy, complete with designated labor destinations for displaced male farmers in South African mines and white-owned farms that actively sought labor (Bryceson 2004: 624).

Arrighi et al. (2008) argue that a historical process of dispossession, which left the African population without enough land to sustain small-scale subsistence production, is at the root of South Africa's development deficit, characterized partly by the halving of incomes in South Africa between 1960 and 2005 alongside the deterioration of access to public services. Workers have been unable to use rural—urban relationships to complement their wages with substance production. The apartheid government favoured white owned monopolies and prohibited the growth of black-owned small businesses. According to Martin and Nielson (1996: 156):

Apartheid legislation distorted the fair distribution of access rights to natural resources, denying the majority of South Africans the use of land, water and mineral marine resources.

Chapter 4 Methodology

This chapter details the methodology for the empirical study and methods applied for the survey. First, it explains the livelihood approach and demonstrates why and how it is applied to the present work. Second, the case study as applied in the thesis, is illustrated. Third, pragmatism and methodological pluralism as underlying concepts of the study design are introduced followed by the study design of the two surveys undertaken in 2007 and 2011. The chapter concludes with a detailed presentation of both surveys.

4.1 Introduction

Within the post-1994 discourse on a 'poverty line', which was a theme of academic debates (Meth 2006; Leibbrandt et al. 2010; May 2010), no consensus emerged for more than a decade. In 2009 an explicit poverty line for South Africa was implemented (Statistics South Africa 2009). The National Development Plan (2010: 3) determined that people earning or receiving less than R418 per month were living in poverty. Various empirical studies on 'poverty' suggest that diverse approaches present diverse results about its degree and development (Njong and Ningaye 2008; Robert and May 2000). Poverty presents itself in different manifestations: lack of safe drinking water, lack of access to health facilities, lack of infrastructure, not enough income for a daily meal, a low standard of housing and clothing. No single definition can be easily applied. The definition used here is unfulfilled basic needs. However, in order to gain insights into livelihood dynamics at Lake Gariep no fixed or static definition is applied as even basic needs could vary according to the most urgently necessary. A basic need could be adequate shelter although drinking water is provided. For others, a doctor would be needed, although they have housing, water, and electricity.

The application of fixed poverty lines is questionable as it already excludes some poor people. Someone who earns slightly more than the officially defined amount of money is not poor. It is easier to fall into a downward financial and social spiral than to climb up the economic ladder. Negative changes in one aspect of poverty can have serious ramifications in other dimensions. Long-term unemployment intensifies the daily struggle for food because the welfare system offers no social security net to such individuals. Being unemployed and parenting children makes the task much harder. The worst case is having a severe illness. The vicious cycle of poverty can become chronic and inherited by the next generations.

The measurement of human deprivation has established a niche in social sciences research (Adato and Carter 2006; May and Govender 1998, May 1998) and is prominent in post-1994 South Africa. Large-scale surveys were

used to inform policymakers, financial institutions and international organisations (World Bank 1979; 2001;2008). While political will is critical, the methods and focus of some studies also has a – unintended – role in perpetuating conditions. A more emancipatory-transformative program is needed.

Deprivation and poverty are seen as what is measured and shown in statistics. They are then defined, not by the changing and diverse wants and needs of the poor, but by the more static and standardized requirements of professionals. Analysts' needs for numbers narrow their perceptions. Appropriate measurement, not only surveying income data but also other indicators that allow for a holistic and dynamic understanding, is necessary to comprehend rural livelihoods. The aim of this research was to construct a valid livelihood study at the household level using both qualitative and quantitative methods. In measuring the degree of diversification it is useful to start with socio-economic dimensions, but people's experience is multifaceted. The author spent more than two years in the Eastern Cape, in Grahamstown, Oviston, Venterstad and Hydro Park, while conducting the research.

4.1.1 The Livelihood Approach

The livelihood approach has been employed by a variety of academic disciplines, governmental sectors and non-governmental agencies that deal with diversification, sustainability, vulnerability, shocks, natural resource management, household accumulation strategies, and micro-economies of farm production or small-scale fishing communities (Allison 2001; Ellis 2000; Gillin 2001; Bryceson 1999; Francis 2000; Alwang 2005; Ahmed 2008). According to Scoones (2009: 173) a cross-disciplinary livelihoods perspective has profoundly influenced rural development thinking and practice. The livelihood approach is a methodological framework that incorporates research techniques for field studies. It is applied to investigations of conditions faced

by poor people in rural settings (Neefjes 2000; Krantz 2001; Thunberg and Krantz 2003). The livelihood approach identifies asset portfolios and resources available to households. It is, however, an approach to development policy and practise – not exclusively a research or conceptual framework (Allison and Horemans 2006).

The Livelihood Approach is understood as a holistic development focusing on people's strategies to survive. It emphasises links between individual or household assets, the activities in which households can engage with a given asset profile, and the mediating processes (such as institutions and regulations) that govern access to assets and to alternative activities (Allison and Ellis 2001). The household is defined as the social group which resides in the same place, shares the same meals and makes joint or coordinated decisions over resource allocation and income pooling (Allison 2006). The concept has been criticised due to its assumption that the household constitutes a core unit of rational economic behaviour, and the subsequent aggregation of individual household members (Bank 2003). It is nonetheless appropriate for this thesis.

The Overseas Development Institute (ODI) published a number of working papers and natural resource perspectives using the livelihood approach (Cornway 2001; Farringotn 2001; Baumann 2000 O'Callaghan, S., Jaspars, S., Pavanello, S., 2009). The Department for International Development, the British government section responsible for promoting development and the reduction of poverty, and many other agencies have adopted the Livelihood Approach. It has become the dominant framework in the study of poverty (Murray 2001). The Sustainable Fisheries Livelihood Programme, which comprises twenty-five West African countries, applies a modified version termed the Sustainable Livelihood Approach (SLA). This combines fisheries policy with poverty reduction programmes to decrease pressure on over-exploited fish resources while maintaining sustainable livelihoods (Allison and Horemans 2006).

Despite, or because of, their lack of access to services and infrastructure, small-scale fishing communities are engaged in diverse activities in order to survive. The livelihood approach examines how people gain a living; hence a monolithic explanatory framework could not take hold of the many facets of poverty people have to struggle with. Du Toit (2005: 2) called for a broadening of the conceptual and theoretical terrain of poverty studies, for a re-engagement with the complexities of antagonism, power, political economy and agency. The Livelihood Approach extends beyond economic attributes and conventional definitions of poverty in order to understand the social entirety (Ellis 2001; Krantz 2003).

Building on these shortcomings, the traditional onedimensional approaches have been questioned and alternative multidimensional approaches have been put forward (Njong and Ningwaye 2008: 4).

According to Appendini (2001: 24), the central objective of the livelihood approach is to search for more effective methods to support people and communities in ways that are more meaningful to their daily lives and needs, as opposed to ready-made, interventionist instruments. It focuses on livelihoods of the poor and points to their agency, the recognition that Africans create their own history and take an avid interest in their own world of lived experience (De Haan 2000: 5). The following definition is now generally adopted:

A livelihood system comprises the capabilities, assets (including both material and social resources) and activities required for a means of living. A livelihood is sustainable when it can cope with and recover from stresses and shocks and maintain or enhance its capabilities and assets both now and in the future, while not undermining the natural resource base (Carney 1998: 2).

As a procedure for field studies, the livelihood approach is attentive to including locals in the development of surveys, questionnaires, and focus groups. They represent not only the subject of inquiry but are also the individuals most knowledgeable about it. Involving local people enables their

knowledge, perceptions, and interests to be recorded (Scoones 2009). This enables identification of individual perceptions without reliance on predetermined categories. Compared with studies that have one particular social, political, or economic frame, the outcome is a deeper and broader understanding of rural people's existences. Poor people typically combine different activities, even if many are outside the formal economic sphere.

Poverty is a condition that involves social dynamics and power relations. It can be informed by an explicit theoretical concern with the way class, gender and capitalist relations operate (O'Laughlin 2004), and who gains and loses and why (Scoones 2009: 187). By focusing on the way poor people achieve a level of sustained living, the livelihood approach consciously avoids the perspective that the poor are powerless and unable to alter their status. Through this lens, the status of the 'powerless' poor shifts to the status of individuals, who have some degree of autonomy. De Haan and Zoomers (2005: 38), proponents of the influential Wageningen School, argue that

contemporary livelihood studies focus on the active involvement of people in responding to and enforcing change. They assert that, rather than being victims, people continuously exploit opportunities.

The survey conducted at Lake Gariep is based on the four criteria of the livelihood approach developed by Ellis (2000): social, economic, natural and human assets. Following these criteria, a livelihood comprises

The assets (natural, physical, human, financial and social capital), the activities, and the access to these (mediated by institutions and social relations) that together determine the living gained by the individual or household (Ellis 2000: 10).

The livelihood approach links inputs (capitals or assets) and outputs (strategies), connected to outcomes, which combined familiar territory (of poverty lines and employment levels) with wider framings (Scoones 2009: 179).

De Haan (2003a) notes that at the beginning of the 1980s, a rather pessimistic outlook in scholarly debates on global poverty was superseded by new means and techniques of research. He optimistically believed this would lead to new policies being applied in the field, advocating a 'search for more effective poverty alleviating policies which would put, contrary to top-down interventionist methods, people's daily lives and needs at the centre (De Haan 2005: 2). Better evaluation of the consequences of poverty relief programmes for the poor was needed. In a work published the following year, de Haan (2006a: 9) argued that

In its optimism, the livelihood approach is an expression of the Zeitgeist, but it is also a direct response to the disappointing results of former approaches in devising effective polices to eradicate poverty.

Rural communities were not a major focus of development research in past decades (Scoones 2009). The development discourse was dominated by national poverty surveys and by poverty reduction programmes established external to the implementing state. Most research was conducted through mono-disciplinary prisms rather than in ways in which it would be best address the circumstances of the rural poor. People tended to be overlooked even though poverty research apparently dealt with the underprivileged. This ultimately led to a rather negative perspective on under development (De Haan 2006).

The livelihood approach per se was instigated in the 1987 Brundtland Commission on Environment and Development. Prominent in the 1990s under the light of a more neoliberal agenda (De Haan 2005), the livelihood approach gained more depth by moving away from the tendency to minimize structural limitations towards one that was addressing issues of power. What strengthens the livelihood approach is the interrelationship of structure and agency (Giddens 1984) as it is reflected in macro, meso, and micro-levels.

4.1.2 Main Principles

Livelihood research has two main concerns: the circumstances of poverty and the means of livelihoods. First, the conditions and the reasons for poverty have to be understood through analysis of social relations in historical, economic and political context. Second, the actual means by which livelihoods are sustained within and between households. The phrase 'highly diversified livelihoods' conveys the maintenance and continuous adaption of a varied portfolio of activities that is a distinguishing feature (Ellis 2000: 4). It recognizes multiple influences and actors to understand change, complex cause-and-effect relationships and iterative chains of events (Murray 2001).

This is not limited to the rural poor's immediate environment or community, but is extended to the political and economic situation, incorporating the macro-economic level, and the broader cultural sphere. Murray (2001: 4) states, it should include an analysis of the effects of past policies, which are often haphazardly reproduced under different political regimes. The livelihood approach also examines the meso-level of rural development in the provinces and the distribution of power within these arenas of often conflicting policies.

Narrowly conceived poverty reduction strategies, informed by dubious perspectives on African livelihoods miss the tautological point: that wider economic deflationary policies have driven peasants into desperate diversification strategies that occupy their labour with minor rewards (Moyo 2010: 308)

As Moyo (2010) stresses, state regulations of poverty reductionist strategies automatically influence livelihoods, hence general structural conditions may exclude or include the rural poor. Therefore, diversification over time has to be researched to compare influences. Diversification per se does not imply that people are better off. For Ellis (2000: 15) diversification applies not only to the struggle to survive but to improve the standard of living. I argue that diversification is necessary in order to sustain a minimum living standard.

The livelihood approach strengthens and highlights the boundaries between conventionally antagonistic sectors: takes account of formal versus informal work; urban versus rural; economic disparities within one community, reasons why some individuals are wealthier than others even though the overall situation is still one characterized by chronic poverty. Murray (2001: 6) claims:

It implicitly recognizes the necessity to investigate the relationship between different activities that constitute household livelihoods, which in turn requires attention, both intra-household and to extra-household social relations.

Livelihood research is essentially carried out at the micro-level: households and communities. It deals with the immediate milieu, entitlements, assets, access to resources, vulnerability, responses to shocks, and income generating activities. It involves empirical investigation of combinations of modes and relationships (Murray 2001: 4). For Allison and Horemans (2006: 2):

The livelihood approach encourages explicit consideration of links between local issues (such as resource allocation among different types of resource users in a fishing port), meso-level processes (such as decentralization of government bringing planning and financial management of fishing ports or landing sits under the control of local authorities) and wider concerns, including national policy and economic or social change (such as the adaption of new fisheries policy or legislation, the liberalization of markets and the withdrawal of production-related subsidies).

In contrast to a conception of poverty as a set of deprivations perpetuated across generations, continually undermining the capability of the poor to change their own situation (Schmink 1984: 87), for Scoones (2009: 172)

Diversity is the watchword, and livelihood approaches have fundamentally challenged single-sector approaches to solving complex rural development problems. The appeal is simple: look at the real world, and try and understand things from local perspectives.

What Scoones is saying is that no pre-formulated models are necessary. The opposite is the case. Researchers can be open to the field without strict limitations.

People at Lake Gariep make decisions about their livelihood strategies on a daily basis. In material terms they are chronically poor. Recipients of social grants are often the only household members with an income, which is shared with others. Study data was mainly aggregated at the household level, however the study incorporated details on individuals and their own lives.

4.1.3 Theoretical Background

The theoretical grounding of the livelihood approach has drawn on influences from the so-called dependencia (Frank 1980; Nuscheler 2004) and structuralist-marxist tradition (Poulantzas 2009). Power relations have a role in decisions on livelihood strategies and outcomes (de Haan and Zoomers 2003). Additionally, the relationship between structures as predetermined context in which rural poor operate and their own agency (Giddens 1984) pointing to the non-static facet of poverty has been included within the concept. However, the livelihood approach highlights the fact that the rural poor are able to challenge and change their situation even though restrictions, structures are not easily be minimized.

In contrast to Marxist theorists pointing to the overall economic structure of capitalism and how subordinated classes are exploited by a capitalist center, Polanyi (1977) focused on the importance of the social, cultural and economic embeddedness of individuals. For Polanyi, classes are primarily determined by culture rather than economy. Holism in Polanyi's idiom, as often referred to by scholars (Farrington 1999; Ashley and Carney 1999; Carney 1998) dealing with the livelihood approach, signifies that the economic sphere is not separated or above the social sphere but has to be re-included into the overall

context of livelihood research. The livelihood approach opposes the view that economic concerns are necessarily of primary importance and refers in particular to the means of gaining a living. For example, within the sampled area at Lake Gariep, many households are classified as subsistence fishing households. This classification refers to the fact the households cash flow is comparatively low. Hence economic concerns are very important; nevertheless the importance is limited to the way the household makes its living. Some households in the area have no income at all, the struggle to survive is not only focused on ways of how to get money for food but mainly on subsistence strategies such as fishing or subsistence farming

Polanyi (1977) argued that Marxism is misleading because it excludes the economy from all other human endeavours. For Polanyi, the cause for degradation is not the economic exploitation of the poor but the disintegration of the poor within their cultural environment. This is relevant in the South African context where people were removed from their original locality to Bantustans. Africans could not own or rent land which diminished their ability to learn about modern agriculture (Lipton 1986: 18). Segregation and dispossession caused cultural fragmentation.

4.2 Case Study

Various classification systems have been developed and applied in order to define a case study and its limitations compared to a different research inquiry (Yin 2009; Stake 2005; Stake 1995; Gerring 2007; Feagin and Orum et al. 1991). Miles and Hubermann (1994: 25) consider case studies as 'a phenomenon of some sort occurring in a bounded context'. They highlight trends that can be compared with other local, or national, or international statistics.

Yin (2003) introduced three classifications. The first, the exploratory case study, relates to grounded theory (Glaser and Strauss 1967), a concept that assumes no prior hypotheses are necessary before commencing fieldwork.

Fundamental characteristics that you do not start out with a priori theoretical notions (whether derived from the literature or not) – because until you get in there and get hold of your data, get to understand the context, you won't know what theories (explanations) work best or make the most sense (Gillham 2003: 25).

Willis (2007: 240) points out that 'researchers do not seek to find universals in their case studies. They seek, instead, a full, rich understanding of the context of the study under investigation'. During the exploratory phase of research undertaken at Lake Gariep, preliminary observations were made by the author and then built on in the weeks at spent at Oviston Nature Reserve. I engaged with local fishermen going to fish or in the evenings after fishing, or observed them while fishing. During this explanatory phase a considerable amount of data was collected. One interesting discovery was that Venterstad incorporated six different townships where people stay according to their ethnic belongings. At this stage, preliminary (informal) interviews were conducted with community leaders. Yin (2008: 18) defines a case study in terms of the research process:

A case study is an empirical inquiry that investigates a contemporary phenomenon within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident

Wollcott (1992: 36) sees it as an end product of field-oriented research rather than a strategy or method. During the explanatory phase, theories are developed. It is up to the researcher to identify the phenomena of interest. Hypothesis are generated during the process of data collection.

The second type of case study, the descriptive form, strives to gain and present holistic knowledge. According to Yin (2002), a descriptive case study presents a complete portrayal of a phenomenon within its context. After preliminary observations were conducted, a thorough literature review was undertaken. For the Lake Gariep fieldwork, as much information about the

communities as possible was obtained. Community members were then actively involved in the creation of a questionnaire and, after a draft version was finished, invited to participate in its modification. Local perceptions were then a pivotal component of the survey results. Oviston locals were encouraged and the quality of the questionnaire was improved according to what they considered important for their community. After the questionnaire was finished, a pilot study was undertaken. Oviston was chosen because it was the smallest township and easier to sample. Questions and pre– coded answers worked very well within the pilot study and the larger sample that it was later applied to. The descriptive phase assisted in developing a comprehensive understanding of case study parameters, existential circumstances, the characteristics of individuals, and the nature of the community in which it is located.

The last category, the explanatory case study reveals cause-effect relationships (Yin, 2003). The field study at Lake Gariep was not limited to one-time research. A second survey was undertaken and enabled the acquisition of longitudinal data. Results could then be compared over a longer period of time.

Stake (1995) has referred to case studies as intrinsic, instrumental or collective. They are less of a methodological choice than to decide of what is to be studied (Stake 1995: 443). Willis 2007: 239) has impressed that 'case studies are about real people and real situations, relying on inductive reasoning and illuminating the reader's understanding of the phenomenon under study'. Case study research permits the gathering of rich and detailed data in a genuine situation. Hence, case study approaches are holistic and the ontological stance perceives that

much of what we know about human behavior is best understood as lived experience in the social context. Unlike experimental research, case study research can be completed without predetermined hypotheses and objectives (Willis 2007: 240).

Feagin (et al. 1991) argue that case studies provide a richness and profundity to the explanation and analysis of the micro events and larger social structures that constitute social life. Case studies permit the grounding of observations and concepts about social action and social structures in natural setting studied at close hand. Moreover, it provides information from a number of sources and over a period of time, thus permitting a more holistic study of complex social networks and of complexes of social action and social meanings (Feagin et al. 1991: 6). For Gillham a case can be individual, a group, an institution, or as it is in this study, communities (Gillham 2000). Gillham (2003: 1) attempts to define a case as

a unit of human activity embedded in the real world; which can only be studied or understood in context; which exists in the here and now; that merges in with its context so that precise boundaries are difficult to draw.

After a solid review of similar case studies (Smith 2008; Phiri 2009), data generated by Statistics South Africa, and secondary literature, inductive theorizing made more sense than a deductive approach for the particular case study conducted for this thesis.

4.3 Pragmatism - Methodological Pluralism

The advocates of a single paradigm, the practice and application of monomethods, reflect differently on epistemological (the means of generating knowledge), ontological (the nature of knowledge) and methodological (the way knowledge is studied) reasoning.

The quantitative approach is related to the positivist and post-positivist philosophy (Shand 2003; Fuller 2003; Gorton 2006; Parsuriková and Cohen 2009; Keat and Urry 2011), employing strategies of social inquiry such as experiments, surveys and methods of data collection that are predetermined measurements resulting in numeric data. For the (post)-positivist the observed is separated from the observer. The researcher has to be neutral in order to obtain reliable and valid data. The research process is similar to laboratory

work or physical experiments in the natural sciences, as the research process has to be replicable and aims to be time and context independent and therefore leads to objective knowledge. Positivists claim that it is possible to understand the world through experience and observation and truth can be determined – the facts speak for themselves.

For the (post-) positivists, truth is objectively measurable. The qualitative paradigm contests this assumption. The researcher should be actively involved within the research conduct, position himself or at least he should be aware about his influence. Researchers acknowledge that their own experience shapes their understanding, and they position themselves in the research to acknowledge how their interpretation flows from their own personal, cultural, and past experiences (Creswell 2010).

By contrast, the qualitative approach tends to be associated with constructivist or transformative-emancipatory paradigms, employing strategies such as participatory observation, action research, and open-ended interview techniques.

Constructivists altogether deny the claim that exogenously-given, objective reality exists in the social world. It thus postulates that reality is constructed which does not mean that the constructed reality is not less real: it becomes a part of the objective world by virtue of its existence in the inter-subjectivity of relevant groups or people (Seifudein 2005:3).

It also follows that in the social world, there is no absolute truth, only our subjective interpretation and understanding. This perspective shares a rejection of the realist's notion that language is simply a neutral means of reflecting or describing the world, and a conviction in the central importance of discourse in constructing social life (Gill 2000: 172). For the constructivist or interpretative schools, there are multiple realities that are subjective depending on many different variables such as context, gender and cultural aspects (Guba 1994; Denzin 1994; Seale 1999). For the interpretivists multiple realities creating multiple equivalent truths exist in the real world of social

phenomena which can best be studied through understanding social behaviours.

Constructivists perceive themselves as part of the social world which they try to analyse and elaborate an emphasis on interpretative understanding as an intrinsic, albeit not exclusive, part of any causal explanation (Risse 2004: 5).

Moreover the usefulness of this theory lies in the fact that it scrutinizes the traditional, powerful concepts and explanations of reality and 'science'. The key features of these perspectives include a critical stance towards taken-forgranted knowledge and an inherent scepticism towards the view that our observations of the world yield its true nature to us. According to Tayler (2001:181),

Social science research has to confront a dimension of human activity that cannot be contained in the consciousness of the isolated subject; in short, it has to look at something that lies beyond the world of atomistic individuals.

However, in practice both approaches lack rigour, which Kuhn (1962: 3) summarized as 'the insufficiency of methodological directives, by themselves, to dictate a unique substantive conclusion to many sorts of scientific questions'. For decades, scholars have argued that the ontological assumptions of the qualitative and quantitative paradigms are mutually exclusive, and ultimately mixed methods are unworkable. For Guba (1990:81) a leading qualitative scholar, the accommodation between paradigms is impossible. The unfeasibility to combine qualitative and quantitative approaches, which led to the so called incompatibility thesis (Howe 1988), within an empirical study has not only limited philosophical thinking to a certain extent but also alternative reasoning outside of the two paradigms was put aside as unnecessary.

The historiography of the paradigm war reassured Kuhn's (1962) assumption that paradigms serve those who control conventional world views

and privilege their own thinking above that of others of a contrary position (Armitage and Keeble 2007). In Kuhn's (1962:32) idiom 'paradigms are the practices that define a scientific discipline at a certain point in time. [Moreover], paradigms are discrete and culturally based'. For the monomethodists, the epistemology for the theorist perspective on research, is reduced to a single paradigm-stance that is unable to coexist with and to bridge the gap to another epistemology and hence paradigm. In practice this can lead to press one's research under a paradigm just because there is no choice or mutual choice to take the best out of both. Armitage (2007:6) calls this selection about a paradigm as

suppression of the mind and the creativity of the researcher which consequently leads to a production of research obeying to rules which possibly might hinder the making of original, ground-breaking and innovative studies.

In contrast to the scholars of the paradigm war, a third system of thought, pragmatism (Cherrholmes 1992; Murphy 1990; Rorty 1990) has been established. The pragmatic paradigm as a set of beliefs arose as a single paradigm response to the debate surrounding the paradigm wars and resulted in the emergence of mixed methods and mixed models approaches. It is pluralistic, based on a rejection of the obligatory choice between post positivism and constructivism. The general approach to research is that of mixing data collection methods and data analysis procedures within the research process (Creswell 2003). Applying the approach practically to field work, pragmatists are looking for the best way of how the research problem could be appropriately addressed by the methods. Quantitative and qualitative research methods may be used in a single study (Tashakkori and Teddlie 2003). The research question should be of key importance – more central than either the method or the philosophical worldview that underlies the method. The forced-choice dichotomy between postpositivism and constructivism should be abandoned. The use of metaphysical concepts such as truth and reality should also be abandoned. Mixed methodological approaches are

associated with the pragmatic paradigm and strategies that include gathering data in a simultaneous or chronological mode using methods that are drawn from both quantitative and qualitative traditions in a fashion that best addresses the research questions (Creswell 2003). Research is often multipurpose and 'a what works tactic' will allow the researcher to address questions that do not accumulate within a quantitative or qualitative approach to design and methodology.

The ontology of pragmatism is that disputes on the nature of reality have not solved to problems but moreover deepened the gap between opposing world views, of which I would argue the least that benefits are those who are studied. Darlington and Scott (2002) note that in reality, a great number of decisions of whether to take a quantitative or quantitative research approach are based not on philosophical commitment but on a belief of a design and methodology being best suited to the purpose. Researchers have the freedom of choice to select procedures that best meet the study's needs. Different problems need different ways of inquiry; hence the methods are subsidiary to the research process and not vice versa. Tashakkori and Teddlie (1998) and Creswell (2003) see it as an intuitive appeal, a permission to study areas that are of interest, embracing methods that are appropriate and using findings in a positive manner in harmony with the value system held by the researcher.

A considerable amount of literature has been published on methodological work on mixed method research (methodological pluralism) by a variety of scholars (Creswell 2010, 2009; Teddlie and Tasharkori 2010, 2009, 2003; Teddlie 2010; Denzin and Lincoln, 2011; Punch and Punch 2009; Hesse-Biber 2010; Lichtmann 2010). Methodological pluralism is a distinct methodological design (Creswell 2010). Above all, methodological pluralism has two facets. First it is a research design with philosophical assumptions. Second it is used in research as a method of gathering data.

As a methodology it involves philosophical assumptions that guide the direction of the collection and analysis and the mixture of qualitative and quantitative approaches in many phases of the research process. As a method, it focuses on collecting, analysing, and mixing both qualitative and quantitative data in a single study or a series of studies. Its central premise it that the use of quantitative and qualitative approaches, in combination, provides a better understanding of research problems than either approach alone (Creswell and Clark 2007:5).

The transformative-emancipatory paradigm (Mertens 2003: 259) states that the adoption of an explicit goal for research is to serve the ends of creating a more just and democratic society that permeates the entire research process, from the problem formulation to the drawing of conclusions and the use of results. Tashallori and Ceswell (2007:4) define mixed methods research

as the research in which the investigator collects and analyses data, integrates the findings, and draws inferences using both qualitative and quantitative approaches or methods in a single study or a programme of inquiry.

Murray (2000) explicitly addresses the issue of mixed methods, e.g. qualitative and quantitative, as a necessary feature of livelihood studies. He states that for livelihood studies to be successful, a sequence of combination of qualitative and quantitative research is obligatory as well as an explicit and sustained analytical tension between macro-meso micro levels. Mixed methods research has regained not just acceptability, but popularity, with a significant number of studies arguing its virtues in terms of greater understanding and or/validation of results (Bazely 2002).

Pragmatism

Methodological Pluralism

Positivism Naturalistic Paradigm

Mixed Methods

Quantitative Qualitative Methods Methods

Triangulation

Figure 3 Methodology of the case study

In this study, the phenomenon under investigation, primarily observed and further elucidated via surveys, semi-structured interviews and participatory observation, are the livelihoods of the rural poor at Lake Gariep. Figure 1 illustrates the hierarchical application of the methodology used in this study. Pragmatism, as the meta-theory, leads to methodological pluralism. Positivism as well as the naturalistic paradigm are applied leading to the mixed methods approach which hence elaborates on quantitative methods (two surveys at Lake Gariep) as well as qualitative methods (in-depth interviews, participatory observation, action research) validated through triangulation. Triangulation essentially involves cross-checking for internal consistency or reliability (Jick 1979). Olsen (2001:1) Triangulation is not aimed merely at validation but at deepening and widening one's understanding (Olsen 2001:1). The researcher's individual viewpoints and dialectical reasoning throughout the process of field work, the way how both methods of inquiry affected each other, has to be highlighted in order to validly triangulate different methods.

The Lake Gariep study applied a mixed method approach. Qualitative data as well quantitative date has been generated applying large sample surveys to gain population data, socio-economic date and quality of life data but also due the necessity to include individual perceptions of fishing and reasons why people do not fish. The quantitative part of this study includes detailed

measurements and analysis of households in the area. The analysis allows not only inter-household but also intra - household comparison which was developed as a household roster. Charts and graphs illustrate the results of each survey. Then both survey results are compared. Then the focus is on the comparative level of the study. Through longitudinal data with a time difference of four years valuable insight about the improvement or deterioration of different aspects of livelihoods at Lake Gariep could be produced, compared and analysed.

Hence, both textual and numerical data were obtained. Both methods are principally fully integrated in the case study. Qualitative and quantitative research methods are closely aligned with the epistemological standpoints. At an epistemological level, in the positivist paradigm, the object of study is independent of researchers; knowledge is discovered and verified through direct observation or measurement of phenomena; facts are established by taking apart a phenomenon to examine its parts. The alternative view is that knowledge is established through the meanings attached to the phenomena studied; researchers interact with the subject of study to obtain data; inquiry changes both researcher and subject; and above all knowledge is context and time dependent.

Especially in the conduct of field work, this process places the researcher as well as the subject of research, in that case households at Lake Gariep, within a particular time and place, which per se can't be redone under the same circumstances. It was anticipated in the study, to minimize bias as much as it was possible. The researcher was well aware about her position within the research context. The chosen methods lead to specific results, not vice versa.

In the present study, triangulation arose through mixing methodologies. Survey data were combined with in-depth semi-structured open ended interviews. What seemed to be true in the conducted survey, turned out to be valid for a second time as matching information was generated with the indepth research (chapter five and six). In that sense triangulation was used to

get different methodological viewpoints on the livelihood study. Behind the statistical data are underlying social realities which are brought to the fore through the in-depth case studies. The mixed methods approach opens the doors to gain insights to various aspects of the phenomena under investigation. The extensive range of single cases within the survey data combined with the 33 case studies on fishing complement each other.

