SPATIO-TEMPORAL DYNAMICS IN THE PROVISION OF PRIMARY SCHOOL EDUCATION IN VHEMBE DISTRICT, LIMPOPO, SOUTH AFRICA

by

MADZINGE FHATUWANI ELLEN NEMBUDANI

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Supervisor: Prof Dr UJ Fairhurst

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Student number 448 5750

I declare that: ***Spatio-temporal Dynamics in the Provision of Primary School Education in Vhembe District, Limpopo, South Africa*** is my own work and that all the sources that I have used or quoted have been indicated and acknowledged by means of complete references. This work has not been submitted before for any degree or examination

13 February 2015

SIGNATURE

DATE

(Mrs)

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ABSTRACT

Spatial, temporal and population dynamics have influenced learner enrolments in Vhembe District primary schools in Limpopo, South Africa. Vhembe District primary schools have in recent years experienced closure of some of its primary schools due to declining learner enrolments. The dynamics of demographic factors such as migration, fertility and mortality cause fluctuations in the school-age population over time and across space. Poor economic development, the location of the district and the spatial distribution of primary schools make the situation in this rural-based district even more complex. The communities of Vhembe District are discontent about the state of affairs in the area regarding the provision of education and the closure of schools. The closure of schools destabilises the social cohesion amongst members of the community and disempowers them, while inadequate provision of primary school education makes them feel neglected and robbed of their constitutional right. This study investigated the causes of declining learner enrolment and the effect of the closure of schools on the communities. To achieve the objectives data came from questionnaires at household level and from interviews conducted with educators, circuit managers, officials in the Limpopo Education Department and traditional leaders.

The study found that declining fertility and out-migration from the area are responsible for a declining school-age population. This is the reality and the communities of Vhembe District will have to live with it because overall learner enrolments continue to decline. Lack of a planning model in the former Venda territory led to an over-supply of primary schools thus schools in close proximity had to compete for learners. Poorly equipped schools and general development of the area exacerbate the problem and some members of the community perceive education in this district to be inferior. Younger economically active people are increasingly moving to places with better opportunities. This study offers some recommendations to alleviate the problems identified in Vhembe District. Application of a geographical approach to an adaptive strategy considers the natural environment in political, social and economic context. It suggests that education authorities could apply such a strategy to make the schools in rural areas more sustainable.

Key words: Spatio-temporal; population dynamics; primary schools; school-age population; learner enrolments; education policy.

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ABBREVIATIONS/ACRONYMS

ABET:	Adult Basic Education and Training
ACE:	Advisory Centre for Education
AIDS:	Acquired Immunodeficiency Syndrome
ANC:	African National Congress
ASER:	Age Specific Enrolment Ratio
BEE:	Black Economic Empowerment
CAP:	Common Agricultural Policy
CAPS:	Curriculum Assessment Policy Statement
CIA:	Central Intelligence Agency
CSIR:	Council for Scientific and Industrial Research
DA:	Democratic Alliance
DoE:	Department of Education (South Africa)
DoH:	Department of Health (South Africa)
DBE:	Department of Basic Education (South Africa)
EFA:	Education For All
EU:	European Union
EMIS:	Education Management Information System (South Africa)
ESRI:	Environmental System Research Institute
GDP:	Gross Domestic Product
GEAR:	Growth, Employment and Redistribution Strategy

GER:	Gross Enrolment Ratio
GIS:	Geographic Information Systems
HDI:	Human Development Index
HIV:	Human Immune Virus
HSRC:	Human Science Research Council (South Africa)
JETEMS:	Journal of Emerging Economic Trends and Management Sciences
MEC:	Member of Executive Council
MRC:	Medical Research Council (South Africa)
NCS:	National Curriculum Statement
NER:	Net Enrolment Ratio
NGO:	Non-Governmental Organization
RDP:	Reconstruction and Development Programme
SACMECQ:	Southern and Eastern Africa Consortium for Measuring Education Quality
SADC:	Southren African Development Community
SAIRR:	South African Institute of Race Relations
SANBI:	South African National Biodiversity Institute
SANSA:	South African Space Agency
SASSA:	South African Social Security Agency
SGB:	School Governing Body
SMS:	Short Message System
TFR:	Total Fertility Rate
UN:	United Nations

UNAIDS: Joint United Nation Program on HIV/AIDS

UNICEF: United Nations International Children's Emergency Fund

UNESCO: United Nations Educational Scientific and Cultural Organisation

UNRISD: United Nations Research Institute for Social Development

INDIGENOUS TERMS

Bantu Indigenous black population as a whole

Gota: Headman

Magota: Headmen

Khosi: Chief

Mahosi: Chiefs

CHAPTER 1: INTRODUCTION

Current forces of change in South Africa, and particularly in Vhembe District, have led to the closure of schools by the provincial government of Limpopo due to declining learner enrolments in primary schools. The forces responsible for change are political, social and economic in nature. Declining learner enrolments and ultimately the closure of some schools in Vhembe District have left communities devastated, especially the educators and the families whose children attended the affected schools. Educators in such a situation find themselves relocated to distant schools where the need to adjust to new environments is inevitable. They might even be redeployed to engage in administration work for which they have not received any training. Learners of closed schools are forced to walk long distances to schools in neighbouring villages. Parents incur increasing costs to transport their children to new schools. Communities feel disempowered because a school serves as common property uniting members of the community who have common interests. The buildings of the closed schools become a wasted investment as they stand there unutilised yet they serve as a reminder of the plight facing such communities. The closure of a school is a thorny issue on the part of authorities of the Department of Basic Education that does not have any plans for using the buildings of closed schools. Non-governmental organisations (NGOs) and other stakeholders are equally discontent with the state of affairs regarding the provision of education in Limpopo schools.

Parents and community leaders aspire to see their children having access to equal and just education. As shared properties, schools are responsible for bringing social cohesion among members of communities. Education is perceived to distribute opportunities equitably and provide legitimacy for social cohesion (LLakes Research, 2011). Any disturbance in this social cohesion is met with discontent by members of affected communities as is the case in some communities in the Vhembe District of Limpopo. The predicament facing communities in Vhembe District (Figure 1.1) regarding the provision of primary schools prompted the researcher to engage in an investigation in an attempt to search for a solution to the problems linked to the closure of a school. From this point of departure a specific aim for the study was formulated and objectives were stated before embarking on a procedure to search for solution. This was followed by identifying the methods that were used as to generate, analyse and interpret the collected data. Before elaborating on the aims and objectives as well as the methods of generating data, a short description of the approach to the study is provided.

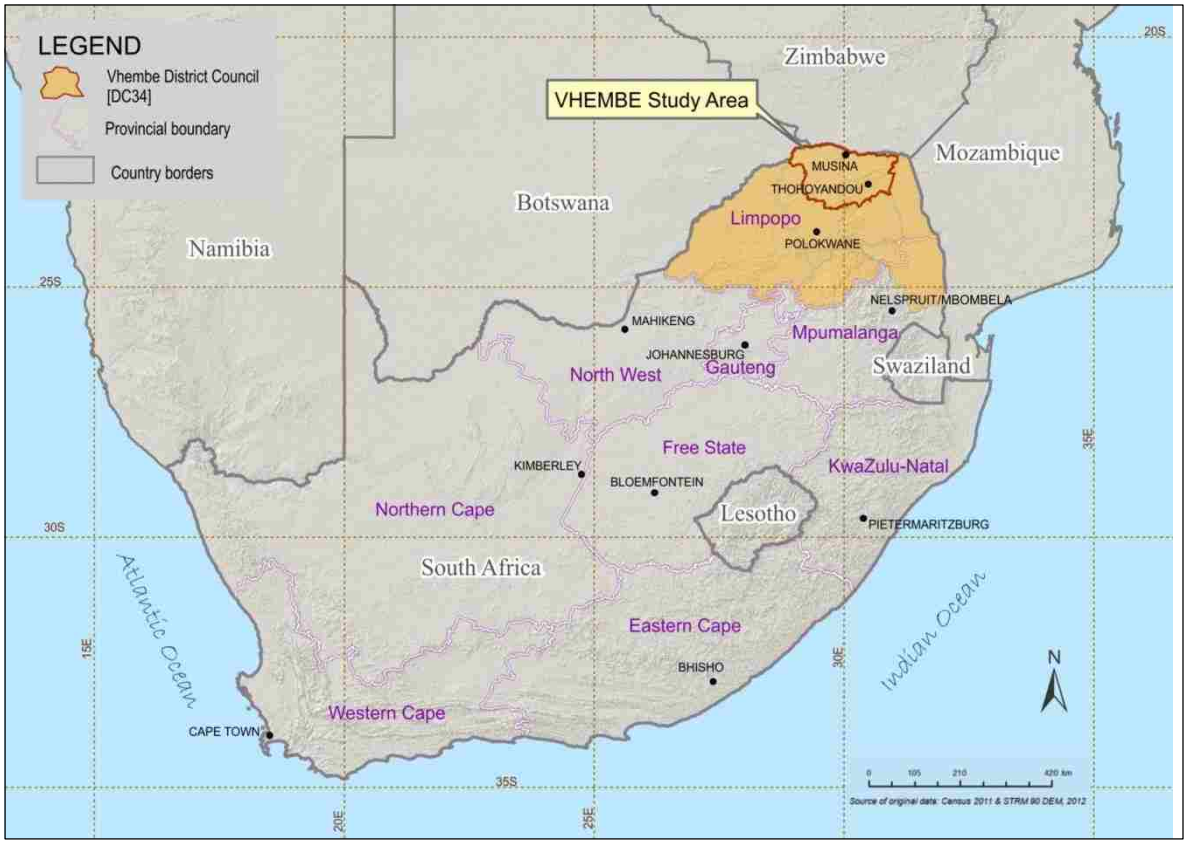

Figure 1.1: The location of Vhembe District in South Africa
Source: ESRI 2010; Statistics South Africa 2003

The perspective adopted was to consider the interplay of spatio-temporal dynamics occurring within the study setting. This approach was preferred because it looked into the changes taking place within the population and the delivery of education over time and across space. Spatio-temporal refers to the philosophy belonging to both space and time (Concise Oxford dictionary 2002). Space and time are inextricably linked, and spatial data have a temporal dimension (Heywood et al. 2006). The government authorities decided on the closure of schools when learner enrolments become unsustainable. Causes of declining learner enrolments were essentially a decreasing total fertility rate (TFR) and the out-migration of young adults of child-bearing age. A demographic transition interpretation provides a useful understanding of the causes of declining fertility from a temporal perspective. Caldwell (1976) in his restatement of the demographic transition theory with regard to fertility decline believes that restricted fertility is the product of social change with economic implications. The change in attitudes of individuals has shifted from the need to have large families, to a situation where individuals carefully decide on the number of children for varying reasons, including raising offspring.

It was established in literature sources that the decline in school-age population has been experienced in other parts of the world (Gould and Lawton 1986; Retnakumar 2003). This study used the case of Vhembe District in Limpopo, South Africa, to explain the connection between population dynamics and the provision of primary school education from a spatio-temporal perspective. Learners and schools have spatial and temporal modes. Schools are located in particular places and over time their building structures and numbers change as additional classrooms or new schools may be required when the learner enrolment numbers increase. School infrastructures and buildings age with time and they need refurbishment. Learners are linked to schools in specific places and demographic and socio-economic forces may cause the number of learners to change. Changes in enrolments may require the intervention of the government if resources or the infrastructure at schools are inadequate. Furthermore, social, economic and political forces are continuously set in motion and induce individuals to leave their places of origin in search for better opportunities elsewhere. Areas of out-migration experience decreasing school learner enrolments while those experiencing in-migration may have increasing enrolments. The government has to adapt to these changes accordingly. Some adjustments, like closing down a school, might leave the communities affected devastated.

The South African government has over the years failed or inadequately adjusted to these dynamics. The injustices of pre-1994 policy regarding the provision of education are not yet completely eradicated and some schools lack adequate funds, infrastructure, facilities, learning and teaching materials. The challenges facing the provision of education are not unique to Vhembe District, but are experienced throughout South Africa as well as in other parts of the world. Although some primary schools in Vhembe are experiencing fluctuating learner enrolments, declining learner enrolments dominate the picture. Population dynamics resulting from changes in fertility, mortality and migration affect the size and structure of a population and ultimately the school-age population. So this research undertakes to document and investigate the connections between population dynamics, spatiality and changes over time in Vhembe District. Vhembe District is largely dominated by persons living in a rural setting. Census 2011 results on community profiles show that 74.4% of the population in Vhembe lives on tribal land (Statistics South Africa 2012b).

The range and threshold of a population in a geographical setting can be used to explain the location of schools. Some places are densely populated while others are sparsely populated, and density will demand that the schools be located accordingly. Every child has a right to education and easy access in terms of travel distance between home and the school is a basic requirement. The location of a school becomes a challenge when there are not enough learners to make it

sustainable. A school may appear to be sustainable when it is first established, but this may change with time when the communities concerned move from a more youthful stage to a situation where the older population dominates or when the local areas are affected by large out-migration of the young population. These dynamics in population over time and space demand adaptive strategies, to enable all children to access equitable and quality education.

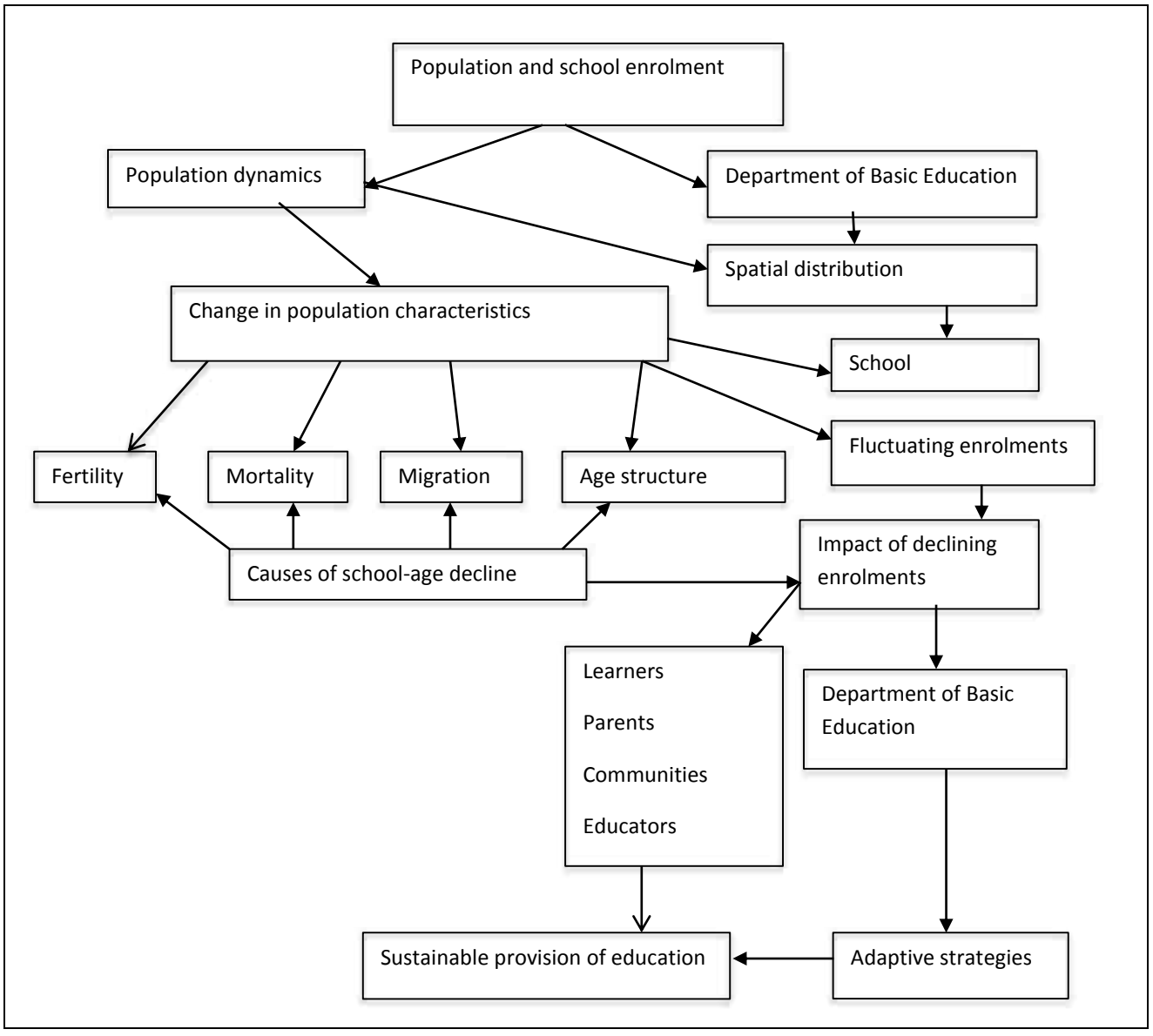

Figure 1.2: Conceptual framework for population dynamics and learner enrolments
Source: Fieldwork 2012

The Department of Basic Education in South Africa is faced with the challenge of improving the provision of education throughout the country. The legacy of previous (apartheid) government

policies regarding the provision of education does not make this a simple task. There are still huge challenges ahead and, according to Dymott (2001), more challenges are encountered in schools located in rural and remote areas. It is for this reason that a case study on the connection between population and the provision of primary school education was undertaken in Vhembe District. The connection between population dynamics, the location of schools and education service delivery over time is shown in the conceptual framework in Figure 1.2.

The provision of education includes providing the school-going population with schools, educators and teaching and learning materials. Population has links with the spatial distribution of schools because schools need to be accessible in terms of the distance travelled by learners between home and school. Figure 1.2 also shows that any change in population characteristics affects total learner enrolment at local schools. The change may lead to an increase or decrease in learner enrolment. The decrease in learner enrolment may lead to closure of affected schools, while an increase may lead to overcrowding. Current global fertility trends show that the total fertility per woman is declining (The World Bank, 2012), and this has implications for school enrolments. Declining school enrolments affect educators employed to teach the learners. A pupil/teacher ratio of 35 learners per educator in South Africa is acceptable in terms of national education policy. Dwindling learner enrolments force the Department of Basic Education to close non-viable schools and redeploy excess teachers. Closing down a school impacts the lives of local people, affecting communities socially, economically and politically. In order to address this problem, adaptive strategies are needed to build a sustainable education system. The plight of Vhembe communities regarding the provision of primary school education prompted the researcher to embark on this investigation in order to find a solution to the problem. The journey started by finding a place for this study in geographical research.

1.1 THIS STUDY AS GEOGRAPHICAL RESEARCH

This is a geographical study that falls in the sub-discipline of Population Geography and it attempts to link education, spatial location and change over time. According to Kitchin and Tate (2000:1), research is a process of inquiry and discovery, and aims to gain better understanding of the relationship between human beings, space and the environment. Flowerdew and Martin (2005:9) state that the purpose of research is to add to our stock of knowledge and to answer certain questions about the real world and its societies. In order to conduct a geographical enquiry, a researcher needs to know the underlying thinking relevant to a specific field of enquiry. The underlying philosophy adopted for this enquiry was empirical in nature, in that the researcher

investigated phenomena within a real-life context, and knowledge was gained by means of direct and indirect observation. Empirical research, according to Goddard and Melville (2004), works through induction, which entails the process of formulating theories from specific observations.

People's experiences relating to spatiality (location of schools), temporality (changes in population, education and delivery), relationality (human beings in a social and communal environment) and corporeality (people's perceptions, feelings and attitudes relating to their everyday life (Van Manen 2011), were used to explain the relationship between demography and education in Vhembe. This approach shed light on the qualitative aspect of the provision of education in the study area. Regarding spatiality, the study aimed to establish how the provision of education varied from one place to the other and how this provision has changed over time and touched people's lives. Relationality refers to human relations where the researcher establishes how communities and educators are bound together in working and educating the children. Corporeality focused on people's feelings relating to certain educational policies and decisions to merge and close down some schools, redeploying educators and failure to supply learning and teaching materials at schools.

1.2 RESEARCH METHODOLOGY

After having identified the problem regarding the provision of primary school education in Vhembe District, the search for a solution led to the formulating of an aim and objectives of the study. The general aim of the research was to apply a spatio-temporal perspective to the relationship between the provision of primary school education and demographic change.

The specific objectives of the study were to:

- determine the spatial distribution of schools in relation to settlement patterns in Vhembe District
- assess policies adopted by the Department of Education in planning for the location of schools and the provision of education
- identify the population dynamics that influence the observed fluctuation of school enrolments
- specify the nature of population dynamics and school enrolments since the 1970s in Limpopo
- note the coping strategies adopted by schools to maintain acceptable learner enrolments in relation to the number of educators at individual schools

- assess the social impact of closure of schools on learners, parents, educators, NGOs and planners
- develop adaptive strategies for sustainable primary school education provision.

After formulating the aim and objectives of the study, there was a need to identify participants who would be used to generate data. The participants were parents, particularly heads of households or their representatives. Information was gathered, by means of questionnaires and interviews with educators, circuit managers, authorities in the Department of Basic Education in Vhembe District and traditional leaders. The identified participants were crucial in this study because they are directly linked or affected by the provision of education in primary schools. Parents decide on where to register their children; educators teach the learners, circuit managers link schools with the Department of Basic Education at district level, and help in recruiting educators and distributing learning and teaching materials to schools in their circuit areas; officials at the district level plan for the provision of education and link the district with the province. Traditional leaders play a role in identifying the sites for the location of schools and to see to it that children in their villages get access to basic education.

The researcher became a participant observer, as the research was conducted among the members of a community of which she is also a member. The researcher was interested in establishing why education processes are the way they are in Vhembe District. It was established that education policy in South Africa has moved from the one of unequal and separate provision of education along racial divisions to “Equal Education for All” where discrimination and separate schools are not entertained. This investigation tried to establish if there was evidence of “Equal Education for All” in Vhembe schools. This enquiry adopted an approach that suits both the qualitative and the quantitative data generation which was used to explain connections between population dynamics, the location of schools and the provision of basic education. The methods used to explain the connections were descriptive in nature. From the phenomenological perspective, the study aimed to understand the views of individuals and their action; and also the meaning of the observed phenomena, which in this study involved demographic and spatio-temporal dynamics in the provision of primary school education.

From the quantitative research perspective, independent and dependent variables were identified in order to determine how they play a role in influencing changes in the population–education system. Within this approach, one carefully and objectively collects data regarding social phenomena in order to explain human behaviour. Descriptive statistical functions such as regression

analysis, standard deviations and means were used to verify learner enrolment behaviour and patterns over time and space. The sources of data were the use of questionnaires and the secondary documents on school-learner enrolment surveys published by the Department of Basic Education and by Statistics South Africa.

Sporton (1999) cited by Flowerdew and Martin (2005), states that research techniques need not be used in isolation, but can instead be employed as just one part of a multi-method approach in researching a question. This approach is known as triangulation (Guion et al. 2011). Researchers can therefore adopt the use of multiple methods from both qualitative and quantitative methods in trying to maximise their understanding of the real world (Flowerdew and Martin 2005). Triangulation is according to Guion et al. (2011), a method used by qualitative researchers to check and establish validity in their studies by analysing a research question from multiple perspectives. This research adopted the use of both qualitative techniques in interviews and personal observation and quantitative methods to check and establish validity of the findings. Explaining the methodology begins by providing a global perspective and context of the problem.

1.2.1 Background to the problem

Population dynamics fertility, mortality, and changing age structure of the population play a direct role in determining the size of the population attending school. Real attractions, such as the availability of space, housing and job opportunities draw towards them migrants, especially the young and economically active population. Migration may take place over a short distance when people move from one residential area to another one close by; or over longer distances within the same municipality, district or province. Long-distance migration may involve crossing national boundaries. The migration of young people in large numbers to newly established areas results in a potential increase in fertility in such areas, and in a school-going population that needs to be accommodated in local schools. On the other hand, the out-migration of young adults from an area results in the number of potential births within that area declining and hence in a decrease in the number of learners feeding the local schools.

The decline in the population of school-going age in places such as the United Kingdom and India led to the emergence of uneconomic or non-viable schools (Gould 1986; Retnakumar and Arokiasamy 2006). South Africa is a developing country characterised by two worlds, namely the developing and the developed worlds. Although this difference is still valid among the people of South Africa after 20 years of democracy, changing attitudes and societal values have played important roles in determining behaviour in terms of fertility. South Africa is characterised by both

the developed and developing section of the population. The developing section comprises mainly the black population that is in the majority, while the developed world is still dominated by the white sector of the population and is currently experiencing both the second stage (a developing stage with increasing fertility and declining mortality accompanied by relatively high population growth) and the last stage (an advanced stage with declining fertility and mortality accompanied by stable to negative population growth) of the demographic transition. Although South Africa is characterised by this dualism, many other factors, for example: education; women in formal employment; family planning programmes; legalised abortion; and breaking away from extended kinship relationships are playing a major role in the decline in fertility. The fertility decline; out-migration by young adults (especially females) in their child-bearing years who move away together with their families; the changing age structure of the population; and government policy about the nature and value of education all have implications for school enrolment. In order to be viable, schools need a continuous supply of scholars of school-going age.

The reasons for declining population growth vary over time, and they usually accompany the modernisation of societies. They include, inter alia, educational attainment; urbanisation; exposure to family planning programmes; economic considerations; and a desire for smaller families.

The process of changing population growth rates that increase from low to rapid, then move from gradual to stable and finally decline is known as the demographic transition (Huw 1987; Daugherty and Kammeyer 1995). In the 1980s the global annual population growth was 85 million per year, then to 80 million in recent years, and it is expected to drop further to 64 million by the year 2025 (Population Reference Bureau 2010). An increase in the members of population of an area, a shortage of land and the lack of opportunities and better services result in the population exploring other parts of the world – hence the process of migration.

During the demographic transition, along with population growth there are changes in the age structure of the population: from youthful-dominant to mature, and finally to old-age-dominant. Changes in the age structure of the population, births, deaths, and migration all affect population growth in an area. The change in population numbers and size has implications for the planning of social services, especially education and health. Planners and policy-makers have to take into account on-going demographic change within their countries in order to make informed decisions. Over the last four decades, there has been a decline in fertility or births per woman throughout the world, at varying rates. Global fertility has fallen from 1.7% in 1980 to a current rate of 1.2%. In 2013 natural population growth rate in South Africa was 0.99 (Statistics South Africa 2013b). South

Africa's total fertility changed from 4.9 in 1970 to 3.3 in 1996 (Udjo 2001) and to 2.34 in 2013 (Statistics South Africa 2013b). Statistics South Africa's 2010 estimation of fertility, derived from the 2007 community survey of South Africa, shows Vhembe's total fertility as 3.6 children per woman, but this has declined to 2.4 in 2011census (Statistics South Africa 2012a).

CSIR (2008) on its overview of spatial trends and settlement characteristics noted that many of Limpopo districts such as Vhembe, Mopani and Sekhukhune, rank amongst those that experience relatively high proportion of out-migration. Employment is scarce and farming opportunities for these rural people are limited owing to the shortage of land. Land reform to address past inequality in the distribution of land in the rural areas is taking too long. Census data for 1996 and 2001 show that unemployment in Limpopo was at 36% (HSRC 2005). Twenty-five per cent of the migrants in Gauteng, South Africa's core economic area, during the same period, originally came from Limpopo. Both unskilled and skilled workers looking for employment are attracted by cities and towns. Young adults who migrate to metropolitan areas such as those in Gauteng and the Western Cape in search of education in institutions of higher learning do not always go back home after completing their studies, but instead settle and work in these cities.

As a population dynamic, mortality too plays both a direct and an indirect role in reducing child-bearing, especially through the effect of the prevalence of HIV and AIDS. The fear of getting infected by the disease makes partners practise safe sex, and conception rates are reduced. Population dynamics affect the school-going population needed to supply the schools, either positively or negatively. From the general background of the problem this research was narrowed down to Vhembe District as a case study (Figure1.1).

1.2.2 Problem statement

Declining learner enrolments in Vhembe primary schools since the dawn of the new democracy has forced the Limpopo government to shut down small and non-viable schools leaving a mismatch between population distribution and the location of schools in these localities. The closure of schools is affecting communities in both the sparsely populated rural areas and the more urban densely populated areas. Rural settlements are those settlements that have limited services and are dominated by primary activities, while urban settlements are those dominated by secondary and tertiary activities. Factors contributing to declining enrolments are, amongst others, changing demographics and the nature of the economic and social planning that is taking place. Political decisions to close and merge schools are taken at government level.

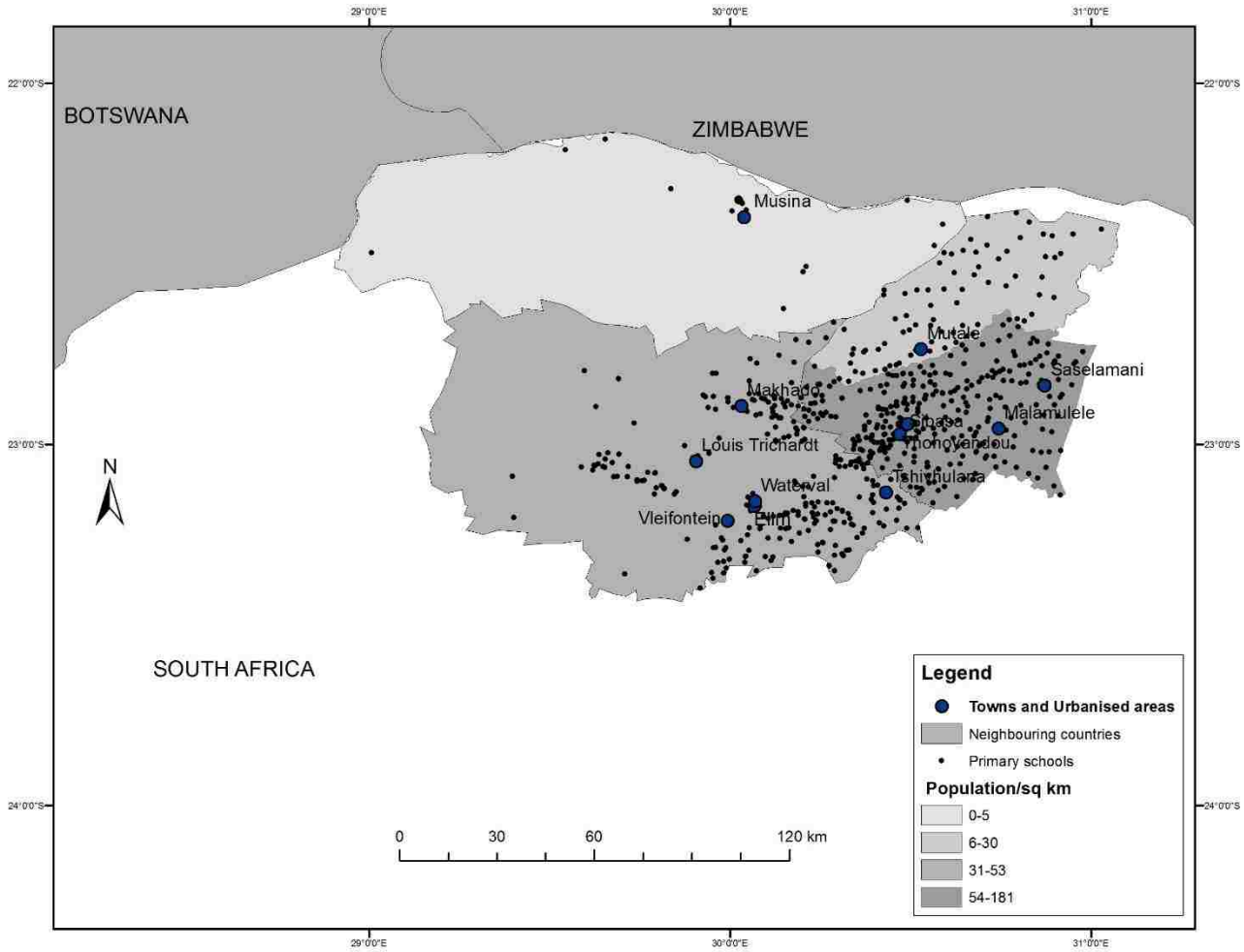

Figure 1.3: Location of primary schools in Vhembe District
Source: EMIS 2012a

Education is a basic service to which no child should be denied access. When schools are not properly located in relation to the school-going population they serve, both learners and parents experience problems regarding access to schools as some children are forced to travel longer distances to school. Some children are even denied access to this basic service because schools are too far from their households. Merging schools creates tension between communities whose schools are involved, as neither wants the merger to disadvantage their children. Educators, on the other hand, are unhappy about being redeployed – education policy compels redeployment to other schools or even to non-teaching posts. Redeployment may occur when schools' enrolments decline and the schools concerned are rendered non-viable. This situation gives rise to problems that have social, economic and political implications for planning and development. The local problem therefore becomes a national problem and, in fact, a global issue as well; and should therefore be

investigated with the aim of finding solutions to the sustainable provision of education by accommodating changing population dynamics. The location of Vhembe primary schools is shown in Figure 1.3.

In the South African context, some of the current problems date back to pre-1994 times, when resources were unequally distributed and the administration of schools was left to the authority of the then 'homeland' governments. Currently, the post-1994 government is faced with the task of addressing past inequalities in all spheres of life, and education is no exception. Although the population in Vhembe continues to grow (from 1 160 672 persons in 2001 to 1 293 398 in 2011), current trends show a decline in total fertility rate (from 2.71 in 2002 to 2.44 in 2011) (Statistics South Africa (2013b). This decline renders some schools non-viable in terms of their pupil/teacher ratio, and their resource provision and infrastructure, which explains the merger of schools in some places. The survival and sustainability of schools as well as the provision of education is dependent on a continuous supply of learners to schools from feeder areas. School enrolments are affected by changes in the school-going population that may fluctuate owing to various factors. Changing learner enrolment affects the equilibrium of the state of education as a system. This disturbance of the equilibrium in education as a system may result in overcrowded schools, a shortage or surplus of educators, and inadequate or unused infrastructure and resources, all of which means a mismatch between the location of schools and the status of the population.

Population characteristics are crucial when planning for basic services in order to achieve sustainable human development. This research focused on primary schools, where the issue of fluctuating learner enrolments is cause for concern. South Africa as a country undergoing demographic transition needs to investigate this issue and its attendant problems, and the solutions thereto could be incorporated into planning for the provision of education.

