



social development

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REPUBLIC OF SOUTH AFRICA



**THE STATE OF THE POPULATION IN THE NORTHWEST PROVINCE:  
DEMOGRAPHICS AND COMPONENTS OF POPULATION CHANGE  
(FERTILITY, MORTALITY AND MIGRATION).**

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## **EXECUTIVE SUMMARY**

The state of the population in the North West province intend to provide information with specific focus on fertility, mortality and migration levels in the province in order to assess progress made on implementation of Population Policy. The population change plays a significant role in the development of the province hence it is critical to understand interrelationship between population, environment and development as well as integrating this information in the development plans. It was evident from the literature that population control is the key to reduced rate of population growth. The source of data for this study were mainly secondary. They were sourced from Statistics South Africa which included censuses, community surveys and population mid-year estimates. The data was analysed with the use of Supercross, and Superweb. The analysis was done at two level namely univariate and bivariate.

The study aimed at analyzing current population status of the North West Province with specific emphasis to Fertility, mortality and migration in order to provide a sound basis for decisions on issues such as population control and socio-economic development. Therefore, the state of the population in the North West province intended to provide information with specific focus on fertility, mortality and migration levels in the province in order to assess progress made on implementation of Population Policy. As discussed in this study, the structure and growth of the population is the first concern in the population policy. It notes the linkage between the growth and structure of the population and the growth and capacity of the economy. Population has been reported to increase globally including the South African provinces. The challenges raised in this regard is that this put pressure on the natural resources. The study was based on secondary data sources mainly from Statistics South Africa and South African Demographic and Health Surveys. Based on that the study used mainly descriptive method of analysis coupled by different demographic techniques to investigate the area of study.

Based on the findings, the population structure of Northwest Province shows that the population will grow very rapidly if proper measure are not in place. The rapid population growth exerts pressure on the distribution and provision of services such as educational, health and recreational resources including housing. Moreover rapid population growth results in young dependent population, which leads to lower levels of saving per capita because of

the excessive burden of dependents that families are obliged to bear. All sector department need to have impact analysis of population change in the strategic document linked to rollout programmes. It is therefore important for managers to have an understanding of interrelationship between population, environment and development. The population growth rate for the province has also been reported to be increasing since the year 2016. The population structure of the North West province is composed with more males than females however the situation was reported to be different for the year 2018 where there were more females than males. The population age structure of the North West Province depict more people at the base with 0 – 4 smaller than 5 – 9 age group but declining as ages increases. The population is observed to have more people in middles ages between 25 and 39 years.

Unlimited population growth on the real planet with finite resources is not sustainable. Hypothetically, if the province halved its fertility rate of 2.77 children per woman, the number of unemployed people will consequently be halved and consumers at large and subsequently halve the national fertility of 2.4 children per woman. Without neglecting the challenges which goes along with that situation, but they are likely to be manageable with good systems in place. Therefore, equitable planning which recognises the market place, the work place, the social and environmental structures - Sustainable Development, is a way to realise a Stable Population.

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**LIST OF ABBREVIATIONS**

CBR:	Crude Birth Rate
CDR:	Crude Death Rate
DHS:	Demographic Health Survey
DHS:	Department of Home Affairs
GDP:	Gross Domestic Product
IDP:	Internally Displaced Person
IMR:	Infant Mortality Rate
NDP:	National Development Plan
NMM:	Ngaka Modiri Molema
NMR:	Net Migration Rate
SADHS:	South Africa Demographic Survey
SADC:	South African Development Community
SDG:	Sustainable Development Goal
STATSSA:	Statistics South Africa
TFR:	Total Fertility Rate

## **1. CHAPTER 1**

### **1.1. INTRODUCTION**

The state of the population in the North West province intend to provide information with specific focus on fertility, mortality and migration levels in the province in order to assess progress made on implementation of Population Policy. As noted in the 1998 Population Policy for South Africa (Department of Social Development, 1998) past policies aimed at addressing population issues in South Africa focused on fertility reduction, restricted population movement and controlled settlement patterns. The position of the democratic government was that sustainable development should be the central theme of the country's population policy. Government therefore recognized the development challenges of meeting the needs of the present generation and improving their quality of life without destroying the environment or depleting non-renewable natural resources.

A number of major population issues have to be addressed by government as part of the overall socio-economic development strategy of the country. Some of these concerns constitute serious obstacles to redressing inequalities and improving the quality of life of the population. To attain a better life for all at the earliest possible time, the South African constitution demanded a human rights approach to integrating population concerns into development planning, implementation and monitoring.

A rights-based approach to development explicitly focuses on the attainment of minimum conditions for living with dignity. It is based on the framework of rights and obligations. The UN Development Program issued a statement in May 2003 explaining that, "in human-rights based approach, human rights determine the relationship between individuals and groups with valid claims (rights holders) and State and non-State actors with correlative obligations (duty bearers). It works towards strengthening the capacities of rights-holders to make their claims, and of duty-bearers to meet their obligations" (UN Development Program, 2003)."



The government of the new South Africa came into power with the determination to correct the evils of apartheid and restore a life of dignity to the people, as well as the three challenges of poverty, inequality and unemployment. Noting that development is about people, the government took cognizance of the interrelationship between population and development, thus it is important to include population variables in all strategic/planning documents i.e NDP Chapter two. Population variables indicate the development status of people while development indicators reflect the population situation within a country (Department of Social Development, 1998). A country with a very high infant mortality may be a country whose population has no access to quality health care services, thus portraying general poor health status of the country. Similarly, a country where, say, only 20% of households have access to tap water, gives an indication of the low quality of life of the people.

The Bill of Rights in Chapter 2 of the Constitution and Population Policy for South Africa, 1998 addresses social and human development issues which affect the quality of life of people. Specific mention was made on housing, health care, food, water and social security, education and the situation of children. The extent to which citizens have access to such basic services of life determines the development status of the country (Department of Social Development, 1998).

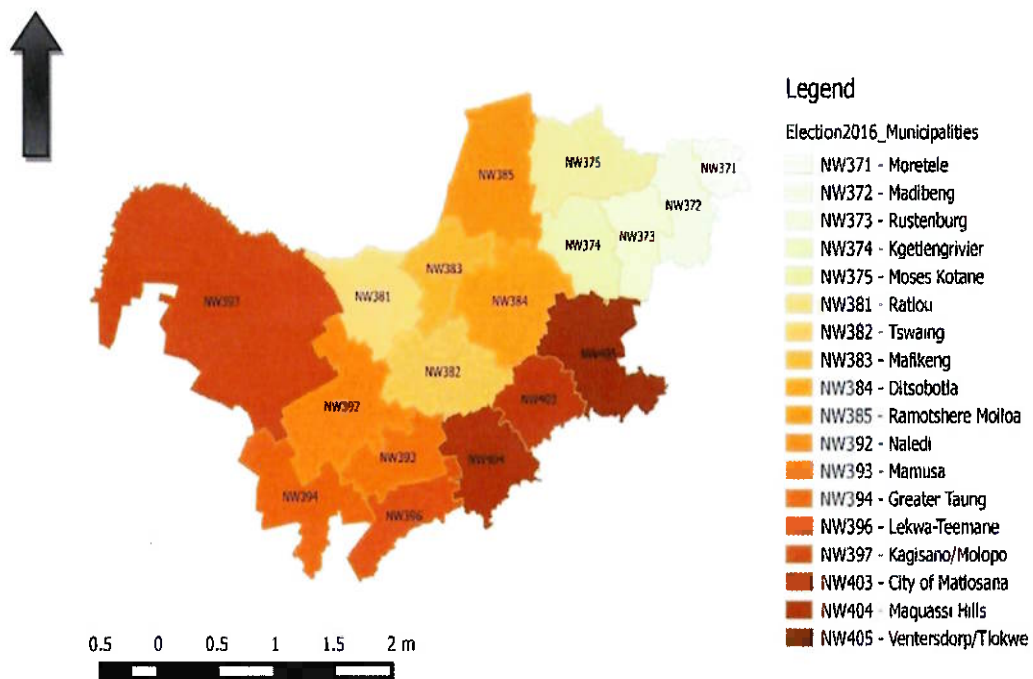
The study focuses on North West, one of the provinces in South Africa situated at the west of the major population centre of Gauteng. The province occupies total land area of 104,882 square kilometres of the country. For the purpose of administration, North West Province is divided into four district municipalities which are Ngaka Modiri Molema, Bojanala, Dr Ruth Segomotsi Mompati and Dr Kenneth Kaunda with 18 local municipalities and 407 wards (Statistics South Africa, 2016).

## **1.2. Geography of North West Province**

In 2016, the Demarcation Board approved new municipal boundaries for the country. This decision affected the area size as well as the population size of some provinces and municipalities. The 2016 demarcation affected mainly wards and two local

municipalities namely; Tlokwe and Vendersdorp in Dr Kenneth Kaunda district municipality in the North West Province. Some wards then had different population sizes from 2011 census figures. For administration purposes, the Province is divided into four district municipalities which are Ngaka Modiri-Molema, Dr Ruth Segomotsi Mompati, Bojanala and Dr Kenneth Kaunda with eighteen (18) local municipalities and 407 wards. Presented in figure 1 is the map of North West Province, showing all local municipalities according to 2016 demarcation.

**Figure 1.1: Northwest Province and Municipalities**



*Figure 1.1: Designed by the Author using QGIS 2.6.1*

### **1.3. Statement of the Problem**

The population change plays a significant role in the development of the province hence it is critical to understand interrelationship between population, environment and development as well as integrating this information in the development plans. Population data provide the basis against which performance in service delivery and development may be measured. The structure and growth of the population, population pyramid, Population structure analysis, gender, rural and urban, household size and household head and Population implications for development are the key variables that should be integrated in development plans specifically integrated development plan of municipalities.

### **1.4. Purpose of the study**

Structure and growth of the population is the first concern in the population policy. It notes the linkage between the growth and structure of the population and the growth and capacity of the economy. For developing countries to attain sustainable socio-economic development, a threefold increase in economic growth is required (compared to population growth). Although reports show that fertility in South Africa has generally slowed down, it remains high. When population grows, there is the need to increase investment just to maintain the existing living standards. Population variables should therefore be considered carefully in development planning as populations continue to increase.

A population structure of a geographic area must be included in any IDP. Specifically, a population pyramid of the area should be included in reports. Population pyramid would reveal the total population size, the sizes of the 5-year age groups; gender differences; reproductive age group; children; the youth; the economically active population and the elderly. This information would assist in planning for and assessment of household services.

## 1.5. OBJECTIVES OF THE STUDY

The study intend to analyze current population status of the North West Province with specific emphasis to Fertility, mortality and migration in order to provide a sound basis for decisions on issues such as population control and socio-economic development.

## 1.6. ORGANISATION OF THE STUDY

This study is organised in four chapters: Chapter 1 is an introductory chapter which covers among others the background, problem statement, purpose, objectives and organisation of the study. Chapter 2 is brief literature related to the population growth and components of population change which are fertility, mortality and migration. Chapter 3 is comprised of methods and materials of research. Chapter 4 is encompassed of the findings of the study while chapter 5 is the concluding chapter with recommendations.

## 1.7. DEFINITION OF CONCEPTS

**1.7.1. Population:** can be defined as the quantity of people, belonging to a certain race or class, residing in a particular geographical area; *population* can also refer to the total amount of these inhabitants/citizens (Online Oxford dictionary, 2018).

**1.7.2. Population Growth:** population growth can be referred to the increase in the number of individuals in a population.

**1.7.3. Population Trends:** Population trends refer to the changes in population size which has occurred in the past to the present.

**1.7.4. Fertility:** It refers to the number of children born to women (Weeks, 2016). It concerns the addition of new members to a population by birth, that is, the actual reproductive performance of women or men (PRB, 2013). It is a demographic variable related to childbearing/ birth (Weeks, 2016).

**1.7.5. Mortality:** The demographic variable related to death (PRB, 2013; Mirsaeidi, Machado, Garcia & Schraufnagel, 2014).

**1.7.6. Migration:** The demographic variable related to a change in residence (Weeks, 2016). The process of permanently changing residence, from one geographical location to another.

## **2. CHAPTER 2: LITERATURE REVIEW**

### **2.1. INTRODUCTION**

A number of countries in the world have been reported to have experienced a sharp rise in population including some countries in the Sub Saharan Africa region. The challenge is that, the high numbers in population are putting strain on the natural resources, food supplies, fuel supplies, employment, housing, etc. and South Africa is no exception. Globally, population is expected to keep growing, currently the global population growth is estimated to be around 83 million annually. The global population has grown from 1 billion in 1800 to 7, 616 billion in the year 2018. The global population has been estimated to grow faster than in the past, for instance it took 127 years for the population to reach 1 billion between 1800 and the year 1927. That has been seen to be shorter with years, for instance it took the global population a period of 33 years to reach another billion in 1960. The global population has been estimated to be at 8.6 billion in 2030, 9.8 billion in 2050 and 11.2 billion by 2100 (United Nations, 2017).