4.4 Study Design

In this section the study design is outlined. The first survey was undertaken in 2007, and a second in 2011. Both include interviews with household heads, other members and dependents. In 2007 a municipality officer from Venterstad was also interviewed. Beause the livelihood approach was applied (Ellis 2000), it was presumed that fishing is part of a diversified livelihood portfolio of the population.

A socio-economic questionnaire was designed to gather information not exclusively on fishing. The questionnaire was split into five sections dealing with different livelihood categories: 1. Household structure, 2. Income, 3. Employment, 4. Fishing, 5. Fish consumption patterns. The categories were discussed with locals, and a pilot study was carried out. The questionnaire was subsequently modified to incorporate valuable suggestions. Twenty inhabitants of the townships under investigation, who were familiar with the local area and spoke the local languages, were trained in structured interviewing techniques, and then acted as the interviewers of this baseline survey. Due to the lack of reliable published population data, community mapping was used to estimate population numbers in the townships and informal settlements (Amsden and VanWynsberghe 2005).

During a workshop, the interviewers were asked to estimate the population size of their township. Accordingly, 263 household interviews were conducted, in which socio-economic data from more than 1300 inhabitants were obtained. Interviewers were asked to conduct the survey by randomly walking through a particular township and selecting every third house for an

interview. Some houses selected in this way were left out, either because a potential interviewee refused to participate in or because there was nobody at home at the time. Sampling bias was considered to have been minimal. This approach was viable within the logistical and financial constraints of the survey. The same procedure was applied for 2011.

After the first survey, in-depth interviews were conducted. These aimed to obtain additional insights. Only households in Venterstad and Oviston were included due to financial and time restrictions. Ninety-four qualitative interviews were conducted. The same sampling framework for the first survey was applied. The in-depth interviews were conducted to generate data on the quality of life. The objective was to identify the personal perception of each interviewee concerning security, housing, education, household possessions and the relationship with other South Africans (Table 4). The questionnaire was divided into four categories that were comprised of several sub-groups. Within the first category, household composition, data on education, occupation, food security and household possessions were collected. Part 2, Quality of Life, collected information on the degree of satisfaction households in this area had with specified categories (Table 5). The last cluster was an income ranking (Figure 2).

An MS-ACCESS database was designed for the storage and analysis of the survey data and the in-depth interview data. The results of these qualitative data were synthesized with the socio-economic survey through the data analysis tools and complement each other.

All questionnaires were assessed using exploratory data analysis. Responses were entered into a database using predefined forms. The database was created by the author for this purpose. Summary tables were generated using numbers and percentages according to standard methodology. Further mathematical analysis was carried out for selected categories to enable additional interpretation of the data. The study also involved some days accompanying fishermen to the lakeshore and observing people go about their

everyday activities. The author visited many households and many hours were spent in conversation with locals.

As illustrated in Table 2, the sampling framework incorporates qualitative as well as quantitative data. It is crucial to reiterate that in order to collect the data to be interpreted, a wide variety of methods and tools were needed. In order to develop a more detailed analysis of livelihood strategies and priorities, not only interviews (Table 2) with households were conducted, but also interviews with stakeholders in the area. A major disjunction emerged between the official data on population numbers in the area passed on to the author from official stakeholders and the results of the surveys. Data on poverty, and its increase or decrease since 1994, is highly political and various interests could be threatened. The application of qualitative methods was undertaken in order to include subjective perceptions of residents in the area. Unreliability about figures provided by Statistics South Africa was an issue that presented difficulties yet was also a revelation in itself.

Table 3 Lake Gariep Livelihood Project, 2007, 2011

Survey Year	Coded question (1) Number of Interviews (N) Data Codes			
Title	Open question (2)		MS Access	
2007 Lake Gariep Interviews				
Base line Survey		1	263	10768
2007 Lake Gariep Interviews		1	94	4352
2007 Lake Gariep				
In-depth Household Compo	sition	1	408	2473
2007 Fisheries Case Studies	3	2	35	textual
2011 Lake Gariep Interview	/S	1	198	13454
Total			994	31047

Note: Table 3 illustrates, two large surveys were carried out, coded questions refer to closed questions, open questions where no pre formulated answer options were included in the questionnaire.)

I include here a brief digression on conducting *in situ* research among circumstances of abject or near abject poverty. The first time I visited the research area, Venterstad and Oviston, the impression was that poverty was prevalent everywhere: low quality housing, lack of infrastructure, people in poor clothing. It was a very dirty and depressing place. In the evening people from the nearby township started to wail. The community had buried one of its members who had died of HIV/Aids and what I perceived as screaming was actually a traditional mourning chant. The example points to the difficulties of remaining an outsider and conducting sound fieldwork in such situations. This is a difficult compromise but necessary in order to get valid, trustworthy, reliable and consistent results

4.4.1 Survey and Questionnaire 2007

The first Lake Gariep field work was conducted in October 2007. Due to the fact that no valid data on which the sample framework could be based, was available, a primary socio-economic survey was conducted. This was distributed and then followed by second survey based on a smaller sampling framework. The second survey focused on detailed household information.

The first group of questions focused on fundamental characteristics of the population. The second type was on household characteristics and state funded programmes. The third set applied was on socio-economic changes over time including improvement or deterioration of living conditions, economic status, unemployment rates, food security and aspects of quality of life. A household roster was applied at the beginning to obtain basic information on the person interviewed (gender, age, language group). Most sensitive topics (income questions) were placed at the end of the questionnaire. Data from the two surveys was later compared.

The household survey questionnaire is composed of several parts that are referred to as modules. Each module contains a number of questions. Closed questions as well as open-ended questions were used in each module. To assist data analysis, each single question and all modules were number coded.

Closed questions were also coded. The answers to closed questions were coded; open-ended answers were categorized and remained uncoded. The questionnaires were coded according to the answers given with numbers 1, 2, and 3.

Q1 Household, on composition, was an essential module. Question one asked how many years the household members have lived in the area. The second question was on the number of household members. The third and fourth questions focused on members' age, how many people in the household are older than 60 years and how many members are under 15 years. The final question if members of the household were staying elsewhere, due to work or school attendance.

The second module, Q2 Income, focused on the economic situation of households. The first question asked about the main sources of income in the household. Are members of the household permanent employed, do they have casual jobs, or/and receive social grants. If social grants were obtained, the following question focused on which types were received (old-age pension grant, disability grant and/or child support grant. The final 'Q2 Income question' was on the fish catch and whether was sold.

The third main module deals with employment. It was composed of three main questions with follow-up groupings. The first question asked if anyone in the household has permanent employment. The next question was on numbers of unemployed in the household and if these people were looking for work. The last question was on casual and informal jobs and the numbers to which this pertained.

Q4, Fisheries, was structured around whether household members fish or not. If household members do not fish, the next question was about the reasons for not doing so. If the first question was answered positively, the follow-up questions focused on the periodical measurement of the activity. Three groupings were available, one to three times per week, one to three times per month, or only a few times per year. The last question was on the importance or otherwise of the fish catch in daily diets.

The last module, Q5 Eating Fish, enquired if members of the household eat fish, and, if positively answered, how frequently. If the household did not consume fish, it was asked why not. Five reasons were noted, price, availability, taste, bones, tradition and other reasons.

The second survey, called Lake Gariep Interview 2007, was based on a randomly chosen smaller sampling frame including four main categories, partly pre-fixed, partly open-ended. This component was an in depth-survey gaining precise knowledge about the household's composition, about Quality of Life, available Income, and Income needed to get by, and nine open-ended questions on fishing.

The first module, 1.Household Composition, was a matrix composed of five core groupings. 1.1 is on the gender of household members. The second, 1.2, is on Age. The third, 1.3, dealt with Education Levels. This has eight subgroups, 1. No education, 2. Up to Standard three, 3. Standard four to six, 4. Standard seven to ten, 5. Matric obtained, 6. Matric plus, 7. Technikon, 8. University.

1.4 Occupation asked within ten subgroups which livelihood members of the households inhabit, are member either 1. Full-time employed, 2. Seasonal employed 3. Holds informal jobs, 4. Are looking for work, 5. Are retired, 6. Going to school, 7. Staying at home, 8. Do the housework, 9. Child minding or 10. Make living with received social grants. More than one answer option is possible. The final module of 1. Household Composition dealt with 1.5 Unemployment and asked about the duration (months, years) of unemployment by members of households.

Questions two to eight of the first module is dealing with the interviewees position within the household: 1. Head 2. Housewife/Homemaker 3. Dependent.

Questions three to seven are focusing on food security. Question three asks how many meals your household usually has per day. Question four asks, on how many days the household consumed meat within the last week. Question five asks on how many days in the last week your household consumed fish. Question six asks if the respective household grow vegetables

and if positively answered if the respective household sell the veggies. The last question on food security, in general asks if the interviewed household member considers the household as food secure. Question eight focuses on household possession and if the household has a 1. Fridge, 2. Electric stove, 3. Paraffin stove, 4. Bicycle, 5. Car, 6. TV or 7. Radio.

The second module, Q2 Quality of Life, includes questions nine to twelve. The first question of Q2 Quality of life asks about how the respondents perceives his/her life at present and if life is getting better, worse or remains the same.

The next question was on most positive changes since the official end of apartheid in 1994. The respondents had five given answerers, 1. Housing and Infrastructure, 2. Education Opportunities, 3. Job opportunities, 4. Personal Pride and freedom, 5. Relationship with other South Africans.

Part eleven consists of quality of life categories, 1. Your education, 1. Your education, 2. Your health, 3. Your family's happiness, 4. The food you eat, 5. Job opportunities, 6. Your family's income, 7. The size of your house, 8. Your freedom of movement, 9. Your security against crime, 10. Your leisure time activities, 11. The distance of shops, schools, transport and other services to your dwelling, 12. Household possessions, 13. Security of tenure.

The respondents were asked to decide about the degree of satisfaction with each of the categories, 1. Very satisfied, 2. Satisfied, 3. Dissatisfied, 4. Very dissatisfied, 5. Considered not important.

The last question within the quality of life module was about how satisfied the respondents are with life as whole these days. Again the interviewee could chose between five answers (very satisfied, satisfied, dissatisfied, very dissatisfied, neither dissatisfied/nor satisfied).

The third module, Q3 Income, was divided by two questions. The first enquiry focused on the approximate average household's monthly income and the interviewer had to choose from nine values (1: R0-R100; 2: R101-200; 3: R201-R500; 4: R501-R750; 5: R751-R1000; 6: R1001-R1500; 7: R1501-R2000; 8: R2001-R3000; 9: R3001 and more). The second and last question

within the money-metric part asked about the needed income of the household.

Q4 Fisheries includes nine main questions, which are open ended. No preformulated answers were used for this final part. Question one and two asked how many members of the respective household fish and often they exercise the activity. Third question was on how important fishing is for the respondents as well as household members in terms of their daily living. Questions four and five were on fish sales. Question six was on seasonal variations in the fish catch. Question seven was on the importance if the money respective household members earn through the fish selling. Question eight asked what the respondents as well as household members are doing if not going to fish. The final question was on whether fishing was a necessity for survival of the respondents and other household members.

4.4.2 Survey and Questionnaire 2011

For Lake Gariep Questionnaire 2011 the same categories as for the conducted 2007 survey were applied. In contrast to the 2007 field trip where two surveys were conducted, it was not considered as necessary to conduct two surveys again. Therefore one core questionnaire was designed with the following categories included: Q1. Household, Q2. Income, Q3. Employment, Q4. Fisheries, Q5. Nutrition, Q6. Housing, Q7. Assets, Q8. Quality of Life, Q9. Income.

Q1 Household is identical with the 2007 survey, Q2 income includes more social grant options, disability grant, foster care grant, care dependency grant, earnings from selling (making, fixing or selling goods, home-grown products). Q3 Employment is identical with the 2007 questionnaire as is Q4 on fisheries. In Q5 nutrition was introduced as a new category, to better summarize findings on food security. Q6 Housing consists of six questions. The first asks if the dwelling is owned by someone in the household, or is rented, or rentfree. The second question asks if the dwelling is an RDP house. The third question asks if the main source of drinking water for the household is from

piped water in the dwelling, from piped water on the site or in the yard, from a public tap or from water carrier/tanker. Question number four deals with two options. Either if the household receives free basic water and free electricity. Module seven, Q7 Assets, is extends the module household possession with a new grouped question and answer option on telephone/cell phones and if household owns livestock.

Chapter 5 Human and Financial Assets

5.1 Introduction

This chapter presents results from fieldwork undertaken in 2007 and 2011 on human and financial assets. Besides its confirmation of material deficiencies, it identifies what the poor have. Demographic correlates identify the structure of the communities and households studied, illuminating the context in which livelihoods are negotiated and the constraints that people face. Establishing key facts on demographics, household composition and dependency ratios assists in determining economic burdens.

Basic demographic and socio-economic characteristics of households are presented first, followed by specific categories, drawing on the 2007 fieldwork. Results of the 2011 fieldwork are then introduced. 2007 and 2011 are then compared, with a focus on changes in the number of poorest households. Age-sex distribution for all surveys and all communities are presented followed by a household composition analysis. Additionally, household dependency ratios (the child dependency ratio, the old age ratio, and the total dependency ratio for Venterstad and Oviston) are presented for both years. Moreover, the chapter also analyses variations in main income sources according to household size and occupational status. Labour markets are either often inaccessible in these rural areas, limited or non-existent. The investigation focuses on the differences in incomes among households, and whether any empirical regularity, such as relationships between occupation

and education, can be identified in the characteristics or make-up of households that would explain these differences. In 2007, fifty-five per cent of residents interviewed were women and forty-five per cent men. The mean age was forty-five years. In 2011, sixty-one per cent of interviewed household members were women and thirty-nine per cent men. The mean age of all respondents was forty-nine years.

Assets owned, controlled, claimed, or accessed by some other means by individual households are grouped into four categories (Table 4). Financial assets comprise: wage labour, casual labour, grants, and income from selling fish and vegetables. Natural assets include: fish stocks, vegetable gardens and livestock. Human assets are people themselves and their capabilities in terms of education and occupation. Building this profile of varying asset types and showing how they interrelate follows Chambers and Conway (1992: 11), who impressed that

distinguishing between different types of assets draws attention to the variety of resources, which are often used in combination, that people rely on for making a living.

The data is presented according to livelihood categories (Scoones 1998). The focus of the analysis is the material, social, financial, and natural assets necessary for the pursuit of any livelihood. The chapter starts with introducing the demographic profile of the study area and a comparison of population composition and change between 2007 and 2011.

Table 2 presents the system of inquiry into livelihoods at Lake Gariep. Note: Livelihood resources are identified as human, financial, natural, and social assets. Data on household composition and age cohorts are presented. For a comprehensive understanding various categories for the analysis are applied.

Selling Fish, Quality of Life categories, Wage Labour, Grants, Casual Labour

Fishing, Age-Sex Distribution, Ownership of Assets, Fishing frequency, Children 15 years and younger

Food Security, Housing Subsistence Fishing, Household Member staying abroad, Child Dependency Ratio

Changes after 1994 Fish for Food Security, Household Composition, Old Age Dependency Ratio, Fish Selling as Income Source, Occupation, Fish Stock, Education, Household's Income Portfolio

Demographic Data

1 Human Assets 2. Financial Assets 3. Natural Assets 4. Social Assets

Livelihood Resources

5.2 Human Assets

5.2.1 Demographic Profile 2007

A summary of demographic results from the Lake Gariep survey 2007 is reported in the tables five, six and seven. First, the results from all townships are presented, followed by a detailed analysis of each one. The overview is based on two-hundred sixty-three sampled households out of a total of 1750 in the area. One hundred ninety-three households were sampled in Venterstad, thirty-six households in Oviston and thirty-four households in Hydro Park. Dwellings were counted using images generated with Google Earth (October 2007). Actual population size was deduced by extrapolating from survey data. In Venterstad thirteen per cent, in Oviston thirty-one per cent and in Hydro Park twenty-eight per cent of households were sampled to ensure that the sample size was adequate. Approximately one in seven households members were approached for inclusion in the survey. Table 5 presents summary statistics for counted households in the area, sampled households in total numbers and the percentage of counted households.

Table 3 Summary statistics for counted households and sampled households in total numbers and percentage of sampled households

			%
	Households	Households	sampled
Location	counted	sampled	
Venterstad	1526	193	13
Oviston	102	36	32
Hydro-Park	122	34	28
Total	1750	263	15

A total of 6620 people live in Venterstad, three hundred forty-three live in the township of Oviston, and five hundred sixty-one in Hydro Park. The total number of people living in the respective towns is 7524 (Table six). Of this number only the townships, and not the wider community, that is, white households, were included in the survey.

Table 4 Summary Statistics for the Communities, respectively Households (HH)

Location	Venterstad	Oviston	Hydro Park	Total
Number of HH	1526	102	122	1750
% of Population	87.2%	5.8%	7.0%	100.0 %
sampled HH	193	36	34	263
% sampled HH	29.7%	35.3%	27.9%	15.0%
Persons per HH mean(S.E.)	4.7	3.4	4.6	4.0
Population numbers	6620	343	561	7524

According to the Statistics South Africa census data from 2001, Venterstad has 3383 inhabitants. Five hundred sixty people reside in Oviston. Hydro Park has five hundred sixty inhabitants (Statistics South Africa 2003). Table seven presents summary statistics for the communities investigated.

Table 5 Population size, Statistics South Africa (2003)

Location	Census 2001
Venterstad	3383
Oviston	560
Total	3943

Demographic data presented in this study indicate that far more people are residing in these towns than are officially measured by Statistics South Africa. Population data record 6981 people living in Venterstad and Oviston (Table 7). The town of Venterstad has five townships (Lyceumville, Nozizwe, Venterstad-Township, Takalani, Magaleni), of which officially Venterstad (Magaleni, Takalani, Venterstad Township, Lyceumville and Nozizwe) records 3383 inhabitants (Statistics South Africa 2003). According to demographic correlates from the present study, 6634 people live in Venterstad. The demographic data of 2007 illustrate that 2348 more inhabitants reside in this investigated area than have been counted during the 2001 census, whose results are used by the government to allocate grants and subsidies which is explicitly stated in the Gariep Spatial Development Framework (2006).

Table 6 Population Size 2007

Location	Population numbers
Venterstad	1529
Nozizwe	1820
Takalani*	3285
Oviston	347
Total	6981
Hydro Park	561
Total	7542

This reveals either a lack of competence in collection and presentation of official data, or a lack of probity. At worst, it suggests a dishonest involvement of political interests in manipulating figures. Since 1994, poverty

trends based on social surveys and censuses in South Africa are measured by Statistics South Africa. People from farms move to Venterstad, occasionally they reside in the township for a short period before locating to urban areas. Statistics South Africa undertook the last population census in 2001. 11 There are many instances of this government body having major problems in conducting surveys (Du Toit 2005: 5). I assume that the lower the actual number of people measured, the lower is the investment by the state for infrastructure and housing, which is based on census figures. South African citizens with less than R3500 per month are eligible for a RDP home. The application process for an RDP home is based on waiting lists, a system that does not work properly, as there is a huge demand for RDP homes (Napier 2005). Hence the wrong population data have an influence on the money allocated and hence on how the municipally can provide its residents with homes. Not only that the basic data for financial planning is wrong, moreover the delivery of subsidised housing units declined in most provinces, with the highest rate of decline evident in Eastern Cape, North West, and Limpopo (between 2006/07 and 2007/08). For example in 2010 the Eastern Cape git a minus of 2.3 per cent of building houses and moreover that

while this may be the case at national level, specific provincial departments do not necessarily fare as well. For example, the 2009/10 budget allocation for the Eastern Cape Department of Housing received a nominal increase of 2.44 percent yet in real terms i.e. once inflation is taken into account, the budget allocation experiences a decrease of -2.90 percent from the previous financial year (Tissington 2011:33).

¹¹ For the established population census by Statistics South Africa in 2011, no published data is yet available.

Moreover, Misselhorn (2008) criticises that in South Africa the number of people living in informal settlements is measured at a very low level and it is to doubt if data are correctly produced.

It can therefore be argued that the actual number of households living in informal settlements in South Africa is probably substantially more than the official Stats SA estimate of approximately 1.2 million, and that, contrary to what official estimates suggest, there has probably not been a rapid decline in numbers of households living in informal settlements in recent years (Ibid:15).

Since the inception of the democratic government's housing programme in 1994, more than eighty per cent of the houses built by the government have been subsidy houses (Estimates of National Expenditure 2011). Each municipality, as part of its integrated development plan, must ensure that within the framework of national provisional legislation and policy, constituents within their jurisdictional regions have access to adequate housing (Housing Act 1997). The Minister of Human Settlement, Tokyo Sexwale, (National Minister of Human Settlements 2010) announced that between 1994 and 2010 2, 4 million RDP houses have been built but

despite all these commendable efforts, the housing backlog has grown in leaps and bounds from 1.5-million in 1994 and now stands at approximately 2.1-million. That means approximately 12-million South Africans are still in need of better shelter. We have, therefore, hardly moved in just breaking the backlog, never mind the numbers associated with population growth (National Minister of Human Settlements 2010).

Around fifteen per cent of the households has been staying in the area five years or less, while more than fifty per cent of the population has been living in Venterstad, Oviston or Hydro Park for more than twenty years. Around fifteen per cent have been residing in their respective township for around ten to twenty years, the same percentage of the population living in the area for around six to nine years (Figure 4).

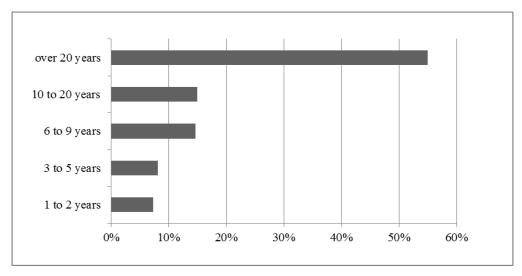


Figure 4 Percentage of households, respectively household members, (y-axis; in total) according to their length of residence in the area (x-axis)

5.2.2 Comparison between Population Composition and Changes between 2007 and 2011

Due to time and funding constraints, the 2011 survey was conducted in Venterstad and Oviston. The sample included a total of 197 households of which 30 were in Oviston and 167 in Venterstad. The Monte Carlo simulation indicates that the mean number of people living together for both townships is similar in both surveys (2007 mean: 3.9 % CI: 3.6-4.2 2011 mean: 4.4 95 % CI: 4.06-4.83). However, when analysing the townships separately, a slightly different picture emerges as for Venterstad, the mean number of people per household was notably lower in 2011 than in 2007 (2011 mean: 3.79, 95 % confidence interval (CI): 3.5-4.2; 2007 mean: 4.7, 95 % CI: 4.3-5.2). Survey data from 2011 resulted in a total population in the Xhosa-speaking areas of

Venterstad of 4349. Compared to 2007, the number of people living in Venterstad has decreased by around one thousand individuals to 2011, a number that corresponds to approximately 260 households. Put another way, within the last four years, around 250 people have left Venterstad annually. It is not surprising that the number of inhabitants did not increase. For example, for the Eastern Cape in total, the population decreased from 14.48 per cent in 2001 to 13.50 per cent in 2011 of the total population of South Africa, the largest total share of migration outflow of any South African province (Statistics South Africa 2011). In contrast, the population in urban areas increased over the same period, with an increase from 9.74% to 10.45% in the greater Cape Town area and increase from 21.04 to 22.30% in the highly urbanised province of Gauteng. Interestingly, population numbers in Oviston largely stagnated (2011 mean: 4.47 95 % CI: 3.35- 5.3 2007 mean: 3.36 95 % CI: 2.7-4.2). In Oviston approximately the same number of people (453) resides in 102 households.

Table 7 Means and Confidence Intervals (Cl) for Population Composition and Changes 2007/2011

2007/2011.				
Location	Mean	Variance	Lower CL	Upper CL
Venterstad				
2011	3.79	0.032	3.46	4.18
2007	4.74	0.053	4.29	5.19
Oviston				
2011	4.47	0.10	2.6	.
2011	4.47	0.18	3.6	5.3
2007	3.36	0.13	2.7	4.2
2007	3.30	0.13	2.,	2
Total				
2011	2.01	0.029	2.57	4.22
2011	3.91	0.028	3.57	4.23
2007	4.43	0.039	4.05	4.83

Note: Ninety-five per cent confidence intervals (CL) were estimated by simulating 1000 bootstrap estimates using PopTools 2.3.2 (Hood 2010). Overlapping confidence intervals indicate that mean values are not significantly different.

5.2.3 Age-Sex Distribution and Dependency Ratios 2007

A total of 1750 people were included in the 2007 household survey (Table Ten). Four per cent of the male population and six per cent of the female population were more than sixty years old. Forty-four per cent of the population was younger than fifteen years. Fifty-two per cent of men and women were between fifteen and sixty years of age. A higher proportion of the total population is female (fifty-four per cent) compared to males (forty-six per cent). Reasons for this gap are manifold but de facto men are more likely to leave rural areas to seek work in urban situations and their life expectancy is in general lower compared to women. 13

¹² Many household members are staying abroad as migrant labour, as children attending school somewhere else, as unemployed in townships like Kylitsha (biggest township in Cape Town, Western Cape or Soweto (biggest township in South Africa, in Johannesburg, Gauteng). The literature on South African migrant labour system is extensive (Feinstein 2005; Zbigniew et al.. 1991; Ross 2008; Anzavin 1987). In South Africa the migrant labour system ,was seen as the basis of apartheid. In other words, apartheid was not so much a form of state but a form of labour control based on rural migrant labour, moreover a labour which was kept in dormitory area (Bantustans) against its will by the pass system, and hence tribalised in the process (Neocosmos 2010: 19-20).

¹³ In South Africa, the male life expectancy from 2001 to 2006 was 49.1 years and from 2006

¹³ In South Africa, the male life expectancy from 2001 to 2006 was 49.1 years and from 2006 to 2011 increased to 50.2 years. For women, the life expectancy was from 2001-2006 54.2 years and from 2066 to 2011 estimated to be 54.4 years (Statistics South Africa 2011)

Table 8 Number (N) and percentage (%) of the sampled Population in Venterstad, Oviston, Hydro

Park, and total number of sampled population divided by age cohorts

Category	Ventersta	Venterstad		Oviston		Hydro Park	
	N	%	N	%	N	%	N
Men over 60	27	4	9	7	3	2	39
Women over 60	39	5	13	11	13	8	60
Men under 15	156	20	16	13	19	12	191
Women under 15	160	21	23	19	27	17	215
Men between 15 and 60	184	23	26	21	56	35	256
Women between 15 and 60	226	28	34	28	42	26	302
Men Total	367	46	51	42	78	49	496
Women Total	430	54	70	58	82	51	582
Total	797	100	121	100	160	100	1078

Age-Sex Distribution in Venterstad

The household survey in Venterstad included 797 people. The percentage of the female age cohort (twenty-one per cent) and the male age cohort (twenty per cent) of fifteen years and younger is forty-one per cent. Approximately nine per cent of the population is above sixty years. Slightly more women are above sixty (five per cent) than men (four per cent). Some forty-one per cent are in the fifteen to sixty years age cohort. Again, a higher proportion of household members are female (fifty-four per cent) than male (forty-six per cent).

Age-Sex Distribution in Oviston

In Oviston, eighteen per cent of the population is above sixty years of age. The proportion of women is higher (eleven per cent) compared to men (seven per cent). Approximately fifty per cent of the residents (twenty-one per cent male; twenty-eight per cent female) are between fifteen and sixty years. Thirteen per cent of the male population is under the age of fifteen, compared to nineteen per cent of the female population. In total, around twelve per cent

more women (fifty-eight per cent) than men (forty-two per cent) are living in the township.

Age-Sex Distribution in Hydro Park

Hydro Park has slightly more women (fifty-one per cent) than men (forty-nine per cent). Ten per cent of the total population are above sixty years. This corresponds to only two per cent of men and eight per cent of women. Twenty nine per cent of the population is under fifteen years. Two thirds of Hydro Park residents are between fifteen and sixty years. The trend of a higher proportion of females, as occurs in Oviston and Venterstad, is replicated in Hydro Park, though with less margin.

Dependency Ratios

Although the dependency ratios shown in Table 7 are crude generalizations, an economic burden for the households is indicated by the numbers of people younger than fifteen and older than sixty years relative to the population segment (fifteen to sixty years) more likely to be economically active. Dependency ratios in these communities suggest a high demand for spending on social services such as education, health and social welfare.

Table 9 Data on child dependency ratios, old aged ratios and total dependency ratios of Venterstad, Oviston and Hydro Park, as well as corresponding national data (Statistics South Africa 2003) for comparison.

	Venterstad	Oviston	Hydro Park	Total	South Africa
Child	77	65	47	73	51
Dependency					
Ratio					
Old Aged	19	35	16	18	8
Ratio					
Total	96	100	63	91	59
Dependency					
Ratio					

Note: The dependency ratios expresses the youth age group (zero to fifteen) or old aged category (over sixty), or both, in relation to the economically productive category (fifteen to sixty). The ratio reports the number in these dependent categories in relation to hundred in the economically productive category, providing an indicator of the economic burden.

Compared to data for South Africa (Statistics South Africa 2003), the ratios for the three categories were above the South African mean. Given the very high unemployment rates in the communities and that the potential economic ratio is consequently much lower than the South African mean, the results indicate that child support grants, old-age pension grants, and disability grants are the most significant contributions to income in these communities.

The results for the three townships have to be interpreted diametrically to the original intention of the ratio's application. High numbers of dependents ¹⁴ sustain households. For these townships, a lower child dependency ratio or a lower old aged ratio would indicate higher poverty levels. In the three townships, high ratios, implicate 'improved' livelihoods of the people in the area. The income is mainly generated through those who, it could be reasonably anticipated, would be supported by the working population, namely old people and children. For children and their upbringing these impacts are more than challenging, as child support grants are used to sustain households. Money granted by the state for food and clothing, especially for children, is nourishing entire families.

5.2.4 Age-Sex Distribution and Dependency Ratios 2011

In Venterstad and Oviston, fifty-nine per cent of the population is female and forty-one per cent male (Table Twelve). The population of sixty years and older accounts for eleven per cent and consists of slightly more women than men. A quarter of the population is under fifteen years old. In this age cohort, the proportion of females (thirteen per cent) is higher than the proportion of males (twelve per cent). The most striking gender disparities were found in the age group between fifteen and sixty years. This is comprised of considerably more women (forty per cent) than men (twenty-four per cent).

¹⁴Aged people, children or disabled individuals

Table 10 Number (N) and percentage (%) of sampled population in Venterstad and Oviston and total number of sampled population divided by age group category.

