

AN ANALYSIS OF SOCIO-ECONOMIC FACTORS ON POVERTY IN NYAKALLONG (MATJHABENG MUNICIPALITY)

BY

SEFAKO SAMUEL RAMPHOMA

Dissertation submitted in partial fulfilment of the requirements for
the degree

Magister Commercii

in

Economics at the

NORTH-WEST UNIVERSITY

Supervisor: Dr MB Sekatane

Co-Supervisor: Dr TJ Sekhampu

Vanderbijlpark

MAY 2012

ACKNOWLEDGEMENTS

My gratitude is expressed to all those who contributed towards the success of this dissertation. Firstly I would like to thank God for giving me the wisdom, strength and excellent health to complete this task.

I thank Dr MB Sekatane and Dr TJ Sekhampu for being supervisors with a difference; they were so kind, so understanding and tolerant. Your devoted and sympathetic guidance, enthusiastic encouragement, constructive suggestion and criticism, made this difficult task easier.

Professor TJC Slabbert, I thank you for designing the model, and for your excellent advice.

I thank the North-West University's library staff for posting relevant sources to me; I received assistance as if I was nearer to you.

I thank the North-West University for providing me with a bursary to complete my studies.

I would also like to thank Mrs Magda Jansen who was employed by Matjhabeng municipality, for helping me with the map of Nyakallong.

I also like to thank my wife, Vuyelwa Anna Ramphoma, for giving me time to concentrate on my studies. Without her support the writing of this dissertation would not have been successful.

I would like to thank my co-field workers, Mr Chauke TI, Mr Letube MP and Mr Mafantiri MA for accompanying me to Nyakallong Township.

I would also like to thank my sister, Malefu Maria Maretele, for her support and believing in me. My special thanks go to my uncle Mahapu Meshack Bochedi for his continuous support, encouragement and inspiration.

Lastly, a very special thank you to my late grandmother, Malekeno Lydia Bochedi. Her words still give me courage: I quote, " My grandchild, there is no age limit for studying further; take the opportunity your uncle is providing you with, you will build from there".

To my late mother, Moipone Belheminah Ramphoma.

Endemic and widespread poverty continues to disfigure the race of our country. It will always be impossible for us to say we have fully restored the dignity of all our people as long as this situation persists. For this reason the struggle to eradicate poverty has been and will continue to be a cornerstone of the national effort to build the new South Africa

President Thabo Mbeki, 2004

DECLARATION

I declare that

**AN ANALYSIS OF SOCIO ECONOMIC FACTORS ON POVERTY IN
NYAKALLONG (MATJHABENG MUNICIPALITY)**

is my own work and that all the resources used or quoted have been duly
acknowledged by means of complete references, and that I have not previously
submitted the thesis for a degree at another university.

SS Ramphoma

ABSTRACT

The aim of this dissertation was to analyse the effect of socio-economic factors on poverty in Nyakallong. Nyakallong is a former Black township in the Free State Province of South Africa. The effect of the socio economic factors on poverty was analysed using an econometric model. The analysis was based on data collected by the researcher and three fieldworkers who conducted a survey of 412 households in Nyakallong in 2009. To calculate poverty rates and the effect of socio-economic factors, data relating to the area was used.

Poverty was defined and then measured for the township, and the profile of both the whole and the poor population was determined. The following poverty lines are used in South Africa – PDL, MSL, MLL, SLL, HSL and HEL. The HSL, which is defined as an estimate of the theoretical income needed by an individual household to maintain a defined minimum level of health and decency in the short term, was used as a measure of poverty in the area. The headcount index, poverty gap ratio and the dependency ratio were also used to measure poverty.

The headcount index was found to be 0.472 for Nyakallong, meaning that 47.2% of all household's income is below their respective poverty line. Poverty rate in Nyakallong was found to be 48.5% which is almost similar to the poverty rate of 49.1% for the Free State province, while poverty rate in Kwakwatsi was found to be 62.1%. The analysis of the sources of income of the poor showed that government grants constitute 64% of household income, with the old state pension grant alone contributing 16% to household income for a poor family. In Kwakwatsi, government grants contributed 38.4% of poor household's income, with the old state pension grant having contributed 40.6%. On average, the whole population has a monthly income of R2 938, 35 compared to R1 140 which is received by the poor population; while in Kwakwatsi, the poor population received a monthly income of R688 and the whole population received an average of R1401.01. The expenditure patterns for the whole sampled population show that 39.7% of household income goes to buying food, compared to 44.3% for the poor sampled population of Nyakallong. In Kwakwatsi,

poor population spent 49.2% of income on food and the whole population spent 33.4%.

In Nyakallong, 50% of the whole population and 53% of the poor population was found to be economically inactive. In Kwakwatsi, 44% of the whole population and 56% of the poor population was found to be economically inactive. The unemployment rate of the poor in Nyakallong is 95.6% compared to 69.9% of the whole population. In Kwakwatsi 86.9% of the poor population and 79% of the whole population were unemployed. The dependency ratio was found to be 6 among the poor population and 2 for the whole population of Nyakallong, while in Kwakwatsi it was found to be 7 among the poor population and 4 among the whole population.

The study analysed the socio-economic determinants of poverty in the area. The data was evaluated using hypothesis testing for statistical significance of the parameters. It was established that there is a positive relationship between education and the poverty gap ratio although it is statistically insignificant. It was also found that there is an inverse relationship between employment and poverty ratio. This complies with theory. The results also showed a positive relationship between household expenditure and the poverty gap – this is what was expected, because expenditure is the reduction of resources. On gender, the results confirm the generally held hypothesis that female headed households are poorer compared to their male counterparts. The results show that poverty is high among female headed households compared to male headed households. Household size was measured by the number of people staying in a given house. The household size was found to range from one to eleven members per household. The average household size was found to be 4.2 in Nyakallong, 3.9% in Kwakwatsi and 3.4% in the Free State. Household size is an important variable in determining poverty – increasing the household size by 10% is likely to increase the poverty gap of the household by about 1%. This might seem not significant, but this is a result that must be noted and handled with caution. More people in households also mean more expenditure on food items, medical expenses, clothing and education.

In order to reduce the level of poverty in Nyakallong, job creation and employment opportunities should be targeted. The nearby university of technology and FET College should inform learners at secondary schools about funds (NFSAS) available to help them in furthering their studies. Educators should also engage learners to realise the disadvantages of large household size. Large organisations such as ESCOM and Harmony Gold could help by means of skills development, especially among youth and females, in order to make them employable. Unemployment can also be reduced by putting back into operation the closed mine shaft and Allanridge Sanatorium hospital. A food garden community programme should be established in order to reduce the level of poverty. People who are involved should be trained on how to manage and develop the programme.

Key terms:

Poverty, socio-economic, unemployed, households, Household Subsistence Level, poverty lines, poor, Nyakallong, Kwakwatsi, Free State province, unemployment rate, headcount index, non poor, average income, education, expenditure, gender, employment.

OPSOMMING

Die doel van hierdie verhandeling was om die invloed van sosio-ekonomiese faktore op armoede in Nyakallong te analiseer. Nyakallong is 'n voormalige swart informele nedersetting in die Vrystaat-provinsie van Suid-Afrika. Die invloed van die sosio-ekonomiese faktore op armoede is geanaliseer aan die hand van 'n ekonometriese model. Die analise is gebaseer op data wat ingesamel is deur die navorser en drie veldwerkers wat in 2009 'n opname by 412 huishoudings in Nyakallong gedoen het. Data wat verband hou met die gebied is gebruik om die armoedekoers te bereken, asook die effek van sosio-ekonomiese faktore.

Armoede is gedefinieer en toe vir die informele nedersetting bereken. Die profiel van die bevolking in geheel, asook die arm gedeelte van die bevolking is vasgestel. Die volgende armoedelyne word in Suid-Afrika gebruik – PDL, MSL, MLL, SLL, HSL en HEL. Die HSL, wat gedefinieer word as 'n beraming van die teoretiese inkomste wat 'n individuele huishouding benodig om 'n bepaalde minimumvlak van gesondheid en menswaardigheid in die kort termyn te handhaaf, is gebruik as maatstaf van armoede in die gebied. Die koppetelling-indeks (*headcount index*), armoedegaping-ratio (*poverty gap ratio*) en die afhanklikheidsratio (*dependency ratio*) is ook gebruik om armoede te meet.

Die koppetelling-indeks vir Nyakallong is op 0.472 bereken, wat beteken dat 47.2% van alle huishoudings se inkomste onder hul onderskeie armoedelyne is. Die armoedekoers in Nyakallong is bereken op 48.5%, wat ooreenstem met die armoedekoers van 49.1% vir die Vrystaat, terwyl die armoedekoers in Kwakwatsi 62.1% is. Die analise van die bronne van inkomste van die armstes het aangedui dat regeringstoelae 64% van huishoudelike inkomste vorm, met die ou staatspensioentoelaag wat alleen 16% bydra tot die huishoudelike inkomste van 'n arm gesin. In Kwakwatsi dra regeringstoelae 38.4% by tot 'n arm huishouding se inkomste, met die ou staatspensioentoelaag wat 40.6% bygedra het. Die hele bevolking het 'n gemiddelde maandelikse inkomste van R2938.35 vergeleke met die R1140 wat deur die arm bevolking ontvang word. In Kwakwatsi ontvang die arm

bevolking 'n gemiddelde maandelikse inkomste van R688, met die gemiddeld van die hele bevolking op R1401.01. Patrone van uitgawes vir die steekproef-bevolking wys dat 39.7% van huishoudelike inkomste aan voedsel bestee word, vergeleke met 44.3% vir die arm steekproef-bevolking van Nyakallong. In Kwakwatsi bestee die arm bevolking 49.2% van hul inkomste aan voedsel en die hele bevolking 33.4%.

In Nyakallong is gevind dat 50% van die hele bevolking en 53% van die arm bevolking ekonomies onaktief is. In Kwakwatsi is 44% van die hele bevolking en 56% van die arm bevolking ekonomies onaktief. Die werkloosheidsyfer onder armes in Nyakallong is 95.6% vergeleke met die 69.9% van die hele bevolking. In Kwakwatsi is 86.9% van die arm bevolking en 79% van die hele bevolking werkloos. Die afhanklikheidsratio is bereken op 6 onder die arm bevolking en 2 vir die hele bevolking van Nyakallong, terwyl dit in Kwakwatsi bereken is op 7 onder die arm bevolking en 4 onder die hele bevolking.

Die studie het die sosio-ekonomiese determinante van armoede in die gebied geanaliseer. Die data is deur middel van hipotesetoetsing geëvalueer vir statistiese beduidendheid van die parameters. Daar is vasgestel dat daar 'n positiewe verband is tussen opvoeding en die armoedegaping-ratio, hoewel dit statisties onbeduidend is. Daar is ook vasgestel dat daar 'n inverse verband is tussen arbeid en die armoederatio is. Dit stem ooreen met teorie in hierdie verband. Die resultate dui ook op 'n positiewe verband tussen huishoudelike uitgawes en die armoedegaping – dit is te verwagte, omdat uitgawes die vermindering van hulpbronne is. In terme van geslag bevestig die resultate die algemene hipotese dat huishoudings met vroue aan die hoof armer is in vergelyking met hul manlike eweknieë. Dit resultate wys dat armoede hoog is by huishoudings met vroue aan die hoof in vergelyking met huishoudings waar mans aan die hoof staan. Die grootte van huishoudings is gemeet aan die getal mense wat in 'n bepaalde huis woon. Die grootte van huishoudings het gewissel van een tot elf lede per huishouding. Die gemiddelde grootte van 'n huishouding in Nyakallong is 4.2, terwyl dit 3.9 in Kwakwatsi en 3.4 in die Vrystaat is. Die grootte van 'n huishouding is 'n belangrike veranderlike in die bepaling van armoede – 'n 10%-toename in die grootte van 'n huishouding is geneig om die armoedegaping van die

huishouding met 1% te laat toeneem. Dit mag op die oog af onbeduidend lyk, maar dit is 'n bevinding waarvan kennis geneem moet word en wat met sorg hanteer moet word. Meer mense in 'n huishouding beteken groter besteding aan voedsel, mediese uitgawes, klere en opvoeding.

Ten einde die vlak van armoede in Nyakallong te verlaag, moet gefokus word op werkskepping en werksgeleenthede. Die nabygeleë universiteit van tegnologie en VOO-kollege moet leerders by hoërskole inlig oor fondse (NFSAS) wat beskikbaar is om hulle te help om verder te studeer. Opvoeders moet leerders bewus maak van die nadele van 'n groot huishouding. Groot organisasies soos Eskom en Harmony Gold kan help deur middel van vaardigheidsontwikkeling, veral onder jong mense en vroue, ten einde hulle moontlikhede vir indiensneming te vergroot. Werkloosheid kan verminder word deur die mynskag wat gesluit is, asook die Allanridge Sanatorium-hospitaal weer in werking te stel. 'n Voedseltuin-gemeenskapsprogram moet gevestig word om die vlak van armoede te verlaag. Mense wat betrokke is, moet opgelei word in die bestuur en ontwikkeling van die program.

Sleuteltermes:

Armoede, sosio-ekonomies, werkloos, huishoudings, Huishoudingbestaansvlak, armoedelyne, arm, Nyakallong, Kwakwatsi, Vrystaat-provinsie, werkloosheidsyfer, koppetelling-indeks, nie-armes, gemiddelde inkomste, opvoeding, besteding, geslag, arbeid

TABLE OF CONTENTS

ACKNOWLEDGEMENTS.....	i
DECLARATION	iv
ABSTRACT	v
OPSOMMING	viii
TABLE OF CONTENTS.....	xi
LIST OF FIGURES.....	xv
CHAPTER 1: THE PROBLEM AND ITS SETTING	xv
LIST OF TABLES	xvii
LIST OF ABBREVIATIONS.....	xviii
CHAPTER 1: THE PROBLEM AND ITS SETTING	1
1.1 INTRODUCTION	1
1.2 STATEMENT OF THE PROBLEM.....	2
1.3 AIM OF THE STUDY	4
1.4 DESCRIPTION OF THE STUDY AREA	4
1.5 THE IMPORTANCE OF THE STUDY.....	7
1.6 METHODOLOGY.....	8
1.6.1 Literature review	8
1.6.2 Empirical research	8
1.6.3 Measurement of poverty	9
1.6.4 Measuring the effect of socio-economic factors on poverty	10
1.7 LIMITATION OF STUDY.....	11
1.8 OUTLINE OF THE STUDY	11

CHAPTER 2: THEORETICAL BACKGROUND OF POVERTY	13
2.1 INTRODUCTION	13
2.2 DEFINITION OF POVERTY.....	14
2.2.1 Deprivation of basic needs.....	14
2.2.2 Political and cultural influences.....	15
2.2.3 Absolute and relative approach to poverty.....	15
2.3 TYPES OF POVERTY	17
2.4 CAUSES OF POVERTY	18
2.5 INDICATORS OF POVERTY IN SOUTH AFRICA.....	21
2.5.1 Relationship between poverty and dwelling	23
2.5.2 Access to water	23
2.5.3 Availability of electricity	24
2.5.4 Relationship between poverty and sanitation.....	24
2.6 MEASUREMENT OF POVERTY	25
2.6.1 Poverty lines	25
2.6.2 Headcount index and poverty gap	30
2.6.3 Dependency ratio.....	31
2.6.4 Poverty gap index	32
2.7 INEQUALITY AND POVERTY	34
2.8 SUMMARY AND CONCLUSION	35
CHAPTER 3: PROFILE OF THE SAMPLED POPULATION	38
3.1 INTRODUCTION	38
3.2 DEMOGRAPHIC PROFILE.....	38
3.2.1 Household size	38

3.2.2	Dependency.....	39
3.2.3	Members of households.....	39
3.2.4	Educational attainment	42
3.3	LABOUR FORCE.....	44
3.3.1	Profile of the employed population.....	45
3.3.2	Profile of the unemployed population.....	46
3.4	INCOME AND EXPENDITURE.....	53
3.4.1	Income sources of the total population	53
3.4.2	Expenditure patterns of the total population.....	54
3.5	SUMMARY AND CONCLUSION	55
CHAPTER 4: POVERTY AND THE EFFECT OF SOCIO-ECONOMIC FACTORS ..		58
4.1	INTRODUCTION	58
4.2	POVERTY LINE FOR NYAKALLONG	58
4.3	POVERTY PROFILE FOR NYAKALLONG.....	59
4.3.1	Demographic profile of the poor.....	60
4.4	INCOME AND EXPENDITURE PATTERNS OF THE POOR POPULATION	71
4.4.1	INCOME	71
4.4.2	EXPENDITURE	72
4.5	THE EFFECT OF SOCIO-ECONOMIC FACTORS ON POVERTY	74
4.5.1	Descriptive statistics	74
4.5.2	Regression Model.....	76
4.6	SUMMARY AND CONCLUSION	81

CHAPTER 5: SUMMARY, CONCLUSION AND RECOMMENDATIONS	84
5.1 INTRODUCTION	84
5.2 SUMMARY.....	84
5.3 CONCLUSION	88
5.4 RECOMMENDATIONS.....	89
BIBLIOGRAPHY	91
ANNEXURE A	98
SURVEY DESIGN AND APPLICATION.....	98
ANNEXURE B	99

LIST OF FIGURES

CHAPTER 1: THE PROBLEM AND ITS SETTING

FIGURE 1.1: GEOGRAPHICAL LOCATION OF NYAKALLONG (CIRCLED IN RED)..... 7

CHAPTER 3: THE PROFILE OF THE SAMPLED POPULATION

FIGURE 3.1 AVERAGE LENGTH OF STAY OF THE POPULATION OF NYAKALLONG: 2009	40
FIGURE 3.2 AGE DISTRIBUTION OF THE POPULATION OF NYAKALLONG: 2009.....	41
FIGURE 3.3 GENDER DISTRIBUTION OF THE TOTAL POPULATION: 2009.....	42
FIGURE 3.4: EDUCATIONAL LEVEL OF POPULATION OF NYAKALLONG ENROLLED IN SCHOOL: 2009.....	43
FIGURE 3.5: QUALIFICATIONS OF THOSE NOT STUDYING (TOTAL POPULATION): 2009	44
FIGURE 3.6: EMPLOYMENT STATUS OF THE TOTAL POPULATION: 2009.....	45
FIGURE 3.7: SECTOR OF EMPLOYMENT OF THE TOTAL POPULATION: 2009	46
FIGURE 3.8: UNEMPLOYED POPULATION OF NYAKALLONG BY GENDER: 2009.....	47
FIGURE 3.9: UNEMPLOYED POPULATION OF NYAKALLONG BY AGE AND GENDER: 2009	48
FIGURE 3.10: DURATION OF UNEMPLOYMENT FOR THE TOTAL POPULATION OF NYAKALLONG: 2009	49
FIGURE 3.11 QUALIFICATIONS OF THE UNEMPLOYED POPULATION OF NYAKALLONG: 2009	50
FIGURE 3.12: SKILLS OF THE TOTAL UNEMPLOYED POPULATION OF NYAKALLONG: 2009	51
FIGURE 3.13 SKILLS NEEDED BY THE UNEMPLOYED POPULATION OF NYAKALLONG: 2009	52
FIGURE 3.14: SOURCES OF HOUSEHOLD INCOME FOR THE TOTAL POPULATION IN NYAKALLONG: 2009.....	54

FIGURE 3.15: EXPENDITURE PATTERNS OF THE TOTAL SAMPLE OF NYAKALLONG: 2009	55
--	----

CHAPTER 4: POVERTY AND THE EFFECT OF SOCIO ECONOMIC FACTORS

FIGURE 4.1: POOR HOUSEHOLDS AND THEIR HSL RATIOS IN NYAKALLONG: 2009	60
FIGURE 4.2: AVERAGE LENGTH OF STAY OF THE POOR POPULATION: 2009	61
FIGURE 4.3: AGE DISTRIBUTION OF THE POOR POPULATION: 2009	62
FIGURE 4.4: QUALIFICATIONS OF THE POOR NOT IN SCHOOL: 2009	63
FIGURE 4.5: EMPLOYMENT STATUS OF THE POOR POPULATION: 2009	64
FIGURE 4.6: EMPLOYMENT STATUS OF THE POOR'S LABOUR FORCE: 2009	65
FIGURE 4.7: POOR EMPLOYED SECTOR OF EMPLOYMENT: 2009	66
FIGURE 4.8: POOR UNEMPLOYED BY AGE AND GENDER: 2009	67
FIGURE 4.9: DURATION OF UNEMPLOYMENT POOR UNEMPLOYED: 2009	67
FIGURE 4.10: QUALIFICATIONS OF THE POOR UNEMPLOYED POPULATION: 2009	68
FIGURE 4.11 SKILLS OF THE POOR UNEMPLOYED POPULATION: 2009	69
FIGURE 4.12 SKILLS NEEDED BY THE POOR UNEMPLOYED POPULATION: 2009 ...	70
FIGURE 4.13 SOURCES OF HOUSEHOLD INCOME FOR THE POOR UNEMPLOYED POPULATION: 2009	72
FIGURE 4.14: EXPENDITURE PATTERNS OF THE POOR POPULATION: 2009	73

LIST OF TABLES

CHAPTER 1: THE PROBLEM AND ITS SETTING

TABLE 1.1: POPULATION OF FREE STATE PROVINCE.....	4
TABLE 1.2: POPULATION OF LEJWELEPUTSWA DISTRICT MUNICIPALITY	5
TABLE 1.3: MATJHABENG MUNICIPALITY'S TOTAL POPULATION	5
TABLE 1.4: HSL/POVERTY LINE FOR NYAKALLONG IN 2009	10

CHAPTER 2: THEORETICAL BACKGROUND OF POVERTY

TABLE 2.2: POVERTY LINES USED IN SOUTH AFRICA.....	29
TABLE 2.3: DEPENDENCY RATIO CALCULATION METHOD 1	32
TABLE 2.4: DEPENDENCY RATIO CALCULATION METHOD 2	32

CHAPTER 4: POVERTY AND THE EFFECT OF SOCIO ECONOMIC FACTORS

TABLE 4.1: DESCRIPTIVE STATISTICS OF THE EXPLANATORY VARIABLES	76
TABLE 4.2: RESULTS OF THE REGRESSION ANALYSIS.....	77

LIST OF ABBREVIATIONS

AIDS	Acquired Immune-Deficiency Syndrome
ANC	African National Congress
CEAS	Central Economic Advisory Services
CS	Community Survey
ESCOM	Electricity Supplier Commission
FET	Further Education and Training
FS	Free State
GDP	Gross Domestic Product
HEL	Household Effective Level
HIV	Human Immune-Deficiency Virus
HSL	Household Subsistence Level
ILO	International Labour Organisation
LO	Life Orientation
MIS	Minimum Income Standards
MRC	Medical Research Council
MSL	Minimum Subsistence Level
NGO	Non Government Organisation
NSFAS	National Student Financial Aid Scheme
OECD	Organisation for Economic Co-operation and Development
OHS	October Household Survey
OLS	Ordinary Least Squares
PDL	Poverty Datum Line
PIR	Poverty and Inequality Report

PROVIDE	Pronincial Decision-Making Enabling
QLFS	Quarterly Labour Force Survey
RSA	Republic of South Africa
SLL	Supplementing Living Level
SMMEs	Small Medium and Micro Enterprises
SPII	Studies in Poverty and Inequality Institute
STATS SA	Statistics South Africa
WHO	World Health Organisation

CHAPTER 1: THE PROBLEM AND ITS SETTING

1.1 INTRODUCTION

The alleviation of poverty in sub-Saharan Africa has been a subject of debate for a number of years. This intricate challenge of developing and implementing poverty alleviation policies is evidenced through discussions and resources earmarked for this cause. The objective of efficient anti-poverty policies has been restricted by lack of credible information about the degree, depth and persistence of poverty in the continent. The unavailability of accessible methods for the evaluation of the effects of poverty alleviation policies also restrains efficient anti-poverty policies (Fosu, Mwabu & Thorbecke, 2009:1).

The problem of poverty and inequality continues to trouble South Africa seventeen years after the democratic transition. It could be said that poverty in South Africa is an outcome of the now defunct Apartheid policy, which discriminated against the majority of the citizens. One of the key elements of the Apartheid policy was large scale land dispossessions. The Black population was grouped according to ethnicity and moved from their land to poorly resourced homelands. Because the Blacks were also needed in the mining and industrial sectors, this resulted in a large scale migratory labour system that worsened the problem of poverty (Aliber, 2002:2). The end of Apartheid in South Africa left the population with enormous inequalities across racial groups. Considering a poverty line of R322 (using year 2000 prices), at least 58% of all South Africans, and 68% of Blacks, were found to be living in poverty in 1995 – while none of the White population was living in poverty (Bhorat & Kanbur, 2006:59).

The end of Apartheid was met by high hopes of a future characterised by shared economic growth, employment creation, and thereby alleviation of poverty and its associated scourges. According to Larsson (2006:6), after more than a decade of democracy, South Africa is still a country with high levels of poverty and income inequality. In its quest to address the problems of poverty and inequality, the South African government has sought to provide a policy framework, regulations, policies and laws for integrated and coherent socio-economic development in urban areas (ANC, 1994:25). These policies have been geared towards ensuring macroeconomic

stability and raising access to basic services, with some success. However, some of the nation's social indicators are comparable to those of the poorest countries in the world (Bhorat & Kanbur, 2006:19). This rouses the question of what the constraints to employment creation and poverty alleviation in terms of socio-economic factors have been. This study measured poverty, specifically the effect of various socio-economic factors on poverty in the township of Nyakallong (Free State, South Africa).

1.2 STATEMENT OF THE PROBLEM

According to Iceland (2006:2), there are several reasons which explain why poverty continues to be an important issue. Firstly, the hardships that accompany poverty clearly have disadvantageous effects on individuals' psychological and physical well being. Children who are born and raised in poor families are unhealthy and are disadvantaged in terms of cognitive development, school achievement, and emotional well-being. The second reason according to Iceland (2006:3) is that poverty has broader economic consequences. Increasing levels of poverty contribute to an unhealthy economy by decreasing the number of people who can purchase goods and services, which in turn discourages economic growth and reduces the average standard of living. Thirdly, Iceland (2006:3) stated that high levels of poverty have serious social and political consequences. Poor people feel that they are neglected by the society. Poverty provokes social disorder and crime, and it reduces public confidence in democratic institutions as people do not feel that their needs are being addressed by the prevailing system (Iceland, 2006:2-3).

Moore (2009:5) states that those living in poverty experience lower life expectancy, which could ultimately lead to child headed families. Poverty also increases the risk of homelessness and drug abuse. People living in poverty are vulnerable to diseases like malaria, tuberculosis, measles and pneumonia. Infectious diseases like Human Immune-Deficiency Virus / Acquired Immune-Deficiency Syndrome (HIV/AIDS) are most common among people living in high levels of poverty. Therefore, high levels of poverty are related to poor health. Moore (2009:5) further stated that these diseases perpetuate and deepen impoverishment by squandering personal and national health and financial resources, thus impacting negatively on Gross Domestic Product (GDP) growth.

There has been increasing concern among policymakers that a rising unemployment rate is a major obstacle in the poor benefiting from the positive economic growth performance. Income of the poor is derived mostly from work as an employee, self-employment or subsistence activities (Sabry, 2009:40). According to Gutierrez (2007:3) the positive impact of growth on poverty depends on the extent to which employment and good earning opportunities are generated by growth. It can be noted that if the generated employment growth and earning opportunities have been created at the expense of wage reductions, it may have a weak impact on poverty (Gutierrez, 2007:3). The aim of this study was to analyse the effect of socio-economic factors on poverty in Nyakallong Township, in the Free State province. An econometric model was used to analyse the effects of the various socio-economic factors on poverty in the area.

Nyakallong is a previously Blacks-only township located in the Free State province of South Africa. The Free State is divided into five district municipalities (see Table 1.1 below), namely, Xhariep, Fezile Dabi, Thabo Mofutsanyane, Motheo and Lejweleputswa. Nyakallong Township is situated in Matjhabeng municipality within the Lejweleputswa district municipality. The population of Lejweleputswa forms 23.1% of the population of the Free State (see Table 1.1). Previous studies have shown that poverty in the Free State is high. These studies include those done by the Human Sciences Research Council (HSRC) during 2008 and Provincial Decision-Making Enabling (PROVIDE) in 2005, both based on the socio-economic situation in the Free State. In a study done by a PROVIDE research team in 2005, 49.1% of the population of the Free State was found to be poor. The extreme poverty rate was 34.9%, which is higher than the national average. The Fezile Dabi District Municipality experienced lower levels of poverty compared to other district municipalities (at 45.4%), followed by Motheo District Municipality (at 49%). The two district municipalities (Fezile Dabi and Motheo) were the only district municipalities with poverty rates below the national (49.8%) and provincial (49.1%) averages. The Lejweleputswa district municipality is slightly above the national average (49.8%) and below the provincial average (49.1%) with 53.7% level of poverty. Xhariep and Thabo Mofutsanyane district municipalities are extremely affected by poverty with 71.5% and 73% respectively. The poverty rates of these two district municipalities (Xhariep and Thabo Mofutsanyane) are much

higher than the national (49.8%) and provincial (49.1%) averages (Provide, 2005:8). Therefore, in terms of poverty rates, Lejweleputswa district municipality is in a better situation than Xhariep and Thabo Mofutsanyane district municipalities, but in a worse predicament than Fezile Dabi and Motheo.

TABLE 1.1: POPULATION OF FREE STATE PROVINCE

Local municipality	Population	Percentage
Xhariep	127 627	4.60
Fezile Dabi	474 089	17.10
Thabo Mofutsanyane	694 316	25.04
Motheo	837 376	30.20
Lejweleputswa	639 651	23.08
Total	2 773 059	100.00

Source: STATS S A, 2007

1.3 AIM OF THE STUDY

The main objective of the study is to analyse the effect of socio-economic factors on poverty in Nyakallong. Poverty is measured, and the important factors determining poverty are analysed using ordinary least squares.

The main objective is supported by the following secondary objectives:

- To profile the sampled population of Nyakallong in terms of their demographic factors: age, gender, qualifications, employment status, expenditure and sources of income;
- To provide information on the socio-economic demographics of the residents of Nyakallong households; and
- To analyse the socio-economic determinants of poverty in the area.

1.4 DESCRIPTION OF THE STUDY AREA

Lejweleputswa district municipality consists of Nala, Masilonyana, Tswelopele, Tokologo and Matjhabeng local municipalities, which together comprise a total population of 408 170 (STATS SA, 2007). The population of Matjhabeng forms 63.3% of the population of Lejweleputswa district municipality (see Table 1.2). Nyakallong

Township falls under the Matjhabeng local municipality, within the Lejweleputswa district municipality in the Free State province.

TABLE 1.2: POPULATION OF LEJWELEPUTSWA DISTRICT MUNICIPALITY

Local municipality	Population	Percentage
Masilonyana	80 094	12.52
Tokoloko	21 323	3.33
Tswelopele	40 617	6.34
Matjhabeng	405 031	63.32
Nala	92 586	14.47
Total	639 651	100.00

Source: Stats S A, 2007

Table 1.3 indicates the population of the towns forming the Matjhabeng municipality. Nyakallong has a population of 22 842, consisting of 4 123 households (Matjhabeng Municipality, 2009).