The population of South Africa was estimated to be at 57, 7 million in 2018 as per 2018 mid-year estimate. The South African population has growth from 17, 5 million in 1960 to 37 million in 1990, to 51 million in 2010, 57 million in 2017. The population of the North West Province grew from 2 727 223 in 1996 to 2 984 098 in 2001 and to 3 509 953 in 2011 (StatsSA, 2018).

### **2.2. FERTILITY**

#### **2.2.1. Trends and Levels of Fertility**

Over time the fertility level of South Africa has been declining from 6 children per woman to an average of 3 children per woman between the years 1960 and 1990 and to 2.4 children per woman between 1990 and 2013. On the same, much as the fertility change have proved to have a remarkable change over time, differentials across provinces do exist with north west having an average of 3.4 children per women in the year 2013.

Fertility decrease started to be attained around 1930s until 1980s by other countries such as Western Europe. In 1970, Rwanda was a leading country with high Total fertility Rate (TFR) of 8.2. Finland, Sweden, Czechoslovakia and Yugoslavia attained a decrease in TFR of less than 2.0 in 1970, followed by 72 countries in 2014, excluding Niger with high TFR of 6.89. In 2014, Singapore was the leading country with the lowest TFR of 0.8. Between 1970 and 2014, the World's two most populous countries attained a TFR decrease, whereby India's TFR decreased with 3.1, while China's TFR decreased with 3.9 which is the biggest World's achievement (PRB, 2013).

When fertility of other regions in the world is thoroughly looked at, Sub-Saharan Africa is the region that experience high fertility rate and considerable dispute surrounds the possibility of these rates declining in the near future. Although fertility rate decreased significantly in Latin America and Asia during 1965 and 1985, and in Africa fertility remained constantly high, well above a level required to replace the population. Consequently, the region faced a challenge of experiencing a high rapid population growth, with rates for some populations considerably above three percent (3%) per year (Kaufman et al, 2001).

Countries like Kenya, Botswana and Zimbabwe started to experience transition whereby fertility rate started to decrease. In addition to the regional and national differentials in fertility rates, it is more likely to experience fertility differentials within countries, frequently in fertility survey records, there is substantial contrast in rates among ethnic, geographic, and socio-economic groups. For example, urban areas are consistently lower because of educational level of women who live in urban areas and their sector of labour market whereby these women are more likely to have more than primary school education, and they are also likely to work in the formal labour market (Moultrie & Dorrington, 2004).

South Africa shows demographic regimes that are characteristically of both developed and developing worlds, whereby it is more likely to be linked to social and economic division among racial and urban-rural lines. People's standard of living is related with

race in South Africa. The African component, which is the poorest with regard to per capita income, has the highest fertility rate, while the white population, which has the highest per capita income, has the lowest fertility rate (Rampagane, 2016).

As reported the TFR for North West province was high at 3.4 children per woman in 1996 which declined to 3.1 in 2001, 2.4 in 2007 (Rampagane, 2016). Currently fertility has been estimated to be have increased to 2.8 in 2016 (StatsSA, 2017). Fertility rates varies by district, at district level in the North West province, TFR was found to be higher for Ngaka Modiri Molema (3.30) and Dr Ruth Mompadi (3.30) in 2007 followed by Dr Kenneth Kaunda (2.90) and Bojanala with 2.70. The TFR declined for all the districts except for Bojanala which slightly increased to 2.73 in 2011. The Ngaka Modiri Molema declined to 3.05 in 2011(Rampagane, 2016).

## **2.2.2. Theories Relating to Fertility**

### **2.2.2.1. The Wealth Flow Fertility**

Two theories are highlighted which takes into consideration the economic rationale of family size which are Wealth Flow Theory and Economic Theory of fertility. The Caldwell's 1996 Wealth Flow Theory argue that fertility is determined by two wealth flow system operating in two different socio-economic contexts. The first context is the traditional model, which argue that, the wealth flows from the younger to the older generation which implies higher number of children as each child contributes to the parent's stock of wealth, security and social standing. The second is associated with modern societies where wealth flows from parents to children with parents bearing the responsibility of children's well-being. This wealth flow system reduces the demand for children as having more children depletes parent's stock of wealth which contribute to decline in fertility. In this society, fertility is lowered marriage delays and lower marriage rate, which are part of the important predictors of fertility transition (Rampagane, 2016).

### **2.2.2.2. Economic Theory of Fertility**

Then Becker's 1960 economic theory of fertility which suggest three perspectives, the first perspective argue that the demand for children depends on the cost of raising children relative to the contribution children will make (Jones et al., 2008). The



second perspective takes children as consumer items which needs to be budgeted for, therefore demand for children should depend on the cost and benefits of alternative goods and services and lifestyles given available and expected resources (Easterlin and Crimmins, 1985). The third perspective is the opportunity cost of childbearing on women's time and is assessed by what women will lose in terms of income through employment (Tiefenthaler, 1997). In this perspective career motivated women will bear fewer children since childbearing is not compatible with engaging in other socioeconomic activities especially employment (Franklin and Tuono, 2004).

The above discussed theories can be supported with the psychological perspectives which was proposed in the 19<sup>th</sup> century which suggest that the demand for children could be determined by the actual and perceived positive and negative values of children. Whereas positive values comprise of companionship, continuity of lineage and economic and social security, negative values comprise of high cost of raising children, income lost due to childbearing and poor maternal health among others (Fawcett, 1977).

The situation in the province is, if the theories are to be considered, all the three theories are relevant in both scenarios which is high demand of children and low demand of children. The North West province is comprised of both traditional or underdeveloped societies and modern societies. However, the modern one has been dominating as it is applicable for both rural and urban areas. The province is mostly rural, however fertility for rural and urban areas have for current years showed a slight difference. Therefore, the economic rationale for children is relevant in the province because of the high cost of raising children; the high cost of living in terms of other household demands including food, housing, education and health care; and the drive for women empowerment through education and employment. The impact of these costs contributes directly to lower fertility through contraceptive uptake and indirectly through delayed age at marriage and higher non-marriage rates due to longer schooling, change of attitudes, perceptions and values by education, employment and urbanization.

## **2.3. MORTALITY**

It was widely believed that difference in death rates are genetic or biological in nature, and thus difficult to change. But now we know that most variations are due to social, economic and demographic. Mortality experience differ by age, sex, education, occupation, residence, income, etc. Death is defined as the permanent disappearance of all evidence of life at any time after birth. Mortality refers to deaths that occur within a population (Weeks, 2016).

### **2.3.1. Trends in Mortality**

The general trends of mortality observed since 1997 is that the number of deaths enlarged consistently up to 2006, after which the number of deaths have continued to decline. There was a total of 458 933 in 2013, indicating a decrease of 6, 5% from the 491 100 deaths for 2012 (Bradshaw et al, 2016). Mortality occurrence in provinces of usual residence deceased in year of 2013. Stats South Africa indicated that there was high percentage of deaths occurred in Gauteng (21, 3%), followed by KwaZulu-Natal and Eastern Cape, each consist of 18, 3% and 13, 9% of the deaths, correspondingly. The common pattern was observed for deaths that occurred in 2012. The lowest percentage of deaths occurred in Northern Cape (3, 0%). With regard to province of usual residence, Gauteng (20,4%) had the highest proportion of deaths, followed by KwaZulu-Natal (18,2%) and then Eastern Cape (13,7%).The highest percentage of people who died outside of South Africa (33,5%) were residents of Gauteng at the time of death occurrence (Bradshaw et al, 2016).

Mortality can be caused by malnutrition, Malthus assumed that human number are ultimately controlled by nutrition even though few may die of actual starvation. Malnutrition and its associated disease condition can be caused by eating too little, eating too much, or eating an unbalanced diet that lack necessary nutrients. This relationship between nutrition and diseases can increase mortality in populations and prevent an individual's ability to work (Dean, 2006). Malnutrition is by far the leading cause of death worldwide. The increases in infectious disease probably reflect both a poorer diet and increased interpersonal contact in crowded settlement and it is in turn, likely to have aggravated nutritional problems (Adam, 2004).

Linked to that is environmental issue which can also contribute to mortality. They include biotic factors such as less food production, disease, and this also include abiotic issues such as rainfall, floods, and temperature. Since the biotic issues affect the population growth, all of the mentioned biotic such as floods, less food production and temperature issues all are influenced by population density. This biotic factors can slow down population or decrease population whereby countries will be experiencing high level of mortality and decrease in birth rate. Biotic factors are often referred to as density-dependent factors (Roosevelt, 2007).

## **2.3.2. THEORIES RELATED TO MORTALITY**

### **2.3.2.1. Mortality Transition Theory**

The nearly universal dropping in death rates that had been registered by the 1960s led demographers to coin the term mortality transition to refer to the road from high mortality, associated in huge part with the high prevalence of infectious and parasitic diseases. To lower mortality, stemming from the control of such communicable diseases (Weeks, 2016). The mortality transition theory was said to have been supplemented by an epidemiological transition theory, a term that focused on the fluctuating relevance of different causes of death and, especially at the early stages of the transition from high to low mortality, put specific importance on the declining role of communicable diseases and on the growing share of mortality due to non-communicable diseases, primarily circulatory disease and cancer (Statssa, 2015). Transition from high to low mortality is mainly due to general rise in life expectancy and sharp decline in infant mortality rate.

The Three Transitional Models

**Classical/western model:** This model is mostly applies in More Developed Countries (MDCs) which are characterized by gradual decline in mortality in a span of one to two centuries

**Accelerated model:** Certain developing countries – South East Asia have already experienced this model. These are countries where mortality declined within a few decades to the levels found in MDCs.

**Delayed model:** This model is applicable to many developed countries, especially in Africa where only relatively slight decline in mortality has occurred to date. South Africa as a country and many of its provinces suit this model because the rate of mortality has declined but the phase is very slow. As reported by StatsSA (2018b), there has been an increase in the number of registered deaths in the country which has a positive indication of complete coverage of cases in the country. That is, since 1997 number of registered deaths increased yearly from a low of 317 872 to 614 248 death occurrences in 2006. This equates to an increase in registered death occurrences of almost double during the two periods. However, since the year 2007, there was a noticeable decline in registered deaths from 606 239 in 2007 to 456 612 in 2016. This is an indication of mortality decline in the country. As argued by StatSA (2018), the comparison between deaths occurring in 2015 and 2016 indicated that the number of deaths processed by Stats SA for 2016 observed a decline of 3,5% from the 473 266 deaths processed for 2015.

#### **2.4. MIGRATION**

Migration is an important process in population studies because it is one of the important components of population change and distribution. It contributes to population growth and reduction as it is an additive as well as subtractive process. It is subtractive, thereby contributes to population reduction in the place of origin and additive and therefore contributes to population growth at the place of destination. Migration is a complex process as it can occur at any age and to any individual. Migration is also an important process in population studies because of its social and economic consequences. Migration involves two important dimensions that is, change of residence in terms of distance and duration of residence in terms of time. Migration has been defined as a change in usual place of residence for some time involving a change in political or administrative boundary. This definition clearly shows a movement between two administrative or political entities and time measured by duration of stay in the place of destination. The place of destination is the new place of residence. While the place where the migrant has come from or the place of previous residence is the place of origin.

#### **2.4.1. TRENDS AND PATTERNS OF MIGRATION**

Globally there have been two major types of migration in human history. These types of migration have historically contributed to the present global population distribution not only by numbers, but also by race. That is, international migration which refers to movement of people between countries generally involving a change and crossing of national borders. The other type of migration is internal migration which is referred to the movement of people across clearly politically, administratively defined territories within a country. Internal migration does not involve the crossing of an international border. The current information regarding migration provided by (Stassa, 2017) shows that in the continent of Africa, South Africa is a leading country to be receiving immigrants from all parts of Africa. Reasons behind the movement of migrants from Africa to South Africa range from economic to Social and Political. Beyond the African Continent, South Africa is also known as a sending country, experiencing the immigration of its citizens to more developed countries such as UK, USA, Australia (Phillips, 2006).

Migration can be considered an instrument of development, which has the potential to facilitate economic, social, political freedom, however, it may also in the process, hinder economies and create social instability and anarchy. Consequences of immigration for a sending country such as South Africa brain drain and loss of skills. Although there are possibilities for brain gain and increased skills via immigration, there are also consequences such as lack of basic infrastructure, depletion of social and economic resources and also the overall inability of a country to cater for the needs of a growing population (Adger and Fortnam, 2018).