Category	Venterst	ad	Oviston		Total	
	N	%	N	%	N	%
Men over 60	36	6	2	1	38	5
Women over 60	46	7	3	2	49	6
Men under 15	72	11	22	16	94	12
Women under 15	71	11	28	21	99	13
Men between 15 and	147	23	37	28	184	24
60						
Women between 15	263	41	42	31	305	40
and 60						
Men Total	255	40	61	46	316	41
Women Total	380	60	73	54	453	59
Total	635	100	134	100	769	100

Age-Sex Distribution in Venterstad

Sixty per cent of the population in Venterstad is female and forty per cent is male. Slightly more women are over sixty years (seven per cent) compared to six per cent of men. The group under fifteen years accounts for twenty-two per cent of which slightly more are female than male. Women between fifteen and sixty account for forty-one per cent and men in the same age group account only for twenty-three per cent.

Age-Sex Distribution in Oviston

Around fifty-four per cent of residents in Oviston are female and forty-six per cent are male. The same trend as in 2007 as well as in 2011 in Venterstad is illustrated in Oviston 2011. Only one and a half per cent of the population over sixty years is male and two per cent is female. The age group under fifteen accounts for thirty-seven per cent of which more females (twenty-one per cent) than males (sixteen per cent) are residing in the location. The population between fifteen and sixty years accounts for fifty-nine per cent of the total population. Twenty-eight per cent of this age cohort is male and thirty-one per cent is female.

Dependency Ratios

In 2011, due to the fact that many households left the area, dependency ratios are lower compared to 2007 (Table 13). In Venterstad, the child dependency is lower compared to 2007, but in general, ratios are higher then the South African mean except, the old aged ratio in Oviston, remains under the mean of seven for South Africa.

Table 11 Data on child dependency ratio, old aged ratio and total dependency ratio, corresponding national data ports data on the age and sex structure of these communities, as

well as corresponding national data (Statistics South Africa 2003) for comparison.

	Venterstad	Oviston	Total	South Africa
Child	35	63	40	46
Dependency				
Ratio				
Old Aged	20	6	17	7
Ratio				
Total	55	69	57	53
Dependency				
Ratio				

Note: The dependency ratios convey the youth age category (zero to fifteen) or old aged category (over sixty), or both, in relation to the economically productive category (fifteen to sixty). The ratio reports the number in these dependent categories in relation to hundred in the economically productive category, providing an indicator of economic burden.

5.2.5 Household Composition 2007

Table Four presents statistics on: the mean number of people living together per household, the mean number of children per household, and child dependency ratios according to townships. Households range from one person to fourteen persons. The mean number of people living together per household is 4.13 ± 2 , S.D. standard deviation). There were considerable divergences in household composition according to townships, ranging from a mean size of 3.4 members per household (± 2.2 , S.D.) in Oviston, compared to a mean number of 4.7 ± 2.4 , S.D.) in Venterstad. In Hydro Park, the mean number of individuals per household is 4.6 ± 2.6 , S.D.).

Table 12 Summarised statistics for the mean number of individuals and children per household and the child dependency ratio for Venterstad, Oviston and Hydro Park

			Child
			Dependency
Location	Individuals	Children	Ratio
Venterstad	4.7 (±2.4)	1.6	77
Oviston	3.4 (±2.2)	1.1	65
Hydro Park	4.6 (±2.6)	1.3	47

Note: The child dependency ratio expresses the youth age category (zero to fifteen) in relation to the economically productive category (fifteen to sixty). The ratio reports the number in these dependent categories in relation to 100 in the economically productive category, and should provide an indicator of economic burden.

Children fifteen years and younger

In total, the mean number of children fifteen years or younger per household is 1.6, which corresponds to a child dependency ratio of 78.3 per cent per household. In Venterstad, the mean number of children per household is 1.6, while it is 1.1 in Oviston and 1.3 in Hydro Park. Thirty-two per cent of households have no children aged fifteen or younger. Approximately thirty-three per cent of the households have one or two children aged fifteen years or younger. One fifth of all households have between three and five children, two per cent have more than six children under the age of fifteen and one household has eight children to take care of. At the time of the survey in 2007, children up to fifteen years of age were eligible for child support grant.

Household Members abroad

Forty five per cent of all households have members not living within in the household, which implies that, a substantial number of household members stay elsewhere for work, for education or for other purposes. In Oviston, twenty-three per cent of households have members are staying abroad, which

is low compared to Hydro Park (sixty-five per cent) and Venterstad (fifty-one per cent).

5.2.6 Household Composition and Change 2011

In Venterstad, the mean number of people living together in a household is $3.8 \pm 2.3 \text{ S.D.}$, of which the number of people varies from a single person household up to an utmost of a dozen members per household. In Oviston the mean number of people, living together is $4.4 \pm 2.3 \text{ S.D.}$ of which the maximum of people per household is eight members living together.

Table 13 Summary statistics for mean number of individuals and children per household as determined during the 2011 survey, including the child dependency ratio for Venterstad and Oviston.

Location	Mean of	Mean of	Child Dependency Rat
	Individuals per Househo	Children per Househo	
Ventersta	3.8 (±2.3)	0.9	35
Oviston	4.4 (±2.3)	1.7	63

Note: The child dependency ratio expresses the youth age category (zero to fifteen) in relation to the nominal working age category (fifteen to sixty).

Children fifteen years and younger

The mean number of children (Table Seven) under fifteen years per household is around one (2011 mean: 0.99, 95 per cent confidence interval (CI): 08.3-1.16; 2007 mean: 1.5, 95 per cent CI: 1.24-1.73). Data from 2007 are included for control. The child dependency ratio was sixty per household. In Venterstad, the mean number of children per household was 0.9 (2011 mean: 0.9, 95 per cent CI: 0.6-1.0; 2007 mean: 1.6, 95 per cent CI: 1.3-1.8). In Oviston, the mean number of children per household was 1.7 (2011 mean: 1.7, 95 per cent CI: 1.1-2.3; 2007 mean: 1.02, 95 per cent CI: 0.6-1.5).

Table 14 Mean and Confidence Intervals (Cl) for Household Structure 2007/2011.

Location	Year	Mean	Variance	Lower CI	Upper CL
Venterstad	2007	1.58	0.01	1.34	1.81
	2011	0.86	0.01	0.66	1.02
Oviston	2007	1.03	0.04	0.61	1.5
	2011	1.68	0.06	1.1	2.27
Total	2007	0.99	0.01	0.83	1.16
	2011	1.47	0.01	1.24	1.72

Note: 95 per cent confidence intervals (CL) were estimated by simulating 1000 bootstrap estimates using PopTools 2.3.2 (Hood 2010). Overlapping confidence intervals indicate that mean values are not significantly different.

Fifty-two per cent of all household have no children aged fifteen or younger. Approximately half (forty-nine per cent) of the households have one or two children aged fifteen years or younger. Fifteen per cent of all households have between three and four children and one household has five children under the age of fifteen.¹⁵

Household Members staying abroad

Thirty-three per cent of all households have members not living in the household. In Oviston, seventeen per cent of all households have members staying abroad which is compared to Venterstad (twenty-six per cent) the lowest account.

5.3 Economic Assets

This section focuses on household income data in 2007 and 2011. Although there are households in the communities with no income at all sustaining on subsistence fishing or farming, the majority is able to generate earnings from a mixture of financial assets. This chapter highlights income portfolios in total. It was anticipated that for many households, their reporting of monthly income would be imprecise. To improve reliability the

¹⁵At the time of the survey in 2011, children up to fifteen years of age were eligible for child support grants.

¹⁶ As will be explained in chapter seven, people sell fish and vegetables.

data is organised into nine income categories ranging from no income to R3001 and above ¹⁷. The Mann-Whitney ranks sum test was used to examine whether incomes differed among eleven household groups according to their economic assets. P-values below 0.05 were significant. Summarised statistics on income data and standard deviations are included in Table 13. Data on occupational status is provided in Table 14. Regression levels of education against the level of occupation highlight dependency of education. In the following figure, a correlation of education and occupation is shown illustrating that the poorer people are the less education was obtained. It was assumed that education levels would decrease as age increased (children under the age of eighteen were excluded). Education levels were measured against age cohorts (Figure 11). Education levels of the entire sampled population are shown in Figure 13.

5.3.1 Household Income and Occupation 2007

In Venterstad, Oviston and Hydro Park, the primary source of income is government transfers in the form of social grants. The second main source is income earned from formal or casual employment. More people are employed on a casual rather than a full time basis. Only eighteen per cent of households have members who are formally employed compared to eighty per cent of households without anyone earning a monthly salary. Twenty per cent of households indicated that members generate an income from causal employment (Figure Five). Casual employment includes work on farms, domestic work and gardening, mainly for white households in the area.

 $^{^{\}rm 17}$ In January 2012, R 1 was 0.098 Euro or 0.13 US Dollar.

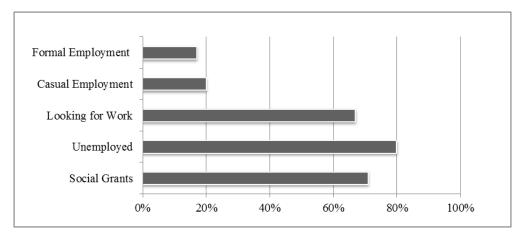


Figure 5 Unemployment, employment, and distribution of social Grants in Venterstad, Oviston and Hydro Park

The mean number of unemployed people per household was 1.8. Seventy-two per cent of households had members who were looking for work. This number is not correlated with the number of unemployed members per household; people who were not satisfied with their wage (casual or permanent) jobs were included in this number. Fishing was a far more important element in livelihood strategies for households whose members were unemployed compared to households with members who were employed. As could be expected then, fishing was particularly important where there was low demand for wage. Sixty per cent of households with unemployed members were fishing regularly compared to forty-eight per cent of households where at least one member had wage employment.

The duration of unemployment ranged from one month up to, for two interviewees, twenty years. ¹⁸ The mean period of unemployment was around five and a half years. Sixty-seven per cent of interviewees stated that members of their households were looking for work. Most of the residents in the area are discouraged and frustrated with their desperate situation and many people eventually lose hope and give up looking for work. A qualitative account of one typical case among interviewees is presented below.

¹⁸ At some point, people stop to count or forget the exact number of years.

Table 15 Ntsigo, Life Story

Ntsigo, 33 years of age, had lived his whole life with his mother on a farm close to Venterstad. After 1994, the farmer decided to sell the farm and leave South Africa. Ntsigo lost his home and job. He moved to Venterstad and spent the first years in a shack. Ntsigo married and now has two kids. Somehow he managed to get an RDP home. He has been unemployed for more than a decade and has given up looking for work. Because they have children, the family can survive from social grants. His left knee is severely injured. In his early twenties police assaulted him because his permit to stay in Venterstad had expired by one hour. He was locked up for a day in the Venterstad prison. After he left without medical treatment, his knee was permanently injured.

Seventy-one per cent of households received welfare grants. Some households receive more than one social subsidy. Twenty-one per cent received a disability grant. Interview transcripts suggest that disability grants were mainly paid to people infected with HIV or associated illnesses such as tuberculoses. Twenty-three per cent received the old age pension and approximately forty per cent of households received support for one or more children. The sample of two hundred sixty-three households collected a total of two hundred twenty-three state welfare grants, an outlay by the state of R 124 530 per month (Department for Social Development 2011). In 2007, the old age pension amounted to R870. The same amount was paid for the disability grant, and the child support grant amounted to R200 (Ibid)¹⁹.

Of the total number of households sampled, sixty-one per cent of respective members received old age pensions, fifty-eight were eligible for

¹⁹ Calculation based on monthly grants data published by South African Social Security Agency, (www.sassa.gov.za, accessed July 2010).

disability grants and one hundred and five grants were paid for children under the age of fifteen. For struggling rural households, the welfare system is an existential necessity. It basically keeps them alive and the ANC is reassured to win elections in a row. Little indication leads to the conclusion that pension payments, child support grants or disability grants were generating 'sustainable' rural livelihoods or were strengthening the village economy. The opposite was the case. Results indicate that households with wage income received fewer social grants compared to households without wage income. Income between unemployed and employed households was statistically indifferent – and indication that salaries in the area are very low.

Moreover, it could be assumed that no significant differences should exist between the proportion of households with employed members and with unemployed members receiving state grants, because grants are paid to children, old people and disabled and hence are not directly related to the population group between fifteen and sixty. Data indicate that fifty-four per cent of households with employed members collected a monthly social grant, compared to eighty per cent of households with unemployed members. Even though statistically no significant difference within the income of employed or unemployed households exists, more households with unemployed members receive state welfare support.

The mean number of children for households with employed members was 1.48 compared to 1.66 of households without any formally employed members. Thirty five per cent of households with employed members, and thirty nine per cent with no member employed, received child support grants. Households with members formally employed had a significantly lower number of members who were disabled. Approximately six per cent of all households with employed members had also members who were disabled and ninety-four per cent of households with no permanent employed members received a disability grant. ²⁰ The mean size of households with unemployed members was 5.4 compared to 4 members for households with employed

members and receiving disability grant. Data clearly indicates that the disability grant is a vital input to the survival of many households and that more people live together in households with disabled people and unemployed members compared to households with employed members and disabled people - a further indicator that social grants are used for the survival of whole families.

In-depths interviews were conducted in Venterstad and Oviston with four hundred and eight people, of which two hundred and twenty-three were between fifteen and sixty-five years old. Figure Six profiles the population according to their respective occupational status.

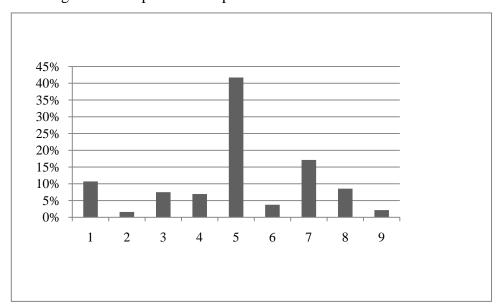


Figure 6 Percentage of household members (x-axis) and their occupational status

1. full-time employed; 2. seasonal employed; 3. informal job; 4. looking for work; 5. unemployed, 6. retired; 7. going to school; 8. staying at home; 9. housework, childminding

Two times more men than women had full-time employment (Figure Seven). More men stated that they are unemployed compared to women, but more women indicate that they are staying at home. Child minding was exclusively a female occupation. The number of men and women unemployed was also dissimilar. Even though the number of men is around two times higher than the number of women who are full-time employed, more women indicate that they are actively looking for a job.

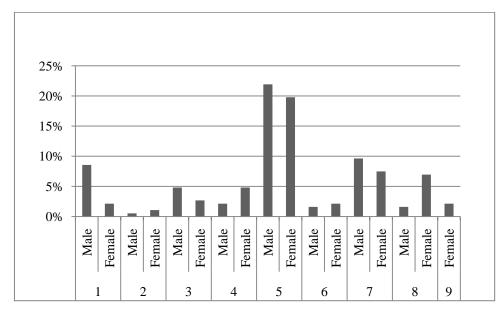


Figure 7 Occupational status according to gender

1. Full-time employed; 2. seasonal employed; 3. informal job; 4. looking for work; 5. Unemployed, 6. Retired; 7. going to school; 8. staying at home; 9. housework, childminding

Eighty nine per cent of the population in Venterstad, seventy-two per cent in Oviston, and seventy-nine per cent in Hydro Park, were unemployed. Ten per cent of the household members in Venterstad had casual jobs, twenty-five per cent received an old age pension, twenty-eight per cent were eligible for a disability grant, and forty per cent of households received child support grants.

In Oviston, thirty-six per cent of households received child support grants for one or more children, fourteen per cent received an old-age pension and eight per cent received a disability grant. Thirty per cent of the households had members who were casually employed.

In Hydro Park three per cent of the households received a disability grant which was the lowest number compared to Venterstad and Oviston. Around forty per cent received a child support grant and twenty-six per cent of households received an old age pension grant. Twenty-six per cent were casually employed.

Income

Nine per cent of household members had no income at all and twenty-two per cent of households had less than R500 per month (Figure 5). The mean number of household members was 3.9; it could be assumed that each member would have R125 per month for basic needs such as food and clothing. Statistics South Africa (2007) published that the minimum amount of money per month per person to pay for essential items in order survive, is R431. The situation in the townships is very desperate. The mean monthly income per household was R586 (\pm 157, S.D.). Households without children had a monthly income of R640 (\pm 124, S.D.). Households with children had a monthly income of R520 (\pm 127, S.D.).

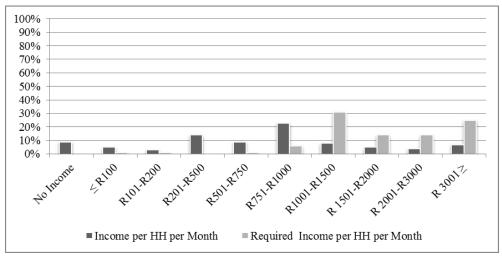


Figure 8 Real Income and Required Income per Month per Household (total HH) 2007

Venterstad

In 2007, fifteen per cent of Venterstad residents of had no income at all and roughly twelve per cent generated R200 or less a month. Forty-six per cent had a monthly income available between R201 and R1000. The highest income group, ten per cent of residents, had more than R3001 per month and it is assumed that this cohort was working for governmental bodies such as the municipality. There were large discrepancies between required and actual income. Around thirty per cent of all households needed more than R3000

month to survive. Around twenty per cent need at least R1001 and ten per cent at least R750.

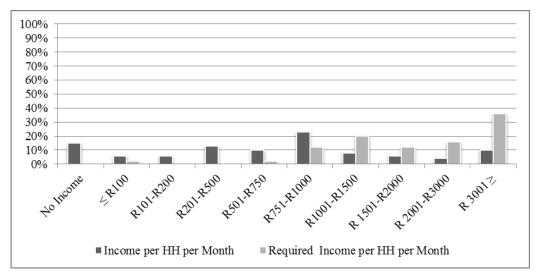


Figure 9 Real Income and Required Income per Month per Household (total HH), Venterstad 2007

Oviston

On average Oviston households have more money per month than those in Venterstad. The minimum income is at least R201 per month compared to fifteen per cent per cent of households without income in Venterstad. Thirty-one per cent generate a monthly income between R201 and R500. The same percentage has between R751 and R1000. Five per cent has more than R3001. Income is nonetheless considered too low relative to expenditures and no household is satisfied with the available amount of money. Around thirty per cent would need a minimum of R1501 and around the same at least R751 per month to make ends meet (Figure Ten).

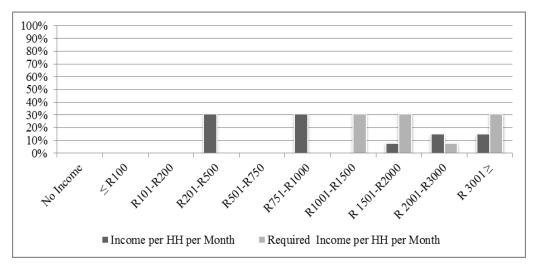


Figure 10 Real Income and Required Income per Month per Household (total HH), Oviston 2007

5.3.2 Household Income and Occupation 2011

Figure Eleven shows the percentage of households with members unemployed, employed and with casual work, as well as how many household members were looking for work. The category social grants cover all state welfare subsidies. The figures are for 2011.

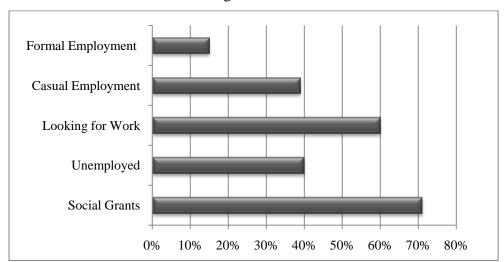


Figure 11 Unemployment/Employment/Social Grants Profile (Percentage of Households)

Four years after the 2007 fieldwork, wage employment was still very limited. Only fifteen per cent of all households have members formally employed. State grants remained the primary source of income in the majority of households. Casual work for the municipality is the second main source of

income. (Figure Eleven). The Expanded Public Works Programme (EPWP)²¹ is a government intervention to create short- term work. The EPWP includes care for the elderly and sick, educating pre-school children, rehabilitating the environment, and upgrading and maintaining infrastructure such as roads, bridges, water and sanitation. According to a Department of Public Works (2010:24) source:

The EPWP aims to create four and half million work opportunities, and more than a million opportunities have been created already since the beginning of Phase Two. Part of the programme focuses on repairing the country's road networks.

As detailed in chapter seven, the unemployment rate in Venterstad is very high at seventy six per cent. The goal of the community work programme is to reduce unemployment in rural areas (McCord 2004). Participants earn a maximum of R60 per day and can work in the programme for two days a month. Community works programmes include vegetable gardens, homebased care, the development of recreational spaces and sporting facilities, environmental rehabilitation, general maintenance work and cleaning schools. In 2010, 55582 people were employed by the EPWP in 49 locations (Department of Public Works 2010).

This study indicates that around forty per cent of households have members who are unemployed. Around the same number of households indicated that members have casual work. The major employer in the area on a casual basis is the municipality via EPWP. People's casual work includes road maintenance, street sweeping, and tending cemeteries.

The number of unemployed people per household varies from one to eight. The mean number of unemployed people per household is 1.4 per cent. The

_

household with eight unemployed people consists of twelve people in total. Around sixty per cent of households have members who are looking for work. This number is not correlated with the number of unemployed members per household because who are not satisfied with their wage jobs are included. Particularly where wage labour, as research has indicated, is in short-supply, fishing as livelihood strategy, is far more important for households with members who are unemployed compared to households with members who are employed. Survey data indicate that twenty-six per cent of households with unemployed members are fishing regularly compared to seven per cent of household where at least one member has wage employment. The reason for this significant reduction in fishing compared to 2007 as an occupation can be related to casual work that is undertaken especially in Oviston where only one household has a permanent employed member and all the other households have members who work for the municipality programmes

In 2011, twelve per cent of households received an old-age pension and fifteen per cent a disability grant. Around forty per cent of all households in Venterstad and Oviston depend on child support grants. Seven per cent receive a foster care grant and two per cent care dependency grants. The sample of 197 households receives a total of 194 state welfare grants. The state disburses more than R82100 per month to eligible household members. In 2011 the disability grant amounted to R1140. Women and men above sixty years of age received the same amount of R1010. The child support grant amounted to R260 (Department of Social Development 2011). Fifty per cent of households with employed members collect a monthly social grant, compared to seventy-six per cent of households with unemployed members. The mean number of children for households with employed members is 1.4 compared to 1.6 of households with no employed members. Sixteen per cent of households with no permanent employed members receive a disability grant. ²²

²²Disability grants are paid to people with for example HIV, TB, sever accidents related to work

Venterstad

In Venterstad fourteen per cent of the population is employed full-time; seventy-six per cent are unemployed. Around sixty-five per cent is looking for work and thirty-seven per cent have casual jobs. Thirty-six per cent are eligible for a child support grant and thirty-eight per cent receive an old age pension grant. Fourteen per cent of households have members who are entitled to get a disability grant and approximately six per cent receive a foster care grant.

Oviston

In Oviston only one member of the community is full-time employed. Eighty-three per cent have casual jobs with the municipality. Around ninety-seven per cent of households have members who fish. A fifth of households sell vegetables. Three per cent of households care for children who are not living with their parents, and are eligible for foster care grants. Sixty per cent receive child support grants. Twenty-seven per cent are entitled to an old-age pension and twenty-three per cent receive a disability grant for a member who is seriously handicapped. Around four per cent of households have an income of less than R100 or no income at all. Thirty-eight per cent had at least R100, forty-three per cent had between R751 to R1500 and five per cent R1500 or more. The mean income per household per month was R680 (±180 S.D.). In Oviston it was R784 (±135 S.D)²³ and in Venterstad R649 (±160 S.D.). The mean income across all households increased as a consequence of causal jobs supplied by the municipality. These include road drainage cleaning, grass cutting and bush clearing, pipe clearing and cleaning. People

²³ Crude generalisation measured from income categories. These figures are household-level income figures that are made up of income earned by multiple household members. Incomes were calculated based on nine income categories applied in the survey: 1: R0 - R100; 2 R101 - R 200; 3:R201 - R500; 4:R501 - R750; 5: R 51 - R1000; 6: R1001 - R 1500; 7:R1501 - R2000; 8: R2001 - 3000; 9: R3001 and more.

employed und EPWP collect a salary of R480 per month working two days in a week.

Although many people are casually employed by the EPWP there is no evidence that this is enough to overcome widespread chronic poverty. Participation is limited to twenty-four months. The training received is of limited value because there are no companies in the area who would further employ residents trained in grass cutting or drainage cleaning. The money earned is very welcome; however, as residents told the author, it is guaranteed income for a restricted time.

McCord's (2004) investigation of the EPWP indicated that many participants were not sure whether they were properly trained or not. Marais (2011: 210) summarises the EPWP, stating that

public work can be effective tools for dealing with transitional unemployment, but they are not an appropriate response in a chronic labour market crisis as the one in South Africa.

This is most evident in the Lake Gariep area, what Marais (2011) implies – as do all the statistics – is that private enterprise is needed for a functioning economy and half-way reasonable jobs. The present study suggests that the public works programme has a negative impact on livelihood pathways. The amount earned through short-term casual work is doubtlessly valuable for poor households, but the number of fishing households decreased and the question remains if the short-term programmes interfere with existing livelihood strategies. Results illustrates that the number of causal employment increased and the number of fishing as an occasional activity decreased. Instead of building upon the structures existing in the area and support people in their livelihoods, the state creates short-term employment and after these short term jobs are finished, people will have not further financial gains from the received training. Hence, more appropriate interventions, as the option that more locals could use the resource fish, or the supplement of fishing gear, would be much more sustainable compared to government's initiatives.

However, in its annual report, the Department of Public Works states that

the target of 550 000 work opportunities by March 2010 has been exceeded. This contributed substantially towards poverty alleviation. The EPWP was also extended to the non-state sector for the first time in the period under review (Department of Public Works 2010: 7).

According to the present study there is no evidence that the casual work contributes considerably towards poverty alleviation.

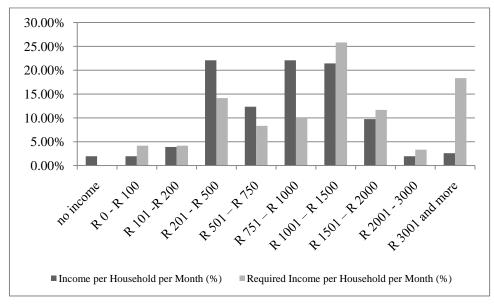


Figure 12 Real Income and required Income per Month per Household (total HH), 2011

Venterstad

In Venterstad 1.8 per cent of households have an income of more than R2001 per month. Two and a half per cent have less than R100 per month. Five per cent of households have at least R101. Around sixty-three per cent have at least R250 per month and twenty-five per cent above R1000. More than thirty per cent of interviewed household members said that they need at least R100 per month for their daily living.

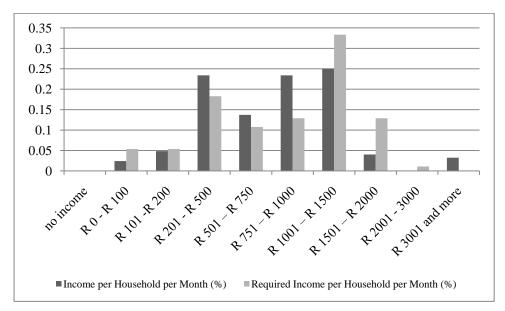


Figure 13 Real Income and Required Income per Month per Household (total HH), Venterstad 2011

Oviston

In Oviston twenty per cent of all households have a mean monthly income of around R250. Half of all households have less than R1000 per month. More than eighty per cent need at least R3000 to make ends meet.

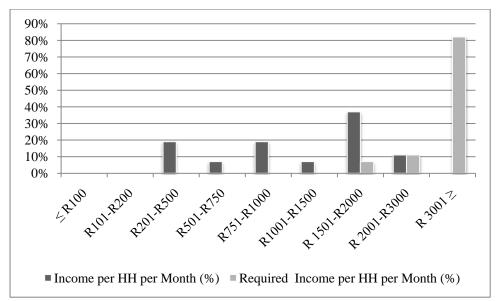


Figure 14 Real Income and Required Income per Month per Household (total HH), Oviston 2011

Table eighteen presents a summary of incomes. Households with the lowest income are households with members who are unemployed. Those

households did not receive any social grants. Households with the highest income earned a monthly wage from formal employment and did not get any social grants. Households with more than one child received a higher monthly income than households without children. This example clearly indicates the significance of grants even though it is a useful indicator that income *per se* does not fully take into account the economic burden households have to struggle with.

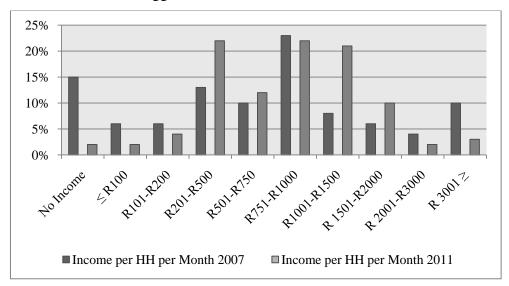


Figure 15 Income per Household (HH) per Month 2007 and Income per Household (HH) per Month 2011

In total, figure fifteen illustrates, that more households had no income in 2007 compared to 2011. The EPWP has a significant impact on this category. Another significant difference between both years, is that the income category of more than R3000 decreased. In general, there is a obvious trend, that more lower-income households had more monthly income in 2011, although the mean income increased compared to 2007 due to the fact that households earning more than R2001 decreased.

The Mann-Whitney ranks sum test was used to test whether incomes differed among eleven household groups according to their economic assets. Mann-Whitney Rank Sum Test. This test is a non-parametric test, i.e. it does not assume that data are normally distributed and is thus suitable for analyzing categorized data. Groups of income categories differences were considered significant if P -values were smaller than 0.05. Test results clearly show that

there is no statistically significant difference overall between the household incomes of households with employed members compared to households with unemployed members. (The difference in the median values between the two groups is not great enough to exclude the possibility that the difference is due to random sampling variability; there is not a statistically significant difference (P = 0.105)).

By contrast the test indicates that households without state welfare support and no one participating in the formal economy compared to household without welfare grants but formal employment are poorer; hence there is a statistically significant difference. The difference in the median values between the two groups is greater than would be expected by chance; there is a statistically significant difference (P = 0.039). This result is not surprising given the enormous impact of various state subsidies. Households with unemployed members but receiving state welfare support are better off compared to household without formal employment and no social grants. The difference in the median values between the two groups is greater than would be expected by chance; there is a statistically significant difference (P = 0.012).

In general households with social grants are better off than households without social grants. The difference in the median values between the two groups is greater than would be expected by chance; there is a statistically significant difference (P=0.003). Households with children have more monthly income compared to households without children. The difference in the median values between the two groups is greater than would be expected by chance; there is a statistically significant difference (P=0.010). No statistical difference exists between fishing households compared to households no one fishes and no formal wage income. The difference in the median values between the two groups is not great enough to exclude the possibility that the difference is due to random sampling variability; there is not a statistically significant difference (P=0.469). The mean household in the sampled area earned 4.7 in 2011. The mean income of households with employed member is 5.8.