TABLE 1.3: MATJHABENG MUNICIPALITY'S TOTAL POPULATION

Town	Households	Population	Percentage
Allanridge	807	2 763	0.68
Nyakallong	4 123	22 842	5.64
Henneman	707	3 926	0.97
Phomolong	4 032	18 345	4.53
Odendaalsrus	2 885	10 154	2.56
Kutlwanong	11 793	68 284	16.86
Ventersburg	356	1 854	0.54
Mmamahabane	2 522	9 179	2.26
Virginia	6 622	21 589	5.33
Meloding	10 741	43 957	10.85
Welkom	9 759	45 557	11.24
Thabong	37 051	156 563	38.65
Total	91 461	405 031	100.00

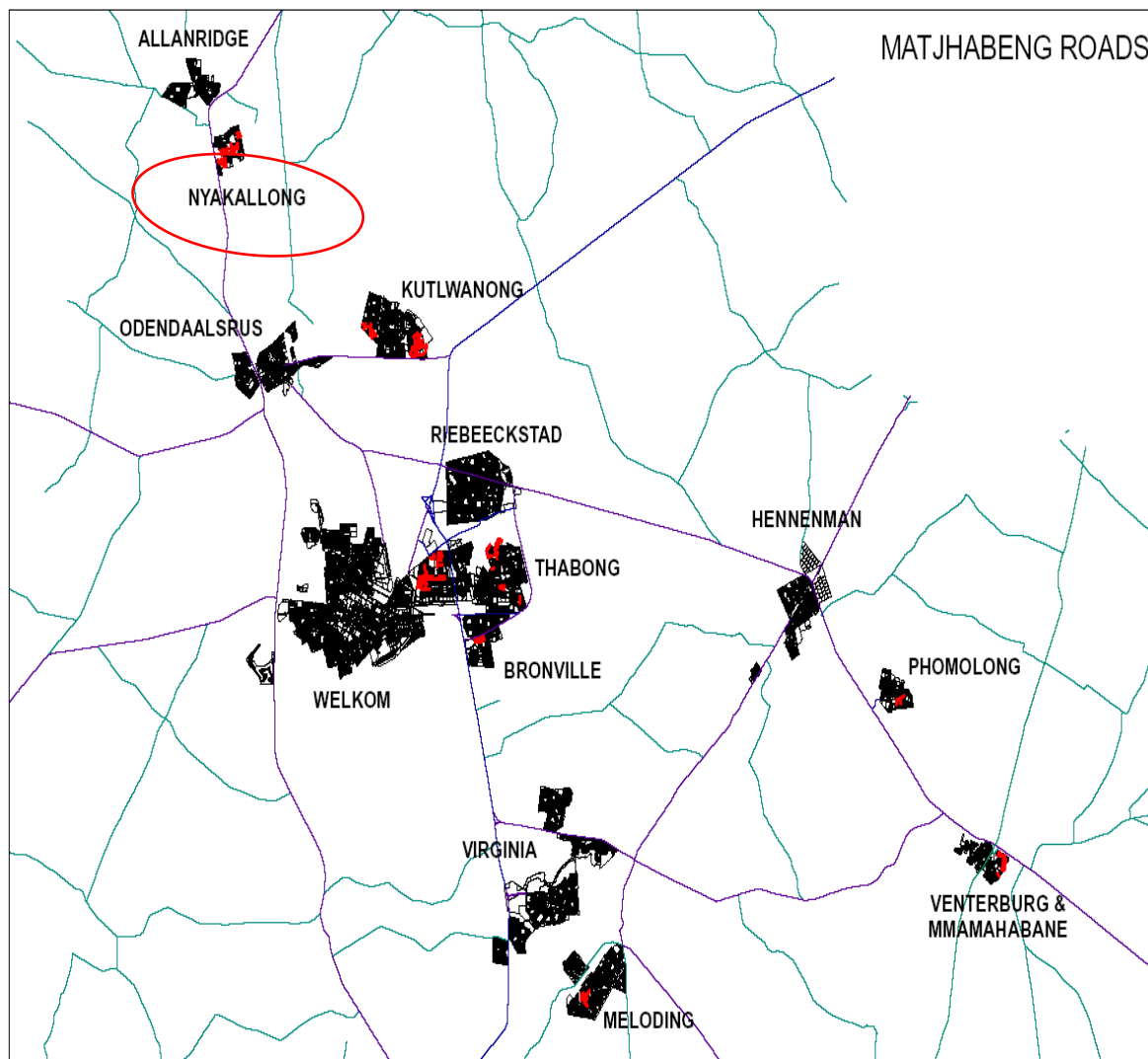
Source: Matjhabeng Municipality, 2009

Nyakallong, as stated in section 1.2, is located in the northern part of Matjhabeng municipality, between Allanridge and Odendaalsrus (as shown in Figure 1.1 below). Nyakallong is situated about 10 km from Odendaalsrus and 28 km from Welkom.

Nyakallong originated from the amalgamation of Heldemoed and Phatha-kahle village. In 1942, the Jeanet mine was founded and as a result the people from Zoetspruit farm found employment. Those who were allowed by Section 10, Act 25 of 1945 to stay in the prescribed area lived in the mine hostel called Heldemoed. The Jeanet mine was

later closed because of excessive underground water. The buildings of Jeanet mine were then used as a hospital (Sanatorium hospital), owned by the government, for patients suffering from tuberculosis. In 1956, Lorain Goldmine was established. It built hostels for Black people at the mine, while family hostels for White people were built about 5km away from the mine. After the establishment of Allanridge town in 1961, Black families were allowed to stay in those family units (according to Section 10, Act 25 of 1945). The family hostels were then named Phatha-kahle village and thereafter the mine ceded Phatha-kahle village to the government. Phata-Kahle village and Heldemoed amalgamated to form a township called Nyakallong (Mahlatsi, 2008; Radiile, 2008).

FIGURE 1.1: GEOGRAPHICAL LOCATION OF NYAKALLONG (CIRCLED IN RED)



Source: Matjhabeng Municipality, 2009

1.5 THE IMPORTANCE OF THE STUDY

South Africa's political emancipation now lies more than 17 years in the past, a period long enough to take stock of past achievements and future challenges. The importance of research in influencing policies cannot be ignored. The analysis of poverty, and the socio-economic factors contributing to poverty, can provide valuable insights into the dynamics of the poor as we assume to know them. The study provides a breakdown of the structures of households in terms of age, gender, marital status, employment status, skills and income. The study may therefore serve as a

reference for further analysis and an information source when setting community development programmes.

1.6 METHODOLOGY

The study consists of a literature review and empirical research.

1.6.1 Literature review

Textbooks, journals, government publications, magazines, Internet sources and previous studies on the subject – as well as unpublished information like dissertations and theses – were used in order to obtain information on the theoretical background of poverty. This theoretical background includes information such as: definitions, types, causes, indicators and measurement of poverty. The comparison between poverty and inequality is also covered in this study.

1.6.2 Empirical research

The study used a qualitative approach whereby a household survey was undertaken in Nyakallong by means of questionnaire-based interviews. The questionnaire (see Annexure B) was used to obtain information about the community's demographics, poverty level, sources of income and expenditure patterns. The HSL survey was used to determine the poverty level in the area, and the impact of the various socio-economic factors on poverty levels in the area.

A large scale map of the study area was obtained from the Matjhabeng municipality. The map was used to select a 10% representative sample of the households in the study area. The household survey was conducted between May and June of 2009. The researcher, together with three field workers, interviewed a total of 412 households (10% of 4 123 households) in Nyakallong. The questionnaire instructions, the meaning of questions and the aims and objectives of the study were explained in detail to respondents in order to ensure that respondents understood the questionnaire. A random sampling method was used to draw the 412 households. (For the survey design and application, see Annexure A)

1.6.3 Measurement of poverty

Poverty is defined as the household or individual's inability to achieve the minimum material standard of living. Household or individual income and expenditure are used to determine the standard of living. Therefore, household income and expenditure are an acceptable benchmark for the standard of living (World Bank, 2000:26). The minimal material standard of living is referred to as the poverty line. It is determined by the income (or expenditure) needed to purchase the minimum standard basic food and necessities. The costs of minimum adequate caloric intake can be calculated by taking into consideration the amount of food and other necessities that are needed to live a healthy standard of living. A poverty line can therefore be calculated for a specific geographical area (World Bank, 2000:26).

Following the guidelines of the World Bank, a poor household is defined as a household of which the combined income (total income of all its members) is less than the poverty line as determined for the specific household. By comparing total income and expenditure of a household with the calculated cost of the minimum adequate caloric intake and other necessities of the household, poor households can be distinguished from the non-poor as a proportion of the population. This is called the headcount index (World Bank, 2000:27).

A household survey was undertaken in Nyakallong Township and used as a basis for analysis. The method developed by Slabbert (1997) was used to calculate poverty in the area. According to this method, a poverty line is calculated for each household by allocating a monetary value to basic items needed for survival by each member of the household. Thereafter, the monetary values of the entire household members are added together with items that are used by the whole household (such as housing, lighting, fuel, etc.). This will determine the individual household's monetary value. This household monetary value is then referred to as the household's poverty line. The poverty line is then compared to the actual income received by the whole household. If the household income is less than the household's poverty line, then the household lives in poverty. To calculate the shortfall of the household's income from the poverty line, express the difference between poverty line and income as a percentage of the poverty line (Slabbert, 1997:47).

The method of calculating household poverty line takes into account age and gender of the household members. These calculations determine the number of poor households, and the distribution of households below and above the poverty line.

TABLE 1.4: HSL/POVERTY LINE FOR NYAKALLONG IN 2009					
Age and Sex		Food	Clothing	Hygiene	Total
Children					
	1–3 years	R 200.07	R 20.39	R 11.79	R 232.25
	4–6 years	R 240.83	R 40.78	R 11.79	R 293.40
	7-10 years	R 299.17	R 40.78	R 11.79	R 351.74
Boys and Men					
	11-14 years	R 358.14	R 61.17	R 11.79	R 431.10
	15-18 years	R 397.86	R 78.87	R 11.79	R 488.52
	19+ years	R 397.86	R 78.87	R 11.79	R 488.52
Girls and Women					
	11-14 years	R 345.84	R 61.17	R 11.79	R 418.80
	15-18 years	R 345.84	R 81.56	R 11.79	R 439.19
	19+ years	R 345.84	R 81.56	R 11.79	R 439.19
Household fuel, light, washing & cleaning					R 300.49
Housing					R 40
Transport					R 50

Source: Slabbert, 2009.

1.6.4 Measuring the effect of socio-economic factors on poverty

The empirical analysis was based on regression analysis in Ordinary Least Squares (OLS). The following specification was adopted from a paper written by Lietchfield and McGregor (2008), the paper was based on poverty in Kagera, Tanzania:

$$PGAPRATIO_i = \beta_0 + \beta_1 UNEMPL_i + \beta_2 EDUCA_i + \beta_3 GENDER_i + \beta_4 INCOME_i + \beta_5 EXPENDITURE_i + \varepsilon_i$$

Where PGAPRATIO is the poverty gap ratio which is a measure of the percentage a household is away from the poverty line. UNEMPL is a dummy variable for unemployment which takes on the value 1 if a respondent was unemployed and 0 otherwise. It is expected that there is a positive relationship between unemployment and poverty.

EDUCA is the number of years of formal schooling a respondent achieved. It is expected that education is negatively related to poverty. GENDER is a dummy variable for sex taking the value of 1 if the household is female headed and 0 otherwise. The expectation is that there is positive relationship poverty and female headed households.

INCOME was measured by the earning power of the household in total. It was expected that income inversely related to the level of poverty. The last variable is total monthly EXPENDITURE. This was calculated by the monthly recurrent expenditures of the household.

1.7 LIMITATION OF STUDY

Unfortunately the researcher could not find enough recent studies on poverty in Nyakallong and the Free State, for that reason, the researcher made use of the study done by Sekhampu (2009) in Kwakwatsi.

1.8 OUTLINE OF THE STUDY

The study is divided into five chapters. The following is a brief outline of the study.

Chapter one (*Introduction*) introduces the research problem, statement of problem and aims of the research, importance of study, and the research methodology of the study. The chapter uses the research proposal as a base.

Chapter two (*Theoretical background of the study*) following chapter one is chapter two which gives a theoretical overview of poverty, internationally and nationally. It also concentrates on the relationship between poverty and socio economic factors.

Chapter three (*Profile of the population of Nyakallong*) constructs a profile of the surveyed population of Nyakallong. This is done in terms of household structures: average household size, income and expenditure status of different households, and age and gender structure of members.

Chapter four (*Poverty and the effect of socio-economic factors on poverty*) constructs a profile of the poor population of Nyakallong in terms of household structures. This chapter provides a poverty profile of the area. Poverty is measured and the socio-economic factors impacting poverty are analysed to the ordinal level of the study.

Chapter five (*Summary, conclusion and recommendations*) provides a summary of the study and the conclusions reached. Recommendations stemming from the findings of the study will also be made.

CHAPTER 2: THEORETICAL BACKGROUND OF POVERTY

2.1 INTRODUCTION

The concept of poverty has been a subject of debate for many centuries. The conceptualisation, definition and measurement of poverty lead in many instances to the formation of strategies to alleviate it. It is therefore important that the concepts, definitions and measurements of poverty are applicable to the society in which they are applied (Bhorat, 2001:41). Poverty is a continuous problem which has presented political and ethical challenges to societies. It is a familiar word which everyone understands or thinks he/she understands. Specifically, the meaning attached to the word poverty depends upon the basic concept people have of it. Poverty is experienced in different ways, leading to different meanings and their impact on the accurate definition (Dixon & Macarov, 1998:1).

In many quarters, research has shown that many poor people spend most of their income on food, and higher food prices can have a negative impact on poverty. This makes the reduction of poverty an important challenge for the global community (Aksoy & Hoekman, 2010; Dellink & Ruijs, 2009). Even in South Africa today, the alleviation of poverty has been a major assertion in many policy discussions. The severe economic downturn that began globally in late 2007 reduced employment and earnings and increased the official poverty rate in Africa. During the long economic expansion that occurred during the 1980s and 1990s, the official poverty rate was higher than it was in 1973. The significant changes in the economy that took place in the early 1970s affected the demographic composition of the population, and public policies have had to be combined to reduce the anti-poverty effects of economic growth (Canclan & Danziger, 2009:1).

There are many researchers such as Seekings (2007) and Thurlow (2006) studying poverty. These researchers attach different meanings and understandings to being in poverty. This chapter concentrates on the theoretical background of poverty and socio economic factors. The chapter also outlines the definitions, types, causes, dimensions, indicators, effects and measurements of poverty. The relationship between inequality and poverty is also discussed in the chapter.

2.2 DEFINITION OF POVERTY

People interpret and understand poverty differently. Therefore, there are several meanings attached to poverty and its impact on society. What is important about different meanings to poverty is that there is a common element of material insufficiency - especially the lack of resources needed for survival. Poverty studies and definitions lead to identifying goods that are needed by human beings in order to keep on living. An important factor regarding the definition of poverty is the ability to function as a full and active member of the society and have individual dignity. Another important consideration is whether people who experience forms of material insufficiency which leads to suffering are considered to be poor (SPII, 2007:10).

The consideration of poverty from a broader angle is derived from the global acknowledgement that poverty is more than having enough income to live by. It is now widely acknowledged that poverty is a multi-dimensional phenomenon which includes other essential dimensions of living standards. In addition to income and consumption, health and education are now part of the definition of poverty (Sabry, 2009:48).

Mokoena (2004:41) points out that the definition of poverty is a difficult task. Public and private initiatives, as well as policy direction regarding poverty alleviation, will all determine how poverty is defined – to answer the question, "Who is poor?" There are varying perspectives on what poverty is. There is a need to consider the factors discussed below when defining poverty.

2.2.1 Deprivation of basic needs

According to the International Labour Organisation (ILO, 1992:46) the definitions of poverty are based on the idea of a state of deprivation. What are regarded as basic needs or necessities by one researcher might not be regarded as such by another. More personal needs, basic needs and wants vary from place to place and time to time. If basic needs are divided into two categories, what is regarded as a need in one area may simply be regarded as a want in another area. The first category includes minimum requirements of a family for private consumption, such as adequate food, shelter, clothing and household equipment and furniture. The second category

include essential services provided by and for the community, such as clean drinking water, sanitation, public transport and health and education facilities (ILO, 1992:46).

According to Streeten (1982:42), there is nothing that could be described as an articulated basic needs strategy, even as a supplement to the other strategies. There is therefore very little agreement as to what constitutes a basic need and/or a state of deprivation of such a need.

2.2.2 Political and cultural influences

In South Africa, the proposition that poverty is a political issue is clear in the many definitions of poverty which attach importance to income, inequalities and disparities resulting from past policies. The Poverty and Inequality Report (PIR, 1998) does not separate the notion of poverty from inequality. There seems to be unquestioned assumption about the existence of a cause and effect relationship between the two according to the PIR. A prevailing political climate can therefore underpin the definition of poverty. The population of South Africa consists of different cultural groups; therefore, people may be viewed as poor or better off depending on the cultural group to which they belong (May, 1998:1).

2.2.3 Absolute and relative approach to poverty

The definition of poverty is based on cash income, from all public and private sources, except capital gains. This definition neglects public or private non-cash benefits, such as food stamps, or medical or employer provided health insurance; nor does it subtract taxes. It must be taken into consideration that both non cash benefits and taxes affect a family's standard of living (Pecora, Whittaker & Maluccia, 2009:91-92).

Baumol and Blinder (2009:448) recognise two main approaches to the definition of poverty. Firstly, the absolute approach which regards the poverty line as the absolute subsistence level, i.e. the level of living necessary to maintain health and ability to work. The absolute approach views poverty as the failure of needs fulfilment, which impairs the ability of the individual or the family to function adequately in society. There are also certain minimum needs necessary for engaging in social life and maintaining a family that must be met, other than maintaining health and the ability to

work. The second approach, the relative approach, regards poverty as a relative concept. The relative approach maintains that poverty can be understood only as part of a given society, and that the situation of the poor is determined by its distance from the other strata of the society. According to the relative approach, those belonging to the lowest fraction of the economy are the poor (Baumol & Blinder, 2009:448).

Envisaging poverty as an absolute condition is usually based on the opinion of subsistence. Subsistence is defined as having the minimum basic needs to sustain life, and being below the subsistence level is to be experiencing absolute poverty, because one does not have enough for survival (Alcock, 1997:68). The concept of absolute poverty refers to poverty that exists independently of any reference group. It does not depend on the general living standards of the society in which it is conceived and nor does it vary over time (Alcock, 1993:70). In this instance, poverty refers to a state of deprivation defined in relation to a supposedly objective, invariant and value free external definition of basic human needs. The standard of absolute poverty supposedly does not change according to prevailing living standards of a society, or over time, or according to needs of different groups in society (SPIL, 2007:24).

According to Holman (1978:2) the poor are those who have regular, though minimal, income while the very poor are those whose income, for whatever reason, falls far below the subsistence level. The functional word in this approach is income. Income that consistently falls short of providing the basic necessities of life is regarded as the major cause of poverty. Absolute poverty therefore can be defined as having no access to the resources which meet absolute needs. The common approach in measuring absolute poverty is to estimate the cost of a bundle of goods deemed basic.

There are two flaws in the absolute poverty definition. Firstly, its determination is a matter of judgement, and levels of subsistence change over time, as do people's expectations. Secondly, it takes no account of socio-cultural needs – namely, that an item can be seen as a luxury in one area, but as a necessity in another area, provided the poverty line is not constructed using the demographics of the area in question. The absolute poverty definition goes beyond subsistence and defining poverty in relation to the accepted standard of living in a society, or the custom of the country.

The relative approach is a more subjective measure than the absolute approach. The relative definition of poverty is based upon a comparison between the standard of living of those who are worse-off and those who are generally better-off. Alcock (1997:69) proposes that people are poor if their resources fall significantly below those of the rest of the community. This means that their income is consistently below the level that would allow them to attain a specific average standard of living.

Noble, Ratcliffe and Wright (2004:4) define relative poverty from three perspectives. Firstly, the relative approach is defined in relation to living standards of a reference group. Secondly, it is defined in terms of resources required to participate fully in society and thirdly, in a narrower way, by reference to the national income and / or expenditure distribution. According to Townsend (1979:31), the relative definition of poverty compares individuals and groups according to the resources they have – the type of diet they can acquire and the living conditions and the amenities which are customary to such particular group. Those who are poor therefore command amenities and resources that are far below those that are attained by the society.

Saunders (1997:39) asserts that when defining poverty, the following two central ideas must be taken into consideration: namely, that poverty involves involuntary restrictions on choice, and that poverty is socially specific, based on a particular society or culture. A measure of poverty is not only socially determined, but must also be acceptable to the community involved, if it is to be socially acceptable. This shows that acceptability within a certain culture or community has an important role to play in the definition of relative poverty. This implies an existence of inequality in wealth and income distribution that leads to an unbalanced societal classification and social classes (Saunders, 1997:39).

2.3 TYPES OF POVERTY

The community would identify those who are visibly starving and unable to meet their basic nutritional requirements as being poor. However, there would likely be disagreement over whether a person who wished to own or have access to an automobile like the rest of his neighbours, and was subsequently marginalised from

the benefits that its use might directly or indirectly bring, could be labelled as being in poverty (Holden, 2008:130).

There is a tradition of work on the culture of poverty that attributes the persistence of poverty to the cultural attributes of the poor groups. Poor people display a remarkable capacity to adjust to extraordinarily difficult circumstances, and it is incorrect to assert that their poverty is being derived from some unchangeable, inherited attribute. Therefore in assessing the impact of poverty, it is important to distinguish between different types of poverty (Rao & Walton, 2004:16).

Jense (2009:6) identified six types of poverty; namely, situational, generational, absolute, relative, urban and rural. Types of poverty are discussed in detail below:

- Situational poverty exists because of a crisis or loss that has occurred and is often temporary. Events that can cause situational poverty include environmental disasters, divorce or severe health problems (Jense, 2009:6).
- Generational poverty occurs when there are at least two generations which have been born into poverty. Children who are born into poverty are likely to suffer from poverty. Families living in this type of poverty find it difficult to move out of their situation (Jense, 2009:6).
- Urban poverty occurs in metropolitan areas with a population size of at least fifty thousand people. The urban poor deal with a complex aggregate of chronic and acute stressors and are dependent on often inadequate large city services (Jense, 2009:6).
- Rural poverty occurs in metropolitan areas with populations below fifty thousand people. In rural areas, there are more single guardian households, and families often have less access to services, support for disabilities and quality education opportunities. Programs to encourage transition from welfare to work are problematic in remote rural areas, where job opportunities are few (Jense, 2009:6).

2.4 CAUSES OF POVERTY

Poverty is increased not only by the incident of depth, but by more unequal distribution of private consumption among the poor. Lack of food and nutritional security, income

security, social security and human security build up the ingredients of poverty. When people have physical and economic access to sufficient safe and nutritional food to meet daily needs, and food preferences for an active and healthy life at all times, then this is referred to as food security. Income security refers to income brought home through regular employment. Social security means access to education, health services and opportunity of acquisition of skills, and human security (Das, 2006:8-9).

According to White and Killick (2001:30), the causes of poverty in Africa are multi-faceted and include economic, social and political, international and national (macro and micro factors). The failings of the political systems and the social forces are identified as the key primary causal factors underlying the poverty problem in most Black countries. Moore (2009:3) explains that poverty rate increases during recessions and that it is directly proportional to average income. The weak rule of law and poor governance can discourage investment and perpetuate poverty. Poor access to affordable education increases poverty and high levels of corruption undermine efforts to make a suitable impact on poverty. Moore (2009:4) further cites that healthcare services can also cause poverty. Poor access to affordable healthcare makes individuals less resilient to economic hardship and more vulnerable to poverty. Children are vulnerable to poverty if they receive inadequate nutrition, which undermines their abilities to develop full human capabilities. Geographic factors such as access to fertile lands, fresh water, minerals and natural factors such as climate change can also lead to increased poverty.

According to SPII (2007:15) there are three basic explanations to the causes of poverty; namely, residual, pathological and structural. These are discussed in detail below.

- According to the residualist explanation, poverty happens as a result of being “left out”. This approach assumes that “the rising tide lifts all boats” – as the economy grows; almost all the people are empowered. However, a few people are left out. Residualists assume that economic growth and participation are good for poverty and, as such, are often linked to explanations of the persistence of poverty that plagues the poor (SPII, 2007:15).

- The pathological explanations of poverty regard people as being responsible for their own poverty. Simply stated, those who advocate for such an analysis of the causes of poverty would argue that each individual contributes to his being poor and should be responsible for moving himself out of poverty. The pathological explanations view jobless people as being responsible for being unemployed. The pathological explanations do not take into consideration labour surplus, shortage of opportunities and cost of finding and maintaining a low paying job (SPII, 2007:15).
- The structural explanation identifies the system (growth and development) as producing poverty and inequality. To remedy this situation would be to change the system. This is very evident in the South African economy where it is believed that unemployment causes poverty. This is influenced by global and national production strategies. (SPII, 2007:15).

According to the World Bank (2005:132), poverty may be due to national, sector, community, household or individual characteristics. Table 2.1 list the different characteristics as per determinants.

Table 2.1: MAIN DETERMINANTS OF POVERTY

Individuals characteristics	Age Gender Sector of employment Formal education Religion Culture
Household characteristics	Household size Dependency ratio Maximum education attained by any individual Total value of household assets Gender of head Proportion of household members that are female Ages of household members Sector of employment of household members
Community characteristics	Access to key services and infrastructure Urban or rural Farmers in the community Access to public goods and services
Regional characteristics	Climate shocks Governance and management Availability of land and its quality Access to markets and services

Source: World Bank, 2005:132

2.5 INDICATORS OF POVERTY IN SOUTH AFRICA

A detailed analysis of poverty extends beyond the assessment of poverty and inequality based on income measures; other key indicators of living standards are included that cannot be accounted for when using only the income approach. Access

to basic services such as dwelling, clean water, sanitation and electricity has an effect on the quality of life which may lead to improvements ranging from health to productivity (Bhorat & Kanbur, 2006:114).

According to the World Health Organisation (WHO, 2005:62) poverty extends to fields such as health, education, gender, children and employment. These are discussed in detail below.

- Poverty increases the risks of becoming infected with chronic illness. These sicknesses lead poor people to die at an earlier age. While these diseases are caused by poverty, they also worsen existing poverty and ruin a household's economic prospects (WHO, 2005:62).
- The uneducated nation lacks awareness and action. The nation without an adequate level of education suffers from poverty. A feeling of complete isolation overcomes such a nation's people, and they become politically and economically deprived. It is difficult to warn illiterate people of the dangers of various illnesses. In this way, illiterate people, who also happen to be poor, are proved to die of illness (Soundarapandian, 2000:80).
- There is a high risk of educational underachievement for children who are from low income circumstances. Children from poor families are prone to hunger, irritability, headaches and other illnesses which may hamper educational progress. There is a greater possibility that children from poor families will drop out of school at an earlier age. These children are at a higher risk than other children for retention in their grade, special placement during school hours and even not completing their high school education. Children who live at or below the poverty line will have far less success educationally than children who live above the poverty line. As mentioned above, poor children are likely to suffer from hunger, fatigue, irritability, headaches and other illnesses which could restrict their focus and concentration (Shepard & Greene, 2003:22).
- There is a further drastic effect of poverty on children. They become exposed to the vulnerability of being abused and exploited, especially when they are forced into child labour. Older children living in extreme poverty, but who are still attending

school, are likely to accept dangerous jobs at the expense of attending school (Lusted, 2010:8).

- Poverty has a strong gender dimension. Research conducted by Posel and Rogan (2011) based on the data provided by the 1997 and 1999 rounds of the October Household Survey (OHS) and the 2004 and 2006 rounds of the General Household Survey (GHS) found that income poverty in post-apartheid South Africa remained a gender issue. The extent, depth and severity of poverty are significantly higher amongst females and female-headed households (Posel & Rogan, 2011:11).

The sub-sections below discuss the following indicators of poverty: dwelling, water, electricity and sanitation.

2.5.1 Relationship between poverty and dwelling

There are four main types of dwellings evident in most parts of the world, namely, formal, informal in backyard, informal not in backyard (squatter camp) and traditional. Formal dwellings are permanent fixtures with walls made of bricks and having tiled or corrugated roofs. These dwellings are considered to be superior. Informal dwellings have corrugated iron as walls and roofs, whilst traditional dwellings have mud walls and corrugated iron and thatch roofs. Informal dwellings in densely populated settlements, such as squatter camps, are vulnerable to unfavourable weather conditions and open fires. Informal dwellings are more vulnerable and more easily damaged than traditional dwellings because of the materials used to construct their roofs and walls. Informal settlements (squatter camps) are common in the urban areas of the Free State, North West and Mpumalanga. Traditional dwellings are more prevalent in rural areas of Kwazulu-Natal and the Free State (STATS SA, 1996; 2001).

2.5.2 Access to water

People in poorer areas collect water of indifferent quality from sources which are far away from their homes. The supply of clean water nearer to home has a positive contribution on a households' well-being by promoting good health and giving them time to spend on other commitments. There were a significant proportion of Black households (11.9%) in 2001 that were collecting water from dams, rivers and springs for domestic use compared to 0.1% of White households in the same year (STATS

SA, 1996 & 2001). Lack of access to water decreases food production and lead to poor nutrition. Inadequate nutrition results in poor health, thus increasing or causing poverty (WHO, 2005:60).

2.5.3 Availability of electricity

Electricity is in demand for its important input with regard to both consumption and production. A suitable supply of electricity relieves hunger and malnutrition because it makes cooking and food conservation (by refrigeration) possible. Electricity leads to better use of production inputs such as machinery and computers. A poor supply of electricity to industry limits the use of technology that could increase production (African Development Bank, 2004:42).

Electricity is regarded as the most superior form of energy and it is used for the functioning of many different household appliances, e.g. stoves, micro ovens and refrigerators. However, those who are poorer lack the means to access electricity (due to lack of income or infrastructure), and ended up using wood, paraffin and candles as forms of energy. In 2001, almost one-third of Black households were using candles, wood and paraffin as a form of energy (Bhorat & Kanbur, 2006:120-121).

2.5.4 Relationship between poverty and sanitation

Lack of sanitation increases risk of being exposed to excreta-related diseases, including faecal-oral diseases and water based diseases. The majority of poor people are affected by these diseases (WHO, 2005:59). Sanitation is a basic right in South Africa. During the inter-censal period (1996-2001), there was an increase in the number of households with access to a flush or chemical toilet in South Africa. In 2001, more than half of the households in the country had access to toilets. The majority of Coloureds (84%), Indians (98%) and Whites (99%) had access to a flush toilet or chemical toilet while only 40% of Black households had this facility in 2001. This is an improvement from only a third of Black households who had access to toilets in 1996 (Bhorat & Kanbur, 2006:125).

2.6 MEASUREMENT OF POVERTY

The measurement of poverty is very important especially when discussing public policy aiming at poverty eradication or alleviation. The measurements are used when identifying the poor and the non-poor, to design optimal poverty alleviation schemes and to establish the equity of poverty alleviation policies. The theory of optimal targeting suggests that it will commonly be best to target individuals on the basis of indicators that are easily observable and as exogenous as possible, while being as correlated as possible with the true poverty status of the individual (Duclos & Araar, 2006:15).