According to StatsSA (2011) with regard to province of residence in South Africa, an overwhelming majority of international migrants reside in Gauteng (52%). This followed by Western Cape (12%) and Kwa Zulu-Natal (8%). Limpopo, North West and Mpumalanga were each provinces of residence to (7%) of international migrants while Free State (3%) along with Eastern Cape and Northern Cape (1%) had the lowest percentages. As the majority of immigrants are in the economically productive age, Gauteng is the economic centre of the country, with employment opportunities and infrastructure offers a suitable province. What makes Gauteng more favourable to

Migrants is the fact that English is very widely spoken, so is a preferred province to immigrants. Thus, this is a total contrast to Northern Cape a province where Afrikaans is the common language that is not spoken widely by majority of migrants.

Based on the 2016 Community survey report there were 52 604 migrants living in North West, and 60% of foreigners were living in Bojanala region while the least extent were living in Bophirima regions. The dominant proportion of non-South African residents who were from Asian nations living in central district was around 41.8%, while 60% of migrants were from outside South Africa were living in Bojanala in 2001, the total population who were originating from Europe by beginning of 2001 was 53.1% while 55.6% was originating from America (StatsSA.2004). Migration statistics in North West Province in the period of 2011 and 2016 reported about 104,188 in-migrants whereas out-migrants were around 69,555.

#### **2.4.2. HISTORY OF MIGRATION IN SOUTH AFRICA**

The re-integration of South Africa into the economic world which came with the political changes in 1994 fundamentally altered the supply and demand for labour and probably also the patterns of migration (Kok *et al*, 2006). According Republic of South Africa (1996) in the Government Gazette (1996), during the apartheid era, half of the total population lived in the areas which were classified by the Central Statistical Service as non-urban, while three-quarters of the total non-urban population lived in areas which had been designated as homelands. Furthermore, the areas in which high population was experienced between 1980 and 1991 were largely in the former homelands, as well as certain urban and mining areas. Therefore, apartheid worked dramatically in concentrating and containing people in the former homeland areas and independent states through forced removals and resettlement.

South Africa was experiencing migration even long before the apartheid system was introduced. During the apartheid system, labour-migration system was the most common type of migration. This type of migration system was its nature selective, because only those who were healthy and physically-abled, especially males from underdeveloped provinces and rural areas were recruited to go work in the more developed urban centers. Furthermore, to regulate this migration these men were

given passes, and this prohibited their families from visiting them. In 1994 after the demise of the apartheid system and when democracy was born people started migrating freely because laws that restricted migration were abolished. Both males and females, especially those who are economically active started migrating (Kaufman, 1997).

With the dawn of the new democratic dispensation in 1994 and the subsequent adoption of the new constitution (1996), the scrapping of the rigid and repressive immigration and internal migration laws and regulation allowed people to move freely within and outside the country and also to decide where to work and stay. Politics of the world today afford people the choice and freedom of movement (Richman, 2010).

International migration to South Africa has a long history. Since the earliest times, migrants have been part of South Africa in its industrialization process. Today international migrants play a significant role in all spheres of the South African economy (Oosthuizen, Peberdyet et al, 2004). The number of migrants coming to South Africa, particularly those coming from the African continent, has increased since the 1990s, and more so after the first democratic elections in 1994. The migrants primarily come from South Africa's traditional labour supply areas, which include SADC (Southern African Development Community) countries. However, migrants have also come from other African countries, Europe and Asia.

### **2.4.3. Theories of Migration**

There are a number of theories relating to causes of migration. This however covers both economic and non-economic factors that influence the rate of migration. In the early days, migration was seen to be influenced by economic factors, but as time goes by it shows that even non-economic factors can influence one's decision to migrate. This shows that the causes of migration should be thought of as broader than influenced by the economic.

#### **2.4.3.1. Ravenstain's Theory of Migration: Distance Theory of Migration**

This is one of the oldest theories of migration. The distance theory of migration states that most migration occurs over a short distance. Thus, the number of migrants

arriving in a given location is thought to decrease as the distance required for travel to that location increases. The question of how far migrants can travel has been the focus of the classical migration studies since Ravenstein's Law of Migration, which recognized the relevance of distance as a factor of migration (Weeks, 2016). This theory was found to be dominant during the 19<sup>th</sup> century, and because of that, he was known as the undisputed father of the modern thinking of migration. Furthermore, other scholars such as Florian Znanieckie published seminal work during the 20<sup>th</sup> century called "The Polish Peasant in Europe and America". The other important publication worth noticing in the history of migration is "Why Families Move" by Peter Rossi that dealt with causes of intra-urban mobility.

#### **2.4.3.2. NEO-CLASSICAL ECONOMIC: Macro Theory**

Neo-classical economics is most probably the best-known approach. It explains internal labour migration in the context of economic development. The theory is based on the assumption that the main cause of labour migration is the differences in the wages between the sending and the receiving area. This means that if there are no wage differentials there will be no rural-urban or any other type of migration. And that labour markets mechanism also affects or influence labour migration. And lastly that labour migration can be controlled or regulated by the government (Weeks, 2016).

#### **2.4.3.3. NEO-CLASSICAL ECONOMIC: Micro Theory.**

The neo-classical economic micro theory came up as a response to a macroeconomic model, and its assumptions were based on the fact that rational individuals migrate because after calculating costs and benefits they conclude that they receive the positive net from moving. This means that migrants estimate costs and the benefits of moving and migrate to that area where expected net returns are greater than their place origin. And that migrants estimate net returns in each future period by taking the observed earnings and multiplying them the probability of obtaining a job in the destination area to expected earnings. And also that the policies that affect expected earning in sending and receiving areas can influence the rate of migration. In essence, this theory suggests that migration is by geographical differences in labour supply and demand, and by the resultant wage differentials (Weeks, 2016).



#### **2.4.3.4. THE NEW ECONOMICS OF MIGRATION**

The new economics of migration is a theoretical model that developed in response to the neo-classical theory. According to the model, families, households and other culturally defined units of production and consumption are those who count in the analysis for migration research and not individuals. Furthermore, wage differential is not what necessarily influence people's decision to migrate. Migration does not stop when differences in wages disappear. Migration will exist if other markets in the place of origin such as insurance markets, capital market, and consumer's credit market are absent or imperfection. And that, government is able to change the rate of migration flows through regulating labour markets. When it comes to the new-economics regime decision making is seen to take place in the context of household risk minimization. A Household can control economic risks by diversifying the allocation of household resources like family labour unlike individuals (Weeks, 2016).

#### **2.4.3.5. VALUE-EXPECTANCY MODEL OF MIGRATION**

Value-expectancy model of migration specifies the personally valued goals that might be met by moving and an assessment of the perceived linkage between migration behavior and the attainment of goals in alternative locations. Values and goals consist of wealth, status, comfort, stimulation, autonomy, affiliation, and mortality. Micro-level migration theory can suggest ways in which policy interventions may alter the expectations that potential migrants have about their goals in alternative locations. Under the value-expectancy model of migration there are personal traits, societal and cultural norms, individual and household demographic characteristics, information, unanticipated constraints, and facilitators (Weeks, 2016).

#### **2.4.3.6. INTERVENING OBSTACLE THEORY**

The distance of the expected destination, the cost of getting there, poor health and other such factors may inhibit migration. These obstacles are hard to predict so they all are summed up to cost of moving and concentrate our attention on explaining the desire to move. It is more likely that people tend to pull back on migrating to economic reasons but also family concerns and job-related issues contribute as intervening obstacles (Weeks, 2016).

## **2.5. CONCLUSION**

The current chapter focused on reviewing the relevant literature related to the study. It was evident from the literature that population control is the key to reduced rate of population growth. This is argued by most authors and theorists, for instance the Demographic Transition Theory supported by specific theories related to fertility, mortality and migration. All the theories speaks the same language of transition for the worst to the better, which is from tradition to modernised style of living. They all states that for a population to be developed, it is expected to go through several stages of transition which can be used to measure the development state of a particular nation. The above mentioned theoretical framework will be approached with the application of the methods and materials planned in the next chapter.

### **3. CHAPTER 3: RESEARCH METHODS AND MODELS**

#### **3.1. INTRODUCTION**

The previous chapter mainly focused on the relevant literature regarding the current study. This chapter is then focusing on the methods and models of research applied in this study. This include data sources and analytical models or techniques used in the study. The study was based on a quantitative research approach.

#### **3.2. DATA SOURCES**

The source of data for this study were mainly secondary. They were sourced from Statistics South Africa which included censuses, community surveys and population mid-year estimates.

##### **3.2.1. Population Census**

The UN defines a population census as the total process of collecting, compiling and publishing demographic, economic and social data pertaining, at a specified time or times, to all persons in a country or delimited territory. The census can either be a de facto by counting people who are physically in a given territory on the census day or a de jure by counting people who belong to a given area regardless of whether they were there on the day of the census or not. The South African Population census has been done every five years, however due to administrative and financial challenges it was then moved to 10 year interval. Therefore, the census data is collected after 10 every years in the country (Weeks, 2016).

##### **3.2.2. Community Surveys**

The sample survey is a widely used research strategy that collects information about a part of a population with a view to making inferences about the whole population (Weeks, 2016). The first Community Survey was conducted in 2007, and the current study was taken from the second Community Survey that took place in 2016. The Community Survey is referred to a huge scale survey that occurs in between censuses which was conducted with the broad intentions of giving statistics about overall population and household to public sector and private sector at a municipal level. It is useful as it can support development planning, monitoring and evaluation also for

decision making (StatsSA, 2016). The community surveys are collected five year prior to the next circle of census in order to supplement the census data.

### 3.3. METHODS OF DATA ANALYSIS

The data was analysed with the use of Supercross, and Superweb. The analysis was done at two level namely univariate and bivariate. Univariate analysis describes the individual variable through frequencies and percentage while bivariate analysis describes relationship between two variables. Data is presented in form of tables, maps and graphs. Relevant statistical and demographic measures are employed and are explained below.

#### 3.3.1. Population Growth Models

Population growth rate (r):

$$\text{Population growth rate (r)} = \frac{\ln(P_{t+1}/P_t)}{t} * 100$$

#### 3.3.2. Population Age and Sex Structure Measures

- **Sex Ratio:** Sex ratio is defined as the number of males per 100 females. It is calculated as the male population divided by the female population multiplied by 100.
- **Population Pyramid:** The age and sex structure of a country can be studied by the aid of population pyramids, population pyramids consists of two sets connected bar charts, and one on the left represents the male and another on the right the female population. The different age bars represent different age categories (or cohorts) and indicate either frequencies (absolute numbers) or percentages. The different age categories are indicated vertically from the youngest (bottom) to the oldest (top). The term pyramid relates to the fact that in the past there were always more younger than older persons in the population and two sets of connected bar charts assumed a pyramid form (Mostert et al, 1998).
- **Age Dependency Ratio:** The study was based on a quantitative research approach. Its source of data were mainly secondary.

### 3.3.3. FERTILITY MEASURES

- **Total Fertility Rate:** In order to measure current fertility, the study employed Total Fertility Rate (TFR), defined by Preston et al., (1997), as the average number of children who would be born to a cohort of women who survive to age 50 according to the rates of childbearing of a particular period. A TFR which is defined in this manner is computed by summing Age Specific Fertility Rates from the age 15 to 49 years, that is,  $TFR = \sum_{ASFR} 5$ . It is the most commonly used summary measure of fertility as it is free from age distribution of a population. While ASFR is the number of births per age group/ females per age groups, thus calculated as  $ASFR = \frac{Ba}{Pfa}$ .
- **Crude Birth Rate (CBR):** refers to the number of births in a year per 1000 persons in the population. It is calculated as  $CBR = \frac{B}{P} \times 1000$ . CBR is regarded as the simplest measure and easy to explain to lay man.

### 3.3.4. MORTALITY MEASURES

- **Crude Death Rate (CDR):** is the total number of deaths in a year divided by the average total population. In general form,  $CDR = D \div P \times 1000$ ; where D represent the total number of deaths occurring in a population during any given year, and P is the total average (midyear) population in that year (Weeks, 2016).
- **Infant Mortality Rate (IMR):** is calculated in this way, the IMR is not a proper rate but a ratio as denominator is not the population at risk of the events in the numerator (Weeks, 2016). That is,  
 $IMR = \text{number of deaths under age 1 in a year} \div \text{live births in a year} \times 1000$

### 3.3.5 MIGRATION MEASURES

- **Net migration rate:** This rate is calculated by dividing the difference between the in migrants and out-migrants by the total population. Net migration rate can either be negative or positive depending on which value, I or O is larger (Weeks, 2016).

$$\text{Net migration rate (NMR)} = (I - O) \div P \times 1000$$

### **3.4. LIMITATIONS**

Other desired measures such as age- sex mortality rate; adult mortality rate; crude birth rates; child mortality rate, etc. could not be applied as they require a specialised format of analysis.