Table 16 Income Categories 2011

Table 16 Income Categories 2011		Standard
	Income	Deviation
Mean per month	4.7	(1.8)
total Venterstad	4.6	(1.6)
total Oviston	5.1	(2.3)
total from Households with employed members	5.5	(1.7)
total from Households with employed members No		
Social Grants	6.5	(1.9)
total from Households with employed members with		
Social Grants	4.9	(1.2)
total from Households with unemployed members	4.7	(1.9)
Households with unemployed members with social		
grants	5.0	(1.8)
Households with unemployed members without social		
grants	4.0	(2.19
Households with members employed casually	4.5	(1.9)
Income Social Grants	5.0	(4.5)
total Income Households without Social Grants	4.0	(2.0)
Income Fishing Households	4.7	(2.1)
Income Non-Fishing Households	4.7	(1.9)
Income Households with Children	5.7	(2.4)
Income Households with one child	5.0	(3.1)
Income Households with more than one Child	5.7	(1.5)
Income Households without Children	4.3	(1.6)
Income Households woman	5.3	(1.8)

Note: These figures are household-level income figures that are made up of income earned by multiple household members. Incomes were calculated based on nine income categories applied in the survey: 1: R 0 - R 100; 2: R 101 -R 200; 3: R 201 - R 500; 4: R 501 - R 750; 5: R 751 - R 1000; 6: R 1001 - R 1500; 7:R 1501 - R 2000; 8: R 2001 - 3000; 9: R 3001 and more.

5.3.3 Education Levels

In South Africa a correlation between racial differences and schooling are important factors in determining adult's economic outcome (Anderson et al. 2001). In 1991, the Eastern Cape had the lowest adult literacy rate of all of South Africa's provinces (72.3 per cent). In 1993, the pupil to teacher ratio was the highest of any province (39:1) and in 1994, over twenty seven per cent of the population had no education at all (Development Bank of South Africa 1996). About seventy per cent had no secondary schooling and about 97 per cent no tertiary education (Eastern Cape Socio-Economic Consultative Council 1997: 5). 25

The present study aimed to investigate this further. This section addresses the educational level obtained from residents in Oviston and Venterstad. In 2007 a roster was designed where household members were asked about their education (Chapter Four). Interviews were conducted with three hundred forty four people from 72 households, of which 59 were in Venterstad and 13 in Oviston. Education levels indicate that the schooling outcome has a strong influence on the livelihood strategy. Fourteen per cent had no education at all, with the proportion of females in this category much higher (sixty-two per cent) than males (thirty-eight per cent). Many residents deficient in reading and writing were not integrated into the formal school system during apartheid. Seventeen per cent of people under forty years of age were without formal education

Figure twelve shows education levels of residents eighteen years or older. Only one per cent attended university. Eleven per cent stopped attending school at up to Standard three.

²⁴ In chapter four, details on the negative results on Bantu education are included.

²⁵ More than a decade ago in 1998, 58 per cent of adults with no education were poor; 53 per cent of adults with less than seven years of education were poor; 34 per cent of adults with incomplete secondary schooling were poor; 15 per cent of adults who had completed secondary school were poor; and only 5 per cent of adults with tertiary education were poor (Woolard 2002).

²⁶ The in-depth study included three hundred persons from Venterstad and forty-four people from Oviston.

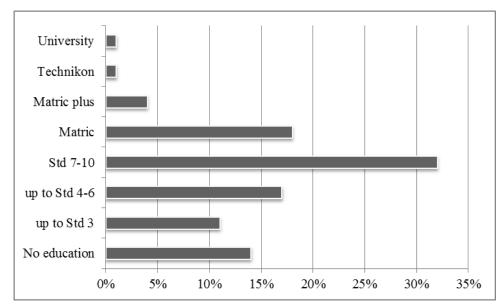


Figure 16 Education levels of sampled population eighteen years or older (n 203)

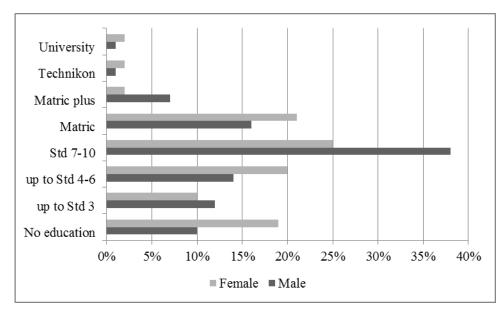


Figure 17 Gender and Education Levels (N 203)

Figure seventeen presents data on gender and education levels. Fewer women than men had some formal education. There is a positive correlation between education and employment but due to the fact that the majority never received higher grades of formal education (university, technikon etc), the relationship is significant for a minority of inhabitants²⁷. Individuals who have

125

no education (category one) are more likely to be unemployed. The question is addressed inversely. Would more education enhance people in the area for qualified jobs? Results indicate that there are a limited number of jobs which would require better trained stuff, but in general there are no employers who would subsequently employ well-trained personal. People with a high level of education (categories seven and eight) have full-time employment. The regression curve in figure x below shows the relationship between education and occupation.

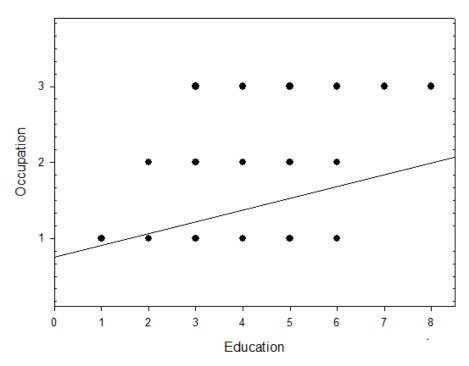


Figure 18 Regression of level of education against level of occupation

Note: Occupation is divided by three groups: 1 unemployed; 2 casual work; 3 full-time employed. Regression of level of education (Education on x-axes is dived by 8 variables: 1: no education; 2: up to Standard 3; 3. Standard 4-6; 4. Standard 7-10; 5. Matriculation; 6. Matriculation plus; 7. Technikon; 8. University) against level of occupation children fifteen years and younger were excluded.

Figure 19 suggests that younger people have better access to education than older people did. The value of education is not reflected in economic realities for the majority of the population. Even though higher levels of education led to a higher probability of getting a job, this does not imply that there is a positive correlation with income. In conclusion, the regression analysis clearly confirms that occupation is strongly dependent on the level of education.

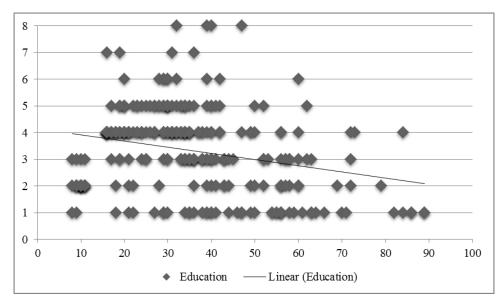


Figure 19 Educational Levels relative to Age Cohort

Note: Education on y-axis is dived by 6 variables: 1: no education; 2: up to Standard 3; 3. Standard 4-6; 4. Standard 7-10; 5. Matric; 6. Matric plus; 7. Technikon; 8. University; Age on y-axis (N= 296) children under eighteen are excluded.

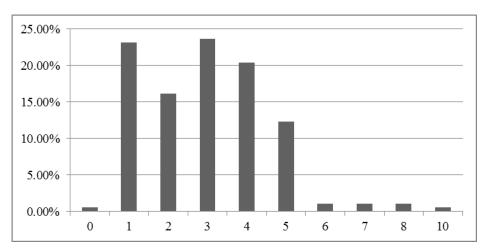


Figure 20 Education levels of female residents

5.3.4 Ownership of Assets/Equipment 2007/2011

Within the possession ranking some trends are reflected indicating significant difference between both surveys. In general possessions scores indicate that households have fewer valuables in 2011 as compared to 2007. 2007 around twenty per cent owned a car of which 2011 only 8 per cent have one. In 2007 more than twenty-eight per cent had a bicycle as compared to 2011 only approximate ten per cent of all households have one. The only category which increased within both survey is the ownership of electric stoves. More people have electric stoves and less people own paraffin stoves in 2011. In 2011 sixty per cent of households own cell phones.

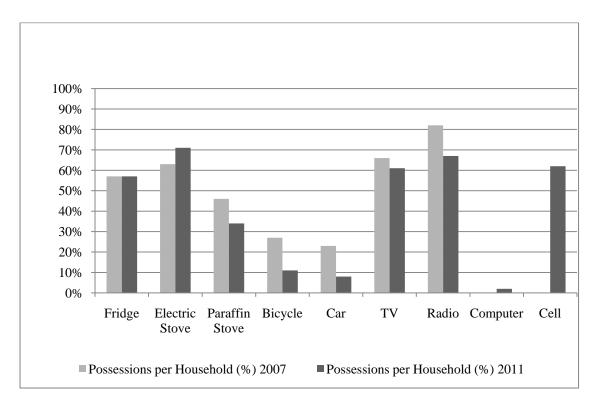
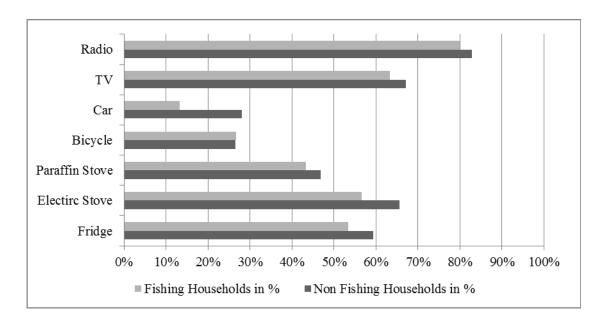


Figure 21 Comparison of Household Possession 2007/2011

Only thirteen per cent of fishing households own a car as compared to 28 per cent of non-fishing households. The passion ranking for those households indicate that fishing households have less valuables hence can be classified as substantially poorer. Less than sixty per cent of fishing households own a fridge, an electronic stove, or a paraffin stove. Only around thirty per cent

own a bicycle. Nonetheless it appears that transport is not as necessary as many households own television as compared to transport options.



 $\textbf{Figure 22} \ Comparison \ of \ Household \ Possession \ (Fishing \ versus \ Non \ Fishing \ Households) \\ 2007/2011$

Chapter 6 Natural and Social Assets

The previous chapter confirmed that the majority of the population at Lake Gariep depends on various types of welfare support for their day-to-day survival. This chapter consists of two main parts. The first deals with indispensible natural assets, such as crops or fish, and how local people use them. Results from the two surveys are again compared, with a particular focus on fishing as a livelihood strategy. A socio-economic profile of fishing households is included and compared with non-fishing households. The policy context, or lack thereof, in which small-scale fishermen operate is addressed. Survey results on food security are also provided. The second part, social assets, presents results for both surveys on ten life satisfaction indicators, including housing, infrastructure, attitudes towards the government, and perceived changes since 1994.

6.1 Natural Assets

6.1.1 Fishing (2007 Fieldwork)

More than half of all households (fifty-eight per cent) in Venterstad, Oviston and Hydro Park fish at least one to three times per week (Table 19). In Oviston, eighty-nine per cent of all households were identified as fishing households, in which seventy-eight per cent of household members fish weekly (Table Nineteen). In contrast, only fifty three per cent per cent in Venterstad and fifty per cent of households in Hydro Park fish. Forty-seven per cent of the households fish weekly. Thirty-five per cent of fishermen sell their catch to members of their respective community, with a kilo of carp costing approximately R5.

After returning from a day's fishing, fishermen either go from house to house offering their fish for sale, or to a designated area outside the towns where their catch is available to customers. In Oviston, a local produces boere carp sausage, a pun on the popular boerewors (farmer's sausage). Fishermen use hand lines rather than fishing rods for fishing and are legally limited to the use of only two of these at a time. The ONR does not prioritize fish as a conservation goal and the fish resources are currently used by subsistence and recreational anglers. Officials from the Oviston Nature Reserve (ONR) occasionally conduct checks, and locals caught using more than two hand lines had to reduce the number of fishing gears. The officials confiscated surplus hand lines. Fishermen are aware of the restrictions, but often do not comply with the rules. Although this occasionally results in problems with ONR officials, fishermen who broke the rules were not banned from the reserve as most regulations are not strictly applied. An interview with the head of the ONR revealed that a tolerant attitude to local fishermen prevails. Fishermen constantly walk in and out of the ONR. This is not of great concern as long as no one is disturbing the wild life. Recent research by ichthyologists from Rhodes University investigating fish population dynamics in the Lake suggested that there is no threat of overexploitation (Ellender et al. 2009). The fish resources are harvested at sustainable levels by the locals.

Table 17 Sampled Fishing versus Non-Fishing Households Venterstad, Oviston and Hydro Park

Total- Venterstad	Male 367	Female 430	Total 797	Number 193	100 %
Total- Venterstad	51	70	121	102 fishing HH 36	~53 %
Oviston Oviston Hydro Park	78	82	160	32 fishing HH 34	~89 %
Hydro Park TOTAL	496	582	1078	17 fishing HH 263	50 %
-				153 fishing HH	~58 %

Fishing households have less money per month available compared to non-fishing households. The mean income of fishing households is R568 (\pm R

138, S.D.) per month, as compared to R618 (\pm R 157, S.D.) per month in non-fishing households Comparison of fishing and non-fishing households also indicates that fishing households have fewer possessions. Thirty-one per cent of fishing households fish weekly or at least one to three times per month and are therefore classified as subsistence fishermen (see below). The survey data suggests that fishing households are generally poorer than households without members who fish. Ninety-five per cent of the total population eats fish and fifty-seven per cent do so at least one to three times per week. Thirty-nine per cent of households consume fish monthly.

The main target species and the most wanted fish is carp which makes up for eighty per cent of the catches. Therefore, carp must be currently considered as the most important food fish. Four other species were recorded in fishermen's catches, the Orange River mudfish, the smallmouth yellow fish, the largemouth yellowish and the African sharp tooth catfish (Ellender et al 2010). According to Ellender et al. 2010 the other fish species did not contribute more than eight per cent to fishermen's catches. Angler catches in the open fishing area do not differ significantly between areas. This observation is based on 400 catches that were assessed.



Photo 1 Fisherman with his catch, Lake Gariep 2007

Table 18 Household numbers and fishing frequency in Venterstad, Oviston and Hydro Park Oviston Venterstad Combined Hydro Park Category HHtotal 102 1526 1628 122 1750 FHH per cent 88.8 53.9 56. 1 50 56 34 FHHn (Interviews) 193 229 36 263 FHH total 91 823 914 61 975 FFW per cent 78. 1 56. 6 58. 7 47.1 58 536.9 28.7 FFW total (Households) 71. 1 465.8 567 FFM per cent 12.5 30.2 28.4 11.8 27 FFM total (Households) 11 259 7 248 263 FFY per cent 9.4 13. 2 18.8 41.3 20 FFY total (Households) 8.5 109 117.5 25 143

Notes: HHtotal = total number of households; FHH per cent = per cent of HH containing .1 member that fishes; FHHn = sample size for FHH per cent; FHHtotal = FHH per cent HHtotal; FFW per cent = per cent of households with at least one member fishing 1-3 days/week; FFWtotal = number of households with at least one member fishing 1-3 days/week; FFM per cent = per cent of households with at least one member fishing 1-3 days/month; FFY per cent = per cent of households with one member fishing less than once a month. Household survey summary statistics for the household (HH) survey are provided in table 2. Number of HH in the settlements accessing the VSFA (Venterstad and Oviston) was estimated at 1628 HH. Interviews were conducted with members from 229 of these households. of these 56 per cent indicated that at least one member of the HH fished. this corresponded to an estimated number of 914 fishing HH in the Venterstad area of the fishing HH. 58 per cent fished 1-3 times a week.

6.1.1.1 Subsistence Fishing Households

A household was classified as a 'subsistence' fishing household if it had members that fished at least one to three times per week. For these households, the fish catch plays a vital role in their daily diet, and fish is consumed at least three times per week. Fish are depended on for survival, as many people are unemployed. Fish are sometimes also a source of income, if a very low one. The definition applied does not exclude grants as an income source given the high levels of households welfare dependency in the area. Subsistence hence is not used as the conventional meaning of it implies that

people solely live from fish but rather the definition is expanded in order to summarize a population strata in the area with particular, specific attributes.

A total number of three hundred eighty households, or thirty-one per cent of all fishing households, are subsistence fishing households. Of the total number of households, thirty-two per cent were Xhosa-speaking subsistence fishing households and twenty-nine per cent were coloured subsistence fishing households. The mean number of people living together in subsistence fishing households is 3.87 ± 2.14 (S.D.). The child dependency ratio for Xhosaspeaking subsistence fishing households is 76.25, slightly lower than the comparable ratios for all households. The ratio for coloured households is 83.54. The child dependency ratio is generally correlated with severe poverty and reflects two trends. First, it can be assumed that the more people live together within a household, the more fish is required as food. Second, high child dependencies indicate greater reliance on social grants as a core income source. Selling fish is regarded as a necessary additional income without which the household would solely live from grants. However, fishing activity and any fish caught are free; only the equipment represents a costly investment.

6.1.2 Fishing (2011 Fieldwork)

In 2011, thirty five cent of all households had members who fished. The fishing frequency varies among households (Table 21). A decrease of the total number of fishing households of twenty-one per cent occurred compared to 2007. From the total number of fishing households, sixty-three pr cent fish weekly, nineteen per cent fish at least one to three times per month and seven per cent fish occasionally. Approximately forty per cent of households responded that the fish catch is very important for their daily diet. Around eighty-six per cent consume fish of which forty-six per cent eat fish at least one to three times per week. Compared to 2007, less households fish regularly

and less consume fish. In 2011, only two per cent of fishing households owned a car compared to six per cent of non-fishing households.²⁸

Table 19 Fishing frequency from the household survey conducted in Venterstad and Oviston

Statistics	Oviston	Venterstad	total
HH total	102	1266	1368
FHH per cent	97	30	35
FHHn (Interviews)	30	167	197
FHH total	99	380	479
FFW per cent (%)	86	57	63
FFW total (Households)	88	216	304
FFM per cent (%)	10	22	19
FFM total (Households)	9	84	93
FFY per cent (%)		20	7
FFY total (Households)		76	76

Notes: HHtotal = total number of households; FHH per cent = per cent of HH containing one member that fishes; FHHn = sample size for FHH per cent; FHHtotal = FHH per cent □∼ HHtotal; FFW per cent = per cent of households with at least one member fishing 1-3 days/week; FFWtotal = number of households with at least one member fishing 1-3 days/week; FFM per cent = per cent of households with at least one member fishing 1-3 days/month; FFY per cent = per cent of households with one member fishing less than once a month. Household survey summary statistics for the household (HH) survey are provided in table 2. Number of HH in the settlements accessing the VSFA (Venterstad and Oviston) was estimated at 1368 HH. Interviews were conducted with members from 197 of these households. of these 35 per cent indicated that at least one member of the HH fished. This corresponded to an estimated number of 479 fishing HH in the Venterstad area of the fishing HH. 63 per cent fished 1-3 times a week.

6.1.2.1 Temporal Comparison of Subsistence Fishing Households

The percentage of subsistence fishing households in Venterstad and Oviston has decreased from thirty-one per cent 2007 to twenty-two per cent in 2011. Casual work opportunities financed by the government appear to have had a strong impact on fishing. Fishing brings lower cash revenue compared to jobs offered by the public work programme. Nonetheless fishing is a major

²⁸In 2007, around twenty per cent of the total population and in 2011 only eight per cent of the total population owned a car. This decrease of twelve per cent suggests that many people became poorer

occupation and income generator for twelve per cent of households, classified as subsistence fishing households in 2011.

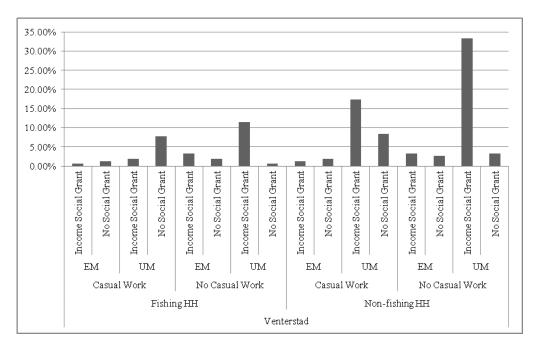


Figure 23 Income Sources of Fishing/Non-fishing Households (HH) in Venterstad 2011

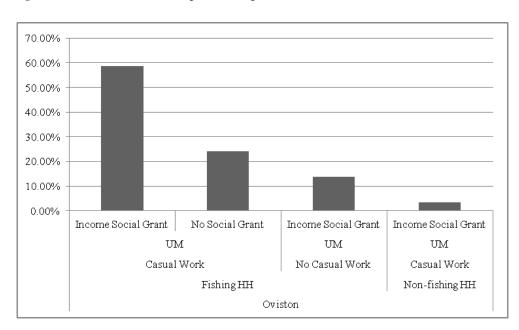


Figure 24 Income sources of Fishing/Non-fishing Households (HH) in Oviston 2011

Figure Sixteen and Figure Seventeen illustrate income diversity for fishing and non-fishing households in Venterstad and Oviston. First, households with members that are casually employed and those without employment are differentiated. Second, unemployed (UM) households and employed (EM) households are categorised. The last specification distinguishes between households receiving income from social grants and households without financial state support. For a high percentage of fishing households, the main income is social grants. In Venterstad, approximately twelve per cent of fishing households receive no social grants and no member has formal or casual employment. In Oviston, only one household has a formally employed breadwinner. This household only fishes occasionally and is not classified for the Figure Seventeen.

Perception of fishing and fish eating

Concurrent to collection of quantitative data on fishing households, subjective reasons why people do not fish were also investigated. A transcript of fishing case studies is included below. This qualitative inquiry identified that there are no significant differences between fishing and non-fishing households related to their cultural origin. The majority of non-fishing households buy fish from local fishermen in the community. Most of the reasons relate to beliefs, for instance, fishing is disturbing river ancestors and therefore fish should not be caught. Disregarding such beliefs could lead to bad luck for transgressors, such as drowning or illness.

Other interviewees stated that the dam is too far away and due to a lack of transport they cannot go fishing. Some said that members of the household are afraid of the water. This may be related to the fact that a number of people drowned in the lake. Other households members are ill and unable to go fishing. A costly factor for the household budget is the fishing equipment, which could cost about R40. In order to buy it, fishermen have to spend about R20 for transport to Burgersdorp, where the only shop is located. Some respondents said that the fishing gear and other materials needed are too expensive to buy, and so they do not fish. Some households do not know how to fish. Especially in households that consisted entirely of women, non-participation in fishing was attributed to this being an activity engaged in by males.

Table 20 Verbatim responses by local people on why they do not fish (Afrikaans responses translated)

far of the dam because of lack of equipment because the dam is too far because of lack of equipment transport because of lack of equipment no material because of lack of equipment afraid of the water because of lack of equipment the dam is too far because of lack of equipment because of lack of equipment the dam is too far because of lack of equipment

transport The dam is too far

afraid of the dam Transport
afraid of the water Dam

afraid of the water afraid of the water no transport afraid of the water

because the dam is too far because there is only ladies who can't afford to

because they don have transport fish

because they have their own because of fishing equipment

transport like bike because of fishing equipment and transport because they don't have transport because of transport and fishing equipment

because they don't have transport because of fishing equipment yes they have transport because of availability

there is no one to do fish in the availability
house because of age

hulle is net vroumense (they are because of availability only women) because of availability hulle is sieklik (they are sick) because of knowledge disability problems because of facilities hulle het nie die gereedskap nie lacking of facilities hulle koop dit shortage of material

(they haven't got the equipment because of lacking of skills

they buy it) lacking of facilities
she is single because of availability
they just buy it lacking of skills

she a single housewife because of availability

old and disability problems because of lacking of facilities they are only women living there geen belangsteling (not interested)

disability problems vervoer (transport)

disability problems geen stokperdjie (no hobby)
they are two housewifes geen vislyne (no fishing lines)
there no one to do fish they buy it geen stokperdjie (no hobby)

they are women and do not know stel nie belang nie

how to do it they have to much work to do husband is not home most of the they buy fish once a month

time wife alone

disabled wife look after him

permanently

time is short and look after

grandchildren

they are only women and can't

fish

there are just two women present

and usually buy

due to sickness not able to fish

but buy

usually buys fish seeing she stays

alone

uncle supply her with fish

usually buy fish son supply her fish

usually buy from local

usually buy from local

receive from friends and

neighbors

mostly women men are disabled

because of the ages

taste not nice and don't have time

age geem ondervinding ou mens

(no experience old person)

min belangstelling (not

interested)

they buy it because they are only two women in

the stel nie belang nie (not interested)

stel nie belang nie (not interested)

stel belang, maar kann nie vis vang nie

(interested, but doesn't know how to catch fish)

kann nie vang nie (cannot catch)

stel nie belang (not interested)

because they don't have fish stuff

don't get a chance

nobody can

because nobody can fishing

because nobody can fishing

because they don't get a chance to fishing

geen ondervinding (no experience)

min belangstelling

Case studies of fishing households

The information gathered on fishing households reveals the importance of the fish resource and its role in sustaining many households at Lake Gariep. Three types of related livelihood pathways were identified. The first group depends on fishing both as food source and as a source of income through the selling of fish. Even though they indicated that selling their catch only generates a very low income, the money earned buys essentials. Individuals in the second group consume the fish they catch themselves. As fishermen indicated, the third group fishes occasionally whereby fishing adds to their quality of life.

ID 10, No 1

Tow household members fish weekly, threw fishing its provides a cover over rice and muttupop. The fish is sold to community and family. It is a low income you can't catch fish every day, there are seasonal variants. The money we earn by selling fish is very important; we can buy sugar tea or bread. Fishing is necessary for our household.

ID2, No 2

One member of our household fishes weekly. It is more a hobby but the fish catch is sold to clients. Fish selling contributes as a low income, there are seasonal variations in the catch, the money we earn we need to buy something else for the household. If we are not going fishing we play soccer. Fishing is necessary for our living.

ID 2, No 3

Members of household fish monthly, but fishing is not important for our daily living. We do not sell the fish. There are seasonal variations in the fish catch; if we are not fishing we watch television fishing is not necessary for our daily living.

ID 11, No 1

Fishing is very important for our household, they sell for money and eat for dinner, we sell the fish at our neighbours and in the streets, even though we sell a lot of fish it still is a very low income contribution for the household. For us there are no variations in the fish catch. Sometimes the money we earned by selling fish to buy electronic power. If we are not fishing, we are just sitting at home. Fishing is for us very necessary because it keeps us living and satisfied.

ID 11. No 2

In our household only one member fishes monthly. The fish catch is very important for our daily living because it keeps food on the Table. Occasionally we sell the fish in the streets to other people. Nevertheless it is a low income. There are no seasonal variations in the fish catch. The money we earn by selling the fish is very important because we can buy other food with it. If we are not going fishing, we are reading, but fishing is my life.

ID 11, No 3

In our household only one member is fishing, only when he's feeling healthy. Fishing is very important because it keeps food on the table. The fish is sold in the street and to neighbors. It is a low income contribution because we sell it and make a price for the size. There are no variations in my fish. Selling fish helps us e.g. to get vegetables. If we are not going fishing, we just sit at home. Fishing gives me a big pleasure.

ID 11, No 7

In our household only one member fishes, always. It's very important because it's her life. She sells the fish in the streets. It is a low income contribution and there are no seasonal variations. The money we earn by selling the fish is very important for our household's income because it helps for example to get bread on the table. If we are not fishing, we just sit at home and read books. Fishing is very important because it helps my family.

ID 2, No 6

In our household one member fishes at least three times per week. It is very important and occasionally the fish catch is sold to other family members and neighbors. Still, it is a very low income for the household. Therefore, the money is not really very important. Making my garden clear is the activity I pursue when I'm not fishing. Fishing is necessary for my living.

ID 8, No 2

In our household, one member is fishing at least three times per week. It is necessary for our daily living, because it helps us when we sell it in our location. It brings lots of money to our family. There are no seasonal variations in our fish catch as from the beginning of the year to the end of the year. The money we earn supports the family. I'm working in my house when not fishing. Fishing is necessary for us.

ID 9, No 4

In our household, one member fishes one to four times a week. Fishing is very important for our daily living because I make our living out of fishing. The fish is sold here around the community. The fish selling is a high income for our household because it helps to feed the family. I do fishing throughout the year. Fishing is very important because I use it to feed my family and to pay the school fees for the children. If I'm not fishing, I watch television. Fishing is my source of living, it is very important.

ID 7, No 3

One member of our household fishes one to four times a week, and it is very important because we make a living out of fishing. I sell the fish here around the community. It is a high income because it helps to feed the family and I do fishing around the year. I use the money to feed and to pay the family installments. If I'm not fishing, I do the garden so it can produce more vegetables. Fishing is my source of living, it is very important.

ID 7, No 5

Me and my wife fish each and every day. It is very important in such a way, we use it as our source of living, we sell it and we also consume it. We sell it in the people around our community; we even have our regular customers. It is a very high income contribution for us because the money we get helps us a bit day by day in living and so. There are no seasonal variations because we do fishing from the beginning of the year, throughout the end of the year, except the rain day, whereby the weather is not good. The money we earn is very important. It is a lot because it covers for us our depths and furniture installments. It is very necessary.

ID 4, No 6

I am alone, it is my household, and I fish three times a month. The fish is very important for me, but I do not sell the fish. There are seasonal variations in the catch because in winter the fish are very scarce. If I'm not going fishing, I do personal activities. Fishing is necessary for my living because unemployed people benefits.

ID 12, No 1

One member of our household fishes two times a month. The fish is very important for us because it provides food for the table and gives children nutrition. We do not sell our fish, but in winter, we catch barber, and in summer, we catch carp. When I don't fish, I sit at home and socialize with friends.

ID 12, No 2

Two times per month, one of our household members is going fishing. The fish is used for the house by the house for the nutritional needs. In winter we fish carp, in summer barber. If I'm not going fishing, I'm mending people's appliances and do gardening. Fishing is not necessary for our daily living because selling and mending appliances keeps the pot boiling.

ID 12, No 3

In our household, one fellow is fishing once a month. It is used for the house; some are freezed for us again. We occasionally sell the fish, only in our location. The fish selling is a very low income because it only about RAND 10-15 a fish. In winter, we catch carp, in summer we catch barber. The money we earn by selling the fish helps us for those extra things that shorten like school fees. Instead of fishing, it's mostly work or socializing. Fishing only provides a small income, but fishing is also for our pleasure.

ID 12, No 4

One member of our household fishes two times a week. Fishing is very important for us and brings money for paraffin and mielimeal. We only sell it among residents in our location. It is a high income in our household and provides the necessary income for basic needs. In winter we catch carp gelid, in summer barber. The money provides the necessary money for the basic needs. Instead of fishing, we are gardening and socializing. It provides food and money for the necessary goods.