1.2.3 Study rationale

The South African education system has undergone a major change since the creation of the democratic government in 1994. The previous education system was designed to serve different racial groups and the approaches differed from one group to the other, and were also structured to accommodate the political policy of separate development. The apartheid homelands controlled education in their territories and, owing largely to poor funding, the provision of education in these areas was inferior and schools were characterised by overcrowded classrooms and a lack of facilities. After the post-1994 government took over and decided that the earlier discriminatory educational administration needed to be corrected, the focus turned to building more schools and

classrooms to cater for larger school enrolments. During this process demographic trends were not considered at all; and consequently the education system is currently affected by declining school enrolments and the emergence of uneconomic schools. Negative net-migration (Statistics South Africa 2012b), closure of schools with non-viable enrolments and the 7% drop in learner enrolments for Vhembe between 2007 and 2013 (DBE 2013) are all evidence that indicate that forces of change are having impacts on school-age population. Some schools are faced with the possibility of closure; in some schools classrooms stand empty because there are not enough learners to use them. Or else the number of appointed educators exceeds the number required to the extent where redeployment is the order of the day, destabilising the lives of the educators concerned.

The issue of merging and closing schools owing to declining enrolments affects the education system because teachers need to be redeployed. Tension is created between the Department of Education and the communities being served. Communities do not always welcome such a move because politically they want to retain the schools within their own territory. Redeployment leaves educators devastated. The guidelines (DoE 2009a) for rationalising schools published in 2009 by the National Department of Education are vague and non-committal: they do not state exactly how rationalisation should be carried out and decisions related to the process are left to the discretion of the provinces.

1.2.4 Research method or procedure

To acquire primary data from the educators 60 schools were sampled for interview purposes. Regarding the sampling of sixty schools where interviews took place, a multi-stage approach was employed when selecting the schools. A sample can be selected on the basis of knowledge, judgment and the purpose of the study (Babbie and Mouton 2001; Welman et al. 2009).This is done in order to achieve representativeness and the steps followed in this research are described below:

- First 240 primary schools were randomly selected from 720 Vhembe primary schools
- Second, the 240 were ranked according to the Department of Basic Education ranking order (Table1.1), namely small (135–320 learners), medium (321–620 learners) and large (621–700 learners). An additional category of schools with enrolments less than 135 was created because these were thought to be schools facing serious challenges. Sixty schools were selected (Table 1.1 and Table 1.2) and the selection was based on using purposive sampling based on enrolment size and trends.

Table 1.1: Enrolment size of sampled schools

Enrolment size	Category	Number sampled	%
Fewer than 135	Very small	9	15.0
135–320	Small	11	18.3
311–620	Medium	23	38.3
621 +	Large	17	28.3
Source of data: Department of Basic Education 2012a			

(i) Trends in learner enrolment between 2004 and 2010. This period was preferred because a database on all Vhembe school records was available. Of the 60 sampled schools, it was established that 42 schools displayed declining trends, ten an increasing trend and eight stable enrolments (Table 1.2)

Table 1.2: Enrolment trends in sampled schools

Category	Number of selected schools
Schools with stable enrolment size between 2004 and 2010	8
Schools with an increase in enrolment of more than 30% between 2004 and 2010	10
Schools with a decrease in enrolment of more than 30%between 2004 and 2010	42
Source: Snap Survey Vhembe 2004 data; EMIS 2006-2012	

(ii) Size of schools; this was done in order to establish why schools were small, medium or large.

(iii) Location of schools. An attempt was made to sample schools from all four municipalities-rural and urban (Figure 1.4). The method used to acquire data were interviews with the educators (Appendix 2). This sampling method was preferred in order achieve representativeness. The purpose of selecting the schools using these criteria was to try and establish the reasons why some schools had either declined, stabilised or experienced increasing enrolments.

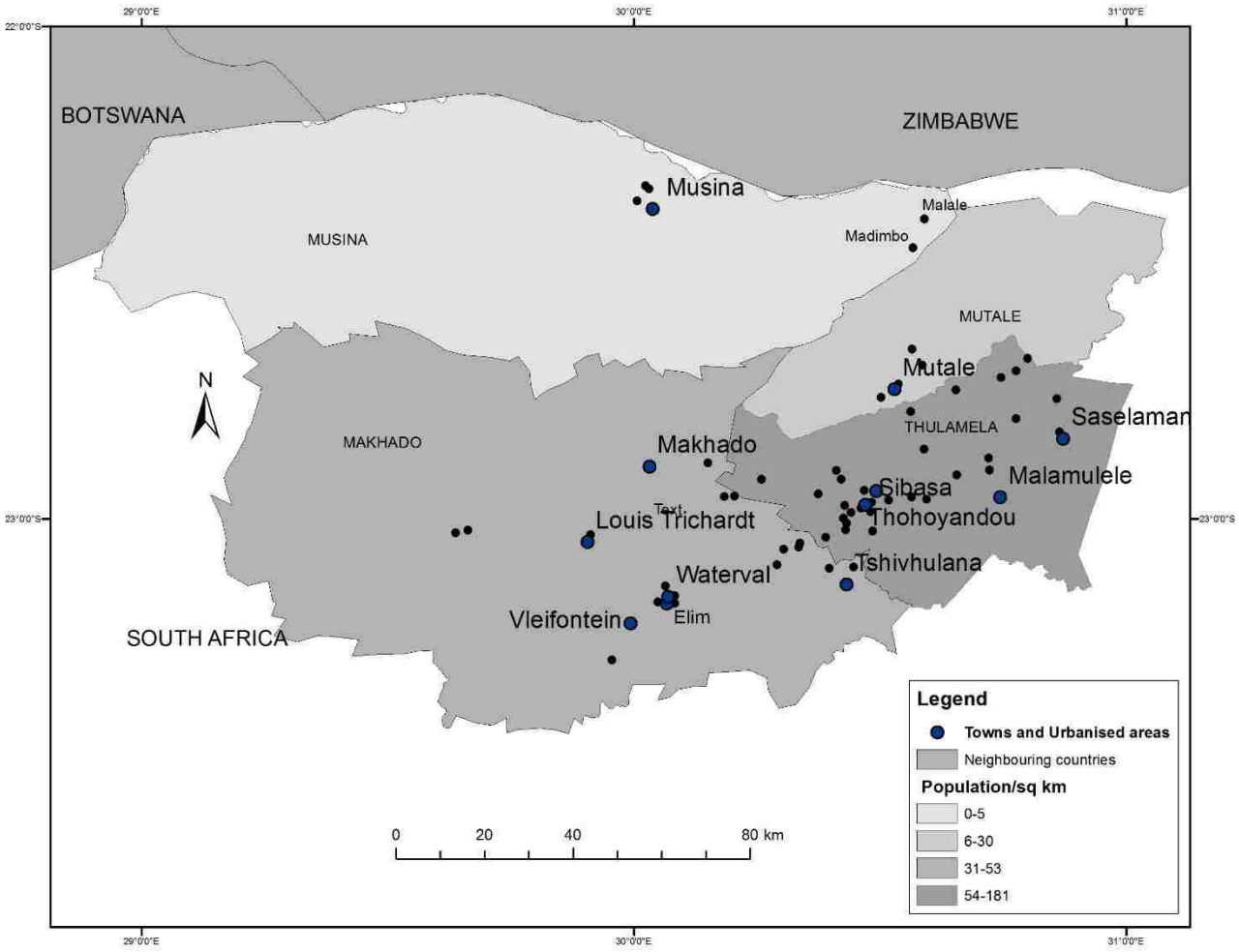

Figure 1.4: Map of the location of sampled schools reference to population density
Source: EMIS 2012a

Interviews were conducted with four sets of participants, namely officials in the Department of Basic Education (Vhembe District); school circuit managers; principals and educators; and community leaders. Interviews focused on changes in learner enrolments; infrastructure and facilities; educational policies; problems associated with schooling and the provision of education; and the impact of demographic processes. For the purpose of gathering information, educators and principals were interviewed on learner enrolments, while 20 circuit managers out of 27 were interviewed on the research topic. Leaders from two traditional communities that were affected by school closures were also interviewed. Eyles (1988), cited by Flowerdew (2005), describes interviews as conversations with a purpose. This method is sensitive and people-orientated, as it allows interviewees to construct their own account of their experiences by explaining them in their own words. The interviewee does not only answer questions; but is also allowed to ask questions.

The interviewer and the interviewee may also share experiences. There is a high concentration of circuit areas (24 of the 27 circuits) in the eastern part of Vhembe District (Figure 1.5).

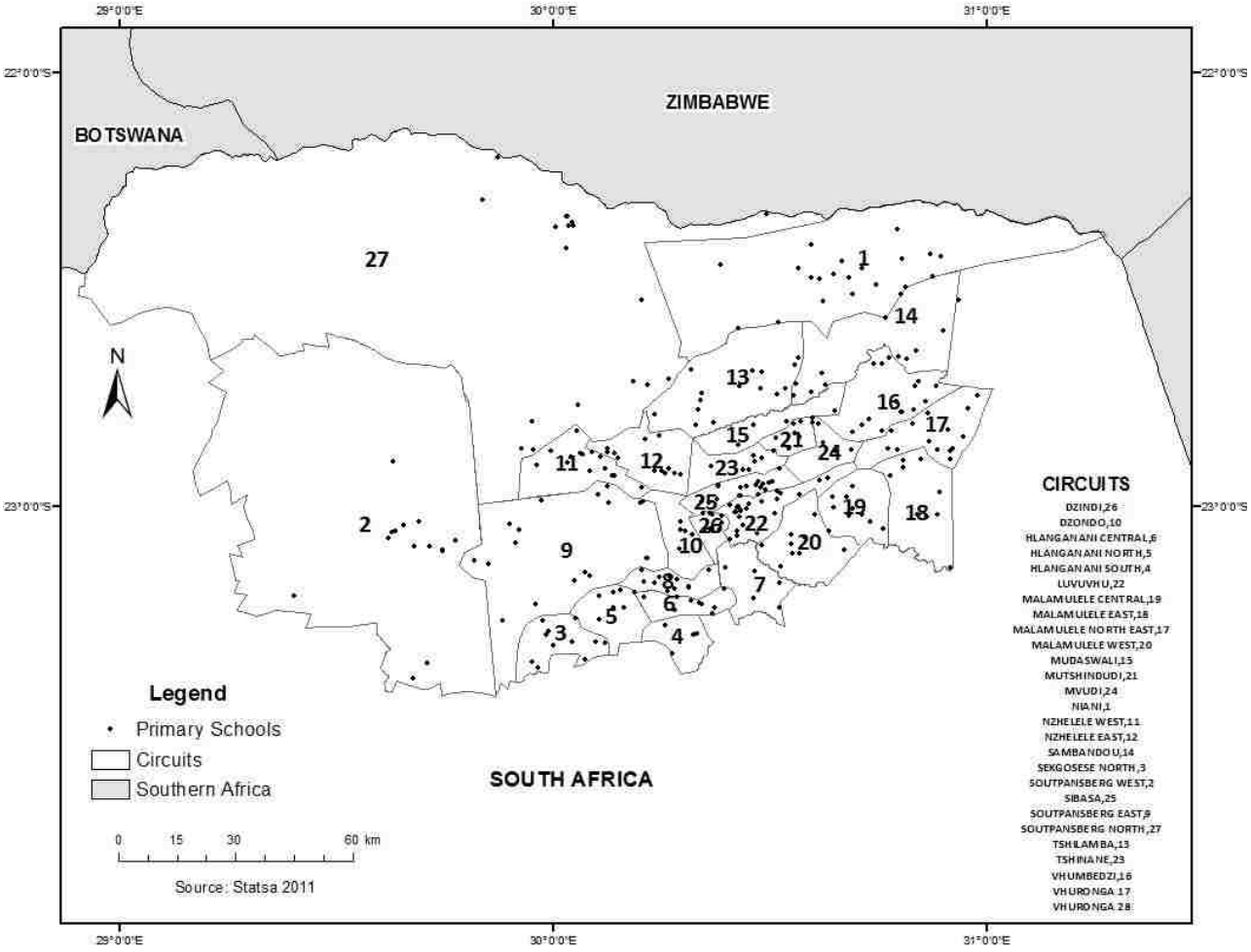

Figure 1.5: Map of school circuit areas
Source: EMIS 2012a

The schools are divided into circuit areas where a circuit manager's duty is to oversee schools in his or her circuit areas. The responsibility of all circuit managers is to see to it that learners are taught; learning material are distributed to schools falling under their jurisdiction; that educators are appointed; common exams are run and check on learner assessments. Circuit offices are not necessarily found in the places where schools are located. For example, the Sibasa offices housed four circuits; the Dzanani offices located in the former Makhado College of Education housed three circuit offices; Malamulele and Saselamani housed two circuit offices each; and the three Hlanganani circuit offices were located at Elim. The circuit areas boundaries do not match those of

municipalities and schools in two municipalities may be located in one circuit area. For example schools in circuit 27 are located in both Makhado and Musina municipalities.

Official digital data on circuit areas was unavailable. This map of the location of school circuit areas was created by using the x and y coordinates of the location of schools falling under specific circuit regions. Points of the location of schools in the periphery of the circuit area were connected, to create polygons of circuit areas.

Table 1.3: Sampled population by municipality

Municipality	Population (2011)	2011 %	No. of questionnaires	Percentage questionnaires
Musina	68 128	5.27	46	15.03%
Mutale	91 793	7.09	61	19.93%
Thulamela	617 973	47.78	120	39.21%
Makhado	515 514	39.86	79	25.81%
Total	1 293 408	100.00	306	99.98%
Source: Statistics South Africa 2012a				

Primary data at household level was generated by using questionnaires (Appendix 1). Questions were completed either in the researcher's presence (visiting household) or absence (where the participant was unavailable at the time of visit) depending on individual circumstances. Both closed and open-ended questions were used. Questionnaires were used in this research to enable the researcher to reach a relatively larger population (i.e. the 306 participants); and to ensure that same questions were asked of all the participants. Samples of raw data collected and indicated in Appendices 5A-5C are included at the end of this report. A questionnaire is a list of carefully designed questions, given in exactly the same form to each person in a group of people, in order to collect data about some topic in which the researcher is interested (McLean 2006). A non-proportional quota sampling method was used to select the 306 participants from Vhembe households (Table 1.3). Thulamela has a high population density and is the largest municipality in terms of population size, constituting 48% of the total population; Makhado comes second with 39%, Mutale third with 7% and Musina with 5% (Figure 1.6). Non-proportional sampling was also employed here in order to achieve representativeness. Musina population comprises only 5% of the total population and using proportional sampling would imply that only 16 of the 306 households would have been sampled instead of the 46 households indicated on Table 1.3.

Musina's population is concentrated in the town of Musina and in two rural villages in the eastern part of Musina Municipality. These two villages are located more than 100 km from Musina. The lifestyle in these two rural villages differs from that in Musina, where different ethnic groups live together. These villages are now occupied mainly by communities who lived on white commercial farms during apartheid; and by illegal immigrants. Because of its location and proximity to the neighbouring countries of Mozambique, Zimbabwe and Botswana, Musina is an area of many cultures when compared to the three other municipalities, which are relatively homogeneous.

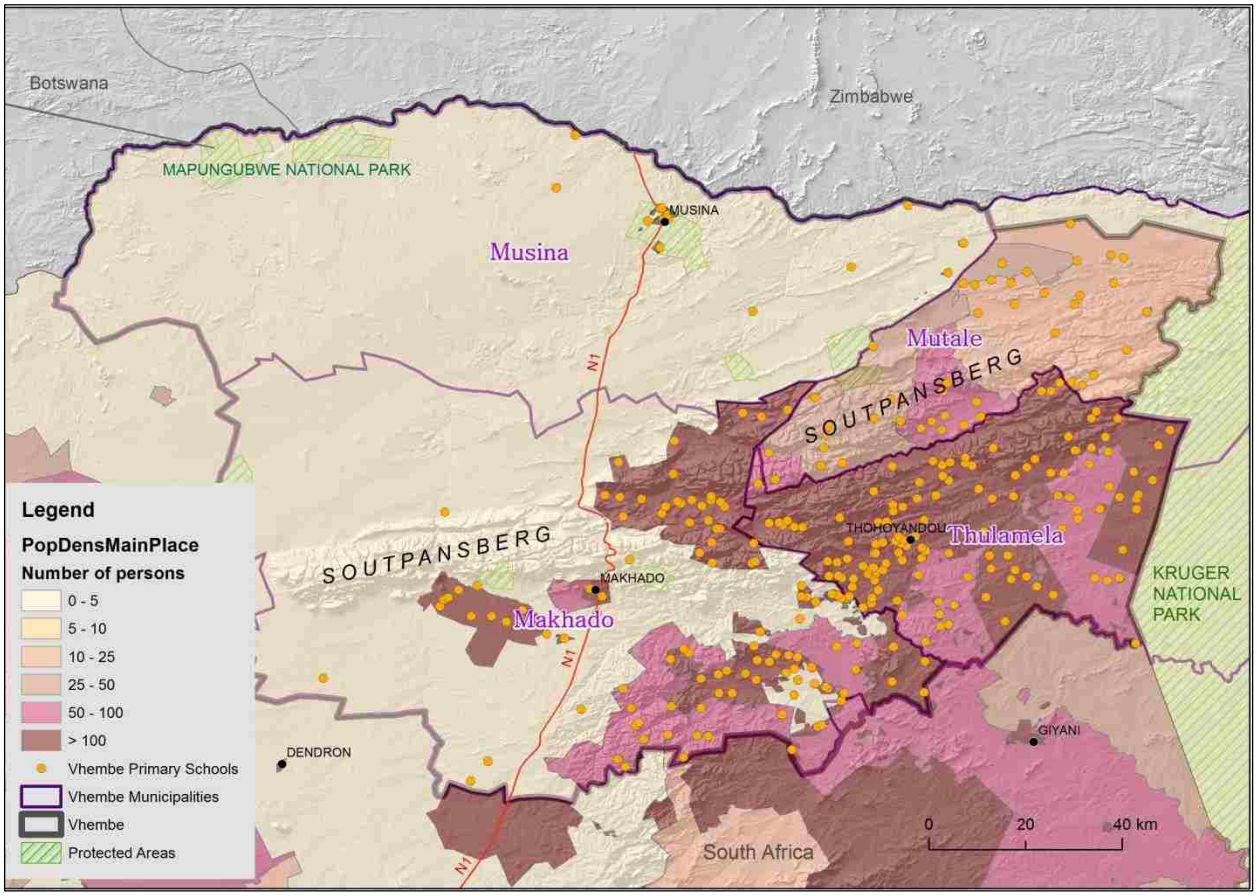

Figure 1.6: Map showing population densities in Vhembe District
Source: Statistics South Africa 2011; EMIS 2012a

The participants targeted were heads or representatives of households. They were required to give information on the demographic and socio-economic position of their households, and on their perceptions regarding the provision of education in their local areas.

The questionnaires were distributed throughout Vhembe District and were completed on site (house visit). The physical presence of a researcher during the completion of the questionnaires ensured the return of all the questionnaires. This procedure also enabled the researcher to help those who

could neither read nor write. When respondents could not read or write they were asked the questions verbally, and their verbal answers were recorded on the questionnaire for them.

Observing schools' settings, facilities, infrastructure and surroundings was done by visiting the schools and taking photos. These focused on safety, the distances travelled by learners from their residential areas, accessibility in terms of distance travelled, physical barriers and cleanliness of the school environment.

Secondary data were used to obtain information on education policies, guidelines and school enrolments. Definition and understanding of key concepts concerning demographic issues relating to the research problem were obtained by consulting literature sources. Theoretical frameworks, models and theories on population and the provision of education were consulted and used to direct this research. Records of learner enrolments were obtained from Education Management Information System (EMIS) and Statistics South Africa. Data in a digital format were used to create maps and were obtained from secondary sources.

1.2.5 Data analysis and interpretation

Quantitative data analysis was carried out through the use of descriptive statistics. Descriptive statistics provide simple summaries about the sample and about the observations that were made. The summaries are presented statistically and visually by means of tables and graphs later in the thesis. As Trochim (2006) notes, descriptive statistics help us to simplify large amounts of data in a sensible way. In this study, univariate analysis was used to determine the average learner enrolment, and standard deviation from the mean. Univariate analysis is an analysis which is carried out using the description of a single variable in terms of the applicable unit of analysis and it is the simplest form of quantitative analysis. The frequency distribution was depicted as tables or as graphs. The measure of central tendency of a distribution was estimated using a mean or average. The standard deviation was calculated using the statistical function in Microsoft Excel. It was used to show the relationship between learner enrolment and the mean or average over a number of years. Values below the mean have negative discrepancies; while those above the mean have positive discrepancies. Univariate analysis can summarise large quantities of numeric data and reveal patterns in the data.

Regression analysis was used in Chapter 5 to calculate change in learner enrolment over time and graphs showing trends in learner enrolments illustrate this change. This showed whether the change in learner enrolment was positive, depicting an increase in enrolments over time; negative, showing

a decline in enrolments over time; or stable, depicting no changes in enrolments over the same period.

Data obtained through interviews and observation methods was analysed qualitatively. This focused on description, classification and the interconnection of the data collected. As stated by Dey (1993), cited by Kitchin and Tate (2000), these procedures form the core of qualitative analysis. Description involves the clear description of facts, and situational and contextual information. Description lays the basis for the analysis. Situational context gives a detailed account of the social settings, the social context and the spatial arena within which an action or phenomenon occurs.

People interviewed furnished contextual information. This research involved interviews with school educators, circuit managers and officials from the Department of Basic Education's regional office in Thohoyandou who, as stakeholders in the field of education were knowledgeable about the provision of education, available facilities and the operational infrastructure at schools. Interviews with traditional leaders made it possible to understand the connections between local communities and the local schools. Information on the situational context was obtained through both interviews and observation of the settings at schools. Kitchin and Tate (2000) pointed out that the social, spatial and temporal context can all significantly affect the data generated.

The generated data were categorised according to their similarities, in order to facilitate interpretative analysis and make it more meaningful. Placing data in categories according to its constituent parts makes it possible to make comparisons between classes and helps the researcher understand the thoughts and actions of people. Together with identifying interconnections, relationships between variables were found, a strategy well documented in the literature (Kitchin and Tate 2000; Flowerdew and Martin 2005) useful for identifying and understanding the association between classes. Schools were categorised by their age to establish whether there was a link between the age of the school and learner enrolments.

ArcGIS 10.2 programme was used to create maps used in this investigation. It was also used to analyse spatial information on schools location, population distribution and density as well as settlement patterns. Overlay analysis were performed to establish the relationship between datasets and this enabled the researcher to show places with schools having declining learner enrolments, while proximity analysis was used to show the distance between neighbouring schools taking into account maximum travel distance norms set by the Department of Basic Education. Proximity analysis of the location of schools can also establish whether the school is appropriately located in terms of distance travelled by learners. Primary school learners are supposed to travel for a

maximum distance of 5 km between home and school. GIS was also used to show the relationship between variables such as the location of schools and population distribution. It is an excellent medium for the display of spatial data and the outcome of spatial analysis (Flowerdew and Martin 2005). It was also used to establish whether schools were appropriately located in relation to other local schools drawing learners from the same area. Changes in the learner enrolment of some schools were established and mapped.

1.3 VALIDITY AND RELIABILITY

The issues of validity and reliability apply to both qualitative and quantitative-based studies (Kitchin and Tate 2000). Literature sources on the theories of population dynamics and the supply of education were consulted to gain the background knowledge that was used to support and provide the foundation for this empirical research. The reliability of the methods and techniques used in this study were tested by reference to conventional statistical methods applicable to survey research methods. For example, the slope function in Excel was used to calculate change in the enrolments of selected schools over time. This function enabled the researcher to find out the schools with positive or negative growth in learner enrolment. The validity of this research centred on using different methods (Figure 1.7) in data collection and data analysis. The validity of qualitative research, according to Guion et al. (2011), refers to whether the findings are true and certain. Multiple methods were used to establish the certainty of the findings. Information relating to enrolments trends was obtained through interviews with educators and from documents of school enrolments by Education Management Information System (EMIS) compiled by the Department of Basic Education. Information supplied by heads of households regarding the situation (Question 33 Appendix 1) at schools was enhanced by visiting the schools concerned to assess the situation.

1.4 ETHICAL CONSIDERATIONS

The issue of ethics was taken into consideration in this study (Appendix 4C). This included observing the human dignity of the persons participating in this research; showing respect to the participants; not interviewing primary school learners; the absence of harm; beneficence; and justice. Entry into schools, circuit offices and the Department of Basic Education was obtained by requesting permission (Appendix 4A) to conduct research in Vhembe schools from the department's regional offices in Thohoyandou (permission letter from Vhembe Department of Basic Education in is included in this document). Individuals and other institutions with information relevant to this research were also contacted in advance (Appendix 4B) before being visited Information provided

by participants was treated as confidential. Participants were also informed that giving information was voluntary and that they had the right not to do so. However, the participants were humbly encouraged to supply information, on the basis that the information supplied was going to benefit society as a whole.

1.5 RESEARCH DESIGN

The research design illustrated in Figure 1.7 shows the progression of this research from its underlying philosophical approach, through data generation, analysis of findings, developing strategies and eliciting recommendations emerging from this research.

In this illustration the methodology and sources of data used as well as the theory in the field of population dynamics and education are highlighted. In order to approach this investigation from different perspectives, both qualitative and quantitative methods were used to enhance the validity of this research. The design also shows that the study was done taking into account various scales, namely the global, national and local scales. The content of each chapter is given below:

Chapter 1 describes the theme of the research, the key variables and the methodology used to collect, analyse and interpret the data used in the study.

Chapter 2 provides the cultural and physical background for Vhembe District, focusing on its population characteristics and settlement patterns and on the location of its schools.

Chapter 3 establishes why it is important to integrate population dynamics and education. It also highlights declining learner enrolments at schools as a worldwide phenomenon; and shows that the causal factors of this phenomenon are essentially declining fertility and the impact of migration.

Chapter 4 focuses on the policies developed to address the challenges faced by the Department of Basic Education. The chapter starts by describing what happens at the global scale to cater for “Education for All” (EFA), and then narrows the situation down to South Africa.

Chapter 5 focuses on data presentation, and on the analysis and interpretation of the data collected.

Chapter 6 is the conclusion to this study.

The findings indicate that the location of some primary schools and demographic changes make some primary schools non-viable. An adaptive strategies aimed to address the impact of declining learner enrolments is proposed. Although this study focused on primary schools, it can be extended to include the provision of secondary education. Learners from primary schools proceed to

secondary schools after completing the primary school education and the challenges facing primary schools can be transferred to secondary schools.

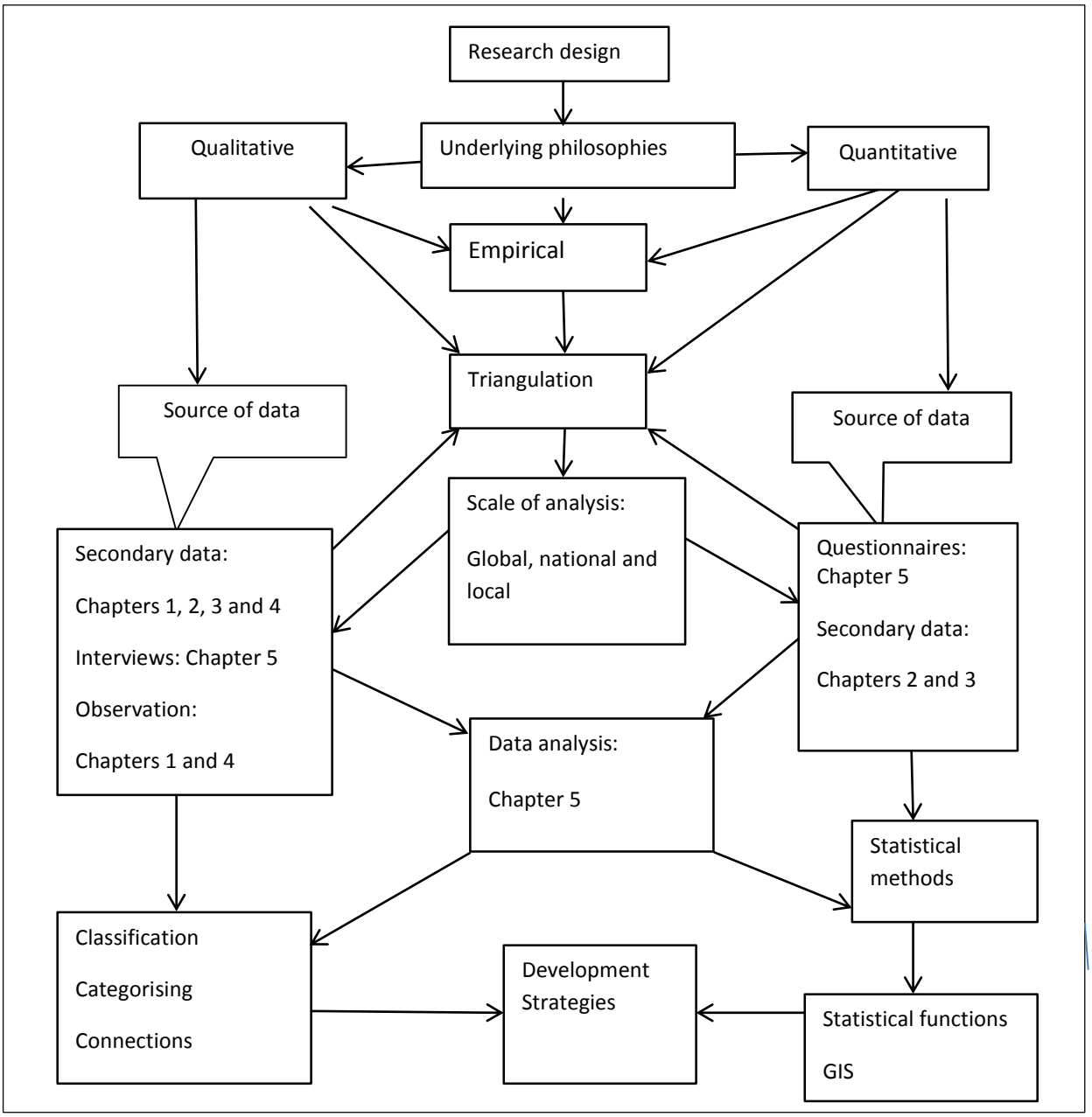

Figure 1.7: Research design of this study
Source: Fieldwork 2012

CHAPTER 2: THE CULTURAL AND PHYSICAL SETTING OF VHEMBE DISTRICT

Vhembe District is one of the five districts in Limpopo (and one of the 52 district municipalities of South Africa), which, in 1994, was formed by merging the former Venda, parts of former Lebowa and Gazankulu homelands and vast tracts of land occupied by white commercial farmers in the northern and north-western parts of South Africa. The Native Land Act No. 27 of 1913 created separate areas based on race and ethnic groups. Thus the black population, as the majority population group, was limited to occupying 13% of South Africa's total land area.

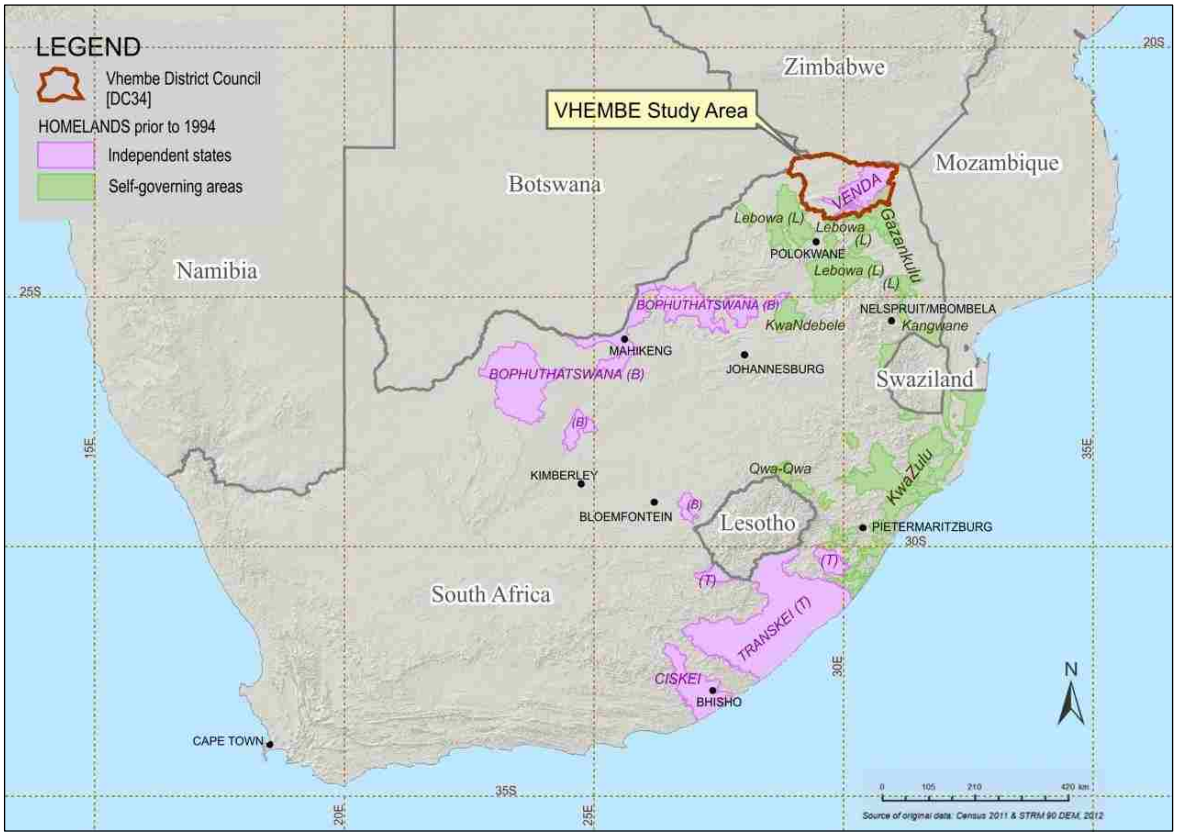

Figure 2.1: Location of former South African homelands prior 1994
Source: Statistics South Africa 2011

The land allocated to the native people was further subdivided into ten self-governing territories between the 1960s and 1970s (Gazankulu, Lebowa, Kangwane, KwaZulu, Transkei, Ciskei, Qwaqwa, Bophutatswana and KwaNdebele based on ethnicity). Some of these homelands like Bophutatswana and KwaZulu were composed of fragmented pieces of land (Figure 2.1). The homelands were located in areas dominated by particular ethnic groups. The Venda and Tsonga ethnic groups occupied the north-eastern part of the former Transvaal and their homelands were

established in that part of South Africa. Four of these homelands, namely Transkei, Bophuthatswana Venda and Ciskei attained independent status between 1976 and 1981. The independent status of these homelands was short-lived as they were incorporated back into South Africa in 1994. In this period of South Africa's history the black people living in these homeland areas of South Africa were all regarded as foreigners and labour migrants living on land reserved for whites. These former homeland areas became densely populated because of high population growth rates and the limited space on which they had to settle. Vhembe District is largely rural with only 1.1% of its population living in urban areas (Vhembe District Municipality 2008b).