### **3.5. CONCLUSION**

The current chapter developed methods and models planned for this study. It addressed the sources of data used in the study and came up with both descriptive and demographic techniques to realise the objective of the study.

## 4. CHAPERT 4: FINDINGS

The previous chapter focused on methods and models selected for this study. This chapter therefore applies those techniques and discuss the results thereof. Findings were drawn from different sources as highlighted in the previous chapter. The chapter first discussed population trends of the North West province, then population growth by sex and then population distribution by age and sex. Fertility, mortality and migration patterns are also discussed in this chapter.

### 4.1. NORTH WEST POPULATION TRENDS

The importance of population processes and trends is already well recognized. The global pattern makes a great deal of heterogeneity across countries. The North West is ranked seventh in terms of population size, the population has been observed to increase since 1996. The trends in population for the North West province is therefore presented in figure 4.1 below.

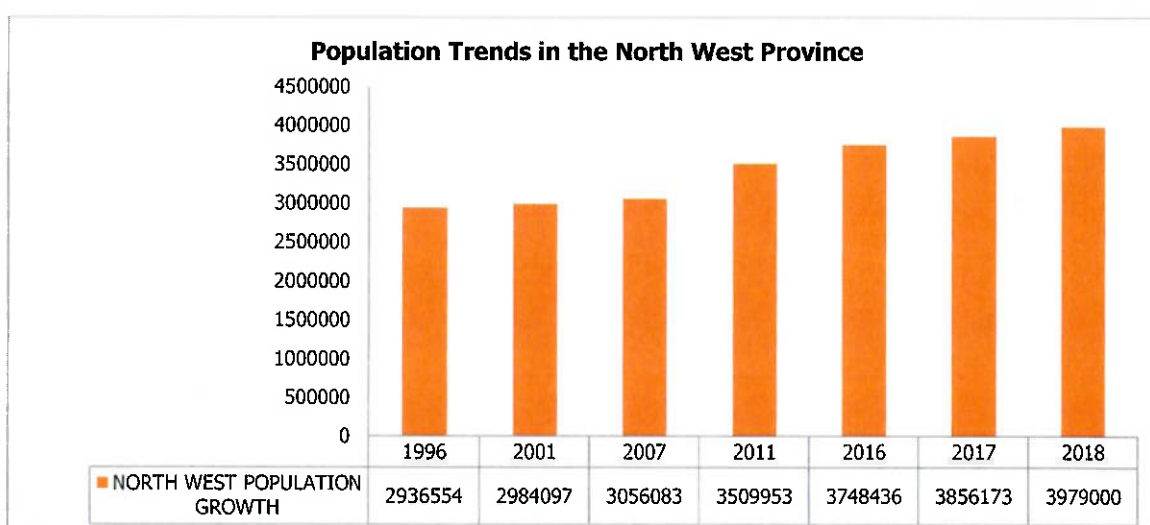


Figure 4.1: Population Trends between 1996 and 2018; Source: StatsSA

Population of North West Province have been growing positively since the first official census in 1996. Figure 4.1 above shows the population growth of the North West Province from 1996 to 2018. As reported, currently the population of the North West Province is estimated to be 3 979 000 (4.0 million) (Statistics South Africa Mid-year Population estimates released on the 31<sup>st</sup> of July 2018). The North West Province is

estimated to hold the third smallest share of the total South African population at 6.9% constantly since the year 2016. The figure illustrate that the population of the province increased from 2 936 554 (3 ml) in 1996 to 3 979 000 (4 ml) in 2018. This implies that the population of the province took an absolute estimated period of 22 years to reach an additional 1 000 000 (1 ml). The population of North West has increased with a total of 122 827 between 2017 and 2018 which a bit higher as compared to 107 740 between 2016 and 2017. The implications of population growth for any government is that it will put pressure on government in terms of service delivery and other concomitants to cater for all people or communities. In essence, this put strain on the already limited resources. It is against this background that planners and decision makers or strategists need to consider the integration of population information when planning.

#### **4.2. POPULATION GROWTH BY SEX**

According to 2018 mid-year population estimate, the province is currently populated with a total population of 3 978 956 persons, of which 1 986 197 are males and 1 992 759 are females. The population in the province has always composed in such a way that there are more males than females even though there are slight differences in some periods. However, for the year 2018, there were more females estimated than males. The sex structure of a population is measured with a sex ratio. Therefore, the sex ratio at birth has been reported in favour of males since 1996 as indicated by sex ratio that is above 100. The sex ratio is the ratio of males to females in a given population, usually expressed as the number of males for every 100 females. Unexpectedly, the sex ratio reported for the year 2018 is in favor of females with a sex ratio of 99.6 which is as equal as 100. This indicate that there are 100 100 males for every 100 females in the province. Thus, more males are likely to be born than females. The population has been indicated to grow positively since the first official census in 1996. The population growth rate has increased with fluctuating moves to date, it has however shown a steady increase since 2016 from 1.3 to 3.1 in 2018. The composition of the population changes as a result of changes in fertility, mortality or migration and consequently this affects the sex ratio (Statssa, 2017; 2018).



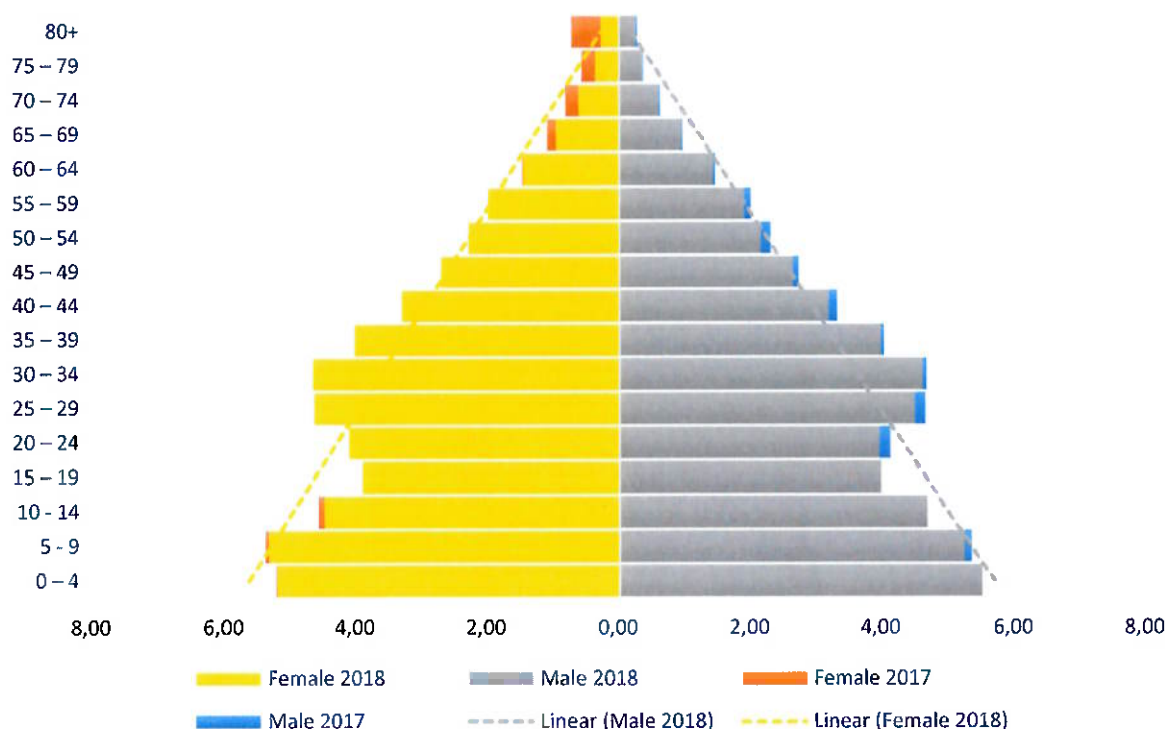
**Table 4.1: Population Distribution of North West Province by Sex**

Census	Population	Male	Female	Sex Ratio	Population Growth Rate
1996	2 936 554	1 483 722	1 452 833	102	
2001	3 193 676	1 605 547	1 588 129	101	1.6
CS 2007	3 271 948	1 645 904	1 626 044	101	0.4
2011	3 509 953	1 779 903	1 730 049	103	1.8
CS 2016	3 748 435	1 906 589	1 838 846	104	1.3
2017 Mid-year estimates	3 856 173	1 945 707	1 910 466	102	2.8
2018 Mid-year estimates	3 978 956	1 986 197	1 992 759	99.6	3.1
Population growth rate (r) = $\frac{\ln(P_{t+1}/P_t)}{t} * 100$					

STATSSA: Census 2011; Community Survey 2016; 2017 and 2018 Mid-Year Estimates

### 4.3. POPULATION DISTRIBUTION BY AGE AND SEX

Population distribution by age and sex for the years 2017 and 2018 of the North West province is presented in figure 4.2 and table 4.2 below present. Figure 4.2 present the percentages while in table 4.2 data is presented in absolute numbers. Accordingly, population information forms an important foundation of planning process in many countries, governments, private institutions and communities. For effective budget planning processes and resource allocation, it is salient that government clearly understands population dynamics with special emphasis on age and gender in order for the informed decision to be made. Human populations are very unevenly distributed in space and the distribution is constantly changing. A constant change has been observed for the province since the year 2001 to date.

**FIGURE 4.2: NORTH WEST POPULATION PYRAMID****Population Pyramid 2017 and 2018**

**STATSSA: 2017 & 2018 Mid Year Estimates**

### **NORTH WEST POPULATION DISTRIBUTION, COMPARATIVELY BETWEEN 2017 AND 2018 MID-YEAR POPULATION ESTIMATES**

**Table 4.2: Population Distribution of North West by Age**

AGE	2017 POPULATION			2018 POPULATION		
	MALE	FEMALE	GRAND TOTAL	MALE	FEMALE	GRAND TOTAL
0 – 4	201,064	201,691	402,755	219152	221040	440192
5 – 9	206,049	208,246	414,295	208561	210895	419456
10 – 14	173,296	176,722	350,018	186448	190789	377237
15 – 19	150,888	150,521	301,409	158816	160895	319711
20 – 24	158,976	156,182	315,158	157605	158010	315615
25 – 29	179,442	173,588	353,03	178774	172329	351103
30 – 34	180,147	167,132	347,279	183672	169795	353467
35 – 39	155,511	137,548	293,059	158696	141281	299977
40 – 44	127,834	111,379	239,213	126795	114610	241405
45 – 49	104,886	95,158	200,044	104718	99943	204661
50 – 54	88,539	83,073	171,612	85365	87146	172511
55 – 59	76,928	69,192	146,12	75339	72526	147865
60 – 64	56,146	56,734	112,88	56872	59679	116551
65 – 69	37,082	42,032	79,114	37605	45032	82637
70 – 74	23,969	31,387	55,356	23733	33157	56890
75 – 79	14,161	22,043	36,204	14190	24597	38787
80+	10,789	27,838	38,627	9856	31035	40891
<b>Grand Total</b>	<b>1,945,707</b>	<b>1,910,466</b>	<b>3856,173</b>	<b>1986197</b>	<b>1992759</b>	<b>3978956</b>

*StatsSA (2017 AND 2018 Mid Year Estimates)*

**THIS RESEARCH REPORT RESPOND TO INDICATOR NUMBER ONE OF POPULATION POLICY PROMOTION DIRECTORATE FOR 2018/19 FINANCIAL YEAR.**

The North West Province population age-sex structure present an expansive type of a pyramid with an implication of young and growing population. Majority of the North West population are found in the younger age groups between 15 and 34 years largely in the age groups 25 – 29 and 30 – 34 years. This can be supported with a linear growth indicated in the year 2018 which has an implication of gradual growth for years to come. The male population has shown a slight increase between 2017 and 2018 in population groups 5 – 9, 20 – 24, 25 – 29, 40 – 44, 45 – 49, 50 – 54 and 55 – 59 years. The increase in the male population especially in the 20 – 24, 25 – 29 age cohorts could be as a result of the gradual positive increasing net migration the province has been experiencing since the 2006 – 2011 period to the current. This can further be linked with the population and economic growth experienced in the province in the past decade. As for females an increase has been shown in age groups 10 – 14 and mostly at the higher age groups from age 65 to 80 and over. This implies that females in the year 2018 are surviving more than males. This could be linked to the increase in the life expectancy at birth for women which has forever been higher than for males. Accordingly, life expectancy at birth reflects the overall mortality level of a population. The estimated life expectancy at birth for females is estimated at 64,6 years for 2016 – 2021 period which higher as compared to 58,4 for males in the province. It has however been increasing since the year 2001 from 49, 9 years for males and 54.0 years for females respectively. The improvement has been argued to be a result of the uptake of the antiretroviral therapy observed in the South Africa in general. This however has both economic and social implications.