Poverty measurement should reflect the characteristics that a poor household should possess. Because the perceptions of poverty vary from individual to individual, it is highly improbable to devise such a measure. Since the level and structure of consumption determines the extent of welfare, poverty measures are eventually related to the ability to consume. The measurement of consumption is associated with complex problems and the phrase “ability to consume” is ambiguous. Therefore, the measurement of poverty adapts information on household income (Sharma, 1990:23).

According to the World Bank (2005:8), poverty measurement is important because:

- It keeps the poor on the agenda of the policy makers;
- it enables interventions aiming at reducing or alleviating poverty;
- it helps to monitor and evaluate interventions of those interested in helping the poor; and
- It evaluates the effectiveness of the policies aiming at poverty alleviation.

This section discusses measures which are used to analyse poverty; namely, poverty line, poverty gap, and headcount index and dependency ratio.

2.6.1 Poverty lines

A poverty line identifies the amount of income a family requires to meet its basic needs. Those who fall below the line are considered to be poor. In other parts of the

world the poverty line is based on pre-tax money income only, which does not include food stamps, medical aid, public housing and non-cash benefits (Newman, 2010:316).

According to the Central Economic Advisory Services (CEAS, 1986:16), household income is the measure of a country's citizens' material well-being and includes:

- Salaries, wages, overtime and commission before the deduction of taxes and pensions;
- Net profit from business, farming or professional practice;
- Cash value of fringe benefits e.g. car allowance, housing subsidy; and
- Other regular income like pension, rent, child grant, interest and dividends (CEAS, 1986:16).

Poverty lines are measures of the minimum incomes individuals and households are considered to need in order to take part in the society in which they live and to avoid what is defined as deprivation and exclusion in that society. There are two kinds of poverty lines (Staff, 2002:73):

- Empirical poverty lines which are based on statistical survey evidence, showing the minimum income levels at which people in fact are able to take part decently in society and avoid deprivation; and
- Prescriptive poverty lines which are based on experts' calculations of the minimum income which ought to be sufficient if used according to the budgeted prescriptions derived from empirical evidence on the prevailing adequate living patterns.

Poverty is thus characterised by the inability of individuals, households or the entire community to command sufficient resources to satisfy their basic needs. The World Bank's poverty line separates the poor from the non-poor based on the expenditure necessary to buy a minimum standard of nutrition and other necessities. This expenditure varies from country to country; therefore country-specific poverty lines have to be drawn (World Bank, 1993:16).

According to Arndt and Simler (2004:11) there is no specific blueprint for the goods and services that can be referred to as basic needs, and about who decides about basic needs. A meaningful poverty line should reflect the cost of achieving basic

human requirements. The money metric poverty line may be used as a tool for this purpose, as it represents a single global amount of money needed to cover basic needs, regardless of what is going to be covered or excluded. The money metric poverty line thus provides useful information on the number of monetarily poor people. It is also difficult to decide on a minimum core of basic needs which are universally relevant, since basic needs are culturally dependent. This means that a basic need in one culture cannot be considered as a basic need in another culture (Arndt & Simler, 2004:11).

When using a relative poverty line, there are no guidelines on how to meet the requirements of basic needs. The standard of living that is customary in a given society can be calculated by calculating the cost of a “basket of goods and services”. What is included in this basket should reflect what the broader society believes constitutes an acceptable minimum standard of life. The importance of this cost is vital (SPII, 2007:29).

A poverty line can also be measured by asking people to define poverty line and then using this to measure the extent of poverty. The answers will vary from person to person, but, when plotted and a line drawn through them, that line will represent a subjective poverty line. A subjective poverty line recognises that poverty lines should be analysed from subjective judgements people make about what constitutes a socially acceptable minimum standard of living in a particular society. Different countries use different poverty lines and poorer countries tend to have lower poverty lines than richer countries, all of which is reflected in the subjective judgements of individuals (Ravallion, 1992:33).

The use of poverty lines to measure poverty is an old practice and is not very relevant to modern societies. These lines demarcate households whose income or consumption is low with regard to the general population. Poverty lines are changed according to general price level and income mean or median. As technology advances and new products are introduced, spending trends change. New products are initially acquired by upper income groups and these products cascade downwards to lower income groups. A case in point is cell phone use in S.A. Cell phones were

seen initially as being a convenience, but have ended up being a necessity (Mokoena, 2001:21).

Table 2.2 shows a comparison of poverty lines used in South Africa, and their composition. The Minimum Subsistence Level (MSL) is the minimum level at which a non-White family would be able to maintain the health of its members and conform to Western standards of decency. It includes the cost of items such as tax, medical expenses, education and household equipment, in addition to the items falling within the Poverty Datum Line (PDL). PDL is the amount of money a household needs to sustain itself regarding its basic necessities for a period of a week or a month or a year. The Supplementary Living Level (SLL) includes items such as recreation, personal care, pension, unemployment, insurance, medical aid and burial contributions, plus 30% more items than those included in the Minimum Living Level (MLL). MLL is defined as the minimum monthly income needed to sustain a household. As the household size becomes larger, so the income required to keep its members out of poverty becomes higher (Potgieter, 1980:7).

TABLE 2.2: POVERTY LINES USED IN SOUTH AFRICA	
POVERTY LINE	COMPOSITION
Poverty Datum Line	Food, clothing, fuel/lighting, washing/cleaning, rent, transport
Minimum Subsistence Level	Tax, medical expenses, education, household equipment replacement
Minimum Living Level	PDL plus: tax, medical expenses, education, household equipment replacement
Supplementary Living Level	MLL plus approximately 30% more of each individual item in MLL plus recreation, personal care, pension, unemployment insurance fund, medical aid, Burial contributions.
Household Subsistence Level	As for PDL
Household Effective Level	HSL plus 50%

Source: Potgieter, 1980

Potgieter (1980:4) defined the HSL as an estimate of theoretical income needed by each individual household to maintain a minimum level of health and decency in the short term. HSL is calculated by taking the lowest cost of a basket of goods and services of adequate quality. The basket of goods and services includes: food, clean water, accommodation, clothing, transport, electricity and washing and cleaning material for each member of the household, as well as for the entire household.

This study uses HSL as a poverty line because firstly, it covers all major centres of South Africa; secondly, it is the most frequently used measure; and thirdly, because the method used to calculate it is simple (Potgieter, 1980:63). After HSL has been calculated for each individual household, the HSL figure is then compared with the combined income of all members of the same household. Then, the degree of poverty can be measured at household level. The HEL is then calculated by adding 50% to the HSL, thus giving a higher cut-off point (Mokena, 2011:22).

2.6.2 Headcount index and poverty gap

Headcount index measures the proportion of the population that is counted as poor i.e. population below the poverty line. This is often denoted by (P_H). Headcount index is described by means of the equation:

$$P_H = \frac{N_p}{N} \dots\dots\dots 2.1$$

Where (N_p) is the number of poor and (N) is the total population. It is often helpful to rewrite the above equation as:

$$P_H = \frac{1}{N} \sum_{i=1}^N i(y < z), \dots\dots\dots 2.2$$

In this equation, (i) is an indicator function that takes on a value of one, if the bracketed expression is true, and zero otherwise. So, if expenditure (y) is less than the poverty line (z), and if (i) equals one, the household will be determined to be poor (Haughton & Khandker, 2009:68).

The headcount index has two weaknesses (Haughton & Khandker, 2009:68):

- Firstly, the headcount index does not take the intensity of poverty into account; and
- Secondly, the headcount index does not indicate how poor the poor are and hence does not change if people below the poverty line become poorer.

An indicator that overcomes the shortcoming of the headcount index that it does not measure the extent of poverty is the poverty gap (P_G). The poverty gap measures the average shortfall of the incomes of the poor below the poverty line, while the poverty gap index measures the extent of the shortfall of incomes below the poverty line. The poverty gap of a household can be expressed by the equation (Haughton & Khandker, 2009:68):

$$P_G = \frac{1}{nx^*} \sum_{i \in L} (x^* - x_i), \dots\dots\dots 2.3$$

In this equation, $(x^* - x_i)$ measures, for the individual (i) in poverty, the gap between income (x_i) and the poverty line (x^*); (L) is the set of all poor, and (n) is the total number of poor (Agenor, 2004:436).

Since the poverty gap does not take into account the number of poor, the product of (P_H) and (P_G) is used and expressed by the equation:

$$P_{HG} = \frac{1}{N_{x^*}} \sum_{i \in L} (x^* - x_i) \dots\dots\dots 2.4$$

(P_{HG}) measures the level of income transfer needed to bring all poor to the poverty line (Agenor, 2004:436).

2.6.3 Dependency ratio

A dependency ratio is the ratio of an area's dependent population divided by its theoretically supporting population. Supporting population is considered to be those individuals between the ages of eighteen and sixty four, while dependent population is those under the age of eighteen and over the age of sixty four. Dependency and support are general notions regarding economic activity in which the population aged between eighteen and sixty four is seen as economically active (income earning) (Pol & Thomas, 2001:124). The dependency ratio refers to the ratio of the number of non-income earners that depends on one income earner. This condition is particularly acute in extended family systems. Those who earn income have to support many non-earners so that their incomes are spread so thinly that they can afford very little food and shelter. Such a trend will obviously increase the incidence of poverty (Slabbert, 1997:57).

There are two methods of calculating dependency ratio as indicated in Table 2.3 and Table 2.4. In both tables, there are three households named A, B and C. Household A consists of four income earners and two non-income earners. Household B consists of three income earners and three non-income earners. Household C consists of five income earners and two non-income earners. According to the first method, a total of

twelve income earners are divided by seven non-income earners to find a dependency ratio of 1:7. The second method calculates the dependency ratio of each household and finally calculates the average of the households. The dependency ratio is found to be 1:8. In this study the second method was used for calculating the dependency ratio.

TABLE 2.3: DEPENDENCY RATIO CALCULATION METHOD 1		
HOUSEHOLD	INCOME EARNERS	NON INCOME EARNERS
A	4	2
B	3	3
C	5	2
TOTAL	12	7
DEPENDENCY RATIO	12/7 = 1.7	

Source: Slabbert, 1997:57

TABLE 2.4: DEPENDENCY RATIO CALCULATION METHOD 2			
HOUSEHOLD	INCOME EARNERS	NON INCOME EARNERS	DEPENDENCY RATIO
A	4	2	4/2 = 2
B	3	3	3/3 = 1
C	5	2	5/2 = 2.5
TOTAL			5.5
AVERAGE DEPENDENCY RATIO			1.8

Source: Slabbert, 1997:57

2.6.4 Poverty gap index

Borooah and McGregor (1991:357) define the poverty gap index as the proportionate gap normalised to the total population. The poverty gap index includes the incidences of poverty, the headcount index, depth of poverty and poverty gap. This measure

reflects the depth of poverty as well as its incidence. The indicator is often described as measuring the per capita amount of resources needed to eliminate poverty, or reduce the poor's shortfall from the poverty line to zero, through perfectly targeted cash transfers. The poverty gap index equation is described as:

$$\frac{1}{N} \sum_{i=1}^q \frac{(Z_i - Y_i)}{Z_i} \dots\dots\dots 2.5$$

Where (Y) = income of poor household,
 (Z) = poverty line,
 (N) = total number of population,
 (q) = number of the poor.

Ravallion (1992:32) stated that the poverty gap can also be written as $PG = I \times H$, where (H) is the number of poor households and (I) represent the income gap ratio (mean depth of poverty as a proportion of the poverty line), and is defined by:

$$I = \frac{Z - Y^p}{Z} \dots\dots\dots 2.6$$

Where (Y^p) = denotes the mean consumption of the poor,
 (Z) = is the mean income of the poor.

Ravallion (1992:32) further pointed out that the income gap is not a good measure for poverty. The case of an individual just below the poverty line who escapes his / her poverty, and hence rises above the poverty line, makes this evident. The mean of the remaining poor will either fall or rise depending on how much was the short fall of the person who escaped poverty. Then, the income gap ratio will also either increase or decrease. The problem will not occur, however, if the income gap ratio is multiplied by the head count index to yield the poverty gap (Ravallion, 1992:32).

The poverty gap can also be interpreted as a ratio of the average extra consumption needed to get all people to the poverty line divided by the poverty line. The

interpretation means that alleviating poverty can be done by lifting all the poor people above the poverty line. Therefore, the minimum cost of eliminating poverty by lifting the poor above the poverty line is through the summation of all the poverty gaps in a population; then every poverty gap is filled up to the poverty line. On the other hand, one can also consider the maximum cost of eliminating poverty, assuming that the policy makers know nothing about who is poor and who is not. Then the policy makers would have to give (z) to everyone to be sure that none are poor; the cost is (z) multiplied by the population size (Ravallion, 1992:32). The cost would be summarised by the equation:

$$\sum_{i=1}^q [z - y_i] \dots\dots\dots 2.7$$

Slabbert (1997:49) has adapted the poverty gap to a measure of an individual household's income shortfall. The poverty gap of an individual household (in monetary terms) can therefore be expressed by the equation:

$$G_i (y; z) = z_i - y_i \dots\dots\dots 2.8$$

Where: (G_i) = the income shortfall of a household;
 (Y_i) = the income of a specific household; and
 (Z_i) = the poverty line of a specific household (Slabbert, 1997:49).

2.7 INEQUALITY AND POVERTY

According to Litchfield (1999:1), there is a growing agreement among economists, policy makers and even politicians that poverty and inequality should not be treated separately. The debate about inequality is whether the definition should include ethical concepts such as the desirability of a particular system of rewards and simple resource differences in income. Inequality, unlike poverty which is a prescriptive term, is descriptive. Inequality therefore refers to the comparison of living standards across the population (Litchfield, 1999:1). Poverty is concerned with the absolute standard of living of a part of the population (i.e. the poor who are not able to attain a minimum

standard of living) whereas inequality refers to the relative standards across the whole population (Ligthelm, 1993:3).

Average level of income and the distribution of income are the factors upon which measurement of poverty depends. These two elements therefore focus on the situation of individuals and households at the bottom end of the distribution. These therefore broaden the definition of inequality. Inequality is defined over the entire population, unlike poverty that focuses upon a certain poverty line. Inequality is concerned with distribution of income and is better understood with regards to fundamental rights, equal opportunities, access to education, job opportunities, and fulfillment of one's potential and other freedoms (Coudouel, Hentschel & Wodon, 2002:47).

Sen (1981:15) asserts that the two concepts, poverty and inequality, are analytically distinct concepts, as the two are related but independent. It is misleading to use one as a marker of the other. Although they have historically been closely associated with an interest in economic and social change, they do not change at the same pace. Studies have even indicated that they may change in opposite directions. Beteille (2003:36) concludes that it is difficult to make any meaningful statement about the relationship between the two without specifying which conception of poverty and which aspect of inequality one has in mind.

2.8 SUMMARY AND CONCLUSION

In this chapter, the theoretical background of poverty was presented. It has been argued that poverty is increasingly regarded as a multi-dimensional concept, leading to the need to give attention to a wide range of factors.

The main perspectives in the definition of poverty were outlined in order to study the related causes and measurements. Poverty is commonly defined using two approaches, namely, the absolute and relative approaches. The absolute approach is based on the notion of subsistence, which is the minimum level necessary to attain a minimum standard of living. Households below this level are considered to be experiencing absolute poverty. The relative approach compares the standard of living of the poor with the standard of living of the non-poor within the community. People

are considered to be poor if their resources fall below the resources of the rest of the community.

The definition of poverty was also broadened to include other essential dimensions like consumption, health and education. It was therefore accepted that poverty leads to deprivation of these essential services such as education, health and human and civil rights. Poverty can be understood as the inability of individuals or households to attain sufficient resources to satisfy a socially acceptable minimum standard of living. These deprivations can be due to increasing/rising unemployment. Poverty is multi-faceted and everyone experiences poverty in a different way. The impact of poverty results in different types of poverty. The type of poverty one experiences depends on one's characteristics or the characteristics of the surrounding society. Many societal factors have been identified as causes of poverty such as poor access to education and health and high unemployment.

The characteristics that determine poverty includes individual characteristics, community characteristics, household characteristics and regional characteristics. The effect of lack of access to basic services such as dwelling, electricity, water and sanitation on poverty was found to be aggravating poverty. The socio-economic factors such as unemployment, education level, gender, income and household size have an effect on poverty.

There are different approaches to poverty measurement. The main measures of poverty are the poverty line, headcount index, poverty gap, household poverty index and dependency ratio. The following poverty lines are used in South Africa: PDL, MSL, MLL, SLL, HSL and HEL. The HSL is used in this study because it covers all major centres in South Africa and is the most used measure in recent years.

The poverty line identifies the income that a family requires in order to meet its basic needs. If the income is below the poverty line, then the family is considered to be poor. The headcount index determines the proportion of the population that is considered to be poor. Poverty gap measures how far the poor population is from the poverty line. The dependency ratio determines the number of non-income earners that depend on one income earner.

Poverty and inequality cannot be treated separately. Poverty is concerned with the absolute standard of living of the poor population, while inequality refers to the relative standards across the whole population. The measurement of poverty depends on the level and distribution of income. Inequality focuses on the distribution of income. Poverty and inequality are different concepts which are related but independent.

Therefore, it can be concluded that people living in poverty are deprived from basic needs such as food, shelter, clothing and household equipment's. There are different types of poverty and each type of poverty depends on the household's characteristics. Poverty is positively related to high levels of unemployment. Poverty levels are high among females and female headed households. Poor access to affordable education and healthcare services increases poverty. Children from poor families are at high risk of educational underachievement. Children from poor families are likely to accept dangerous employment at the expense of attending school.

CHAPTER 3: PROFILE OF THE SAMPLED POPULATION

3.1 INTRODUCTION

In this chapter, a profile of the households within the area is constructed using the questionnaires that were completed during the survey. The aim is to provide insight into the households by presenting an economic profile of the community. Sekhampu (2010:117) argues that information about socio-economic factors can be used to prepare demand planning and in the formulation of policies to reduce poverty, inequality and unemployment.

This chapter will present an economic profile of the area in terms of population size, labour force, and the educational qualifications of the population. Information provided will also include information about the sources of income and the expenditure patterns (on food, clothing, cleaning material, electricity, furniture, transport and other household necessities) of the residents of Nyakallong. The information provided in this chapter stems from a household survey conducted through a questionnaire. The results of the study are compared to household data from a similar study conducted in Kwakwatsi Township, situated within the Fezile Dabi district municipality in the Free State province, by Sekhampu (2010). Data from STATS SA about the Free State province is also used in order to make comparisons.

3.2 DEMOGRAPHIC PROFILE

The analysis of the demographic profile of the sampled population of Nyakallong has important implications on employment, income and household structures. In the next section the demographic profile of the sample population is presented from different perspectives. Any change in the economy of the region will have an effect on its population in terms of employment opportunities, income (remuneration), expenditure patterns, poverty level and social services (Slabbert, 2004:61).

3.2.1 Household size

The average household size, indicating the average number of people in a house, in Nyakallong was 4.2 for the year 2009 – meaning that on average there were four

people per household. Sekhampu (2010:119) found an average household of 3.9 for Kwakwatsi. STATS SA (2007:8) estimated the average household size for the Free State to be 3.4 members per household. It can be observed therefore that the average household size of the two townships is similar, and they are both slightly above the provincial household size.

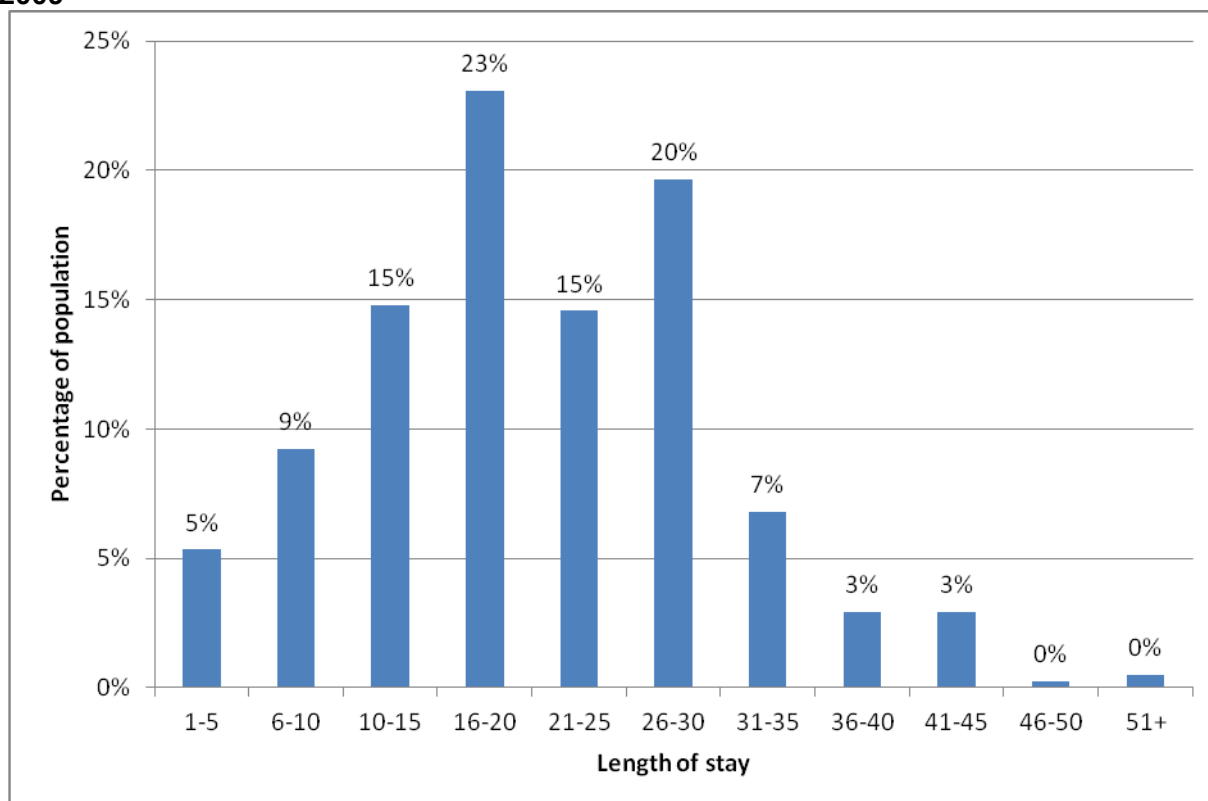
3.2.2 Dependency

The dependency ratio is calculated by dividing the number of non-income earners by the number of income earners. A low dependency ratio means that on average, a small number of non-income earners depend on the income of an individual income earner. The results of the survey show a dependency ratio of 2 for the total Nyakallong population surveyed, and a ratio of 6 for its poor population. Sekhampu (2010:138) calculated a dependency ratio of 4 for the whole population of Kwakwatsi, and 7 for its poor population.

3.2.3 Members of households

Figure 3.1 shows the average length of stay of the whole population of Nyakallong in 2009. The Figure shows that 14% of the whole population has moved to the township in the last ten years. In Kwakwatsi, 25% of the whole population had moved to the township in the last ten years. About 38% of the population has been staying in Nyakallong for ten to twenty years, while 41% of the whole population of Kwakwatsi has been staying in the township for ten to twenty years. This figure might have been caused by informal settlements that formed during the early 1990s.

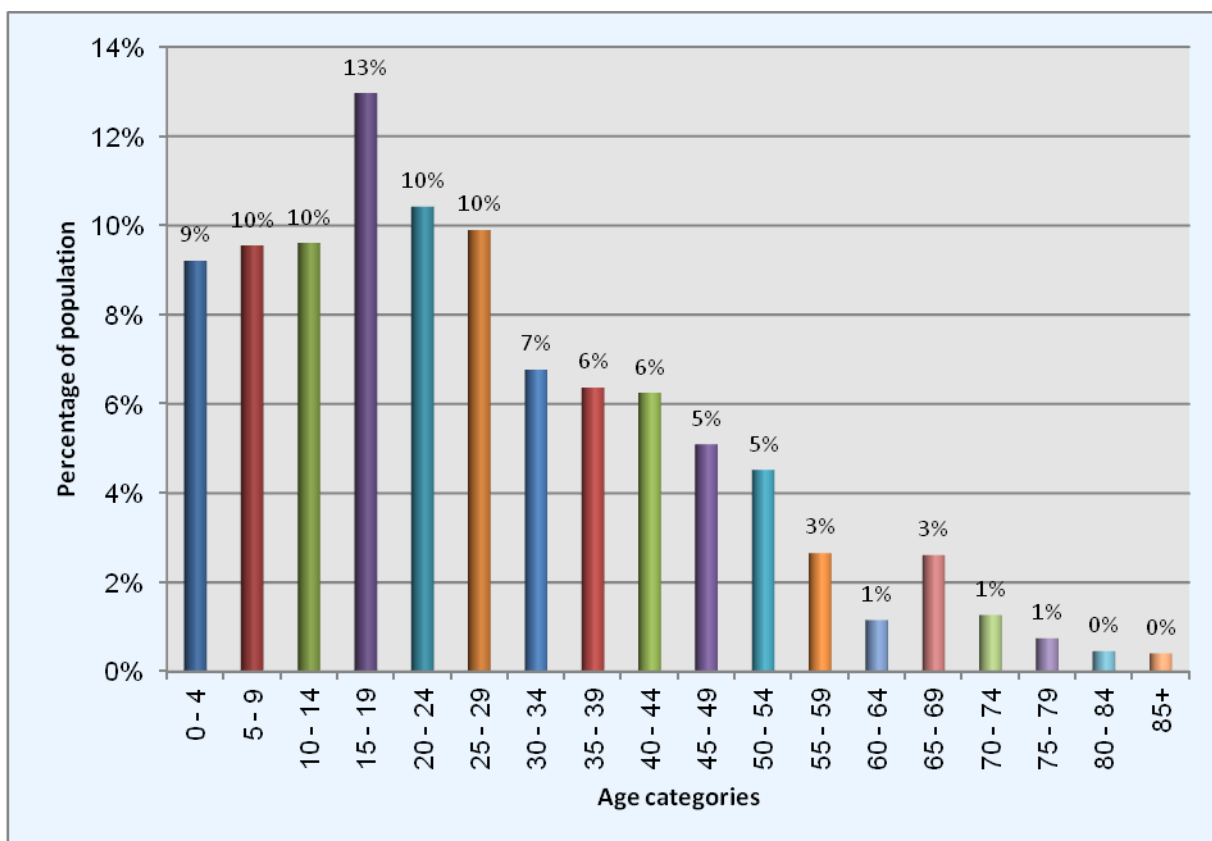
FIGURE 3.1 AVERAGE LENGTH OF STAY OF THE POPULATION OF NYAKALLONG: 2009



Source: Survey data, 2009

Figure 3.2 shows the age distribution according to categories of the population of Nyakallong in 2009. The Figure shows that 29% of the sampled population is younger than 15 years in age. About 5% of the population was found to be aged 65 and above. This 5% is eligible for the government's old-age grant, while some of those who are younger than 15 years qualify for child and foster grants. In Kwakwatsi, 31% of the sampled population was found to be younger than 15 years and 9% was 65 years and above (Sekhampu, 2010:123). A comparison with province as a whole shows that 39.6% of the population of Free State are aged younger than 15 years and 5.5% are aged 65 years or older (STATS SA, 2007:19).

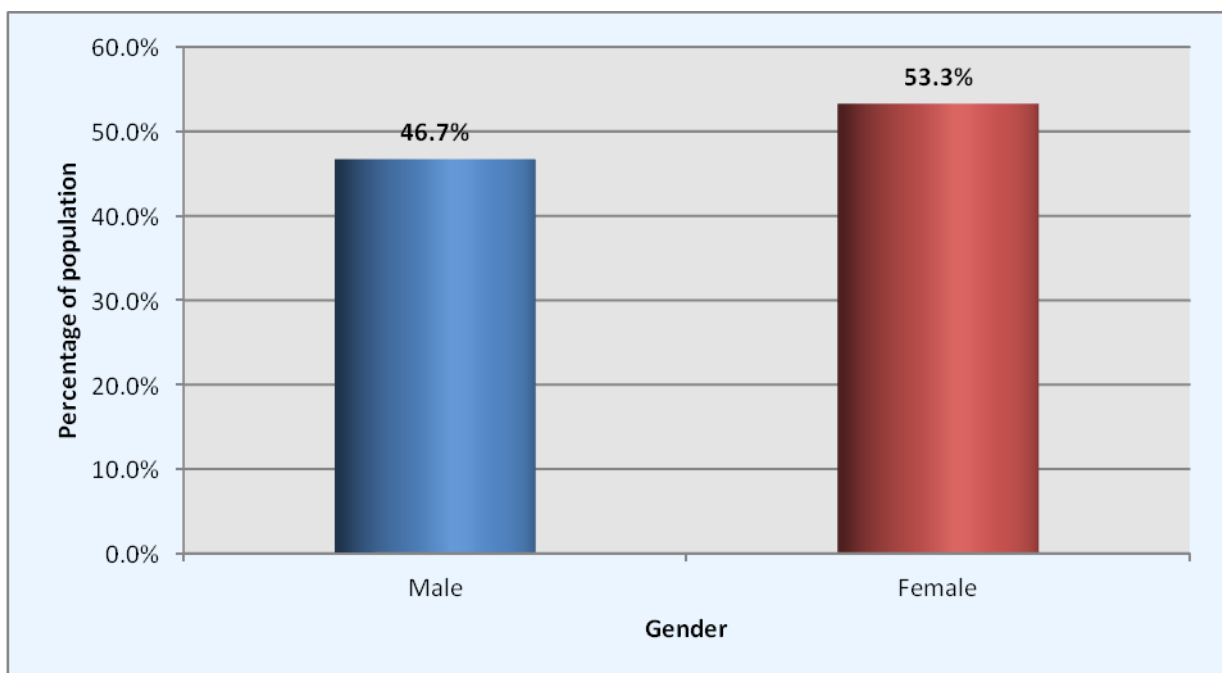
FIGURE 3.2 AGE DISTRIBUTION OF THE POPULATION OF NYAKALLONG: 2009



Source: Survey data, 2009

Figure 3.3 shows the gender distribution of the sampled population of Nyakallong in 2009. It shows that approximately 46.7% of the residents of Nyakallong were male, while 53.3% were female. According STATS SA (2007:19), 48.5% of the Black population in the Free State province were male while 51.5% were female. Sekhampu (2010:121) found that 46.2% of the population of Kwakwatsi were male, and 53.8% were female. This shows that Nyakallong's gender distribution is similar to that of Kwakwatsi Township and to the Free State province in general.