ID 5, No 2

Four members of our household fish on a weekly basis. Fishing is very important for us, because we get some vitamins and minerals. We are not selling the fish, we eat them by ourselves. For me, there are no seasonal variations in the fish catch, every day I go fishing I got something. Instead of going fishing I prepare the recipe of fishing. It is very necessary for our living, because it play an important role in our diet.

ID 5, No 3

In our household, two members go fishing after two days. It plays an important role for the growth of my family. Sometimes we sell our fish to our neighbourhoods. The fish selling plays a vital role, because we can buy some few things for the family to live. There are seasonal variations in the fish catch because the season you catch less, the following you catch more. But the catch is very

important because we can make some small groceries for the family. Looking television and listen for radio is what we are doing instead. It is important because our diet get either and either.

ID 5, No 4

One of our household members fish on a weekly basis. Fishing plays a vital role on our diet. We cannot sell our fish because we depend on them each and every day when we need a meal. The costs of living for us are very high, therefore, we take what we can any time we catch something no matter it's only one. Instead of fishing, I'm preparing my garden to be neat and clean. Fishing is very important for our growth.

ID 5, No 5

Two members of our household are fishermen, they fish when I'm off to work. Fishing plays a vital role in my habitat and we enjoy sitting next to the river. I do not sell the fish; I catch all of them and pack them on my freezer. It's fulltime entertainment and we enjoy seasonal variations. I am at work during work hours, in the leisure time I like to fish because I gain something.

ID 5, No 6

One member of our household fishes when days off. It is our daily bread, therefore fishing is very important. If I caught a lot of them, we can sell the fish to the Spaza shop. The fish catch is a very low income, but we accept it because those rands can solve something. I can't recognize that seasonal variations at all, cause I catch every day that I have visited. The fish selling is not so important to our household because people come and ask for a discount. If I'm not going fishing I enjoy my sport training session and fishing for us is necessary because we get some vitamins and minerals.

ID 6, No 1

In our household, two people fish after three days. The fish catch is very important for us. We do sell the fish, especially for our neighbors. It is selling low

income. There are no seasonal variations in the fish and if we don't fish we are watching movies. But fishing is necessary for our living.

ID 6, No 5

Two members of our household fish at least weekly. We do not sell our fish because we like eat fish. It is our daily bread. If I'm not fishing, I'm looking for a job.

ID 6, No 6

One member of our household fishes at the weekend. Fishing is very important to our household because it is our daily bread. We eat fish because it's very nice. We do not sell the fish. If we're not fishing we're watching television or cleaning the house. And fishing is necessary for our living.

ID 13, No 1

Two members of our household fish at the weekends. Fishing is very important for our daily living because it is very healthy. We sell the fish in our community and the income is a very low contribution. In summer we have a good catch. The money we earn by selling the fish is very important, and we can make a living off it. If we're not going fishing, we're looking after the children.

ID 13, No 7

All of our members fish regularly; it is a very important contribution. Fishing is necessary for our living and if we're not fishing we work in my garden.

ID 13, No 3

I am on my own, and because I'm not working, fishing is my daily food. Every day during the week I go fishing. I do sell the fish catch to my neighbors and people so that I can buy mealie. It is a very high income for me, and if I'm not fishing, nothing, just doing my garden. Fishing is necessary for my survival.

ID 13, No 5

One member of our household is fishing every day. It is important for our daily living.

ID 13, No 7

One member of our household is fishing, if he has time. It is not important for our daily living, but I don't have money for meat every day.

ID 6, No 14

Three to four times a week, three members of my household going fishing, and they sell the fish in Venterstad. It is a low income to our household, but we need the money for eat. If they are not fishing, they work in my garden. There are no seasonal variations in the catch.

ID 14, No 1

Two members of our household fish four times a week. Fishing is important for us because I eat fish every day, it's my daily meal. I do sell the fish, especially in Venterstad, but it is a low income for me. Still, the money is very important because I am unemployed and I am looking for a job. Fishing is necessary for my daily living.

ID 14, No 3

Two members of our household fish every day. Fishing is very important because I eat it every day and I sell it, especially in Venterstad, but sometimes also in Burgersdorp. The fish selling contributes a very low income to our household, but it is very important so I can buy food for the house. There are seasonal variations in the catch. If I'm not going fishing, I work part-time. Still, fishing is very necessary for our living.

6.1.3 Farming and Livestock

Vegetable gardens are noticeable in Oviston and Venterstad and a vital component for many households. Most residents engage in gardening in the immediate surroundings of their dwellings. Interviewees informed that vegetables are sometimes donated to friends and neighbours in recognition of kinship and community ties. These connections can be very important in times of crisis.

In 2007, sixty nine per cent of households had vegetables gardens and eleven per cent sold their vegetables. By 2011, the number of households with vegetable gardens had increased by four per cent, and those selling vegetables increased by three per cent. Although growers consumed a large proportion of their agricultural produce (spinach, pumpkins, butternuts) many households earn some money selling their products.

Research undertaken by Makhura (1998) in the former Swazi Bantustan of KaNgwane found that fifty-two per cent of households sold vegetables. The income generated from selling home-grown products corresponded to approximately twenty-eight per cent of the household income (Makhura 1998). It could reasonably be assumed that the more a household diversifies the poorer it is, but the opposite is the case in Venterstad and Oviston. Households selling vegetables are in a monthly income category between R750 and R1000.

Shekleton and Shekleton (2001) argued that many previous studies on farming and livestock production in rural livelihoods have probably undervalued the economic value of selling vegetables. They criticise that measurement approaches of home-grown products and household income from these, are not clearly communicated by academic works. The value of farming, livestock production and the selling of vegetables in economic terms for rural livelihoods may have much greater returns than those estimated. In Venterstad and Oviston, approximately a fifth of all households own livestock, such as goats, sheep, chickens and, to a lesser extent, cows.²⁹

²⁹One resident in Venterstad owns some cows. The milk is sold to clients in the community.

6.1.4 Food Security

In 2007, thirty-one per cent of households in Oviston reported that they do not consider their household as being food secure. In Venterstad, a quarter of households struggled to get enough food. Approximately nine per cent of households had no regular meals, twenty-nine per cent had two meals a day, and sixty per cent consume three meals a day. When questioned on how many days per week they consume meat, sixteen per cent of households reported that they do not obtain it at all. Thirty per cent consumes meat once per week, around the same percentage of households members interviewed stated that they consume it two to three days per week, around eighteen per cent between four to six days per week and five per cent eat meat seven days per week. In 2011 the percentage of households lacking adequate daily nutrition was at thirty-eight per cent, higher than 2007 (thirty-one per cent). This is increase of seven per cent is another indicator that people got poorer. In Venterstad twenty-eight per cent of households did not have enough food, an increase of three per cents compared to 2007. The increase in Oviston could be related to people having fewer transport options in 2011, including less car ownership. In Oviston, the only shop selling food is very expensive. Residents occasionally buy food in Venterstad at similar prices to Oviston. In 2011, food insecure households consumed once a week meat and once a week fish (Figure 21).

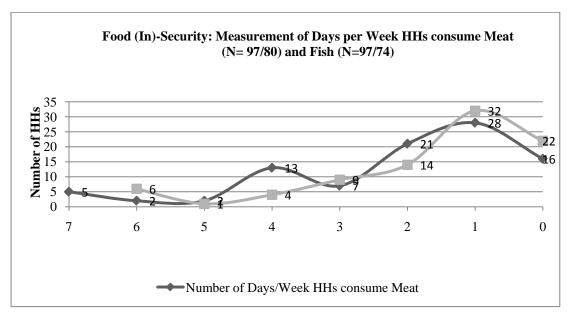


Figure 25 Food Security 2007 - Consumption of meat and fish by households that consider themselves food secure.

Figure eighteen indicates that food secure households consume meat up to seven days a week and fish up to six days a week. Food insecure households eat less meat and more fish.

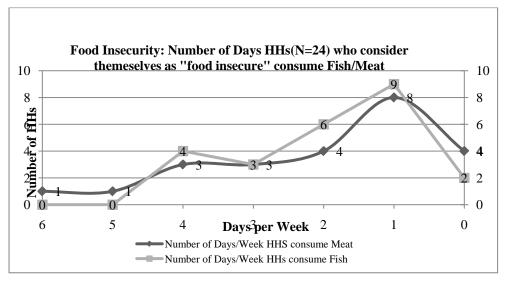


Figure 26 Food Insecurity 2007 - Consumption of meat and fish by households that consider themselves food insecure. Note at bottom says consume meat (only)

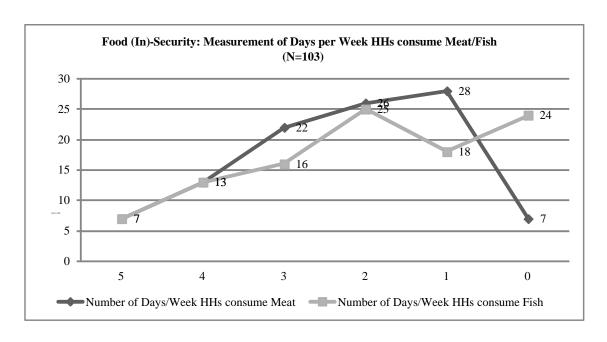


Figure 27 Food Security 2011. Consumption of meat and fish by households that consider themselves food secure.

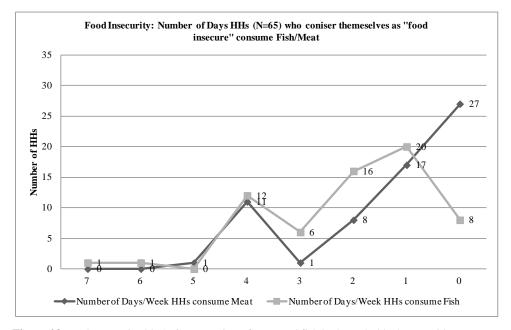


Figure 28 Food Insecurity 2011. Consumption of meat and fish by households that consider themselves food insecure.

6.2 Social Assets

6.2.1 Life Satisfaction Indicators 2007 and 2011

Sharpe (1999) argued that the relationship between objective conditions and subjective well-being can be paradoxical and, therefore, subjective as well as objective states should be monitored. An important part of the present study concerns personal perceptions about security, housing, education, household possessions, and relations with other South Africans. Interviews were conducted to obtain qualitative data and to discover from residents if their lives had substantially improved since democratization.

Table 21 Life Satisfaction: Perceptions about Quality of Life, Venterstad and Oviston 2007

	Sample size	•	·	Ranking (per cent)		
Quality of life categories	Junia Para	1	2	3	4	5
Interviewee's education	86	12.8	39.5	33.7	8.1	5.2
Interviewee's health	86	25.6	48.8	18.6	7.0	=
Happiness of interviewee's family	86	43.0	46.5	7.0	2.3	1.2
Food quality	86	29.1	64.0	5.8	-	1.2
Job opportunities	84	2.4	7.1	52.4	35.7	2.4
Income of interviewee's family	83	4.8	38.6	38.6	15.7	2.4
Size of dwelling	84	9.5	50.0	31.0	8.3	1.2
Interviewee's freedom of movement	83	12.1	67.5	13.3	2.4	4.8
Perception of security relating to crime	85	9.4	28.2	38.8	22.4	1.2
Interviewee's leisure time activities	85	16.5	60	14.1	1.2	8.2
Distance of dwelling to shops, schools,	85	16.5	43.5	21.2	18.8	-
public transport etc.						
Household possessions	83	25.3	60.2	12.1	-	2.4
Security of tenure	85	31.8	51.8	8.2	4.7	3.5

Note: Perceptions were coded 1 = very satisfied, 2 = satisfied, 3 = dissatisfied, 4 = very dissatisfied, 5 = not considered important. Numbers under codes are percentages of the total. Questions not answered were excluded. Percentages may not add due to rounding. *Shops, schools, public transport

The quality of life study in 2007 indicated that approximately fifty-four per cent were dissatisfied or very dissatisfied with their cash income. Only two and a half per cent of all interviewees were very satisfied with their job opportunities, reflecting an economic situation characterized by a close to complete absence of formal employment. A majority is more than dissatisfied with their employment options. Interviewees expressed a particularly low degree of satisfaction concerning categories related to public facilities and infrastructure that the state is responsible for.

6.2.2 Changes after 1994

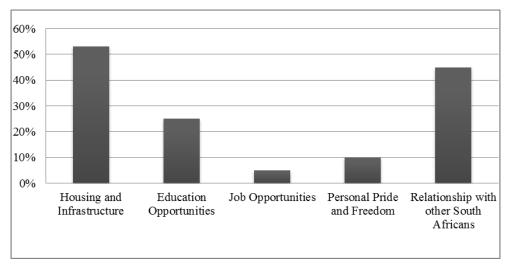


Figure 29 Perceptions of residents on the most positive changes since 1994

For only a tenth of the interviewees, personal pride and freedom has become more positive since 1994. After the first elections in 1994, nationally all South Africans who voted for their first time, were satisfied with their life in contrast to prior 1994 were unhappiness and discontent overweighted positive life satisfaction (Moller 2007). Personal pride and freedom, for example the freedom of movement which was restricted during apartheid, refers to the changes occurred after 1994 in relation to improvements that occurred after the end of apartheid. Freedom of movement was one of the

most important gains for the individual South African after 1994. Only five per cent perceive job opportunities as a positive change since 1994. For forty-four per cent the relationships with other (white) South Africans have improved, which is taking the country's history into account and the years since liberation a very low result. For fifty-four per cent, housing and infrastructure entail the most positive changes. About seventy per cent think that education opportunities have not improved since the end of apartheid. When these indicators are compared with the RDP objectives, the spearhead of the ANC's national reconstruction and development programme (ANC 1994), the level of achievement is perceived as very low.

6.2.3 Life Satisfaction Indicators 2011

The first category in Table Twenty-Four, very satisfied with (Interviewer's education, the interviewer's health, the family's happiness, the municipality, the job opportunities, the income, the size of the house, the freedom of movement, the security relating to crime, the leisure time activities, the distance to facilities, the household's assets, with the government and the future) received a minimum of twenty six per cent. At least sixty per cent is not very satisfied with the size of their dwelling and around the same percentage is satisfied with their income even though as the socio-economic survey indicates mean monthly income is around R600. Only thirty-six per cent is very satisfied with the government as compared to thirteen per cent who are dissatisfied. Forty-six per cent are dissatisfied with their job opportunities. Twenty-three per cent are dissatisfied with their municipality.

Table 22 Life Satisfaction: Quality Of Life Perceptions from Venterstad and Oviston 2011.

Life Satisfaction Indicators	Sample size		Ranking (per cent)					
	1	1	2	3	4	5		
Interviewer's education	188	61	24	9	2	4		
Interviewer's health	183	41	48	10	1	0.5		
Family's happiness	184	54	32	11	3	0.5		
The Municipality	179	26	48	23	3			
Job Opportunities	173	26	21	46	9	2		
Income	175	27	37	6	1			
Size of the House	173	25	39	28	8			
Freedom of Movement	175	33	45	15	5	2		
Security relating to crime	176	30	36	18	13	3		
Leisure time activities	178	28	30	19	4	19		
Distance to shops, schools, transport	179	41	43	8	7	1		
Household's Assets	173	37	43	13	2	4		
With your government	181	36	45	15	3			

Note: Perceptions were coded 1 = very satisfied, 2 = satisfied, 3 = dissatisfied, 4 = very dissatisfied, 5 = not considered important. Numbers under codes are percentages of the total. Questions not answered were excluded. Percentages may not add due to rounding. *Shops, schools, public transport

6.2.4 Changes after 1994

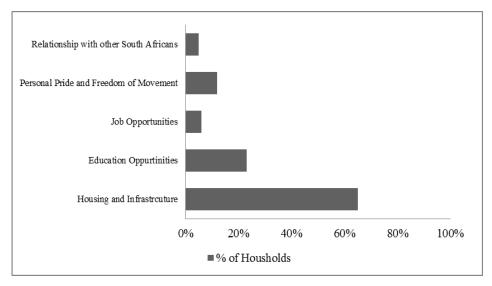


Figure 30 Changes after 1994 (2011)

In 2011, only six per cent of the respondents stated that the job situation has changed for the better since the end of apartheid. More than ninety-five per cent are dissatisfied with the relationship to other South Africans. Less than a quarter said that education opportunities have changed positively since 1994. For twelve per cent of the respondents, personal pride and freedom of movement improved since 1994. Eleven per cent said that life is getting worse. Sixty-five per cent think their life is better compared to the past and eight per cent would rate their quality of life as about the same.

6.2.5 Housing

Seventy five per cent of all households live in an RDP home. These homes are very badly constructed and many residents reported that soon after they moved in they discovered problems. It is obvious to anyone who visits that many houses in Venterstad are unfinished. In some instances construction stopped before a roof was put on. Some half finished houses are empty, others have people living in them temporarily. Some of the newly built houses are no more than ruins. Residents informed the author that the construction company was not fully paid and that subsequently no more building material was delivered. The construction company left the sites and never returned. Homes promised to some residents by the municipality were never delivered. As a consequence, people are destitute, living in very poor conditions: mud floors, curtains instead of doors, very small rooms for parents and children, mothers with newborns, elderly and disabled people. An extended citation from a news report presents further confirmation of the situation, revealing:

that thousands of houses simply could not be lived in as they were so badly built; that housing projects had lagged so far behind deadlines that by the time the homes were built, the people they were meant for had left the area. There was even a house that was so badly built that it blew over in the wind killing a young child. In one bizarre twist there was even a community

which had been given houses made of cardboard to live in after their other state homes fell apart; a housing backlog of 800,000 units; and a further R360m needed simply to fix the houses that had already been built. The biggest victims in the province's housing fiasco are among the most vulnerable in the population. Like two pensioners, Loki Makeleni and Ngqukuse Nonxaza, who have been living in a flimsy cardboard home for seven months while their shoddy RDP house in Burgersdorp is repaired. The government doesn't care about people who live here. We're going to die in these houses. I'm just waiting for my coffin right now, said the elderly Makeleni. To rub salt into their wounds, the local Gariep Municipality wanted the same residents to clear the tons of rubble lining the streets – for free (Daily Dispatch, June 2009)

In 2011, forty-five per cent of dwellings were owned by residents. One per cent stated that their house was rented. Fifteen per cent said that no rent was paid for their dwelling but it is not their own. Only fourteen per cent of households had a tap for drinking water in their house. Seventy-eight per cent said that they had piped water on the site or in the yard of their dwelling. Thirty-six per cent received free basic water and nineteen per cent received free basic electricity. Seventy four per cent stayed in a house with at least two and a maximum of four, very small, rooms.

In 2011, around a third of interviewed household members were not satisfied with the service delivery of their municipality.

³⁰In 1994 the Eastern Cape had the highest percentage of people of all the provinces in South Africa who had neither tap water nor electricity on site (81 per cent had no water and 92 per cent no electricity), (Provide 2000).

Chapter 7 Discussion

This chapter provides an analytical discussion of the survey results from Chapters Five and Six, and relates the livelihood study to broader political and economic contexts. In a South Africa where poverty, deprivation, and structural neglect are widespread, Lake Gariep is not an exception in terms of any of these factors. What is unique to Lake Gariep is the use of natural resources by local residents and a very high dependency on state welfare support. Empirical and qualitative evidence show that livelihoods at Lake Gariep are sustained largely by social grants rather than through private or state-funded economic activity. The elderly, people with disabilities, and children receive monies relied on by households of up to twelve members. This creates a paradoxical situation in which the most vulnerable citizens are those most depended on financially; that is, by others nominally of working age and in good health.

Government intervention has to be designed in a careful, area-specific manner; if it is implemented as a one size fits all model, it will fail to establish sustainable rural livelihoods. Unemployment levels did not, as the ANC envisaged in the PDGP of 2004, fall. Data indicate that the formal employment sector shrank between 2007 and 2011. Creating more dependency on the state, even through casual employment with the EPWP, is not a solution to poverty.

Without state support, poverty levels at Lake Gariep would deepen further; with state support they at least remain stagnant. Yet, due to policy failures since 1994, no sustainable development occurred in the area. The party that people voted for in the hope of a better life has not substantially improved the lives of most.

I argue that the state should provide incentives for private businesses run by local people. The short-term criteria of supply and demand should not be the only considerations. Rather, foundations should be laid for longer-term economic sustainability that will greatly reduce poverty over time. Ventures such as the EPWP are stop-gap measures that do not allow people to develop

effective skills. The government has made many poor choices and condemned the rural poor to very few options for making a living. As a result, there is a low labour absorption rate, and no value chains are present in the local economy.

7.1 Macro-Level Policy and Economic Context

South Africa has experienced a significant increase in unemployment irrespective of the definition or measurement used. Nationwide, between 1995 and 2000 the broad unemployment rate increased from 31 to 42 percent, and narrow unemployment rates rose from 18 to 31 percent (Bhorat and Oosthuizen 2006). The data on employment and unemployment trends reinforce the income trends noted above (Chapter Six). Over the period 1995-2002, aggregate employment grew by 1.5 million jobs, at a mean rate of 2.3 percent per annum. This was slightly below the economic growth rate over the same period. However, the labour force grew by 5.2 million individuals, resulting in a massive rise in national unemployment levels from 4.2 million in 1995 to nearly 8 million in 2002 (Bhorat and Oosthuizen 2006). The fact that strict unemployment is higher in urban than in rural areas (29.3 versus 25.6 percent) suggests that more of the urban unemployed are actively seeking jobs. The expanded unemployment rate, which includes discouraged job seekers, is higher in rural areas (42.5 versus 39 percent), where more people have given up hope of finding a job. Finally, unemployment is lower among agricultural than non-agricultural households, probably because many farming enterprises are family run. Members of agricultural households participate in farming rather than not working at all. Bhorat (2004: 6) argued that

while the economy did not experience jobless growth in the post-apartheid period, employment absorption was sufficiently poor to result in rising unemployment rates for all races and both sexes. In turn, these labor market shifts reflect a continued trend of skills-biased labor demand needs, as the share of skilled and semi-skilled workers continued to rise in the post-apartheid period.

Since 2009, the narrow unemployment rate has remained at about 25 percent. The broad unemployment rate, which includes discouraged job seekers, is 33 percent, implying that one out of three South Africans seeking work cannot find formal employment (Polity 2012). Social differentiation among racial groups is also growing, with the black rural population experiencing the most extreme poverty. An estimated 71 percent of this demographic suffer poverty, while national poverty rates are between 49 and 57 percent (Andrew and Jacobs 2009). The state has never made any serious attempt to promote smallholder production in the Eastern Cape, nor has it devised any initiatives that actively seek to transform the agrarian economy of the former homelands, Ciskei and Transkei (Bank 2005). Official statistics suggest that conditions have declined. Poverty levels in the Eastern Cape have steadily worsened, especially in rural areas, where 65 percent of the province's 6.3 million people live. The Human Science Research Council's (2004: 6) calculations are based on a measure of poverty that varies by household size. A household of four with monthly income below R1290 is defined as living in poverty. In 2009, 47.1 per cent of South Africa's population had less than R322 per person (in 2000 prices) per month for survival (Armstrong et al. 2009). This amount was introduced as a poverty line in South Africa (Statistics South Africa 2007). South Africa's exceptionally well-developed system of social assistance grants and social assistance has expanded dramatically in recent years: government spending on such grants increased from 1.9 percent of GDP in 2000/01 to an estimated 3.3 percent in 2007/08, while the number of beneficiaries increased from 3 million to an estimated 12.4 million.

The Eastern Cape is fairly unique in South Africa in that a large proportion of households are involved in farming activities (Banks 2005). Using the broad definition of agricultural households, which includes off-farm labour, it was shown that over 50 percent of the population reside in such a household (Ibid). However, few of the members are formally employed in agriculture, and their work activities do not represent an important source of income to

many of these households. Also interesting is that income inequality is higher among agricultural households. Most are involved in their own production but do not gain much if any income from this source. Eastern Cape is one of the most impoverished provinces in South Africa, with most of the municipal districts experiencing poverty rates higher than the national mean (Banks 2005). Long-term unemployment remains higher in rural areas.

One of the key expectations of the post-apartheid government was that it would address the legacies of racially determined poverty and inequality. However, social differentiation is growing within racial groups. As far as inequality is concerned, income in the Eastern Cape is highly skewed, with a Gini coefficient of 0.70. The Gini coefficient for black households is 0.62 compared to 0.43 for white households. This suggests that between-racial group inequality is an important source of disparity. Kingdon and Knight (2001) conducted extensive research on patterns of unemployment in South Africa and investigated the black-white gap in the unemployment rate. They identified two striking features. First, the fact that unemployment rates are higher in rural areas than in urban areas is atypical internationally and is explained by historical policies restricting mobility. Second, 62 per cent of the unemployed have never held a job. They began unemployment when they entered the labour force. The long duration of unemployment suggests that the demand-side of the labour market is responsible for much of the unemployment rate.

Kingdon and Knight (2001) argued that unemployment was very inequitably distributed in South Africa and certain groups are much more likely to become and stay unemployed than others. Young uneducated Africans living in homelands and remote areas are particularly exposed. The main reason why blacks have a much higher unemployment rate than whites is their lower levels of employment-enhancing characteristics, primarily education. Unemployment rates may also be linked to the historical economic neglect of rural areas during apartheid times. Apartheid deprived the majority of access to assets, education, and the attainment of skills necessary to get a job. This is reflected in different population cohorts at Lake Gariep. Virtually

no people above forty in the area have higher levels of education. Adult socioeconomic position correlates poorly with level of formal education. The failure to attain an education beyond the most basic levels has various negative effects. Because so many people are unskilled, important public facilities are understaffed and there are few medical experts. In Venterstad, a doctor is present only once a week. Inadequate medical care perpetuates bad health conditions reflected in the many households with members who suffer chronic problems.

The rural population lacks the skills, resources and capacities to participate effectively in the liberalized, market-oriented South African economy. In 2007, sixty-nine per cent of the population in the investigated townships had a monthly income of less than R1500. Thirteen per cent of households had no income. In Venterstad, Oviston and Hydro Park, data on employment levels, as well as on formal and informal work, shows that more than 70 per cent of the population is unemployed and that roughly the same number receives welfare grants from the government. A limited proportion of total income in this rural area is derived from formal employment.

7.2 Micro-Level - Lake Gariep

When income data from Xhosa-speaking households is compared with that of Afrikaans-speaking households, the black rural population at Lake Gariep is poorer than Coloureds. Child dependency ratios in townships inhabited mostly by Xhosa-speaking inhabitants are higher than those in coloured townships. Town design follows apartheid-era patterns, with black dwellings located at some distance from the centre. Martin and Nielson (1997: 157) noted it is important here to recognize the historical distinctions made by the apartheid government between the Coloured and black communities. These patterns still occur at Lake Gariep, suggesting that cultural habits created during apartheid are replicated.

As compared to 2007, a significant difference in the region's population composition had emerged by 2011. In Oviston, the number of households

remained constant, whereas in Venterstad, the total number of households decreased **by** 250, corresponding to approximately 1000 individuals. This drastic reduction in the number of inhabitants is directly related to the prevailing conditions. Infrastructure is deficient, as Chapter Five detailed. People depart to seek opportunities in urban areas, where transit locations are rapidly growing. For example, a number of new townships have been built in Grahamstown, Eastern Cape, that temporarily accommodate people from rural areas such as Venterstad until they relocate to the larger cities (Moller 2007). Additionally, in Venterstad, the number of household members living abroad had decreased in 2011. This may indicate that extended families moved to urban areas in search of jobs and/or better housing.

Results also illustrate that the population cohort of children is very high. Even though the number of children was greater in 2007, in 2011 twenty-five per cent of residents were under fifteen years of age. Given that unemployment rates are very high and incomes are very low, without serious policy change, a quarter of the population will continue to inherit the blight of older generations. The child dependency ratio in 2007 was at 77 in Venterstad, 65 in Oviston and 47 in Hydro Park. With the exception of Hydro Park, these ratios are greater than the national average of 51. Dependency ratios include all potential economically active residents between fifteen and sixty, although not all people of this cohort are economically active due to disablity or other reasons. About seventy per cent are not employed. For these reasons, dependency ratios are considered as crude generalizations that indicate trends rather than deliver absolute proof. There is a paradoxical element to the dependency ratios in that the higher the ratios are the more income, combining received and earned forms, households generally obtain and thereby have a better lifestyle. Social grants paid for children, old aged or disabled people are the main income for most households, and high dependency ratios imply an at least stable monthly income. Welfare grants are often used by entire households rather than specifically categorised individuals. Children under the age of fifteen should be the core beneficiaries of child support grants. The R240 per month grants ostensibly for children and their daily needs are used by whole families and extended families.

Social grants prevent absolute impoverishment although they are a subsistence mechanism and do not create real financial security for residents. The government 'strategy of protracted grants payments represents a state of inertia, devoid of policy innovation or resolve to truly alleviate poverty. Vigorously attacking unemployment, especially chronic unemployment, is a more hopeful approach. Work opportunities vary according to skills, mainly acquired through education and training, both of which should receive greater support. Stimulating investment, including in small and micro start-up businesses, will also have positive outcomes. Problems related to welfare support are multi-faceted, but seriously refocusing policy on to these three targets cannot do worse in reducing enduring dependency on the state than has occurred since 1994.

In 2007, the mean number of people living in common dwellings in Venterstad was 4.7. The number decreased to 3.8 in 2011. In Oviston, the mean household size in 2007 was 3.4 and increased to 4.4 in 2011. The mean number of children per household in Oviston increased, from 1.1 in 2007 to 1.7 in 2011. In Venterstad, it decreased from 1.6 in 2007 to 0.9 in 2011. Households have been undergoing a process of transition from an extended family structure to a more nuclear structure, more comparable with that found in the West. On a national level, the actual average household size declined from 4.7 people living together to four people. From 1994 to 2007, in total household size shrank by 15 per cent (Statistics South Africa 2007). At the same, the continuation and persistence of household with more than four people living together is due toe economic hardship but nevertheless, the trend in the research area reflects the national trend of minimized household sizes in total. (Russell 2003). People have left the area although the mean household size has remained nearly unchanged. In Venterstad, this is as a result of disaggregation of households (household size reduced), but the resulting needs for infrastructure and social services have not declined.