As emphasized in both figure 4.2 and table 4.2 above, the North West Province has a composition of higher number of children and young people. This is a reflection of a demographic dividend or window of opportunity which essentially means the province has a large proportion of young/working age population and less people depending on the working class. This calls for adjustments in focus as this group implies more economic demands thereby impacting on planning. In general, the provincial age - sex structure depicts the expansive type of a pyramid similar to the national one. This pyramid is common in developing country and has both demographic and economic implications (StatsSA, 2016; 2017; 2018).The implication of this finding is that the

province may have high population growth rate at the long run particularly when the young population attain reproductive age.

#### **4.4. GEOGRAPHICAL POPULATION DISTRIBUTION IN NORTH WEST PROVINCE**

Data presented in table 4.3 shows an analysis of population disaggregation of North West Province by locality or geographic area and sex. Bojanala district municipality have the highest population compared to other districts with a total population of 1657148 persons, and 626522 people reside in Rustenburg. The local municipality (Rustenburg) is known as the largest producer of platinum in world hence the province nick name "Platinum Province". Bojanala at large has also been found to be the most progressive district in the province due to proper infrastructure, cultural and leisure facilities (StatsSA, 2017 and Kibet, 2013).

Ngaka Modiri Molema as presented in table 4.3, is the second highest with a total of 889108 population. The number of people residing in this district could be justified by the fact that it hosts the capital city of the province and the fact that it has a number of educational facilities. Mafikeng embodies a number of governmental departments and legislative/provincial parliament which can be one of the factors influencing the population composition in the district (Kibet, 2013; Palamuleni, 2010; Statssa, 2017).

The third largest district in the province is Dr K. Kaunda accounting for a total of 742 8261 (19.82%) persons. The population composition this district could be attributed to the gold mines situated in the Matlosana local municipality. The last and smallest district in the province is the Dr R.S. Mompoti district which accounts for a total of 459 357 (12.25%) Population. Population composition in the district could be influenced by the fact that it is known has the South African largest beef producing district and that it produces maize and peanuts (Kibet, 2013).

**Table 4.3: Population Disaggregation by Locality and Sex**

<b>Geographical area</b>	<b>Male</b>	<b>Female</b>	<b>Total</b>	<b>%</b>
<b>North West</b>	<b>1909589</b>	<b>1838846</b>	<b>3748435</b>	<b>100</b>
<b>DC37: Bojanala</b>	<b>876689</b>	<b>780459</b>	<b>1657148</b>	<b>44.21</b>
NW371 : Moretele	93259	98047	191306	5.1
NW372 : Local Municipality of Madibeng	287273	248837	536110	14.3
NW373 : Rustenburg	342865	283657	626522	16.71
NW374 : Kgetlengrivier	31906	27656	59562	1.59

*THIS RESEARCH REPORT RESPOND TO INDICATOR NUMBER ONE OF POPULATION POLICY PROMOTION DIRECTORATE FOR 2018/19 FINANCIAL YEAR.*

NW375 : Moses Kotane	121385	122263	243648	6.5
<b>DC38: Ngaka Modiri Molema</b>	<b>439049</b>	<b>450060</b>	<b>889108</b>	<b>23.72</b>
NW381 : Ratlou	50247	55861	106108	2.83
NW383 : Mafikeng	153094	161300	314394	8.39
NW384 : Ditsobotla	93421	88444	181865	4.85
NW385 : Ramotshere Moiloa	77458	80232	157690	4.21
NW382 : Tswaing	64829	64223	129052	3.44
<b>DC39: Dr Ruth Segomotsi Mompati</b>	<b>221111</b>	<b>238247</b>	<b>459357</b>	<b>12.25</b>
NW392 : Naledi	34771	34032	68803	1.84
NW393 : Mamusa	31620	32380	64000	1.71

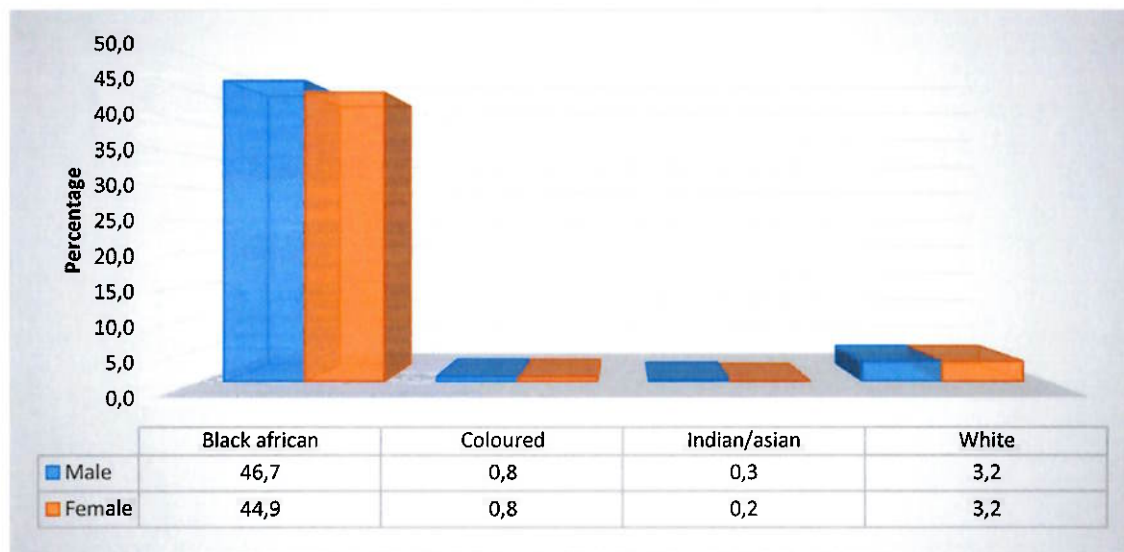
**Table 4.3: Population Disaggregation by Locality and Sex (continued)**

Geographical area	Male	Female	Total	%
NW394 : Greater Taung	77855	89972	167827	4.48
NW396 : Lekwa-Teemane	27718	28307	56025	1.49
NW397 : Kagisano/Molopo	49147	53555	102703	2.74
<b>DC40: Dr Kenneth Kaunda</b>	<b>372740</b>	<b>370081</b>	<b>742821</b>	<b>19.82</b>
NW403 : City of Matlosana	208839	208443	417282	11.13
NW404 : Maquassi Hills	41236	40776	82012	2.19
NW405 : Ventersdorp/Tlokwe	122666	120861	243527	6.5

*STATSSA: Community Survey 2016*

#### **4.5. RACIAL COMPOSITION**

Racial groups or Ethnicity can have important effects on socio-economic development planning. Community survey 2016, indicated that all respondents have specified their ethnicity thus whether Black African, Asian/India, Coloured and White. The Northwest province is predominated by Black Africans as illustrated in figure 4.3. It is necessary to understand these cultural differences and attitudes so that effective healthcare can be delivered in a sensitive way. Examples of such differences include: the patient's expectations of the doctor and of medical care generally, the expression of symptoms which can have cultural influence, family roles and relationship differences between cultures, different attitudes to sex and marriage between cultures and religions and different attitudes to clinical examination which may affect what is acceptable to the patient.

**Figure 4.3: Population Distribution by Racial Groups**

*STATSSA: Community Survey 2016*

#### **4.6. LANGUAGE**

In South Africa there are twelve spoken languages and sign language. 70% of the population in the province speak Setswana as reflected in table 4.4. This is not surprising due to the fact that, black Africa population account for 92% of the entire population in Northwest province (see figure 4.3). English is amongst the least spoken languages even though it is declared a media of instruction both national (in South Africa) and international. As the world language, English deliberates access to all the sources of knowledge, work and pleasure (TV, Films and novels). Moreover, it is important to bear in mind that type of language knowledge required for educational development and access to economic opportunities. However, an ability to handle basic interpersonal communication is not enough in anyway. What is required is linguistic proficiency which will allow high level of cognitive performance and their ability to perform high level social tasks. The main emphasis here is that English should be used or taken as a first language in all schools in order to smoothen paths for learners in remote or disadvantaged municipalities.

**Table 4.4: Population Dissagregation by Spoken Language**

<b>Language</b>	<b>Number</b>	<b>Percent</b>
Afrikaans	263028	7.02
English	51649	1.38
Isindebele	14385	0.38
Isixhosa	188445	5.03
Isizulu	58517	1.56
Sepedi	72429	1.93
Sesotho	212485	5.67
Setswana	2622334	69.96
Sign language	1850	0.05
Siswati	9725	0.26
Tshivenda	15155	0.40
Xitsonga	108578	2.90
Khoi; nama and san languages	876	0.02
Other	49748	1.33
Not applicable	78573	2.10
Not specified	658	0.02
Grand Total	3748435	100.00

*STATSSA: Community Survey 2016*

## **4.7. FERTILITY**

### **4.7.1. TOTAL FERTILITY RATE IN THE PROVINCE BASED ON SADHS DATA BETWEEN 1998 AND 2016 STATISTICS SOUTH AFRICA ESTIMATES.**

Total fertility Rates (TFRs) for the province for the years 1998, 2003 and 2016 are presented in table 4.6 below. As indicated in this study earlier, TFR is the average number of children a woman would have by the end of her childbearing years if she bore children at the current age specific fertility rates. The SADHS data collects data from reproductive women aged between 15 and 49, however the 2003 and 2016 collected data from both men and women in reproductive ages. Present in table 4.5 also is the number of births reported by geographical area from 2011 to 2016.



Table 4.5: **Reported Births by Geographical Area**

<b>Geographical Area</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>
<b>Bojanala</b>	23 334	23 909	27 423	26 773	24 718	22 691
<b>Dr KK</b>	14 357	14 530	11 716	13 034	13 093	12 124
<b>Dr RSM</b>	10 858	11 299	10 163	9 923	9 411	9 435
<b>NMM</b>	14 293	14 023	10 361	10 111	10 155	10 947
<b>North West</b>	62 842	63 761	59 663	59 841	57 377	55 197

Source: Stats SA

As indicated in table 4.5 above, the reported number of births has been fluctuating in the Province with an increase noticed in the year 2012 of 63 761 from 62 842 births in 2011. The number of registered births declined again in 2013 at 59 663 then increased slightly to 59 841 in 2014 which subsequently declined to 57 377 and 55 197 in 2015 and 2016 respectively. For all the reported years, Bojanala has reported the highest but fluctuating number of registered births as compared to other district municipalities. The Bojanala births increased from 23 334 in 2011 to 27 423 in 2013 which has since declined to 22 691 in 2016. Dr Kenneth Kaunda also reported a fluctuating but declining number of births registered from 14 357 in 2011 to 12 124 in 2016. The same fluctuating pattern was observed for Dr RSM and Ngaka Modiri Molema, however for NMM numbers have increased between 2015 and 2016 while for Dr RSM in increased slightly but still lower than the 2014 births. The overall decline in the number of reported births in the province is consistently aligned with reported declining Total Fertility Rates which is presented in tables 4.6 and 4.7 below.

Table 4.6: **Total Fertility Rates by Year of SADHS**

Estimates by year	TFR
1998 SADHS	<b>2.4</b>
2003 SADHS	<b>2.5</b>
2016 SADHS	<b>3.1</b>

Source: SADHS 1998, 2003 & 2016.



As presented in table 4.6 above, fertility has been increasing a TFR of 2.4 in 1998 to 2.5 in 2003 and 3.1 children per reproductive woman in 2016 as per South African Demographic and Health Survey data. The fertility pattern as per SADHS results seem to be surprising as fertility has been declining globally, regionally and nationally. In comparing North West to other provinces, the province was found to have the highest TFR in 2016. The TFR estimates from the SADHS data is based on the assumption that it collects fertility data of the 3 years before the survey. The TFR for 2016 is however seem to have the similar pattern with the national one, there was an increase in Crude birth rate observed from 2002. CBR was reported to increase from 21, 7 in 2002 to 24.2 in 2008. The increase in TFR was only observed in 2005 that is an increase from 2.53 in 2004 to 2.68 in 2008. The overall fertility affected the provincial fertility patterns, the challenge with fertility increase is that, it takes long to go back to lower levels as it depends on a number of factors to go down which includes both demographic and non-demographic factors (Statssa, 2018; Statssa, 2019. The Statistic South Africa fertility estimates are presented below.