FIGURE 3.3 GENDER DISTRIBUTION OF THE TOTAL POPULATION: 2009

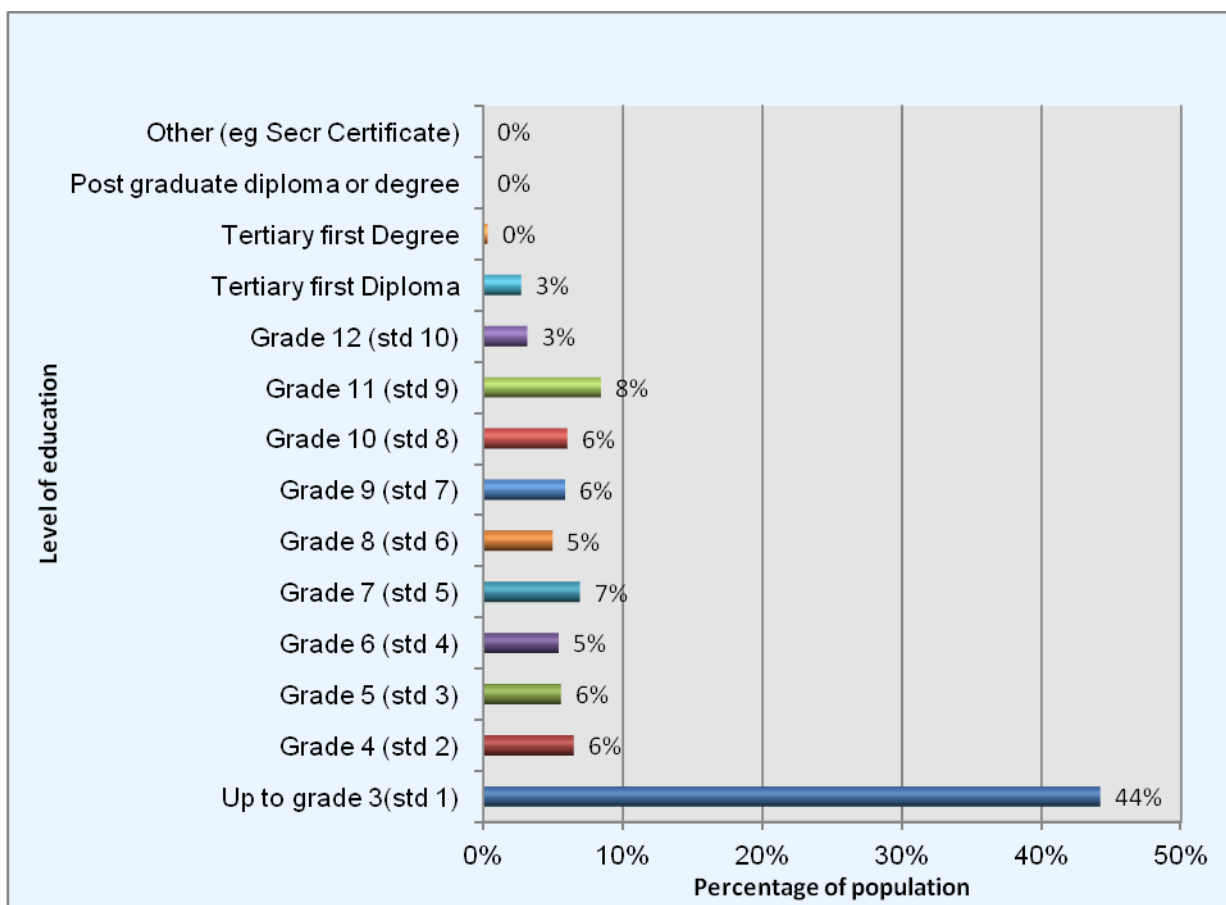


Source: Survey data, 2009

3.2.4 Educational attainment

Education is widely recognised to be a vehicle for empowerment, economic growth and general improvement in welfare (Sekhampu, 2010:124). In this study, it is assumed that the population having other qualifications have a Grade 12 certificate as well, as most other qualifications need Grade 12 as a prerequisite. Also, the study assumes that the illiterate population do not have any formal education. About 38.5% of the sampled population is still attending school. Figure 3.4 shows the school enrolments of the sampled population of Nyakallong in 2009. The figure shows that the majority of the school going population (44%) is still in the first three years of schooling. A total of 68% of the school going population is in primary school. The enrolment for grade 12 is 3%, with a total of 28% in secondary school (from grade 8 to grade 12). For Kwakwatsi, 36% of the school going population was found to be in their first three years of schooling. This means that in both townships the majority of the school going population is in the first three years of schooling. The enrolment for grade 12 in Kwakwatsi was recorded at 6%, with a total of 32% in secondary school. There were no enrolments at tertiary institutions in Kwakwatsi (Sekhampu, 2010:124-125).

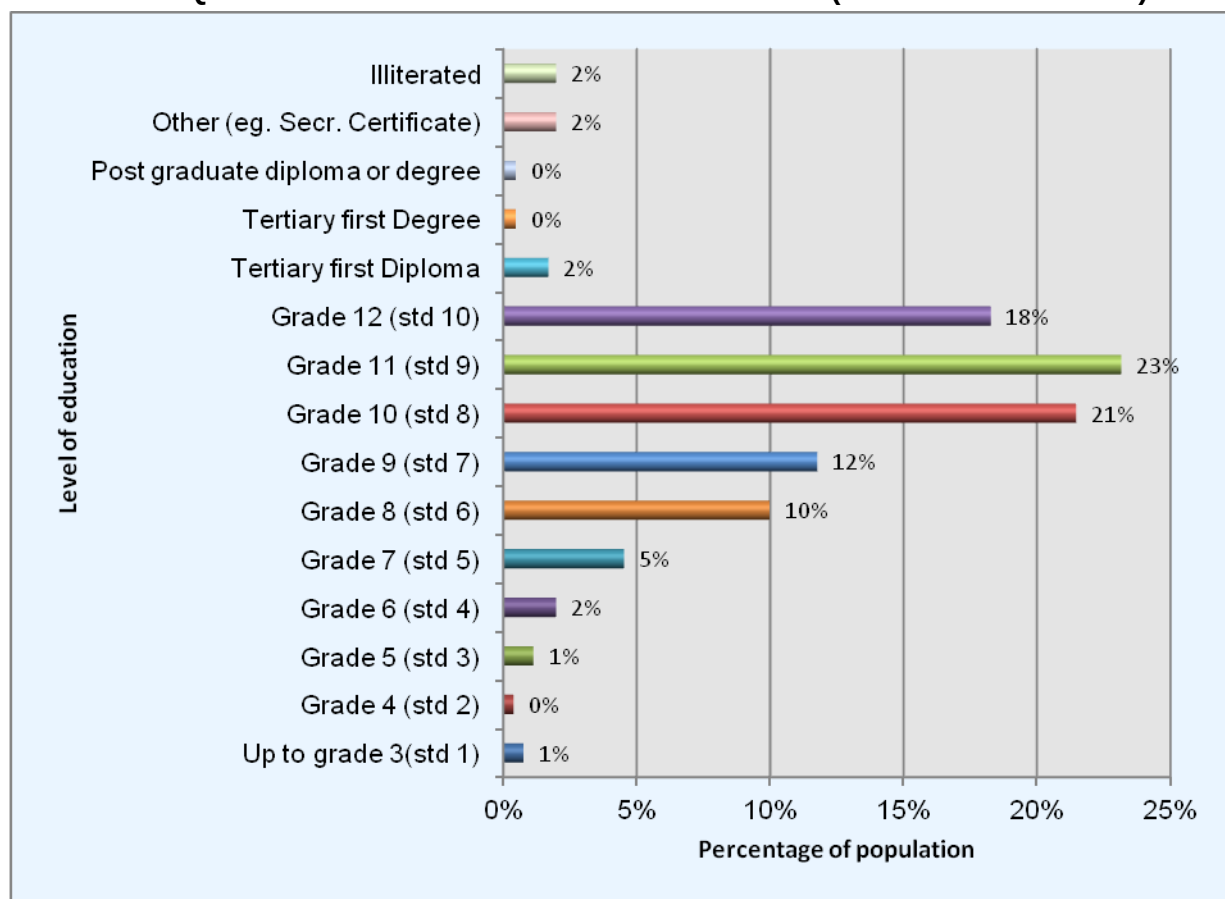
FIGURE 3.4: EDUCATIONAL LEVEL OF POPULATION OF NYAKALLONG ENROLLED IN SCHOOL: 2009



Source: Survey data, 2009.

An analysis of the post-school population's educational attainment shows that 20% of the post school population have a grade 12 qualification or higher. 79% have a qualification lower than grade 12, as shown in Figure 3.5 for Nyakallong in 2009. A majority of 84% of the population is attending secondary school. About 2% of the post school population are illiterate and 9% have educational qualifications of grade 7 or below. According to the data obtained from the survey, only 3% of those with matric have obtained a matric exemption (allowing them to be accepted at a university for further studies).

FIGURE 3.5: QUALIFICATIONS OF THOSE NOT STUDYING (TOTAL POPULATION): 2009



Source: Survey data, 2009

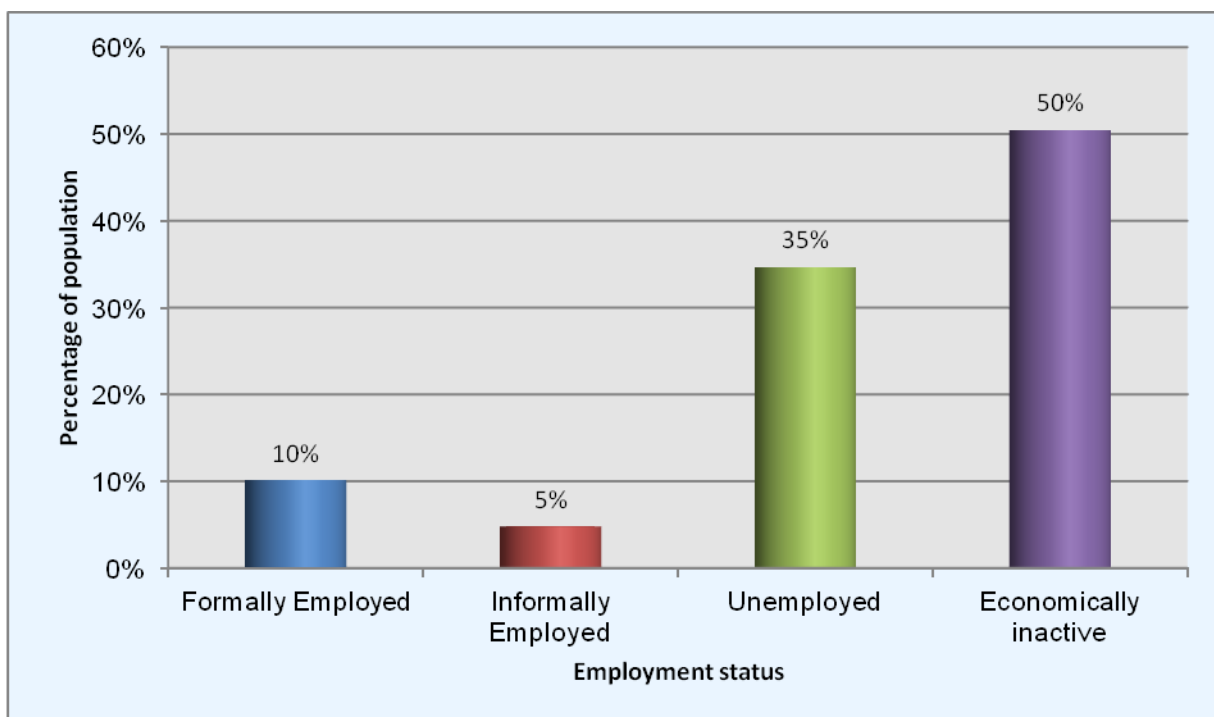
In Kwakwatsi, Sekhampu (2010:125) found that 15% of the post school population have a grade 12 qualification or higher. Sekhampu (2010:125) also found that 42% of the population have secondary education. About 12% of the post school population are illiterate, and 42% have an educational qualification of grade 7 or lower. A study by STATS SA (2007:32) in the Free State reported that 17% of the whole population have a grade 12 qualification or higher. About 34% were found to be illiterate.

3.3 LABOUR FORCE

This section concentrates on the employment status, the composition of the labour force, and the profile of the employed and unemployed population of Nyakallong. Figure 3.6 shows the employment status of the population of Nyakallong in 2009. Half of the population in Nyakallong is found to be economically active. Of the potential labour force, 69.9% are unemployed and 30.1% are employed. Of the employed population, 20.4% are formally employed while 9.7% are informally employed. In

Kwakwatsi, 44% of the population were found to be economically active. Of the total employable population, 79% were unemployed and 21% were employed (Sekhampu, 2010:124). In the Free State, 62.8% are economically active. Of the economically active population, 35.8% are unemployed and 64.2% are employed (STATS SA, 2008:v).

FIGURE 3.6: EMPLOYMENT STATUS OF THE TOTAL POPULATION: 2009



Source: Survey data, 2009

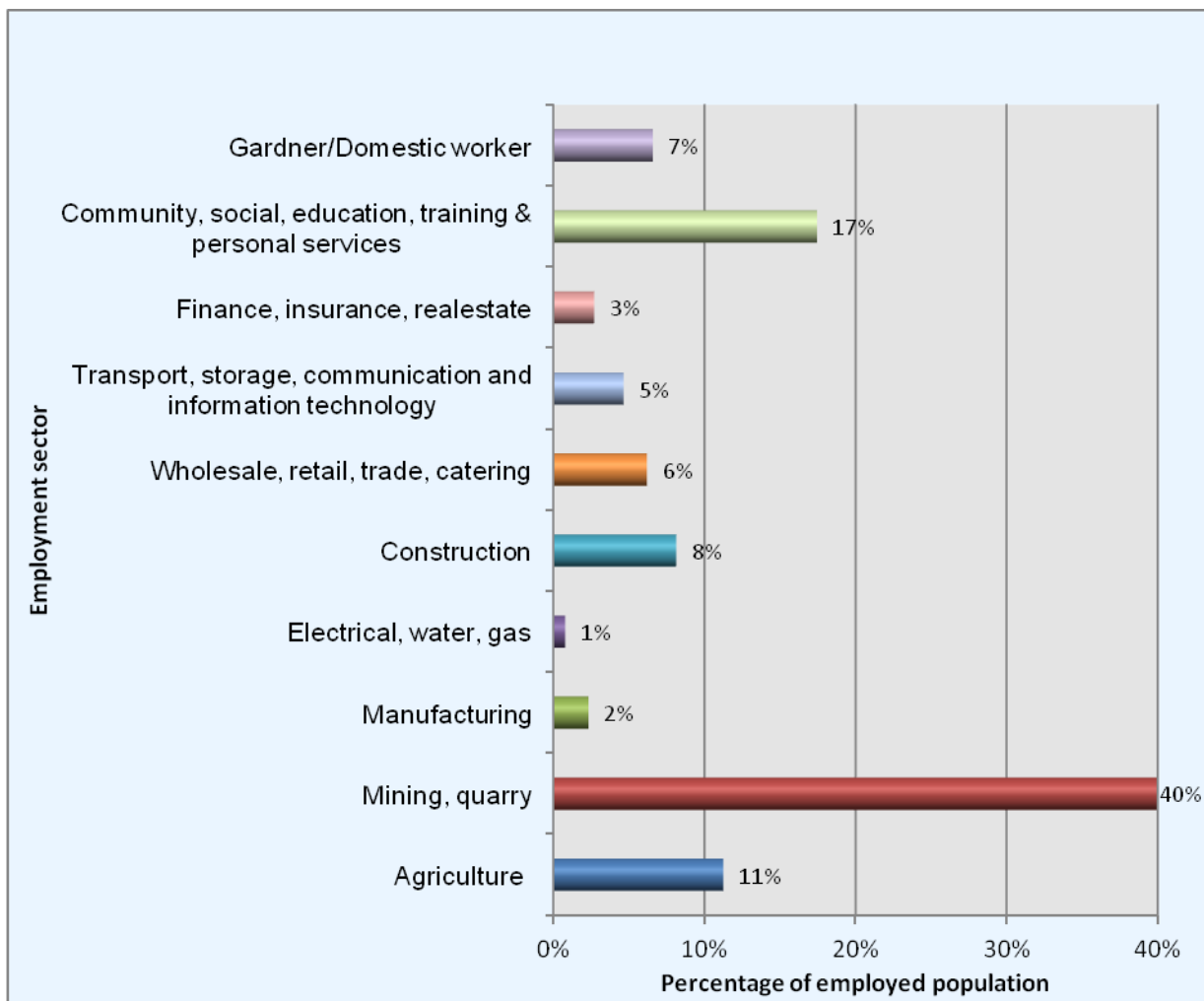
3.3.1 Profile of the employed population

This sub-section concentrates on the profile of the employed population, specifically with regards to the sectors of employment. In order to indicate the sectors which employ the majority of the Nyakallong population, the study must analyse the sectors of employment.

Figure 3.7 shows the sectors of employment of both the formally and the informally employed population of Nyakallong in 2009. The Figure shows that the mining sector is the main employer, employing a total of 40% of the employed population. Community, social, education, and training and personal services employ 17% of the employed population. Other major sectors of employment are agriculture (11%), and garden and domestic service (7%). In Kwakwatsi the main sector of employment was

found to be domestic services at 21%. Other major sectors of employment were community, social, education, training and personal service (19%), mining sector (14%) and agriculture (14%) (Sekhampu, 2010:138). The dominance of the mining sector in the employment sector of Nyakallong is due to the fact that the area is within a mining region – with the towns of Welkom, Allanridge, Odendaalsrus and Virginia having mining activities.

FIGURE 3.7: SECTOR OF EMPLOYMENT OF THE TOTAL POPULATION: 2009



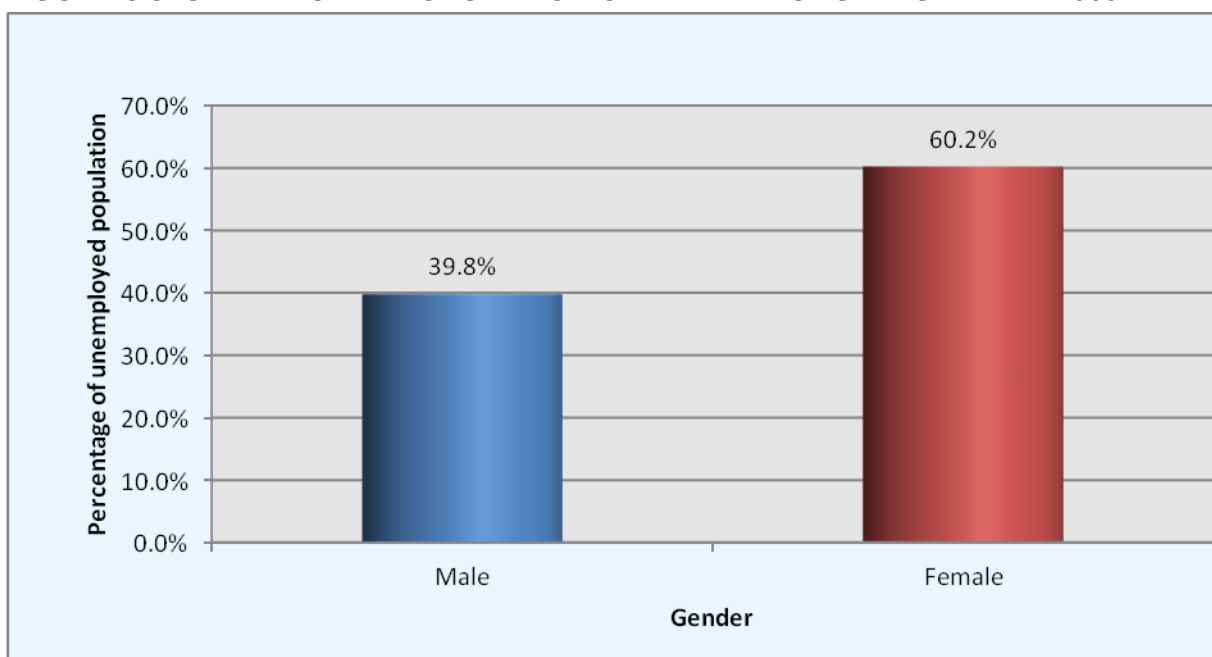
Source: Survey data, 2009

3.3.2 Profile of the unemployed population

This subsection concentrates on the profile of the unemployed population. This is achieved by investigating the following characteristics of the unemployed population: age, gender, duration of unemployment, and qualifications and skills possessed.

Figure 3.8 shows the gender distribution of the unemployed population of Nyakallong in 2009. The Figure shows that 60.2% of the unemployed population are females, while only 39.8% are males. This means that the majority of the unemployed are females. This could be because the mining and agricultural sectors are the major employers – both previously considered as male dominated sectors. The gender distribution of the unemployed population correlates well with that in Kwakwatsi, where 60.2% of the unemployed were females and 39.8% were males (Sekhampu, 2010:129). The majority of the unemployed in the Free State are females (53.6%), while unemployed males make up 46.4% (STATS SA, 2008:58-60).

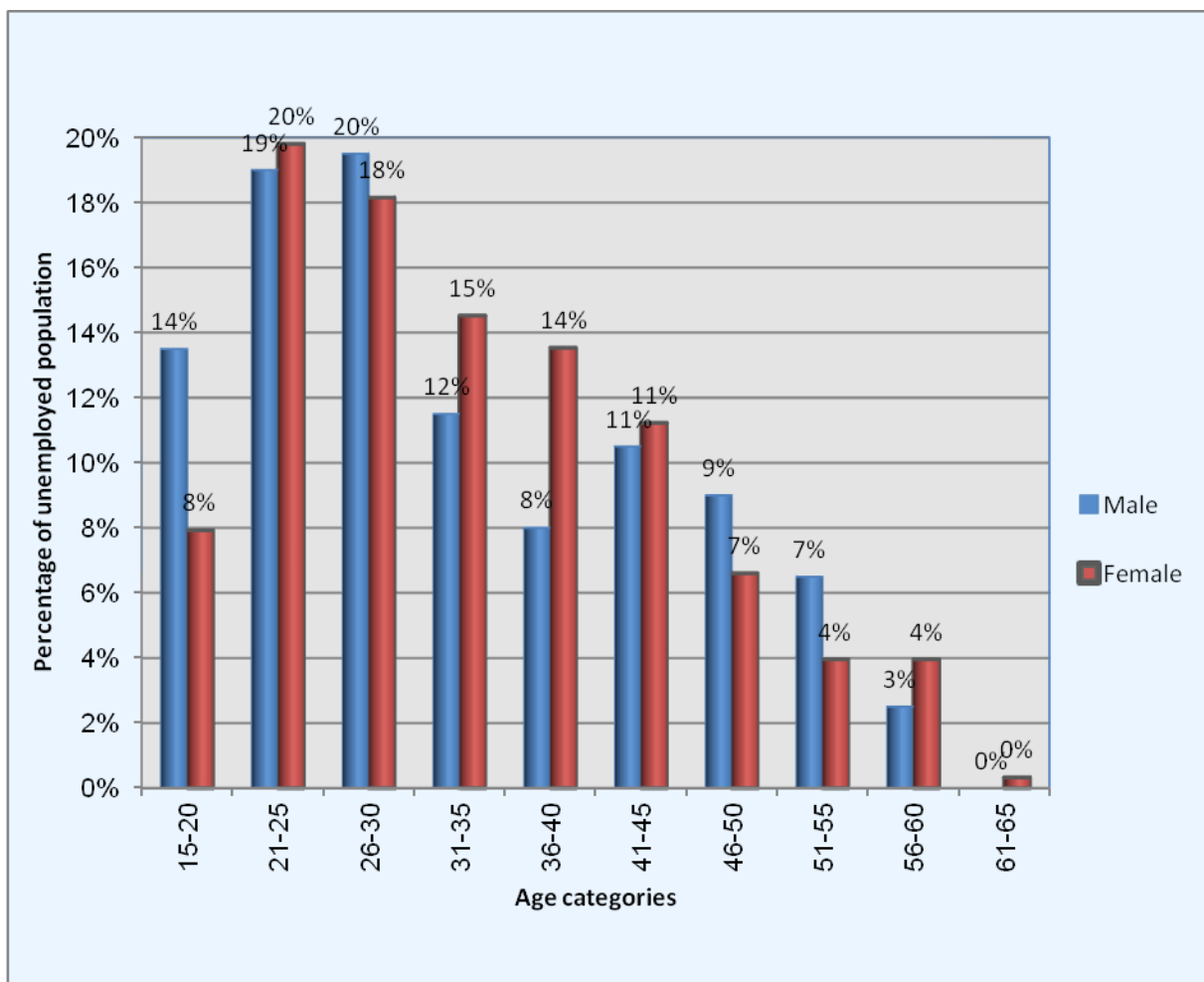
FIGURE 3.8: UNEMPLOYED POPULATION OF NYAKALLONG BY GENDER: 2009



Source: Survey data, 2009

Figure 3.9 shows the unemployed population of Nyakallong by age and gender in 2009. The Figure shows that the majority of the unemployed population is under the age of 35. Out of the total unemployed population, the youth (age category 21 to 35) is the most affected group – with 51% of males and 53% of females being unemployed.

FIGURE 3.9: UNEMPLOYED POPULATION OF NYAKALLONG BY AGE AND GENDER: 2009



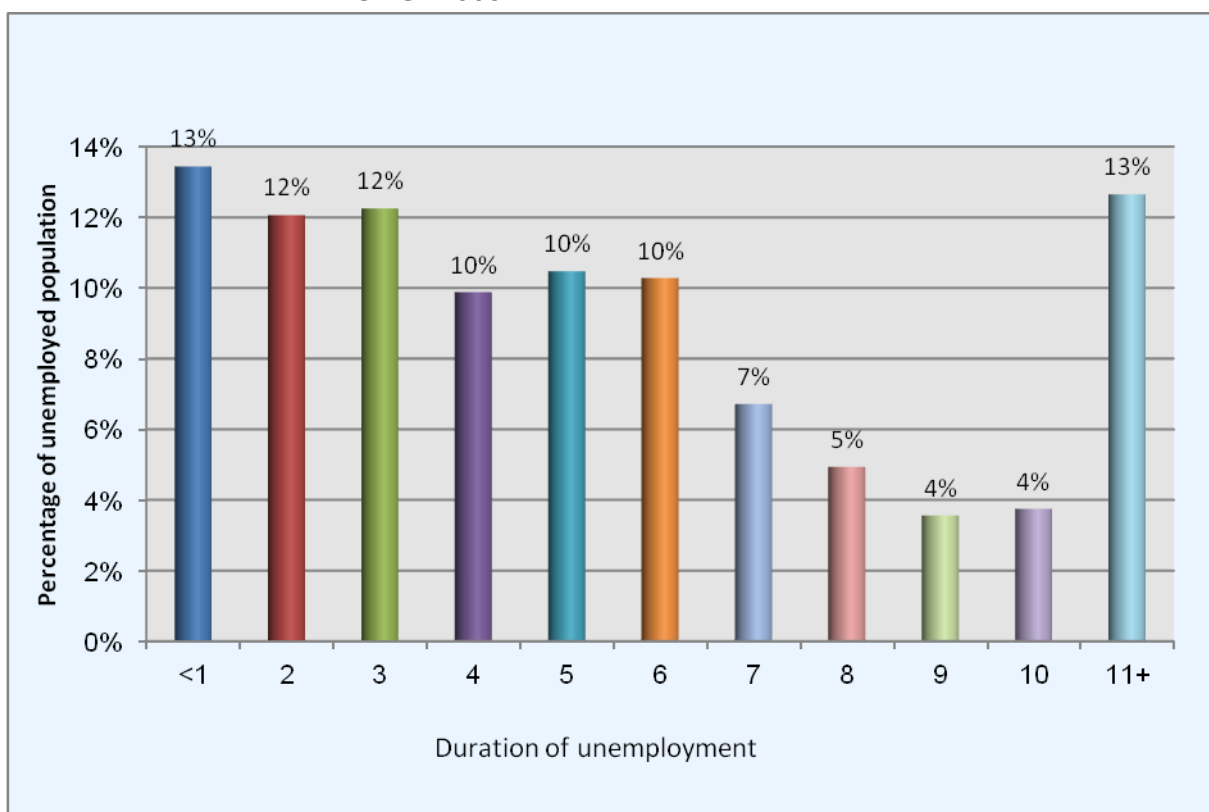
Source: Survey data, 2009

The average number of unemployed persons in a Nyakallong household is 1.5 (calculated by dividing the total number of unemployed by the number of sampled houses). In Kwakwatsi, 48% of males and 51% of females who were in the age category 21 to 35 years were unemployed. In the Free State as a whole, 79.5% of the population under the age of 35 are unemployed (STATS SA, 2008:58-60). Nyakallong is no different from the Kwakwatsi Township and the Free State province, where the majority of the unemployed are the youth.

Figure 3.10 shows the duration of unemployment in Nyakallong in 2009. The Figure shows that 57% of the unemployed have been unemployed for a time of up to five years. This group is most probably made of school leavers' who have entered the labour force as job seekers. The Figure also shows that 7% of the unemployed have

been unemployed for up to seven years. This might have been caused by the implementation of a special labour law in 2002.

FIGURE 3.10: DURATION OF UNEMPLOYMENT FOR THE TOTAL POPULATION OF NYAKALLONG: 2009



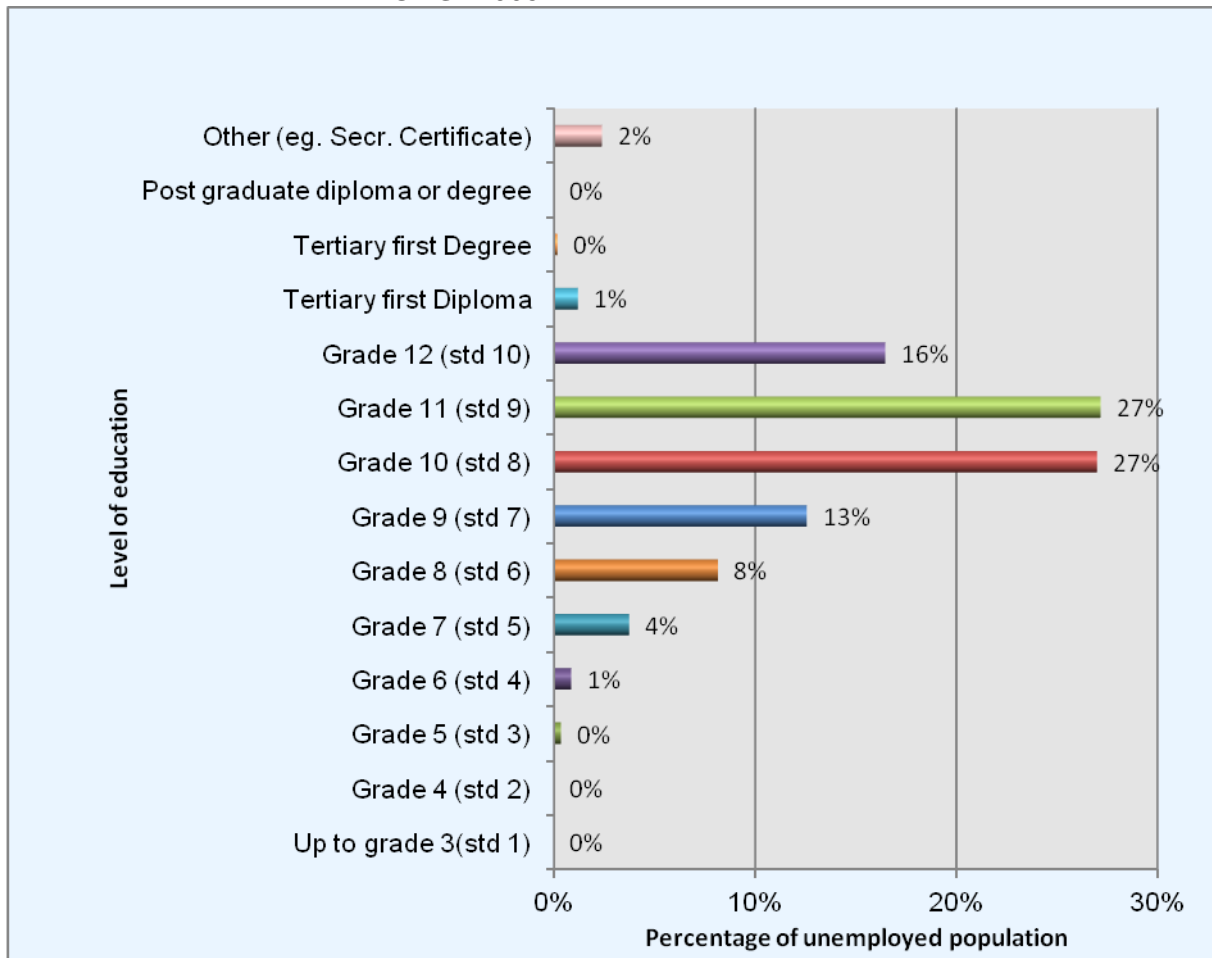
Source: Survey data, 2009.