In 2008 the South African Presidency again stressed the importance of decent work opportunities and sustainable livelihoods in order to improve rural development (The Presidency 2008). Results from this study revealed that the already small full-time employment sector shrank again from eighteen per cent in 2007 to fifteen per cent in 2011. The number of people looking for work also decreased over the four years from seventy-two per cent in 2007 to sixty per cent in 2011. There are fewer jobs available and fewer people seeking work. It might be expected that the number of people looking for work would increase concomitant to a decrease in positions available. For completeness sake, it has to be added that it could be that those actually seeking jobs have found them, and so both these numbers and the numbers of jobs available, because they have been filled, decreases. The lower rate of unemployed is related to an increase of casual work in the area by twenty per cent from 2007 to 2011. Superficially, the reduction of people looking for work reflects positively on the government, which declared a goal of halving unemployment by 2014 (PDGP 2004). There is actually a reduction of fulltime employed people in percentage compared to 2007, as economic prospects remain unattractive for private enterprises. The lack of job growth in this area is of greater consequence than the raw numbers indicate, as each worker financially supports many other people. It is also, of course, doubly unfavourable for the national economy as the state both loses revenue and has greater outgoings, either to state-sector job creation schemes of dubious value or to welfare. It is thus important to distinguish between (temporary) jobs funded by the state, and jobs created due to real demand. The absence of fulltime employment opportunities, with or without decent wages, and lack of economic growth in Lake Gariep discourages people to actively look for work. Another disincentive is found in the statistically insignificant difference between the income of households where at least one member is employed compared to households where no one is employed.

Because wages are very low, employment, even if it existed, would not necessarily improve the standard of living for certain households. Again, for most households it is the various state welfare grants, or their absence, that largely determine the actual monthly income. The poorest income group are households without social grants and without employed persons. The difference between households without social grants and households with social grants and causal employment is low. Casual work brings cash return for some people, often in the form about R40 for a day working for a white person or family. Apart from grants and the very limited amount of people who earn a regular wage income, household finances are determined by the amount and quality of fish that is caught or vegetables that are grown and sold. In times of crisis, illness or unforeseeable incidents, incomes are not secure. These developments further deepen the poverty traps that people are caught in.

In his 2004 State of the Nation Address (Presidency 2004), the then President, Thabo Mbeki, outlined that job creation in the first economy was the major goal of the ANC. Some years later, at Lake Gariep a major increase in state funding for welfare or casual work schemes occurred. In both 2007 and 2011, seventy-two per cent of households had members receiving state welfare support. When casual employment through short-term public work programmes is added to this figure, ninety per cent or more of households had members in one way or the other dependent on the state.

And conditions are still deteriorating. Widespread and often chronic unemployment is identified here as the greatest problem in the Lake Gariep area. In some cases people live through it for most or even their entire lives. The EPWP has some short-term benefits but the impact is not as substantial as the government presents. The Mayor of the Gariep Local District Municipality (Mtyali 2011:18) recently proclaimed a mass job creation program in Gariep:

In the current budget we resolved to put aside an amount of 2.4 million for mass job creation in order to respond to the need to create jobs since we have high levels of unemployment. We have so far appointed 214 people in the whole District and in the Gariep area we appointed 62 young people divided into 19 in Steynsburg, 21 in Venterstad and 22 in Burgersdorp.

These people are being trained to maintain our water treatment works in terms of grass cutting and maintaining our buildings. This program has improved the image of our water infrastructure assets such that our people can be assured that where their water is getting treated, the environment is conducive for that type of work. We have ensured that 25 per cent of those benefiting in this program are women and 90 per cent is constituted by the youth. We are determined to continue with the mass job creation plan in the new financial year and the lessons we have learnt from this program will inform us on the new budget which I will announce before the end of April.

Mtyali displays Terreblanche's (2008) discourse of neglect, that the ANC is affected by unrealistic optimism completely ignoring the realities of people on the ground. He continued:

Our initiative to engage with TEBA for an application to the Presidential community works program has resulted in another mass job creation program in Gariep and we created 250 jobs in Burgersdorp, 500 jobs in Steynsburg and 254 jobs in Venterstad. All infrastructure projects we are currently implementing and those to be implemented in the new budget will put mass job creation at the epicenter of our program. The expanded public works program will also add value to the creation of jobs and we will report on these programs consistently so that the community can assist us in monitoring that all these plans achieve the required impact (Mtyali 2011:18)

In 2007, fifteen per cent of households had no income. In 2011, only two per cent of households had no income. This reduction was mainly due to the rise in casual employment in public work programs. Forty per cent of interviewed hoseuholds indicated that a member had work on a casual basis. A corresponding increase in the R201-R500 income per month category, from thirteen per cent in 2007 to twenty-two per cent in 2011, is another indicator

that these programs had some impact and partly because wages - and costs are very likely to increase over 4 years anyway. The casual jobs created by the government also had the political aim, rather than a direct human one, of lowering the official unemployment rate. When visiting the field sites the orange, blue or yellow overalls of EPWP workers were visible everywhere, cleaning the streets and the cemetery. While this might be perceived as positive, after limited periods of employment there are no further opportunities because there are no companies in the region. Even if there were, because unemployment rates are very high, potential non-state employers are able to bargain down wages. Residents confirmed that the training people received is all but useless. Several informed the author that the programs did not provide skills for permanent employment. Participants might find casual work, for example, as gardeners for white people, but this does not lead to genuine careers, rather, it tends to confirm wealth inequality among races. Instead of enhancing possible livelihood pathways, or at least enabling food security by establishing public vegetable gardens, the government prolongs rural poverty with temporary unskilled labouring positions.

There is very little diversification in the local economy. The tourism sector has potential and should be built on. Of course this suggestion would not solve the problem of chronic unemployment but at least a couple of people could find work. Land and agrarian reform could contribute to the growth of the agricultural sector and not detract from. There is a high level of socioeconomic and racial fragmentation of settlements. Strategies to enhance integration must include improvement in levels of access to facilities, and areas of economic opportunity must be explored. Employment by the government is the largest economic sector in Joe Gqabi district. The informal sector is relatively small and mainly relates to the sale of food and household goods. The District contributes about 3 per cent of the provincial Gross Geographic Product (GGP). There is a heavy reliance on income from migrant workers. The Gqabi District Municipality (2010: 165) states:

The 2010/2011 budget is informed by the following assumptions: Increase for purchase of electricity is estimated at 25 per cent; Eight per cent Increase on Refuse and Sundry; eight per cent Increase on rates and taxes; growth in the salary and allowances has been provided for in the budget at 10 per cent; Increase on Water and Sanitation tariffs

It is unlikely that the mean household income will change over the next two years and the goals declared by the ANC in their PGDP (2004) will not be reached. Most of the population will not be able to afford the services that the municipality intends to raise charges for (Mtyali 2011). Only nnineteen per cent receive free basic electricity and thirty six per cent receive free basic water. Others have to use grants to pay debts. One interviewee explained that occasionally he had no money left to pay for electricity and water. Municipality staff threatened that his water and electricity would be cut off. Public services such as education, health, water and sanitation are worst in places of historical neglect, causing a rising tide of community protest (Development Bank of Southern Africa 2008; National Treasury 2008). At Lake Gariep in 2011 thirty per cent of residents stated that they are dissatisfied with the service delivery.

Eighteen years after apartheid officially ended, its influence is still apparent though the precise expressions of its legacy are debatable. Some arguments shift the reasons and the responsibility for contemporary neglect of rural areas into the past. The ANC came to power with a mandate to act for their electorate, yet seventy per cent of the population between 15 and 60 years is unemployed. The government has failed in generating a more inclusive, labour absorbing growth path for the economy.

Kington and Knight (2001; 2004) conclude that despite its commonness, unemployment in South Africa has received little attention in terms of social research on causes and consequences. Moreover, Kingdon and Knight (2001) discovered that income from formal employment decreases as local unemployment rates rise. High unemployment rates at Lake Gariep not only affect households and their survival strategies negatively, but it also influences

the amount of money earned by household members with casual or formal employment. The government's inability to enhance economic growth, hence does not only affect those unemployed but also those receiving lower wages. Incomes of three South African rural communities investigated in a livelihood study by Puttergill et al. (2011) (Ebenhaeser, in the Western Cape, Mashishimale, in Limpopo Province, and Mophela, in KwaZulu-Natal) appeared disproportionally high compared to those of the communities under investigation in the present study. The main difference between these studies is that employment rates were much higher in the communities investigated by Puttergill et al. (2011), with up to 67% of residents in one community having formal employment. Although the monthly income is slightly above R1000 on average (Puttergill et al. 2011), the impact of formal employment on communities cannot be overvalued. Fewer people are unemployed, as Kington and Knight (2001) argued the wages are higher, dependency on state support are lower, and households are generally better-off.

Quality of Life

Quality of Life Tables (23 and 24) present data on how the post-1994 government has been perceived as being successful in creating a better life for South Africans. Progress is measured not by what the government did according to their development goals, but instead by focusing on the subjective quality of life indicators that measure degrees of residents satisfaction or dissatisfaction. Davids and Gaibie (2011: 234) concluded that South African satisfaction indicators demonstrated

a clear disjuncture between public opinion (what citizens think) and national statistics (provided by the state institutions and government departments).

This study shows that life satisfaction increased within the survey period. In 2011, the percentage of residents who were at least satisfied with their education increased by twenty four per cent, family happiness increased by eleven per cent, and job opportunities increased by twenty four per cent. Two new categories were added to the indicators in 2011, namely interviewees degree of satisfaction with the municipality and with the government. 36 per cent of interviewed were very satisfied with their government and 26 per cent were very satisfied with their municipality. These results suggest that residents are aware of the underperformance of their government even though the government provided incentives for the communities (social grants, housing, casual jobs etc) that apparently influence people's degree of satisfaction with their quality of life. Given the remarkably high level of transfer payments to the residents in the area and in general to South Africans, the percentage of people indicating their degree of satisfaction with the government is very low.

Natural Resources

This study has attempted to understand livelihood systems in a holistic manner. It finds that local interconnections are more complex than might be assumed though they are not fully exploited. Linkages between rural areas and the urban economy are also underdeveloped. Lack of infrastructure is a significant factor. The sector with real potential to stimulate a more vibrant and durable local economy is natural resources. Survey results on use of natural resources at Lake Gariep uncover aspects of rural households and their strategies to survive that have never been researched prior to this work. The informal trade with fish and vegetables exists already. What is of relevance is knowledge into the types of activity or food supply markets that can provide greater scope to benefit local and national economies.

Aliber (2009) found that the number of households in South Africa lacking food security decreased from 2000 and 2007. There was also a reduction in per capita food expenditure in rural areas, and 'self-provisioning is an important if often underemphasised factor (Ibid). Aliber highlights that in the two municipalities studied the percentage of people with insufficient food was 2.8 per cent. However, the data for the study was based on Statistics South

Africa (2006) and, according to Aliber, not reliable, merely an indicator. Aliber (2007: 406) contended that

perhaps most significantly, more than half of seriously hungry households appear to be eligible for social grants that they do not receive.

At Lake Gariep, although households diversify their livelihood strategies, in 2011 around a third of the households in the area consider themselves as having not enough food to eat, a further indicator that poverty is chronic. Without rigid interventions, the situation for the rural poor will not change for the better and ultimately structural rural poverty will deepen.

The present study provides the first socio-economic assessment for communities that harvest freshwater fish in the Lake Gariep area. Fifty-eight per cent of households have members who fish and thirty per cent of fishermen sell some of their catch. There is a strong correlation between fishing and poverty, but without fish both food security and incomes would be even further diminished (Stelzhammer and Wood 2012). Fishing is not only an activity of the poorest households and pursued beyond those of bare subsistence.

The literature on small-scale inland fishing communities leads to the conclusion that fishermen are poor because they fish (Béné 2003b). Although often statistically accurate, this presumption is too simplistic to explain livelihood functions in small-scale fishing communities. At Lake Gariep, fishermen are members of low-status, marginalized households and, compared to non-fishing households, they have fewer assets and less cash income. This study indicates that fishermen are poor not because they fish but due to an absence of other employment options and alternative means of income generation. Fishing is widely relied on for survival, notwithstanding that a third of households state that they do not have enough food. Besides its essential dietary function, fish provides income for many households. Reasons

why people are not fishing are mainly due to illness (TB), age, lack of transport, or reasons related to beliefs whereby people are afraid of the water.

In 2007, thirty-one per cent of fishing households investigated were classified as subsistence fishing households. These are households with unemployed members and from which someone fishes at least once per week. By 2011, subsistence fishing households had decreased to twelve per cent. Income rises between 2007 and 2011, particularly for the lowest income brackets, contributed to a reduction in fishing activity. Many residents who fished in 2007 obtained casual jobs with the municipality. It is assumed that the work programs target the poorest of the poor and hence also subsistence fishing households which would explain the decrease of the occurrences. This explanation was also discussed with locals that underpinned the researchers inference. Ellender et al. (2009) presented estimations of the total quantities of fish consumed or donated, released and sold to the community. Their data indicate that sixty two per cent are consumed by fishing households (47 tons a year), four per cent are given away, nine per cent were released and twenty six per cent were sold. Even though it is a crude estimation and based on the assumption that the fish sold was consumed locally, the total per capita fish supply from the lake was 11.1 kg per year. The total annual monetary value of fish sold was R104676 per year in 2007. Their calculations were based on population data from Statistics South Africa (2002). The present study estimates both fish consumption and the monetary value of the fish as significantly higher as population data recorded counts more households than the official statistics.

Fishing should be prioritized as a key component in a strategy that includes and develops this economically neglected environment in future policy perspectives. The existing locally organized culture of fishing provides a base upon which infrastructural and other investment can build. Serious institutional deficiencies have and continue to prevent the initiation of such processes. It is questionable whether the conception, details, and implementation of government policies, such as the Growth, Employment and Redistribution strategy, are appropriate to Lake Gariep. More than 90 per cent

of the lake's shoreline is not publicly accessible as it forms part of nature conservation areas. As interviews indicate, fishermen are tolerated rather than encouraged to use the free resources.

Smith and Ress (2005) argued that where inland fisheries produce a significant volume of high value fish, marketing chains usually develop. For example, carp are moved to Calcutta from all over India, Nile perch to Europe from Lake Victoria, or catfish to Venezuela and Colombia from the Brazilian Amazon. Taken into consideration under which desperate circumstances fishermen and their dependants have to survive to gain a living (case of Lake Victoria), the poverty trap in which fishermen and their dependants are caught has to be put at the fore when establishing possible business in order that local people gain from it. Taken into consideration under which desperate circumstances fishermen and their dependants have to survive to gain a living (case of Lake Victoria), the poverty trap in which fishermen and their dependant are caught, has to be critically investigated and the purpose of marketing chains which usually develop should be critically assessed (Ahmed et al. 2008).

Hence, the purpose of marketing chains which usually develop should be critically assessed so that those who benefit from the fishes are not solely business but instead the rural poor. The worst case would be, as at Lake Victoria, that the fishermen are exploited and again trapped in poverty as well as the natural resources are destroyed.

The poor, however, can ill afford project failure; their diversification or multiple livelihood strategies are premised on risk reduction and the maintenance of a land-based safety net. Thus, commercialisation can mean the opening up of economic opportunities for relatively wealthy interest groups at the expense of the impoverished (Shakedown et al. 2001: 596)

Interventions applied to improve rural livelihoods have to consider of the diversified livelihood strategies of the rural population. In comparison with the livelihood approach, a sectoral focus, for example, on fishing or food production, does not include welfare subsidies or remittances from household

members staying abroad. Sectoral approaches can be misleading as seasonality, the make-up of households, and other factors influence the means of generating or obtaining income. Due to their exclusion from the formal employment sector, livelihood diversification is not by choice but by necessity.

Given the extent of the fishery at Lake Gariep, Ellender et al. (2009) investigated the viability of a commercial fishery. They concluded that an economic assessment based on experimental gill net catch data and a feasibility assessment has shown that such a venture is probably not viable given the high logistical costs. A vehicle is necessary to transport the bulky gill nets, weighing over 100kg, to the dam and the catch of 200 to 500 kg of fish to market. Moreover, Ellender et al. (2009) financial analysis found that with a fish price of R5/kg, the internal rate of return on a small operation with a boat powered by a 15Hp motor and a small vehicle (total loan R150 000) would only be at approximately 15 per cent. Poor local fisherman not only face these more proximate financial hurdles, there is also the problem of South Africa's wholesale and retail markets being heavily influenced by larger corporate interests, restricting opportunities for rural entrepreneurs (Bryceson 2004).

The case studies show the low revenue of selling fish to the community. It is also not known whether there is a market for the large quantities of freshwater fish that would be produced by a commercial fishery. In contrast to a marine fishery, where commercial fishers land their catch and sell it immediately to a wholesale fish merchant, a commercial fishery on Lake Gariep would first need to establish such a market. The onus to sell the catch is therefore on the fisher. This is an impossible situation, as door-to-door selling of 200 kg of fish is an unrealistic expectation. While it is clear that the deep poverty in these areas requires radical measures, not least a redistribution of productive resources, including land, a livelihoods approach suggests that building on the land- and fish-based livelihoods that rural people currently practice, and seeking ways to enhance their economic value, might be more

appropriate than attempting to replace them with entirely market-oriented or commercialized approaches.

This study has found that vegetable gardens and fish are crucial in the diets of those who cultivate or catch them. Comparable date from Statistics South Africa (1999) found that ninety-three per cent of farming households, those spending at least one hour per week on farming activities, including livestock, do so primarily to produce food for their own consumption.

What defines the local informal economy? First, fishermen have used the fish resources at Lake for decades. Local communities possess valuable knowledge about fish populations and their harvesting. Fish, vegetables and livestock, and other items such as herbs and wood, are components in rural diversification. Facilitating supply to other regional and national locations would greatly improve local economic conditions.

Agricultural produce is vital in alleviating food shortages and mitigating difficult material circumstances, but generally does not yield much available cash. Households with access to vegetable gardens lack capital to increase production. Risks associated with investing in farming in part explains why re-securing employment rather than engaging in small-scale agricultural production remains the most important livelihood strategy for these communities.

Rural livelihood strategies are more significant than is typically recognized, especially in direct provision (farming) and subsistence livelihoods (fishing), and as part of the safety net (Smith 2004). Dovie's (2001) study, in which all income and direct-use values were assessed (incomes, livestock and natural resources) found that land-based activities (livestock, cropping and natural resources) accounted for 57.5 per cent of total annual value per household. Furthermore, in many rural areas surplus labour with low opportunity costs and a lack of alternative employment options makes activities based on the natural resources both viable and inexpensive, especially for poorer and less skilled people. Poorer households use both a greater diversity of resource and larger amounts of each than those more well

off or less geographically isolated. They are also more dependent on the resource base in times of crisis (McGregor 1995; Cavendish 1996; Campbell et al., 1997; Shackleton et al., 1999a).

The value associated with these goods has not been fully captured in regional or national statistics. This perpetuates the perception of communal rural areas as being unproductive and contributing little to the national welfare and economy, reliant on state welfare and remittances from relatives abroad (May 1996; Banks 2008). However, this only partly corresponds with actual day-to-day living at Lake Gariep, where conventional approaches to poverty do not reflect the full picture.

The production of vegetables as food for trading or consumption has not only positive impacts on health and budget, but also, as many residents informed the author, it has recreational value. Similarly, fishing is not only perceived as sustaining a living, but as an occupation away from the monotony of staying at home. Oya (2007) stresses that very little research has been carried out on effects on agrarian structures, structural changes and farmers differentiation. Fishermen and small-scale farmers are a heterogeneous group in need of a differentiated approach to rural development. A one-fits-all model would not realistically assure the development of the area.

At Lake Gariep, fishing³¹ is not exclusively an activity of the last resort, or of the worst-off. On the contrary, when examining income strata, households with higher income of R700 or more fish regularly. Interventions have to take into account that even though income poverty is a general feature, there are significant differences in regular cash revenue.

The chapter on natural resource use and their implication on food security summarized emerging evidence that natural resources, livestock production and farming of vegetables at Lake Gariep make significant contributions to rural livelihoods, hence has important implications for the conceptualization,

design and implementation of land and agrarian reform and the development of the inland fishing sector, for improving rural livelihoods at Lake Gariep. South African governments did not prioritize rural development before 1994 [sure about that?] and have not since (Cousins 2002). More than 30 per cent of the Lake Gariep population has lived in the area for over 20 years. Some residents have fished there since the 1970s and, as chapter four highlighted, while some other African countries developed their inland fisheries industries and thereby contributed towards poverty alleviation, this has not occurred at Lake Gariep. State-facilitated redistributive reforms, building on the productive and social capabilities of fishermen, and support for fishing-industrial growth could be a possible way forward, one that encourages private enterprise to get involved

Over 70 per cent of the population derive parts their livelihoods mainly from farming or fishing, which is characterized by low productivity and underdevelopment. Human development in the region is - as data on education indicates - very low, and underlines the failure of the government to ensure the availability and accessibility of education, basic food and wage-goods for the majority of rural people. Access to land and agrarian production resources, partially by small producers, would help reverse human deprivation. Some land redistribution could ensure that residents at least gain food security through farming even though the majority survives on fishing and farming but a positive impact would be a reduction on state welfare grants. Inadequate access to transport, infrastructure and livelihood pathways in general tend to limit people in the area to be mere welfare recipients rather than actively trying to overcome dependency on state support. Local municipalities as in Gariep or Burgersdorp do not provide training beyond menial tasks. State support though credit schemes would be a more promising option for creating sustainable and independent livelihoods than the current system of welfare grants and temporary government employment. However, state dependency, along with modest incentives and promises, has been central to the ANC's modus operandi.

South African agrarian reform discourses are ideologically framed around micro-economic questions about the relative efficiency of the small or subsistence farmer opposing the large commercial and modernized farmer, and their leadership roles in the process of agriculture transformation (Mafeje 2003). Instead, of ideological contests or grandstanding, government should focus on small farming enterprises or fish production to greatly reduce poverty. Mafeje (2003) argues that the predominant agricultural and rural development model is fundamentally a modernization strategy focused on elites, which monopolises public infrastructure. The PGDP (2004: 15) identified a need to centrally increase the number of black commercial farmers, to create what was seen as a viable agricultural sector. Terreblanche's view (2007) that the ANC already postponed the vigorous tackling of social questions, especially for the rural poor, is reflected by the present study.

The relatively lower financial costs of enhancing self-employed, smallscale farming and fishing, and the social networks resulting from local autoconsumption among small-scale producers, and which are critical to broadbased rural development should be a further reason to develop this sector. Fishermen at Lake Gariep mobilize family and kinship labour and other local resources, and save (mostly for social reproduction and risk insurance), and invest, although this is inadequate for large-scale capital formation. They adopt technologies, including locally adapted ones, and maintain some agricultural production, in spite of the reversal of state support to farming and social welfare, and in spite of low trade or even no trade option. Government should aim to enhance the productive use of natural resources. Instead of short-term employment for 40 per cent of the households in the area, the money spent on those jobs would be better invested in the creation of sustainable and viable ways of using the natural resources at Lake Gariep for the population. Given the fact that around a third of households are food insecure, it is clear that state sponsored grants and state sponsored casual jobs do not lead to better livelihoods for rural residents. . The 1996 constitution fundamentally changed local government into an independent sphere of governance, described as the hands and feet of reconstruction and

development in South Africa. Yet before local economic development can flourish, municipalities have to be reconstructed and made more accountable. The case of Lake Gariep exemplifies that local municipalities do not have the capabilities to develop townships and greatly improve quality of life. There are major deficiencies in planning, project management, financial management and technical skills. As Atkinson (2007: 76) noted, Many municipalities according to one 2007 account, are declining into a morass of venality and dysfunction. Local economic development (LED) projects in the Eastern Cape are supported by the state, but most fail due to poor management and political infighting over implementation.

Sangweni and Mxakato-Diseko (2008:138) report a South African public service groping in the dark in an infant state of ability to fulfil its functions, implying mediocrity, weakness, ineptitude and a lack of cognizance of the urgency to raise the bar on service delivery. Their analysis illuminates a

prevalence of muddled understandings of the challenges facing the nation; cultural and political clashes between officials; the lack of any common ethos; the absence of uniform training; limited loyalty in the service; little commitment to excellence; failure of proactive or anticipatory governance; high mobility of public officials in pursuit of senior positions, resulting in limited institutional memory; and excessively rapid turnover of heads of departments.

How does the research help in formulating adequate policies to reduce poverty? First of all, this case study was a base line study and was intended to measure major socio-economic indicators for the area. I argue that in order to reduce poverty levels concerted efforts of policy makers, researchers and residents from the area have to be brought together in order to create holistic packages for a long term solution to the problems but I also have to state that the government does not have an excellent reduce in eliminating poverty, as their policies since 1994 have no brought the necessary and substantial change for the rural poor. I think a major result of this work is that people have quite

different livelihood portfolios and they are able to survive not only because of their natural and economic assets but also because of ideals like community coherence and because of the fact that people help each other. The sharing of their pensions within households has to be viewed as altruistic attitude and people are used to share. During the field work I was constantly invited to peoples home and I was impressed by residents generosity. The willingness of the poor to help and empower themselves is further explained by Wilkinson-Maposa et al. (2006) who conducted qualitative research within Southern Africa – in Mozambique, Namibia, South Africa and Zimbabwe – into how and why people who are poor help each other. They conclude that held between poor people is widespread, deeply embedded in communities and it operates as a vital element of both survival and progress. Their research emphasized both material support (food, money and clothes) and non-material support (knowledge, physical and emotional support). In a second study, The poor Philanthropist, Wilkinson-Maposa and Fowler (2009: 5), argue that

the unique capability of poor communities is not found in exceptional wealth, influence or power over others. Ironically, their greatest development strength is found in the ordinary. Self-help and mutual assistance is part and parcel of the social fibre and of how things are done in poor African communities, lending these phenomena qualities of permanence and resilience.

The achievements and shortcomings of the government policies over the last decade have to be critically addressed. This case study clearly indicates that high levels of poverty persists, despite evidence of an improvement in the quality of life for some residents. What would be of essential significant to the rural poor, is economic empowerment, greater access to financial resources outside the household, significant increase in own income. The most important is the reduction of unemployment. People should be able to make choices about their own live not being trapped in unemployed from adolescence till the

time when receiving an old age pension. In fact this is the biggest challenge for the ANC to create dissent work opportunities.

Chapter 8 Conclusion

The conclusion summarizes the research approach, the research findings and how this study contributes to a growing scientific awareness on the importance of fishing for rural communities at Lake Gariep.

Summary of the research approach

The thesis would not only attempt to explain what constrained the people's livelihoods at Lake Gariep, but also to formulate a conceptually grounded research design explicitly addressing interrelations between political agency and structure in the production of these constraints. Theoretically the thesis emphasis is laid on a repolarisation of the livelihood approach to investigate power structures related to vulnerability. One reason for this is the need to go beyond income dynamics in the assessment of poverty, and to develop a broader focus on the multidimensionality of people's livelihoods, the structural position people inhabit by limited access to resources, to education, to employment to improve their living condition. The study not only investigated economic indicators in terms of social grants but primarily focused on assets people have. These include social, human, financial, and natural assets (Ellis 2001) and represent an antidote to a perception of poor people as being passive or deprived. The people at Lake Gariep may not have cash or savings, but they do have other material and non-material assets such as family, health, skills and natural resources. To understand these assets, one can identify the opportunities they might offer or the types of constraints that might exist (Rakodi 2002). Even though people have various assets, data from the two surveys indicate that these are not economically viable in order to build hoseuholds wealth or decrease their dependency on the state welfare support. However, as emphasis on the livelihood approach highlights, it would be short-sighted to underestimate the value of these assets, because long-term benefits for the households could arise when choices are made by government to more effectively support the rural poor.

The application of solely money metric indicator restricts itself to gain insights on the importance of the resources fish and residents in the area would be exclusively characterized by the fact that they have a lack of adequate income. In arguing that the application of quantitative as well as qualitative frameworks is mutually benefiting the results, I already subscribe to the idea that asking different questions about reality also leads to different assumptions. It is a challenging task, to avoid perceiving people as poor and automatically implying that external intervention, help, is needed. Much of what the livelihood approach is defined by, is the fact that poor people have their agency. I completely agree but still I think that the agency of residents in the area is too weak as to be able to challenge what they have in order to improve their living situation.

The shortcomings and reliability of data and hence the gaps of knowledge that are created thorugh limited reliability, by Statistics South Africa, as I argue are identified closely to the empirical work of this study. Even though South Africa has a governmental statistics agency that periodically publishes census data and data from surveys investigating households, labour and living standards, the quality of their record and results are heavily disputed (Daniel et al. 2006; du Toit 2005). Accurate figures on poverty, inequality, and unemployment hold particular policy relevance. The question remains how a government with a primary focus on poverty alleviation should implement its policies when the basic data on which these policies are based, are unreliable. This question goes to the heart of the problem. Instead of perpetuating the assumptions resulting from questionable data, the present study presents a first hand baseline study.

Summary of the findings

This thesis reports the results of an in-depth case study on the rural livelihoods at Lake Gariep, framed against the background of the political

make-up of contemporary South Africa. It is concerned with the complexities, in particular the complex survival strategies, of the residents at Lake Gariep, and it represents an attempt to make sense of the socio-economic situation the rural poor have to struggle with through the application of mixed methods in investigating livelihood strategies. The micro-economic situation at Lake Gariep can not be separated from the macro-economics of South Africa, as the majority of South Africans classified as poor reside in rural areas. The objective of the first survey was to generate base line data about an area no prior socioeconomic data existed, indented to unveil social and economic constraints about livelihoods situated at Lake Gariep. Population data were collected, as well as dependency ratios calculated, education levels of residents in their respective area investigated. Results of a baseline study conducted in 2007 and the followup survey in 2011, identified high levels of income poverty, lack of food security and low levels of education among the residents. The age and sex distribution indicate a sex-ration weightened in favour of females which may be explained either by lower life expectancy of males or by more of them having migrated out of the area. The case study applied the livelihood approach and focused on assets that the poor have in the area investigated.

The second objective of the thesis was, with the undertaking of a second survey in 2011, to analyse the socio-economic conditions at Lake Gariep with a special focus on the comparative level of both surveys. The second survey's objective was to assess if and how socio-economic indicators have altered over a period of four years. Due to the fact that the area is characterised by high levels of unemployment the majority of people depend on state welfare grants. The socio-economic situation at Lake Gariep has partly worsened and poverty has deepened from 2007 to 2011. There was a rapid decline of valuable household possession. Only 8 per cent of the population has a motor vehicle as compared to 24 per cent in 2007. Income data indicate that in 2007, 71 per cent of the population had an income of 875 rands or less. As compared to the cumulative total income this makes up only for 34 per cent. Within the townships the difference between rich and poor is growing. The poorest thirty per cent of the population has only 8 per cent of the income as compared to

2007 where 30 per cent of the total population shared 11 per cent of the total income. The median income in 2007 was slightly higher than that of 2011. Formal employments declined within four years, with a total of only thirteen per cent of men and women in the economically active age group (between 15 and 60 years) having formal jobs in 2011. Child support grants, old age pension grants and disability grants are used the make ends meet. The research indicates that around 80 per cent of the population living in the area can be characterized as chronically poor.