**Table 4.7: TFR based on Statistics South Africa estimates from 2001 to 2021**

Estimates by year	TFR
2001 - 2006	<b>3.10</b>
2006 - 2011	<b>3.20</b>
2011 - 2016	<b>3.05</b>
2016 - 2021	<b>2.77</b>
2018	<b>2.77</b>

*Source: Statistics South Africa estimates.*

Table 4.7 above present the TFR from the year 2001 to 2021. TFR is projected back ward and forward. As indicated in table 4.7 above, fertility was estimated to be 3.10 between 2001 and 2006, it has however increased to 3.20 between 2006 and 2011. Fertility was estimated to decline further to 3.05 between the years 2011 and 2016. Fertility is projected to be 2.77 children per woman between 2016 and 2021. In line with that is the 2018 fertility estimates of 2.77 as per 2018 mid – year estimates, the question is whether the province will be able to keep at that level or even decline further. The fertility pattern of the province have been found to be fluctuating. There was high fertility rate reported in 2016 based on both Statistical estimates and SADHS report (3.05 and 3.10 respectively) but declining from the 2011 estimates. The declining pattern is similar to the national fertility rates which has been reported to decline since the year 2009 to 2018 based on both TFRs and CBRs. For instance,

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the South African TFR declined from 2.66 in 2009 to 2.4 in 2018. The same pattern was observed for Crude Birth Rate (CBR), from a CBR of 24.1 births per 1000 population in 2009 to 20.8 births per 1000 population in 2018 (Statssa, 2018). There are a number of factors which influences fertility. This include among others the age at which a woman begin childbearing, the intervals between her births, and her fecundity. Late age at first birth and longer birth interval of at least more than 24 months have played a bigger role in reducing fertility in many Southern African countries including South Africa, North West province is not compromised however disadvantaged by its geographical background. North West in mostly rural, and non – urban fertility has always been reported to be higher. For instance the non – urban fertility was reported to be high at 3.1 in 2016 though declining from 3.9 in 1998 as compared to 2.4 children per woman in 2016 for urban areas in South Africa. This is one of the reasons which might have influenced the slower decline in fertility for the province. For instance, rural fertility is associated with lower socio – economic standards which among others include poverty, lower or no income, lower educational levels, no or poor access and knowledge to reproductive health services, etc (Statssa, 2019).

#### **4.8. MORTALITY**

As indicated in this study in chapter 3, mortality status of the province is presented in this section. Analysis is mainly based on Crude Birth Rates at provincial level, Infant Mortality Rate and under 5 mortality at both provincial and district level, and reported number of deaths as well at both provincial and district level. The main focus is based on IMR and under 5 mortality rates as they are very important indicators of both demographic assessment and socioeconomic development of an area.

##### **4.8.1. NUMBER OF REPORTED DEATHS**

The registration of deaths in South Africa falls under the mandate of the Department of Home Affairs (DHA) governed by the Births and Deaths Registration Act 1992 (Stats SA, 2018c). The Act states that notice of death should be given as soon as possible after the occurrence of death. As the Act gets amended from time to time, the latest amendment gives provision to report death 72 hours after the date of occurrence. Upon completion of death registration a death certificate is issued to the informant. All death notification forms are subsequently collected by Statistics South Africa from DHA biweekly for capturing, processing, assessment, analysis, and dissemination of statistical reports and datasets on mortality and causes of death (Stats SA, 2018c). The country has been reported to have improved in terms of coverage and timely

registration of deaths. The number of deaths get updated continuously as late registration keeps on coming. This section therefore present number of deaths reported at both provincial and district level.

**Table 4.8 Number of reported Deaths by geographical area between 2012 and 2016.**

Geographical Area	Number of Reported Deaths				
	2012	2013	2014	2015	2016
<b>North West</b>	<b>35 824</b>	<b>35 531</b>	<b>34 933</b>	<b>34 428</b>	<b>35 405</b>
<b>Bojanala</b>	12 779	12 633	11 280	<b>12 027</b>	<b>12 835</b>
<b>Dr KK</b>	7 749	7 755	<b>8 003</b>	7 526	7 306
<b>DR RSM</b>	5 354	<b>5 494</b>	5 483	5 484	<b>5 582</b>
<b>NMM</b>	8 966	<b>9 132</b>	9 053	<b>9 306</b>	<b>9 631</b>

Source: Stats SA

Table 4.8 above present number of reported deaths at provincial level between 2012 and 2016. The increase number of deaths reported were observed for the province in the year 2016. The number of deaths reported to have declined from 35 824 in 2012 to 35 531 in 2013, to 34 933 in 2014 and further to 34 428 in 2015. It then increased to 35 405 in 2016. Bojanala district has also experienced the same pattern as the reported number of deaths has been declining since the year 2012 from 12 779 to 11 280 in 2014, in then increased to 12 027 in 2015 and further to 12 835. Contrary, Dr Kenneth Kaunda district experienced a decline from 7 749 reported deaths in 2012 to 7 755 in 2013. It then increased to 8 003 in 2014 but declined again to 7 526 and 7 306 in 2015 and 2016 respectively. Dr Ruth Segomotsi Mompati experienced and increase in 2013 and 2016. The reported number of deaths for Dr RSM increased slightly from 5 354 in 2012 to 5 494 in 2013 which then decreased to 5 483 in 2014 and then to 5 484 in 2015. The number of deaths then increased to 5 582 in 2016. Ngaka Modiri Molema (NMM) district experienced fluctuating reported number of deaths since the year 2012. The reported number of deaths NMM was reported to be 8 966 in 2012, the numbers then increased to 9 132 in 2013 which then declined to 9 053 in 2014, the numbers has since then increased to 9 306 in 2015 and further to 9 631 in 2016.

The mortality pattern of the North West province present a contradictory picture as compared to the national pattern even though the difference is trivial. The mortality levels and trends of South Africa has continuously declined since the year 1997 at 317 872 even though it peaked in 2006 to 614 248 which then declined to 456 612 in 2016. The North West province scenario is not exceptional as compared to other provinces in South Africa. For instance, Gauteng and Kwazulu Natal provinces which reported high number of deaths. The reported number of deaths for Gauteng Province has been fluctuating since the year 2012, in 2012 there were 98 549 deaths which declined to 96 736 in 2014 which then increased to 98 191 in 2015. Conversely, KZN reported a decline from 96 749 deaths in 2012 to 79 138 in 2014 which then increase to 81 320 in 2015 and further to 84 755 in 2016. To further examine the mortality patterns of the North West Province, the Infant Mortality Rates are discussed in the next section.

#### 4.8.2. INFANT MORTALITY RATES BY GEOGRAPHICAL LOCATION.

Infant mortality rate by geographical area is depicted in table 4.9 below. IMR is estimated by dividing the number of children deaths which occurred before the age of 1 with the number of live births in the year and multiplied by 1000. Therefore it is the number of infant deaths per 1000 live births.

**Table 4.9: Infant Mortality Rate by Geographical Area**

Geographical Area	IMR 2011 census	2003 SADHS	2016 SADHS
<b>North West</b>	<b>41.9</b>	<b>62</b>	<b>65</b>
Bojanala	30.3		
Dr KK	48.3		
DR RSM	62.2		
NMM	45.8		

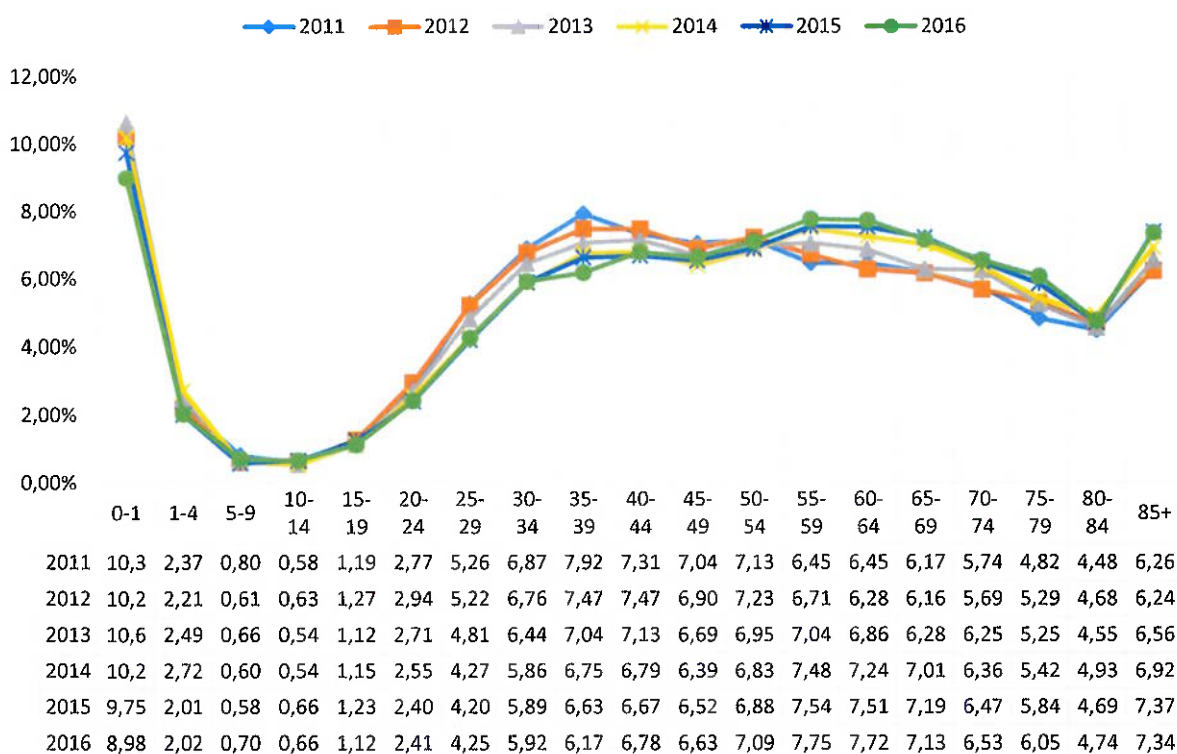
Source Stats SA Census 2011 & SADHS

As depicted in table 4.9 above, based on the 2011 census data Infant Mortality Rate for North West province was reported to be 41.9 infant deaths per 1000 live births. At district level, Dr RSM was reported to have the highest IMR at 62.2 infant deaths per 1000 live births followed by Dr KK with 48.3, and then Ngaka Modiri Molema with 45.8

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infant deaths per 1000 live births. Bojanala District was found to have the lowest IMR of 30.3 infant deaths per 1000 live births. The SADHS collect infant deaths from the selected women and men in the reproductive ages. As indicated in table 4.8 above, there were 62 infant deaths per 1000 live births for women in reproductive ages in 2003 which increased 2016 to 65 infant deaths in North West province. The results suggest that as a province there is still more which need to be done in order to achieve Sustainable Development Goal (SDG) 3 which seeks to ensure healthy lives and promote well – being for all ages y 2030 as it can only be achieved through the reduction in both infant and child mortality. At national level it is promising as the IMR has been reported to have being declining from 53.2 in 2002 to 36.4 infant deaths per 1000 live births in 2018 (Stats SA, 2018; Stats SA, 2019).