It is also shown that 26% of the unemployed have been unemployed for eight years or more. This might be as a result of retrenchments at the mines during the early 1990s, and by the closure of Loraine Gold mine number two in 1995. In Kwakwatsi, 41% had been unemployed for up to five years while only 1% had been unemployed for seven years. 53% had been unemployed for eight years or more (Sekhampu, 2010:128).

Figure 3.11 shows the qualifications of the unemployed population of Nyakallong in 2009. The Figure shows that 17% of the unemployed have a grade 12 qualification or higher. Only 1% of the unemployed have a tertiary diploma, and none have a tertiary degree. 82% of the unemployed have a qualification lower than grade 12 (this assumes that those with other qualifications do not have a grade 12 certificate). A majority of 93% of the unemployed have secondary education (this assumes that those with other qualifications have secondary education). The minority (5%) have

only primary education. According to theory, low levels of education are related to high levels of unemployment. This seems to be the case in Nyakallong.

FIGURE 3.11 QUALIFICATIONS OF THE UNEMPLOYED POPULATION OF NYAKALLONG: 2009



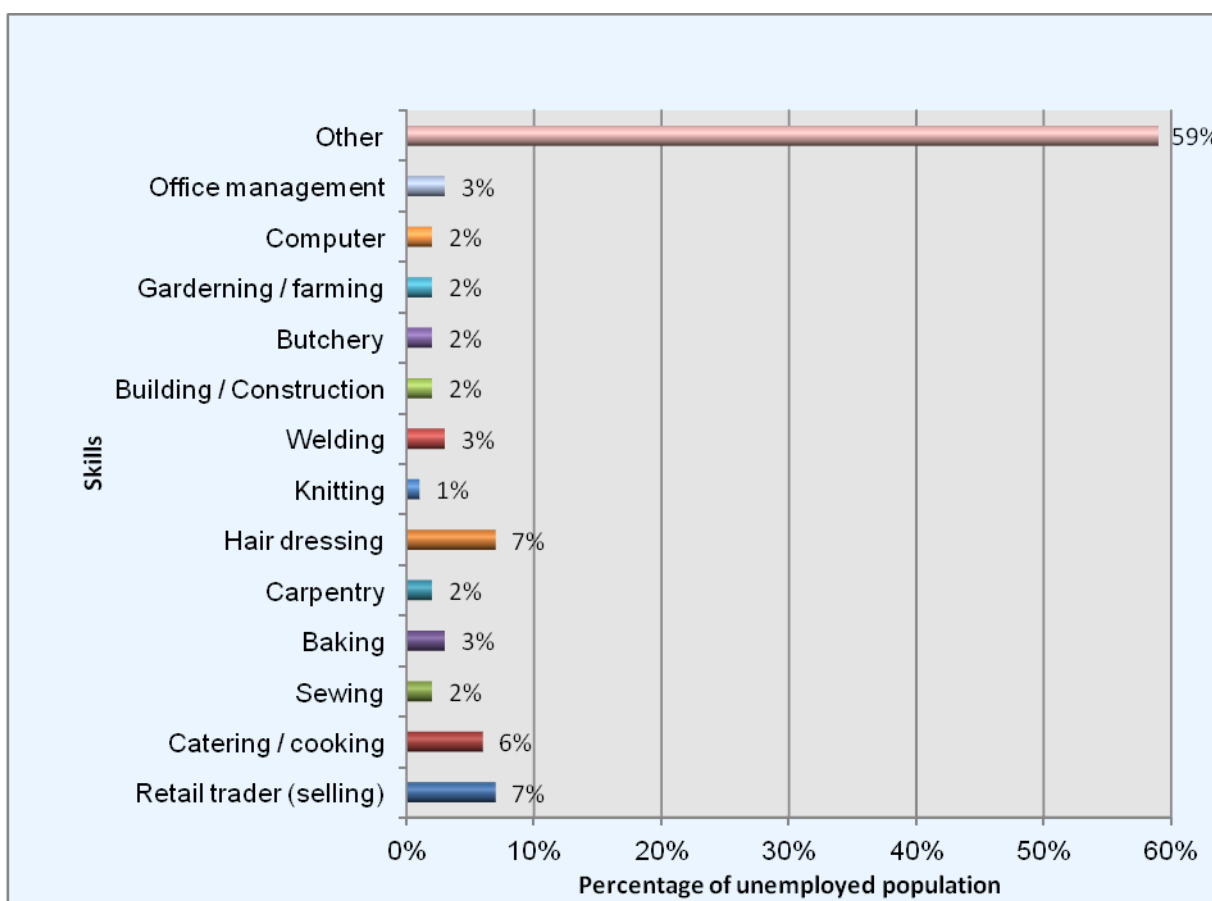
Source: Survey data, 2009

In Kwakwatsi, 18% of the unemployed had a grade 12 qualification or higher. Only 1% of the unemployed had a tertiary diploma, and none had a tertiary degree. 80% had a qualification lower than grade 12 while 16% had a qualification up to grade 3. The majority of the poor population had only primary education (Sekhampu, 2010:130). In the Free State as a whole, 16% of the unemployed population have a grade 12 qualification or higher. Those with tertiary diplomas make up 5.1% of the unemployed, while 0.5% of the unemployed have a tertiary degree in the Free State (STATS SA, 2008:55-56). Most of the unemployed population have a low level of education in both townships and in the Free State province. In terms of the level of

education, the unemployed population of Nyakallong is, on average, in a better situation than the unemployed population of Kwakwatsi.

Figure 3.12 shows the skills of the unemployed population of Nyakallong in 2009. The figure shows that the highest percentages of the unemployed have unspecified skills (59%).

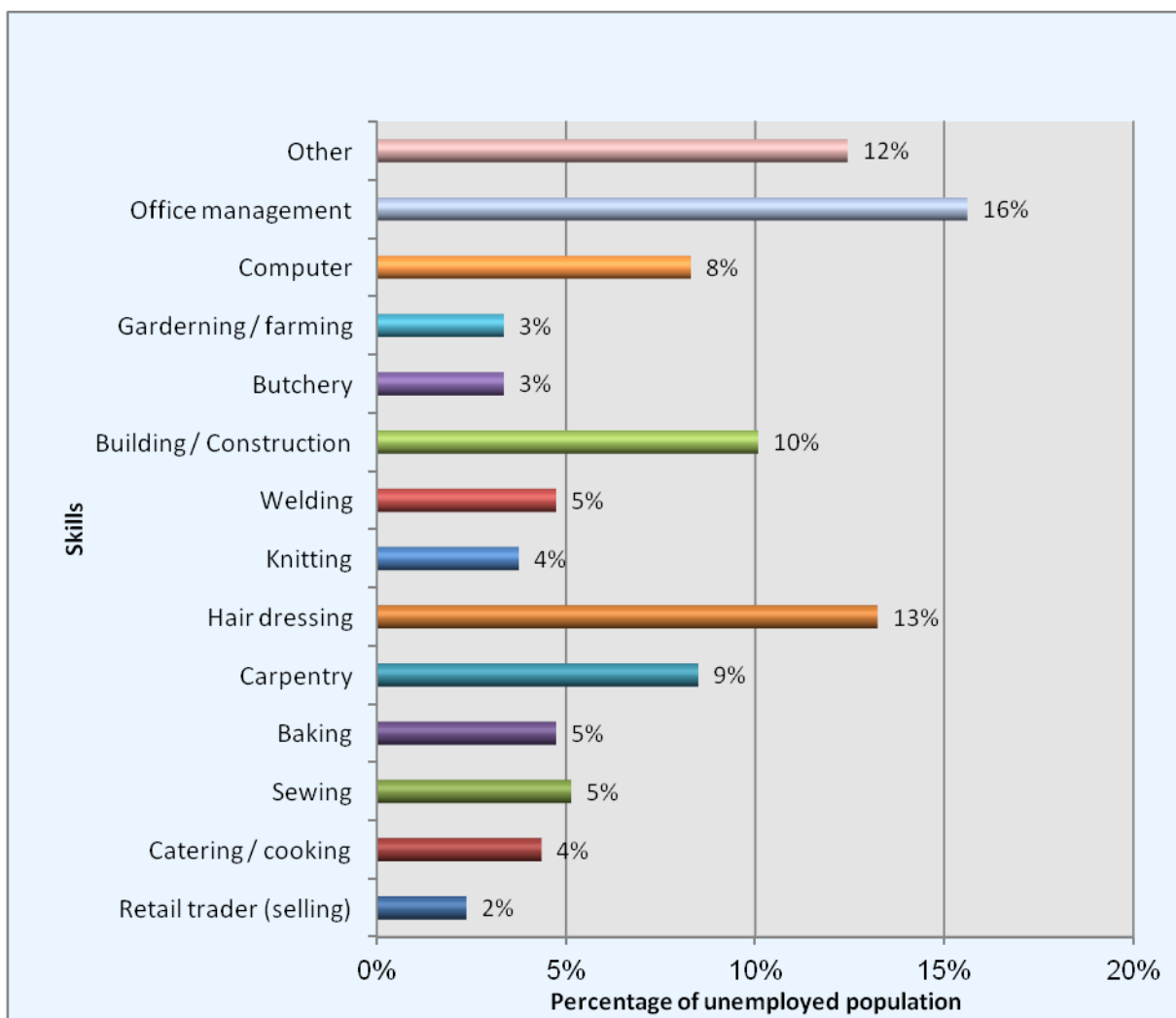
FIGURE 3.12: SKILLS OF THE TOTAL UNEMPLOYED POPULATION OF NYAKALLONG: 2009



Source: Survey data, 2009

The most skills possessed are hairdressing (7%); retail trading (7%) and catering/cooking (6%). According to Sekhampu (2010:132), the skills most possessed in Kwakwatsi were building/construction (23%), retail trading (21%) and catering/cooking (14%). It is possible that those from Nyakallong who were retrenched are among the 59% of which may be unskilled – retrenched because they are unskilled. The majority of the skills which are possessed are predominately “female skills”.

**FIGURE 3.13 SKILLS NEEDED BY THE UNEMPLOYED POPULATION OF NYAKALLONG:
2009**



Source: Survey data, 2009

Figure 3.13 shows the self- sustaining activities which the unemployed population of Nyakallong would like to be trained in. As seen in Figure 3.13, the majority of the unemployed population indicated that the most needed skills are office management (16%), hairdressing (13%) and building / construction (10%). Hairdressing has been indicated as the most possessed skill and the most needed skill, probably due to the high demand of hairdressing in the Township. Alternatively, people with hairdressing as a skill still need to be trained in order to be qualified specialists in that field. Building / construction has also been indicated as the most needed skill. The reason for this may be the increase in the construction of roads and the building of RDP houses. In Kwakwatsi, the unemployed population's most needed skills were retail trading (26%), building / construction (22%) and catering / cooking (14%).

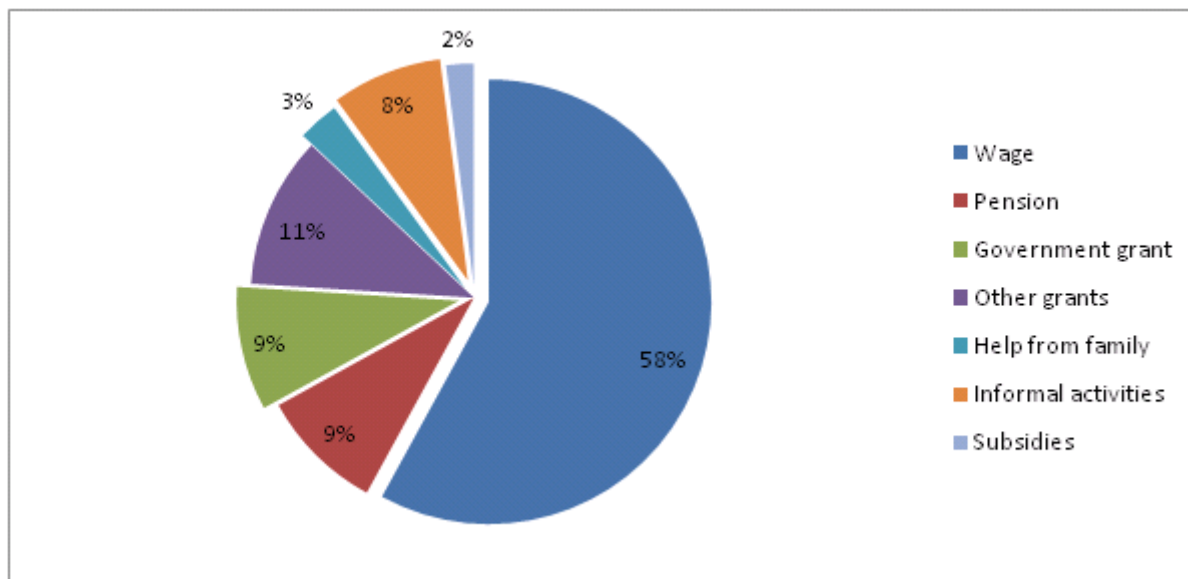
3.4 INCOME AND EXPENDITURE

This section concentrates on the state of income and expenditure in Nyakallong. It is noted that much care was taken in the household surveys when gathering information on different income levels, income sources, and expenditure and expenditure surplus. Expenditure surplus is when the expenditure exceeds the income. This might be caused by the fact that some households do not declare some of their income, possibly because such earnings are gained through illegal means.

3.4.1 Income sources of the total population

Income, as defined in this study, is the money received in payment for services rendered. This includes money received from the government in the form of grants and pensions. A household income is therefore the income received by all of the members of the household, all living under the same roof and making joint financial decisions (ILO, 1992:67). The main source of income for the sampled population is wages/salaries (58%). Social grants also appear to play an important role in the subsistence of the interviewed households. They constitute 20% of the income of the sampled population (other grants are regarded as child supporting grants and foster care grants provided by the government). Figure 3.14 depicts the source of household income for the sampled population. The average household income recorded amongst the respondents is R2 938.35 per month. In Kwakwatsi, the main source of income for the sampled population was also wages/salaries (46%). Pension grants appeared to be the second most dominating source of income, with 31.9% contribution. The average household income recorded amongst the respondents in Kwakwatsi was R1 409.01.

FIGURE 3.14: SOURCES OF HOUSEHOLD INCOME FOR THE TOTAL POPULATION IN NYAKALLONG: 2009



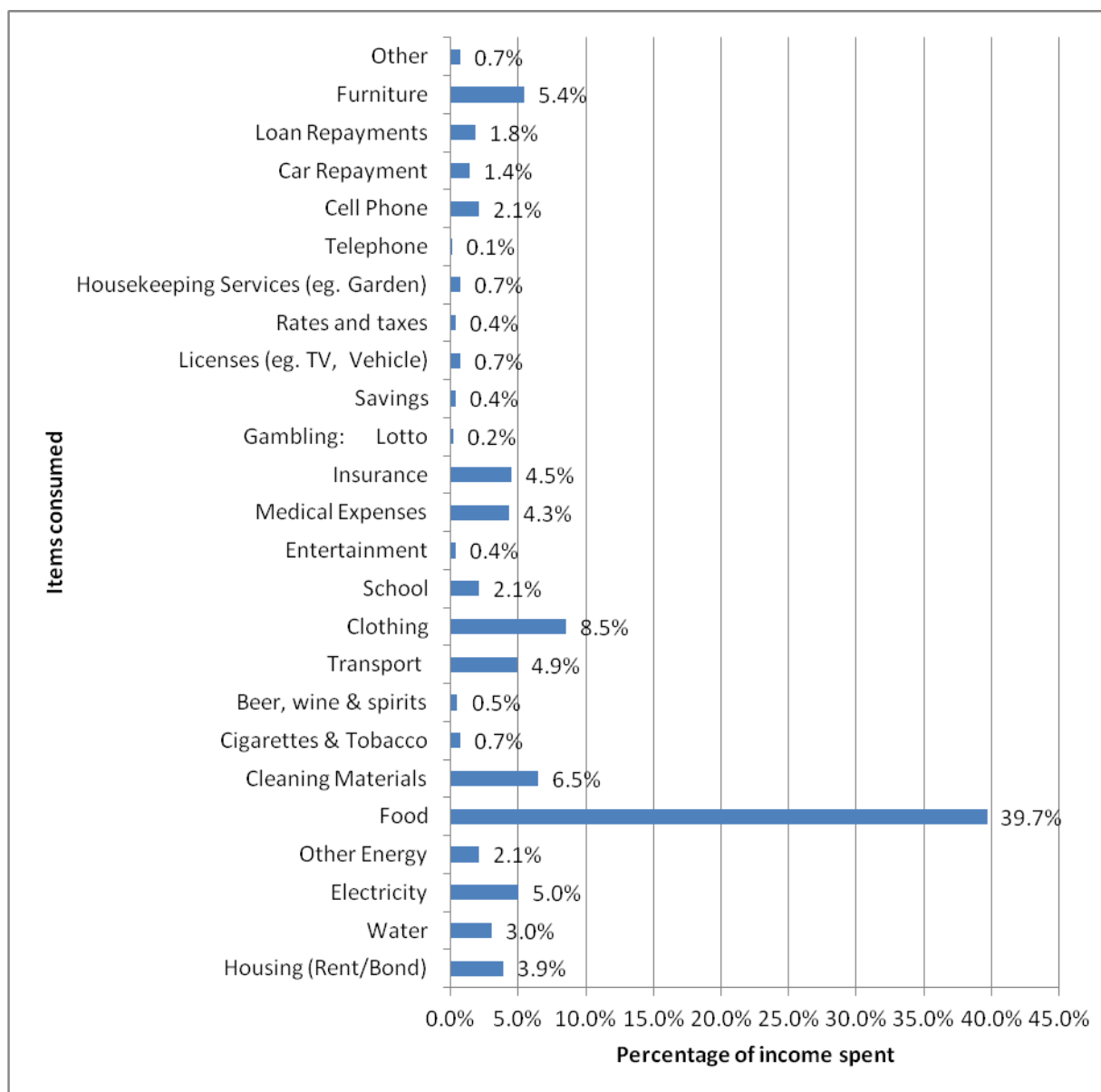
Source: Survey data, 2009.

3.4.2 Expenditure patterns of the total population

This subsection concentrates on the expenditure patterns of the residents of Nyakallong in 2009. Figure 3.15 depicts the average expenditure of households in Nyakallong in 2009.

An estimated 39.7% of household income goes to buying food. This affirms Slabbert (2003:21) when he noted that a large percentage of household income in poor communities is spent on food. The figure also shows that 6.5% of household income (R104.58 per month) goes to buying cleaning material. The sampled population of Nyakallong spent 8.5% of their income on clothing.

FIGURE 3.15: EXPENDITURE PATTERNS OF THE TOTAL SAMPLE OF NYAKALLONG: 2009



Source: Survey data, 2009

3.5 SUMMARY AND CONCLUSION

In this chapter, household questionnaires (implemented by the researcher and fieldworkers) were used to construct a profile of households in Nyakallong. The economic profile of the area was presented in terms of demographic profile, labour force, and income and expenditure. The results of the study were compared to household data from a similar study conducted in Kwakwatsi Township. Data for the total Free State province was also used in the comparison.

The average household size for Nyakallong was found to be 4.2, which is higher than both Kwakwatsi Township and the Free State province. The dependency ratio in the total population and in the poor population is almost the same, apart from one difference. A higher percentage of the total population reports staying in Nyakallong for ten to twenty years.

In Nyakallong, 29% of the whole population are aged younger than 15 years while 6% are aged 65 years and above. In Kwakwatsi, 31% were younger than 15 years while 9% were 65 years and above. Lastly, in the Free State, 39.6% are aged younger than 15 years and 5.5% are aged 65 years and above. With regards to gender, there are more males than females in Nyakallong – a result which is the same in Kwakwatsi and the Free State province.

The majority (i.e. more than 50%) of the school going population attends primary schools in both Nyakallong and Kwakwatsi. As compared to Kwakwatsi, Nyakallong shows a smaller percentage of the population completing grade 12. The majority of the post school population in both Nyakallong and Kwakwatsi have a qualification lower than grade 12.

The unemployment rate is 69.9% in Nyakallong and 79% in Kwakwatsi. The unemployment rate in the Free State is 35.8%. It is found that 50% of the whole Nyakallong population is economically inactive, while 44% in Kwakwatsi were economically inactive. The economically inactive population in the Free State province was found to be 37.2%. The mining sector is the major formal employer in Nyakallong, employing the majority of the whole population. In Kwakwatsi, the major formal employer was domestic and garden service.

The major contributing source of income for the whole population is salaries/wages in both Nyakallong (58%) and in Kwakwatsi (46%). The average monthly household income for Nyakallong in 2009 is estimated at R2 938.35, while the average household income for Kwakwatsi was found to be R1 409.01. The expenditure pattern of the population of Nyakallong shows that 39.7% of the average household income is spent on food, while the expenditure pattern for Kwakwatsi showed that 33.4% of household income was spent on food.

Unemployment is higher among females than males in both townships and in the Free State province as a whole. In both townships and in the Free State province, the youth (15 years to 35 years) is the age category most affected by unemployment. Most of the population in Nyakallong (39%) have been unemployed for less than five years, while in Kwakwatsi the majority of the unemployed population (53%) had been unemployed for over eight years. In both townships and in the Free State Province as a whole the percentage of unemployed people who possess a grade 12 qualification or higher is small. The majority of the unemployed population of Nyakallong possesses unspecified skills. Most of the skills possessed by the unemployed population of Nyakallong are female skills. This is not the case in Kwakwatsi. The skills most needed by the unemployed population of Nyakallong are office management, hairdressing and building / construction.

It can be concluded therefore that the household size in Nyakallong and Kwakwatsi is similar, but they both tend to be higher than the household size in the Free State. The dependency ratio in Nyakallong is lower than Kwakwatsi, for both the poor and the total population. In both townships, the dependency ratio is higher among the poor population when compared to the total population. The unemployment rate in Nyakallong is lower than in Kwakwatsi, but higher than in the Free State. The unemployment rate is also accompanied by lower levels of education, and it can be observed that the high level of unemployment is concentrated among the youth and the female population. The population derive most of their income from salaries / wages, but a substantial income is also derived from government grants. The largest proportion of the population's income in both townships is allocated towards food. The unemployed population of Nyakallong and Kwakwatsi do not have adequate skills and they need to be trained in some skills in order to be employable.

CHAPTER 4: POVERTY AND THE EFFECT OF SOCIO-ECONOMIC FACTORS

4.1 INTRODUCTION

South Africa's political victory over the now defunct Apartheid system lies 17 years in the past. This is a period long enough to take stock and to assess progress and change in people's living conditions (Sekhampu, 2010). A number of special initiatives, aimed at promoting a wider spread of economic benefits across the population, were initiated over the past 17 years. The outcomes of these initiatives, in terms of growth in per capita income and employment have, however, been below expectations (Bhorat & Kanbur, 2006:18).

The primary aim of this study was to analyse the effect of socio-economic factors on poverty in Nyakallong. The previous chapter provided the basis of the analysis by providing a profile of the area. This chapter provides an analysis of poverty levels in the area, and will continue to study the socio-economic factors contributing to the scourge of poverty in the area. The information is based on households found to be poor from the overall sample.

4.2 POVERTY LINE FOR NYAKALLONG

When calculating national poverty lines as a statistical measure, the most common approach is to estimate the cost of a basket of goods that would satisfy the minimum necessary daily energy requirements per person over a period of a month. STATS SA (2007:8) writes that the daily energy requirement, as recommended by the South African Medical Research Council (MRC), is 2261 kilocalories per person.

For this study, a poverty line is calculated for each household individually and that household's own income is then compared with its individual poverty line. In accordance with a method developed by Slabbert (1997:7), the poverty line for each household is calculated by allocating a monetary amount for each member of the household. This method takes age and gender into account (Slabbert, 1997:7).

With these calculations, not only the number of poor households is determined, but also the distribution of households below and above the poverty line. The same applies to other measures such as the dependency ratio. This is calculated on an individual basis instead of only using averages. Table 1.4 lists HSL calculations for residents of Nyakallong, using 2009 prices.

A straightforward comparison of household consumption is not possible because of the fact that households differ in size and composition (STATS SA, 2005:5). The standardised method is to use some form of normalisation. A household consumption is constructed based on the consumption of each member living in the household. Comparison is then based on the household per capita consumption. The HSL breaks down households into different constituents (household members according to age and sex) and builds up a poverty line for each household depending on the composition of the members (Portgieter, 1980:63).

4.3 POVERTY PROFILE FOR NYAKALLONG

A common measure used to express the number of poor people as a proportion of the whole population is called the headcount index. This is the simplest measure of poverty, given by the proportion of the population for whose consumption (or another suitable measure of living standard) (y) is less than the poverty line (z). Suppose (q) people are poor by this definition in a population of size (n). Then the headcount index is $H = q/n$ (Ravallion, 1992:36).

The headcount index for the sample population is calculated at 0.472. This means that 47.2% of all households' income is below their respective poverty line. This is in comparison to a poverty rate of 49.1% for the Free State for the year 2007 (Provide, 2009:36). This could mean that the socio-economic conditions of Nyakallong mirror those of the Free State Province. Figure 4.1 shows the distribution of the poor households' income as a percentage of their specific HSL in Nyakallong in 2009. The more households below the poverty line, the higher the proportion of a poor population. The more the number of households in the income/HSL category 91-100, the less severe the poverty (Slabbert, 2003:13). According to the results of the survey, poverty in Nyakallong seems to be as high as 48.5% of all households.

Nyakallong has an income of less than 50% of their HSL, compared to 62.1% in Kwakwatsi.

FIGURE 4.1: POOR HOUSEHOLDS AND THEIR HSL RATIOS IN NYAKALLONG: 2009



Source: Survey data, 2009

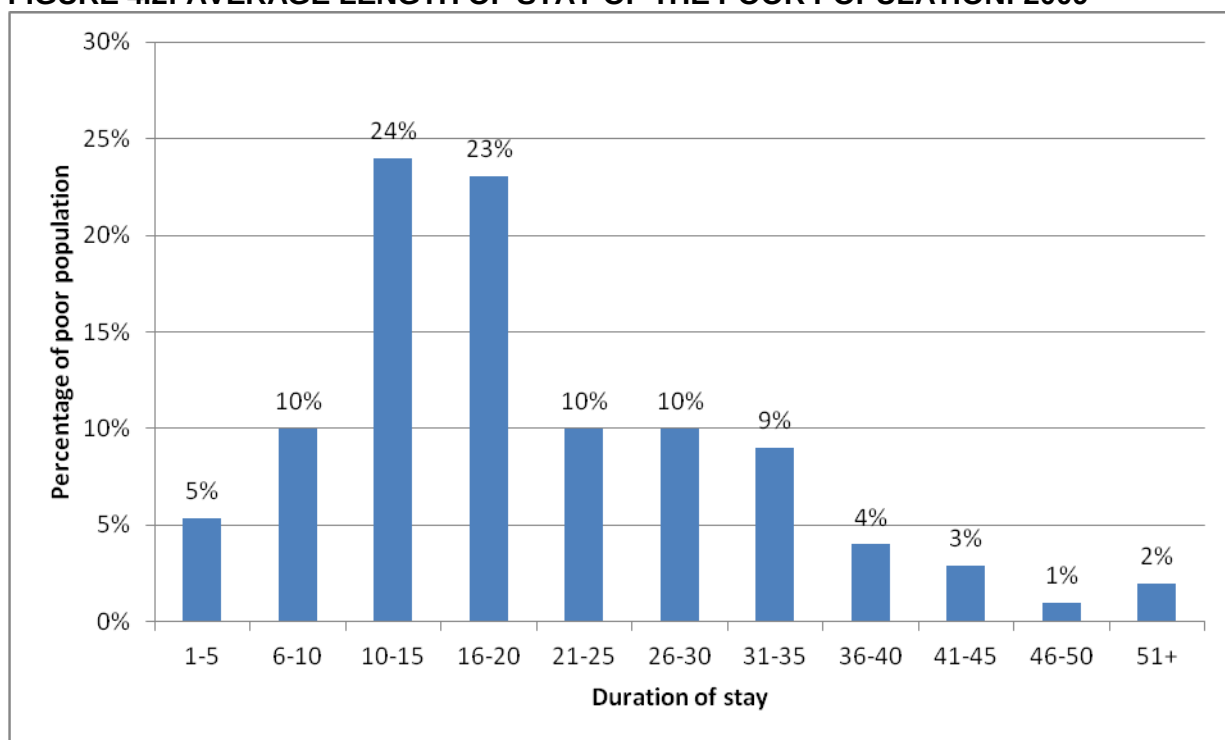
The poverty gap index, which measures the extent of the shortfall of income below the poverty line, was also calculated for the sampled population. The poverty gap ratio is determined at 0.5, meaning that an average household lacks 50% of the income needed to attain a level equal to their poverty line. Sekhampu (2010:158), in a study for Kwakwatsi, found a poverty gap index of 0.56. This seems to suggest a similar pattern exists for both Kwakwatsi and Nyakallong.

4.3.1 Demographic profile of the poor

This section concentrates on the population that has been found to be poor. The poor population's demographics and labour force statistics are analysed. This section compares demographic profile, labour force, and the income and expenditure patterns of the poor population of Nyakallong with that of the whole population of Nyakallong

and the poor population of Kwakwatsi. Lastly, the section analyses the effect of the socio economic factors on poverty.