The rural poor at Lake Gariep are placed in a wider context of policy failure of the South African government over the last decade. Conventional avenues of upward mobility were cut short, as today, ultimately ineffective patterns of social capital accumulation play a significant role in the persistence of this constrained mobility. In 2007, approximately 70 per cent of the unemployed were looking for work. In 2011 that number was at around 60 per cent. Interviewees indicated that people in the area lost their jobs due to the fact that white farmers left the area. Data from prior to 1994 are not available and one can only speculate about conditions during that time, but in 2007, half of the interviewees indicated that they were better off prior to 1994 than they are today. This suggests that policies are not actually pro-poor but in fact opposed to the aims and needs of the rural poor.

Addressing uneven development and spatial marginalization is at the heart of the PGDP, with its six fold strategy of systematic poverty eradication, transforming the agrarian economy, diversifying and developing manufacturing and tourism, developing human resources, developing infrastructure, and institutional public sector and transformation (Provide 2003:86).

Even though during this time period (2007-2011), major policy frameworks were introduced by the ANC (PDGP from 2004 until 2014, and the National Development Plan in 2011), no decrease of poverty in the area occurred.

Instead, dependencies on state welfare support and a decrease of formal employment opportunities indicate that poverty deepened over the years.

The high rates of unemployment may be directly linked to the historically induced economic neglect of rural areas during apartheid times. But a generation born after 1994 is also affected by the absence of job opportunities. Nonetheless, this argument appears to shift the reason for the neglect of rural areas to the past, even though more than eighteen years have passed since apartheid was officially declared as over. To transform South Africa in the interests of all its citizens was the proclaimed intention of the ANC (RDP 1994). Apartheid was a crime against humanity and hence South Africa today is a better place. However, the focal point should be laid on what the achievements of the ANC are in terms of minimising the effects of the legacy of apartheid.

The core research was concerned with how people build livelihood assets. Socio-economic remnants of apartheid would be perpetuated and even augmented. Drawing on the second survey, it was found that a majority of households are stuck in a poverty trap from which they cannot escape on their own or with social welfare grants solely.

The thesis considered the social, political, and economic forces that have deepened and entrenched poverty in rural areas over the past decade. Banks (2005: 22) doubts that

the removal of obstacles and introduction of localized incentives packages will ever be enough to reorientate an entire region with a long and deep history of poverty and underdevelopment.

The agricultural sector has not been allowed to play the imperative role that it should in the fight against rural poverty. Government needs to reverse the decay in agricultural infrastructure, and refocus efforts in support of poor and disadvantaged farmers. Kirsten et al. (2003: 39) similarly highlight

the failure to use agricultural policy to alleviate poverty. The deregulation of commodity markets and the removal of most state support to the agricultural sector since 1990 have contributed to a climate that is not favourable to new entrants and existing smallholders.

As the white farming sector has declined over the last decade, more than 6500 farmers working on forty-one per cent of the agricultural land in the province have left with resulting in dramatic job losses the rural poor. On a national level, the agricultural sector has lost 112 352 jobs between 1994 and 2004 (The Presidency 2008; Haussmann 2008). According to Lahiff and Cousins (2004), the economic policies adopted by the democratic government since 1994 have done little to develop the smallholder sector, and may even have contributed to its long-term decline.

Subsistence-oriented rural households which provided labour for the mining industry during apartheid are now faced with the situation of lifelong unemployment and restricted space of manoeuvre to improve their situation. Shackleton and Echelon (2005) argue that the contribution of land-based livelihoods to the national economy is poorly understood and not reflected in aggregated statistics. This partly explains their low profile with national policymakers, as does the small volume of goods that enter formal marketing structures. An important issue is the sustainability of current patterns of resource use. There has been little empirical analysis of the sustainability of natural resources used by rural communities. Fish and other natural resources currently make an important contribution to the livelihoods of a significant proportion of rural people in the study area, even if they contribute less than wages or social grants. If households to a great extent consume fish either after buying it or self harvesting the resource and absorb a great deal of direct household provisioning, ways of enhancing those assets not only for the direct provisioning of rural households should be established. Contributions to rural livelihoods can be secured from improved harvesting, processing, and marketing of harvested natural resources (Shackleton, 1996; Shackleton and Shackleton, 1997).

The South African Institute for Poverty, Land and Agrarian Strategies (PLAAS; Hara 2011) produced a research paper on inland fisheries access rights and property rights regimes. Their research focuses on dams in South Africa whereby Lake Gariep has not been investigated. Highlighting the fact that a wider research community is getting aware of the resources inland fisheries produce for rural livelihoods, I argue that this research highly contributes to the emerging body of knowledge of rural communities and fishing.

In South Africa, 704 of a total of 4703 dams are publically accessible (Hara 2011). Moreover Hara (2011) argues that a lack of an inland fisheries policy as it is the case in South Africa means there has been a lack of appropriate institutional arrangements for subsistence and commercial fishing on dams. An inland fisheries policy could be just another way how the poor are getting disciplined by regulations and defined access rights. Fishing at the Lake already has a long tradition, hence people built their own 'knowledge' and ways of conduct. In contrast to their research results (Hara 2011) Access rights in the Lark Gariep area are properly managed and there are no major issues arising for the rural poor. People are allowed to access the dam for fishing. The findings of the present study at Lake Gariep enhances our thus far very insufficient understanding of the livelihoods of the rural fishermen at Lake Gariep. I can not identify how any institutional arrangements might be of use to the poor, as the poor are already benefiting from having access to the Lake. I consider that further research should focus on distributional issues of fishing, and if it would be achievable that also people from areas that are at a great distance to Lake Gariep could use its resources in order to get basically enough food to eat.

What can be done to strengthen the assets people have in the area?

Assets are not simply resources that people use in building livelihoods: they are assets that give them capability to be and act. Assets should not be understood only as things that allow survival, adaption and poverty alleviation. They are also the basis of an agent's power to act and to reproduce, challenge or change the rulers that govern the control, use and transformation or resources. Ellis (2000: 21) considers assets to be

the stocks of capital that can be utilized directly, or indirectly, to generate the means of survival of the household or to sustain its material well-being at differing levels above survival.

The assets poor people possess or have access to, the livelihoods they desire and the strategies they adopt are all predisposed by the context in which they live and grow. Livelihood outcomes are the achievements or outputs of livelihood strategies. They relate to both increased material and nonmaterial well-being such as health, access to services and to formal employment. Nor can increasing income alone establish economic and social security unless it is also used to build a firm asset base. An asset offers a way out of poverty because it is not simply consumed, it is a 'stock that endures and can be used in many ways to generate economic and social benefits that foster resilience and social mobility' (Ellis 2000: 25).

When conducting field work, I became aware of the fact the poor people do not have long time frames in their minds, it is all about one day and the next to come. Given the fact that government interventions have to be scrutinized critically as most of those interventions at Lake Gariep prolong or deepen poverty, alternatives have to be developed and, after a thorough process of consultation with locals, implemented. Alternative ways have to be put in place, such as, for instance, a kind of 'harvesting and sharing' approach. Over the last decade, a neoliberal, market oriented economy has not reduced poverty, irrelevant of which de facto poverty line is being applied, I suggest that in South Africa in general, new, innovative opportunities for the marketing of natural resources should be put in place. For example, once a week, carp could be transported to Burgersdorp and sold to residents there at the same price as in Venterstad and Oviston. I doubt that Lake Gariep carp can form the basis of a 'profitable' business, but the natural resource could support other local communities where household numbers struggle similarly to those in the study area to get enough food.

The ANC has not had the capacity and willingness to noticeably improve rural livelihoods, or at least create incentives for the rural poor to take advantage of the economic growth path proclaimed to benefit the all South Africans, and slowly but constantly start to participate in the economy. The window of opportunity to improve conditions in Venterstad, Oviston and Hydro Park has passed without any key achievements to report. RDP houses were built but soon after, the houses fall apart. A clinic was established but a medical doctor irregularly attends the health facility. Schools were built but the quality of education is poor. The residents of these areas are becoming more socially isolated; they have few connections to mainstream society and little power to engage in decision-making. What is perhaps worst is that as a result of these desperate economic conditions, many residents seem to have lost hope for a better future altogether. In sum, the haves are increasing their control over assets while the have-nots are falling ever further behind. Quoting the Sunday Times (May 9, 2004), Habib (2005: 101) states that

the number of South Africa's super-rich (i.e., those with assets of more then US\$ 30 million) has jumped from 150 in 1994 to 600 in 2004. This is the period when the share of national income of South Africa's more marginalised sector of society has decreased dramatically.

What the white ruling elite during apartheid could never achieve, was to destroy the hope of the people that life could get better by having a black government elected by those who were desperate for change. However, to transform South Africa and improve the livelihoods of all its citizens can not be achieved by social grant payments as the single source of income on which the majority of households have to survive.

Decent work is the foundation of the fight against poverty and inequality and its promotion should be the cornerstone of all our efforts. Decent work embraces both the need for more jobs and for better quality jobs. The creation of decent work and sustainable livelihoods will be central to the ANC government's agenda. The ANC government will make the

creation of decent work opportunities and sustainable livelihoods the primary focus of our economic policies (ANC 2010: 1).

The policies introduced by the ANC benefited the privileged and disciplined the poor through the Gear policy. Moreover, the ANC abused the state effectively for self-enrichment. In its 2009 election manifesto, the Zuma-led ANC promised an expanded public sector, improvements in working conditions and the provision of decent wages for workers (Hassen 2011: 4).

The voting masses are rendered powerless. The hegemony of the ANC is guaranteed and real alternatives are crowded out. This is because the epicenter of politics of governance, corruption and opposition reside within the same entity. Ironically, inequality has been exacerbated by the lack of state support. Most poor South African households, more than 13.8 million people, do not qualify for any social security transfers. This means that the poor have had to rely largely on themselves for survival. The South African government, while declaring to eliminate the oppressive and exploitative forces of the past, perpetuated rural poverty.

Inequality actually increased between those who are skilled and able to participate in the first economy, mainly in urban areas, and those left behind in rural areas, where little or no economic empowerment of the poor occurred. Finally, neo-liberal statecraft is also predatory on the people who are already poor because it constitutes a continuation of what Harvey (2003) described as accumulation by dispossession³².

By [accumulation by dispossession] I mean the continuation and proliferation of accumulation practices which Marx had treated of as primitive or original during the rise of capitalism. These include the commodification and privatization of land and the forceful expulsion of peasant populations...; conversion of various forms of property rights (common, collective, state, etc.) into exclusive private property rights (most spectacularly represented by China); suppression of rights to the commons; commodification of labor power and the suppression of alternative (indigenous) forms of production and consumption; colonial, neocolonial, and imperial processes of appropriation of assets (including natural resources); monetization of exchange and taxation, particularly of land; the slave trade (which continues

This is a historical process intrinsic in the capitalist mode of production whereby expanding market imperatives both locally and globally produce an increasing concentration of wealth for relatively few individuals, with increasing marginalization for the many who are unable to take part in the wealth creation of which capitalism has always been capable. Accumulation by dispossession exists in both old (crude) and new (sophisticated) forms, from forced land removals in the past to the present enforcement of intellectual property rights, backed up by economic, political and sometimes military pressures by dominant powers (Andreasson 2007:23).

The post-apartheid government, while theoretically critical of market neoliberalism, has been one government that has accepted that it has to abide by the rules of the market (Andersson 2006). After a long struggle for democracy in South Africa, the government has chosen to follow the anti-democratic path where the private sector and foreign investors decide whether policies are viable. The citizens of South Africa are once again disenfranchised and have been deprived of their ability to decide on the economic policy. The structural weaknesses of the economy have been entrenched. At the same time, economic growth is unsustainable and based on debt-driven consumption that has increased the trade deficit and dependence on short-term capital inflows. The government's approach to governance has allowed the unconditional internationalization of some of the country's largest corporations, which built up their wealth through building the apartheid economy and exploiting South African's people and natural resources. The result of this are lost opportunities

particularly in the sex industry); and usury, the national debt and, most devastating of all the use of the credit system as a radical means of accumulation by dispossession(Harvey 2003: 159).

for economic development and lost wealth and resources for the country (Anderson 2006). For the first decade of the post-apartheid economy, macroeconomic doctrine has prevailed at the expense of broader economic and social intervention. These have, of course, been in part propelled by the political and rhetorical requirement to redress the inequities and inequalities inherited from apartheid.

In stark contrast to the ANC's aims at the beginning of the post-1994 period, major policies (GEAR) have resulted in state-driven underdevelopment, and none of the government's initiatives have resulted in an improvement of key national poverty indicators of deprivation and depth of poverty. People complain about the poor situation of their houses, poor levels of service delivery, almost complete lack of health care facilities and schools being in a very bad condition. The local state suffers serious deficiencies in planning, project management, financial management and technical skills. Many municipalities, according to one 2007 account, are declining into a morass of venality and dysfunction (Atkinson 2007: 76). Effective performance in the public sector invariably depends upon skill competency and coherence of those public servants who must convert the state's goals into reality (Levin 2007: 5). Certain limitations of the South African state are inevitable historical legacies. The ANC was obliged to create a new system of government out of the shambles of the former apartheid state, incorporating former Bantustans, creating new municipalities and provinces, reconfigurating the centre of the state and developing a cohesive national medium-term planning framework (Picard 2005). Local government, legal systems and the police were compromised by their apartheid histories.

I already pointed to the fact of the weakness and vulnerability of the rural poor and agree with Banks (2005) that researchers and policy makers would do well to recognise the social fragility and weakness of many rural households, as they reflect on the capacity of rural households to drive local economic development in rural areas. As Bank (2005: 22) argues

The assumption of the state has been that by explaining rural services, restoring rights to land and pursing more market-friendly economic policies, rural produces would suddenly emerge from the aches of apartheid and express their natural desire to truck, barter and exchange and evolve into competitive farmers and rural entrepreneurs.

When people sustain under a definite poverty line, or on subsistence use of livestock, fishes etc, it is assumed that in order to overcome this destitution, development has to take place. The area has to be improved, people have to acquire skills.. To think realities differently, is definitely challenging but given the enormous amount of failures that occurred it is worth asking about alternatives.

Culturally perceived poverty need not be real material poverty: subsistence economies which serve basic needs though self-provisioning are not poor in the sense of being deprived. Yet the ideology of development declares them so because they do not participate overwhelmingly in the market economy, and do not consume commodities provided for and distributed though the market (Shiva 1988: 10)

In stark contrast to this argument, I suggest that the already existing structure should be further developed by state-imitative even though I am very doubtful about the quality, implementation and sustainability of state-intervention in order to strengthen the economic assets of the residents in the area. I still doubt that the ANC would be able to do so as policy failures since 1994 indicate the incompetence of this party. However, there is a need to move away from simplistic explanations on all levels, and realise that different solutions are needed in different localities. Preconceived ideas and general assumptions about the rural poor, on rural livelihood strategies or simple sectoral approaches are not useful when intended to develop the Lake Gariep area. Even the notion of development should be disputed and overall, a very critical stance on all government activities has to be applied.

The dilemmas of the land question in Southern Africa arise from a poor understanding of the peasant question in particular, and of the constraints on articulated development in the semi-periphery. Thus, racially inequitable structures of wealth, income and land distribution remained intact, while liberal democratic constitutions and market principles protected these inequalities and inequities. This limited the scope and pace of land and agrarian reforms (Moyo 2005:2)

Reform-minded policy in South Africa is based on the assumptions that if access to land and natural resources it support is made easier and more equitable, then the use of these resources will be intensified, leading to beneficial changes in the structures and dynamics of the conditions that produce rural and urban poverty (Hebinck and Sheckelton 2010: 1).

However, access at the lake is only allowed during day time, and fishing does not improve peoples' livelihoods to escape from 'poverty'. For decades, this resource has been part of diversified livelihood strategies. I would argue that reasons for rural poverty in this case study lie beyond debates on natural resources. What should be highlighted is the ANC's ineffectiveness in creating job opportunities and as in the long run, in a capitalist state, peasant problem remained unaddressed, despite the fact that their peasantries continue to be marginalized and to expand.

Economic development within a context of agrarian transformation and industrialization tends to be distorted by the spread of skewed agrarian structures in the region. Thus, the land question is not only an agrarian issue but also a critical social question regarding inequitable patterns of resource allocation within the rural-urban divide and the agricultural-industrial divide. This underlies the persistently conflictive relations of class, gender, race and ethnicity, as well as the processes of inter-class labour exploitation, differential taxation and resource access and benefits, in the

context of the marginalization of the majority rural populations in the region (Moyo 2005:275)

Asset based approach as land redistribution is a necessary way forward but only when politics creates an environment for poor rural famers to be able to participate in the liberalized market economy. Especially the agricultural sectors in South Africa is heavily distorted and without rigor state intervention, in order to protect new entry, I cannot see how fishermen at Lake Gariep can establish businesses when competition means to battle with big agro-food businesses.

When apartheid ended 15 years ago, 87% of commercial farmland was owned by whites and 13% by blacks—the exact reverse of their proportion of the population. (This excludes the subsistence farms where 4m black families eke out a living.) The 30% target, adopted in 1994 by South Africa's first democratically elected government, meant redistributing 26m hectares (64m acres) of white-owned land with a deadline of five years. So far, less than 3m hectares have been transferred.

Under a separate land-restitution programme to compensate victims of forced removals over the past century, a further 2.5m hectares have been returned to their dispossessed black owners. If this is included in the 30% target, over 5m hectares, nearly a fifth of white-owned land due for redistribution, are now in black hands. The government admits that about half the farms taken over by blacks have failed, usually because of a lack of money or skill. Some put the failure rate at 70%. Since 2007 the country has been a net importer of food, after decades of self-sufficiency (The Economist, Dec 2009).

Outlook

The outlook includes two positions: one focusing theoretically on the local level, the rural area of this research, the other perspective deals with the power structure within South Africa. Both spheres are mutually distinctive but not

exclusive. In the long run, the latter was fairly destructive on the local level, but people can revolt against power structure as we just became observers in Tunisia, Egypt and currently Syria.

The Daily Dispatch (March 2011), a regional newspaper in the Eastern Cape, published a headline story on residents of a township close to East London who were protesting for urgent improvements of service delivery. As the mayor showed up in front of the protestors, the crowd raised their voices. The police then started to fire rubber bullets at peacefully demonstrating South African citizens forcing them violently to stop their civil unrest. This is not the first incident since 1994 in which residents have used protests as a way to have their demands heard.

Hence, the ANC may at times threaten the poor who are merely demanding what has constantly promised but not delivered. Moreover, state power is used to discipline residents, a sort of intervention that does not formally abide by the rules of a democracy. In contemporary South Africa, the economic–developmental objective has become subordinated to the political–strategic short term imperative to either discipline the poor or to neglect them.

Many social movements have been established. Some of the main movements and organizations borne out of this period include: The Concerned Citizens Forum in Durban; the Anti-Privatisation Forum in Johannesburg (which continues to expand and now has nearly 30 affiliate community organizations); the Landless People's Movement (a national movement which went through a divisive split with its original NGO partner — the National Land Committee — and has since weakened but remains active in some rural and peri-urban areas); Jubilee South Africa (a national movement centered around debt, reparations and social justice issues, but which also experienced a split in its ranks in 2005/2006 which has since resulted in the existence of both Jubilee South Africa and a new formation — Umzabalazo we Jubilee); the Anti-Eviction Campaign based in Cape Town; and Abahlali baseMjondolo (a movement of shack dwellers mainly in and around Durban which has begun to

link up to other shack dweller organisations in other parts of the country) (Mitlin and Mogaladi 2007; McKinley 2007).

The ANC was re-elected for a fourth time with an overwhelming majority of votes. Over the last decade, people have affirmed and reaffirmed the policy direction of the ANC. It is a paradoxical situation that South Africans are dissatisfied with their ruling party, but still the ANC won the fourth election in a row. A possible explanation could be that people identify themselves with the former liberation movement. Even though they do not see the ANC's promises fulfilled, most South African's do not see an alternative to this party. The ANC-Alliance has a long history, which is cemented by a powerful National Democratic Revolution ideological discourse that secures its legitimacy amongst the working class. Like many other liberation movements, this has given the ANC almost mythical (and mystical) status akin to a religious authority. For many South Africans, the ANC can do no wrong – only its leaders can fail the movement (Pillay 2011).

While the ANC received 62 per cent of all votes cast in the 2011 municipal elections, according to Hassen (2011), using Statistics South Africa's 2010 Mid-Year Population Estimates, 15.6 million eligible votes over 20 years of age did not vote, compared to the 13.7 million voters who did. If 18-20 year olds are counted in, the 'silent majority increases, indicating a significant and potentially increasing degree of voter alienation. Percentages of voter registration and voter turnout suggest that the participation in general elections in South Africa has decreased (Ibid).

While there has been an increasing number of eligible voters, an increase in the number of registered voters since 1999, and an overall increase in total votes cast since 1999, the number of casting a vote between 1999 and 2004 actually declined (Schulz-Herzenberg 2009:24).

Moreover the authors analyse that

Despite the growth in the eligible voting population and increase in registration figures, the number of valid votes cast actually decreased by over 3.9 million between 1994 and 2004 elections. However, in the 2099 elections more people voted compared to 2007. The turnout increased from 76.7 per cent in 2004 to 77.3 per cent in 2009. Nevertheless, the ANC vote in 2009 increased from 10.9 million in 2004 to 11.7 million in 2009 (Ibid: 24).

Moeletsi Mbeki (*Business Day* 21 February 2011) warns that as long as the South African economy remains the way it is today, the time will come when South Africa's Tunisia Day will arrive. He argues that the ANC inherited a flawed, complex society it barely understood; its tinkering with it is turning it into an explosive cocktail. Moreover Mbeki is convinced that the time will come when the ANC will have to cut back on social grants, which it uses to placate the black poor and to get their votes (Ibid).

Government must teach its people to fish; not be suppliers of fish. The latter is not sustainable. The government pond will never be able to supply more fish in twenty years than it is doing now to the ever increasing masses of people in this country. Let's work to reduce dependency (Minister of Finance, citing Mandisha Motha- Ngumla in his March, 2011 budget speech)

Since decades, residents at Lake Gariep are fishermen. It was not the government that thought them how to fish. People adapt to situations and grow with them so too the ANC has to adjust in order to create a South Africa in which people have a dissent life.

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Comparative Living Conditions Lake Gariep - Venterstad and Oviston in 2007 and 2011

11 2007 4114 2011			
	2007	2011	Major Changes
Total Households Percentages in the	n154	n198	
table are based on total households			
Household Size (mean)	4.42	3.92	X
Household Size (incul)	2	3.72	11
I anoth of regidence in the area (0/)			
Length of residence in the area (%)	10	22	
under 5 years	18	32	
between 5 and 10 years	20	26	
more than 10 years	58	42	
RDP housing (%)		86	
Piped Water (%)			
None		0	
Piped Water in the house		14	
Piped water on the side of the yard		85	
Public Tab		0.5	
Services (per cent)			
Free basic water		42	
Free basic electricity		25	
•			
Satisfied with Service Delivery		68 per cent yes	
TT (0/)		31 per cent no	
Homeowners (%)		74	
Rooms of the house (%)		44 per cent has	
		4 rooms	
Amenities (%)			
Fridge	59	58	
Electric Stove	61	70	X
Paraffin Stove	47	34	X
Bicycle	28	11	X
•			
Car	27	10	X
TV	64	62	X
Radio	82	68	X
Computer		2	
Telephone /Cell Phone		62	
Livestock		30	
Income Sources (%)			
Formal Job	18	15	
Casual Job	20	40	
Selling Fish	48	19	
Social Grants	71	73	

Household Income (%)			
R0-R500 per month	40	28	
R501-R1500	37	57	
R1501-R3000	12	12	
R3001 and more	10	3	
Income Mean	R962	R924	
Median Income	5	5	
Income required to get by	6,4	5,6	
	R1699	R1299	
Food Security (%)			
yes	69	61	X
Reported Household Situation			
Better than in the past	52	76	X
Same	30	13	X
Worse compared to the past	19	9	X
Most positive Changes since 1994 (%)			
Housing and Infrastructure	52	65	X
Education opportunities	24	20	
Job opportunities	3	5	
Personal pride and freedom	9	12	
Relationship with other South Africans	44	4.5	X
Percentage of Households with access	69	73	
to land for food gardening			
Percentage of Households	11	15	
reporting cash income from selling			
vegetables			

Interviewer Name Lake Gariep Survey Zwelithini David Phongolo Zamani John Noyo Dumila Mkrola A.L.Mengmene Fundile Jeffrey Tshemse Mfazwe Vuma Bongani Joseph Rantie Zingisile Noyo Welle Noyo Leona Thompson Prudence D. Moses Werner King Neville Robert Eliona Ancoise Anna Hetta Celeste

Lake !Gariep Questionnaire 2007

Q No.	Name of Communit	ty:	House No	.:	Interv	viewer:	Date:	
Name of Household member: Male								
1. How ma	ny years has your hous	ehold been stay	ring in the	1-2 C	3-: 20 yea	5 □ 6-9 □	10-20	
2. How man	ny people live in your l	nousehold?		<u> </u>		Male:	Female:	Total:
3. How man	ny people in your house	ehold are older	than 60 year	rs?		Male:	Female:	
4. How ma	4. How many people in your household are under 15 years old? Male: Female:							
	members of your house g, looking for work, or				ey	Yes 🗆	No 🗆	
Q2. Inco	me							
1. W	hat are the main source Permanent Empl	_	<u>-</u>	old? No □				
	Causal jobs:	Yes		No 🗖				
	Social grant:	Yes		No 🗆				
if yes, which	ch grants: a) old-age pe	nsion 🗖 b) dis	sability grant	c) c	hild su	pport grant	1	
	Fishing:	Yes		No 🗖				
Q3. Emp	loyment							
	yone in your have permanent nt?	Yes □ 1.1 If yes, ho	w many pers	sons?	No			
2. Are any	members of your	No 🗆		Yes []	2.2 Ar	e they lookin	g

household unemployed?		2.1 How many unemployed?	for work? Yes No
3. Do members of your household have casual/informal jobs?	No 🗆	Yes □ 3.1 How many persons have casual jobs?	

Q4. Fisheries

1. Do you or members of your household fish?

Yes □	No □
1.1 How often do you fish?	1.3 Why do people in your household not fish?
1 - 3 times per week □	
1to 3 times per month □	
only a few times per yea	
1.2 Does the fish catch play an important role in your household's diet? Yes □ No □	

Q5. Eating Fish

1. Do you or members of your household eat fish?

Yes □	No 🗆			
1.1 How often do you eat fish?	1.2 Why do you not eat fish?			
Weekly □ Monthly □	Price		Bones	
Monthly 🗀	Availability		Tradition	
	Taste reason:		Other	

Thank you very much!!!

Lake !Gariep Interview 2007

Q No.	Name of Community:		House No.:		Interviewer:		Date:	
Name of Ho	usehold member:	Male		Age:			Home language	:
					English		Afrikaans \square	Xhosa 🗖
		Female			Other:			

We are conducting a study to learn more about the people in Venterstad and we would like to put some more questions to you. The answers you give will be treated confidentially and the answers can't be traced to individuals because we will put them together into groups. As soon as we finish with our results the study will be reported back to the residents of the communities.

I. Household Composition

3. How many meals does your household usually have per day?

2

3

	1.1 Gender	1.2	1.3 Education	1.4 Occupation	1.5 If 5: unemployed
	female: f	Age in years (babies under 1 year =0)	1. no education 2. up to Std 3 3. Std 4-6 4. Std 7-10 5. Matric 6. Matric plus.	 Full-time employed seasonal employed informal job looking for work unemployed retired going to school staying at home housework, childminding social grants 	How long have you or members of your household been unemployed? (how many months or years)
			7. Technikon, 8. University		Months Years
1.H	F M			1 2 3 4 5 6 7 8 9 10	
2.	F M			1 2 3 4 5 6 7 8 9 10	
3.	F M			1 2 3 4 5 6 7 8 9 10	
4.	F M			1 2 3 4 5 6 7 8 9 10	
5.	F M			1 2 3 4 5 6 7 8 9 10	
6.	F M			1 2 3 4 5 6 7 8 9 10	
7.	F M			1 2 3 4 5 6 7 8 9 10	
8.	F M			1 2 3 4 5 6 7 8 9 10	224
9.	F M			1 2 3 4 5 6 7 8 9 10	

6. Do you grow vegetables? Yes/No Yes/No					yes, do y	ou sell vegeta	bles?
7. Do you consider secure?							
8. Do you have in Radio	your household:	1. Fridge 4. Bicycle		ectric Stove ar		. Paraffin Stov . TV	re 7.
		Q2. 0	Quality of I	Life			
(compared to the pass) 1. better		rorse		3. betwee	en the two)	
10. In which of the f	ollowing areas h	nave you seen	n the most pos	itive changes	since 19	94?	
1. Housing and Infrastructure	2. Education opportunities	3. Job	opportunities	4. Personal pand freedom		5. Relationshi other South A	_
11. Here are some as aspect. If you are: 1. Very sa (If the aspect I mention	atisfied, 2. Satisf	fied, 3. Dissa	atisfied or 4. V	ery dissatisfic	ed.		ach
	1	. Very	2. Satisfied	3. Dissatisfied	1 4	Very	5. Not
		atisfied	2. Sunstice	3. Dissuisiles	l l	satisfied	importan

	1. Very satisfied	2. Satisfied	3. Dissatisfied	4. Very dissatisfied	5. Not important
1.Your education					
2. Your health					
3. Your family's happiness					
4. The food you eat					
5. Job opportunities					
6. Your family's income					

7. The size of your house			
8. Your freedom of movement			
9. Your security relating to crime			
10. Your leisure time activities			
11. The distance of shops, schools, transport and other services to your dwelling			
12. Household possessions			
13. The security of tenure			

12. Taking all things together how satisfied are you with your life as a whole these days? Generally speaking would you say you are 1. very satisfied, 2. satisfied, 3. dissatisfied, or 4. very dissatisfied?

1. very satisfied	2. satisfied	3. dissatisfied	4. very dissatisfied	5. Neither dissatisfied /
				nor satisfied

Q.3 Income

13. Approximately what is this household's average monthly income?

R 0 - R 100	1
R 101 -R 200	2
R 201 - R 500	3
R 501 – R 750	4
R 751 – R 1000	5
R 1001 – R 1500	6
R 1501 – R 2000	7
R 2001 - 3000	8
R 3001 and more	9

14. What monthly income does that household need to get by?						
Use above codes:						
Q3 Fi	sheries					
1. How many members of your household fish?	2. How often do you and members of your					
	household fish?					
3. How important is fishing for you and your hou	sehold in terms of your daily living?					
4. Do you and members of your household sell fish? 1. If yes, where do you sell your fish?						
14. Is the fish-selling a high or low income contribution for your household?						

15. Are there seasonal variations in your fish catch?	
16. Is the money you earn by selling fish very important for your household's income?	
16. Is the money you earn by selling fish very important for your household's income?	
16. Is the money you earn by selling fish very important for your household's income?	
16. Is the money you earn by selling fish very important for your household's income?	
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16. Is the money you earn by selling fish very important for your household's income?	
16. Is the money you earn by selling fish very important for your household's income?	
16. Is the money you earn by selling fish very important for your household's income? 17. If you are not going fishing, what are you doing instead?	
17. If you are not going fishing, what are you doing instead?	
17. If you are not going fishing, what are you doing instead?	
17. If you are not going fishing, what are you doing instead?	