Figure 4.4: Age Distribution of Mortality by Year of Occurrence



Source: StatsSA

Deaths are not randomly distributed across life cycle (Weeks, 2016) the very young and old are the most vulnerable whereas the adult are least likely to die. That is, the very young and the older population have the highest death rates irrespective of

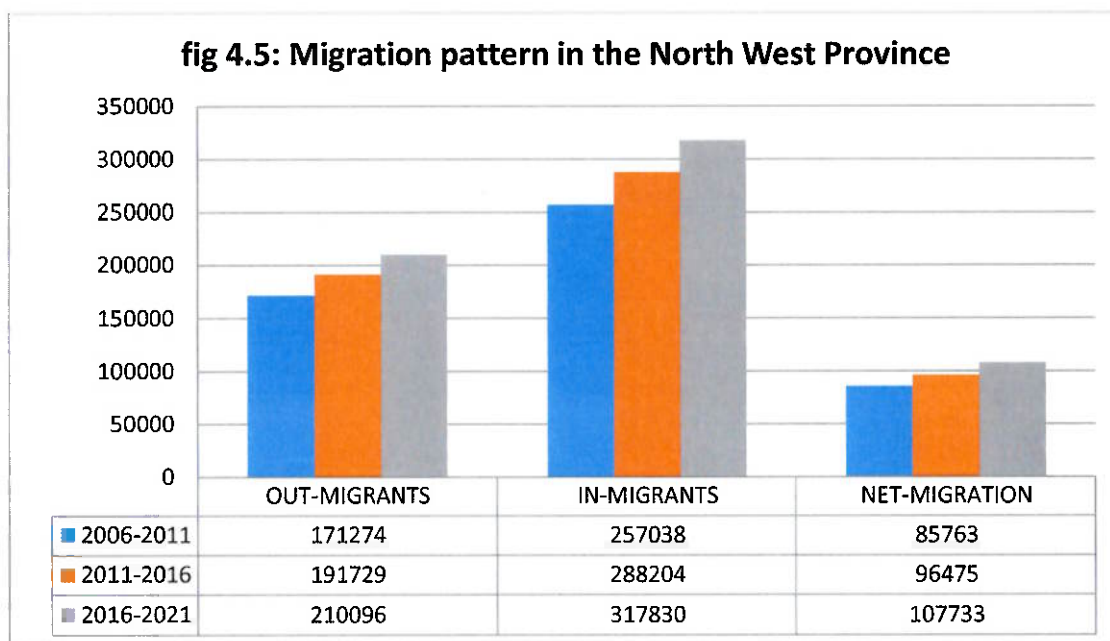
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whether general mortality is or low. The expected scenario is, death rate is high in the first month after birth, declines during the infancy and childhood, remains low during adolescence and young adulthood, and then rise gradually at Middle Ages and steeply in old ages. There are two peaks expected with age distribution of mortality, one in the first year of life and the other one in old age. Correspondingly, as presented in figure 4.4 above, deaths were found to be high at infancy, declined at childhood and remained lower at Middle Ages and then increased again at older ages. Overall, reported number of deaths have been declining from 2011 to 2016 for all the age groups except the 85 plus age group. It is however expected to have higher and numbers at that age group given the improvement of life for all.

#### **4.9. MIGRATION**

Migration as one of population dynamics affect population growth of a sending and receiving areas and indirectly impinge on service delivery. According to Kibet (2013), Migration is a 'back-fourth-and-onwards movements of an individual, family, or group between sending and receiving geographic area. Migration create trends such as demographic imbalances, skills shortages, environmental changes, and new poles of growth in emerging economies. North West province is dominated by rural areas, but it has nature reserves such as Pilanesburg National Park and Madikwe Game Park. These attract people to migrate in to the province. The presence of the minerals such as platinum, little but of gold also play a role in attracting labour migrants both internal and international mostly from the Southern African region (province history and tourism guide; 8) .

Presented in figure 4.5 below is migration pattern in the North West province from 2006 to 2021 estimates.



Source: stats SA

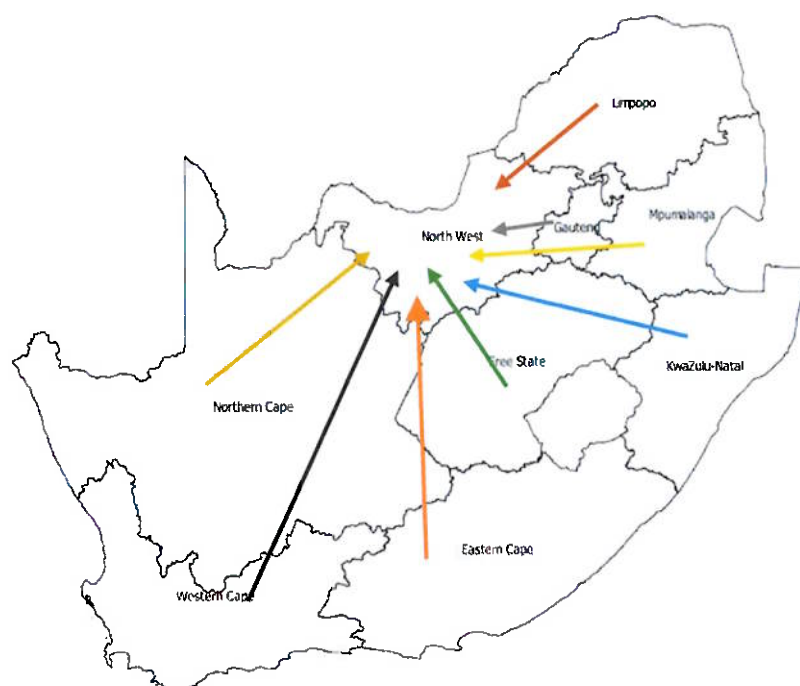
As depicted in figure 4.5 above, the number of migrants has been estimated to be increasing from 171 274 during the 2006 – 2011 period to 191 729 during the 2011-2016 period and estimated to increase further to 210 096 during the 2016 – 2021 period. Correspondingly, the number of in-migrants increased from 257 038 between 2006-2011 period to 288 204 during 2011-2016 period and further to 317 830 between 2016 and 2021 estimate period. The assumption based on the results imply that the North West province receives more in-migrants as compared to the out-migrants. This has led to the positive increasing Net Migration throughout the three periods since the year 2006. Migration stream is presented in table 4.10 and figure 4.6 below. Since the collection of census 2011, it was possible to out – migration rates for each province and this made it easier to determine migration streams for provinces.



**Table 4.10: Migration by Province of Birth and Province of Current Residence**

Province of Birth	Province of Current Residence - North West		
	2006 - 2011	2011 - 2016	2016 - 2021
EC	35956	36733	37014
FS	22097	22878	23676
GP	75357	86779	99311
KZN	9859	10497	11159
LIM	27226	28605	30197
MP	13687	15050	16472
NC	11439	12215	13031
WC	6885	7762	8703
OUTSIDE SA	54531	68044	78267

Source: Stats SA

**Figure 4.6: Province of Previous Residence by Province of Current Residence**



As depicted in table 4.10 and figure 4.6, majority of the in-migrants in the province were originating from the Gauteng province for all the three periods. North West received a total of 75 357 in 2006 – 2011 period which increased to 99 311 in 2016-2021 period from the Gauteng province only. The second sending province was reported to be the Eastern Cape a total of 36 733 received during the period 2011-2016 which is estimated to increase to 37 014 during the 2016 – 2021 period. The least sending provinces are Western Cape and Kwazulu Natal with an estimate of 8 703 and 11 159 respectively for the period 2021. The North West province has reported to have been receiving migrants from outside South Africa. The number of immigrants into North West has increased from 54 531 during the 2006 – 2011 period to 68 044 during the 2011-2016 period which has further been estimated to increase to 78 267 during the 2016-2021 period. Additionally, table 4.11 below present province of destination by year of migration out of the North West province.

**Table 4.11: Province of Destination by Year moved from the North West**

Periods	Province of Destination							
	EC	FS	GP	KZN	LIM	MP	NC	WC
<b>2006 - 2011</b>	4 529	10 313	97 675	5 341	17 442	10 417	20 605	7 951
<b>2011-2016</b>	4 977	11 314	107 645	5 867	19 149	11 433	22 610	8 737
<b>2016 - 2021</b>	5 448	12 373	118 045	6 421	20 945	12 507	24 786	9 572

Source: STATSSA

As presented in table 4.11 above, majority of people who migrating out of the province are moving into Gauteng and Northern Cape provinces. Gauteng province has been receiving migrants from North West with a total of 97 675 during the period 2006 which increased to 107 645 during the 2011 2016 period and have been estimated to increase further to 118 045 during the 2016 – 2021 period. Likewise, the Northern Cape received a total of 20 605 during the 2006-2011 period which has been projected to increase to 24 785 during the 2016-2021 period. The least receiving province from North West are Eastern Cape and Kwazulu Natal with an estimate of 5 448 and 6 421 during the period between 2016 and 2021.

#### **4.10. CONCLUSION**

Chapter four was mainly based on the findings for this study. The study analysed data from different sources with specific focus of the province and disaggregate by districts where applicable as other sources were collected only up to provincial levels. The highlight of the findings is that the population of the North West province is continuing to grow with population growth rate being higher than 3%. The sex ratio currently has more females than male which is uncommon. The most populated district is Bojanala district. One of the major findings in the study is the high infant mortality rates though the current reported deaths is showing a decline among the infants. Fertility is reported to be declining with a general decline in mortality. However the province is continuing to receive more migrants mostly from Gauteng and also sending more migrants to Gauteng province. Conclusions, implications of the findings and recommendations of the study are made in the next chapter.

## **5. CHAPTER 5: CONCLUSION AND RECOMMENDATIONS**

### **5.1. INTRODUCTION**

The previous chapter focused on the findings for this study. This chapter is based on the conclusion and recommendations of this study. A number of major population issues have to be addressed by government as part of the overall socio-economic development strategy of the country. Some of these concerns constitute serious obstacles to redressing inequalities and improving the quality of life of the population. To attain a better life for all at the earliest possible time, the South African constitution demanded a human rights approach to integrating population concerns into development planning, implementation and monitoring.

### **5.2. CONCLUSION**

The study aimed at analyzing current population status of the North West Province with specific emphasis to Fertility, mortality and migration in order to provide a sound basis for decisions on issues such as population control and socio-economic development. Therefore, the state of the population in the North West province intended to provide information with specific focus on fertility, mortality and migration levels in the province in order to assess progress made on implementation of Population Policy. As discussed in this study, the structure and growth of the population is the first concern in the population policy. It notes the linkage between the growth and structure of the population and the growth and capacity of the economy. Population has been reported to increase globally including the South African provinces. The challenges raised in this regard is that this put pressure on the natural resources. The study was based on secondary data sources mainly from Statistics South Africa and South African Demographic and Health Surveys. Based on that the study used mainly descriptive method of analysis coupled by different demographic techniques to investigate the area of study.

Based on the findings, the population structure of Northwest Province shows that the population will grow very rapidly if proper measure are not in place. The rapid population growth exerts pressure on the distribution and provision of services such as educational, health and recreational resources including housing. Moreover rapid population growth results in young dependent population, which leads to lower levels of saving per capita because of the excessive burden of dependents that families are obliged to bear. All sector department need to have impact analysis of population change in the strategic document linked to rollout

programmes. It is therefore important for managers to have an understanding of interrelationship between population, environment and development. The population growth rate for the province has also been reported to be increasing since the year 2016. The population structure of the North West province is composed with more males than females however the situation was reported to be different for the year 2018 where there were more females than males. The population age structure of the North West Province depict more people at the base with 0 – 4 smaller than 5 – 9 age group but declining as ages increases. The population is observed to have more people in middles ages between 25 and 39 years.

Generally, the North West Province has a composition of higher number of children and young people. This is a reflection of a demographic dividend or window of opportunity which essentially means the province has a large proportion of young/working age population and less people depending on the working class. This calls for adjustments in focus as this group implies more economic demands thereby impacting on planning. In general, the provincial age - sex structure depicts the expansive type of a pyramid similar to the national one. This pyramid is common in developing country and has both demographic and economic implications (Statssa, 2016; 2017; 2018).The implication of this finding is that the province may have high population growth rate at the long run particularly when the young population attain reproductive age. Geographically, majority of the population in the province are residing in Bojanala district followed by Ngaka Modiri Molema district. Furthermore, mostly the province is composed of Black/African for both males and females with mostly speaking Setswana and then Afrikaans.

Based on fertility, the province depict a national picture of declining fertility though still high as compared to other provinces. However, with respect to reported number of births Bojanala is found to be leading but still declining with other districts and the province at large. With regards to mortality, the mortality pattern of the North West Province resembles the South African pattern with a slight difference, in which mortality rates have declined in all the ages and all the districts. This is likely to be as a result of improvement in standard of life which subsequently led to the increased life expectancy at birth which is estimated to have increased from 53,9 in 2001 to 62,0 in 2016 and further projected to increase to 64,1 by the year 2021 which is at the same level as the national one of 64.1 (Stats SA, 2017). The number of reported deaths are higher among younger ages which can be aligned with the higher Infant Mortality Rate reported in the province and all the districts in the province. This pose a huge challenge in terms of achieving the Sustainable Development Goal (SDG) 3 which seeks to ensure

healthy lives and promote well – being for all ages by 2030, because it requires both infant and child mortality to be at minimal levels for it to be achieved. Therefore, the province need to start from the basis and consider the population size, the pattern of growth, the manner in which it changes by taking cognisance of variations brought be fertility, mortality and migration behaviours.