This chapter gives an overview of the Vhembe District. The focus is first on its cultural setting and population characteristics describing its historical, social, economic and political aspects, including the spatial distribution of primary schools. Population dynamics, historical, social, political and economic forces are seen to have affected places in South Africa over time and given them distinctive characteristics. Discussing the cultural background of the area studied helps to give a picture of its population, its social organisation and the cultural landscape. The focus then turns to the physical background of the area, which gives insight into the influence of natural factors on settlement patterns and the economic development of the study area. The social, economic and political factors give rise to the spatio-temporal dynamics that are an indication of the forces behind population's characteristics and development in general.

2.1 CULTURAL BACKGROUND

This section deals with the population characteristics of the study area such as size, distribution, sex and age structure of Vhembe communities in general. These factors do not operate in isolation but in combination to shape the character of a population according to its, culture, beliefs and the natural environment in which it exists. The manner in which societies organise themselves differs across space and over time. According to the results of Census 2011, the population of Vhembe District was estimated at 1 293 406 people who live in its four municipalities (Table 2.1). Thulamela is the largest municipality in terms of population size, while Musina is the smallest. In terms of area size, Musina is the largest municipality, followed by Makhado, then Thulamela and then Mutale. Figure 2.2 shows the location of these municipalities and their average population densities. Vhembe's population as a whole grew by an average rate of 0.8% per annum between 2001 and 2011 (Statistics South Africa 2012a). The spatial growth in population, however, varies from one municipality to the other, with Musina having the highest population growth (73%) and Makhado the lowest over the ten year period 2001-2011.

Table 2.1: Vhembe District population according to municipalities, 2001-2011

Municipality	2001	2007	2011	Growth rate 2001–2011
Musina	39 310	57 195	68 128	73.30%
Mutale	82 650	108 215	91 793	11.06%
Thulamela	580 829	602 819	617 973	6.39%
Makhado	495 261	471 805	515 514	4.08%
Vhembe Total	**1 198 050**	**1 240034**	**1 293 406**	**7.90%**
Source: Community Survey 2007; Statistics South Africa 2012a				

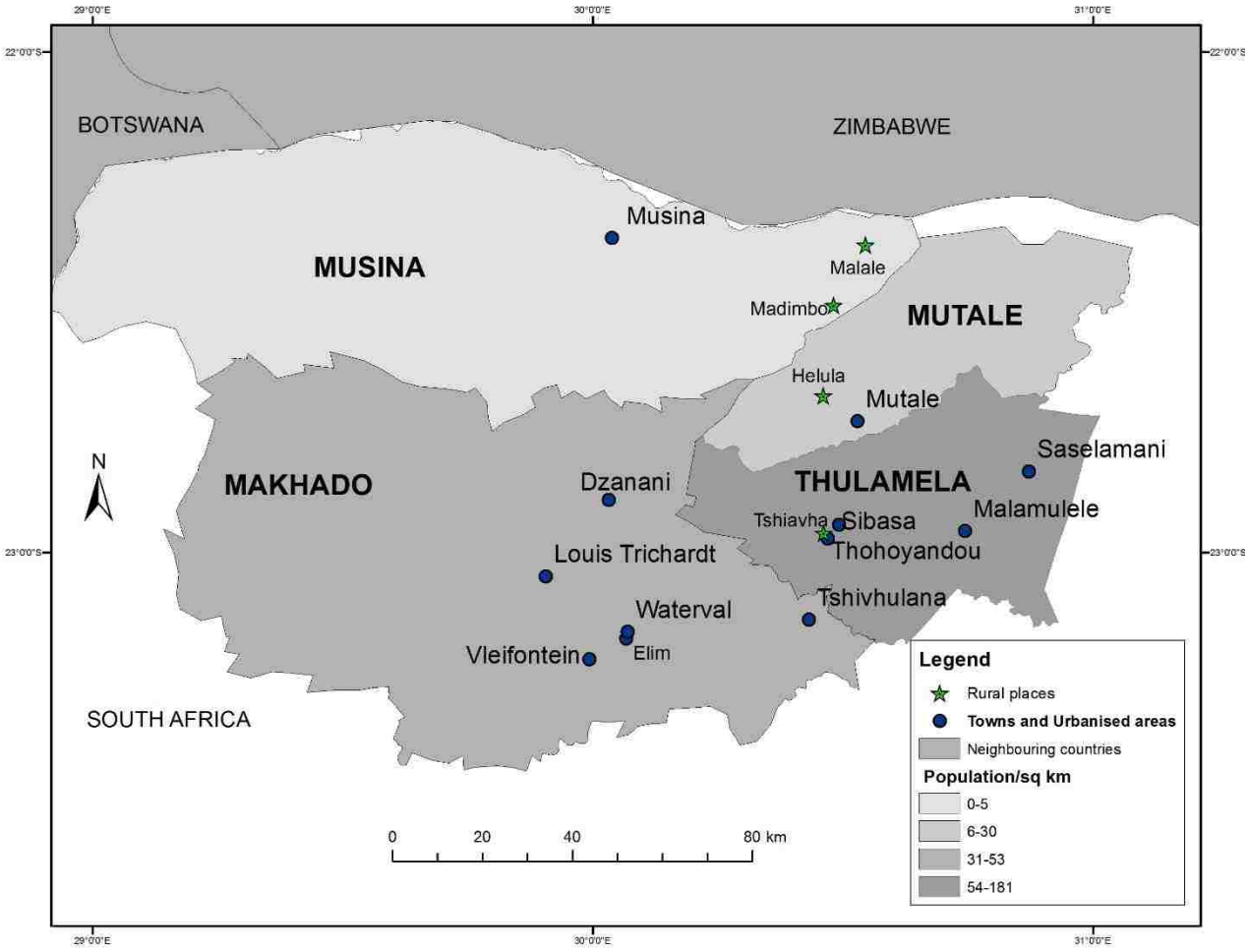

Figure 2.2: Map of Vhembe municipalities and location of urban places
Source: Statistics South Africa 2012a

Musina Municipality has attracted many illegal and legal migrants, since it is the first municipality across the border between South Africa and its neighbouring states of Zimbabwe in the north,

Botswana in the north-west and Mozambique in the east. Fifty-four per cent of the population is female and the dominant ethnic group is Venda (68.25% of the total population). Other population groups are Tsonga (26.40%), North Sotho (2.33%) and whites (1.52%). Ethnicity factors play a role in the location of schools.

In terms of average population density, Thulamela is densely populated (181 persons per km^2), while Musina has a population density of five persons per km^2. Musina is a border town which before 1994 it only attracted migrants working at the copper mine. After the abolition of the apartheid government its population grew sharply from 39 310 in 2001 to 68 359 in 2011 (Census data). Musina's population only constitutes 5% of Vhembe population. Its growth rate did not have a significant impact on the total population of Vhembe District.

Urbanised areas (Figure 2.2) and their surrounding environs are densely populated with some of their primary schools having very high learner enrolments.

There is steep increase in population numbers in Musina as shown in Table 2.1. Musina is characterised by an influx of persons from neighbouring Zimbabwe who believe that it offers employment opportunities on commercial farms, mining and in town. Mutale came second in terms of population growth, and this is attributable to natural increase in this municipality that is largely rural. Relatively low population growths in Thulamela and Makhado are attributable to a declining total fertility rate. According to Kyei (2012), the total fertility rate in Vhembe District is 2.5 thus it is approaching fertility replacement level which is expected to happen within the next few years. Declining fertility will tend to have a negative impact on the structure of the school-going population. Census 2011 data shows that the number of children between 2001 and 2011 has dropped by about 5%, from 40% of Vhembe District population in 2001 to 35% in 2011 (Statistics South Africa 2012a). This shows that the number of children has declined by an average of 0.5% a year. The decline in the school-age population is also affected by out-migration of the young and economically active section of the population. Statistics on migration in Limpopo indicate a net migration of -259 116 in 2011 (Statistics South Africa, 2012a).

Population data has both a spatial and a temporal dimension. Although people are mobile, population characteristics can be linked to specific places at specific times. When looking at the age structure of a particular population and place, we find that it has changed over time. Understanding the age structure (Figure 2.3) of Vhembe District's population is important because it indicates the specifics of its school-age population of a local area. The age structure of the population in Vhembe District is in a youthful stage, with 35% being children between the ages of 0 and 14 (Statistics South

Africa 2012a). The 2011 Census results indicate that the proportion of children to the total population aged 0-14 in Vhembe District had dropped from 40% in 2001 to 35% in 2011. The change in the school-age population has also affected the overall total of this age group (from 478 403 in 2001 to 451 764 in 2011). The sex structure of Vhembe District population shows that there are more males in the age groups 0 to 19, but from the age of 20 females outnumber males.

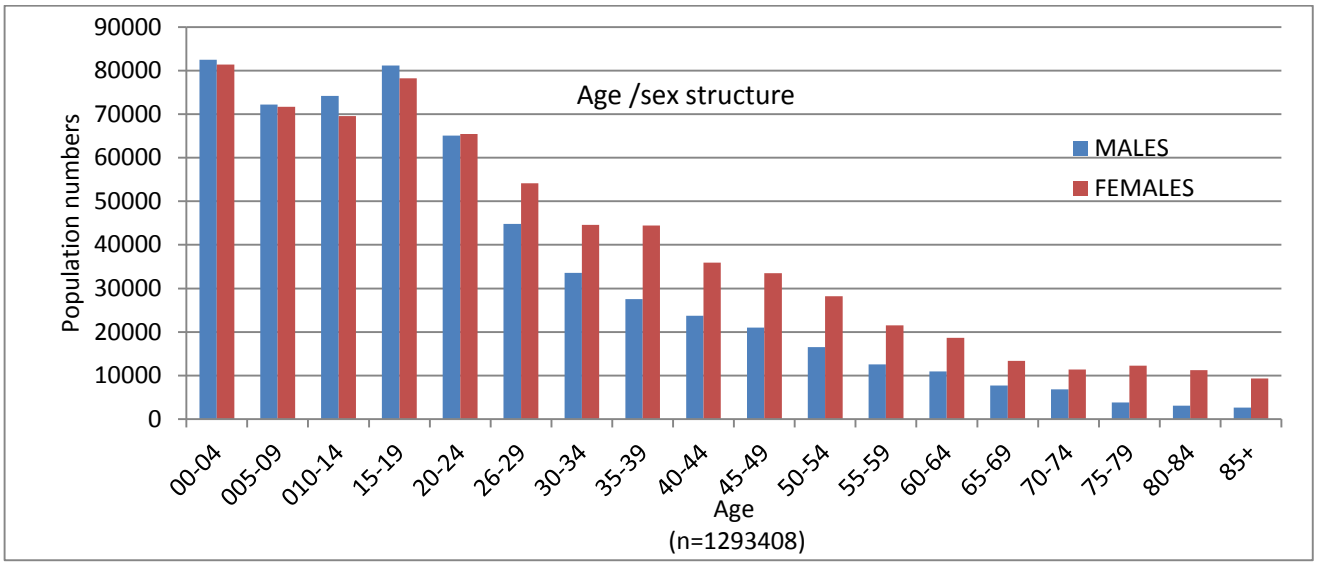

Figure 2.3: Sex/age structure of Vhembe District population in 2011
Source: Statistics South Africa 2012a

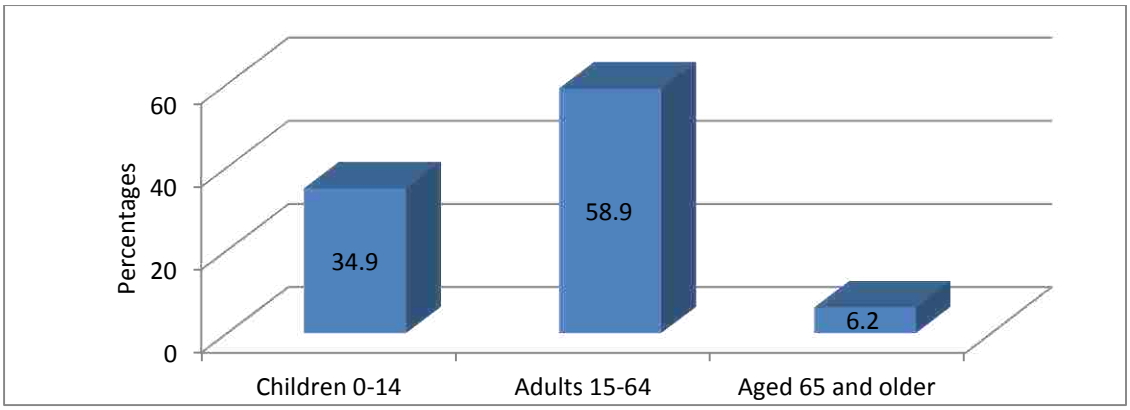

Figure 2.4: Population age structure percentages for Vhembe District in 2011
Source: Statistics South Africa 2012a

The negative growth rate of children between the ages of 0 and 14 has implications for the future school-age population. The decline in the percentage of children in relation to the total population implies that the number of adults and aged people are increasing; and that there is a shift of the age

structure of Vhembe District's population towards one dominated by adults. Nevertheless, the Vhembe District population age structure is still youthful. The results of Census 2011 (Figure 2.4) indicate that adults between the ages of 15 to 64 constitute 58.9% of the total population; children between the ages of 0 and 14 constitute 34.9% of the total; and senior citizens aged 65 and older, 6.2% (Statistics South Africa 2012a). With a youthful age structure, we expect an increase in births, while a population age structure dominated by an increasing number of elderly persons is associated with a declining birth rate.

The age structure of population in different municipalities reveals different proportions in terms of children aged between 0 and 14 years, and adults 65 years and older. The percentage of children between 0 and 14 varies from 33% in Musina Municipality to 43% in Mutale. According to Shapiro and Tambashe (2000), rural areas have high fertility when compared with urban areas. Musina's population is concentrated mainly in the town of Musina – hence the low percentage of children aged between 0 and 14. A higher proportion of the young persons in the population imply potential high fertility and continued population growth in an area (Shapiro and Tambashe 2000). With the exception of Musina, whose senior citizens represent 3% of the population, this age group constitutes between 6% and 7% of the population in the other municipalities. The age-dependent population (population younger than 15 and those 65 and older) constitutes 33% of the total population in Musina, and between 46% and 49% of the total in the other three municipalities. Musina Municipality has a high proportion of economically active people when compared with the other local municipalities in Vhembe District. Vhembe District Municipality (2012a) estimates that the percentage of its population younger than 20 years old comprises 51.3% of its total population.

The age structure of a population may also be determined by its median age. The median age divides a population into two numerically equal groups, with half the people younger than this age and the other half older. The median age of South Africa was estimated at 24.7 in 2010. The average median age of Limpopo is 22 and is the same as that of the Eastern Cape. The median age of the population in Vhembe District ranges from less than 17.8 to 25.8, depending on location. The median age is lower in rural areas when compared to that of urban areas. A country with a median age that lies between 20 and 29 has a young population, while one with a median age of 30 and above has an old population (Statistics South Africa 2012a). Areas that experience more out-migration of young persons have a median age slightly higher than 25.8. The sparsely populated areas of Mutale's north-western and north-eastern areas have a median age of less than 17.8 owing to a high fertility rate in the rural areas. Median age is important in this study because it gives an indication of a population age structure and potential future births; and consequently an indication

of the number of school-age learners needed to keep the schools going. Planning for the provision of education – especially the building of new schools – needs to consider these population indicators.

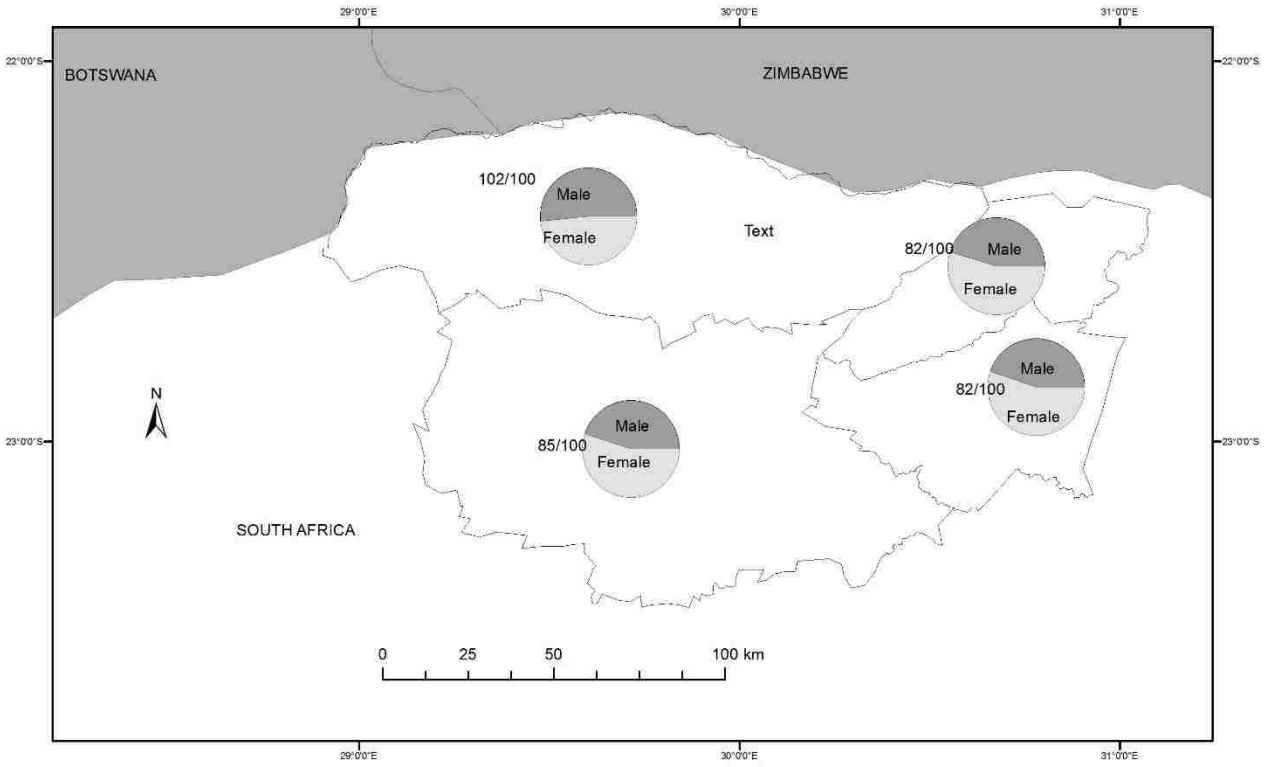

Figure 2.5: Gender distribution by municipality in Vhembe District in 2011
Source: Adapted from Statistics South Africa 2012a

Vhembe District has more females than the males (Figure 2.5) and the spatial distribution of the sexes varies across the four municipalities. Musina Municipality has on average more males than females that could be explained by male population migration from Zimbabwe. Gender distribution within municipalities is determined by location in relation to human activities whether the area is urban or rural, in a commercial farming areas or the presence of villages. The eastern part of Musina Municipality is rural and is characterised by a population with sex ratios that vary between 75 males to 90 males per 100 females. Racial groups and the nature of economic activities also affect the sex ratio. Sections of the town of Musina that have a dominantly white population have sex ratios ranging between 91/100 to 100/100; while Nancefield, which has a dominantly black population, has a sex ratio of 75/100. The farming areas of Musina and Luvuvhu in Makhado Municipality have sex ratios of 101/100 and 125/100 respectively (Statistics South Africa 2003).

With regard to culture, we find that boys are given a higher status than girls in African communities. Culturally families would not stop giving birth to more children until a boy is born. Boys are treated with high esteem because they are believed to be the ones to carry forward the name of the family. Considering the culture and sex structure of the population also sheds light on why primary schools have enrolled more boys than girls. The average sex ratio of Vhembe District's population is 84/100 (Statistics South Africa 2012a). Areas with sex ratios that display more males suggest that males may have migrated into those areas, leaving their wives in their areas of origin. Fewer women in an area may also affect the number of births needed to supply schools with school-age children.

The rural areas occupied by black people have sex ratios that range between 75/100 and 90/100, depending on out-migration rates. The area of Mutale bordering the Kruger National Park, where mining is practised, has more males than females (the ratio is greater than 125/100). Mountainous areas where forestry is practised have a higher proportion of males than females (the ratio is 110/100). Urbanised areas that offer job opportunities have more males than females. The town of Thohoyandou and the villages immediately next to it a have a low representation of females (the ratio is 125/100). Thohoyandou offers potential employment and males have immigrated into this area from less-developed areas. Generally, three of the four municipalities (Musina is the exception) display similar male/female ratio trends with higher proportions of females than males. This is to be expected since Vhembe District is largely rural. In 2001 and 2011, the male/female ratios in Vhembe District (Figure 2.5) display a similar pattern to that of Limpopo: 88/100. In the 2011 Census the sex ratio of Gauteng was 102/100 and that for North West was 103/100 (Statistics South Africa 2012b). North West and Gauteng have positive net migration, while Limpopo and the Eastern Cape have negative net migration. Limpopo and the Eastern Cape were affected by out-migration in terms of interprovincial migration.

Information on the sex ratio is important in understanding the role of gender differences in decision making in the provision of education. The sex ratio of a population has implications for the social and economic development of an area. In the developing world, fewer females than males receive an education. According to the United Nations (2010), 516 million women throughout the world have never had the opportunity to see the inside of a classroom. Women still lag behind in employment opportunities, wages and civic participation (Statistics South Africa 2013). Poor or no participation in civic matters by women implies that they lag behind in the sphere of social development, including fighting for their rights and the right to education for their children. Culturally, black women play a subordinate role in society and areas dominated by women are likely to lag behind socially and economically. The gender parity index at primary schools in Limpopo for 2011 in primary schools

was 0.92 with slightly more boys than girls (101 boys: 93 girls). These figures show that there are more boys than girls in Limpopo under the age of 20 (Statistics South Africa 2013). Examination of the sex ratio in different parts of Vhembe District thus helps to understand some of the educational challenges facing communities in the area**.**

Knowledge about the district's demographics serves as background to developing insight into the provision of education in Vhembe District. According to Daugherty and Kammeyer (1995: 44), demographics is defined as the management information that helps decision-makers identify population factors and population change for use in planning. Educational achievement, employment and household income levels are indicative of a society's level of socio-economic development.

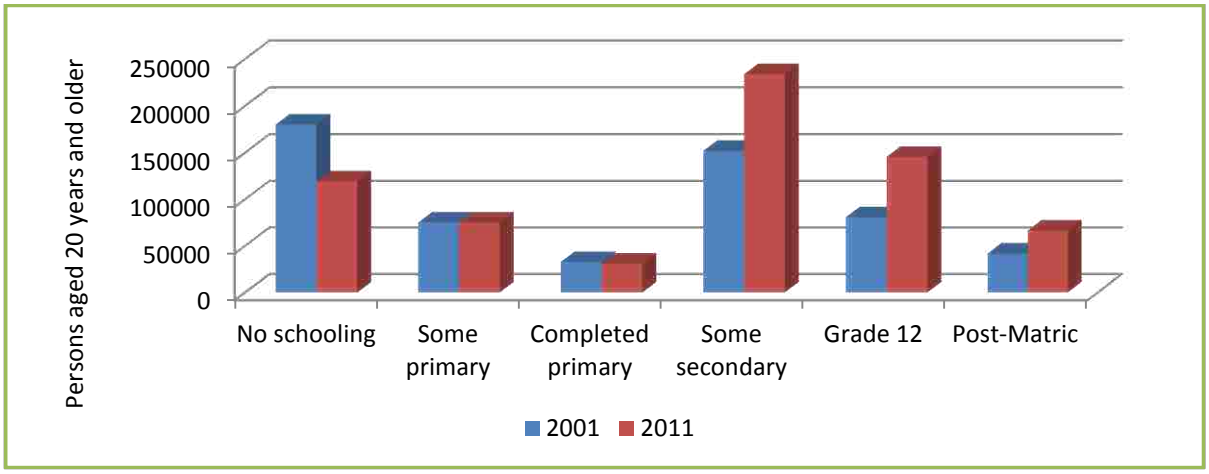

Figure 2.6: Educational achievements for persons 20 years and older between 2001 and 2011
Source: Statistics South Africa 2012a

The status of educational achievement in Vhembe District in 2011, for persons aged 20 and older, is illustrated in Figure 2.6. The percentages for educational achievement in the district, however, have improved since 2001. In 2001, people 20 years and older who had never attended school accounted for 32% of the total (Statistics South Africa 2012a), but that percentage had declined to 17.8% by 2011. The high level of illiteracy has implications for improving the quality of education in the area. To improve learning, children are expected to do part of their schoolwork at home with the assistance of parents. Parents who never attended school cannot assist their children or properly follow their children's progress. Teachers have to be aware of this situation and accommodate it in their daily classroom practice, adding it to their other responsibilities.

The results of Census 2011 also show a further improvement in educational achievement in six categories. The first one encompasses people with some secondary education (151 779 adult persons out of 561 583 in 2001 compared with 233 654 adult persons out of 672 278 in 2011). The percentage of adults with some secondary education had thus improved from 27% in 2001 to 34% in 2011. The second category refers to adults with Grade 12, whose numbers had improved from 41 714 out of 561 383 (7.42%) in 2001 to 66 362 out of 670 278 (9.9%) in 2011. The low educational achievement profile of the population in the Vhembe District is nevertheless cause for concern since it indicates poor economic development.

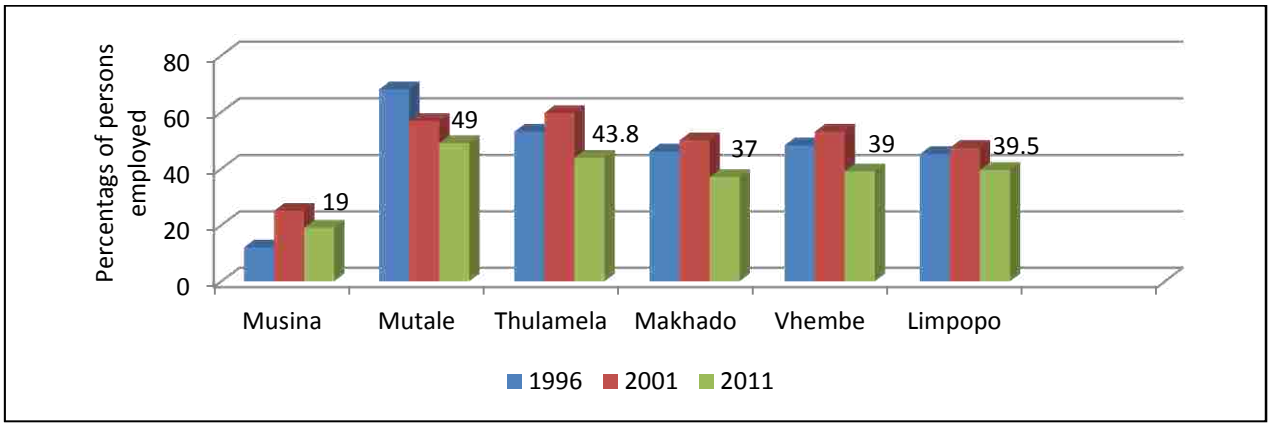

Figure 2.7: Unemployment rates in Vhembe District from 1996-2011
Source: Statistics South Africa 2012b

Table 2.2: Economic sectors and labour absorption in Limpopo, 2011–2012

Sector	2011	2012	2012 (%)	Change	Change (%)	Nature of change
Agriculture	52 000	88 000	9.40	36 000	69.20	Increase
Mining	57 000	70 000	7.40	13 000	22.80	Increase
Manufacturing	62 000	69 000	7.30	7 000	11.20	Increase
Utilities	9 000	8 000	8.50	-1 000	-11.10	Decline
Construction	93 000	92 000	9.80	-1 000	-1.10	Decline
Trade	243 000	246 000	26.00	3 000	1.20	Increase
Transport	33 000	55 000	5.80	22 000	66.60	Increase
Finance	64 000	58 000	6.20	-6 000	-9.40	Decline
Communication and social services	227 000	234 000	25.00	7 000	3.10	Increase
Private households	101 000	76 000	8.10	-25 000	-24.80	Decline
Source: Statistics South Africa 2012c						

The main sources of income for the Vhembe District Municipality are agriculture, forestry and some mining in the primary sector. Retail trading also contributes some revenue to the municipality, through taxation. Other sectors such as manufacturing and transportation contribute very little. Moreover, employment opportunities are tending to decline. *Global Insight* of June 2006 (Vhembe Municipality 2008b), indicates that 65% of the population of Vhembe District was living in poverty.

According to the *Labour Survey* of September 2005, the percentage of unemployed people in Limpopo in 2004 was 27.8%. In March 2005, this rose to 32.4% (Statistics South Africa 2005); and in 2011, to 39.5% (Statistics South Africa 2012a). This state of affairs has not changed much and in 2011 unemployment rates (Figure 2.7) in Mutale was 49%, Thulamela 44% and Makhado 37%. Musina is the only municipality in Vhembe District in which the unemployment rate in 2011 was less than 20%. However, examination of the general employment situation in Limpopo as a whole indicates that there is little improvement in job creation in the province as very few local people are absorbed in the Limpopo job markets. Negative net migration (-259 116 persons in 2011) in the area shows that there are not many employment opportunities to attract in-migrants (Statistics South Africa 2012d). This is an indication that the economy in Limpopo still lags behind. The economic sectors in Limpopo as a whole (Table 2.2) show that the labour force absorbed in private households, utilities and finance decreased between 2011 and 2012. The number of employees in the household sector depends on the number of employees in other sectors, since the former are employed to look after children and households when the latter have found work. Although there were significant increases in employment opportunities in sectors such as mining, manufacturing and transport, these contributed very little in curbing migration to other more developed provinces. A decline in employment encourages out-migration, when individuals migrate to other provinces that offer better employment opportunities. Out-migration is responsible for the decline in school-age population and ultimately the closure of some Vhembe District schools.

The Limpopo labour force was 1 166 000 in 2012, but only 940 000 of this total were employed. The industries that absorbed comparatively more of the labour force were trade (26%) and communication and social services (25%). The industry that absorbed the smallest percentage of members of the employed labour force in Limpopo was transport (5.8%). Agriculture, mining, manufacturing, utilities and construction are each contributing less than 10% in labour absorption (Statistics South Africa 2012c).

Census results of 2011 indicate the average annual household income for Vhembe District as R49 440 and this was the second lowest in all of Limpopo's district municipalities (Statistics South Africa 2012a). The lowest household average income in Limpopo is that of Sekhukhune (R45 977) and the highest is that of Waterberg (R72 421). The average household income for Vhembe District is even lower than that of the whole province (R56 841) (Statistics South Africa 2012a). Many families are dependent on child and old-age support grants, and Table 2.3 is evidence of this. According to the South African Social Security Agency (SASSA) office in Thohoyandou, 495 252 persons receive social support grants and many families are dependent on them for their daily food.

Table 2.3: Persons receiving social support grants in Vhembe District in 2012

Local municipality office	Old-age grants	Child-support grants	Disability grants for children	Foster care grants	Total
Musina	1 497	11 972	497	445	14 411
Mutale	6 525	29 926	1 487	521	38 459
Thulamela	42 348	177 067	10 096	2 220	232 832
Makhado	43 037	155 636	8 657	3 321	210 651
Vhembe	93 407	374 601	20 737	6 507	495 252
Source: SASSA, Thohoyandou 2012					

The low employment absorption rate of 0.6% between 2012 and 2013 in Limpopo (Statistics South Africa 2013a) indicates why a high number of children is receiving child-support grants. According to SASSA, there were 374 601 Vhembe District children (31%) of Vhembe District's population) receiving child-grant support, out of 8 million children receiving grants throughout the country in 2012 (Children's Institute 2012). Vhembe District's dependency ratio in 2012 was 69.9%; and that of Limpopo as a whole was 67.3% (Statistics South Africa 2012a). Table 2.3 shows the total population that was receiving social support grants in Vhembe District Municipality. It is to be noted that frequently a household whose only income is a social grant finds it very difficult to budget for school fees and other expenses as other survival priorities have to take precedence.

The population characteristics are seen to be playing a role in determining the dynamics in learner enrolment either directly or indirectly. The aim of the study was to apply a spatio-temporal dynamics in the provision of primary education. Population numbers coupled with a youthful age structure are indicators of potential births in a place. Lack of employment opportunities may induce out-migration of the young persons and thus affect potential school-going children needed to feed local schools. Low educational achievement is acting against potential business investors who may be interested

in initiating business ventures in Vhembe District. This is indicated by the negative net migration in Limpopo. Persons, even those unskilled opt to migrate from Vhembe District in search of better opportunities elsewhere. The high numbers of persons receiving social support grant indicate the level of poverty in an area. All these are the forces directly or indirectly responsible for changes in learner enrolment in space. Learner enrolment however is also acted upon by the cultural landscape that characterise particular places in Vhembe District.

2.2 CULTURAL LANDSCAPE

The nature of the cultural landscape of a society is determined by the way it organises itself (socially, politically and economically) within its own space, its beliefs and the way individuals interact with one another. Settlement in the rural areas is mainly in the form of villages of varying population size and density. A village is a group of houses situated in rural area larger than a hamlet but smaller than a town (Concise Oxford English Dictionary 2002). A village on tribal land has a traditional leader (Gota) who looks after the affairs of people in that place. The densely populated areas of Vhembe District are under the custody of traditional leaders and these are *Mahos*i (chiefs) and *Magota* (headmen). The *Mahosi* and their subjects also decide if they want schools in their villages. Of the four municipalities, Mutale and Thulamela are largely constituted by tribal land (Figure 2.8). *Mahosi* and *Magota* have custody over their land including land declared as urban. This situation, according to a recent Vhembe District Municipality report (2012a), makes it difficult for development to take place as the land tenure system is not favourable to commercial development. There are usually conflicts between the municipality and the *Mahosi* over the land, even in areas declared as urban by the local municipalities.

The town of Thohoyandou falls within the land under the custody of *Khosi* Tshivhase and *Khosi* Mphaphuli. This presents a challenge for the municipality regarding decision making in matters relating to development, as the *mahosi* have their own expectations which may not necessarily agree with those of the municipality or of different tribal authorities. Tshiavha, an area located near Thohoyandou (shown in Figure 2.2, Section 2.1), which had been reserved for urban development, was seized back by the tribal authority of Ngovhela. Figure 2.8 shows the location of Thohoyandou within land under tribal authority. The authority demarcated the area into residential plots that it sold to persons seeking land on which to build houses. In addition, some development projects in Thohoyandou were halted when contractors learnt that the land had been sold to more than one individual, first by the chief and then by the municipality, or vice versa.