FIGURE 4.2: AVERAGE LENGTH OF STAY OF THE POOR POPULATION: 2009



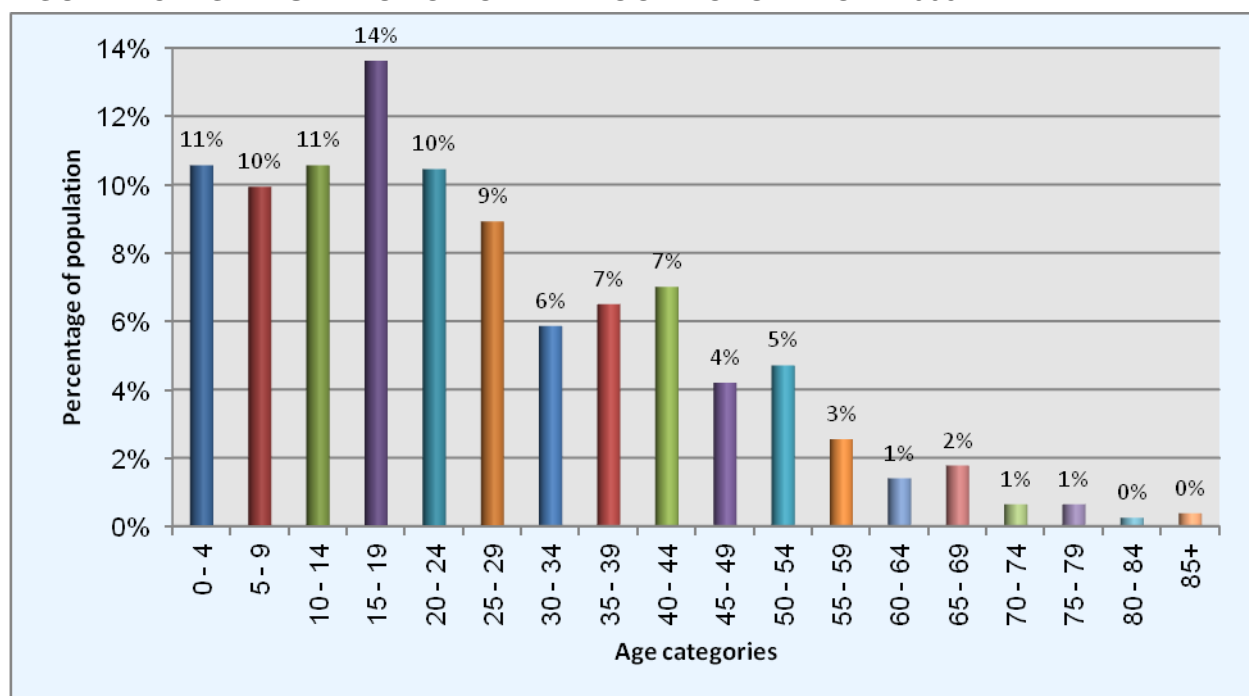
Source: Survey data, 2009

Figure 4.2 shows the average length of stay of the poor population in the Nyakallong area in 2009. The Figure shows that 15% of the poor population have moved to the township in the last 10 years compared to 14% of the population as a whole. About 47% of the poor population have been staying in Nyakallong for 10 to 20 years compared to 38% of the whole population. For Kwakwatsi, 26% of the poor population had moved to the township in the last 10 years while 43% had been in Kwakwatsi for 10 to 20 years (Sekhampu, 2010:162).

Figure 4.3 shows the age distribution of the poor population of Nyakallong in 2009. The Figure shows that 46% of the poor were found to be below the age of 20 compared to 42% of the whole population. In Kwakwatsi, 42% of the poor population were also below the age of 20 (Sekhampu, 2010:161). This is the group which is likely still in school. About 51% of the poor were found to be between the ages of 20 and 59 compared to 52% of the whole population. For Kwakwatsi, 46% of the poor

population were aged between 20 and 59 (Sekhampu, 2010:161). This is generally regarded as the population within the working age.

FIGURE 4.3: AGE DISTRIBUTION OF THE POOR POPULATION: 2009

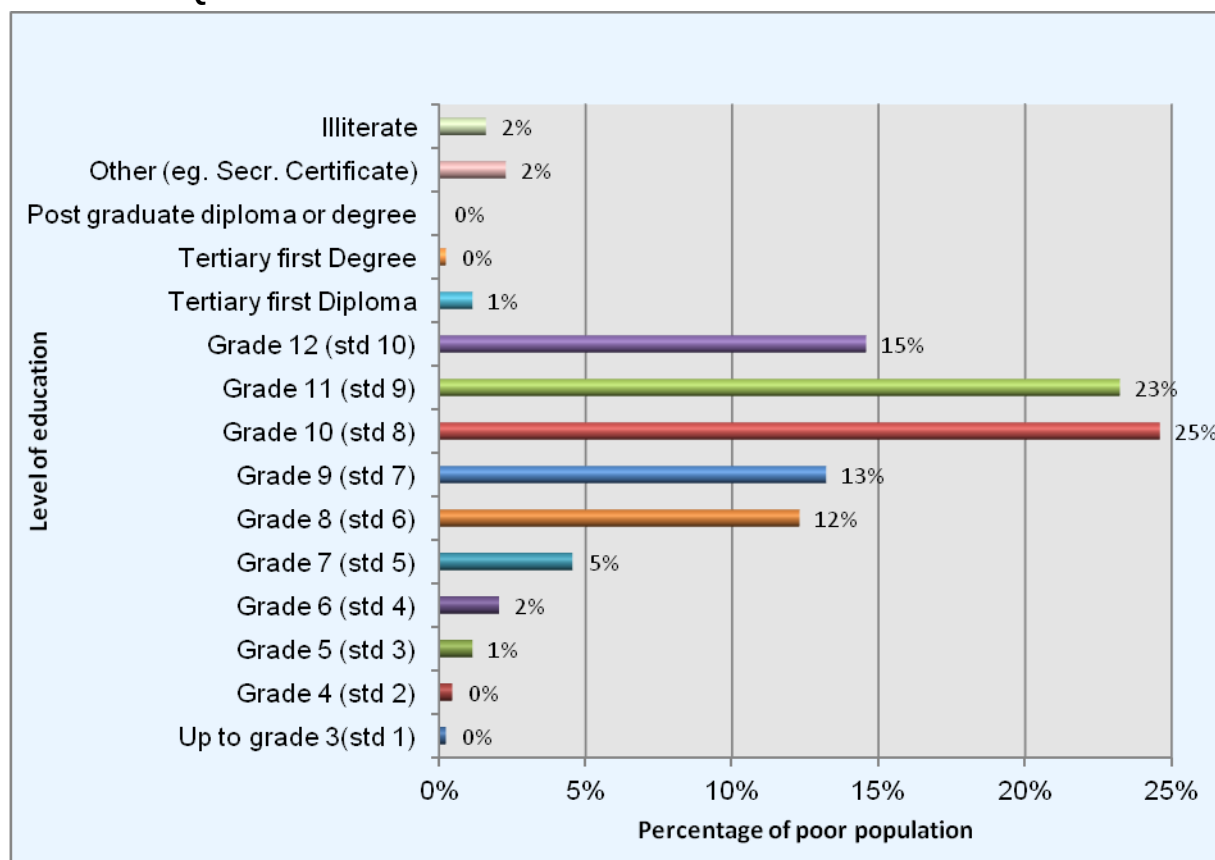


Source: Survey data, 2009

When looking at the gender distribution of the poor population of Nyakallong, 54% of the poor population were found to be female compared to 53.3% of the whole population. In Kwakwatsi, 53% of the poor population were females (Sekhampu, 2010:161). According to literature, female headed households are more vulnerable to poverty than male headed households (Posel & Rogan, 2011:11).

This study assumes that the population with other qualifications (such as a secretarial or office management certificate) do not have grade 12 qualification. This is assumed as other qualifications (like a secretarial or office management certificate) are offered at FET (Further Education and Training) colleges where a grade 12 certificate is not considered a prerequisite. The illiterate population is considered to have no formal education.

FIGURE 4.4: QUALIFICATIONS OF THE POOR NOT IN SCHOOL: 2009

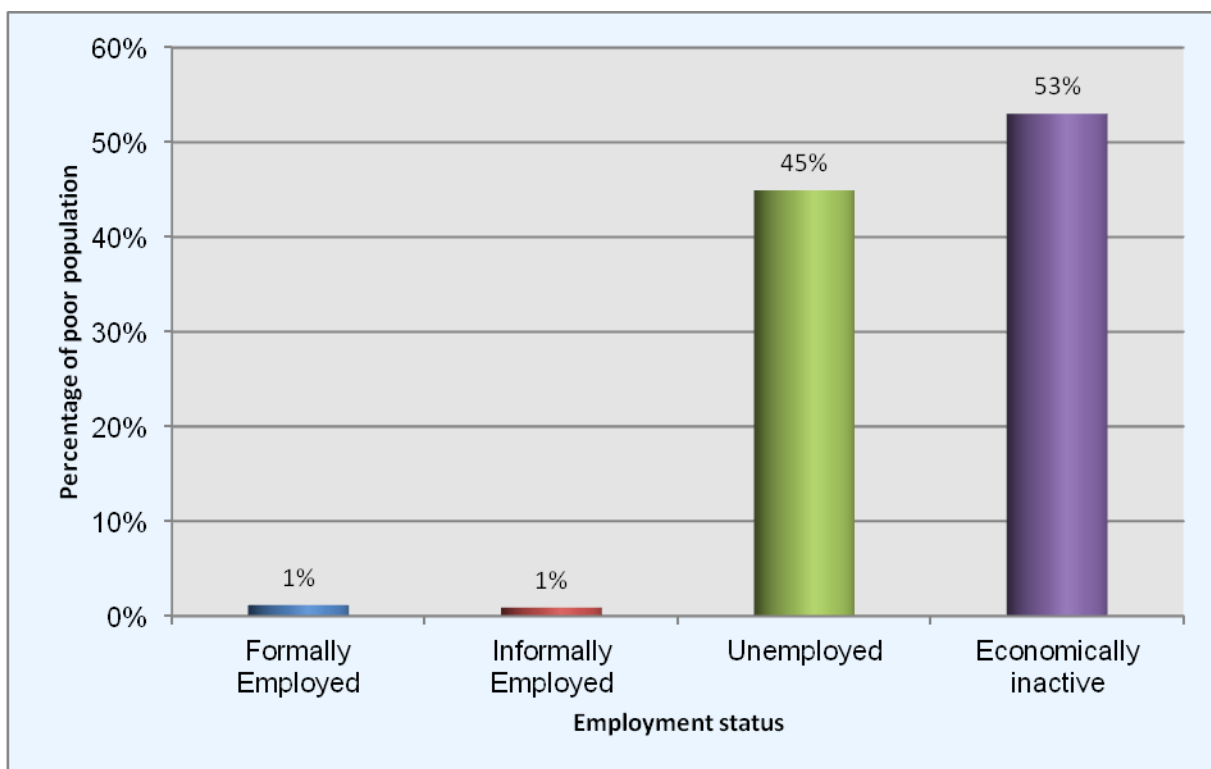


Source: Survey data, 2009

Figure 4.4 shows the qualifications of the poor out of school population of Nyakallong in 2009. The Figure shows that 16% of the post school population have a grade 12 or higher qualification compared to 20% in the whole population. Only 1% of the poor out of school population have a tertiary diploma and none possess a tertiary degree, while in the whole population about 3% have a tertiary diploma and none a tertiary degree. In Kwakwatsi, 3% of the poor out of school population have a grade 12 or higher qualification. The poor population of Kwakwatsi has only 1% of the population with a tertiary diploma and none with a tertiary degree (Sekhampu, 2010:165).

The employment status of the poor population of Nyakallong in 2009 is analysed in Figure 4.5. It is shown that 53% of the poor population are economically inactive compared to 50% of the whole population. In Kwakwatsi, 56% of the poor population were found to be economically inactive (Sekhampu, 2010:166).

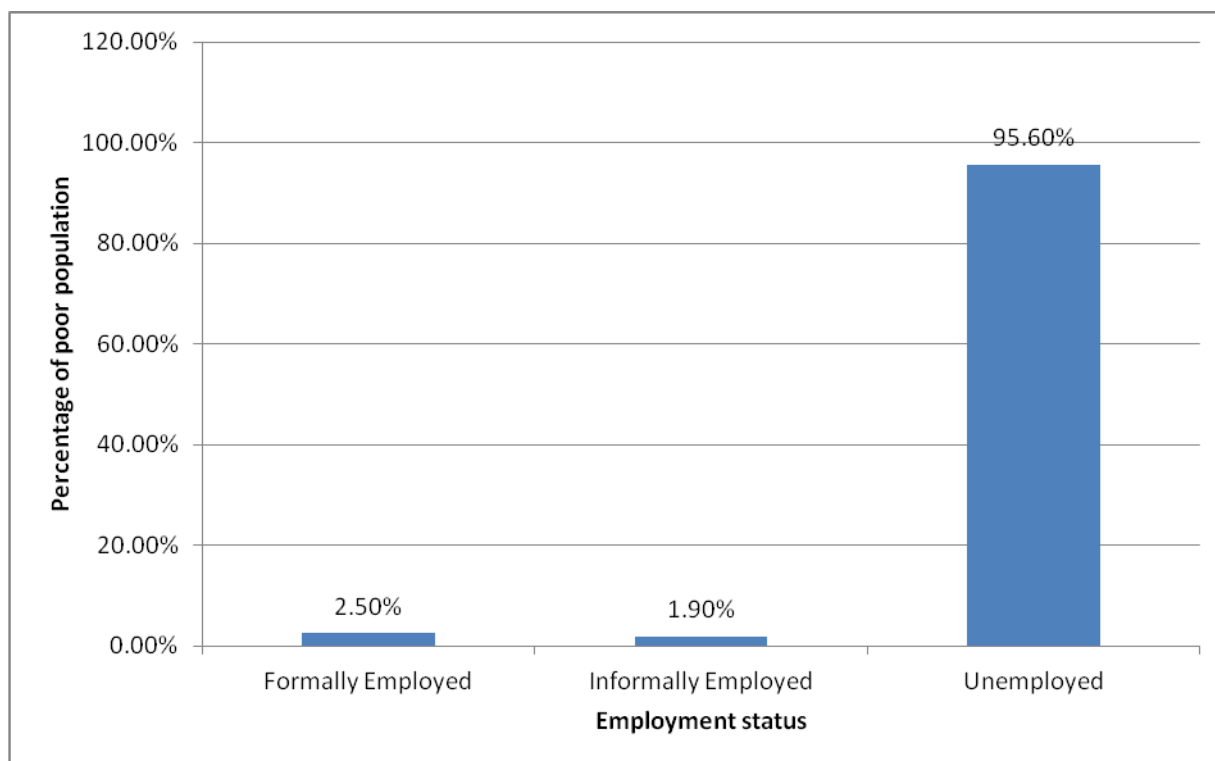
FIGURE 4.5: EMPLOYMENT STATUS OF THE POOR POPULATION: 2009



Source: Survey data, 2009

A further look at the unemployment status of the poor population shows a grim picture. As evidenced by Figure 4.6 (which shows employment status of the poor population of Nyakallong in 2009), 95.6% of the poor with the ability to work were found to be unemployed. This is in comparison to 69.9% for the whole sample. Only 1% of the poor population have been formally employed, and the informally employed poor population comprises 1%. In Kwakwatsi, the unemployment rate for the poor population was 86.9%; formally employed population was 6.8%, while the informally employed population was 6.3% (Sekhampu, 2010:167). Unemployment among the poor population is extremely high compared to the whole population and the poor population of Nyakallong, even when it is compared to the poor population of Kwakwatsi. In fact, almost none of the poor population of Nyakallong is working. There is a higher economically inactive population amongst the poor population compared to the whole population.

FIGURE 4.6: EMPLOYMENT STATUS OF THE POOR'S LABOUR FORCE: 2009



Source: Survey data, 2009

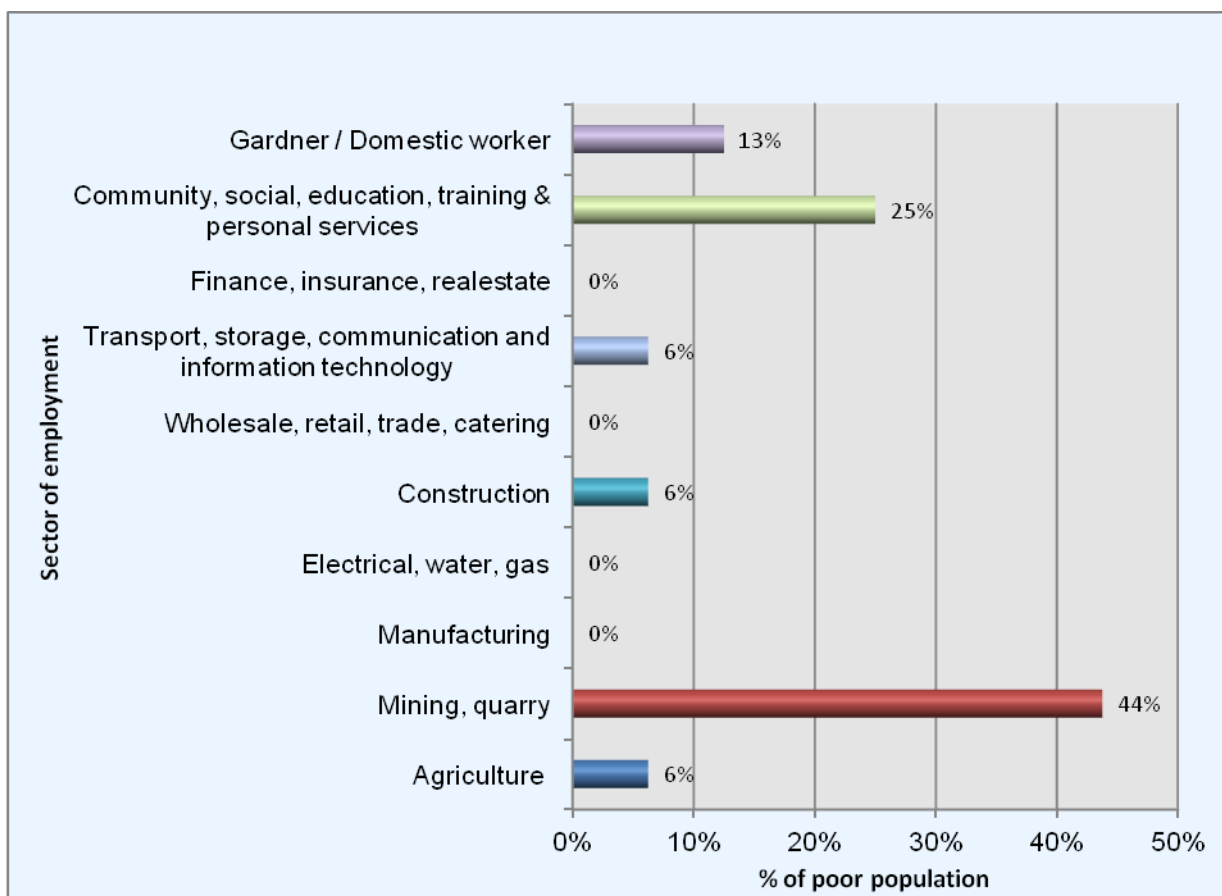
When looking at the gender distribution of the poor unemployed population, the results of the survey show that 52.7% of the unemployed are females and 47.3% are males. The poor population is not different from the whole population because in both sample groups more females are unemployed than males. The results for Kwakwatsi showed a similar pattern, with a recorded gender distribution of 55% of females and 45% of males who were unemployed amongst the poor population (Sekhampu, 2010:168).

The results of the survey show a dependency ratio of 2 for the whole population and of 6 for the poor population. Sekhampu (2010:140 & 177) calculated a dependency ratio of 4 for the whole population of Kwakwatsi and 7 for the poor population. Therefore, each poor income earner in Nyakallong is burdened to support an increased number of people.

Figure 4.7 shows the sectors of employment for the poor employed population of Nyakallong in 2009. The Figure shows that the mining sector employed 44% of the poor population compared to 40% for the whole population. The community, social,

education, training and personal services have employed 25% of the poor population compared to 17% of the whole population. In Kwakwatsi, the dominating employers for the poor population were domestic services (34%) and the agricultural sector (21%) (Sekhampu, 2010:176). It can be observed that mining is the major employer in Nyakallong for both the poor and the whole population.

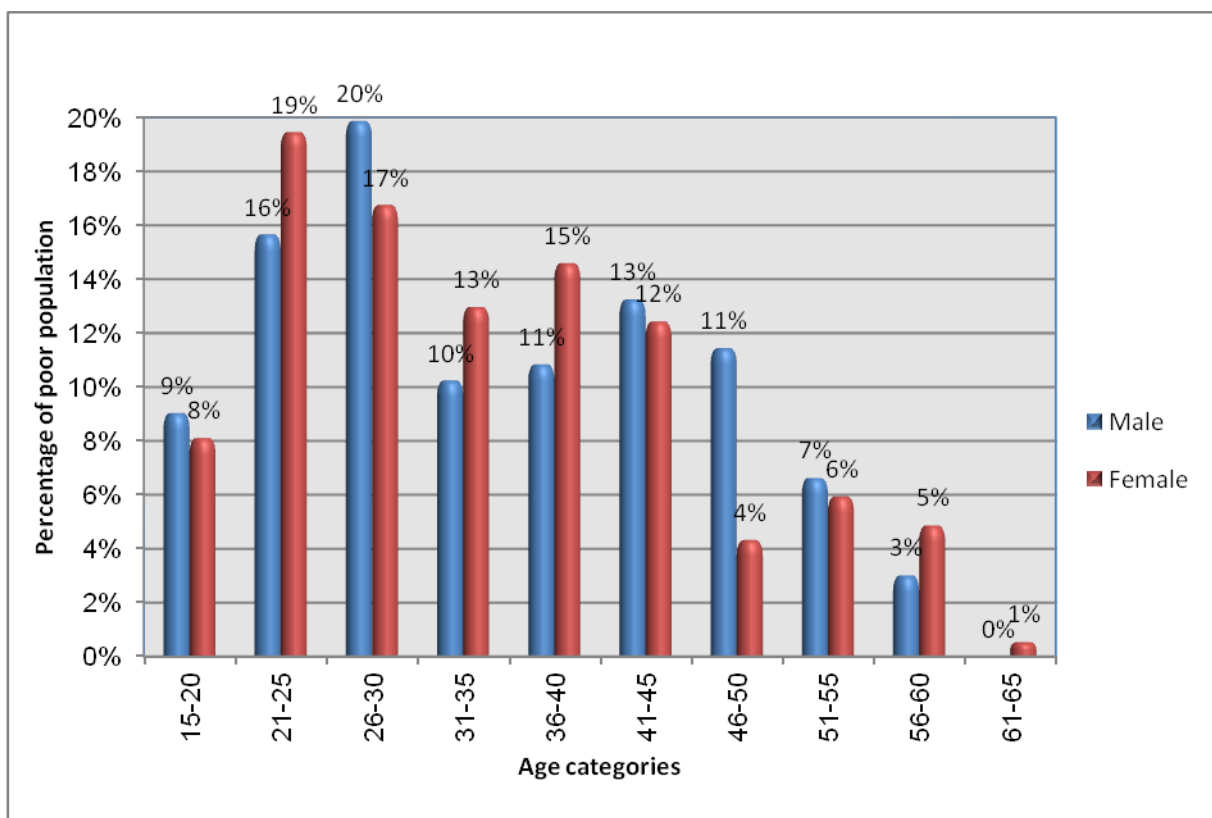
FIGURE 4.7: POOR EMPLOYED SECTOR OF EMPLOYMENT: 2009



Source: Survey data, 2009

The results of the poor population are not different from the whole population because in both, more females are unemployed than males. Figure 4.8 shows the poor unemployed population of Nyakallong in 2009 by age and gender. The Figure shows that the majority of the poor unemployed population is under the age of 35. Out of the total of the poor unemployed population, the youth (age category 15 to 35) shows the highest level of unemployment – 55% of males and 57% of females, with similar figures for the whole population. In Kwakwatsi, 51% of the poor unemployed population was found to be in the youth age category (Sekhampu, 2010:169).

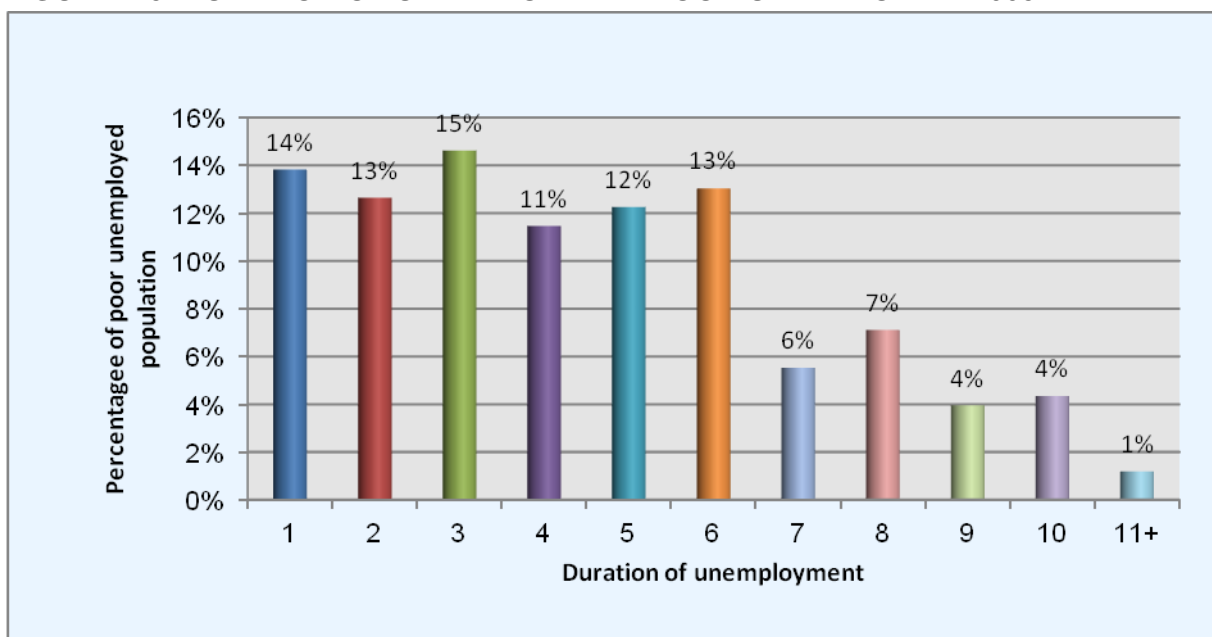
FIGURE 4.8: POOR UNEMPLOYED BY AGE AND GENDER: 2009



Source: Survey data, 2009

Figure 4.9 shows the duration of unemployment amongst the poor population of Nyakallong in 2009.

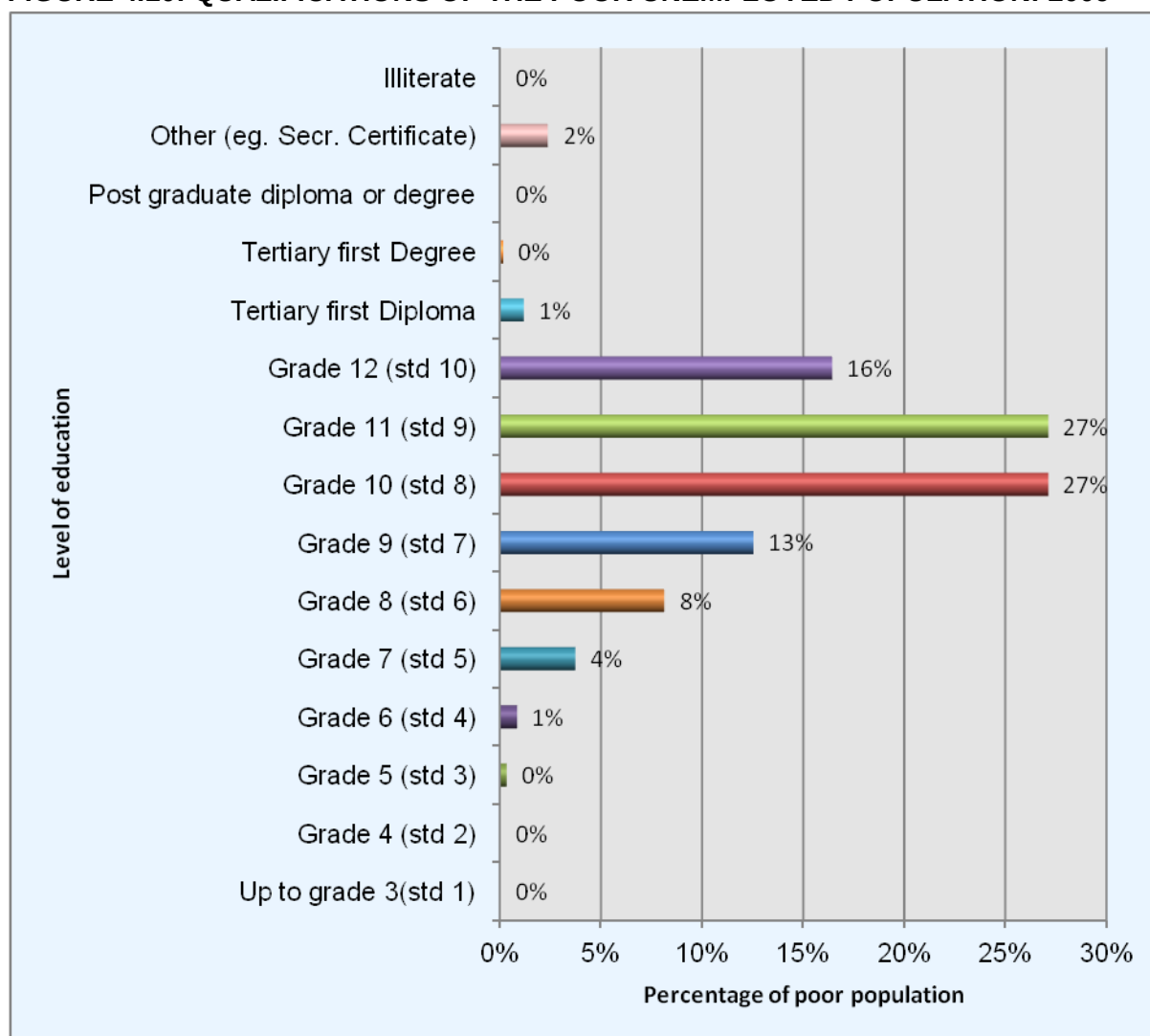
FIGURE 4.9: DURATION OF UNEMPLOYMENT POOR UNEMPLOYED: 2009



Source: Survey data, 2009

The Figure (4.9) shows that 65% of the poor population has been unemployed for up to 5 years compared to 57% amongst the whole population. The Figure also shows that 6% of the poor unemployed have been unemployed for 7 years compared to 7% for the whole population. It is also shown that 16% of the poor unemployed have been unemployed for 8 years and above compared to 26% for the whole population. The majority of the unemployed seem to have lost hope in finding a job. For Kwakwatsi, 41% of the poor population had been unemployed for up to 5 years, 1% for 7 years and 53% for more than 8 years.