### **5.3. IMPLICATIONS**

The population of the North West province as argued above has been estimated to grow further thought the rate at which it is growing has shown a declining pattern in the past but has since 2017 increased. This implies that the population has a potential of growing given the broad base of the age-sex structure as presented by the findings. This has then pose challenges with respect to lower job creations; the housing backlogs; the skills deficit or land issues. There is a big problem "Red elephant in the room" which seem to be overlooked here, which is population growth. The problem is 'WITHIN - US' and it is 'NOT BEYOND OUR CONTROL ANYMORE'. We need not to take extreme measures which seem immaterial and beyond our control. As argued by Malthusian theory, population is growing triple the rate of the resources or simply food production and it eats up the current and the future resources, if not controlled disaster still to come. Let us then face the facts, it is not late and we are getting somewhere but there is a need to refocus and redirect our policies and programmes.

The National Development Plans for the South African country seem to be packed with little ambitious targets, for instance creation of 11 million jobs by 2030 hence the 4<sup>th</sup> revolution, how realistic are we in this regard? For instance also, reduction of infant and child mortality, how will the North Province be able to realise this when provision of primary health is still a challenge which will if provided enhance standard of life. The painful truth is that the global economy is turning into technological solutions, leaving higher number of people jobless and irrelevant and increased number of school leavers who enter the market annually. Government takes some cognisance of the former whilst the latter is treated as a fact of nature and not something over which we are in control of.

The government has as a matter of fact have as much control over population growth as we are willing to take. But the point is, for every individual who is aware of the challenges facing humanity (environmental, economic and quality of life related), must be aware that alongside the emerging technological solutions, stabilising populations would lessen the pressure on the resources. Best approach is stabilised population which subsequently lead to economic growth

free from pressure to grow (pressurised where demand is way higher than supply) where the transition to "steady state" economies simply means citizen well-being rather than GDP growth as the measure to economic success. According to Lawn (2010), a steady – state economy is a physically non – growing but qualitatively – improving economy that is maintained by an ecologically sustainable rate of resource throughput. The transition to a steady – state economy is necessary in order to avoid the catastrophes mentioned by Thomas Malthus and emphasised by Neo – Malthusians by considering sustainability and use of contraceptives.

For that reason, a controlled to stabilised population is a starting point. For instance in a stabilised or falling population, even a static GDP can translate into rising GDP per capita. In that way the Province will be able to focus on the quality of life, improved environmental status, quality of education and housing, and more services and sustainable use of land, it might seem ambitious but in the long run it can be realised.

#### **5.4. RECOMMENDATIONS**

A stable population is beneficial in the sense that economically the jobless will subsequently gain in the created job opportunities. Currently at national level unemployment rate is at 27% which as per NDP strategies should be reduced to 14%, whilst at provincial level we have been at 43% as June 2018 and has since been increasing.

No matter how vigorous the plans might be, reducing population growth would the province and the country good specifically within a period of at least two decades. This will one, ease the unemployment which is the key to economic growth and later other challenges. Reducing unemployment is key as it boost both individual and provincial economies. In practical terms, individual economic growth is inversely related to national economic growth. This is achievable, "COPY – THE – BEST – PRACTICE" and come up with the best but realistic systems. There are creative ways to place family planning at the centre of development goals without using excessively harsh or inhuman ways. Answers to the following questions, a possible solutions:

- If Thailand managed to halve its Total Fertility Rate from 3.2 to 1.6 in a period of 30 years through innovative public education campaigns linked to family planning, economic development and quality of life, what is prohibiting us from doing the same?
- The province is currently doing that through programmes already in place but the question is, are we missing the point somewhere?

- Are we planning for the right population? Are our plans informed by changes in population behaviour brought by current fertility levels, current mortality levels, current migration patterns, and current rate of growth?
- Are we more of chasing numbers rather than quality – impact/ output based approach?

**Possible solutions:** There is a need for change in approach alongside with change in mind set. As a province we need to put more emphasis on population growth and recognise it as central to the challenges we are facing as a society. We need to stop blaming inequitable distribution of resources (apartheid systems/ policies and to - date) as a central issue to the bigger problem but recognising it as part of the problem. Therefore, addressing the unequal distribution of resources is one way to go but in an equitable manner as it addresses the social structure issue. Theoretically as pointed out by many authors, the balance between the population and resources is ideal, but realising it is a bit ambitious as it may sound. It will call for sacrifices, one might be that of recycling - reuse and genetic modification. The common belief is that there is a need for more hands to create markets and economic growth, the reality is upside – down. Economies are meant to serve the needs of the people not the other way round. Though it might sound unrealistic, as the province we need a 'steady – state' economies alongside with a stable population. A state where government is no longer chasing the numbers/targets but rather focus on efficiency, innovation and the equitable allocation of resources.

**Ending statement:** Unlimited population growth on the real planet with finite resources is not sustainable. Hypothetically, if the province halved its fertility rate of 2.77 children per woman, the number of unemployed people will consequently be halved and consumers at large and subsequently halve the national fertility of 2.4 children per woman. Without neglecting the challenges which goes along with that situation, but they are likely to be manageable with good systems in place. Therefore, equitable planning which recognises the market place, the work place, the social and environmental structures "**SUSTAINABLE DEVELOPMENT**" is a way to realise a "**STABLE POPULATION**".

General recommendation: A stable population is the a long – term goal but most effective approach recommended for the North West Province in order to be able to address the material challenges it is facing. It is worth trying as there is nothing to lose but beneficial.

## REFERENCES

1. Adam W. (2004). The Millennium Development Goals for Health: Rising to the Challenges. World Bank Publications.
2. Adger, W, M & Fortnam, M. (2018). Interactions of migration and population dynamics with ecosystem services.
3. Asmal, K. 1999. Statement Call to action: mobilising citizens to build a South African education and training system for the 21st century. Minister of Education, Tuesday 27 July 1999.
4. Bradshaw, P.T et al. (2016). Cardiovascular Disease mortality among breast cancer survivors. *Epidemiology*, 27: 6 – 13.
5. Dean T.J (2006). Disease and Mortality in Sub-Saharan Africa. World Bank e-Library. World Bank Publications.
6. Department of International Economic and Social Affairs. 1988. Improving Statistics and Indicators on Women using Household Surveys. Series F No 48. Statistical Office and International Research and Training Institute for the Advancement of Women, United Nations, New York.
7. Department of Social Development. (1998). Population Policy for South Africa.
8. Easterlin, A.R. & Crimmins, E.M. 1985. The fertility revolution: A supply and Demand analyses. University of Chicago Press.
9. Fawcett, J.T. 1977. The value and cost of children: converging theory and research. PP 91 – 114. In the Economic and Social supports for High Fertility, proceedings of the conference held in Canberra 16 – 18 November, 1976, ed. L.D. Ruzixka, The Australian National University, Canberra.
10. Franklin, J. & Tueno, S.C. 2004. Low fertility among women graduate. *People and place*, 12 (1): 37 – 44.
11. Haviland, W. A. (2003). Anthropology. Belmont, CA: Wadsworth.
12. Jansen J & Christie P (eds) 1999. *Changing curriculum: studies on outcomes-based education in South Africa*. Cape Town: Juta.
13. Jansen J & Taylor N. 2003. *Educational change in South Africa 1994–2003: case studies in large scale education reform*. Washington DC: World Bank.
14. Jansen, J.D. 2004. How mergers shape the institutional curriculum. *South African Journal of Higher Education*, 18(1), 5-18.
15. Kaufman, de Wet & Stadler. (2001). Adolescent pregnancy and parenthood in South Africa. *Studies in Family Planning*, 32: 147-160



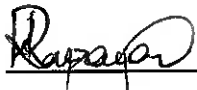
16. Kaufman, C.1997. Reproductive control in South Africa. New York: The Population Council, Policy Research Division (Working Papers 1997, no. 97).
17. Kibet, M. (2013). Migration into Rustenburg Local municipality between 1996 and 2001. *Journal of social development in Africa*, 28 (1);6
18. Kok P, Van Zyl J, Oucho J, and Gelderblom D.2006.Migration in South and Southern Africa. Cape Town. HSRC press.
19. Lawn, P. (2010). Facilitating the transition to a steady – state economy: Some macroeconomic fundamentals. *Ecological Economics*, (69): 931 – 936.
20. Local government, 2000., **Municipal system ant No. 32 of 2000**, Pretoria: government printer
21. Mfusi, X.M. 2004. The effects of higher education mergers on the resultant curricula of the combined institutions. *South African Journal of Education*, 18(1), 98-110.
22. Mostert W.P., Hofmeyr, B.E, Oosthuizen, J.S and van Zyl, J.A.1998. Demography: Textbook for the South African students, Pretoria, South Africa.
23. Moultrie, T & Dorrington, R. (2004). Estimation of fertility from the 2001 South Africa census data. Cape Town : Centre for Acturial Research for Statistics South Africa.
24. Mouton, N., Louw, G.P. & Strydom, G.L. 2013. Present-Day Dilemmas and Challenges of the South African Tertiary System. *International Business & Economics Research Journal* – March 2013 Volume 12, Number 3. The Clute Institute.
25. Online Oxford dictionary, served in 2018.
26. Oosthuizen, M. & Peberdy, S. 2004. Migration into Gauteng Province: a report for the Office of the premier, Gauteng Province. Cape Town & Johannesburg: SAMP.
27. Palamuleni, M.E. (2010). Some patterns of internal migrations in province, South Africa, 1996 – 2001. TD, the Journal for Transdisciplinary Research in Southern Africa, 6(1): 225 – 240.
28. Palamuleni, M.E. 2010 "Determinants of Fertility Decline in Malawi: An Analysis of the Proximate Determinants" *Journal of Social Development in Africa*, 25(1):9-38.
29. Phillips T.2006. MCSE Windows 2000 Migration. California. Wiley publications.
30. Population Reference Bureau. 2013. *2013 World Population Data Sheet*, Washington.
31. Rampagane, K.V. (2016). Marriage dynamics and fertility in the era of HIV and AIDS in Mahikeng local municipality of the North West province, South Africa. Thesis.
32. Republic of South Africa. 1996. **Constitution of the Republic of South Africa, 1996**. Government Gazette, No 17678 (Act No 108, 1996) (December), Pretoria: Government Printer.

33. Richman, T. 2010. *Should I Stay or Should I Go? To Live in or Leave South Africa*, Two Dogs Publishers, Cape Town.
34. Roosevelt, C.L. (2007). *Demographic Transition Theory*. Springer Science & Business Media.
35. Statistics South Africa (2015). *Mortality and causes of death in South Africa, 2014: Findings from death notifications*. Pretoria Statistics South Africa.
36. Statistics South Africa (2016a) *Mid-year population estimates 2016* Pretoria: statistics South Africa.
37. Statistics South Africa. (2016b). *Statistical release P0301: Community Survey 2016*. South Africa
38. Statistics South Africa (2017). *Mid-year population estimates 2017*. Pretoria: statistics South Africa.
39. Statistics South Africa (2018). *Mid-year population estimates 2018*. Pretoria: statistics South Africa.
40. Tiefertal, J. 1997. *Fertility and family: The allocation in the Philippines. Population and Development Review 23(2): 377 – 397.*
41. United Nations. (2003). *Human Development Report 2003 – Millennium Development Goals: A compact among nations to end human poverty*. New York.
42. United Nations, Department of Economic and Social Affairs, Population Division (2017). *World population prospects: The 2017 Revision, key findings and advanced tables*. Working Paper no. ESA/P/WP/248.
43. United Nations. 2017. *Major Trends Affecting Families: A Background Document*. New York. United Nations Publications.
44. UNICEF. (2008). *The state of the world's children 2009: maternal and newborn health (Vol. 9): UNICEF*
45. United Nations Children's fund (UNICEF). 2009: *The State of the World's Children*. New York
46. United Nations Children's fund (UNICEF). 2014: *Measuring the determinants of childhood vulnerability*. New York
47. Wilkinson, K., 2011 *Census Bureau; 2010 Census of Population and Housing, Summary File 1: Technical Documentation, Issued June 2011*
48. Weeks, J.R. (2016). *Population: An introduction to concepts and issues*, 12<sup>th</sup> Edition, Wadsworth, USA.

49. Wood K & Jewkes R (2001) Dangerous love: Reflections on violence among Xhosa township youth. In R Morrell (Ed.) Changing men in southern Africa. Pietermaritzburg: University of Natal Press/Zed Books.

**OFFICIAL SIGN OFF**

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**DR RAMPAGANE KV**

15/03/19

**DATE**

**DD: POPULATION POLICY PROMOTION**

~~RECOMMENDED/ NOT RECOMMENDED~~

  
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**MS NYOKONG SS**

15.03.19

**DATE**

**D: POPULATION POLICY PROMOTION**

~~APPROVED/NOT APPROVED:-~~

  
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**MS MEKGWE MM**

2019/03/25  
**DATE**

**CHIEF DIRECTOR: COMMUNITY DEVELOPMENT**