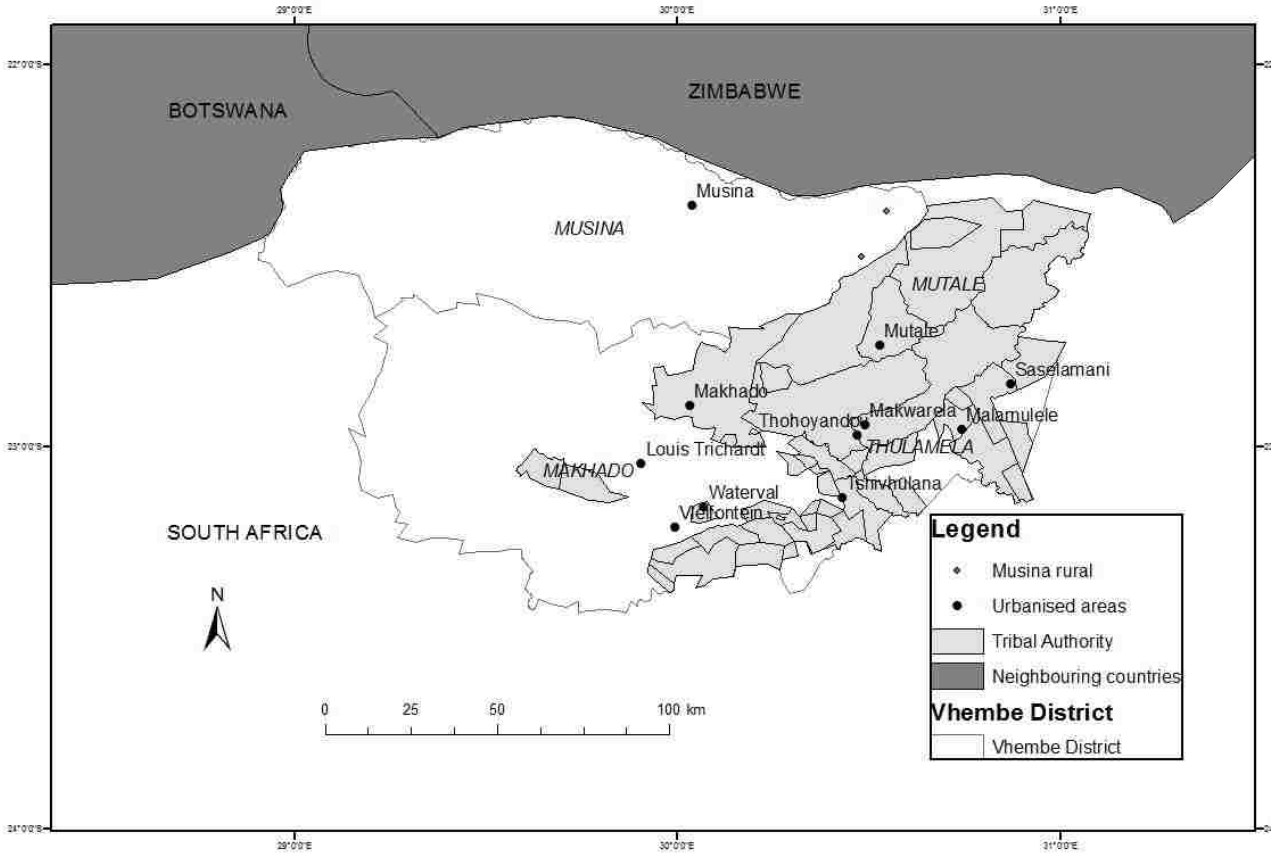

Figure 2.8: Map of the location of land under Tribal Authority in Vhembe District
Source: Statistics South Africa 2003

Population density is one aspect of the population that plays a role in determining service delivery, including how schools should be distributed throughout communities. More than three quarters of the Thulamela Municipality has a population density that exceeds 100 persons per km^2. Makhado Municipality is more densely populated in the eastern than in the western part. Densely populated areas are situated in tribal authority land and urbanised places (Figure 2.8). Musina and Makhado municipalities are large because they have incorporated vast commercial farming land owned mainly by white farmers. The sparse population in areas used for commercial farming affected the location of schools. Schools here are located far apart. Too many schools (Figure 1.3 in section 1.2.2) are found in the densely populated tribal lands because the schools were located by the *Mahosi* (chiefs) haphazardly without taking into account distance to existing schools in neighbouring villages. Schools are regarded as fulfilling a sense of pride and belonging for local communities. The closure of schools socially and politically disempowers affected local communities.

Physical conditions (such as rainfall, topography, and soil fertility), socio-economic and political factors influence settlement patterns significantly. Mutale and Thulamela municipalities are situated within tribal land. Commercial farmers practising both arable and pastoral farming are located in the sparsely populated areas of Musina. Musina Municipality has only two rural settlements, namely Madimbo and Malale in the eastern part (Figure 2.8). These two settlements are, growing very fast because of immigrants from Zimbabwe and Mozambique, most of whom entered the country illegally and are employed on the farms. Malale and Madimbo are new as they were created after 1994.The South African Defence Force occupied both these places as their army was patrolling the boundary between South Africa and Zimbabwe during the apartheid era. Each of these settlements has a primary school with learner enrolments that are increasing. Malale and Madimbo settlements are located more than twenty kilometres apart. The level of literacy in these two settlements is very low because many of their residents originally lived on the farms and did not attend school. Malale, for example, did not have a school until 1998. There is an absence of a secondary school in these villages and this contributes to the low literacy level in the area. Since these two settlements do not have a secondary school, the few learners who do go beyond primary education commute to Tshiungani in Mutale Municipality. The distance travelled from Malale to Tshiungani is more than 30 km and only those children whose parents can afford to pay for transport are able to continue after completing primary education. Parents really want their children to be educated because they sincerely believe that education is the key to a successful life and through education poverty could be alleviated. Thus, location and distance are spatial constraints in the provision of accessible education in Musina Municipality and other parts of the rural areas in Vhembe District. Some learners are unable to go continue with their schooling because of long distances travelled in order to access the nearest primary school.

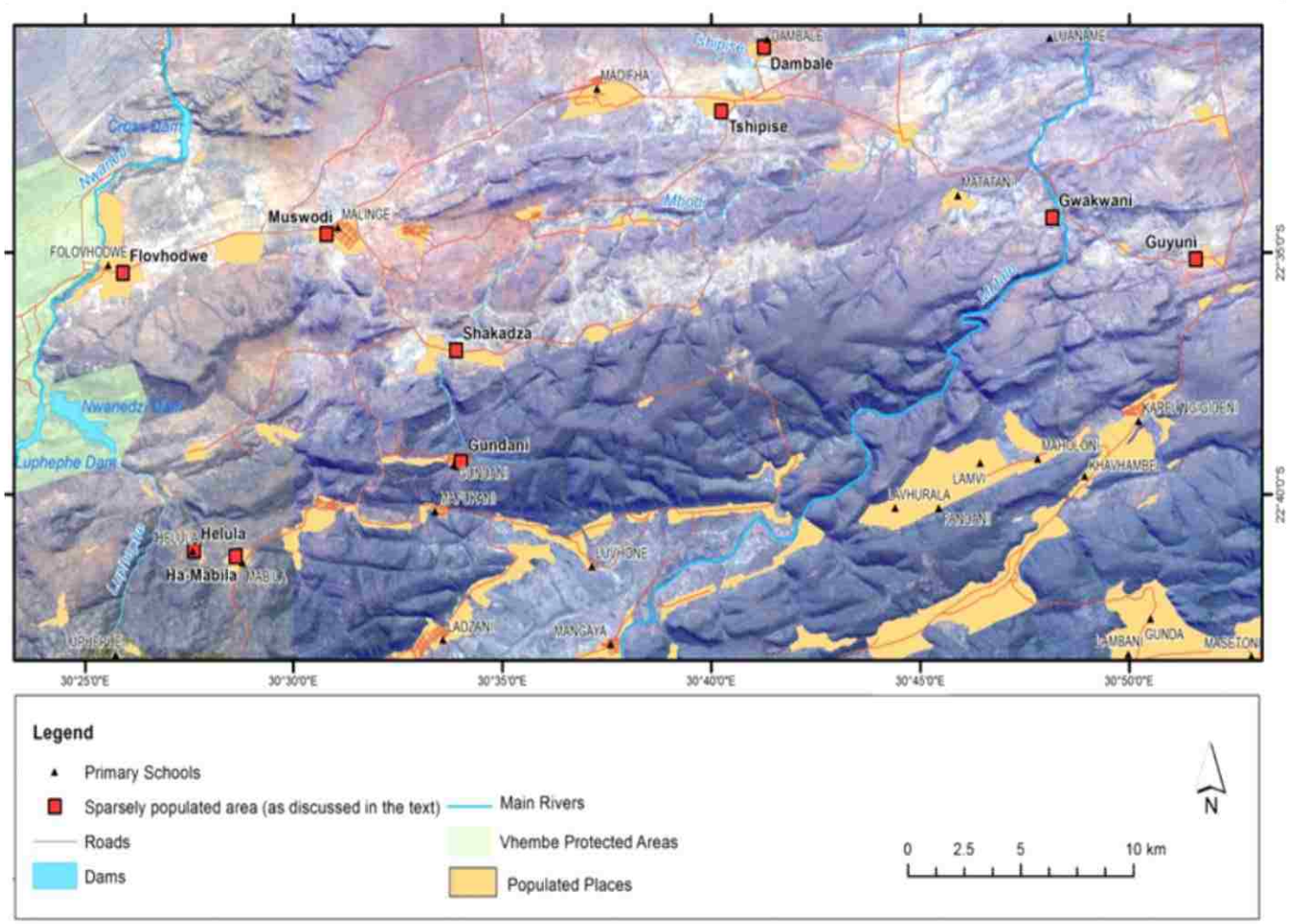

Figure 2.9: Dispersed settlement in Mutale Municipality in the Soutpansberg mountain range
Source: SANSA 2012; SANBI 2011

Figure 2.10: Villages that have coalesced at the foot of the Soutpansberg region in Vhembe District
Source: SANSA 2012

The dispersed nature of settlement along the Soutpansberg in Mutale Municipality is illustrated in Figure 2.9. The villages are separated by forested areas and this makes them isolated from one another. Mutale Municipality is therefore largely rural and has an average population density of

about 32 persons per km^2 (Statistics South Africa 2003). Population densities in the villages generally vary from less than 1 person to 112 persons per km^2. There are villages like Helula with fewer than 100 people and large villages with more than 10 000 persons in size. There are some places in the south-west where population densities vary from 782 to 1 630 people. This is the case along the Mutale River valley in the south and the area near Mulodi village where the town, Mutale, is located. The villages in the east and north-east are located far apart. Villages in the south-western part have grown physically and have coalesced to form a continuous chain of built-up villages. Figure 2.10 is a typical example of villages that have coalesced to form a continuous built-up area. In villages that are isolated schools are located far apart and competition for learners between schools is minimal.

Table 2.4: Residential population densities/ km^2 of selected places in Vhembe District in the year 2011

Place	Type of settlement	Area km^2	Total Population	Density/km^2
Helula	Remote rural	0.07	60	835
Gundani	Remote rural	0.88	306	347
Shakadza	Remote rural	2.15	1 719	800
Waterval	Urban	3.6	7 712	2141
Folovhodwe	Village	3.24	2 806	866
Tshakhuma	Dense rural	11.62	11 371	1494
Maungani	Dense rural	7.48	7 271	972
Mavambe	Dense rural	5.28	4 133	783
Maphophe	Dense rural	9.57	13 070	1400
Thohoyandou	Town	42.62	69 453	1629
Shayandima	Urban	6.15	10 259	1667
Itsani	Peri-urban	6.89	11 473	1664
Fondwe	Dense rural	7.48	1 798	429
Madimbo	Dense rural	2.61	2 739	1050
Source of data: Statistics South Africa 2011b				

Thulamela Municipality is densely populated and includes the Soutpansberg mountain range and the eastern lowveld (the Malamulele area). It has an average population density of 180 persons per km^2, but its residential population density in the villages can be as high as 1400 persons per km^2. One example of a village whose residential population density exceeds over a thousand persons per square kilometre is Maphophe (1400 persons per km^2). Residential population density is calculated by dividing the total residential land by the total population living in that parcel of land. Population density in Thulamela far exceeds that of the 44 persons per km^2 average for the whole province. Villages have expanded physically and have merged with one another, and it is now difficult to distinguish one village from another. Thulamela Municipality has few sparsely populated

areas; and these are found in the mountainous and protected areas or in places that are inaccessible for settlement purposes. Protected areas are areas reserved for nature conservation or sacred places. Population density varies from 0–354 persons per km^2 in the sparsely populated mountainous north-east and the protected area of the Thathe-Vondo sacred forest in the north-west, to 1 463–2 259 persons in the Thohoyandou and Malamulele environs.

The villages in Thohoyandou and its environs have the highest concentration of communities. Gross population density or net residential area is used as a key variable in planning and allocating resources such as health-service points, water supply and schools. Net residential densities of selected places are shown in Table 2.4. Thohoyandou Town has an area of 42.62 km^2 and it is the largest settlement in Vhembe District. Helula village is the smallest settlement with a total population size of 60 persons and occupies 0.07 km^2. When taking into account the residential areas that the other settlements occupy we find that their distance range from the central point would not exceed 5 km. This implies that if a school were centrally located the learners from the furthest point would not travel for more than 5 km. More than one school would therefore be needed were total population exceeds 4 500. This is the minimum population threshold for a large school according the rating of South African primary schools set by the Department of Basic Education (CSIR 2012).

The history of South Africa, however, played a major role in influencing settlement patterns and the provision of education in Vhembe District. The Bantu Authorities Act, No. 68 of 1951, created separate government structures in South Africa. Schools in South Africa were racially divided because of the introduction of this Act. Some of the current challenges affecting the provision of education in primary schools can be linked to government policies enforced prior to 1994. These policies influenced the provision of education either directly or indirectly. The introduction of the Bantu Education Act, No. 47 of 1953, resulted in learners not only attending separate schools but also using separate curricula.

According to Naicker (2000), the Bantu curriculum was designed to teach blacks to be assistants in the white-run economy and society, regardless of their aspirations and abilities. The curriculum was therefore designed to serve the interests of the white supremacy, and promoted stereotypes via its curriculum and textbooks. Naicker (2000) points out that the curriculum emphasised separateness and that the fiscal allocations for education favoured the education of whites. Unequal funding for the race groups resulted in wide-scale disparities with regard to all aspects of education and educational delivery, including the quality of teacher training; the quality and quantity of resources;

the location of schools; and the availability of support materials. These disparities were recognisable in space, particularly in terms of the provision of school infrastructure and areal developments. It is because of some of these disparities that a number of areas in Vhembe District today face the problem of a mismatch between population distribution and the location of schools.

Prior to 1994 government policies were strongly the driving forces behind settlement patterns and schooling systems. The Black Self-government Act, No. 46 of 1958, entrenched the National Party's policy of nominally independent homelands for black people. Self-governing Bantu units were proposed, which would have administrative powers and would develop towards self-autonomy and self-government. Indigenous black persons were referred to as Bantus by the apartheid government. The term 'Bantu' referred to the indigenous black population as a whole including those coming from neighbouring countries. The Bantu Investment Corporation Act, No. 34 of 1959, set up a mechanism to transfer capital to the homelands in order to create employment there. The Bantu Homeland Citizenship Act, No. 26 of 1970, defined black people living throughout South Africa as legal citizens of one of the ten homelands designated for their particular ethnic group – thereby stripping them of their South African nationality. Men working in the urban areas of South Africa became the citizens of their ethnic territory and de facto immigrants in the rest of South Africa, which was reserved for whites. The control of the influx of the black population into former white areas prevented many migrants from living with their families in the urban areas. The creation of the homelands exacerbated the problem of improper planning because homeland administrators planned their own activities assisted by individuals who lived kilometres away and knew nothing about conditions in the homelands. One planning activity that did not consider demographic or long-term consequences was the haphazard location of schools.

Black persons in Vhembe District represent 98.8% of the total population and the distribution by race and ethnic groups is still distinct. The other population groups (whites, coloureds and Indians) are very small, each constituting less than 1% of the total. Vhembe District is very poor and in 2006 it had a human development index (HDI) of 0.51 (Vhembe District Municipality 2008a). The HDI shows whether a country is developed; developing; or under-developed. It shows development in terms of the following per capita: life expectancy; literacy; level of education; standard of living; and gross domestic product (GDP). South Africa's HDI falls among that of the medium-developed countries, ranging from 0.650 to 0.699 (United Nations 2011). According to Vhembe Municipality, the HDI in Vhembe is not sufficient for economic development. The level of economic inequality in the region also shows great disparities, with rural Mutale being very poor (0.47HDI) Makhado and

Thulamela (0.51) and Musina having the highest human development index of 0.53 (Vhembe District Municipality 2008a).

Musina Town developed as a copper mining town. Other minerals mined in Musina Municipality are diamonds and coal. Musina Town also serves as a border town linking people from Zimbabwe, Malawi and Zambia to South Africa, which is another reason why Musina Municipality is doing better economically than other municipalities.

The gap between the rich and the poor is very large in Musina Municipality. Musina Municipality has many commercial farms owned mainly by whites, with blacks serving as labourers on these farms. Four Vhembe commercial farms – in Malamula (Tshipise), Makwembe (Musina), Timongo in Levubu and Mbhongolo in Waterpoort – had 1 680 permanent and 1 000 casual workers. Not all farm workers stay with their families on the farms, because schools in the farming areas are usually located far from the residential areas. According to Statistics South Africa (2013), 739 000 persons in South Africa were employed in the agricultural sector in the first quarter of 2013. About 30 farm schools were closed down owing to low enrolments between 2004 and 2013 (Vhembe survey snap 2004; EMIS 2013). A study by Wisborg et al. (2013: 13) shows that 942 000 persons were evicted from farms between 1994 and 2004; and half of these were children. Uncertainty about life on the farms has resulted in farm workers leaving their children with relatives in villages where there is easy access to schools. Previously farmers provided accommodation for their workers on the farms, but they had no tenure rights. Because now farm workers can claim tenancy rights, many farmers no longer provide dwellings on farms and labourers live in nearby villages, leading to closure of schools on farms.

When locating schools the issue of a dominant language in an area too has to be taken into account. Schools using different media of instruction can be located in close proximity. Distance to neighbouring schools is in this case insignificant and this is the case in towns.

The discussion so far has established that the organisation of a population is made up of the social, economic and social environments that do not necessarily act in isolation but together give settlements their distinctive characters and ultimately also determine the location of primary schools. From a geographical perspective, ultimately, social and cultural factors alone cannot determine a suitable location of a primary school without taking into account environmental issues that would be affect distance and safety. The next section establishes whether environmental factors specifically play a role in determining the sustainability of primary schools in Vhembe District.

2.3 PHYSICAL BACKGROUND OF VHEMBE DISTRICT

The physical environment plays a major role in influencing human settlement patterns and development in general. This section focuses on topography, temperature and rainfall as major factors that have influenced population distribution and the location of schools. At even the micro-scale, topography influences the location of schools. When planning and deciding on a suitable site and location of a school several factors are taken into account: the slope of the ground of the site, physical surroundings, space openness, accessibility in terms of distance from home to school and safety. At the macro-scale topography and rainfall distribution too influenced settlement patterns and where schools are located.

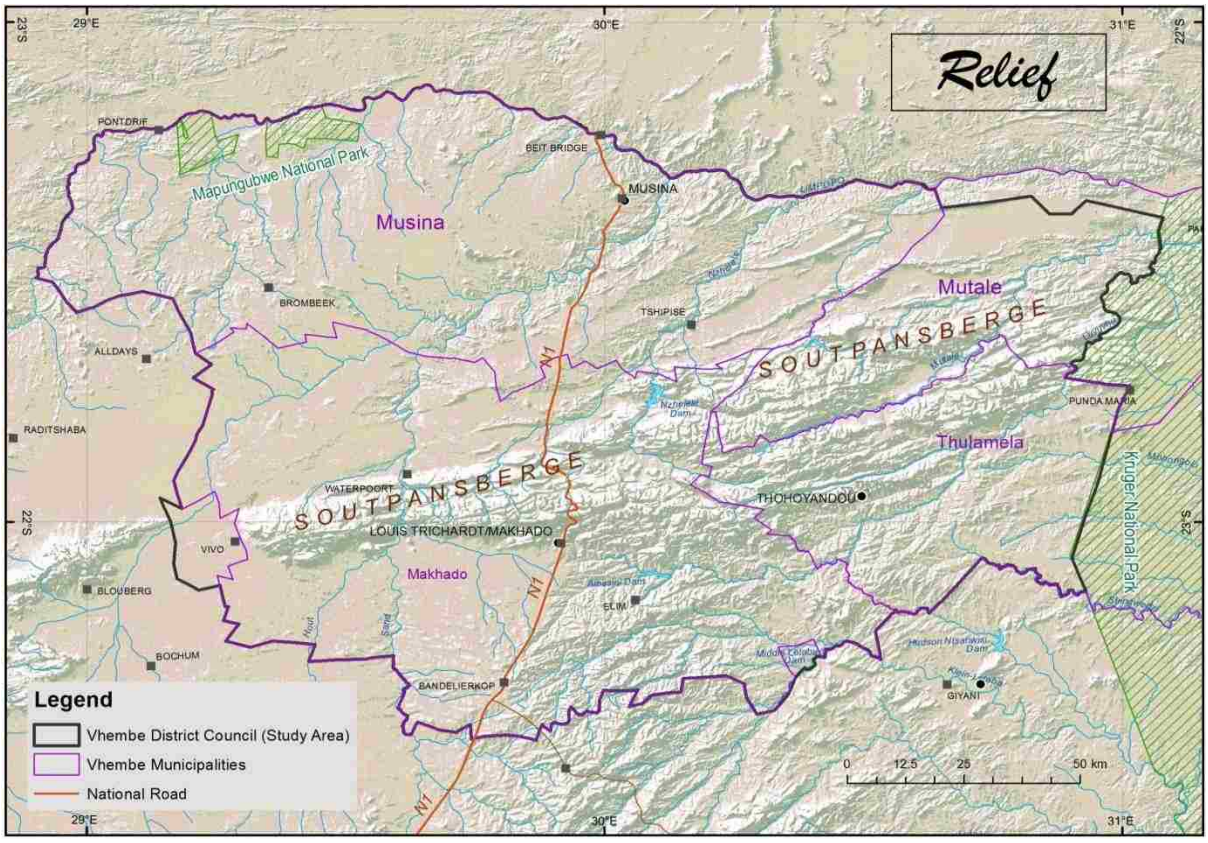

Figure 2.11: Map showing the relief of Vhembe District
Source: ESRI 2010 ArcGIS Geospatial World Map Data

Vhembe District covers an area of about 21 407 km^2 (Vhembe District Municipality 2008a) and is characterised by both high-lying and low-lying areas. Its relief is divided into the lowveld in the east; the Limpopo valley in the north and north-west; the Soutpansberg region in the central part, and the Pietersburg plateau in the south. The altitude above sea level of Vhembe District varies between 200 m in the north-eastern part of the area and over 1 500 m in the Soutpansberg mountain range

(Figure 2.11) which lies in an east–west direction. It is approximately 210 km long; 60 km at its widest part; and 15 km at its narrowest point. The Limpopo valley lies at altitudes of between 200 m and 600 m. The central part, occupied mainly by the Soutpansberg, has altitudes that vary between 900 m and over 1500 m. Matshavhawe and Thononda are villages located at altitude of about 1200 m above sea level. The south-western part of Vhembe District has altitudes that range from 800 m to 1200 m above sea level. The eastern part, which forms part of the lowveld, is low-lying and has altitudes starting at 300 m. The district's northern, eastern, south-western and south-eastern parts are flat. The north-eastern and southern parts have undulating relief. The north-eastern part, at Dovho and Tshilamusi, has altitudes as low as 200 m above sea level, while the north-western part has an altitude of about 400 m above sea level. From the macro-scale the pattern of the location of schools is similar to that of the location of villages. Looking at the location of schools from a micro-scale the physical aspect of the environment such as the slope of the place, size, accessibility and safety are taken into account when locating schools.

Vhembe District is very hot in summer, and temperatures can be as high as 40 ^{0}C. Winters are mild, with a minimum temperature of about 10 ^{0}C (Vhembe District Municipality 2012a). The low-lying areas in the Limpopo valley in the north and the lowveld in the east are very hot, while the mountain areas are relatively cool. Very high temperatures in the low-lying area did not stop people from settling there, in a number of villages. Temperature plays a role in influencing rainfall and evaporation in the area. Vhembe District Municipality especially Musina has very high temperatures in summer that can affect learning and teaching. Only former schools for the whites are air-conditioned while those in areas dominated by black people are not.

The average rainfall in Vhembe District according to the data provided by Limpopo Department of Water and Forestry (2008) varies over space and time and shows a range of less than 200 to more than 600 mm per annum (Figure 2.12). Mean annual precipitation in the Limpopo varies from 200 mm in the Limpopo valley to over 600 mm over the Soutpansberg area. Rainfall in Vhembe District is seasonal, occurs during the summer months and its distribution varies over space. The northern part of Vhembe District, located in the Limpopo valley, has a mean annual precipitation that varies between 200 mm and 400 mm. The area surrounding the Soutpansberg has a mean annual rainfall varying from 600 mm to 800 mm.

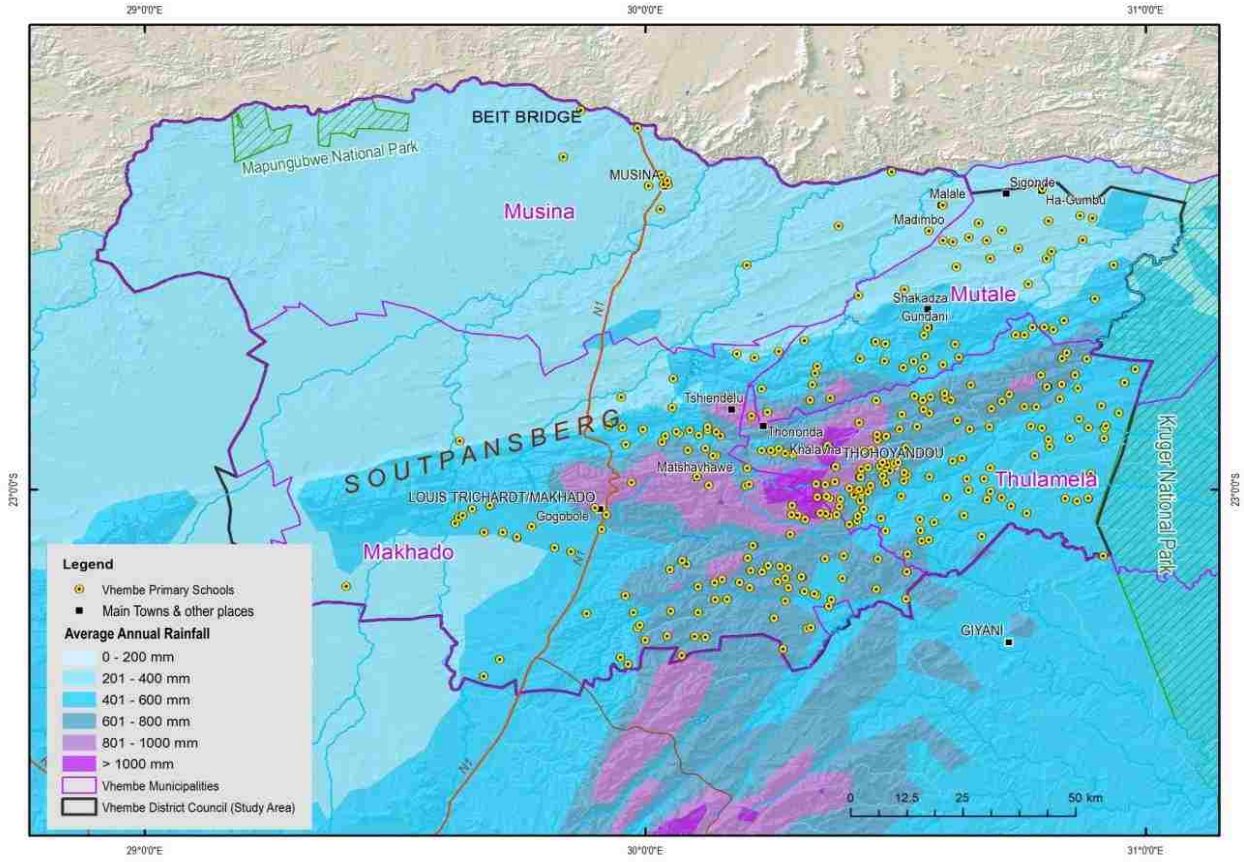

Figure 2.12 Rainfall map of Vhembe District
Source: SANBI 2011

The eastern and southern slopes of the Soutpansberg have a mean annual precipitation greater than 800 mm. Musina Municipality and the northern and north-eastern parts of Mutale, are located in a zone with a mean annual precipitation of about 250 mm. Availability of water is a requirement for each school and in some areas where piped water is not available because of water scarcity, boreholes are provided.

Annual precipitation influences the availability of water resources and therefore settlement distribution. The rivers in Vhembe District originate from the Soutpansberg mountain range and flow towards the low-lying area in the north and north-east. The Lower Sand River in Musina Municipality, according to Midgley et al. (1994), has a mean annual precipitation that varies between 100-300 mm. The tributaries of the Sand River are non-perennial and this has resulted in sparse settlements in the western part of Vhembe District. The Lower Nzhelele River is also characterised by low precipitation. However, despite being sparsely populated, the area has attracted commercial farmers who in the main cultivate citrus orchards and practise pastoral farming. The Upper Nzhelele and Luvuvhu rivers are located in the Soutpansberg area, where the annual precipitation is relatively

higher. The mean annual precipitation in the upper Nzhelele River valley varies between 400-800 mm, while that of Luvuvhu ranges between 500-1 500mm. Winters are dry. For example, according to data provided by the Department of Agriculture in Sibasa, the average June rainfall from 1992 to 2001 was about 4.7 mm in the area of Hagumbu–Sigonde in Musina Municipality and 19.4 mm at Tshiombo in Thulamela Municipality. The same database reveals that some parts of Thulamela and Makhado municipalities receive mean annual rainfall varying from 1 000 mm to 1 500 mm on the Soutpansberg mountain range. The climatic regimes experienced affect population distribution and density patterns as well as influencing agricultural endeavours markedly whether for subsistence or commercial purposes. In this respect, the 500 m isohyet shows a clear distinction between the well-watered south-east and the dry north and north-west.

Vhembe District is situated in the area that also experiences occasional drought. The percentage of deviation from the mean annual rainfall in Vhembe District varies between 20% and 30% (Department of Water Affairs and Forestry 1986). The Limpopo catchment area, which serves Vhembe District in the northern part of the country, gets surface water amounting to 2 290 million cubic metres per annum, but because of high temperatures that can reach up to 40 ^{0}C in summer, much water is lost through evaporation. Only in areas where the annual rainfall exceeds 1 500 mm is the annual evaporation potential less than the average annual potential rainfall. The evaporation rate is very high. It varies over space by between 1 100 mm and 3 000 mm, and its deficit is - 1 050 mm. In Vhembe District mean annual evaporation increases with the increase in distance from the east to the west. Mean annual evaporation from open water in Vhembe District varies from 1 400 mm to 2 200 mm. On the mountains, the mean annual evaporation is between 1 200 mm and 1 300 mm. Other areas within Vhembe District get rain that varies from 400 mm to 600 mm per annum (Midgley, Pitman and Middleton 1994). On many occasions, rain comes in the form of heavy storms. Surface water resources do not supply all the water required and some areas rely greatly on groundwater, especially in the drier areas (Vhembe District Municipality 2010). In some areas, ground water is used in conjunction with tap water. The water shortage in the area creates a problem for households, institutions and schools.

2.4 INFRASTRUCTURE

Infrastructure for piped water and electricity is important in households and institutions, and modern societies cannot function well if the need for these services is not met. The infrastructure present in an area is an indicator of the level of development of an area. Telephones and good roads are important to ease communication and the dissemination of information, while reticulated water and

electricity are really basic needs in modern societies. This section on infrastructure highlights the level of development regarding the basic facilities and infrastructure in Vhembe District.

Table 2.5: Number and per cent of households with water inside yard, 2011

Municipality	Number of households	Households with piped water inside the yard %	Households with piped water from a common point outside the yard %	Households without access to piped water %
Musina	20042	75.56	17.65	6.79
Mutale	23751	26.88	61.21	11.91
Thulamela	156 594	41.93	46.96	11.11
Makhado	134 889	43.66	43.43	12.91
Vhembe	335 276	43.49	44.80	11.71
Source: Statistics South Africa 2012a				

The surface water supply from rivers in Vhembe District is not adequate to meet all the water needs, and it is supplemented by groundwater. In 2007 piped water connected to household yards met 44% of Vhembe District's safe water needs, and the supply decreased to 43.49% in 2011 (Table 2.5). Factors contributing to a decrease in the number of households with piped water connected to the dwelling might be the increase in the number of households that was not accompanied by increase in water supply. Households that access water from a common point outside the yard made up 44.80% of the total number of households. From the water supply figures, it can be seen that there is backlog in piped water that is connected to the dwelling units. Moreover, water supply differs across municipalities. Mutale Municipality is lagging behind in terms of piped water connected to dwelling and had only 26.88% of its household connected to dwelling in 2011. The percentage of households that had access to piped water connected to dwelling units in Makhado had improved from 35.7% in 2007 to 43.66% in 2011, while in Thulamela it had declined from 50.7% to 41.93% over the same period. This decrease in the percentage of dwellings with inside piped water in Thulamela was the result of the increase in the number of households and the fact that this was not accompanied by the provision of more piped water to the new dwellings (Statistics South Africa 2012a). Musina had 64.7% piped water inside dwelling in 2001, and this increased to 75.56% in 2011. The municipality with the highest percentage of households without access to piped water (12.91%) is Makhado. The location of these municipalities and rainfall distribution are shown in (Figure 2.12). Musina Municipality is a dry area and its settlements are located in areas with no perennial rivers. Hence the high number of households depend on piped water.

Electricity meets an important need for the smooth running of people's day-to-day activities today. At home it is used for lighting and cooking purposes, while in business the use of modern equipment is dependent on the availability of energy. Schools use electricity to run their computers, experiments, faxes, printers and photocopying machines. About 79% of the households in Vhembe District are electrified. In 2011, 684 out of 720 primary schools were electrified (Vhembe District Municipality 2012a).

Telephones represent one of the important requirements in this modern world for quick communication and the dissemination of information. Without the use of telephones, communication between institutions becomes difficult. Schools and circuit offices need to communicate frequently and the same applies to communication between circuit offices and the Department of Education. Many primary schools in Vhembe District do not have Telkom[1] telephone lines. For communication purposes, principals and educators use their own mobile phones.