THANK YOU VERY MUCH !!!!!!!

Lake Gariep Survey 2011

Please tell me about all the people who live in this household, that is, the people who usually share meals and household expenses.

Q1. Household

1. How many years has your household been staying in the area? 1-2 3-5 6-9 10-20 over 20 years										
2. How many people live	in your h	ouse	hold?			Male:		Female:		Total:
3. How many people in y	our house	hold	are older tha	an 60 years	?	Male:		Female:		
4. How many people in y	our house	hold	are under 15	5 years old	?	Male:		Female:		
5. Are any members of you working, looking for working					-	Yes 🗆		No 🗆		
Q2. Income					J					
2. What are the so Permanent jobs:	urces of in		ne in your ho	ousehold? Disability	grant		Yes l	-	No	
Causal jobs: No □	Yes 🗖	N	o 🗖	Foster Ca	re grar	nt Yes 🗆				
Old Age pension:	Yes 🗖	N	o 🗖	Care depe	endenc	y grant	Yes		No	
Child support grant:	Yes 🗖	N	o 🗖	Earnings	from s	elling:	Yes		No	
			product		fixing	or selling	goods	s, home grov	vn	
Q3. Employment										
1. Does anyone in your household have permaner employment?	nt		s □ If yes, how i	many perso	ons?	No C]			
2. Are any members of yo household unemployed?	our		No 🗆			ow many ployed?	f	2.2 Are they for work? Yes No.	look o 🗖	ing
have casual jobs?		Yes 5		persoi	ns have casu	al jo	bs?			

Q4. Fisheries

1. Do you or members of your household fish?

Yes □	No □				
1.1 How often do you fish?	1.3 Why do people in your household not fish?				
1 - 3 times per week □					
1 - 3 times per month □					
only a few times per year □					
1.2 Does the fish catch play an important role in your household's diet? Yes □ No □					
1.4 Do you sell the fish? Yes □ No □					
Q5. Nutrition					
 How many meals does your household usua In the past week, on how many days did you Days: Do you grow vegetables? Yes \(\sigma\) No \(\sigma\) No \(\sigma\) Do you consider your household as food see Yes \(\sigma\)	ur household consume meat? 3.1 If yes, do you sell veggies? Yes □				
5.1 How often do you eat fish?	5.2 Why do you not eat fish?				
Weekly □ Monthly □	Price Bones				
5.3 In the past week, on how many days did your household consume fish? Days:	Availability				
Q6. Housing					
 Is your dwelling? 1. Owned by someone in the household 2. Rented 3. Free (no rent is paid) Is this an RDP house? Yes □ No □ What is the main source of drinking water for members of your household? 1. Piped water in dwelling 2. Piped water on site or in yard 3. Public tap 4. Water carrier/tanker Does this household receive: Free basic water Yes □ No □ Free basic electricity Yes □ No □ How many rooms has your house? 1 2 3 4 5 Are you satisfied with the service delivery of your municipality? Yes □ No □ Q7. Assets 					
 Which of the following items does the household have? 1. Fridge 2. Electric Stove 3. Paraffin Stove 4. Bicycle 5. Car 6. TV 7. Radio 8. Computer 9. Telephone/Cell phone Does your household own livestock? Yes □ No □ Q8. Quality of Life 					

1. Can you tell me about your life at present? Is your life getting better or worse compared to the past?

1. better	2. worse	3. between the two

2. In which of the following areas have you seen the most positive changes since 1994?

1. Housing and Infrastructure	2. Education opportunities	3. Job opportunities	4. Personal pride and freedom	5. Relationship with other South
				Africans

3. Here are some aspects of people's life. I would like you to tell me how satisfied you are with each aspect.

If you are: 1. Very satisfied, 2. Satisfied, 3. Dissatisfied or 4. Very dissatisfied.

(If the aspect I mention is not important enough to be concerned about, say: 5. not important)

	1. Very satisfied	2. Satisfied	3. Dissatisfied	4. Very dissatisfied	5. Not important
1.Your education					
2. Your health					
3. Your family's happiness					
4. The Municipality					
5. Job opportunities					
6. Your family's income					
7. The size of your house					
8. Your freedom of movement					
9. Your security relating to crime					
10. Your leisure time activities					
11. The distance of shops, schools, transport and other services to your dwelling					
12. Household possessions					
13. The government					
14. Your future					

4. Taking all things together how satisfied are you with your life as a whole these days? Generally speaking would you say you are 1. very satisfied, 2. satisfied, 3. dissatisfied, or 4. very dissatisfied?

1. very satisfied	2. satisfied	3. dissatisfied	4. very dissatisfied	5. Neither dissatisfied
				/ nor satisfied

Q9. Income

1. Approximately what is this household's average monthly income?

	·
R 0 - R 100	1
R 101 -R 200	2
R 201 - R 500	3
R 501 – R 750	4
R 751 – R 1000	5
R 1001 – R 1500	6
R 1501 – R 2000	7
R 2001 - 3000	8
R 3001 and more	9

^{2.} What monthly income does that household need to get by? Use above codes (**number between 1 and 9**):

Stelzhammer, H., Wood, S. 2012, South Africa: Livelihoods at Lake Gariep - A Baseline Study; Development Southern Africa, 9(4); (in press)

This paper focuses on the livelihoods of the rural population around Lake Gariep, South Africa's biggest inland water body, with a focus on the role of fishing activity and its contribution to overall welfare. It incorporates the first empirical social research undertaken in this area and contributes to the body of knowledge on livelihood studies in general and post-Apartheid South Africa in particular. A socio-economic survey was conducted in three townships proximate to the lake. Data on employment, household size, and income for 263 households were generated. Relating the research findings to national politics, it is argued that the Lake Gariep area constitutes a case of severe neglect and policy failure, in direct contrast to the declared aims of the ANC since it was first elected almost two decades ago.

Keywords: inland fishing policy, Lake Gariep, rural poverty, South African politics, Eastern Cape

1. Introduction

Inland fisheries account for at least 15% of total global employment in capture fisheries and aquaculture (FAO, 1999). These resources are vital for people in rural areas, especially in developing countries. Fishing for income and consumption is part of the daily survival needs of fishermen (FAO, 1999). Despite their socio-economic and ecological importance, inland fisheries are often neglected in water resource planning and policies by governmental bodies (Ellender et al., 2009: 679). The Food and Agriculture Organization (FAO, 1999) estimates that about 90% of the 38 million people recorded globally as fishermen are classified as small-scale; at least 100 million people are estimated to be involved in the small-scale post-harvest sector. The FAO does not, however, explicitly address poverty in fisheries (FAO, 2000: 3). Livelihoods depending on fishing for their day-to-day survival are placed in a wider context of socio-economic and political constraints. Béné (2003a) identifies an absence of fisheries' case studies in the debate on poverty, especially in developing countries. Despite the high level of poverty reported in fisheries for more than fifty years, Béné's work was originally motivated by the absence of references to fishery communities in research currently carried out on poverty (Béné 2003a: 17-58).

In several African countries, inland water bodies provide basic resources to many households and contribute substantially to both rural and national economies. For example, inland fisheries in Malawi supply about 70% to 75% of the total animal protein consumption of both urban and rural low-income families (FAO, 1996). In northeast Nigeria, fisheries provide employment, income, trading opportunities and valuable protein for human consumption. 42% to 70% of rural households were found to earn some income from fishing. On average it contributed 24% to 28% (Smith et al., 2005: 359-383).

Within the substantial body of research on socio-economic development in post-apartheid South Africa, the field of inland fishing and associated policies have received comparatively little scholarly attention. Andrew (et al. 2001), Weyl (et al. 2007), Ellender (et al. 2010), are among the few exceptions. Commensurate with the lack of specialized academic work, successive ANC governments have, following their apartheid-era predecessors, largely neglected the inland fishing production and the communities dependent upon it in favour of the marine fishing sector and others such as wild resources, livestock and crop production (Turner et al., 2009).

The inland fishing sector is neglected by the Ministry of Environment Affairs and Tourism (MEAT), which initiated the process of developing a national marine policy launch in 1994 (MEAT, White Paper, 1997). The South African government prioritizes the marine fishing sector which provides work for around 27 000 people; its wholesale value is worth R1.7 billion, which represents 0.5% of South Africa's GNP (Martin, Nielson, 1997). Shackleton et al. (2006) estimated that the wild resources, livestock and crop production in the communal areas of South Africa added approximately USD2 billion in value to the gross domestic product in 1999. The 'small-scale' inland fishing sector, included in this figure, is perceived as being economically irrelevant, and is disregarded by the Ministry for Agriculture, Forestry and Fisheries.

This article contributes to the study of inland fishing communities by presenting empirical data drawn from one intensive baseline survey of three villages near Lake Gariep (Place of great dryness, San), in the provinces of the Eastern Cape and the Free State in 2007. The research aimed to evaluate the significance of fishing activities to the livelihoods of the rural population, to investigate current consumption patterns and to determine the socio-economic living situation of fishing and non-fishing households in the respective communities. The article also situates the research findings in broader contexts of socio-economic development, poverty, institutional change, policy competence, and political culture in South Africa. The data from Lake Gariep indicates a strong correlation between inland or freshwater fishing and poverty.

2. South Africa: Past and Present

Underdevelopment of inland fishing industries and neglect of communities dependent on it constitutes one legacy of the apartheid regime, continued under a new system ostensibly oriented to overcoming such inequities. Institutional constraints, racial divisions and political control over access rights and ownership characterise a structural-historical pattern that manifests itself as the status quo in South Africa. In order to comprehend the marginalisation of political voice that partly explains the under-utilisation of the inland fishing sector, social forces which developed over decades of colonial rule and Apartheid are highlighted. The 1913 Land Act set the limits of the so-called "African reserves", later referred to as Bantustans, restricted black people to 13% of the total land area, prohibited land purchase by Africans outside these areas and limited the size of individual holdings within them (Lipton, 1985: 239). As a result of this Act, large numbers of Africans were forced by economic necessity to seek at least part-time wage-paid employment on white farms, in mines and factories.

Off-farm labour provided black and coloured people with an income that was higher than what could be earned through subsistence farming or fishing. Labour remaining in the rural areas was primarily allocated to production for home consumption rather than market production. Black commercial farming "was essentially ruled out as a livelihood option with the clearance of agrarian black populations during the late nineteenth and early twentieth centuries, implemented as a conscious policy, complete with designated labour destinations for displaced male farmers in South African mines and white owned farms that actively sought labour" (Bryceson, 2004: 624). The Apartheid government favoured white owned monopolies and prohibited the growth of black owned businesses. "Apartheid legislation distorted the fair distribution of access rights to natural resources, denying the majority of South Africans the use of land, water and mineral marine resources" (Martin and Nielson 1997: 156). Large-scale farmers had privileged access to natural resources, while black Africans in rural areas lived under harsh conditions of deprivation.

Although the African National Congress (ANC) committed itself to the "upliftment of impoverished coastal communities through improved access to marine recourses" (Bond and Khose, 1994: 104) the inland fishing sector was not part of the

Reconstruction and Development Program (RDP) policy formulations, and the improvement in living standards for impoverished small-scale fishing communities through better access to lakeshores was remained unfulfilled. The Fisheries Policy Development Committee was established in order to formulate a new fisheries policy with the participation of all sectors of the fishing industry. During apartheid, people placed at Lake Gariep were not granted access rights to the natural resources. Therefore a local inland fishing industry never emerged. The ANC declared that the long-term vision for South Africa was to redistribute income and opportunities in favour of the poor and to guide an economic environment which created sufficient jobs for all jobseekers (White Paper, 1995). There was no inland fisheries policy announced in 1997. One consequence was that communities located around inland water bodies remained impoverished under the ANC government (White Paper, 1997).

3. Geographic area studied

Lake Gariep: South Africa's largest impoundment

(INSERT FIGURE 1 ABOUT HERE)

The fieldwork was conducted in Oviston, Venterstad, Eastern Cape and Gariep, Free State Province. Venterstad and Oviston are part of the Gariep Local Municipality (Joe Gqabi District Municipality), which has its headquarters in Burgersdorp, about 60 km away. Gariep is part of the Xhariep District Municipality. The three villages were chosen because of their proximity to the lake.

Lake Gariep, formerly called Verwoerd Dam "named after Hendrick Verwoerd, the grand architect of apartheid" (WCD, 2000: 3), covers 360 km². It is South Africa's largest impoundment and was established in 1971. Situated between the Northern Cape Province, the Eastern Cape Province and the Free State Province, Lake Gariep has a shoreline of approximately 400 km. This shoreline falls under the jurisdiction of two local nature conservation authorities, Eastern Cape Parks Board and Free State Nature Conservation. Most of the shoreline is closed to angling but two open-access fishing regions, Gariep Dam Fishing Area (GDFA) and Venterstad fishing area (VSFA), each about 35 km long, have been designated for fishing. In these areas, fishermen are restricted to fish between 06h00 and 18h00.

Lake Gariep was a major component of the Orange River Development Project, instigated in the 1950s after the election victory of the National Party (NP). Just as the "grand scheme" of apartheid represented the culmination of Afrikaner nationalists' political dream, the ORDP may be seen as a culmination of their economic dream of South Africa as the economic giant of the South" (Ibid: 3). The irrigation of 310 000 km² of land and the creation of 400,000 jobs was intended to improve the livelihoods of some 160,000 people (Ibid: 5). Due to their legacy lasting until today, two objectives of the ORDP project should be mentioned. The Department of Water Affairs clearly stated that the major aims of the ORDP were to impede the migration of the rural population to the cities. The establishment of stable farming communities allowed employment

creation through the construction of the scheme as well as the expansion of agricultural production and generation of hydropower. The benefits of power generation came from an installed capacity of some 150 MW in total, as well as supply of water to towns of Bloemfontein, Kimberly, De Aar, Port Elizabeth, Uitenhage, Cradock, and small towns in the southern Free State, in the North-West and Eastern Cape Province. The creation of tourist and recreational facilities was also planned, as well as the stimulation of rural development including communication facilities, schools, hospitals, roads and railway extensions (WCD, 2000: 6). Both the "white dam", declared as necessary for South Africa's economic growth by the apartheid regime, and the "black lake", the forgotten livelihoods at South Africa's biggest inland water body, are placed in the centre of this research. "Historically, the conflict over water was the source of sustained colonial and apartheid oppression: for example, large dams displaced tens of thousands of people on the Zambezi River (Kariba and Cahora Bassa dams) and Orange River (Gariep Dam)" (Bond, 2002: 271).

4. Livelihood Analysis

For the applied data analysis the sustainable livelihood approach (Ellis, 1998) was selected due to its fundamental precept "to identify what the poor have rather than what they do not have" (Ellis, 2000: 27). The following definition is now generally adopted: A livelihood comprises the capabilities, assets (including both material and social resources) and activities required for a means of living. A livelihood is considered sustainable when it can cope with and recover from stresses and shocks and maintain or enhance its capabilities and assets both now and in the future, while not undermining the natural resource base (DfID, 1999, 1.1).

The social survey conducted is based on the five criteria of the livelihood approach developed by Ellis (2000). Following these criteria, a livelihood comprises "the assets (natural, physical, human, financial and social capital), the activities, and the access to these (mediated by institutions and social relations) that together determine the living gained by the individual or household" (Ibid: 10).

The study draws on this actor-oriented perspective, which puts people at the centre and points to their agency, with a focus upon local households perceived as the central social unit. The core investigation is based on this micro-unit as a structure that essentially regulates daily life. The concept of sustainable livelihoods is understood in the light of a holistic 'development' approach focusing on people's strategies to survive. This approach stresses the links between individual or household assets, the activities in which households can engage with a given asset profile, and the mediating processes (institutions, regulations etc.) that govern access to assets and to alternative activities (Allison and Ellis, 2001: 377-388).

The livelihood approach opposes the view that economic concerns are necessarily of primary importance and refers in particular to the means of gaining a living. In this context, we draw on De Haan (2009, 2005, 2003) and Polanyi (1977), who developed a sophisticated conceptualization of livelihoods. Polanyi viewed the economy as socially,

culturally and historically embedded. People need a material base to satisfy their needs and wants, yet to understand their livelihoods one has to go beyond the material and thus beyond formal economics (Polanyi 1977: 55-86).

5. Methods

The research was undertaken during 2007 and 2008 and includes interviews not only with household heads, members and dependants, but also with governmental officials. Due to the underlying methodological framework, the livelihood approach (Ellis, 2000), it was presumed that fishing per se is part of a diversified livelihood portfolio of the rural population. Hence a socio-economic questionnaire was designed to gather information not exclusively on fishing. The questionnaire was split into five sections dealing with different livelihood categories: 1. Household structure, 2. Income, 3. Employment, 4. Fisheries, 5. Fish consumption patterns. The categories were discussed with locals, and a pilot study was carried out. The questionnaire was subsequently modified to incorporate valuable suggestions. Twenty local residents, who were familiar with the area and spoke the local languages, were trained in structured interviewing techniques, and then acted as the interviewers of this baseline survey. Due to a lack of reliable and valid population data, community mapping was used to estimate population numbers in the townships and informal settlements (Amsden, VanWynsberghe, 2005). During a workshop, the interviewers were asked to estimate the population size of their respective township. In accordance with these numbers, 263 household interviews were conducted, in which socio-economic data from more than 1300 inhabitants were obtained. Interviewees were asked to conduct the survey by randomly walking through a particular township and selecting every third house for an interview. The sampling procedure was undertaken within three days. As many of the houses selected in this way were left out, either because a potential interviewee refused to participate in the survey or because there was nobody at home at the time, sampling bias was considered to have been minimal. We consider this approach suitable to obtain a random sample within the logistical and financial constraints of the survey.

After the survey, in-depth interviews were conducted. These were designed to provide additional, supplementary insights into the livelihoods of fishing and non-fishing households. Only households in Venterstad and Oviston were included due to financial and time restrictions. 86 qualitative interviews were conducted. The identical sampling framework used for the first survey was applied. The in-depth interviews were conducted to generate data on the quality of life. The objective was to identify the personal perception of each interviewee concerning security, housing, education, household possessions and the relationship with other South Africans (Table 4). The questionnaire was divided into four categories that were comprised of several subgroups. Within the first category, household composition, data on education, occupation, food security and household possessions were collected. Part 2, Quality of Life, collected information on the degree of satisfaction households in this area had with specified categories (Table 5). The last cluster was an income ranking (Figure 3). An MS-ACCESS database was designed for the storage and analysis of the survey data

and the in-depth interview data. The results of these qualitative data were synthesized with the socio-economic survey through the data analysis tools and complement each other.

All questionnaires were assessed using exploratory data analysis (MS EXCEL). Responses were entered into the database using predefined forms. Summary tables of the various questions were generated using numbers and percentages according to standard methodology. Further mathematical analysis was carried out only for selected information categories to allow additional interpretation of the data. The study also involved some days accompanying fishermen to the lakeshore and observing people go about their everyday activities. The author visited many households and many hours were spent in conversation with locals.

6. Results

Summary statistics for the socio-economic household survey are provided in table 1. In total, 263 household interviews were conducted. It is estimated that 1750 households are pursuing their livelihoods in the area which leads to a total of 7524 people living in VSFA and GDFA. (INSERT TABLE 1 ABOUT HERE)

Population data from this study record 6962 people living in Venterstad and Oviston. VSFA and GDFA are predominantly populated by Xhosa-speaking South Africans, constituting 62% of the total population. Afrikaans-speaking South Africans account for 34% of the total population (Lake Gariep Livelihood Study, 2007).

Around half of the population at Lake Gariep, most of them former constructions workers and their families, are living in the area for more than 20 years. The average number of people per household is 4.13 ± 2 , Standard Deviation). Forty per cent of the total population was under the age of 16 years. The average number of children under 16 years per household was 1.67, which corresponds to a child dependency ratio of 78.3% per household. One per cent of people living in the area obtained a university degree, 13% have matriculated, and 5% have no formal education.

Eighty-two per cent of households had members (between 16 and 65 years) without formal employment. (INSERT FIGURE TWO ABOUT HERE). Eighteen per cent of the population had formal jobs and 13% worked on a casual basis.

Eighty one per cent of households received state welfare grants. A quarter of all households received old age pension grants, 21% of households received disability grants and 41% collected child support grants. The sample of 229 households received a total of 265 state welfare grants, which was an outlay by the state of R172170 (USD23227) per month. Nine per cent had no income at all and 22% of households had less than R500 per month. (An average household has around four members; each member has R125 per month.) (INSERT FIGURE 3 ABOUT HERE)

The average monthly income per household was R586 (\pm R157). The average monthly income was higher in Afrikaans-speaking households (R742; \pm R95) than in the Xhosa

speaking households (R482; \pm R185). Households without children had an average monthly income of R640 (\pm R124), whereas households with children had a monthly income of only R520 (\pm R127).

Table 2 (TABLE 2 INSERT ABOUT HERE) provides a summary statistic for fishing households. In Oviston 81%t of the households are classified as fishing households, 78.1% of respective household members fish at least one to three times per week. Fifty-four per cent of households in Venterstad have members who fish, respectively 56.6% of the total fishing households fish at least one to three times per week.

In Hydropark, 50% of the sampled households fish; 47.1% of the households fish at least one to three times per week. The mean income of fishing households was R568 (± R138) per month and thus lower than the mean income of non-fishing households, R618 (± R157) per month. Thirty five per cent of fishermen sold their fish catch. In addition, possession scores comparing fishing and non-fishing households indicate that fishing households own fewer assets than non-fishing households (INSERT FIGURE 3 ABOUT HERE).

Only thirteen per cent of fishing households own a car compared to 28% of non-fishing households. Thirty one per cent of fishing households fish weekly or at least one to three times per month and are therefore classified as subsistence fishermen. Ninety five per cent of the total population studied eats fish, 57% at least one to three times per week. The study identifies that there are no significant differences between fishing and non-fishing households related to their cultural origin. (INSERT TABLE 3 ABOUT HERE)

For the majority of the population, the most positive change since 1994 constitutes an increase of their personal pride and freedom (83%). Only five per cent perceive job opportunities as the most positive changes since 1994. For 37% the relationship with other South African has improved and for 54% housing and infrastructure are the most positive changes since 1994.

In Oviston, 31% of households and in Venterstad around 25% of households struggle to get enough food. Fifty four per cent of households in Oviston and Venterstad have access to land for food gardening and 15% of households in Oviston and 10% in Venterstad report cash income from selling vegetables. The quality of life study indicate that 54% were dissatisfied or very dissatisfied with the their monthly cash income and only 9% were very satisfied with the size of their dwelling

(INSERT TABLE 4 ABOUT HERE)

7. Discussion

The study provides the first socio-economic assessment for communities that harvest freshwater fish in the Lake Gariep area. It confirms that these fisheries contribute substantially to rural livelihoods. Formal employment is only available to a very low

percentage of the population; hence the sale of fish is a significant even though low source of income contribution.

At Lake Gariep, fishermen belong to low-status, marginalized households and compared to non-fishing households they have less assets and less cash income. Although often statistically accurate these presumptions are too simplistic to offer a pertinent clarification of livelihood functions in small-scale fishing sectors. The research intended here indicates that fishermen are poor not because they fish but due to an absence of other employment option and income generating alternatives. The literature on small-scale inland fishing communities leads to the conclusion: Fishermen are poor because they fish (Béné, 2003b). The study clarifies that fishermen are not poor because they fish but they fish because they are poor. High levels of poverty in the Lake Gariep area mean that fishing is widely relied on for survival. The fish catch plays an essential role in the daily food consumption and is a central part of the weekly diet. Moreover, fishing is a main source of income for the household's survival strategy; a few fishermen sell their catch to other households. Even though fishing is free, as fishermen indicated the fishing equipment is a costly investment. Some inhabitants live too far away from the lakeshore, or are too old to fish for themselves. Household income derived from state grants is used to buy fish from local fishermen. Reasons why households do not fish vary; some interviewees stated that members are ill (TB); others are too old; some households live too far away from the lake shore.

The 1996 constitution fundamentally changed local government into an independent sphere of 'governance', described as the hands and feet of reconstruction and development in South Africa. Yet before local economic development can flourish which could be a promising and necessary strategy to overcome or at least reduce levels of rural poverty exemplified in the case study of Lake Gariep, it has to be considered that municipalities should be able to basically improve livelihoods. The case of Lake Gariep exemplifies that local municipalities essentially do not have the capacities and capabilities to develop their 'areas'. The 'Gariep Spatial Development Framework', a first draft baseline document, dated August 2006, is part of the Gariep Integrated Development Plan and is closely linked to the LED Programme (Gariep Spatial Development Framework, 2006: 3). This development framework excludes fishing, even though fishing could be one of the region's most important assets. While 'official' figures have to be treated with caution, Lake Gariep's demographic and economic profile states that "economic analysis indicates high levels of dependency on subsidies and low economic growth increase dependence on state funded projects, with specific reference to housing and infrastructure" (Ibid: 13). Precise details of the infrastructure are not specified but left to the readers' own interpretation.

Development strategies of this underdeveloped sector should be credible and reinforced by the government and on a local level by the municipality instead of creating further dependence on welfare grants and state subsidies (Chasse and Jensen, 2009). Fishing should be prioritized as key component in a strategy that includes this economically totally neglected 'environment' in future policy perspectives. Local economic

development could be supported, as a pre-market locally organized culture of fishing already exists. The institutional setting (assistance with storage of the catch; development of marketing ways and infrastructure; training of locals to create employment or even the establishment of business owned by local fishermen) of this process is non-existent. It has to be questioned if the development policies of the government, for example, the Growth, Employment and Redistribution strategy, are appropriate. More than 90% of the lake's shoreline is not publicly accessible due to nature conservation areas for wildlife. Yet, as interviews indicate, fishermen are rather tolerated than encouraged to use the natural sources.

Since 1994, poverty trends based on social surveys and censuses in South Africa are measured by Statistics South Africa and the demographic numbers are used by the government for grants and subsidies. According to the Statistic South Africa Census Data 2001, the village of Venterstad has 4285 inhabitants, 560 people reside Oviston (Gariep, Spatial Development Framework, 2006: 32) and Hydropark has 561 inhabitants.

Results of this study identify a significant higher population number than officially measured by Statistic South Africa Census 2001. The demographic records of the socio-economic survey clearly illustrates that 2348 more inhabitants reside in the explored area than included in the Statistic South Africa Census 2001. Given the enormous amount of people living in the area, namely 2348 people, who are not measured within the official Census data 2001, this raises questions about the role of political interests in the assortment and presentation of official census data. We hypothesize that the lower the actual number of people measured, the lower is the required investment by the state for infrastructure and housing, which is based on census figures. "One has to be frank about the fact that this government body undergoes major problems in conducting these surveys," (Du Toit, 2005: 5) which henceforth could be a factor contributing towards rural underdevelopment perpetuated by the ANC government.

One of the key expectations of the post-apartheid government was that it would address the legacies of racially determined poverty and inequality. Social differentiation is growing within racial groups. In South Africa the black rural population experiences the highest levels of poverty, estimated at 70.9% compared with the more contested national poverty rates, evaluated between 49 and 57% (Andrew and Jacobs, 2009). Data from the case study also reflects this trend. Comparing income data from Xhosa - speaking households to Afrikaans speaking households, the black rural population at Lake Gariep is 'poorer' than Afrikaners. Child dependency rations in Xhosa – townships are higher than in colored townships. Town design follows Apartheid-era patterns, with black town ships located at some distance from the centre. In coastal villages, the majority of fishermen are colored and speak Afrikaans. Martin and Nielson (1997: 157) noted "it is important here to recognize the historical distinctions made by the apartheid government between the colored and black communities." At

Lake Gariep these patterns are also occurring, suggesting that "cultural" habits created during apartheid are replicated.

The Eastern Cape Province (Venterstad and Oviston), is one of the poorest and most populous South African province's. The official unemployment rate is 27% (Policy-Budget Speech, 2009: 4), which is significantly lower compared to Lake Gariep. The unemployment rate in the area (Figure 2) is significantly higher than the South African average. Employment is not available to those who seek it and wage income does not automatically imply wellbeing. Households primarily depend on state welfare grants to get cash income. For struggling rural households, the welfare system has proven a welcome injection of reliable cash income which is primarily invested in human and social capital, notably direct family welfare. Households receiving old-age pensions or disability grants are better off than households without disabled or old people. However, there is little indication that the pension payments or other welfare grants are generating sustainable rural livelihoods or strengthening the village economy South Africa's disability grant system is regarded as one of the worst cash transfer schemes in the world (Marais, 2011).

Households with children obtain a slightly higher average monthly income than households without children. Potential benefits are diminished by that amount payable: at R250 per month, it barely approaches minimum child – raising costs. The average number of children under 16 years per household is 1.67, which corresponds to a child dependency ratio per household of 78.3%. The Human Development Report on South Africa cites an average child dependency ratio of 46.6% (HDR, 2009), significantly lower compared to the Lake Gariep area.

The Human Science Research Council's calculations (2004) are based on a poverty line varying by household size, with one household in four having a "poverty income" of R1290. Sixty nine per cent of the population (households) in the townships included in this case study has a monthly income of less than R1500. In the Eastern Cape, the Gini coefficient has reached levels above 0.69 (Punt et. al., 2005: 11). These levels are higher than pre-1994. The ANC government has thus created poverty instead of alleviated it. In the case of Lake Gariep there is no indicator of a change in this condition. People have to struggle on a daily basis to make ends meet.

An absence of economic growth characterizes the area. Poverty is chronic. People experience poverty for extended periods or throughout their entire lives. Their children are also likely to remain poor. They have benefited least or are likely to benefit least from economic growth and national and international development initiatives.

The rural population lacks the skills, resources and capacities to participate effectively in the liberalized, market-oriented South African economy. There is no space for them as little or no opportunities to participate are created by the state or private companies. As Bank (2005) argues, in the Eastern Cape Province the state has never actually made any significant effort to encourage smallholder production, nor has it adopted any other initiatives that actively seek to transform the 'agrarian' economy of the former Ciskei

and Transkei homelands. Living conditions have worsened, and over the past decade poverty levels in the Eastern Cape Province have deepened, especially in rural areas, where 65% of the 6.3 million people of the province live (Bank, 2005: 6).

Poverty alleviation, the economic improvement of former disadvantaged non-citizens, the creation of a black middle class, as well as the creation of a more equal and just society, were the main declared objective of the South African government post-1994. The Lake Gariep area is still in a situation of economic and social underdevelopment. More than 40% of the township inhabitants state that life in the past, prior 1994, was better than today. Hence the achievements of the post-'apartheid' development have to be reassessed. Lake Gariep (fishing) communities are one microcosm of government neglect.

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