FIGURE 4.10: QUALIFICATIONS OF THE POOR UNEMPLOYED POPULATION: 2009

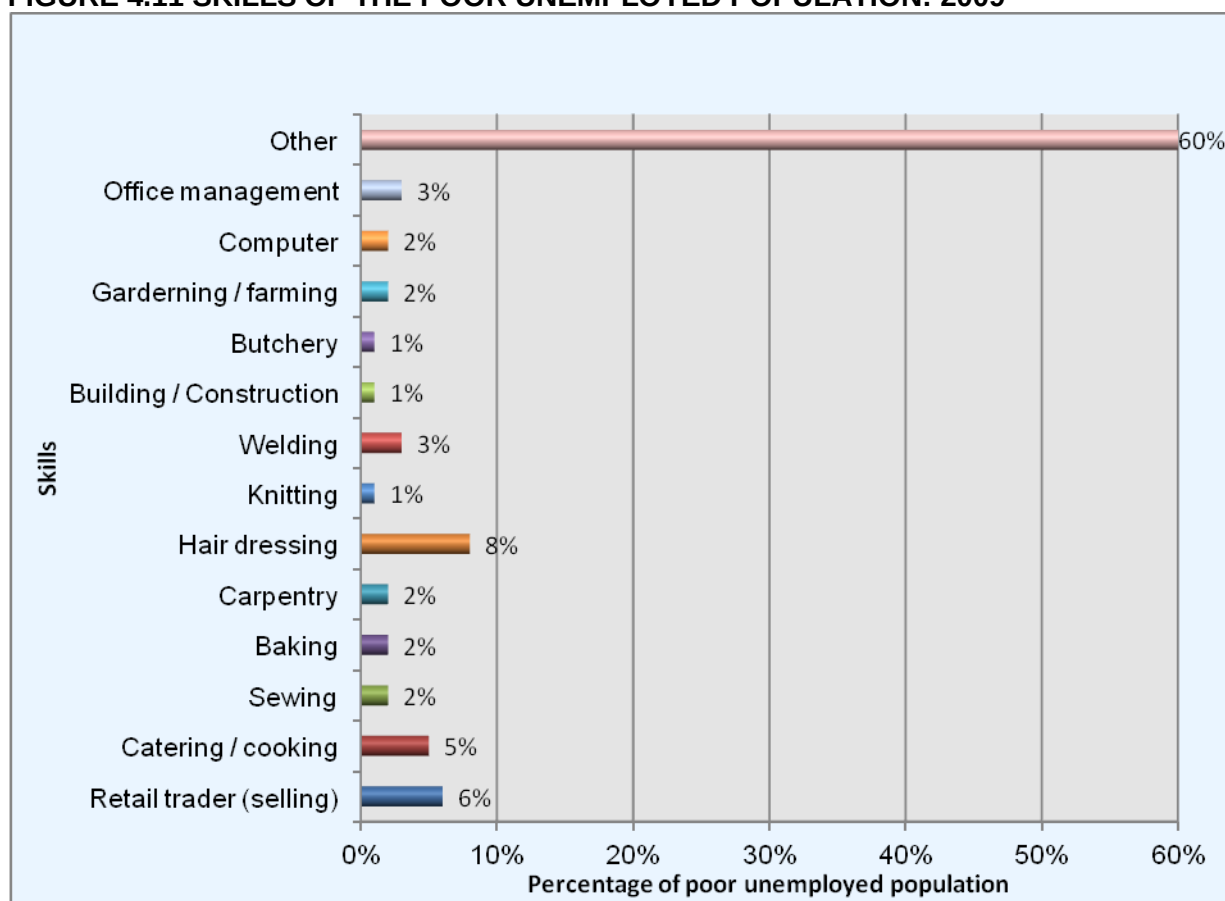


Source: Survey data, 2009

Another important consideration when looking at the unemployed is their qualifications, as it might be an indicator of their employability. Figure 4.10 shows the qualifications of the poor unemployed population of Nyakallong in 2009. The Figure

shows that 17% of the unemployed have a grade 12 and higher qualification. About 48% of the poor unemployed population have secondary education but have not passed grade 12. In Kwakwatsi, 17% of the poor unemployed had a grade 12 and higher qualification while 40% had secondary education but had not passed grade 12 (Sekhampu, 2010:170).

FIGURE 4.11 SKILLS OF THE POOR UNEMPLOYED POPULATION: 2009

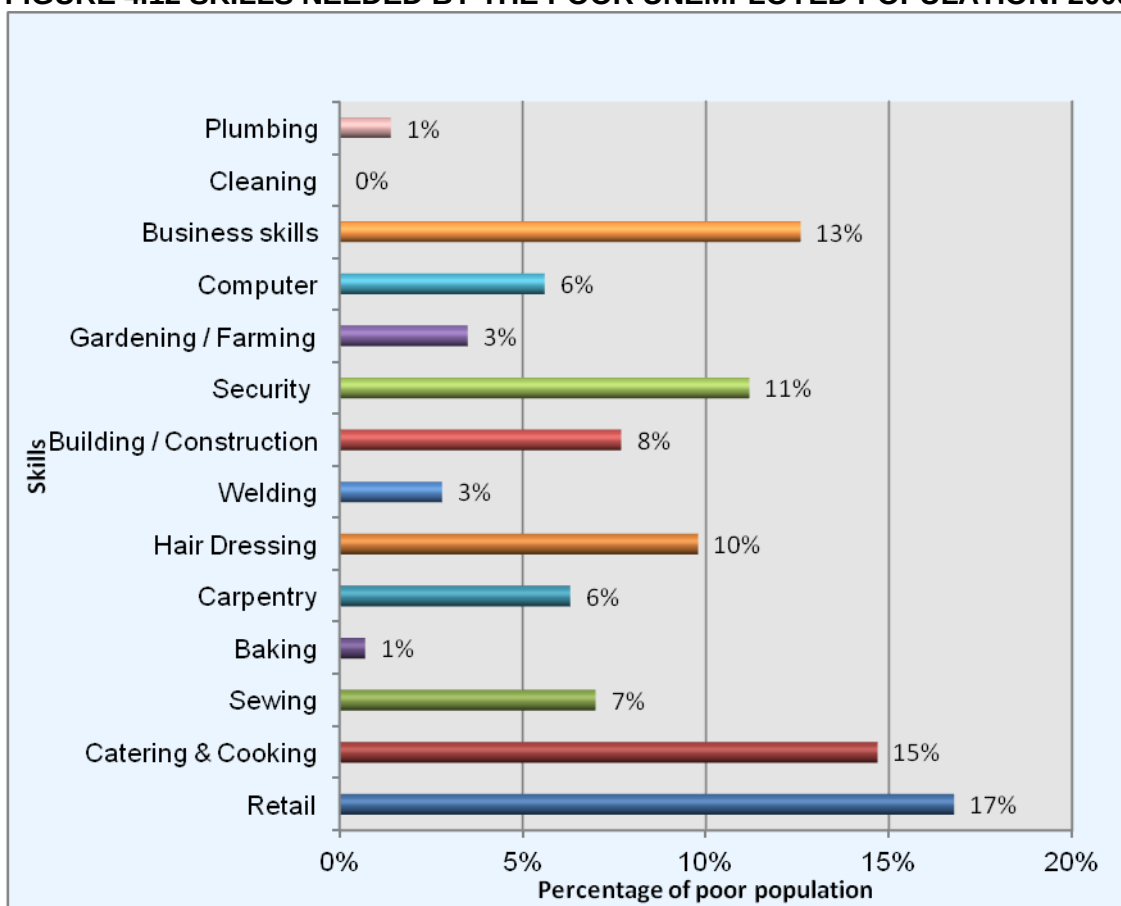


Source: Survey data, 2009

Figure 4.11 shows the possessed skills of the unemployed poor population of Nyakallong in 2009. The most possessed skills are hairdressing (8%), retail trading (6%), and cooking / catering (5%). The most possessed skills amongst the whole population are retail trading (7%), hairdressing (7%), and catering / cooking (6%). There is an element of commonality because retail trade and hairdressing appear to be the most possessed skill in both the whole population and the poor population. In Kwakwatsi, the most possessed skills were retail trading (20%), building / construction (25%), and catering / cooking (13%) (Sekhampu, 2010:171). An element of

commonality also appears in the poor populations of the two townships, as retail trading and construction are the most possessed skills in both townships.

FIGURE 4.12 SKILLS NEEDED BY THE POOR UNEMPLOYED POPULATION: 2009



Source: Survey data, 2009

Figure 4.12 shows the skills needed by the unemployed poor population of Nyakallong in 2009. The most needed skills are retail trading (17%), catering / cooking (15%), and business (13%). Security (11%), hairdressing (10%), and building / construction are also shown to be needed skills. The unemployed poor population in Nyakallong also need to be trained further in skills which they already possess. For the whole population, the most needed skills are office management (16%), hairdressing (13%), and building / construction (10%). Building / construction and hairdressing appear to be the most needed skills by both the whole and the poor population. For Kwakwatsi, the most needed skills were retail trade (24%), building / construction (23%), and catering / cooking (15%). The most needed skills by the poor population of both townships are retail trading, catering / cooking, and building / construction (Sekhampu, 2010:173).

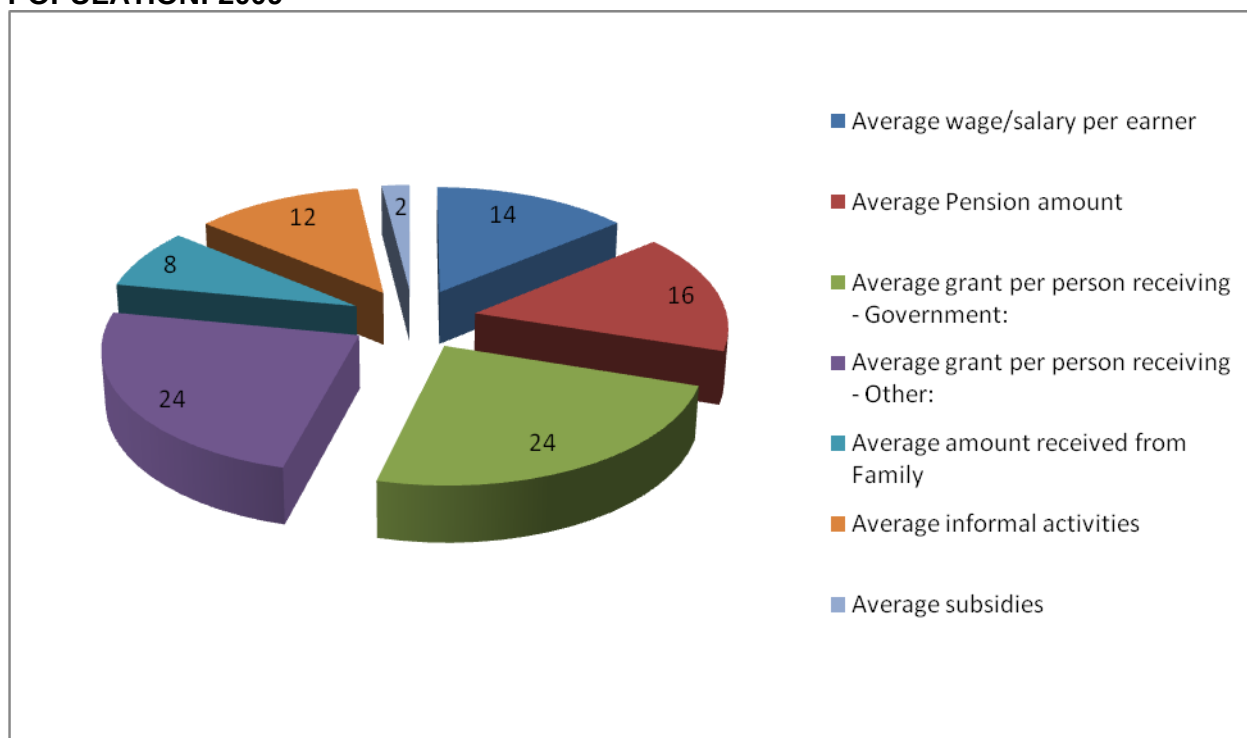
4.4 INCOME AND EXPENDITURE PATTERNS OF THE POOR POPULATION

This section concentrates on the income and expenditure patterns of the poor population of Nyakallong. The average dependency ratio in Nyakallong is calculated at 6. The dependency ratio for the whole population is 2, and for the poor population of Kwakwatsi it was 7 (Sekhampu, 2010:177). This shows that the poor employed population of Nyakallong gives financial support to more people compared to the average population of the township and compared to the poor population of Kwakwatsi.

4.4.1 INCOME

The average monthly income for an average poor household is R1 140, 05 compared to R2 938, 31 for the whole population of Nyakallong. The poor population of Kwakwatsi receive an income of R688 per month (Sekhampu, 2010:177). The poor population of Nyakallong is worse off compared to the whole population of Nyakallong. Figure 4.13 shows the sources of income for the poor population of Nyakallong in 2009. This figure shows that government grants (i.e. child support grants and foster care grants) are the main source of income. Government grants contribute 48% of household income of the poor population. The second main source of income is pensions (16%), followed by wages / salaries (14%). Wages / salaries are the main source of income for the whole population, contributing 58% of the household income. For Kwakwatsi, government grants contributed 38.4% to an average poor household while pensions (40.6%) were the main source of income. Wages / salaries contributed 19.4% towards the poor population's income (Sekhampu, 2010:178). The poor population of the two townships depends mostly on government and pension grants.

FIGURE 4.13 SOURCES OF HOUSEHOLD INCOME FOR THE POOR UNEMPLOYED POPULATION: 2009

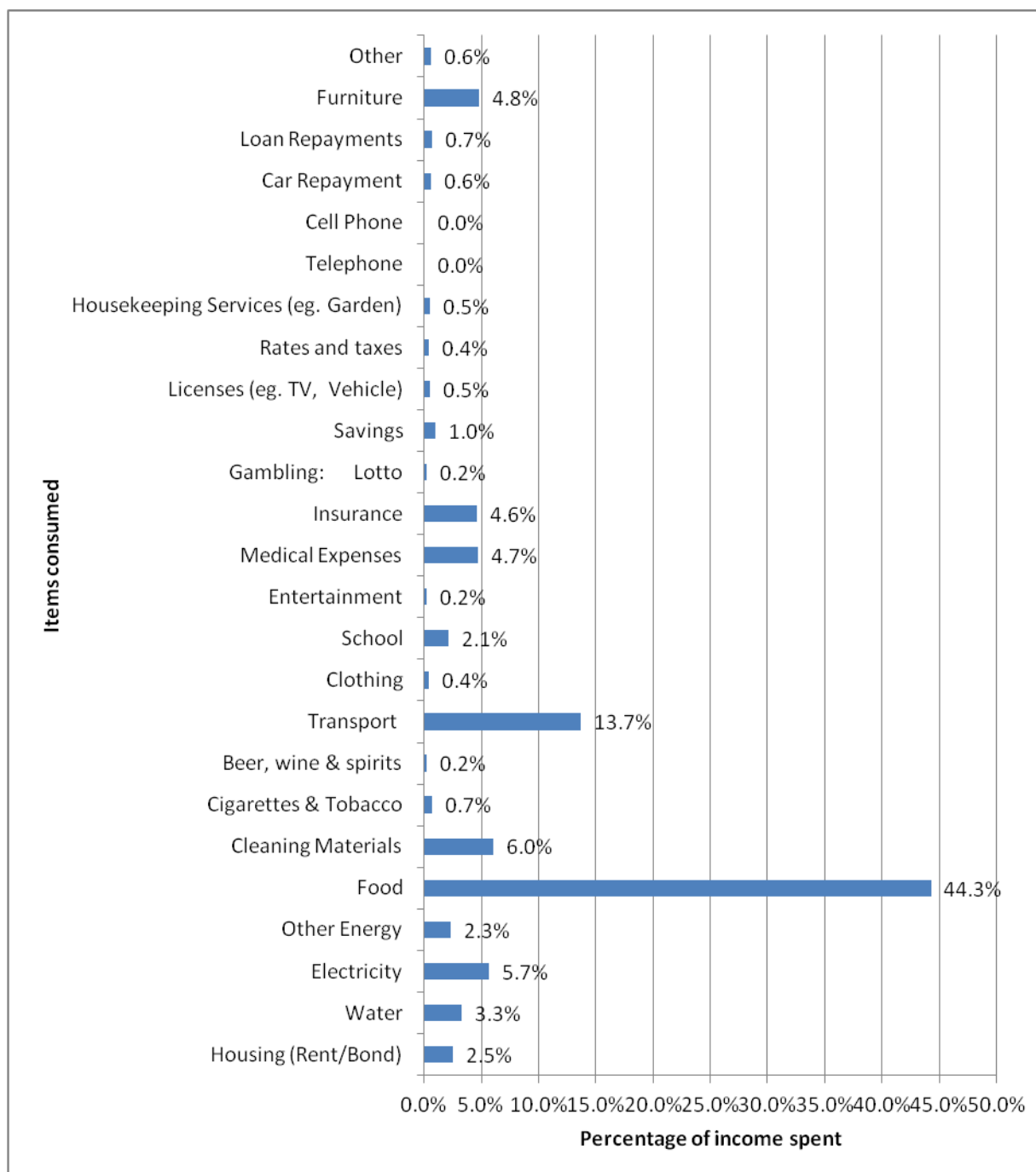


Source: Survey data, 2009

4.4.2 EXPENDITURE

According to data collected from the survey, a poor household spends R662, 12 per month on average compared to R1 608, 69 on average for the whole population. For Kwakwatsi, a poor household spent R687, 56 on average (Sekhampu, 2010:179). Figure 4.14 depicts the average expenditure of households in Nyakallong in 2009. In a poor household, an estimated 39.7% of household income goes to buying food. This is in comparison to 44.3% average expenditure on food for the total sample. For Kwakwatsi, the poor population spent 49.2% of income on food (Sekhampu, 2010:179). This is in the line with the study by Slabbert (2003:21) which noted that a large percentage of household income in poor communities is spent on food.

FIGURE 4.14: EXPENDITURE PATTERNS OF THE POOR POPULATION: 2009



Source: Survey data, 2009

Items also allocated a larger portion of the poor household's income in Nyakallong in 2009 are transport (13.7%), cleaning material (6%), and electricity (5.7%). Items with smaller portions of the poor population's income are furniture (4.8%) and medical expenses (4.7%).

4.5 THE EFFECT OF SOCIO-ECONOMIC FACTORS ON POVERTY

This section analyses the socio-economic factors impacting on poverty in the area. The analysis is also accompanied by an in depth discussion of the socio economic factors' relationship with poverty. The empirical analysis was based on regression analysis in Ordinary Least Squares. The following specification was adopted:

$$PGAPRATIO_i = \beta_0 + \beta_1 UNEMPL_i + \beta_2 EDUCA_i + \beta_3 GENDER_i + \beta_4 INCOME_i + \beta_5 EXPENDITURE_i + \varepsilon_i \quad (4.1)$$

SOURCE: Adapted from Gujarati, 2004:49

- Where PGAPRATIO is the poverty gap ratio which is a measure of the percentage a household is away from the poverty line. UNEMPL is a dummy variable for unemployment which takes on the value 1 if a respondent was unemployed and 0 otherwise. It is expected that there is a positive relationship between unemployment and poverty.
- EDUCA is the number of years of formal schooling a respondent achieved and it is expected that education is negatively related to poverty.
- Gender is a dummy variable for sex taking the value of 1 if the household is female headed and 0 otherwise. The expectation is that there is positive relationship between poverty and female headed households.
- Income was measured by calculating the earning power of the household in total. It was expected that income inversely related to the level of poverty. The last variable is the total monthly expenditure, which was calculated by the monthly recurrent expenditures of the household.

4.5.1 Descriptive statistics

Table 4.2 below is a summary of the descriptive statistics of the data of the main variables used in the study. There were 194 households which were classified as being poor, out of the total of 412 households visited. The 194 households classified as poor were found to be living below their poverty line. From 7 variables

(PGAPRATIO, expenditure, household size, education and age), the 194 households provided a total of 1358 observations, thereby making the central limit theorem of value. The central limit theorem states that as the number of observations increases towards infinity, the observations become normally distributed (Gujarati, 2004:108). This is a critical condition for hypothesis testing and regression analysis, especially under Ordinary Least Squares method (which the study used). It is interesting to note that the sample had households whose poverty gap ratio was at the maximum possible level of 100%, and yet others had their poverty gap ratio at the minimum possible of 0%. The mean of the PGAPRATIO was about 50% with a standard deviation of 31%. This means that data set on PGAPRATIO was normally distributed along with the other variables considered in the analysis.

The highest earning household earned a monthly income of R4 490 per month against the least level of R0 (Zero) per month. The average income in the sample was R1 140 per month with a standard deviation that is very high at 860.21. This is an indicator of the high income inequality in the community – some earn relatively high incomes while others earn nothing at all.

The highest expenditure level per month was R6 924 and the lowest was R0 (Zero). On average, households spent R1 396 per month. The highest spender therefore poses questions of entitlements and earnings, since it is spending more than what the highest earner can get in a month. A household which spends 54% more than its income is worrisome and could mean two things. Firstly, they are spending their future earnings thereby making them weaker members of the society. Secondly, they might be selling off some of their assets to make ends meet which again renders them poorer members of the community in the future.

The highest household size consisted of eleven members and the smallest household had only one member. The average household size was 4 members with a standard deviation of 1.99. On average, only 5% of the poor population who were economically active were employed and the rest were unemployed. The oldest person was 90 years old and the average age (obviously affected by the outliers) was 45 years.

The most educated person had 14 years of formal schooling (i.e. had attended tertiary education) and the least educated respondent had no formal schooling at all. On average, the sampled respondents had 7 years of classroom education with a standard deviation of 3.94.

TABLE 4.1: DESCRIPTIVE STATISTICS OF THE EXPLANATORY VARIABLES

	PGAP RATIO	INCOME	EXPENDITU RE	HHSIZE	UNEMP	EDUCAT ION	AGE
Mean	0.4979 38	1140.052	1395.906	4.046392	0.04639 2	6.773196	45.097 94
Median	0.475	1010	1309.25	4	0	8	44.5
Maximum	1	4490	6924	11	1	14	90
Minimum	0	0	0	1	0	0	3
Std. Dev.	0.3091 3	860.2178	842.9692	1.985155	3.93866 2	3.938662	15.303 35
Observations	194	194	194	194	194	194	194

Source: Own construction

4.5.2 Regression Model

The results of the cross-section regression analysis are reported in Table 4.3. The dependent variable was the poverty gap ratio (PGAPRATIO). For the study, the HSL was used as a poverty line. The HSL measures the minimum subsistence level for each household. This study used general equilibrium analysis to analyse poverty determinants in the community of Nyakallong.

The model is evaluated using hypothesis testing for the statistical significance of the parameters. The model was implemented using OLS method and several econometric tests were carried out. Standing out was the Whitney test for heteroscedasticity because of the nature of the data (cross-section). As Gujarati (2004:393) notes, heteroscedasticity is a more common problem in survey data than in time series. In the data set, the null hypothesis that the data set was heteroscedastic was rejected, even at the 1% level of significance.

TABLE 4.2: RESULTS OF THE REGRESSION ANALYSIS				
Dependent Variable: PGAPRATIO				
Method: Least Squares				
Included observations: 194				
Variable	Coefficient	Std. Error	t-Statistic	Probability.
C	0.637439	0.034369	18.54688	0***
EDUCATION	0.002399	0.002453	0.978014	0.3293
UNEMPL	0.188793	0.050903	3.708854	0.0003***
EXPENDITURE	8.08E-06	1.14E-05	0.706322	0.4809
GENDER	0.020422	0.020127	1.014666	0.3116
HHSIZE	0.076559	0.006596	11.60693	0***
INCOME	-0.000438	1.67E-05	-26.2674	0***
R-squared	0.82573	Mean dependent variable		0.497938
Adjusted squared	0.820139	S.D. dependent variable		0.30913
S.E. of regression	0.131102	Akaike info criterion		-1.19026
Sum squared residual	3.214124	Schwarz criterion		-1.07235
Log likelihood	122.4553	F-statistic		147.6747
Durbin-Watson stat	2.076161	Probability (F-statistic)		0***

Source: Own construction

*** implies statistical significance at the 1% level

The evaluation of the model using hypothesis testing was important as OLS estimation requires homoscedasticity testing so that the parameters, together with the other assumption estimators, are efficient (small variance) and unbiased. On the other hand, multicollinearity and serial autocorrelation is usually a problem common to time series and panel data. In the present case, survey data was used and therefore there was no need to conduct other more detailed tests. The coefficients of the variables in Table 4.3 have the expected correlation signs as stated in the last chapter. There is a

positive relationship between education and the poverty gap ratio, although it is statistically insignificant. This is somewhat strange as many poor people have embraced the route of education for their children as a way of breaking out of the poverty gap. This has a different meaning though. It appears that education might not be regarded as a way of escaping poverty.

Another consideration might be that the poor population's economic conditions do not allow them the means to attend formal educational structures. If the poverty severity ratio is taken into account, there will be a positive relationship between the two variables. Haughton and Khandker (2009:135) found that poverty rates are high among households whose head either had no formal schooling or had only primary schooling. Poverty rates are expected to decrease as education level increases, and are almost zero if the household head is a university graduate.

Unemployment is statistically significant at the 1% level. The coefficient is calculated at 0.189. This is an encouraging result which complies with theory. Employment is an important variable for the reduction of poverty, and policy prescriptions that bring more employment to the people in the local area are an important element. A 10% decrease in unemployment lowers the poverty gap ratio by 1.9%. Although others have argued that employment alone is not a means in reducing poverty, attributes of the employed (such as minimum wage, conditions of service and type of employment as being either white or blue collar) can reduce the afflictions of poverty. It is important to note that by being employed, the individuals gain some satisfaction that on aggregate increases the welfare level of the community. According to Narasaiah (2005:39) unemployment erodes national income and living standards, aggravating the difficult job of promoting development and alleviating poverty. Unemployment also raises government deficits and increases macro-economic instability, while soaking up investment for education and training which eventually increases or results in poverty.

The positive relationship between expenditure and the poverty gap ratio is interesting but not unexpected. Expenditure, however, is twofold. A person can spend what they have (income) and/or they can create debts to be paid in the future. Where one is spending current income, the impact of expenditure on poverty must be analysed together with the impact of income. However, where a household is spending future

incomes, it is imperative to note that such an analysis would be inconclusive if only current income is regarded. Unfortunately, information and data on future incomes was not readily available and their definitions were not within the scope of this study. The results however show that with increases in expenditures, households become poorer than before.

This is a result which complies with the expectations. Expenditure is a reduction of resources. According to Sen (1982:36), this means that the asset base of the people, holding other things constant, is diminishing. While the asset base diminishes, income is constantly filling the gap. The direction of the relationship should have been different. The implication is that the poor people in this area spend more than they earn. This confirms the findings of Sekhampu (2010) whose study showed that the poverty status of the area was also due to expenditures that were more than earnings. The direct recommendation is that the social grants must be extended to those who earn at the level at which they are away from the poverty line.

With regards to gender, the results confirm the generally held hypothesis that female headed households are poorer compared to their male counterparts. The results show that there is a positive relationship between the poverty gap and the dummy variable gender, which is one for female and zero for male. This is expected since in this area there are very few industries that can employ people. This is also largely attributed to the reality that most females have blue collar jobs. The majority of the poor population in both developed and developing countries is women. Poverty among rural women is growing faster than poverty among rural men (Narasaiah, 2005:25). The main cause of high poverty rates among women originate from the perpetual disadvantage of women's positions in the labour market, access to productive resources and income for the satisfaction of their basic needs (Narasaiah, 2005:25).

The last two variables are both statistically significant at the 1% level and have the expected results. Household size, which was measured by the number of people staying in the house, is important in determining poverty. Increasing the household size by 10% is likely to increase the poverty gap of the household by about 1. It might not seem much, but this is a result that must be noted and handled with caution. An

extra member of the household will mean an increase in the consumption basket for certain items such as bed space, soap, water volume and many other toiletries. However, the survival strategies of most poor households are different from those of their richer counterparts. For example, richer people organise a separate room for a newcomer in the household, while in poorer households the same bed space is shared among the people. A study done by Klasen in Kwazulu Natal between 1993 and 1998 concluded that there is a positive relationship between household size and poverty rates (Klasen, 2004:23).

More people in the household also mean increased expenditure on food items, medical expenses, clothing and education. This is common, especially where the extra members are dependants. Other households with children, who also earn income, are likely to be less poor since the incomes complement that of the head of the household. Income and poverty are negatively related. The higher the income level in the household, the lower the poverty gap – and this is statistically significant even at the 1% level of significance. The willingness and ability to pay for goods and services depends on the household's income. Households with low income may be unable to buy the minimal amounts of goods and services required for their survival. Therefore low income has a positive effect on poverty (Hayman, 1997:113).

The coefficient of determination (R-Squared) is at 82% when adjusted for degrees of freedom, which indicates that there is a good fit and explanation of the behaviour of poverty in this community. This means that even though the other individual parameters (such as education, expenditure and gender) are not statistically significant enough to provide the confidence of rejection even at the 30% level, together the variables are all important in determining the poverty gap ratio among the households in the sample collected.

In most cross section studies, the constant or y-intercept has little meaning and is therefore not reported at all. However, in this case, the constant was statistically significant even at the 1% level. The constant in this case is an important parameter which, in the economic sense, means that if all the other parameters are held to be zero there will still be poverty in the community. This is true considering that there are households in the sample which do not earn any incomes, others which have no

education and some which reflected no employment. A conclusion can be made that given a situation where all people are employed, educated, have the most optimal household size (however defined), households are male headed, earn enough income (however defined), and spend within their means – there will still be some amount of poverty in this community.

4.6 SUMMARY AND CONCLUSION

This chapter provided an analysis of poverty rates for Nyakallong and continued to study the associated socio-economic factors resulting in its perpetuation. A poverty line, which measures the monetary amount needed for an individual household to live a healthy life, was measured. The HSL, which is defined as an estimate of the theoretical income needed by an individual household to maintain a defined minimum level of health and decency in the short-term, was used as a measure of poverty in the area. The following important information was highlighted:

- 47% of the sample households were found to be poor.
- The dependency ratio is 6 for the poor population of Nyakallong, compared to 7 for the poor population of Kwakwatsi.
- About 48.5% of all poor households in Nyakallong have an income of less than 50% of their HSL, compared to 62.1% in Kwakwatsi.
- The poverty gap index is calculated at 0.5. This means that on average, poor households have an income shortage of 50% of their poverty line.
- The majority of the poor population's household members are young people; 46% of the poor were found to be below the age of 20.
- There were more poor females than poor males; 54% of the poor population were found to be female.
- An analysis of the poor population's employment status shows that 53% of the poor population are economically inactive compared to 50% of the whole population. About 45% of the poor population's working age group were found to be unemployed. Females appear to bear the brunt of unemployment in the area; 52.7% of the unemployed are females and 47.3% are males.

- The mining sector is the major employer which has employed the majority of the poor population of Nyakallong.
- The poor population derive most of their income from government grants such as old age pension grants, disability grants, child grants and foster care grants.
- Food is the biggest expenditure item amongst the poor; 44.3% of household income goes to buying food in a poor household. This is in comparison to 39.7% average expenditure on food for the total sample. This is in line with other research done among the poor.

The last part of the chapter involved studying the socio-economic factors which affect poverty. These factors could be said to be the determinants of poverty in the area. The effect of these factors on poverty was analysed using ordinary least squares. This study used general equilibrium analysis to analyse poverty determinants in the community of Nyakallong. The following findings were made:

- The average income in the sample was R1 140 per month with a standard deviation that is very high at 860.21. This is an indicator of the high level of inequality in the community.
- The highest expenditure level per month was R6 924 and the lowest was R0 (Zero). On average, households spent R1 396 per month.
- The largest household size consisted of eleven members while the smallest had only one member. The average household size had four members with a standard deviation of 1.99.
- There was a positive relationship between education and the poverty gap ratio, although it is statistically insignificant.
- Unemployment is statistically significant at the 1% level. The coefficient is calculated at 0.189. This is an encouraging result which complies with theory. Employment is an important variable in the reduction of poverty – policy prescriptions that bring more employment to the people in the local area are an important element.