The roads in Vhembe District are in poor condition. Most of them are not tarred and they are barely maintained. Roads with steep slopes are characterised by gullies caused by water erosion. The few tarred roads have potholes in them owing to the lack of regular maintenance. Public transport is limited because taxi and bus owners avoid making several trips per day on these badly damaged roads. Some bridges collapse during periods of high rainfall and are only repaired after many months have elapsed. Poor transportation in public transport makes it difficult to reach workplaces and schools on time. District roads cover about 3 963 km but only 1 428 km of the roads are surfaced (Vhembe District Municipality 2012a).

2.5 DEVELOPMENT OF SCHOOLS IN VHEMBE DISTRICT

Prior to1900 the northern part of South Africa was settled by indigenous people under the custody of their chiefs or headmen. These indigenous people grouped themselves according to their ethnic groups. *Khosi* (Chief) and his advisors or elders were responsible for decision making in matters affecting the community. The first white people to settle in northern part of the former Transvaal were missionaries who, upon their arrival, introduced formal schools and education among the indigenous tribes (Nemudzivhadi 1969; Ndlovu 2002). The establishment of schools was part of the mission work of various churches. The first was the Berlin mission, followed by the Swiss mission, the Dutch mission, the Salvation Army and the Anglican mission. The first schools established by

[1] Telkom SA SOC Ltd is South Africa's telecommunications provider

the Berlin mission church were at Mavhola in 1878, Tshakhuma 1886 and Maungani in 1891. The aim of establishing schools in these mission stations was to teach the people how to read the Bible so that they could assist in the spread of the Word of God. In addition to the Berlin missionaries there were the Presbyterians, who established mission stations at Matangari and Vhufuli. During the early 1900s the Salvation Army started schools at Gaba, Tshaulu, Sambandou and Tshidimbini, and the Anglican Church built its first school at Mukula. Missionaries and churches were also invited by the traditional chiefs to start schools in their territories (Nemudzivhadi 1969).

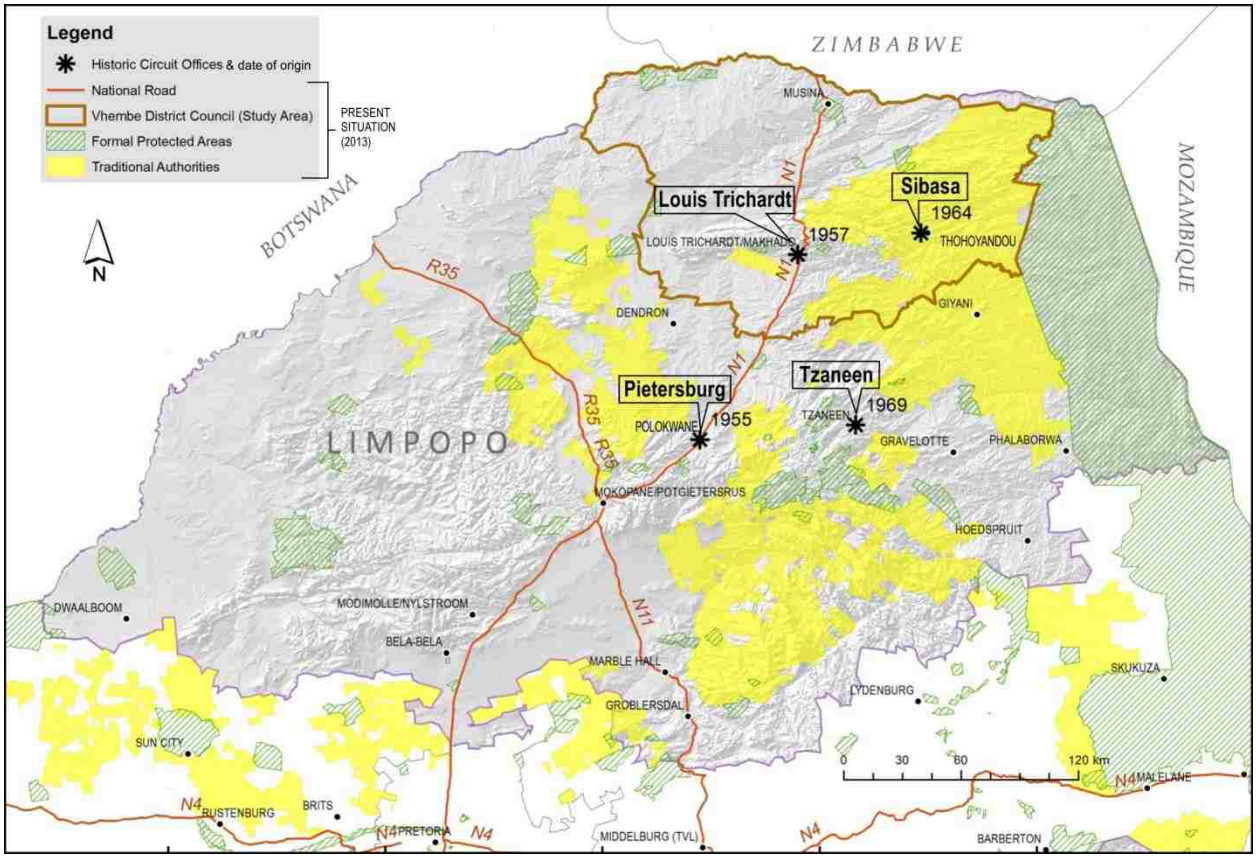

Figure 2.13: Location of old circuit offices between 1957 and 1969 in the Northern Transvaal
Source: Statistics South Africa 2003

In 1920 the Reverend Giesekke of the Berlin mission introduced compulsory education at Tshakhuma. Some schools were controlled by their mission stations and a few by the communities themselves. By the end of 1955, there were 59 schools under different chiefs and 303 teachers in the area. *Khos*i Tshivhase had 26 schools; *Khosi* Mphaphuli 10; Khosi Nethengwe 4; Khosi Mphephu 6; Khosi Sinthumule-Kutama 3; *Khosi* Nelwamondo 3; and *Khosi* Makuya 1. In 1955 the South African Government took control of all the schools in Venda and set up a circuit office for the

schools in Pietersburg (now Polokwane). In 1957 the schools in Vhembe District had their circuit office at Louis Trichardt (now Makhado) (Figure 2.13). In March 1958 there were 102 schools, 420 educators and 24 133 learners in the region. Because of the increase in the number of schools in Vhembe District, the schools were divided into East Louis Trichardt and West Louis Trichardt in 1964. The head office for East Louis Trichardt was located at Sibasa. During a forced removal in 1969 because of the policy of separate development, the Tsonga schools were removed from the Louis Trichardt circuit office and placed under the Tzaneen circuit. By 1969 the number of schools in Venda had more than doubled, to 232; and the number of learners had almost trebled, to 63 597 (Nemudzivhadi 1969; Republic of Venda 1979).

From the 1960s, there was a steep increase in the number of school-going children. This sharp increase in the number of school-going children led to an increase in the number of children to be accommodated in schools. The creation of new schools became the priority for the homeland governments, the tribal chiefs and their communities. The decision to do this was also politically motivated, as communities strived for self-determination by building at least one primary school in each village. Members of communities would contribute money to build a class or two or even a shack in order to have a school in their village. To be able to identify with one's own school was perceived (and is still perceived) as a matter of pride for the community concerned. Each village with a recognised *gota* (one headman) demanded its own primary school, irrespective of its distance from other existing primary schools. This led to the mushrooming of primary schools in the former homeland of Venda, which, as has been said, now forms part of Vhembe District.

Similarly, in the apartheid era separate schools were created and built in the urban areas too to cater for different racial and ethnic groups without taking the distances between schools into account. Emerging from the effect of impacting spatial-temporal dynamics the distribution of population in Venda District and its various social characteristics have now created a mismatch between population distribution and the location of schools. The concern addressed in this study was to identify the spatio-temporal dynamics involved in the provision of primary school education in order to establish whether the right all children have to learn can be implemented in Vhembe District in Limpopo, a province in South Africa in accord with Millennium Development Goal 2. It states that all children of school-age must receive universal primary education by 2015. The vision for equal education for all was initiated at international and accepted at national levels worldwide. Current constitutional rights of children are the driving force behind providing primary education. All boys and girls should at least complete their primary education. To achieve this schools must be located within reach by children aged 6-13.

Primary education is important in promoting a range of benefits such as gender equality and the empowerment of women; improving maternal health; reducing child mortality; combating HIV and AIDS; guaranteeing environmental sustainability; and building the future (UNESCO 2004). A proper primary education benefits children into adulthood. Issues of gender parity, equity, equality and community empowerment are the important issues taken into account when providing of education. These issues are all well documented in the country's constitution and the main task of the Department of Basic Education is in implementation in South Africa.

In 1994 when the new democratic government was born, the education system was transformed into one that promised well-being, respect and justice for all racial groups. Schooling became compulsory for children in the age group 7–15 (South African Schools Act, No. 84 of 1996). In 2002 the South African government amended the Act and the age of admission into Grade 1. This was reduced to the age of 5 for 2003, if the child turned 6 on or before 30 June.

The post-1994 education authority had to address the inequality and backlogs of the past by providing resources and infrastructure (Motala et al. 2007). As Bougardt (2011) notes, the new education authorities had to address the inequality and handicaps of the past by providing resources and facilities, and focused on building more classrooms to ease overcrowding in schools. Children of age were encouraged to register at schools. Pre-school classes and a nutrition programme were introduced in black schools to attract more learners. Despite the implementation of all these plans, in the late 1990s overall learner enrolments in primary schools started to show declining trends (Department of Basic Education 2011d). In the meantime, the education authorities continued to provide more classrooms. Private schools were created and boasted increasing enrolments as parents who were willing to pay higher fees, removed their children from community schools and placed them in these schools. The private schools were perceived to be providing quality teaching, by parents who wanted their children to be taught in English as a medium of instruction. However, some of these private schools could also not be sustained: they started experiencing falling learner enrolments and ended up closing down. The closure of some of these private schools was due to the lack of funding, the absence of fees and improved teaching in public schools.

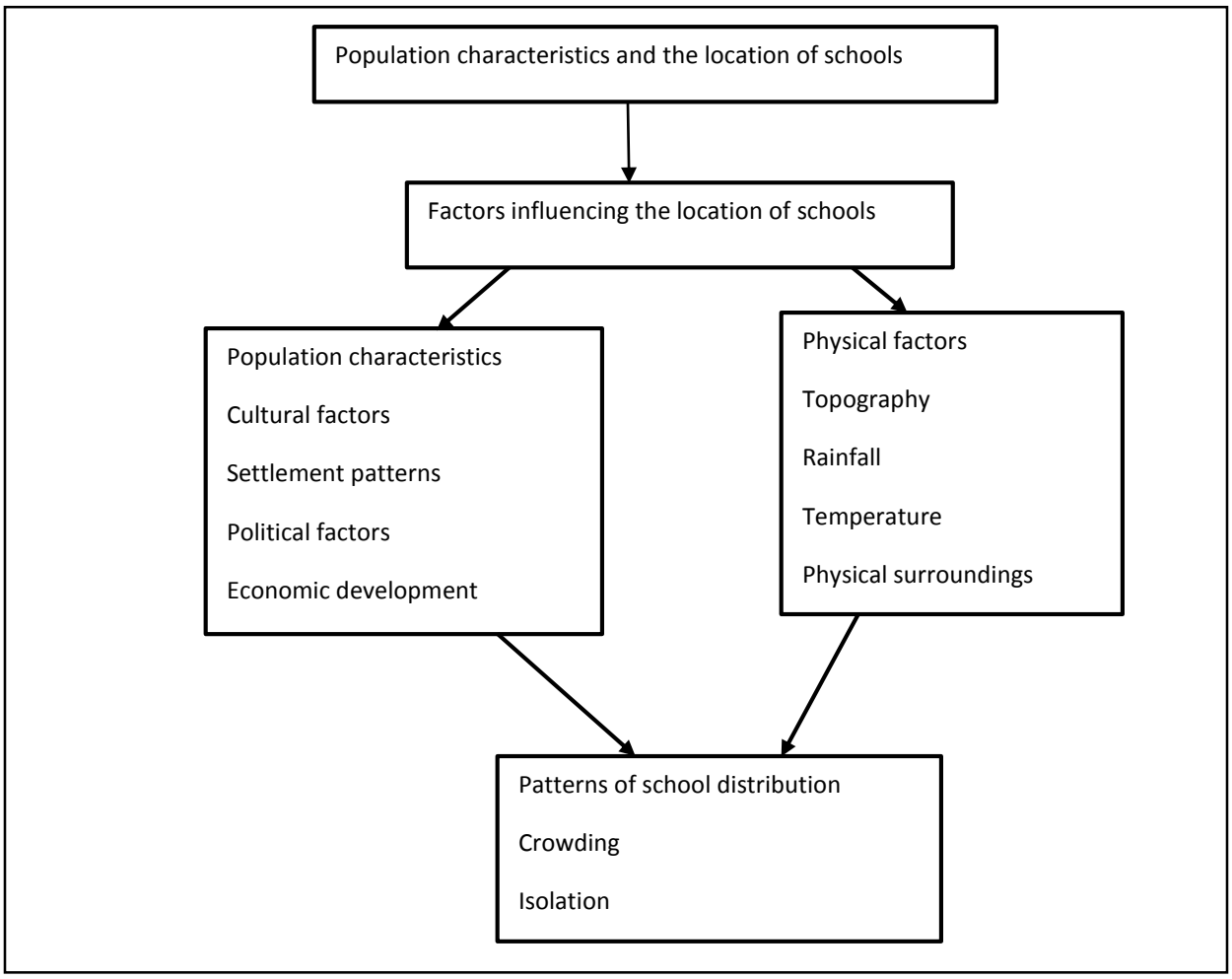

Figure 2.14: Population characteristics and the location of primary schools
Source: Researcher conceptualising the relationship between patterns of population and school distribution (2012)

Primary schools are concentrated in the eastern part of Vhembe District (Figure 1.3) and their distribution corresponds to the area's settlement patterns. Lack of proper planning and cooperation between the *Mahos*i (chiefs) and *Magota* (headmen) led to the creation of too many primary schools. With the passage of time, too many schools in the same locality in certain areas created the problem of classrooms standing empty. In some cases, where the decline in learner enrolment was below the acceptable norm (60 learners for the whole school), schools were forced to merge. The Member of the Executive Council (MEC) of the Department of Basic Education in the provincial government of Limpopo announced through the media in 2013 September that it intends merging 301 and the closure of 176 schools throughout the province (Moloto 2013; Smalle 2013). What will be done with the buildings of closed schools has still to be decided.

Population density was found to influence the location and number of primary schools, but in some instances the decision on the number of schools required was exaggerated. At Tshakhuma, for example, there are 12 primary schools (including the Levubu Primary School located on a commercial farm) located in close proximity. When analysing the pattern of the location of schools and that of the spatial distribution of villages, it can be seen that the patterns match. Schools in sparsely populated and isolated areas are located far apart and this is the case in farming areas. The nature of the settlement and the physical environment thus influence the distribution of schools.

The connection between population characteristics, cultural and physical factors and the location of schools (Figure 2.14) illustrates the theme of this chapter and elaborates on the cultural and physical setting of the study area as well as the historical development that affected the location of primary schools. Settlement patterns and thus the development and location of schools were influenced by political and economic development as well as physical factors. Dense concentrations of people live on the windward side of the Soutpansberg, where rainfall is good. Sparse population is located in the leeward, drier areas in the north and the west.

The cultural landscape of Vhembe District was affected by the policies of the apartheid regime, during which black people were confined to ten homeland areas. Schools in the area that form the subject of this study are located according to ethnic or racial dominance patterns. A sense of self-determination influenced communities to demand primary schools in their villages, irrespective of their distance from neighbouring schools. It is therefore crucial to recognise both the cultural and physical factors when addressing the provision of primary education in Vhembe District.

Chapter 3 looks into the importance of integrating population dynamics and the provision of primary education. Population dynamics are seen as a major force in determining the school-age population and also learner enrolments. For comparative purposes these were discussed with reference to the global, the national and the local levels.

CHAPTER 3: INTEGRATING POPULATION DYNAMICS AND SCHOOL ENROLMENT TRENDS

Population issues impact on many aspects of socio- economic development in general particularly with regard to health, education, housing, labour force participation as facets of our social lives. Population dynamics, involving fertility, mortality and migration processes, have significant roles to play in planning for the social, economic and political development of our societies. When children are born, for example, we need to plan for their health care and their education. Regional disparities cause people to migrate from one area to the other in search of better opportunities, and they therefore need housing and other basic services in the new areas, including education for their children. In order to reduce the rate at which persons are affected by diseases, hospitals, clinics, doctors and nurses are needed. Population dynamics influence population growth (which may be positive or negative) and hence cause school-age populations to fluctuate. In order to address these changes effectively, strategies to adjust to these dynamics need to be carefully researched.

3.1 POPULATION DYNAMICS AND LEARNER ENROLMENT

The aim of this research was to apply a spatio-temporal perspective to the relationship between the provision of primary school education and demographic change. Population dynamics as a driving force affect learner enrolments. Key population variables affecting the size and characteristics of the school-age population are fertility, mortality and migration. Population size, growth and age structure as well as the gender and marital status of the people also directly or indirectly play a role. Education in a country is seen as a pillar of economic development because it determines the future economy of any country (Oyoo 2003). In order to achieve this, the behaviour of key variables such as trends in fertility, mortality and migration need to be carefully examined. These demographic dynamics together with population characteristics operate not in isolation, but in combination, in influencing and directing population growth at all levels – globally, regionally, nationally and locally. It is necessary to understand the demographic transition of any population in a given place, because socio-economic and political influences shape its demographic characteristics including that of the school-age population. Since the socio-economic and political factors of a country have an influence on the demography of a population including the school-going one, they cannot be ignored but form part of the discussion of this research.

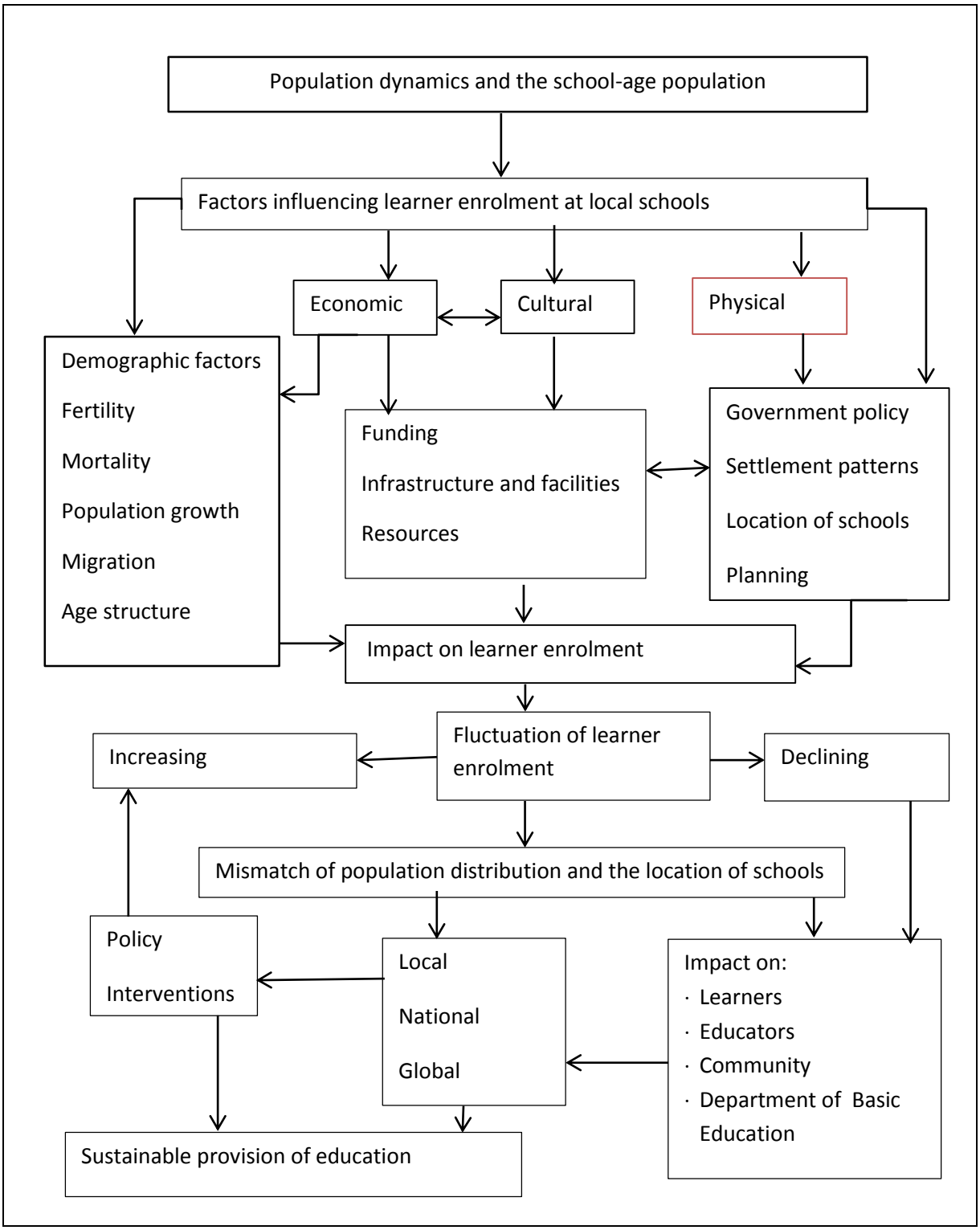

Figure 3.1: Population dynamics and school-age population
Source: Conceptualised by the researcher

Population dynamics are connected to the school-age population that constitutes the learner enrolment in local schools (Figure 3.1). Demographic processes, and the economic and social development of an area, directly influence the school-age population through births and migration; while the physical environment influences it through affecting settlement patterns. When there is a mismatch between the location of available schools and population distribution, governments face a number of challenges over time that may be of a local, national or global nature. The challenge is of a global nature if problems of a social or economic in nature are created in one country and affect other countries. This South African study sought to investigate these connections, which might have adverse effects on learners, educators, communities, the Department of Basic Education or the country at large. Should these connections exist, understanding their effect should enable decision makers and planners to make informed decisions about appropriate locations for primary schools thus providing necessary basic education to children living in particular localities within their jurisdiction.

Continuous decrease in learner enrolments over time, result in some schools getting shut down. Other direct effects of declining learner enrolments include the redeployment of educators, the relocation of learners to neighbouring schools and the additional costs of transporting learners to new schools. Declining learner enrolments also render the schools concerned uneconomic, since some classrooms stand unused because of too few learners (Retnakumar 2005). The closure of schools may have an indirect effect on the community concerned, such as when young adults with small children out-migrate from areas because of the unavailability of schools for young children. Long distance travel by children between home and schools in neighbouring villages indicates that a school is inappropriately located in terms of access. Out-migration of the young and economically active population may disrupt social cohesion, and leave local communities demoralised and stuck in a stagnant economy with little development.

In the areas characterised by a surge in the number of school-age children because of increasing fertility and in-migration, for example, such sudden increases in the number of the school-age population usually finds the authorities unprepared and unable to provide adequate resources for the learners. In order to keep pace with changes in learner enrolments and to adjust to these fluctuations, authorities need an understanding of how demographic processes operate, and of how they are linked to education. With this background in mind this chapter touches on the demographic transition theory, global population growth, and population dynamics, and, trends in school enrolments.

Demographic transition refers to a change from high birth and death rates to low birth and death rates, and this occurs when countries transform over time from primitive states to modern ones. In this theory all countries are expected to transform from primitive and agrarian state to industrialised one. The demographic transition theory has according to Caldwell (1976) in his article entitled “A restatement of demographic transition” shifted a little from its original position, particularly when applied to developing countries. The demographic theory has changed in the last few decades owing to analysis of differential fertility. The first demographic theorist Warren Thomson in 1929, as stated by Caldwell (1976) saw industrialisation and urbanisation as responsible for modifying the role of the family in production, consumption, education and recreation. It was developed after studying experiences in Western Europe and North America. The reduced importance of the family and economic value of the children have weakened the need for a large family. The high survival rate of infants assures parents that someone in the family will carry forward the family name and look after ageing parents. Caldwell (1976) argued that 20 decades earlier the term industrialisation and urbanisation were replaced by modernisation because it became clear that great number of people in the Third World were unlikely to be living in industrial cities for generation. The demographic transition theory did not allow for the possibility that the new way of life and the consequent new fertility behaviour might be generated in the urban industrial setting and then be exported to non-urban and non-industrial population. Caldwell argues that fertility is essentially the product of social rather than economic change. This is evident in the rural areas of Vhembe District, where total fertility has declined to 2.4 children per woman (Kyei 2012), yet its urban population comprise of only 1.1% (Vhembe District Municipality 2011).

For comparison purposes, it is crucial to cite examples of similar processes in places other than South Africa because this may give insight into different ways of solving the same or similar problems. Non-demographic variables such as economic and educational achievement of a population may influence births and migration. Economic influences and employment opportunities vary across space and nations. Climate and the political situation in a place also influence its settlement patterns.

Migration of the young population into or out of an area, in large numbers, results in the shift in the age structure of the population. When a large number of the young and economically active members of a population migrate out of an area, the area becomes dominated by an ageing population, while in the area of destination the population is dominated by youths or young adults. According to the United Nations (2010), the number of children aged from 5 to 14 has been declining since the year 2000. The change was rapid, but it is expected to slow down between 2010 and

2025. In the United States of America, the proportion of the population younger than 18 years of age has decreased from 25.7% in 2000 to 24% in 2010, and is expected to fall further, to 23.6% in 2030 (Centre for Public Education 2012).

Although some developing countries still experience high fertility rates, the proportion of older persons continues to rise. Globally it is rising by 2.0% each year, faster than the increase in population as a whole. At the same time, in 2005, eighty-five countries that constituted 45% of the world population exhibited fertility levels at or below replacement level (United Nations 2008). Since changes in world population have impacts on the social, political and economic lives of people, this study looked at the problems created at all scales, global, regional national and local scales. The problem of declining learner enrolments at schools is worldwide, and gaps need to be identified in order to find a common-ground approach that will not only address challenges in South African but could also be implemented in other parts of the world. The theme of this research is about changes in population characteristics over time and space and how they affect the provision of education in Vhembe District, a typical South African rural area. However, education is a global phenomenon and changes in population characteristics affect the provision of education in South African in the same way as they do in other parts of the world.

The consequences of the mismatch between population status and the location of schools may be reversible. Improper planning on the provision of education may trigger responses from the side of the community (Figure 3.2) and these challenges may be social, economic or political in nature. Socially educators who have established themselves in a setting may feel demoralised if relocated to new schools due to educator rationalisation. Where a school is forced to shut down due to declining learner enrolment, parents may feel disempowered and also incur additional costs of transporting their children to a new school.

The government faces a dilemma, between closing down the school or letting it continue to function. How does the government plan for education to accommodate all the grades, facilities and other basic needs if the enrolment is unsustainable? Haphazard planning may also cause problems like competing for learners by schools located in close proximity. The connection between the location of schools and population status informs the decision-maker in developing and implementing policies. Policies, on the other hand, are driven by changes in the economic, social and political situation in a country over time and space. Initiation of new policies may on the other hand drive human and government actions to desired effects. This illustration helps in the understanding of the connection between population dynamics and the location of schools in Vhembe District in Limpopo

and, in fact, anywhere in the world. Policy issues are important in delivering equal and just primary education and cannot be ignored in any modern societies.

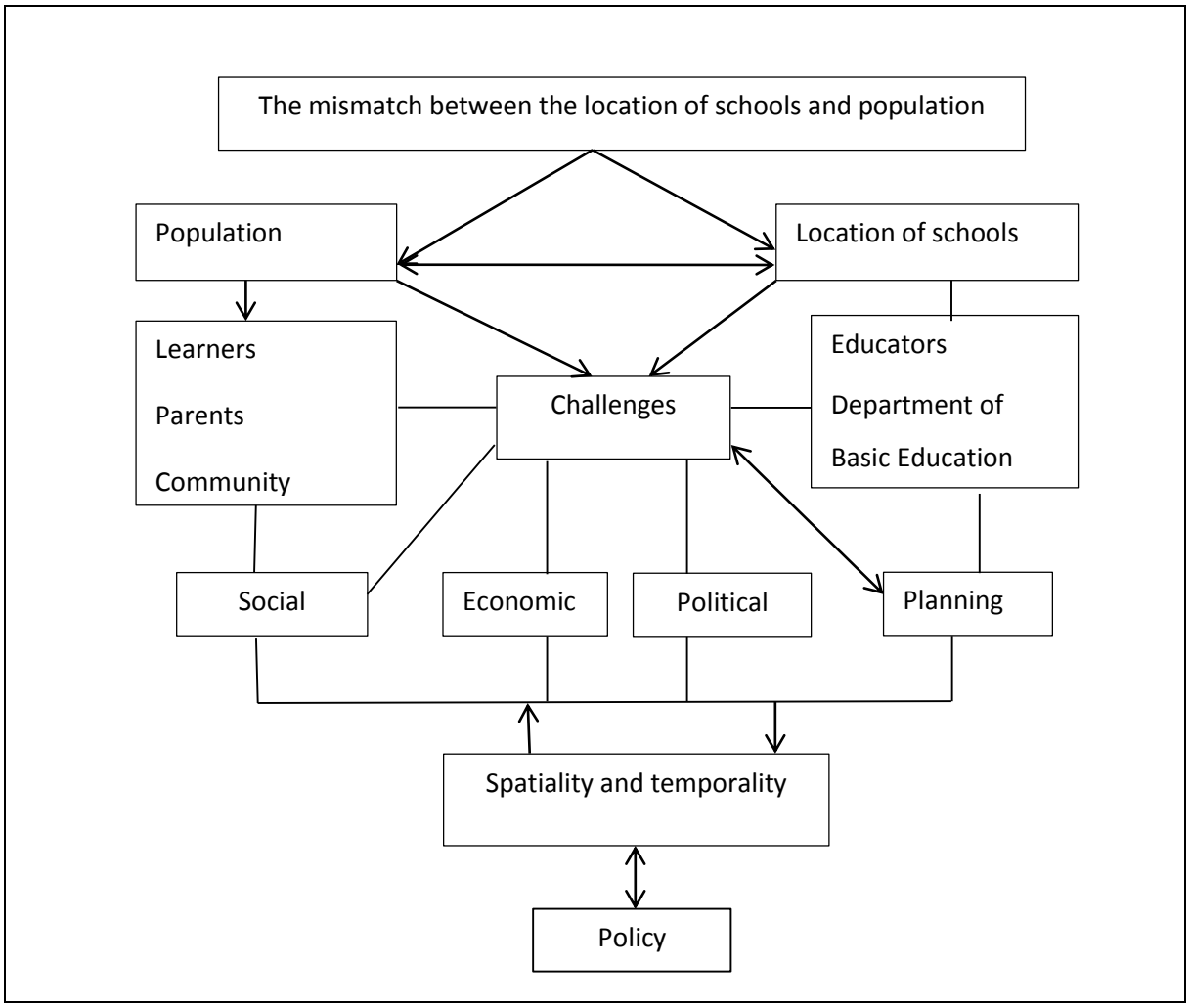

Figure 3.2: Mismatch between population status and the location of schools
Source: Conceptualised by the researcher

3.2. GLOBAL POPULATION GROWTH

Population growth is one of the forces that influence changes in societies and calls on government authorities to act and adjust accordingly. The situational analysis of trends in population and the provision of education in South African schools are compared to that of the world as a whole because some strategies to improve education are initiated at international levels. Through the UN and UNESCO, countries meet at world conferences to discuss education issues and initiate policies

intended to improve the education of children. Countries are encouraged to collect data on their education systems. The data enable the UN and UNESCO to compile a database on educational matters such as pupil/educator ratios, educator qualifications, access to education by learners, and class size; and also to publish country reports. Countries are expected to work within the six "Education for All" (EFA) framework goals and to report on their progress towards those goals by 2015 (DBE 2010c). (The EFA goals are discussed in detail in Chapter 4, which focuses on education policies). This investigation therefore began by establishing why countries succeed or fail in their attempts to develop and implement education policies, and also how countries can learn from one another.

Table 3.1: Selected world countries' (TRFs) and growth rates

Country	**Total TFRs**	**Growth rate (%)**	**Nature of growth rate**
Zimbabwe	3.58	4.36	High
Zambia	5.86	2.89	High
Nigeria	5.30	2.55	High
Mozambique	5.34	2.44	High
Namibia	2.33	0.75	Intermediate
Vhembe District (2011 data)	**2.50**	**0.80**	**Intermediate**
South Africa	2.25	0.41	Intermediate
Norway	1.77	0.33	Negative
Switzerland	1.53	0.85	Negative
Poland	1.32	-0.08	Negative
Source of data: Central Intelligence Agency 2013;Statistics South Africa 2012a			

The global population before the year 1800 was less than 1 billion. During the industrial revolution, mortality was reduced while fertility increased owing to improved medical services and food production. The reduction in mortality and increases in fertility during the period resulted in additional persons, making the population grow and reach two billion by the beginning of the twentieth century. The twentieth century saw population increasing much faster, to reach three billion in the 1959. From the 1959, it took population growth only 40 years to double and the total world population reached 6 billion in 1999 (Population Reference Bureau 2012). The figure in 2001 was just above 6 billion and it took the world only one decade to add another one billion persons to its population

(to make it seven billion in October 2011). Globally, population continues to grow in many places on earth.

The pace of population growth varies over time and space. Initially, the growth rate was slow, but it changed very rapidly in the period after World War II. The developed countries have already reached stable population growth, while developing countries continue to grow by varying degrees. The pace at which population is growing may be grouped into five categories, namely countries with very high annual population growth; countries with high, but declining, population growth rate; countries with intermediate growth rate; countries with stable population growth; and, finally, countries with negative population growth. Table 3.1 shows the total fertility and growth rates of selected countries (Central Intelligence Agency (CIA) 2013). The countries displaying a high fertility rate are located in sub-Saharan Africa. South Africa and Namibia show an intermediate population growth rate of less than 1% per annum and total fertility rates (TFR) approaching a fertility replacement level. Census 2011 results give the South African growth rate for 2011 as 1.2% and that of Vhembe District as 0.8 (Statistics South Africa 2012a).

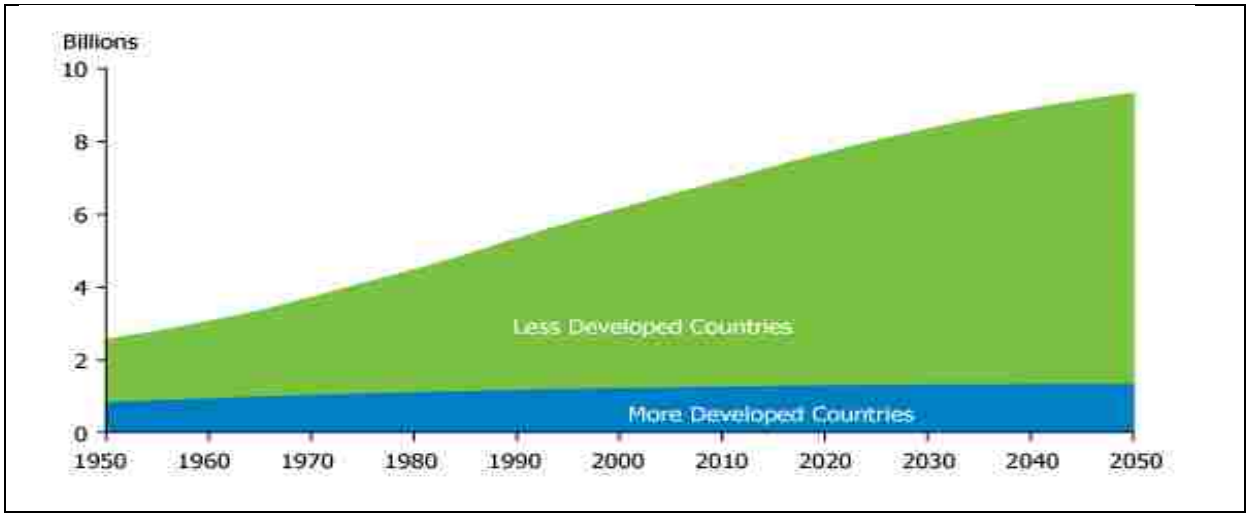

Figure 3.3: Global population growth
Source: Population Reference Bureau 2012

The global population growth rate started to show a declining trend from the 1960s. The world growth rate in the 1960s was 2.1%, and currently it stands at 1.2%. Even though the world's population is displaying an overall reduction in its rate of increase, population numbers in developing countries continue to increase while those in the developed world have stabilised and some even show a negative growth rate (Figure 3.3). The decline in both fertility and mortality in the developed

world is responsible for stable population growth, while in the developing world fertility rates above the replacement level and declining mortality are responsible for continuous population growth.

3.3 FERTILITY

In 2013 the global total fertility rate per woman was 2.5 children (Population Reference Bureau 2014). However, global fertility varies from region to region, with Africa having an average growth rate of 4.7, and North America an average of less than 2.0, children per woman. Fertility patterns have changed dramatically owing to varied reasons that include access to family planning; urbanisation; level of education; female employment; and economic considerations. The improved economy, medical services and awareness of health issues led to a decline in mortality and high child survival rate. Due to high child survival rate, there was no need to give birth repeatedly to ensure that some of the children would escape infant death. Lyager (2010) believes factors leading to fertility decline also include factors such as number of children considered acceptable; a transformation in lifestyles; the costs of pre-natal controls against those of post-natal ones; and the perceptions of people in the reproductive stage of life. Declining birth is responsible for declining school-age population and the closure of primary schools in the developed and in some developing countries like South Africa. Births, school–age population and learner enrolments have a causal relationship.

Lyager (2010) identified a theoretical framework that is able to incorporate insights from different theories and can be used to explain the transition from high to low fertility. He merged the presence of different factors that he viewed as being responsible for the decline in fertility in a particular setting. He also combined the views of Caldwell (1980), who according to him focused on intra-familial wealth flows as a cause of fertility decline; and those of Becker (1960), who concentrated on income. Lyager (2010) believes that if these factors are treated separately, one cannot explain all known fertility transitions. He is also of the opinion that the explanation of fertility transition should be ideational (i.e. the change in people's perceptions should be recognised) or interactive (where it is recognised that societal changes do not affect fertility in isolation from other aspects). He adopted Mason's (1997) model, which states that fertility level is determined by people's perceptions regarding children's probability of surviving; the costs of having offspring; and the benefits associated with having children. According to this approach, high child mortality rates induced parents to have many children. With the decline in child mortality, child survival is assured and there is no need to give birth to many children. In the past, the benefits of having many children were greater, since families needed to be self-sufficient, but since the decline in subsistence farming and

the rise of the market-oriented economy and the abolishment of child labour, the perceptions of those in the reproductive stage of life have changed. The extended family household has been or is being replaced by the nuclear type of family in many countries, both developed and developing. The preference for large families has been replaced by the desire to have fewer children.

Exogenous factors such as family planning, educational achievement and women empowerment also play a major role in lowering fertility. There is now easier access to, and greater acceptance of, the use of contraceptives than was the case before because the costs of pre-natal controls have been reduced. The total fertility ratios of many countries have declined, and that of South Africa is 2.4 children per woman. With an increase in urbanisation and the high cost of living in cities and towns, many individuals decide to have small families. The transition has been observed in the Vhembe District of Limpopo as well, where people's inclination to have large families has changed to preference for smaller families. The total fertility ratio in Vhembe declined from 5.0 children per woman in 2001 to 3.6 in 2006 (Statistics South Africa 2007); and to 2.5 in 2012 (Kyei 2012). This shows a rapid decline in fertility and the rate has been halved in only eleven years due to wider acceptance of the use of contraceptives by women.

All developing countries have been projected by the United Nations to reach a total fertility rate (TFR) of 2.1 by the year 2050 (United Nations 1997; The *Economist* 2009). The pace at which fertility will decline will be determined by the socio-economic development of a country, and rapid fertility decline will usually require rapid development. Bongaarts (2002) noted that increases in life expectancy and literacy appear to be responsible for the decline in fertility. The first group of countries to experience fertility transition consisted of Western Europe, Eastern Europe and the southern European countries. Countries following this first group were Russia, India and Japan (Kirk 1996). The fertility transition in all the countries mentioned above was slow, but it is much faster for countries in which the transition came later. The transition started before the last quarter of the nineteenth century in Europe and the contributing factors were urban life, employment, the mobility of young people, education, the cost of raising children, the decline in the labour value of children, women's independence, a change in norms and values, and the diffusion of knowledge. The Population Reference Bureau (2012) views fertility transition as a worldwide phenomenon, first realised in now developed countries and more recently in developing countries.

At the end of the fertility transition, populations are characterised by smaller family size. Economic, social, political and environmental factors are influencing the way global population changes. Factors such as the use of contraceptives, urbanisation and the employment of women are

responsible for the decline in family size. In Sweden in the early nineteenth century fertility was 5.0, while recently in the 1990s in sub-Saharan Africa it was as high as 8.0 children per woman. Education for girls lowers fertility by between 0.3 to 0.5 children for each additional year at school. In Latin America, fertility rates declined from more than 5.0 children in 1970 to just above 2.0 children today, while in North Africa fertility dropped from 6.5 to 3.0 children per woman (Moultrie and Timaeus 2002; Statistics South Africa 2011b).

The Central Intelligence Agency's (2013) TFR estimates for 2012 show that about 108 countries globally have reached the transition convergence stage (an average TFR of 2.1 children per woman). Fertility transition is inversely related to development, and especially to high levels of education and improved health. The pace of transition tends to be fast soon after the onset of the transition but slows down towards the convergence of the transition (Bongaarts 2002). The pace of fertility transition also depends on the level of development; and those countries in which the transition onset occurs when the development levels are low may experience stalling fertility at higher fertility rates. The pace that the transition keeps has implications for short- and long-term planning in the provision of education. If the declining pace is fast, the education authorities are faced with the challenge of the emergence of uneconomic schools, while the slow pace will give the authorities adequate time to plan and improve on the provision of quality education.

3.3.1: Current trends in fertility

Change in population is influenced by three worldwide demographic variables, which operate as a totality in order to increase or decrease population. Fertility and mortality are responsible for natural population growth by increasing and decreasing population respectively. The increase or decrease in population that is the result of migration is influenced by both physical and cultural factors. The section on population dynamics highlights the importance of understanding fertility, mortality and migration trends and their behaviour as determinants of the school-age population that is required to feed the school.

Fertility is the main demographic process influencing learner enrolments, because birth adds to the population needed for schools. If the fertility rate is very high and so is the school-age population in relation to available resources, schools face the problem of overcrowding and inadequate facilities for effective teaching and learning. High fertility rates are associated with poor communities, high dependency; and poor economic development. The Central Intelligence Agency (CIA) (2012) estimated total fertility rates (TFR) in 222 countries throughout the world in 2012. The highest total fertility was recorded in Niger, with 7.52 children per woman; followed by Uganda, with a TRF of

6.65; and Mali, with 6.35 children per woman. The total fertility rate refers to the number of children who would be born to a woman if she were to live to the end of her childbearing years and bear children in accordance with current age-specific rates (The World Data Bank 2012). Kyei (2012) in his study of teenage fertility indicated that the total fertility rate of Limpopo was 2.5. This is an indication that in a few years to come it will reach the replacement level if the current declining rate is maintained. Fertility declined by 1.1% in seven years (i.e. 0.15% per annum on average).

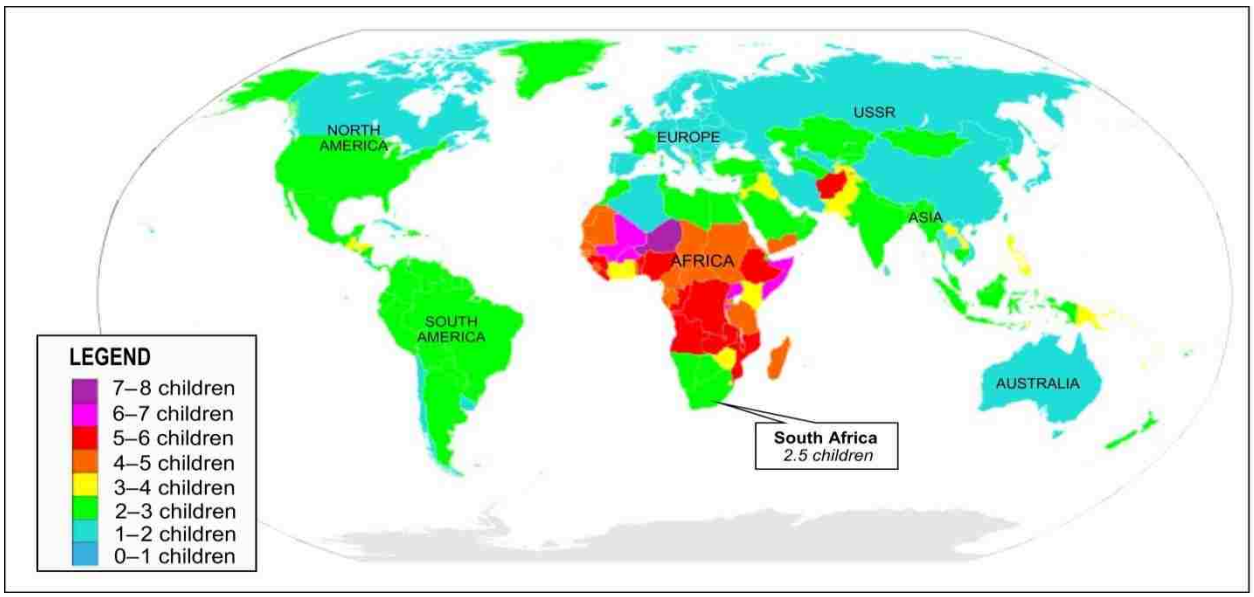

Figure 3.4: Total fertility rates in the various regions of the world
Source: United Nations 2012

There are 18 countries with a TFR of 5.0 children and above per woman throughout the world, and they are all situated in sub-Saharan Africa. Twenty-one countries have TFRs that range from 4.02 to 4.96; 22 countries have TFRs that vary between 3.1 and 3.98; and 68 countries have TFRs that lie between 2.00 and 2.98. The countries with TRFs that range between 2.00 and 2.98 include South Africa, Egypt, Libya, Lesotho, Botswana, Namibia and Morocco in Africa. Ninety-two countries have TFRs that have gone below the replacement fertility level. TFRs in this group of countries vary between 0.78 in Singapore to 2.00 in French Polynesia (CIA 2012). The countries with very low TFRs are the countries that are highly industrialised. The TFR there is below 2.00 and indicates an ageing society that is decreasing in size because of fertility rates that are below the replacement level. Figure 3.4 shows where different levels of TFRs are concentrated. Central Africa is characterised by high TFRs, while South Africa and Namibia can be compared to North and South America, North Africa, the Middle East, South East Asia and Greenland.

According to *The Economist* (2009), in the next few years the world will have only just enough children to replace itself. In 2005, a population of about 2.9 out of 6.5 billion were living in countries at or below fertility replacement level; and this is expected to rise to 50% by the mid-2020s and to stabilise by 2050. *The Economist* further stated that in 1970 only 24 countries had had total fertility rates of 2.1 children per woman, while in 2009 the number had increased to 70 countries. In developing countries, fertility fell by half between 1950 and 2000, from 6.0 to about 3.0 children. The decline in fertility in some developing countries is very rapid. For example, it took Britain 130 years but South Korea only 30 years to reduce its fertility to the same level .The same level of decline in fertility took Mauritius only ten years to reach.

What this shows is that fertility decline is moving very fast in developing countries even though social change is not happening as quickly (Bongaarts 2002; *The Economist* 2009). The change from a low to a high standard of living is responsible for fertility decline. The countries with a high standard of living have low fertility rates while the counties with high fertility rates are economically poor. In its study of Indonesia, *The Economis*t (2009) noted people's perception that each birth reduces the likelihood of a woman getting a job; it lowers household income and pushes some families into poverty. The authors of the publication came to the conclusion that the combination of wealth and education reduces fertility, while poverty and illiteracy have the opposite effect.

Fertility rates are only by level of education and economic development, but also by other factors that are linked to the desire not to have children, such as non-marriage and voluntary childlessness, which symbolise social change in societies.

3.3.2 Social change and fertility

Social change plays a crucial role in fertility decline, and encompasses non-marriage, voluntary childlessness, rising rates of divorce, increasing age at motherhood, change in values and family planning (Noordhuizen et al. 2010).These social changes are influenced by women's educational attainment and by the growing permissiveness regarding the participation of women, especially mothers, in the labour market. This development has been labelled "the second transition". Ageing Horizon Brief (2007) states that the demographic transition is irreversible and that, once started, it will continue. The developing countries in their transition will also follow the same pattern as that in the developed countries, but the pace at which this will occur will be determined by the country's level of development (Bongaarts 2002).

According to Edmoston et al. (2008), the increase in the number of childless couples has become the most important factor in influencing low fertility. The rate of childlessness ranges from 8% in the former Czechoslovakia and Yugoslavia, to 18% in Germany. In Australia women who remain childless account for 13% of all women; in Canada, 14%; and in the USA, 17%. These authors observed that the increase in women's time invested in education or career formation takes its toll on the time available for childbearing. In their analysis of fertility, they found that childlessness increases with an increase in age; and that some 10%–20% of women aged 40–44 in Canada had reported that they intended to remain childless. For the same age group in the USA, women's childlessness increased from 9.5% in 1981 to 20.4% in 2004. Gobbi (2011) worked out a model of voluntary childlessness and arrived at the conclusion that there is a positive relationship between childlessness and fertility. This means that in places where a reasonable number of couples believe in childlessness, fertility will decline.

The relationship between childlessness and development assumes a U-shaped pattern (Gobbi 2011). The left-hand side of the "U" depicts developing countries, where persons have less intention of remaining childless, followed by intermediate countries at the bottom of the "U" and by an increasing intention to remain childless in the right-hand side of the "U". Gobbi stated that the high level of education, the large number of women in the labour force, cultural background and a lack of religious affiliation are the factors contributing to the intention to remain childless. Culturally, there is a difference in childlessness between English-speaking countries and French-speaking ones. He used the USA and France as examples, showing that fewer couples intend to remain childless in France than in the USA.

In Norway, according to Gobbi (2011), 16.5% of the women aged 35 remained childless in 1963 while in the same year 18% of women in Italy and 22% of women in Australia remained childless. The public acceptance of voluntary childlessness in the Netherlands rose from 20% to 90% within 30 years, that is from 1965 to 1996 (Noordhuizen et al. 2010). A study conducted in South Asia found that an increase in the level of non-marriage is contributing to low fertility rates, especially in communities where cultural values do not agree with birth out of marriage. On the other hand, in countries where births out of union are culturally not a problem, the use of contraceptives makes it possible for unmarried women to limit births to one or a few children for economic reasons (Caldwell 1976). The use of contraceptives is also known to be responsible for the wide acceptance of voluntary childlessness. According to Basu (2002), the people in developing world have shown themselves to be fast learners and usually copy what happens in developed countries.

Harrison (2007) noted that the low levels of marriage in South Africa are influenced by the change in attitude towards marriage among the young, particularly urbanised women. The increase in the number of educated women who wish to work, and also the effects of HIV and AIDS, were found to be contributing to non-marriage. Harrison's study, described in the paper "A context of 'non-marriage': non-marital unions in the transition to adulthood in South Africa", was conducted in KwaZulu-Natal among black women. The findings of this study were that marriage had been an important goal in the past, but that costs of living (this may be social or economic) dictated long delays in achieving this.

The picture of marriage statistics in Vhembe District is complicated: many couples who according to black culture are regarded as married are unfortunately not recognised as such because their marriages are not registered. Thus many such individuals are recorded as never married. The government has made provision for customary marriage to be registered, but many people are not taking advantage of this facility.

Figure 3.5 shows that although the population continues to grow in South Africa, marriage increased at a slower pace per annum from 2002 until 2009, and then started to decline. Before 2001 marriages among some couples (mostly blacks) were not registered and since 2003 couples who are married under indigenous law are encouraged to register their marriages. This led to a sharp increase in the number of recorded marriages.

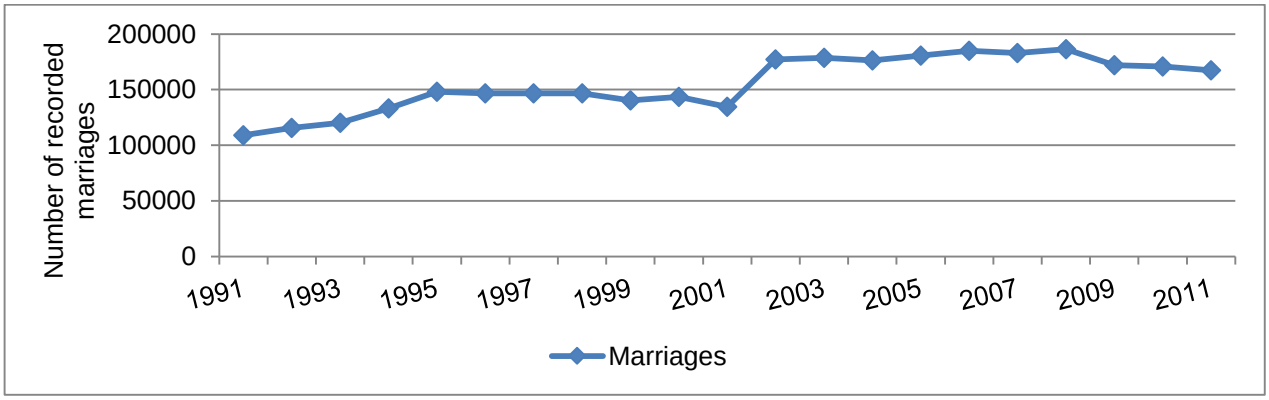

Figure 3.5: Marriage trends in South Africa
Source: Statistics South Africa 2008; Statistics South Africa 2012d

Budlender et al. (2004) stated that 58% of adult women were not married in South Africa in 1995, and this proportion increased to 60% in 1999. The percentage of unmarried females sat at 58% in 2007 (Palamuleni 2010: 50). Basu (2002) noted that non-marital fertility makes up a small

percentage of births in industrialised West European countries. This high number of unmarried females will, in the long run negatively affect total fertility rate and consequently reduce the total number of the primary school-age population.

Harrison (2007: 2), “one of the most notable features of South Africa’s contemporary demographic profile is the relative absence of formal marriage”. Following her analysis of the South African Demographic Health Survey data, she noted that the median age of marriage was 26.8 years. She also pointed out that only a quarter of adults aged 18 and above were married, while half of those aged 40–44 had never been married. She further noted that the levels of marriage among all South African racial groups had fallen since the 1950s, and that this tendency was more pronounced among the black African population. Although some young adult women gave birth in their teens and early 20s, there was a tendency to delay the second birth until much later. Harrison (2007: 3) called this fertility pattern “bi-modal fertility”. Bi-modal fertility refers to early childbearing among young women, followed by a great delay in the birth of a second child. South African childbearing is characterised by long birth intervals (Timaeus and Moultrie 2008). Factors contributing to these long delays in the birth of a second child are, among other things, the use of contraceptives and the prevalence of abortion after the birth of the first child. Termination of pregnancy through abortion is legal in South Africa, and hundreds of thousands of abortion are performed in the country each year. The percentages of terminated pregnancies in Limpopo first increased between 1997 and 2007 but have been showing a stable trend between 2008 and 2010 (Figure 3.6).

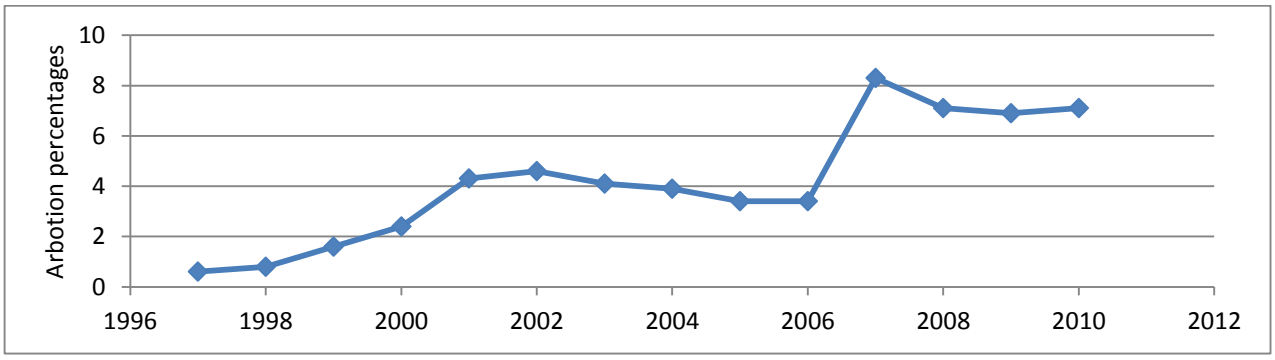

Figure 3.6: Abortion percentages in Limpopo between 1997 and 2010
Source: Johnston 2011

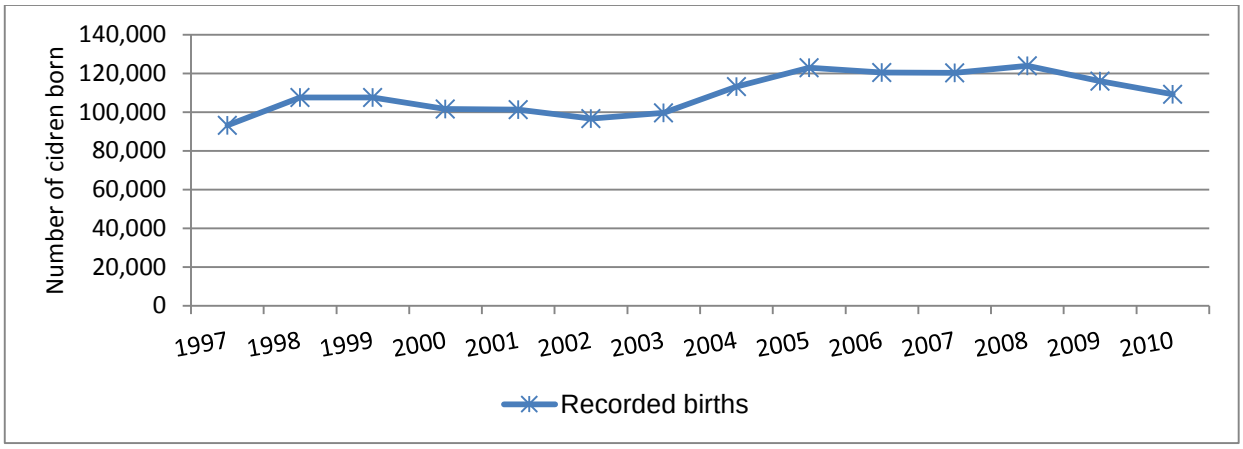

Figure 3.7: Recorded live births in Limpopo, 1997–2010
Source: Johnston 2011; Statistics South Africa 2011

Early childbearing among teens in South Africa reflects a low level of contraceptive use at this age. Some teenagers who give birth opt to return to school – hence one reason for the long delays in the birth of a second child. Non-marriage and delays in the birth of a second child, coupled with the use of contraceptives and legal abortion, contribute to the decline in South African fertility and thus in the general decline in the school-age population. Figure 3.7 displays the number of recorded live births by year of occurrence between 1997 and June 2011 in Limpopo. The graph indicates that although birth records show fluctuating trend from 93 217 live births, the number of births stabilised between 2005 and 2008 after reaching 123 916 births. From 2009 were recorded births displayed declining trend. The registration of births has improved tremendously in South Africa, because only registered children from poor households can access the monthly child-support grant made available by the government. Moreover birth certificate is a requirement when a child first registers at school.

The divorce rate among women in South Africa is very high and has increased yearly, from just below 15 000 women in 1991 to 35 000 in the year 2000. Since 2006 it has shown a declining trend (Figure 3.8). Divorce disrupts family life and consequently fertility. A divorced woman needs time to sort out issues of finance, housing and sometimes relocation and family life in general. During this process of adjusting to a new life, giving birth to children will not be a priority for most women, since it is not easy to raise children on one's own.

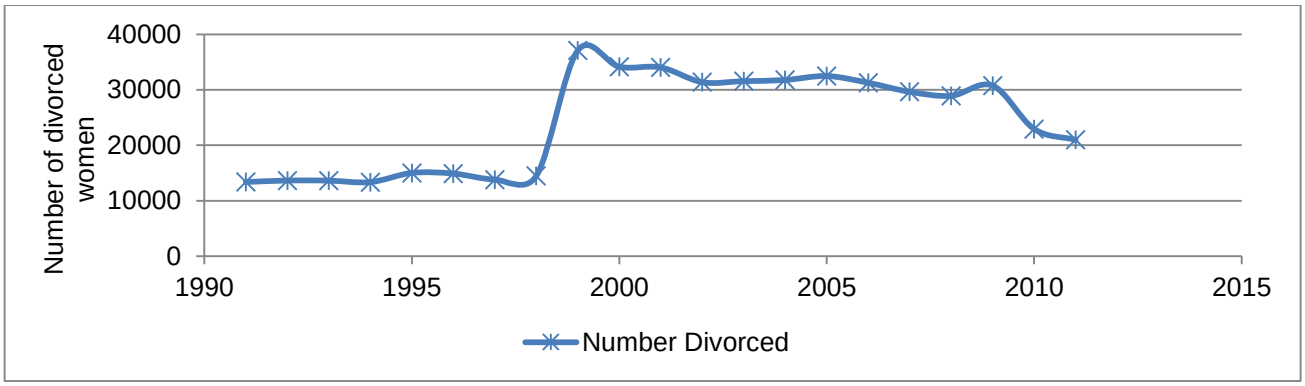

Figure 3.8: Trends in divorce for South African women, 1991–2011
Source: Statistics South Africa 2008; Statistics South Africa 2012

Divorce rates impact on fertility and thus affect the school-going population. Women with children, who are involved in divorce, are likely to halt or postpone giving further births until they remarry or feel more settled (feel that they can afford raise children as single parents) as a single mother. When females postpone or stop giving further births, fertility declines. The declining school-age population due to decreasing fertility has implications on learner enrolments in primary schools.

3.3.3 Prospects of a decline in fertility in sub-Saharan Africa

According to Cleland et al. (1994), in the 1980s there was a greater increase in the strength of family planning in Africa than in any other world region. It has been noted that the UN, in its conferences on population and development in Bucharest (1974) and Mexico (1984), emphasised the use of contraceptives in alleviating poverty in developing countries (Daugherty and Kammeyer 1995). The existence of family planning programmes enhances the prospects of a widespread fertility decline in Africa. The Demographic and Health Surveys in 14 African countries recorded that lower fertility rates had been more recently observed than in the past; and that these declines were appreciable in size (Cleland et al. 1994: 4). In eight cases, the change exceeded 10%. Examples were Botswana and Senegal, where the change was 20%; and Zimbabwe and Sudan North, with a change of 30%. It was also noted that age at first marriage has risen and that this development, coupled with the fall in fertility, has contributed to a decline in overall fertility. The trend towards the later onset of child-bearing is apparent in all the sub-regions of the continent. Cleland et al. (1994) concluded that there were accelerated trends towards the postponement of birth throughout sub-Saharan Africa in the 1980s. The authors said that the “African fertility regime is changing rather than static” and that delayed motherhood by young African women in the 1980s “may have depressed period fertility

rates" (1994: 7). The analysis of declining fertility trends also holds true for South Africa's black population, including that of Vhembe District, where more than 96.8% of the population is black (Statistics South Africa 2012).

In Nigeria the fertility change is restricted to the south-west and south-east. The authors did not detect convincing evidence of a fertility decline in Ethiopia, Uganda, Burundi, Liberia, Congo or Cameroon. They anticipated that the decline that was in evidence in southern Africa would also spread to other states (Cleland et al. 1994).

Machiyama and Sloggett (2009) conducted research on the analysis of fertility in the developing world and found that the decline in fertility seemed to have decelerated since 2000. Similar fertility analysis was done by Bongaarts (2002), who in his findings concluded that 12 sub-Saharan African countries have stalled fertility declines in the midst of transition. Stalling fertility is, according to Machiyama and Sloggett (2009), "no absolute decline per year in total fertility between two successive observations". The authors concluded that, of the 13 countries whose fertility data for women aged 15 to 40 had been analysed, only Benin had an increasing pace. Kenya had a stalled pace and the rest showed an increasing declining pace. The declining pace was higher in the 1980s, but had also declined recently (Machiyana and Sloggett 2009: 17).

3.3.4 Fertility trends in South Africa

According to the technical report of the Medical Research Council (MRC) for 2002, fertility in South Africa in the years 1970, 1982 and 1996 was highest among the 25–29 age group, followed by the following age groups in order: 20–24; 30–34; 39–40; 40–44; 15–19; and 45–49. Fertility among these age groups was obtained by the MRC using reverse survival projections. The authors also found that there was an absence of reliable data on the topic in South Africa for the years 1970–1996. Nevertheless, the available MRC data clearly show a declining trend in fertility since the 1960s; and a steep decline since the 1980s (Moultrie and Timaeus 2002). One of the contributing factors may be the policy on contraception introduced in 1974. The report also shows the results of an analysis of fertility trends specifically among African women, which arrived at fertility patterns similar to those for all South African women. There was an increasing decline in fertility among women of reproductive age even during the 1980s. According to Anderson (2003)), there is a probability of a further diminishing birth rate with each child born, because child spacing for most women is in excess of 40 months. It was also established that South African women's mean birth interval was longer than anywhere else in the developing world. Birth intervals among young women

is lengthening dramatically, and the report's projected birth intervals show that they have been increasing since the 1970s, even among older women.

Although the report did not specifically state the trend in Vhembe District, the fact that the region's TFR has declined from 5.0 children per woman in 2001 to 2.5 children 10 years later shows that Vhembe is conforming to the general birth interval pattern in South Africa. The decline in TFR, caused by increasing births intervals in Vhembe District, is responsible for declining trends in learner enrolments and the closure of some primary schools. The proximate determinants of birth interval are the same as those that determine fertility, in other words the use of contraceptives; induced abortion; lack of post-partum fecundity; intrauterine mortality; and permanent sterility (MRC 2009: 48–49). The MRC report by Moultrie and Timaeus (2002) cites the following as determinants of longer birth intervals:

- The rate of contraceptive use among sexually active women aged 15–49 is high. This is supported by data from the Department of Health (DoH), which indicates that 65% of women in that age group in South Africa use contraceptives (DoH 2012a).
- Long intervals of post-partum abstinence. It was established that the birth intervals for unmarried mothers were longer than those for mothers who had been married; and that the birth intervals of women living in urban areas were longer than those of women in the rural areas. The median birth interval in South Africa is 59 months, while for the same sub-population in Uganda and Madagascar it is 29, and in Namibia 39. The median birth interval of South African women has doubled since the early 1970s.
- Women are breastfeeding for longer periods. Women are encouraged to breastfeed their babies for not less than two years.
- Disruption of marital relations. South Africa is characterised by high migration- men are frequently away from home. This aspect is also determined by the age of partners. The female population in Vhembe constitutes 53% of the total population owing to the out-migration of the male population. As a result, some married females have sexual relationships only when their partners come home on visits.
- The prevalence of induced abortion. It is estimated that 45 000 abortions are performed each year in South African hospitals. In Limpopo in 2007, 10 862 abortions were induced. This number came down in 2010 (to 8 342), but still remains high (Johnston 2011). This is an indication that some individuals get rid of unplanned pregnancies and that this is contributing to declining fertility in Limpopo. (The fact that the number of abortions has declined is an

indication that more individuals are aware of the benefits of using contraceptives to prevent unwanted pregnancies).

- Increases in sterilisation as a result of the spread of HIV and AIDS and other sexually transmitted diseases. HIV and AIDS morbidity is projected to be high in the mid-30s age group. In 1992, 82 out of 565 maternal deaths were recorded as HIV- and AIDS-related, and 87% of the women concerned had delivered fewer than three children.

The contributing factors mentioned here are evidence that fertility will continue to decline; and that this will affect the potential school-age population and also school enrolments at first registration.

Camlin et al. (2004), in the paper "Fertility trend and pattern in a rural South Africa in the context of HIV and AIDS", published in the African Journal of Reproductive Health observed that fertility transition is progressing very fast and that its end is now in sight. This study was conducted in KwaZulu-Natal, which has the highest fertility in South Africa. Their findings were that fertility has been declining consistently for 30 years in South Africa; and that all population groups were tending towards replacement level (Camlin et al. 2004: 51–52). South African fertility has already reached replacement level among the white and Asian populations. Fertility decline was rather rapid among young women aged 25–29, the age group with the highest fertility. Sixty per cent of the women aged 20 to 34 in KwaZulu-Natal were using contraceptives (Camlin et al. 2004).

The South African government, through its revised policy on contraception, provides resources and facilities throughout the country, including Vhembe, to enable individuals to access products and facilities with ease. Contraception facilities are available in all clinics, hospitals, colleges and universities, and in many public places.