- With regards to gender, the results confirm the generally held hypothesis that female headed households are poorer compared to their male counterparts. The results show that there is a positive relationship between the poverty gap and the dummy variable gender.
- The last variable which was measured in the model was statistically significant at the 1% level and has the expected results. Household size (which was measured by the number of people staying in the house) is important in determining poverty. Increasing the household size by 10% is likely to increase the poverty gap of the household by about 1. It might not seem much, but this is a result that must be interpreted with caution. An extra member of the household will mean an increase in the consumption basket for certain items such as bed space, soap, water volume and many other toiletries. However, the survival strategies of most poor households are different from those of their richer counterparts.

It can therefore be concluded that the poor population of Nyakallong live in poverty. Poverty in Nyakallong is caused by low levels of education and a small possession of skills. The population consists mostly of the school going age group which is not productive, thus aggravating poverty. The high rates of poverty are caused by a high number of unemployed females, and by female headed families. Unemployment is mostly concentrated amongst the youth. The high dependency ratio amongst the poor population and their dependency on government contributes positively on poverty. Unemployment is high in Nyakallong, impacting positively on poverty.

CHAPTER 5: SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 INTRODUCTION

The main objective of this study is to analyse the effect of socio economic factors on poverty in Nyakallong. A theoretical understanding of poverty and the associated economic factors contributing to being poor were discussed. The empirical findings of the study are based on a household survey using questionnaires. This chapter will provide a summary of the study.

5.2 SUMMARY

Poverty in South Africa continues to be a problem seventeen years after the scrapping of the policy of Apartheid. The Apartheid policy is regarded as a contributing factor to high poverty levels, especially amongst the Black population. The South African government is trying to address problems of poverty by implementing appropriate policies. These policies aim to ensure macroeconomic stability and increase access to basic services.

Poverty is interpreted and understood differently by different people. Several meanings have been attached to poverty and its impact on society. Despite being different, the different interpretations have a common element of material lack, especially the lack of resources needed for survival. The definition of poverty helps with the identification of goods and services needed by human beings in order to live. Poverty is seen as the inability of the individual or household to attain sufficient resources to satisfy a socially acceptable standard of living.

There are two approaches towards defining poverty, namely the absolute and relative approaches. The absolute approach regards the poverty line as the absolute subsistence level. The absolute approach views poverty as the failure of needs fulfilment which impairs the ability of the individual or household to function adequately in a society. The relative approach views poverty as a relative concept. The relative approach maintains that poverty can be understood as part of the given society within which the poor are determined by their distance from the other strata of society. Because the relative approach compares those who are worse off with those who are

better off, it is more subjective than the absolute approach. Mostly, the definitions of poverty are income based or material based and this tends to favour income based policies in poverty reduction.

The types of poverty that have been identified are situational, generational, absolute, relative, urban and rural. The type of poverty that is suffered by the individual or household depends on its characteristics, as well as the present and previous situation of the individual or household. Lack of food and nutritional security, income security, social security and human security are considered to be the ingredients of poverty. The three basic explanations to the causes of poverty are residual, pathological and structural explanations. The main determinants of poverty are characteristics of the individual, household, community and region. Poverty extends to fields such as health, education, gender and employment. Those living in poverty are likely to be infected with chronic illnesses. Children living in poverty tend to drop out of school at an early age leading to a low level of education. People with low levels of education tend to accept low paying jobs. Children who leave school early are exposed to exploitation especially when forced into child labour. High levels of poverty are found mostly amongst females and female headed households. Poverty is also high amongst individuals or households living in traditional dwellings and those lacking access to clean water. Also, high levels of poverty are found amongst people using wood, paraffin and candles as forms of energy and who do not have flush toilets.

Poverty and inequality are not the same. Inequality refers to the comparisons of living standards across the population while poverty is concerned with the absolute standard of living of part of the population. Therefore, inequality is defined over the whole population and poverty focuses upon a certain part of the population below the poverty line.

A poverty line is used to separate the poor from the non-poor. A poverty line helps the government and the society to focus on the living conditions of the poor and has a great impact on policy decisions. The Poverty line is a quantitative approach used to measure poverty in this study. The poverty line shows the level of income necessary to provide a minimum subsistence level. Therefore, poverty lines are both income and price elastic. This means that poverty lines are adjusted for changes in mean income

of the population as well as for changes in the general price level. The following poverty lines are used in South Africa, namely PDL, MSL, MLL, SLL, HSL and HEL.

PDL is the amount of money needed by a household to sustain itself with basic necessities for a certain period. PDL includes items such as food, clothing, fuel / lightning, washing / cleaning, rent and transport. MSL is the minimum level at which a non-White family would afford to maintain the health of its members. MSL includes items such as tax, medical expenses, education and household equipment. MLL is the monthly income needed to sustain a household. MLL includes items in both PDL and MSL. SLL includes items in MLL, plus 30% more of each individual item in MLL, plus recreation, personal care, pension, unemployment insurance fund, medical aid, and burial contribution. The HSL is the estimate of theoretical income needed by each individual household to maintain a minimum standard of living of health and decency in the short term. HSL is calculated by taking the lowest cost of the basket of goods and services of adequate quality. The basket of goods and services includes food, clean water, accommodation, clothing, transport, electricity and washing and cleaning material for each individual member of the household, as well as for the whole household. The HSL for each individual household is then compared with the combined income of all members of the same household. HSL was used in this study because firstly, it covers all major centres in South Africa; secondly, it is the most frequently used measure in recent years; and thirdly, because the study involved Nyakallong and Kwakwatsi, the HSL offers a common measure. HEL is calculated by adding 50% of HSL to HSL.

The headcount index measures the proportion of the population that is counted as poor, meaning those who fall below the poverty line. The headcount index of the sampled population was calculated at 0.472, meaning that 47.2% of all households' income was found to be below their poverty line. The disadvantage of the headcount index is that it does not consider the intensity of poverty and also does not indicate how poor the poor are. The poverty gap measures the mean shortfall of the incomes of the poor from the poverty line, and was calculated to be 0.5. The poverty gap ratio measures the extent of the shortfall of incomes below the poverty line. The poverty rate of Nyakallong was found to be 48.5%.

Various household level indicators were used to map a profile of the surveyed population. The population size of Nyakallong is estimated at 22 842 with 4 123 households. There are more females than males and most of the population is still attending school. The average household size is 4.2 and the largest household size has eleven members. If the household size is increased by 10%, it is likely that the poverty gap will increase by 1. Many people in the household mean more expenditure. The dependency ratio is the ratio of the number of non-income earners that depend on one income earner. The dependency ratio for the poor population is high with 6 non-income earners depending on one income earner.

According to age distribution, 42 % of the whole population was found to be below the age of 20 and 46% of the poor population was found to be below the age of 20. About 52% of the whole population was found to be between the ages of 20 and 59, while 51% was found to be between the ages of 20 and 59 in the poor population.

The main source of income for the whole population is salaries / wages, while social grants are the main source for the poor population. On average, the whole population has a monthly income of R2 938,35 and spends an average of 39.7% of this income on food. Aside from expenditure on food, other income of the poor population is spent on transport, cleaning material and electricity, while the other items which consume the whole population's income are clothing, cleaning material and electricity.

School goes from both the whole population and the poor population attend primary schools. This is the population which is unproductive and mostly depends on both child support grants and foster care grants. The majority of the out of school population does not have grade 12 or higher certificates – this is true in both the whole population and the poor population. The poor population is worse off when compared to the whole population in terms of the level of education of the out of school group, as well as those attending primary education.

The unemployment rate in Nyakallong is 69.9% for the whole population and 95.6% for the poor population, in comparison to a provincial unemployment rate of 35.8% for the second quarter of 2008. The unemployment rate is very high and needs attention. The majority (50% of the whole population and 53% of the poor population) of the population is economically inactive. The population is dominated by females which is

the same in the province and in Kwakwatsi. Unemployment is concentrated amongst the youth and females in both whole and poor populations. On average, the whole population and the poor population lack skills, and the acquired skills are mostly female dominated skills such as hairdressing and catering / cooking. The main employer of the population of Nyakallong is the mining sector.

One hundred and ninety four households out of the four hundred and twelve were found to be poor. The average income of the poor population is very low at R1 140 with a standard deviation of 860, 21. The large standard deviation indicates that inequality exists among the poor population. The average expenditure per poor household is R1 396, 00 per month. There is a positive relationship between expenditure and the poverty gap ratio. People either spend their income or borrow and pay later. If expenditure is based on current income, then the impact of expenditure on poverty must be analysed together with the impact of income on poverty. The poor population spent 44.3% of income on food. The results confirm that female headed households are poorer compared with male headed households. The poverty gap ratio is positively related to education and this is statistically insignificant. Employment is negatively related to the poverty gap ratio. Employment is regarded as an important variable that can be used to reduce poverty. A 10% increase in the level of employment will reduce the poverty gap ratio by 1.9.

5.3 CONCLUSION

The main aim of the study was to analyse the effect of socio-economic factors on poverty in Nyakallong. In order to achieve the main aim, the completed questionnaires were used to profile the population in terms of demographic factors, age, gender, qualifications, employment status, sources of income and expenditure patterns. Also to achieve the main aim, poverty was measured from the information provided in the questionnaires and the important factors determining poverty were analysed using the ordinary least squares method.

From the previous chapters' information, tables and figures, it can be concluded that low levels of education and high levels of unemployment contribute positively towards high poverty levels. Female headed households are found to be experiencing high levels of poverty compared to male headed households. The skills and education can

increase the probability of being employed and productive. Employment, especially employment for skilled and educated individuals, will encourage the adoption of practises that lead to better health; it will also motivate others to become educated and skilled.

5.4 RECOMMENDATIONS

This section proposes possible strategies to be implemented in order to alleviate poverty or to reduce its impact on the poor population. The proposed strategies need further and more detailed investigation. These strategies can be used when setting up community development programmes.

Education is a basic human right; its fundamental role for poverty reduction is universally recognised. The main objective in the area of education includes achieving complete secondary education and tertiary education. The nearby university of technology and the FET College should visit secondary schools in Nyakallong with the aim of marketing themselves and of informing students about funding which is available for them to further their studies – an example is the National Student Financial Aid Scheme (NSFAS). These institutions should work hand in hand with educators who are teaching Life Orientation (LO) at schools. In terms of large household size, the syllabus of LO should also involve family planning which will encourage learners to realise the advantages of small families. The Department of Health should also supply mothers to be with booklets which explain the advantages of small families, as well as with topics related to pregnancy.

There is also a necessity to develop the skills of the unemployed. A skill development centre should be established, perhaps housed in the closed mine buildings or the closed chest hospital building. The skills development programme should concentrate mostly on youth and females. The large organisations in Nyakallong, such as the Electricity Supply Commission (ESCOM) and Harmony Gold to undertake social responsibility initiatives within the community of Nyakallong. These large organisations could also help in the identification of the scarce skills needed especially by the mines. Those with the skills and motivation in operating businesses (SMME's) should be assisted to form cooperatives. In this way, job opportunities could be

created and, because of the close correlation of poverty and unemployment, poverty could be alleviated.

A food garden community programme should be established. People are interested in food garden development should be trained in order to understand the management of food gardens. Through training, people can also realise how food gardens can improve their quality of life. The creation of employment is seen as one of the best strategies of poverty reduction. The Department of Health should consider putting back into operation the closed Allanridge Sanatorium hospital so as to create jobs for the residents of Nyakallong. The Department of Mineral and Energy (DME) should also look into putting the closed mining shaft back in operation in order to create employment for the residents of Nyakallong.

Poverty is the most important problem that affects the poor people. A further research on the analysis of socio economic factors on poverty needs to be done. Also the effects of the level of education, unemployment, income level and household size on poverty need to be researched. This will help the policy makers when drafting anti-poverty policies, this policies will be used to alleviate poverty. Research on this topic will help the consumers be aware of the causes and the effects of poverty and also poverty can be alleviated. It will also help the community to reflect on socio economic ills and as a result the community will be able to attain self-reliance. Failure to research this topic may enhance civil disobedience, socio economic ills and redundant economic activity.

BIBLIOGRAPHY

AFRICAN DEVELOPMENT BANK. 2004. African Economic Outlook. Paris: OECD.

AGÉNOR, P.R. 2004. The economics of adjustment and growth. 2nd Ed. New York: Academic Press.

ALCOCK, P. 1993. Understanding Poverty. Basinstoke: McMillan Press.

ALCOCK, P. 1997. Understanding Poverty. 2nd ed. London: McMillan Press

AKSOY, A.M. & HOEKMAN, B.M. 2010. Food Prices and Rural Poverty. Washington D.C.: World Bank.

ALIBER, M. 2002. Poverty-eradication and sustainable development. Cape Town: HSRC publishers.

ANC (AFRICAN NATIONAL CONGRESS). 1994. The Reconstruction and Development Programme (RDP). Johannesburg.

ARNDT, C.A. & SIMLER, K.R. 2004. Estimating Utility Consistent Poverty Line. Forum Paper. African Development and Poverty Reduction: The Macro-Micro Linkage.

BAUMOL, W.J., & BLINDER, A.S. 2009. Economics: principles and policy. Canada: British library.

BHORAT, H. 2001. Fighting poverty: labour markets and inequality in South Africa. Cape Town: UCT Press

BHORAT, H., & KANBUR, R. 2006. Poverty and policy in Post-Apartheid South Africa. Cape Town: Human Sciences Research Council.

BETEILLE, A. 2003. Poverty and inequality. Extended Public Works Special Article. [HTTP://WWW.EPW.ORG.IN/SHOWARTICLES.PHP?ROOT&LEAF=10&FILENAME=6392&FILETYPE=HTML](http://www.epw.org.in/showarticles.php?root&leaf=10&filename=6392&filetype=HTML) [Accessed: 12/09/ 2009].

BOROOAH, V.K. & MCGREGOR, P. 1991. The measurement and decomposition of poverty: an analysis based on the 1985 family experience survey for North Ireland. *Manchester School of Economic and Social Studies*, 59(4):357-365.

CANCLAN, M., & DANZIGERS. 2009. *Changing poverty, changing policies*. New York: Russell Sage Foundation.

CEAS. 1986. *Social accounting matrices for South Africa*. Pretoria.

COLLINS, M.F., & KAY T. 2003. *Sport and social exclusion*. London: Routledge.

DAS, R. 2006. *Poverty and hunger: causes and consequences*. New Delhi: Sarup & Sons.

COUDOUÉL, A., HENTSCHEL, J.S. & WODON, Q.T. 2002. *Poverty measurement and analysis*. Washington D.C.: World Bank.

DELLINK, B.B. & RUIJS, A. 2009. *Economics of poverty, environment and natural resource*. Dordrecht: Springer.

DIXON, J. & MACAROV, D. 1998. *Poverty: a persistent global reality*. London: Routledge.

DUCLOS, J., & ARAAR, A. 2006. *Poverty and equity: measurement, policy and estimation with DAD*. New York: Springer Publishers.

FOSU, A., MWABU, G. & THORBECKE, E. 2009. *Poverty in Africa: Analytical and Policy Perspectives*. Nairobi: University of Nairobi.

GUJARATI, 2004. *Basic Econometrics*. 4th ed. New York: McGrawhill

GUTIERREZ, C. 2007. *Does employment generation really matter for poverty reduction*. Policy Working Paper 4432: World Bank.

HAUGHTON, J.H., & KHANDKER, S.R. 2009. *Handbook on poverty and inequality*. Washington D.C.: World Bank.

HAYMAN, D.N. 1997. *Macroeconomics* 4th ed. Chicago: McGrawhill.

- HOLDEN, A. 2008. Environment and tourism. 2nd Ed. Canada: Routledge
- HOLMAN, R. 1978. Poverty: Explanation of Social Deprivation. London: Marting Robertson
- ICELAND, J. 2006. Poverty in America. California: University of California Press.
- INTERNATIONAL LABOUR OFFICE. 1992. Household Income and Expenditure Surveys. Geneva: ILO
- JENSE, E. 2009. Teaching with poverty in mind: what being poor to kids' brains and what school can do about it. Alexander: Nancy Modrak.
- KLASEN, S. 2004. Determinants of income mobility and household poverty dynamics in South Africa. Discussion paper no. 1030. Human Sciences Research Council and University of Port Elizabeth.
- LARSSON, A. 2006. Government response to poverty and unemployment in South Africa. A micro-level evaluation of the Expanded Public Works Programme. Department of Economics: Uppsala University. Bachelor Thesis (A Minor Field Study).
- LIGTHELM, A.A. 1993. Salient features of poverty in South Africa. Pretoria: Bureau of Market Research.
- LITCHFIELD, J.A. 1999. Inequality: Methods and tools. Text for World Bank's Web Site on Inequality, Poverty, and Socio-economic Performance.
- LUSTED, M.A. 2010. Poverty. Minnesota:ABDO.
- MAHLATSI, N.S. 2008. Interview with Mr. N.S. Mahlatsi, Principal of Tshireletso Primary school of Nyakallong from 1974 to date. 19 September 2008.
- MATJHABENG MUNICIPALITY. 2009. Integrated Development Plan. Welkom. Matjhabeng Municipality.
- MAY, J., ed. 1998. Poverty and Inequality in South Africa: report prepared for the office of the Executive Deputy President and the Inter-ministerial Committee for Poverty and Inequality. Summary report – 13 May 1998.

MOKOENA, T.D. 2001. The status of material poverty in the Vaal Triangle Area in the year 2000. Vanderbijlpark: Vista University (Dissertation – MCom.).

MOKOENA, T.D. 2004. A critical analysis of community-driven development projects aimed at poverty alleviation in Evaton West. Vanderbijlpark : North-West University. (Thesis -PhD.Com.)

MOORE, D. 2009. Measuring poverty.

[Internet] [HTTP://EN.WIKIPEDIA.ORG/WIKI/MEASURING POVERTY](http://en.wikipedia.org/wiki/Measuring_Poverty)

NARASIAH, M.L. 2005. Poverty and Environment in Education. NewDelhi: Discovering publishing house.

NEWMAN, D.M. 2010. Sociology: Exploring the architecture of everyday life. 8th Ed. New Delhi: SAGE Publications.

NOBLE, M., RATCLIFFE, A. & WRIGHT, G. 2004. Conceptualizing, defining and measuring poverty in South Africa: an argument for a consensual approach. University of Oxford: CASASP.

PECORA, P., WHITTAKER, J., & MALUCCIA, A. 2009 The child welfare challenge: policy, practice and research. New Jersey: Transaction Publishers.

POL, L.G. & THOMAS, R.K. 2001. The demography of health and health care. New York: Kluwer Academic / Plenum

POSEL, D., & ROGAN, M. 2011. Gendered trends in poverty in the post-apartheid period, 1997:2006. *Working Paper Number 205*. Natal: University of kwaZulu.

POTGIETER, J.F. 1980. Background and interpretation of the household subsistence level. Port Elizabeth: Institute for Planning Research.

PROVIDE (2005). "A profile of the Free State province: Demographics, poverty, inequality and unemployment." PROVIDE Technical Paper Series, 2005:1(4).

PROVIDE Project, Elsenburg. Available online at WWW.ELSENBURG.COM/PROVIDE.

RADIILE, M.A. 2008. Interview with Mr. M.A. Radiile, Administration Clerk of Allanridge municipality from 1970 – 1995. 19 September 2008.

RAO, V., & WALTON, M. 2004. Culture and public action. Washington D.C.: State University Press.

RAVALLION, M. 1992. Poverty lines. Washington D.C.: World Bank

SHARMA, A. 1990. Concept and Measurement of poverty. New Delhi: ANMOL.

SABRY, S. 2009. Poverty line in Greater Cairo: understanding and misrepresenting poverty. [Internet] [HTTP://WWW.IIED.ORG/PUBS/DISPLAY.PHP?0=1-572//ED](http://www.iiied.org/pubs/display.php?0=1-572//ED)

SAUNDERS, P. 1997. Toward a better poverty measure. Focus. 19(2). Institute for Research on Poverty: University of Wisconsin-Madison.

SEKHAMPU, T.J. 2010. An investigation into the economic sustainability of Kwakwatsi. Vanderbijlpark: North West University (Dissertation – Phd).

SEN, A. 1981. Poverty and famines: an essay on entitlements and deprivation. New York: Oxford University Press.

SEN, A. 1982. Choice, Welfare and Measurement. New York: Blackwell.

SHEPARD, J., & GREENE, R.W. 2003. Sociology and you. Ohio: McGraw-Hill.

SLABBERT, T.J.C. 1997. Poverty amongst black households in the Vaal Triangle metropolitan area: a micro analysis. Vanderbijlpark: Vista University (Dissertation – Phd).

SLABBERT, T.J.C. 2003. Bophelong: a socio-economic & environmental analysis. Research report no. 12. Vanderbijlpark: Vaal Research Group.

SLABBERT, T.J.C. 2004. An investigation into the state of affairs and sustainability of the Emfuleni economy. Pretoria. Pretoria University. (Thesis – D. Com.)

Slabbert, T.J.C. 2009. Bophelong: a socio-economic and environmental analysis. Vandebijlpark: Vaal Research Group.

SOUNDARAPANDIAN, M. 2000. Literacy campaign in India. New Delhi: Discovery Publishing House.

SPII (STUDIES IN POVERTY AND INEQUALITY INSTITUTE). 2007. The measurement of poverty in South Africa project: key issues. Richmond: SPII.

STAFF, D.J. 2002. Introduction to social security: policies, benefits and poverty. Canada: Routledge.

STATISTICS SOUTH AFRICA. 1996b. Census 1996.

<http://www.statssa.gov.za/census01/html/default.asp> [Accessed: 20 June 2010]

STATISTICS SOUTH AFRICA. 2001b. Census 2001.

<http://www.statssa.gov.za/census01/html/default.asp> [Accessed: 20 June 2010]

STATISTICS SOUTH AFRICA. 2007. Community survey, municipalities' basic results. Statistical release P0301.1. Pretoria: Government printer.

STATISTICS SOUTH AFRICA. 2008. Quarterly Labour Force Survey. 1st Quarter 2008. Statistical release PO211.1. Pretoria. Government printer.

STATISTICS SOUTH AFRICA. 2009. General Household Survey. Statistical release PO318. Pretoria. Government printer.

STATISTICS SOUTH AFRICA. 2009b. Mid year population estimates. Statistical release P0302. Pretoria: Government printer.

STREETEN, P. 1982. First things first: meeting basic human needs. New York: Oxford University Press.

SURVEY DATA. 2009. Unpublished results of conducted among households in Nyakallong: Allanridge.

TOWNSEND, P. 1979. Poverty in the United Kingdom: a survey of household resources and standards of living. Berkeley: University of California Press.

WHITE, H., & KILLICK, T., 2001 African poverty at the millennium:. Washington, D.C.: Oxford University Press.

WHO. 2005. Poverty and Health. Paris: OECD.

WORLD BANK. 1993. Poverty Reduction Handbook. Washington: World Bank.

WORLD BANK. 2000. Poverty. Washington, D.C.: Oxford University Press.

WORLD BANK. 2005. Poverty manual. Washington: World Bank.

WHO. 2006. Poverty and Health. Paris: OECD.

ANNEXURE A

SURVEY DESIGN AND APPLICATION

A questionnaire was employed in soliciting data from households in Nyakallong. The Household Survey Questionnaire was compiled from a number of questionnaires used in the field, such as by Slabbert (2003). In total, four hundred and twelve questionnaires were employed.

Two maps, Matjhabeng Municipality and Nyakallong, were obtained from Matjhabeng Municipality. The Nyakallong map was used to sample four hundred and twelve households and allocate questionnaires evenly throughout. Households were completed on site by the researcher and three field workers. Details with regard to the site were listed, but no names were recorded with regard to the head of the household or other persons living at the site. This was done to ensure anonymity, thereby encouraging honest and reliable information.

A sample of the questionnaire is annexed. The survey was done in May/June 2009.

ANNEXURE B

HOUSEHOLD QUESTIONNAIRE

NB : The information in this questionnaire will be treated in strict confidence

NYAKALLONG	Section/RDP/Shack	Date:	Questionnaire no.:
Street:	House number:	Interviewer:	

A BACKGROUND INFORMATION

1. What is the position of the respondent in the household? Cross X

Head of household	Spouse or child	Extended family members	Boarder
-------------------	-----------------	-------------------------	---------

2. How many housing units are on the site?

3. How many people stay permanently on the site?

4. How long have you (respondent) stayed in Nyakallong township (Years)?

B ENVIRONMENTAL

5. How do you feel about the environment in which you stay? (Mark 2 options) X

1 It is clean and pleasant	2 It is littered, untidy and dirty	3 Indifferent - No opinion	4 Something should be done to clean it	5 Other (explain)
----------------------------	------------------------------------	----------------------------	--	-------------------

6. If you feel it should be cleaned up, who should take the initiative and responsibility? (X More)

1 The municipality	2 A street Committee	3 Every person should be made responsible	4 A campaign should be organised.	5 Other (explain)
--------------------	----------------------	---	-----------------------------------	-------------------

7. If you would have the money, what would you be prepared to pay monthly to have your environment cleaned up?

8. How do you experience, especially in winter, the dust levels in your area? X

1 Not affected	2 Slightly Affected	3 Affected	4 Badly affected	5 Unbearable (severely affected)
----------------	---------------------	------------	------------------	----------------------------------

9. What would you be prepared to pay monthly to have your environment dust free?

10. If you are making fire for cooking & heating purposes, would you like to be introduced to technologies that will reduce the smoke levels at your house?

1 Not making fire: using electricity for heating & cooking	2 Making coal / wood fire: but not interested	3 Making coal / wood fire: and interested	4 Using paraffin: Not interested	5 Using paraffin: Interested
--	---	---	----------------------------------	------------------------------

11. How do you experience, especially in winter, the smoke levels (air pollution) in your area? X

1. Not affected	2. Slightly affected	3. Affected	4. Badly affected	5. Unbearable (severely affected)
-----------------	----------------------	-------------	-------------------	-----------------------------------

12. d you be prepared to pay monthly to have your environment smoke

- (a) What % of the smoke pollution do you think comes from industry?
and coal fires?

- (b) Number of persons in your household whose health is affected by air pollution?

--

- (c) What are most of them suffering from? (e.g. coughing, asthma, etc).

.....

13. Especially in the spring and summer some people are using amplifiers to make loud music. How are you affected by this in your area?

1 Not affected (quiet in the area)	2 I hear it but I don't care (accepting it)	3 I hear it and it is affecting me (don't like it).	4 I hear it and I am badly affected	5 I hear it and it is unbearable (severely affected)
--	---	--	---	---

14. If you feel that something should be done in your area to reduce the noise levels, who should be responsible and what should be done? (Mark X more than one option)

1 The municipality should control and restrict people to play loud music.	2 The police should control and restrict people to play loud music.	3 A street committee should control and restrict people to play loud music	4 People who disturb the neighbour- hood with noise should be find /	5 The instruments of those who disturb the neighbour- hood should
--	---	---	---	--

			punished	be confiscated
--	--	--	----------	----------------

15. If you would have the money, what would you be prepared to pay monthly to have your environment quiet?

--

16. Has any person in your household been a victim of crime in the last 12 months?

Yes	No
-----	----

17. What kind of crime? (Can mark X more than one option)

1 Assault	2 Robbery	3 Rape	4 Murder	5 Abduction	6 Other
-----------	-----------	--------	----------	-------------	---------

C CONSUMPTION

18. How much of the following items does your household buy per week/per month and about how much does your household spend on these items per week/per month?

Product	Kilograms / litres per week	Kilograms / litres per month	Rand per week	Rand per month	Town	Nyakallong
1 Maize Meal						
2 Bread						
3 Meat/chicken						
4 Vegetables						
5 Milk						
6 Washing powder						
7 Coal						
8 Paraffin						

19. How does your household spend their income monthly?

Item	Rand per month	Name of shop	Town	T/ship	
Housing (Rent/Bond)					1
Water					2
Electricity					3
Other energy (coal, paraffin, etc)					4
Food					5
Cleaning materials					6
Cigarettes & Tobacco					7
Beer, wine & spirits					8
Transport: Taxi					9
Car					
Other					
Clothing					10
School					11
Entertainment					12
Medical Expenses					13
Insurance					14
Gambling: Lotto					15
Horseracing					16
Other (casino, etc)					17
....					
Savings					18
Licenses (e.g. TV, vehicle)					19
Rates and taxes					20
Housekeeping services (e.g. garden)					21
Telephone					22
Cell Phone					23
Car Repayment					24
Loan Repayment					25
Furniture					26
Other: Specify					27

D EMPLOYMENT AND EDUCATION STATUS

20. Complete in respect of all members of the household (Refer to Code List)

1	Number of people in the household								
2	Composition of members (Code list 2)								
3	Age of each member in years								
4	Sex (Male = 1, Female = 2)								
5	Marital status (code list 5)								
6	Highest qualification (still at school) (Code list 6)								
7	Qualifications (not at school) (Code list 7)								
8	Employment Status (Code list 8)								
9	Sector of employment (Code list 9)								
10	(10-17 for unemployed only) Skills of unemployed (Code list 10)								
11	Duration of unemployment in years.								
12	Willingness & type of skills training required (code list 10)								

13	What is the unemployed doing presently?								
14	Do you have matric exemption?								
15	If persons would like to study further : preferences (Code list 15								
16	Preferences to start self-sustaining activities (Code list10)								
17	Minimum wage required to take a job.								
18	Income: Wages/salaries per month (take home pay)								
18.1	Current								
18.2	Two years ago.								
19	Pension/Remittance								
20	Child Grant from Government								
21	Other Grants from Government								
22	Help (family/relatives/etc) Also help in kind								
23	Informal activities (e.g. SMME)								
24	Subsidies (e.g. housing)								
25	Interest/dividends								
26	Other (specify)								

21. How do you cope with increasing food prices ()? _____

22. Does someone in your household have a vegetable garden?

Yes	No
Yes	No

23. Would someone in your household be interested in receiving assistance to start a food garden in your yard?

24. Would someone in your household like to be involved in a community food garden project?

Yes	No
Yes	No
Yes	No

25. Does someone in your household own a sewing machine?

26. Do you know a clothing manufacturing business in your township?

If so, give the address

.....

27. Does someone in your household own a welding machine?

28. Do you know any small scale welding/metal work firm in the township?

Yes	No
-----	----

If, so, give the address

.....

29. Has any member of your household operated a SMME / still operating one? (also distinguish between formal and informal)

Yes	No
-----	----

If so, what kind of SMME?

.....

30. Taking into account your skills (or that of your household members), would you or someone in your household (unemployed persons) be interested in starting your own business or rather work together with others in a cooperative?

Own business	Cooperative
--------------	-------------

31. What kind of business would you like to start? (Compare Q.20.16)

.....

32. If you would like to start your own business, what kind of support do you think you will need?

.....

33. Do you think you will get a job if you are better trained?

Yes	No
-----	----

34. What kind of training do you need? Compare Q20.12)?

.....

35. Were any members of your household retrenched in the last year?

Yes	No
-----	----

36. What was the reason for the retrenchment?

.....

37. Where were they working at the time of the retrenchment?

.....

38. Do you think large corporations like Harmony should be more involved in community development projects?

Yes	No
-----	----

39. What should they do?

40. Why should they do it?

THANK YOU FOR YOUR COOPERATION