The percentage of the Vhembe District population aged 0–14 constituted 43.5% of the total population in 1996, but this had declined to 39.9% in 2001 (this works out to a reduction of 3.6% in five years). It had dropped further by 2011, to 34.9%. As the population of Vhembe District is mainly black (96.8%), this is an indication that black persons in the region have also accepted the use of contraceptive as a means of controlling their fertility. Females are increasingly participating in the labour market, and this change in lifestyle does not encourage one to have many children. As a result, the people of Vhembe District are conforming to what is generally happening in the rest of South Africa and elsewhere.

3.4 MORBIDITY AND MORTALITY

Morbidity refers to incidences of diseases and discussion here will focus on HIV and AIDS as it has an impact on the lives of both children and adults. Mortality has both direct and indirect impacts on education, particularly in the supply of learners to schools. Children born from mothers with deadly infectious diseases sometimes inherit these diseases from them. An infectious disease such as HIV can easily be transferred to the infant during birth. Children born infected are often vulnerable to diseases, and have poor health and a short life span. They usually die as infants, while those who live longer to reach the school-going age may drop out of school because of poor heath or die before they go very far with their schooling. HIV and AIDS also impacts learner enrolments because infected children are in and out of school owing to poor health. Mortality also has a direct bearing on school learner enrolments when the children of very sick parents drop out of school or do not attend school regularly because they assume parental responsibilities and take care of their parents or younger siblings. The death of a parent may also have an impact on schooling owing to the loss of financial support or because a learner drops out of school in order to assume the parental role towards siblings who are too young to look after themselves. This is the case in poor households in southern African countries such as Kenya, Zimbabwe and Zambia (Gachuhi 2002).

Table 3.2 shows that only North America, Western Europe and Eastern Europe had decreases in their numbers of HIV-infected children between 1999 and 2011. Sub-Saharan Africa continues to lead the world in the number of infected children, with 93.9% of the infected children living in this region. Other regions that had very large increases are Latin America; eastern Asia and the Pacific; the Caribbean; and South and South East Asia. In South Africa 330 000 children under the age of fifteen were infected in 2010 (AIDS Foundation (Stephen Lewis Foundation 2012).

In 2003 the number of child deaths as a result of HIV/AIDS rose to 610 000. The total deaths of children from HIV and AIDS, however, were reduced from 430 000 in 1999 to 230 000 in 2011 (a decrease of 53%). The spread of the HIV and AIDS pandemic is declining owing to intervention by the health departments in various countries. High death rates in the developing countries due to HIV and AIDS confirm that the spread of the virus is highest in poor countries. The decrease in the figures for HIV-infected children in developed countries is evidence that these countries are managing to control and treat the virus, while the developing countries in Africa are lagging behind in dealing with the epidemic.

Table 3.2: Global HIV infection in children younger than 15, 1999 and 2011

Region	Infected children younger than 15 1999	Infected children younger than 15 2011	Change
North America	11 000	4 500	-6 500
Caribbean	9 600	18 000	8 400
Latin America	2 800	42 000	39 200
Western Europe	4 100	1 600	-2 500
North Africa and the Middle East	8 000	15 000	7 000
Sub-Saharan Africa	**1 million**	**3.1 million**	**2.1 million**
Eastern Europe	15 000	11 000	-4 000
Eastern Asia and the Pacific	5 000	16 000	11 000
South and South East Asia	2 000	15 000	13 000
Australia and New Zealand	Less than 200	3 600	3 400
Total	**1 300 000**	**3 300 000**	**2 000 000**

Source: UNAIDS 2000; UNAIDS 2012

The high HIV prevalence rate among women of reproductive age also has a direct impact on the supply to schools of the school-going population, since some of the infected women of reproductive age may not be keen to give birth repeatedly.

3.4.1 HIV and AIDS in sub-Saharan Africa

According to UNAIDS (2012), there were 29.4 million persons living with the virus globally in 2001 and this had increased to 34 million by 2011. Sub-Saharan Africa is according to this report by far the most affected region in the world and accounts for 69% of the people living with HIV worldwide. In sub-Saharan Africa in 2001, there were 20.9 million persons living with the HIV virus and 2.4 million newly infected persons. The number of persons living with the virus in sub-Saharan Africa has increases to 23.4 million, but the number of newly infected persons has declined to 1.8 million. The deaths of adults and children in 2005 amounted to 1.8 million persons, and this has declined to 1.2 million in 2011. The rate of infection has slowly declined after peaking in 1995 because of improvements in HIV treatments. Adult HIV/AIDS prevalence has declined from 5.8% in 2001 (UNAIDS 2009) to 4.9% in 2011 (UNAIDS 2012). Table 3.3, which provides regional comparisons of HIV prevalence, demonstrates that sub-Saharan Africa is leading the world in terms of HIV prevalence rates. Sub-Saharan Africa and Latin America are, however, showing decreasing trends; while Eastern Europe and Central Europe are showing some increases.

Table 3.3: Global HIV prevalence among adults, 2001 and 2011

Region	Prevalence among adults in 2001 (%)	Prevalence among adults in 2011 (%)	Growth rates
Sub-Saharan Africa	**5.5**	**4.9**	**-0.6**
North Africa and Middle East	0.2	0.2	0
South and South East Asia	0.3	0.3	0
East Asia	<0.1	0.1	0
Oceania	0.3	0.3	0
Latin America	0.6	0.4	-0.2
Eastern Europe and Central Asia	0.7	1	0.3
Western and Central Europe	0.3	0.2	-0.1
North America	0.6	0.6	0
Total	0.8	0.8	0
Source: UNAIDS 2009; UNAIDS 2012			

Research conducted by Bradshaw et al. (2000),shows that deaths as a result of HIV/AIDS accounted for 28% of all female deaths in Limpopo. The corresponding figure for males was 21%. The mortality rate as a result of HIV infection in female children aged 1–4 was 39.5%, while that in male children of the same age was 36.5% (Bradshaw et al. 2000). Bradshaw et al. also indicated that the death of children following HIV infection decreased with increases in age until the age of 14, but increased again from 15 years of age, when young adults started engaging in sexual relationships. In 2008 the HIV prevalence rate in Vhembe District was 14.7%, which made it the district in Limpopo with the smallest number of infections (Limpopo Community Survey 2009). According to the Department of Health (2012a), the prevalence of HIV in pregnant women in 2010 was 30.2%. It was much higher in farming communities during the same year – 39.5% (*Mail & Guardian* November 2010). According to the United Nations (2012), however, HIV infection has been drastically reduced and South Africa falls among those countries where the reduction rate ranges between 26% and 49%.

Death owing to HIV infection differs across gender and age, as the figures provided by Bradshaw et al. in the previous paragraph amply demonstrate. Sub-Saharan Africa, together with Eastern Europe and Central Asia, show an increasing prevalence rates while North Africa and the Middle East, South and South East Asia, and East Asia, have stabilised. Sub-Saharan Africa and Latin American regions show negative growth rates HIV prevalence, and this implies that their interventions in managing the HIV pandemic are being effective. More girls and women continue to

get infected and in West Africa, for example, the HIV prevalence of 4.6% for women is twice that of men. HIV prevalence tends to peak at a younger age for women (30–34) and in the late 30s and early 40s for men.

Babies get infected via transmission from their mothers during child birth or through breastfeeding. In Swaziland, for example, 5% of 2–4 year olds are infected with the virus as a result of mother-to-child transmission (UNAIDS 2009). In South Africa in 2008, the number of children infected at birth was 38 000, while the number infected through breastfeeding was 26 000. The high infant mortality reduces the number of children required to feed the schools. The reduction in the number of primary school learners will also affect the number of learners in secondary schools in subsequent years. In Tanzania, for instance, it was projected that the number of primary schoolchildren will be reduced by 22% and that of secondary school-goers by 14% owing to HIV infection and loss of life (Ijumba 2011).

Declines in school enrolments based on HIV and AIDS have been observed in many sub-Saharan countries, such as Botswana, Swaziland, South Africa, Zimbabwe and Malawi. Contributing factors that are impacting negatively on school enrolments are believed to be declining births, the early death of children and the inability to pay school fees after the death of parents. AIDS in sub-Saharan Africa is impacting negatively not only on learner enrolments but also on educators. It was estimated that between 20 and 30 educators were dying in the region each month (Gachuhi 2002).

3.4.2 HIV and AIDS in South Africa and its impact on school enrolments

In 2001 HIV prevalence in South Africa stood at 24.8% and in Limpopo at 14.5% (Geffen 2006). The highest HIV prevalence in South Africa's provinces is in KwaZulu-Natal, with its prevalence rate of 33.5; the Free State, with 30.1; Mpumalanga, with 29.7; and Gauteng, with 29.0. The province with the lowest prevalence of HIV and AIDS is the Western Cape. HIV prevalence is highest (31.4%) among the age group 25–29 (the group with the highest fertility). In 1990 only 0.7% of 1.1 million pregnant women was infected, but in 2001 about 29.4% of pregnant women visiting ante-natal clinics were infected. This figure rose to 30% in 2005 (Geffen 2006). It can be seen that future fertility and primary learner supply will be heavily affected as a result of the spread of HIV and AIDS among the women of reproductive age, unless strategies able to control the spread of HIV are sought.

According to *City Press* of 1 April 2012, a total of 5 595 KwaZulu-Natal children under the age of five years old died as a result of HIV and AIDS-related diseases and diarrhoea during the financial year 2010/2011. The newspaper blamed the Department of Health for this situation because a

number of deaths occurred in districts with some of the best health facilities in eThekwini and uMgungundlovu. Poverty and lack of access to safe water aggravate the problem. The department has identified initiatives such as the exclusion of breastfeeding; the strengthening of the mother-to-child prevention programme; and identifying HIV-infected children from as early as possible to deal with the problem.

Case and Ardington (2004) conducted a longitudinal study in 1 000 KwaZulu-Natal households between 2000 and 2004, to examine the extent to which children's educational outcomes and enrolments respond to parental death. The authors found significant differences in the impact of mothers' and fathers' deaths, and noted that children whose mothers have died are at risk of lower enrolment at schools throughout sub-Saharan Africa. The death of a mother may scare her child, causing the latter to be less school-ready than he or she had previously been. The death of a father may worsen the economic situation in a household and thus force some children to drop out of school. This implies that areas that have a significant number of adults infected with HIV and AIDS may experience low school enrolment. It is therefore imperative for policy- makers to develop policies to deal with the crisis.

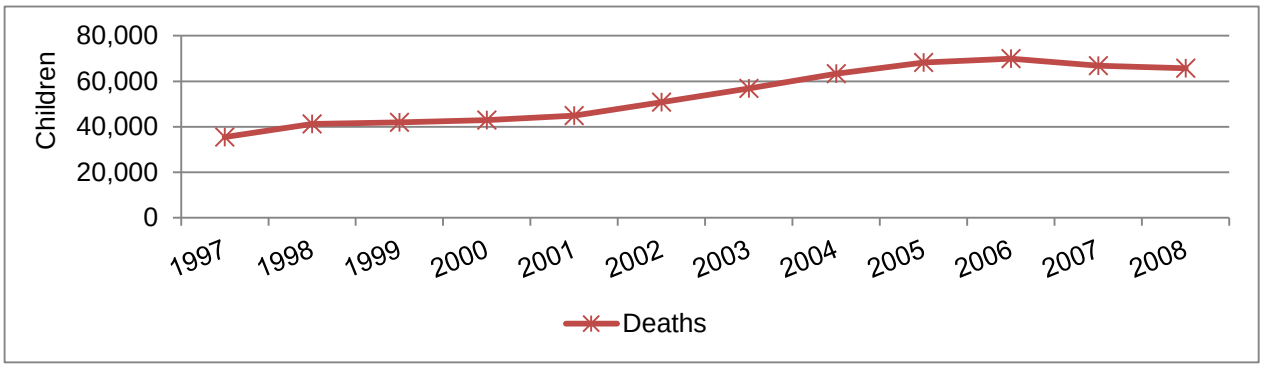

Figure 3.9: HIV/AIDS-related deaths of children aged 0–9 in South Africa, 1997–2008
Source: Avert, 2012 from Global Report

AIDS in South Africa will have a devastating effect on the education system because it is killing children who are the potential learners of tomorrow. Figure 3.9 shows the number of HIV and AIDS-related deaths for children aged 0–9 in South Africa between 1997 and 2008. In 2008 some 65 650 children died as a result of HIV and AIDS infection, causing a decline in school enrolments. It is also causing delays in the registration of learners who come from households affected by AIDS. The death of both educators and learners will have a severe impact on school management. Children

coming from households affected by AIDS do not regularly attend classes because they are sometimes forced to stay at home to look after their sick parents or younger siblings.

3.5 MIGRATION

The discussion on migration focuses on both local (moving from one residential area to the other within the same area) and long distant ones. It is important to analyse migration at this levels because moving out or into an area by some members of can have significant impact on learner enrolment of a local school. Migration discussed will not only be limited to rural-urban but will also encompass rural to rural (village to village). According to Collinson, et al. (2007), migration will be increasingly concentrated in the urban areas of the developing world. The developed world had more persons staying in urban areas than in rural areas. The United Nations (2008) predicted that half of the world population would be living in urban areas by the end of 2008. Sub-Saharan Africa still lags behind, yet the percentage of people living in urban areas in sub-Saharan Africa is expected to reach between 54% and 60% of the total population by 2030. This increase in the urban population will demand that governments plan properly for social services such as health, housing and education.

Understanding migration patterns and processes is important in the study of the primary school education system because migration is likely to attract the age cohort that is economically active and also active in reproduction (Liviga and Mekacha 1998). In countries that have regional imbalances related to economic activity, migration may cause the brain drain of skilled and educated persons, leaving areas of origin demoralised and dominated by senior adults who are economically inactive. Liviga and Mekacha (1998), in their analysis of migration in Tanzania, found the lack of land on which to farm, poor or lack of social services and unemployment as the main reasons for out-migration from the rural areas to Dar es Salaam. Out-migration ultimately affects the supply of learners to schools, especially at the primary school level.

Migration is a process that influences the size of population either positively or negatively and also determines the potential size of the school-going population in an area. In-migration increases the size of a population while out-migration reduces the number of residents in affected areas (OECD 2001); Statistics New Zealand 2010). Young people have a higher propensity to migrate than people in older age groups (Statistics South Africa 2006; Statistics New Zealand 2010). Migration may occur within a country’s boundaries; or may also involve crossing its boundaries.

Table 3.4: Immigration into South Africa by age for immigrants seeking permanent residence in 2013

Country	Ages 0–14 %	Ages 15–64 %	Ages 65 and older%	Unspecified
India	13.8	83.9	2.2	0.1
USA	17.8	75.9	6.3	
France	17.3	80.4	2.3	
Zimbabwe	24.6	74.5	0.8	0.1
DRC	8.2	88.3	3.4	0.1
United Kingdom	8.1	67.7	24.2	
Congo	15.2	83.1	1.6	0.1
Source: Statistics South Africa 2013c				

Table 3.4 supports the fact that younger people are more migratory than persons aged 65 and older. The data used was that of persons who had moved into South Africa and were also seeking permanent residence in 2011. Residential movement is associated with marriage and family growth, while labour migration is likely to attract those without major family commitments and without the seniority, job security or pension rights derived from an extensive period of employment in a single company.

Table 3.5: Internal rural-urban migration by gender and age in South Africa in 2002

Age	In-migration (Females)	In-migration (Males)	Out-migration (Females)	Out-migration (Males)
0–14	1 009	894	3 001	2 151
15–34	1 370	640	1 129	1 071
34–54	241	164	1 485	797
55+	107	48	269	223
TOTAL	2 727	1 746	5 884	4 242
Source of data: Agincourt Research cited by Statistics South Africa 2006				

Children aged 0–14 have a higher propensity to move because they are still dependent on their parents and they migrate together with them (Statistics New Zealand 2010; Jones 1981). Regarding immigration into South Africa from all over the world, 12% of the immigrants are children aged 0–14 (Table 3.4). The children in this age group coming from other African countries account for 14% of all African immigrants. Children coming from Zimbabwe account for 24.6% of persons coming from Zimbabwe. Several factors motivate people to migrate to other countries, including

employment; business; education; being forced to move owing to political instability; and famine in the country of origin.

Internal migration in South Africa by gender and age in the Bushbuckridge area in 2002 reveal that women and children are more migratory (Table 3.5). Children 0-14 accounted for 42.5% of the in-migrants and those out-migrating accounted for 50.8%. There is a high proportion of children migrating because one female migrating will take along all her young children. Also in situations where a mother and father divorce, young children are more likely to move out of the household with their mother. Within the same country individuals may be forced to relocate as a result of variety of reasons such as marriage or when their family has grown to such an extent that the same household unit can no longer accommodate all its members.

Migration within a country may also be caused by the thirst for greener pastures. Opportunities in other parts of the same country include housing, employment and business opportunities (Huw 1987). High proportion of children moving out of an area affects the number of learners of local schools negatively unless equal numbers of children move into the area. The in-migration of children aged 0–14 determines the school-going population that will influence school enrolments and lead to demand for the provision of more educational facilities.

Decision-making theory states that factors such as the opportunity to migrate, and incentives and expectancy in the area of destination, induce individuals to migrate from one area to the other (Daugherty and Kammeyer 1995). Young and educated people in South Africa migrate to metropolitan areas such as Pretoria, Johannesburg and Cape Town, and to other places where there are better opportunities. After 1994 many young people left the rural areas and migrated to the cities. Since the introduction of the new democracy in South Africa, many individuals have been at liberty to migrate to areas formerly reserved for the white population, where incentives are better.

The demand for housing by the population migrating into an area results in the extension of the area in order to cater for the growing population. The extension of residential areas may find some households fairly far away from essential facilities such as clinics and schools. If no alternative facilities are provided, residents travel longer distances to access such facilities. Population in the newly established settlement areas increases in size while it decreases in the areas of out-migration, especially if no or fewer people migrate into the latter areas. Migration to new areas may be slowed down by a lack of opportunities and a shortage of land on which to build houses and carry out business activities. A decline in-migration in an area may be attributed to a variety of developments, including a marked improvement in living standards and income per capita in poor regions, and also

a growth in the number of dual-wage-earner families. Dual wage earners may, for example, be a husband and a wife in a household.

According to Statistics South Africa (2006), migration is seen as a process that offers hope for the future. According to the motivational theory of migration, decision-making individuals who migrate believe that migration will help them achieve their goals and incentives (Daugherty and Kammeyer 1995: 119–120). Regional inequalities may induce people to move out of their areas to areas with better opportunities. Barakat (2009) states that an unattractiveness image of an area as a whole may influence young adults to out-migrate from that area, especially if they perceive that the area – a rural area, for instance – is not fit for their future. Governments should therefore strive to increase the attractiveness of rural areas in order to prevent the out-migration from them of the young population.

In South Africa urban areas offer better opportunities (e.g. in terms of employment and/or educational facilities) than rural areas and, as a result, South Africa is characterised by rural to urban migration. Within cities or villages, some people may relocate in search of housing or new residential areas. Migration is a significant demographic process because it brings equilibrium between those areas that offer opportunities and those that do not. Migration has sometimes been seen as a way of solving problems of unemployment in certain regions in a country, and may therefore be approved by the government (Jones 1981). Although the migration of black people from rural areas to urban areas during the apartheid era was controlled, it was approved for a limited number of migrants because sectors such as industry, construction, domestic services and mines relied on the cheap black labour provided. Vhembe District is rural-based with limited employment opportunities. Persons out-migrate to provinces such as Gauteng where they believe the will get employment.

When comparing internal migration between blacks and whites in South Africa it was found that only 9% of the black population migrated between 1975 and 1980 (Statistics South Africa 2006), and this rose to 11% between 1996 and 2001. The white population was more migratory between 1996 and 2001 (26%) when compared with the other population groups. From the analysis of migration and urbanisation carried out by Statistics South Africa in 2006, migration shows an increasing tendency, meaning that more and more people are moving into urban areas. Between 1996 and 2001 some 3 754 380 black people migrated, compared with 1 136 722 whites, 500 460 coloureds and 150 087 Indians. Although more black people migrated when compared with people of other race groups, their proportion constitutes only 11% of the total black population; while the

proportion of migrating whites represented 26% of the total white population. Migrating coloured and Indian people each constituted 13% of their group's total population. The overall migration rate in South Africa between 1999 and 2003 was 6.5/1000 population (Statistics South Africa 2006).

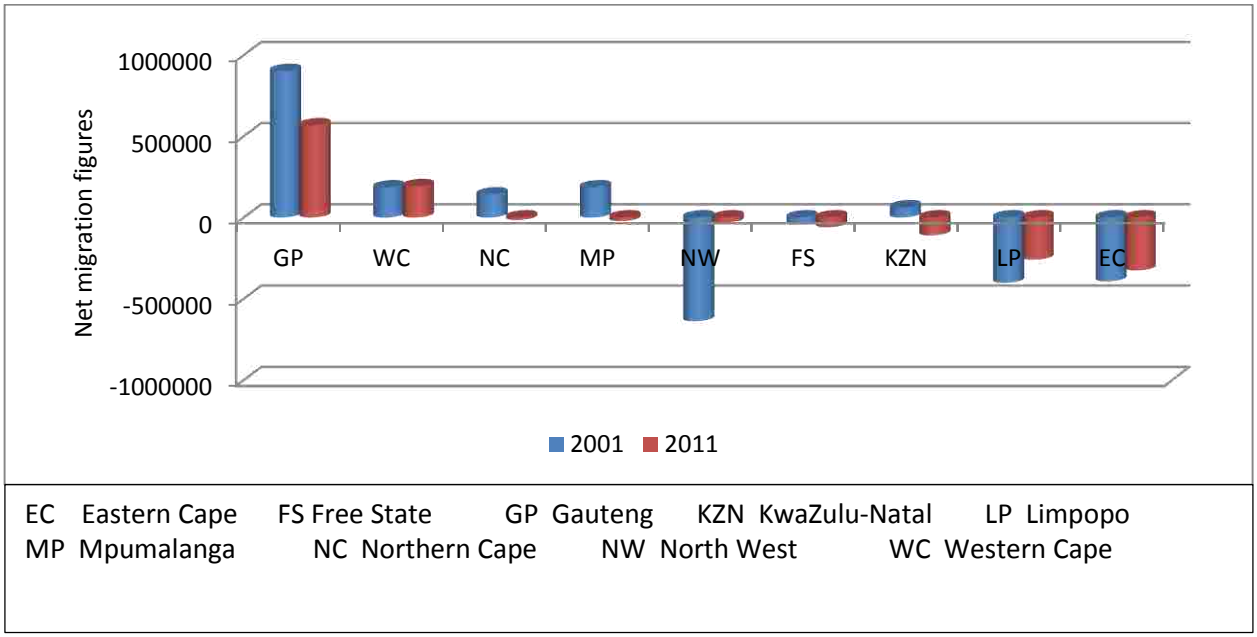

Figure 3.10: Net migration figures by province in South Africa in 2011
Source: Statistics South Africa 2012e

Estimates of migration by province in South Africa between 2001 and 2011 are indicated in Figure 3.10. Gauteng, Western Cape, Northern Cape and Mpumalanga, and North West had positive net migration. North West had a significant change from negative net migration to a positive one. Kwazulu-Natal had positive net in 2001 but in 2011 it displayed a negative net migration. Eastern Cape and Limpopo had displayed negative net migration in 2001 and 2011. Gauteng is highly industrialised and had significant gain in in-migrants, but not to the same extent as in 2001). The Western Cape did not experience a significant growth in in-migrants between 2001 and 2011. Limpopo and the Eastern Cape are the poorest provinces in the country in terms of employment opportunities and this drive people out in search of places with employment opportunities and this evident from their negative net migration figures. The differences between in-migrants and out-migrants in Limpopo and the Eastern Cape amount to hundreds of thousands of people. The highly industrialised provinces of Gauteng and Western Cape offer better employment opportunities and also educational institutions with better facilities and extensive educational programmes that offer wider choices -.hence in-migration. The poorer provinces offer limited opportunities – hence the

high rates of out-migration. Vhembe District, the focus of this study, is located within an area that is largely rural in Limpopo and consequently has a high proportion of migrants moving to towns and cities in other provinces. Forty five per cent of out-migrants from Limpopo went to Gauteng, while only 6.4% in-migrated into Limpopo (Landau et al. 2011). The reality of this scenario is indicated by the graphic presentation in Figure 3.10.

Following the abolishing of influx control, in 1986 many black people migrated to the cities and in 2001 the urban sector of the South African population increased to 56%. Internal migration in South Africa takes place not only towards the urban areas, but also between one rural area and another. South Africa is characterised by both temporary and permanent migration among the black population. South African born black persons residing in cities were regarded as temporary migrants originating from the homelands. Temporary migration is still prevalence among South African blacks who are strongly attached to their homeland areas. There are two main reasons for temporary migration: the first is the search for employment and the second is migrants' inability to secure their own houses in urban areas, resulting in them having to leave family members behind in the rural areas. These migrants have economic ties with their households of origin (Posel 2003). Although temporary migration among blacks is still very high in South Africa, Posel believes that it might decline because the new South Africa allows people to reside in the area of their choice. Increasing numbers of individuals are shifting away from traditional extended families in favour of nuclear families and so younger persons working far from home take their families along to reside closer to their working places. Moreover individuals who afford can also buy own dwelling units in towns irrespective of gender or race (buying a house in towns and cities by black persons was not easy under apartheid laws). All these are strong indicators that the younger generation will take urban areas as their permanent homes and only visit rural areas during holidays.

Table 3.6: Permanent internal migration patterns in South Africa, 1992–2003

Type	**In-migration %**	**Out-migration %**
From village to village	79	72
To nearby towns	5	11
To secondary towns	8	8
To primary metropolis	3	4
Other and unknown	5	5
Source: Collinson et al. 2007		

Migration from rural areas to urban areas is not the only one that affects enrolment at local schools. With regard to permanent migration in the year 2002, Collinson (2007) found that 79% of the migrants moved from one village to another, but nearby towns gained 5% in population; secondary towns, 8%; and primary metropolitan areas, 3% (Table 3.6). Data by Collinson (2007) on permanent rural-urban migration seems to contradict the findings by Atkinson (2014) who stated that the patterns of current migration in South Africa are from small towns to medium-sized towns and to cities. It is interesting to note that migration from one village to another contributes a higher percentage of all permanent migration. These short distance migration are capable of reducing the number of learners at local primary schools when younger adults move out in search of new residential places leaving behind their aged parents.

The high migration from village to village indicates a shift in social behaviour in the rural areas, away from the extended kinship type of household where a number of families stay together and towards a nuclear one. The per cent share of permanent migration to urban areas is still low because owning a house in the cities is not easy for the majority of the population who are poor and cannot raise enough money to buy their own house.

Migration influences the size of the population in the area of destination. The increasing population size will demand proper planning for the provision of basic social services such as housing, health facilities and education. The following section focuses on trends in school enrolments, from the global to the national scale.

3.6 TRENDS IN PRIMARY SCHOOL ENROLMENT

A trend refers to the direction in which something is developing or changing *(Concise Oxford English Dictionary,* 2002), and in this section it refers to change in learner enrolments over time. A population is a group of people bound together by similar characteristics, be it biological, physical or cultural environment. Population changes have significant effect on enrolment rates of schools over time and across space. A picture of primary school learner enrolment at global, national levels will be highlighted before describing the situation in Vhembe District. This is done in order to compare the situation in South Africa and Vhembe District in particular with the scenarios in other part of the world. The gross and net enrolment ratios of selected countries from both developed and developing countries, are used as examples. The gross and net enrolment ratios are standard international education indicators of access and coverage, and therefore provide some indication of the internal efficiency of an education system (Perry and Fabian 2003).

The gross enrolment ratios measure the access and coverage of learners in the schooling system. Coverage refers to the proportion of the population the school system covers and the capacity of schools to accommodate them. The gross enrolment ratio for primary school learners is calculated by dividing the primary school enrolment by the population-appropriate age at primary school level. The primary school level cater for learners aged 7-13 attending Grade R-7. The net enrolment ratio measures the internal efficiency of the schooling system by considering only those learners in the appropriate age group.

3.6.1 Global trends in school enrolments

According to a United Nations (2006) report global primary school net enrolment rates are increasing by an overall average rate of 0.14% a year, but in most countries the growth rate stands at between zero and one per cent. Countries with high growth rates reaching 4% are found in sub-Saharan Africa and this is an indication that not all children in the appropriate ages required are attending schools. During the same period the majority of countries in sub-Saharan Africa had enrolment far below 100%. For example, in 2002 Mali had a net enrolment of approximately 45%. Botswana stagnated at 80%, while Burkina Faso had an enrolment of 36%. In Latin America net enrolment during the same period stood at between 80% and 95%. Algeria among the Arab states had a net enrolment of more than 90%. Countries in Eastern Europe and Central Asia displayed similar enrolment structures and stood at 95.3%. Eastern Europe and Central Asia both display declining birth rates and this is affecting enrolments at schools. The report places South Africa in the same category as the Czech Republic, Georgia, Kuwait, Luxemburg, Palestine and Vietnam. These are the countries that, according to the UN report, will not achieve Education for All's Goal 2, which states that by 2015 all children should have access to and complete free and compulsory primary education of good quality. Contrary to this, the report published by the South African Department of Basic Education in 2010 shows that this goal *will* be achieved by 2015 (Department of Basic Education 2010a).

3.6.2 School enrolment in South Africa

According to the Human Sciences Research Council (2005), the size of the school-age population in a country is determined primarily by past fertility, and by modified mortality and migration. High fertility results in an increase in the school-age population, while the opposite is the case when fertility is declining. It was mentioned previously that a large number of children (38% of the age group 0–4; and 17% of the age group 5–14) in South Africa are dying as a result of HIV and AIDS

(Section 3.4.1: Chapter 3). According to Perry and Fabian (2003), between 1975 and 2000 both primary and secondary schools experienced an increase in school enrolment because education for black Africans was expanding. Primary school enrolments increased by 66% and, by the year 2000, the education coverage was extensive, with a gross enrolment of 99%. The annual growth rate peaked in the 1990s, then started slowing down, decreasing by 2.9% per annum between 1997 and 2000.

Gross enrolment rates for South African schools have shown a declining trend since the mid-1990s (Department of Education 2009b). The gross enrolment rate first experienced a decline in the mid-1980s owing to the unrest that took place in schools during that time. The decline continued until 1991, when the unrest stopped as a result of negotiations towards the new, democratic government that came to pass in 1994. The gross enrolment rate (GER) in primary schools peaked to more than 100% until 1995, when it again showed a declining trend. A GER can be more than 100% if some of the learners are under-age or over-age. In the mid-1980s the GER at primary schools was 121% because there were over-age learners who had enrolled at primary schools. These were the children who could not register at schools at the appropriate ages because of political riots that started in 1976 right through to the early 1990s. After the attainment of the new democracy in 1994, the children who were living on farms and not attending school were encouraged to enrol and so older children also enrolled at primary schools. The GER is equal to 100% if only learners of an appropriate age are enrolled at a particular level (either primary or secondary). The enrolment rate in 1995 was thus above 100% because primary schools comprised some learners who were either over- or under-age for the primary school-going age stipulated by the government. From this discussion it can be seen that the political forces of the 1970s right through to the 1990s played a role in determining the fluctuation in learner enrolments at South African schools.

The factors responsible for the decline in the GER are natural saturation of the system and the admission policy at first registration. The education system management is doing everything in its power to limit under-age enrolment at the Grade 1 level and also excessive repeating of all the other grades. In 1985 the enrolment grew by 33%, in 1997 by 23% and in 2000 by 2.9% (Perry and Fabian 2003). In 2011 the GER of learners in Limpopo schools was 99%, which means that more children of an appropriate age were at school (Department of Basic Education 2013b). *Education Statistics* (DBE 2011g) shows that there were more male (447 091) than female (416 027) learners in Limpopo primary schools. After 1994 the changes directing learner enrolments were the implementation of the 1996 education policy. Primary education became more accessible to all the children of the

school-age population. More schools were built and schools with inadequate classrooms were provided with additional classrooms by the Department of Basic Education.

In 2006, the total primary age net enrolment for South Africa was 96.8%, and this increased to 98.4 in 2009. In the same year the net enrolment rate in primary schools was 99% for male learners and 98.4% for female learners (DBE 2011g). The country's net enrolment was projected to reach 100% by the year 2015 if this trend was maintained (Department of Education 2010). This shows that the South African schooling system has made remarkable progress in ensuring that learners of the appropriate age are participating in education. The negative growth rates, however, have negative consequences on school enrolments because they may lead to the merger and closure of schools.

3.6.3 Closure of schools and its impact on local communities

The closure of schools as a result of declining learner enrolments has become a global phenomenon and is therefore not unique to South Africa. The closure of schools is a current South African issue in which the study area was significantly affected. , The problem of school closure started in the now developed countries as a result of the decline in the school-age population. Authorities in the education departments of various countries close schools when they realise that enrolments are no longer viable or sustainable. The closure of schools has taken place in many countries, for example India, Finland, East Germany (in the region of Saxony) and New Zealand, for a number of different reasons. In India, some schools were closed down when they become uneconomic (Retnakumar 2006). In Finland's sparsely populated regions, small schools face many staffing challenges typical of disadvantaged, remote areas. In Sweden and Saxony in East Germany, primary schools are being shut down owing to rural depopulation (Barakat 2009). The town of Invercargill in New Zealand experienced a 4.5% decline in population between 1991 and 1996, and this resulted in the closure of some of its schools Witten et al. 2001). South Africa has experienced the closure of some schools in areas such as the Western Cape (*Mail & Guardian* November 2012) and North West (Cosatu Press Statements 15 & 18 January 2013) since the dawn of the new government, and Vhembe District in Limpopo is no exception.

As already emphasised, declining enrolments result in the closure of a school as soon as it becomes uneconomic. The closure of a school is viewed as a way of solving the problem of non-viable and unsustainable schools by the authorities in the Department of Education. However, this move has negative consequences for the local community of a closed school. Witten et al. (2001), in their analysis of the closure of schools in New Zealand, found that the social cohesion of a community is disturbed when a school is closed. The social cohesion of the neighbourhood is disturbed because

schools are seen as a common property that brings together the members of the community. Community facilities such as schools provide venues for informal meetings outside home and work, facilitating the formation and maintenance of social relationships within the community. For example, parents exchange information while waiting to pick up their children after school. Witten et al. (2001) stated that without the presence of safe places that offer opportunities for social interaction, people's sense of belonging to a particular community and place diminishes. Barakat (2009) argued that a community's capacity to maintain and reproduce itself can be lost owing to perturbations such as depopulation, economic decline and the restructuring of services within a community. The loss of community infrastructure becomes more critical where few alternatives exist or where barriers to mobility preclude access to other venues.

Witten et al. (2001) concluded that the place of a school as the focal point for community participation and identification can contribute to the broader mental health of a community. Lytton (2011) supports this view by stating that when a school is located outside a neighbourhood, the active participation of parents is reduced. The closure of a school also hits poor individuals hard, because of the extra transport costs involved in travelling to schools in neighbouring communities.

From the financial perspective, fluctuation in learner enrolment poses another problem, as Lytton (2011) has indicated in his analysis of the impact of the closure of schools in America. In that country in recent years, school enrolments have become less predictable: there are often either enrolment surpluses or enrolment deficits. Some American districts are growing very fast while others are contracting, and such districts are experiencing large disparities in utilisation rates between schools. Funding in America is determined by the occupation of classrooms by learners in schools. If all classrooms in a school are full, the utilisation rate is 100%. Underutilised schools are viewed as no longer cost effective and as needing to be closed down, and the learners of closed schools are transferred to other schools. One negative aspect of this development may be that the receiving schools are not ready to accommodate additional learners. Moreover, the cost implications of moving learners and supplies, and transferring educators, are often miscalculated, especially when the move also involves the modification of existing infrastructure at the receiving school (Lytton 2011). Teachers whose schools are facing closure become vulnerable because of uncertainty about their future and professional development. They may experience problems with their identity and self-confidence. Schools facing the threat of closure present a hindrance to educational planning and school empowerment (Korpinen 1998; Solstad 2009, cited in Kalber-Granulund 2011).

Barakat (2009) cites the view of Grigor and Row (2006) that the closure of schools should be viewed as a “recipe for depopulation”. The closure of a local school may render an area unattractive to young persons with small children because of the extra costs involved when transporting children to schools in distant neighbourhoods. The school is also seen as fulfilling important functions besides teaching as it is a focal point in a community’s life. As a result of a school’s closure, the parents of commuting children may no longer feel as closely integrated into the school community: “The parents of children in the remaining schools’ locality likewise lose the valued privilege of being personally acquainted outside of the school environment with other parents of their child’s class.” (Barakat 2009: 4) In other words, the closure of schools impacts on both communities – the one that lost, and the one that gained a school.

In some areas of South Africa, with their continuous out-migration and a low fertility rate, the future of affected schools is a significant concern. These areas may face a bleak future. It is not unusual to see young adults migrating in large numbers from Limpopo and the Eastern Cape. The rural rebound, which refers to an increase in population following years of declining or stagnant population growth, may diminish the incidence of natural decrease. If young persons are discouraged from migrating out of an area by being offered better opportunities there, equilibrium between birth and death rates may be reached. This equilibrium may be offset in the short term. If, for example, young and economically active adults migrate out of an area, a high death rate ensues there because the area is dominated by an ageing population. The rural rebound may encourage those young people who live in areas with a shortage of space on which to build their own house to move to areas with abundant space. As Irwin, (1981), cited in Johnson 2011: 97) points out, “Contextual factors reflecting civic engagement and community cohesion have also been found to diminish the probability of out-migration”. This is possible if areas of out-migration are improved socially and economically; and therefore implies various interventions by the government and people themselves.

In South African rural areas, some unemployed women earn their living by selling food to learners. To them, the closure of a school means a great loss of income. Some children are able to have a plate of food a day only because their mothers sell food to staff and learners at local schools. Local unemployed individuals are also often tasked by a school’s governing body to work in school gardens, or to assist with the school’s feeding-scheme programme by cooking and feeding the learners. Such individuals are rewarded for carrying out these tasks. For these individuals, therefore, the closure of a school entails the loss of a livelihood.

Understanding the connections between population dynamics and schooling is important in terms of preparing tomorrow's nation for the future. Therefore it is necessary for the government to initiate policies for quality mass education aimed at preparing South Africans for life in the twenty-first century.

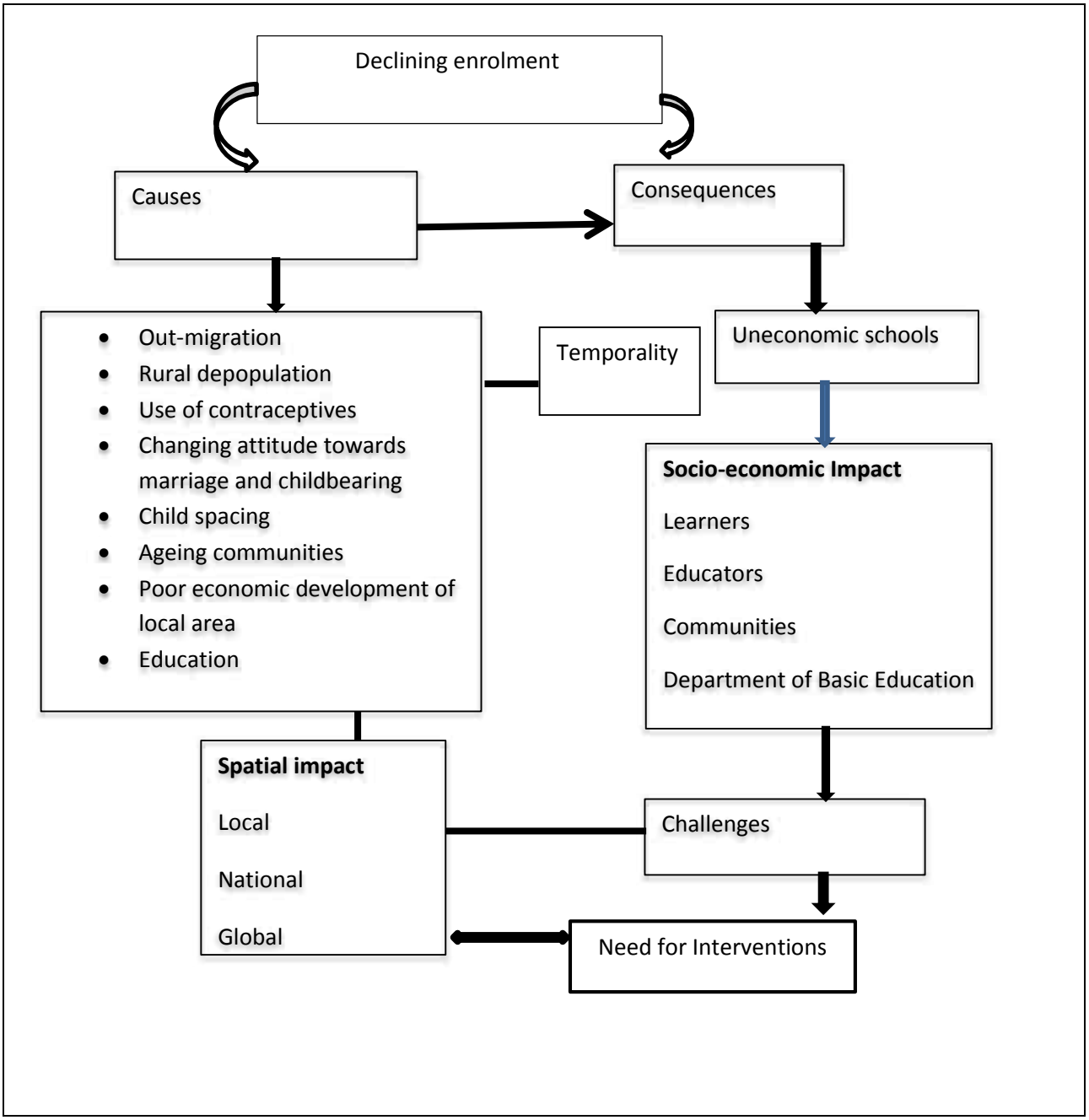

Figure 3.11 Mind map of Chapter 3
Source: Fieldwork 2012

The main ideas contained in this chapter are summarised and illustrated in Figure 3.11. It demonstrates that population dynamics are responsible for changes in learner enrolment. Migration, together with a community's fertility and level of development, has an important role to play in determining the school-age population and consequently learner enrolments at schools, spatially and over time. The decline in school enrolments has become a global phenomenon, and has brought with it many challenges that are social, economic and political in nature. Therefore, integrated solutions by governments to address the challenges are required.

This research has thus far looked into the connections between population and education provision from the spatio-temporal perspectives, and also into the variables involved in these connections. The discussion in this chapter shows that fluctuation in learner enrolment is influenced by population dynamics. With declining births a decline in learner enrolment will characterise many schools and declining learner enrolments have become a reality in many parts of the world, both developed and developing. At a local scale migration is seen to be a major driving force in the fluctuation of learner enrolment, followed by fertility and to a lesser extent by mortality. For sustainable learner enrolments interventions by the government are crucial.

The Department of Basic Education together with other departments indirectly involved in the provision of education need to collectively come together and address the causal factors leading to the closure of primary schools. Some of the challenges in Vhembe District schools emanate from Vhembe District's rural setting, remoteness, location of schools and non-implementation of some education policies. The next chapter focuses on South African policies, both population-related and developmental, in order to determine how they shape the provision of primary education in Vhembe District.

CHAPTER 4: POLICY ISSUES AND THE PROVISION OF EDUCATION

Policies are plans of action developed to achieve the goals and objectives of institutions like government, business organisations and political parties. A society, besides being shaped by its cultural beliefs and the natural environment is strongly governed by its political milieu as society organises itself socially, economically and politically. Population policies, are aimed at influencing issues to desired direction (Daugherty and Kammeyer 1995). Education policies for example seek to ensure that there is equal and accessible education for all children of school-age. This chapter deals with the policies developed to address the challenges faced by the Department of Basic Education. This chapter describes population dynamics in relation to policy and reality. Then it focuses on what happens at the global scale to cater for "Education for All" (EFA), and narrows the situation down to South Africa. It looks into the education policies both national and provincial, socio-economic development policies and land reform policy in South Africa. Policies discussed include those outside the education system, but have direct or indirect influence on schooling and the provision of primary school education. A particularly important aspect concerns policies that are aimed at promoting, protecting and providing equity in education; and on those policies that relate to the population dynamics and economic development that influence the school-age population, learner enrolments and the provision of education. The United Nations Research Institute for Social Development (UNRISD) defines policy as public policies and institutions that protect citizens against social contingencies and poverty. Social policies are directed towards funding, migration, social welfare, the assessment of HIV and AIDS and global issues. Global social policies are important because they shed light on the institutions, policies and politics that have made some countries more successful than others in addressing social problems such as poverty and educational challenges (UNRISD 2006).

An understanding of the role of policies from a global perspective is crucial in this study because the well-being of current and future generations depends on policies that emphasise investment in people of all ages – in their health, education, livelihood, living conditions and human rights – in all the world's countries. These are policies that promote equity and empower communities, and that strive to bring equitable and sustainable development everywhere. Population issues in one country may have impacts in neighbouring countries, and for the well-being of all persons in the world it is crucial for countries to have a common understanding of particular issues. So this discussion will cite examples from global and South African experiences.

4.1. POPULATION DYNAMICS: POLICY AND REALITY

Chapter 3 focused on population dynamics as driving forces that shape the location of schools and the general provision of primary school education. It has been established that migration is the major force influencing school-age population and learner enrolments. Poor economic development in the rural areas in South Africa is partly responsible for out-migration of the young and economically active sections of the population together with their children. There is high migration of children under the age of 15 throughout the world, both internationally and within countries as noted in Chapter 3: Section 3.5. In Limpopo, net migration is negative because more persons out-migrate in favour of metropolitan provinces, especially Gauteng, than in-migrate into Limpopo. The policies to be put in place in order to address this challenge should be those that encourage economic development and the creation of employment opportunities in the rural areas. The role of economic reform policies in rural areas is discussed later in this chapter.

Fertility is another driving force influencing a school-age population. Expectant mothers and new born babies are treated without paying in public clinics and hospitals in South Africa. Children are tomorrow's generation who will carry forward the present generation's aspirations and to fulfil these aspirations they need to be prepared accordingly through formal education. Governments make education one of the basic rights for all children irrespective of the place of birth (South Africa 1997). There should be no discrimination on the basis of race, class and gender and vulnerable children of refugees and those with disabilities are all accommodated. A study by Consortium of Refugees and Asylum Seekers in South Africa in 2010 (Consortium for Refugees and Migrants in South Africa 2011) however found that 24% of the children of refugees and asylum seekers were out of public education. Challenges affecting these groups included application for enrolment in no-fee schools. Schools also refuse children whose parents' resident permits might be due before the start of the new year. The other challenges involved being refused the opportunity to apply for fee exemption, inability to pay fees in private schools and transport or to pay for uniforms or send children to pre-schools. With regard to children of South African citizenship, they can be accepted at any public school where parents choose to settle or in-migrate it is located within the feeder area. The challenge occurs when parent settle in an area with a fee paying private school and the public school is unavailable and the parents are unable to pay for transport to access a public school. This applies in urban areas where schools use this to determine who should be accepted at a particular school.

Mortality could be seen as a driving force influencing the provision of education directly and indirectly. Its impact is not as strong as that of migration and fertility. The impact is less direct and it

is realised in cases where one or both parents die and the child does not recover from the shock of losing a parent or both parents. This shock may affect the performance of a child at school or the child may not attend classes regularly due to lack of supervision in a child-headed family. Discussion on policies relating to mortality focuses mainly on morbidity, death of children due to accidents and natural death of both children and parents. There are clear policies on HIV and AIDS prevention and treatment and so focus is on policies aimed at reducing deaths and the spread of HIV. Death of learners can have significant effect on learner enrolments if left unattended.

Regarding mortality among learners, the Department of Basic Education listed causes of death in 2010 as accidents, illness, suicide, violence and homicide (Department of Basic Education 2012b). In 2009 as many as 11 000 learners in South African schools died as a result of these causes. Illness was found to be the dominant cause of death in all the provinces, responsible for a total of 7 633 deaths. Illness as a cause of death among schoolchildren was followed by accidents, which resulted in 2 428 deaths. In Limpopo, 1 195 deaths among schoolchildren occurred in 2008, but this came down in 2009, to 951 deaths. Mortality can adversely impact on learner enrolments if many children are affected. Policies aimed at reducing deaths of young children are crucial because the future of our societies is dependent upon them.

HIV and its related diseases are seen as a global challenge that affects both adults and children. Its impact is felt in every sphere of human life, be it social, economic, political or geographical. It affects schooling in the education system directly and indirectly. HIV and AIDS is a worldwide phenomenon in the sense that it can easily be spread locally and internationally through migration and physical contact with infected persons if preventative measures are not used. Children's schooling is disturbed if they have to miss classes while assuming parental responsibilities in families with sick infected parents. Infected children may also drop out of school owing to poor health or may become very sick and die. Since HIV and AIDS have a devastating effect on the education system, strategies to minimise the spread of the disease and to prevent new infections need to be developed. Several countries have taken major strides in halting and reversing the impact of HIV and AIDS in accord with the UNAIDS 2015 strategy goal to achieve zero new infections on all new born babies, zero discrimination and zero AIDS-related deaths (UNAIDS 2012).

According to UNAIDS (2009), new HIV infections are declining. Global infection declined by 19% between 1999 and 2009 but, as indicated in Chapter 3: Section 3.4, the decline varies across space. There is a decline of more than 25% in 33 countries, including 22 countries in sub-Saharan Africa. However, the incidence of HIV has increased by more than 25% in seven countries, including five

in Eastern Europe and Central Asia. The incidence of HIV remained stable in 23 countries between 2001 and 2009. The causes of the decline in incidence, according to UNAIDS (2009), are believed to be behavioural change, which involves the increased use of condoms, a reduction in multiple partners and delayed sexual debut. The other cause of decline in HIV prevalence is the initiation of preventative programmes in different countries. Mother-to-child infection has decreased globally, from 500 000 in 2001 to 370 000 in 2009. Inadequate access to antenatal and post-natal services is hampering the prevention of mother- to-child transmission. South Africa has achieved a mother-to-child transmission prevention rate of 70%.

In 2012, HIV and AIDS prevalence in Limpopo was 22.3% (Department of Health 2014) However, HIV figures varied from one district to the other, and to name a few Waterberg in 2012 recorded 30.3%, Mopani 25.2%, and Vhembe the lowest rate of 14.7%. HIV and AIDS kill both young and old (schoolchildren and educators), curbing the spread of HIV is important to save future generations. Investing in fighting the spread of HIV infection is an important strategy used to defeat this killer disease.

The investment made in fighting the spread of HIV and AIDS accounts for 22% of all the money spent on HIV and AIDS in 106 of the low- and middle-income countries (UNAIDS 2010), and the challenge behind investing in fighting HIV infection is the reluctance of planners and implementers to focus on prevention efforts. Investing in HIV is a shared global responsibility because through this, lives are saved, the quality of life of people living with HIV is improved and the future burden of disease can be reduced in many countries. Collectively donors, governments, the private sector, philanthropic organisations and individuals provide funding. Investing in health contributes to a decline in HIV prevalence and more than 5 million persons globally receive antiretroviral therapy. In many countries orphaned children have access to basic education and health care. This was made possible by the mobilisation of the international community. However, there is still a gap between investment and resource availability, and that gap continues to widen. On average, government resources allocated to fighting HIV and AIDS covered one fifth of the population suffering from HIV. According to UNAIDS (2010), many countries allocate far less than might be expected given their disease burden and their government resources.

South Africa is following suite in the fight against the spread of HIV and AIDS and so is Vhembe District. HIV prevalence in Vhembe District is 14.7% and it is the fourth from the lowest of all the 52 district municipalities of South Africa. Vhembe District Municipality's HIV prevalence is the Lowest in Limpopo. The number of new infections among children 0-14 in South Africa has declined from

5.6% in 2002 to 2.4% in 2012 owing to access to ARV treatment (Human Sciences Research Council 2014).

4.2. EDUCATION FOR ALL: GLOBAL AND NATIONAL PERSPECTIVES

At a global level “Education for All” (EFA) strategies (UNESCO 1990) were initiated to improve access to education for all children. In order to ensure that equity, equality and quality education was offered at schools various aspects too were addressed: the governance of schools; the organisation of the education system; early childhood participation; gender parity; and issues pertaining to diseases and causes of death among schoolchildren.

In 1990 the Jomtien (Thailand) Conference mobilised the international community in favour of EFA, and ten years later (in April 2000) the international community met at the World Education Forum in Dakar to devise a Framework for Action on Education and Schooling (UNESCO 2009). At these meetings, individual countries were requested to set their own goals, intermediate targets and timelines within existing or new national plans (Department of Education 2008). Many developing countries have taken significant strides in planning the future development of EFA. Various goals relate to the achievement of EFA, but some will not be dealt with here because they are not relevant to the primary school children who are the primary focus of this study. However, some of the goals that apply to adult basic education and training (ABET) and to secondary education are relevant to this research.

The following are the EFA goals that have relevance for this study:

Goal 1: *Expanding and improving comprehensive early childhood care and education, especially for the most vulnerable and disadvantaged children.*

Goal 2: *Ensuring that by 2015 all children, particularly girls, children in difficult circumstances and those belonging to ethnic minorities have access to free and compulsory education of good quality.*

Goal 3: *Ensuring that the learning needs of all young people and adults are met via equitable access to appropriate learning and life skills programmes.*

Goal 5: *Eliminating gender disparities in primary and secondary education by achieving gender equality in education by 2015, with a special focus on ensuring that female learners have full and equal access to education of good quality and are able to succeed within the system of education provided.*

Goal 6: *Improving all aspects of the quality of education and ensuring excellence for all, so that recognised and measurable learning outcomes, specifically numeracy and essential life skills, can be achieved by all*.

Measuring the progress of the achievement of EFA goals is, according to the Department of Education (2008), done through the use of indicators such as access, including gross enrolment ratios (GER) and age-specific enrolment ratios (ASER). Measuring quality is done by considering learning achievement, learner/educator ratios and teacher qualifications.

The financing factor, educational reforms and the strengthening of institutional capacity are the three most important goals of EFA. Reform policies include the rationalisation and decentralisation of functions in the education system. The implementation of plans to reform educational institutions requires the rational and efficient use of the necessary resources. Governments are expected to create favourable conditions to put the plans into operation (UNESCO 2010).

According to UNESCO (2009), before the technical level is developed each EFA plan should first adopt a political approach, and take into account the shared values of the country concerned. EFA policies reflect values (equality, equity, efficiency and liberty) that are shared to different degrees nationally and internationally. Caution must be exercised, because values may be prone to different interpretations and come into conflict with one another. Conflicts may occur between equity and quality. One example concerns infrastructure in South Africa in former disadvantaged areas. It is now (2015) two decades since the dawn of the new democracy, but some learners still attend classes under unacceptable conditions, including in dilapidated classrooms and mud schools and even under trees. The school infrastructure of former disadvantaged areas does not match that of former white areas. Another conflict occurs between equity and liberty, where learners' admission is limited to schools in certain areas, especially in urban and densely populated areas. Learners are not always able to gain admission to the schools of their choice.

As a result, compromise on some values is the preliminary policy for EFA plans, which greatly facilitates their preparation and implementation although it does tend to compromise their effectiveness to some extent. The political legality of the adaptation of the plan's civic values is derived from, and documented in the constitution of the country. The civic values are adapted to political, cultural and national economic frameworks, which allow the expression of many different interpretations at different levels and perspectives of EFA development. For example, the issue of equity in Francophone African countries means access to primary education by all. In the Republic

of Korea, it means that priority in funding is given to elementary education, leaving out secondary and higher education. Compromise offers political stability in a country (UNESCO 2009). Access to education is a constitutional right for all children in South Africa. In order to maximise access the government has adopted several strategies ranging from no-fee schools to providing feeding schemes and dividing schools according to quintiles. Ninety seven per cent of primary schools in Vhembe District fall under quintile 1-3 (EMIS 2013a).

The National School Nutritional Programme was introduced in all Quintile 1–3 schools in the former disadvantaged areas. Quintiles were introduced for the purpose of allocating funds to South African schools. Schools are grouped into five quintiles - Quintile I schools are attended by learners from poor economic background while Quintile 5 schools are attended by children from economically advanced families. Quintile 1-3 schools were in 2013 allocated R1010 per learner while Quintile 4 and 5 were allocated R505 and R252 per learner respectively. The money allocated to schools is for payment of electricity and water services, buying stationary equipment and maintaining the school (Western Cape Department of Education, 2014). All public schools under quintiles 1–3 are involved in nutrition programmes and were declared no-fee schools, and their learners receive free stationery (Vhembe Department of Education 2011). Quintile 4 schools in Vhembe District are very few in numbers (less than 20 in total) and are located in urbanised areas. Quintile 5 schools are found in Louis Trichardt and Musina town and are former white schools. Quintile 2 schools dominate in the deep rural areas of Mutale (Niani circuit), the Vhuronga 1 and 2 circuit schools in Makhado Municipality, Malamulele East and Malamulele West, as well as the Sambandou circuits in Thulamela. The Soutpansberg North circuit has a significant number of schools falling under Quintile 1. These are the schools located on the farms in the Musina and Makhado municipalities. Because of high poverty levels in the area, almost all the schools are ranked under quintiles 2 and 3 (the exception to this is the independent schools). Regarding allocation per quintile, however, it is not clear what criteria were used because schools in the same locality may fall under different quintiles.

Education gets the biggest share of the country's budget, with an allocation of 6.166 billion rand in the 2010/2011 budget year (Department of Basic Education 2010d). One billion rand was allocated for learner materials in the same year. The allocation of equity-driven funds to each public school is divided into five groups, according to quintile level. The allocation of funds per learner for the years 2010 to 2013 is shown in Table 4.1. Note that "NQ1" stands for national quintile level 1 and as such "Q" stands for quintile.

Table 4.1: Allocation of funds per learner according to national quintile level, 2010–2012

Quintile level	2010 (in rand)	2011 (in rand)	2012 (in rand)	2013 (in rand)
NQ1	855	901	943	R1010
NQ2	784	826	865	R1010
NQ3	641	675	707	R1010
NQ4	428	451	472	R505
NQ5	147	156	162	R252
Overall	571	602	630	R757
Source of data: Roos 2010; Limpopo Department of Education 2011; Western Cape Government 2014				

In some schools, however, the funds allocated do not meet the requirements. To supplement state allocations, the schools are permitted to do the following:

- Charge fees. This is only permissible in quintiles 4–5.
- Receive voluntary contributions, for example in the form of donations.
- Maximise the core business of the school, for example by offering after-care services. This includes running private Grade R and pre-primary facilities, because Grade R is not compulsory.
- Engaging in actual business ventures, for example by running tuck shops and charging groups for the use of school facilities for private use, as in the case of parties, meetings and sports activities.

During the apartheid era, the South African education system was characterised by huge disparities in terms of resources among the various racial groups who by law resided in separate localities. Schools in the former disadvantaged black areas received less funding, while those in former white areas got the best of everything, including funds, other types of resources and infrastructure. To address the injustice of the past, the new democratic government designed a model in which funding was determined by looking at the socio-economic background of the area where a school is located. In order for schools to function properly, they need appropriate funds to run maintenance costs. The no-fee schools policy was introduced in 2007 and 55% of ordinary schools, catering for 42% of all learners, benefited from this policy in different provinces. In Limpopo during the same year, 60.3% of schools, catering for 53.4% of learners, benefited from this policy. The no-fee schools policy was later extended to cover Quintile 3 schools. In 2010, no-fee schools represented 77% of all schools

(Department of Basic Education 2010b), and this description had been extended to 95% of schools by 2012 (Education Management Information System 2012).

The other strategy adopted by the Department of Basic Education to increase the number of learners at primary schools, was to introduce Grade R and attach it to all primary schools. Children usually enrol in Grade R at the age of five and a half. Grade R is not compulsory, but from Grades 1–7 at primary school level, schooling is compulsory (Department of Education 2008). An early childhood programme was introduced to improve access to schools and to prepare children for school attendance. The target group for the early childhood programme is children aged between 0 and 6, but in this study the focus will be on learners at the Grade R level, that is children aged between 5 and 6. According to the EFA goal, all children aged 5 and 6 had to have access to Grade R by the year 2010 in all public schools. The phasing in of more Grade R learners in formal school settings led to a huge expansion of the learner enrolment in primary schools. The Grade R gross enrolment rate (GER) increased from 15 in 1999 to 50 in 2009. This strategy led to an improvement in participation by learners in the age group 7–13 and reached 98% in 2008 (Department of Education 2009b). Education for All strategy also encouraged equity in terms access to education by both boys and girls. In terms of gender and access to school, South Africa is also doing well because participation by gender at primary schools at the time was 97.92% for boys and 98.42% for girls.

The task of the new democratic government of South Africa is not only to improve access to primary education, but to provide quality education as well. The South African education system has been experiencing many challenges with regard to the provision of quality education and in the post-1994 period the government has been forced to seek strategies aimed at improving the quality of education and performance by learners. The strategies aiming to improve the quality of education in all South African schools are the following (Department of Basic Education 2011e):

- The introduction of common examinations set at provincial and national levels.
  The department has introduced periodic tests and examinations written by learners throughout the country in order to improve the quality of education.
- A participatory approach. As from 2012, parents have been requested to view the work of their children at school starting from the beginning of the year, so that parents and educators can work together in assisting learners not performing well at school.
- As from 2011, learners whose performance is poor have been allowed to repeat a year. Soon after 1994, the schools had some learners who were over the age for the classes they

were attending and the education system allowed them to pass to the next level even when they did not deserve to do so. This led to a significant reduction in the number of over-age learners at school, especially at primary school level.

- Learner achievement levels are monitored at circuit level at the end of each term in South Africa. The same holds true in India, where the education authorities monitor the level of learner achievement by conducting nationwide achievement surveys. To complete infrastructure, and improve and optimise its use, governments are expected to renovate existing classrooms and construct new ones, with priority being given to disadvantaged areas. Optimising the use of infrastructure poses a challenge in areas with low learner enrolments. Building new classrooms is aimed at reducing overcrowding in schools. Education for All goals also aims to provide separate latrines for girls and to upgrade existing infrastructure in rural areas.
- Improving the quality of education also involves recruiting well-trained educators and offering bursaries for the training of educators. Recruiting well-trained people is important, and for this to happen educators should be offered opportunities to receive training and obtain funding towards training. A problem entails the dumping in primary schools of educators deemed to be poor at their job. The training of educators needs to be carried out on an on-going basis, to keep educators abreast of changes in the curriculum. Curriculum reform has to be accompanied by pedagogical support in the form of teaching manuals, and audio-visual and computer materials (DBE 2011e).

Institutional development is central to improvements in the quality of education, and this involves competent leadership at different levels. In the South African educational system, the provision of education is arranged in hierarchical order (Figure 4.1). The national department is at the top, followed by the provincial departments, then district offices and circuit offices. At the bottom of this pyramid are the schools. In order to strengthen the development of the educational system as a whole, each of the levels needs to be occupied by well-trained personnel. To strengthen national capacities in South Africa, for example, the Department of Education was split in 2009 into two ministries: Basic Education and Higher Education (South African Government News Agency 2009). The same division is encountered in Niger, which has a Ministry of Basic Education and a Ministry of Secondary and Higher Education. The aims of dividing the single department into two have been to create strong and visible institutional leadership; improve professionalism among public sector personnel; and make the administration of education more participatory in nature (DBE, 2010c).

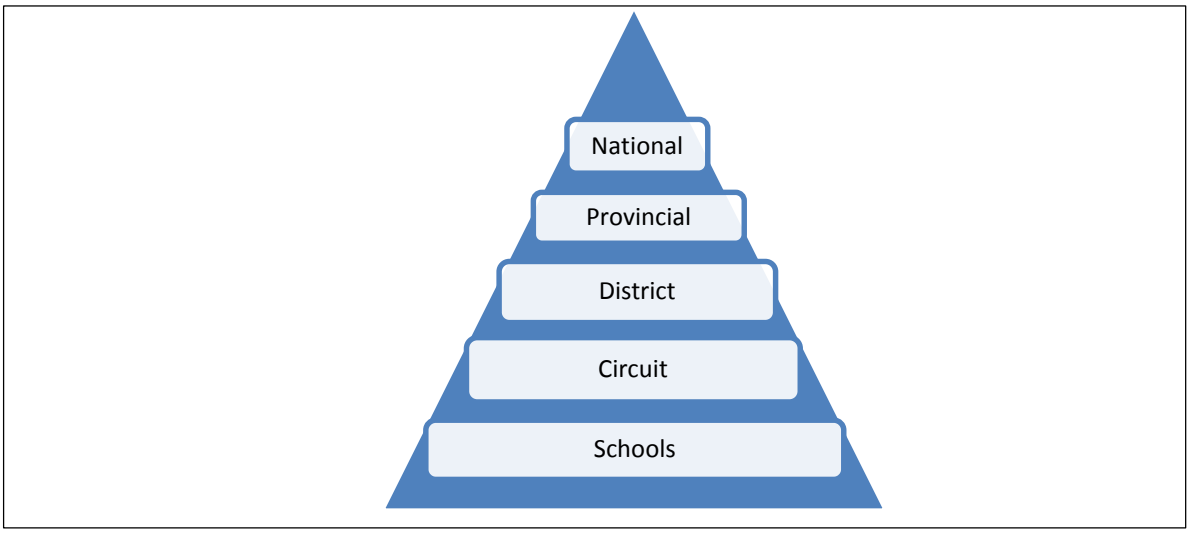

Figure 4.1: Arrangement of institution in the South African education system
Source: South Africa 2013

The decentralisation of administration in the education system aims to make administration more efficient. A decentralised system, it is argued, gives administrators better knowledge of grassroots needs and more flexibility in the management of micro-programmes.

Institutions are created to facilitate in the flow of resources from the national department down to schools. The task of these institutions is to see to it that resources, such as adequate infrastructure, educators, funds, learning materials and other facilities due to schools are provided. Vhembe District inherited the injustices of apartheid, and this is reflected in poor economic development, with a substantial section of the economically active population being poor and unemployed. The introduction of no-fee schools was welcomed by parents, especially those who were living below the breadline. However, the new government has not done much else to address the issues of equity and equality. In particular, the provision of school infrastructure has been grossly neglected and there are still learners attending classes under trees. The economic background of communities does not allow them to raise money to improve the conditions at local schools; and all they can do is wait for the current government to provide for their needs.

State resources must be deployed according to the principle of equity, so that the government provides essentially the same quality of learning opportunities to all children in South Africa (Fiske and Ladd 2004). Providing equal opportunities for all is at the same time viewed as a means of addressing the injustices of past apartheid policies. To provide the necessary resources to all schools helps to improve the quality of education in all schools. With the past twenty years since

the implementation of the new democratic government, however, this objective has proved to be difficult to achieve. For example, learners in public schools are by law expected to receive free stationery and textbooks. Unfortunately, many learners end up sharing textbooks because not enough textbooks are supplied to all schools.

The Limpopo Department of Education was in 2011 taken over by the National Department of Education owing to the misuse of funds, which had resulted in huge deficits within the provincial department. The national department bailed out the Limpopo department by paying the salaries of educators. The companies contracted to supply textbooks to schools were complaining of non-payment for work delivered, and decided to stop supplying textbooks at the beginning of 2012. This angered the parents, who, with the help of Section 27, a not-for-profit company operating in the field of constitutional rights, took the Limpopo Education Department to court, where the latter was ordered to supply textbooks by 15 June 2012. This did not happen, and the failure of the Limpopo Education Department to supply textbooks ended up making headlines from May to October 2012 (*Equal Education* 17 May 2012; *Mail & Guardian* 31 August 2012; Nicolson 2012, 5 October 2012). It was widely reported that the North Gauteng High Court had ruled in favour of Section 27 in the case it had opened against the government of Limpopo. The Limpopo government's inability to keep to its promises nevertheless continues: in June 2013, the half-year exams did not start as scheduled because schools did not have money to purchase printing paper, even though the provincial Department of Basic Education claimed that things were in order. Question papers for common examinations are given to schools saved electronically on CDs.

Although given more funds, schools in the rural areas are still not equipped equally when compared with schools in the former white areas. Facilities such as libraries, laboratories and sports fields are lacking. The lack of basic school facilities results in people perceiving education in formerly disadvantaged areas as inferior.

The learner/educator ratio is one indicator determining the quality of a country's education. The overcrowding of classrooms compromises quality teaching because educators do not have enough time to focus on those individual learners who may be lagging behind or facing learning challenges in class. According to Wasley (2002), learners in small classes perform better than those in large classes because educators in the former have the time needed to give learners individual attention.

Table 4.2: Global distribution of learner/educator ratio, 2006 and 2012

2006	2006	2012	2012	Place
Number of countries	**Learner/educator ratio**	**Number of countries**	**Learner/educator ratio**	**Selected countries**
7	< 10	13	< 10	Sweden/ Cuba/ San Marino/ Kuwait Bermuda /Georgia
90	10–19	98	10–19	Iceland/ Denmark/ Poland/ USA/ France China/ Tunisia/ Libya
43	20–29	49	20–29	South Africa/ Egypt/ Brazil/ Swaziland/ Turkey/ Botswana
27	30–39	24	30–39	Zimbabwe/ Botswana/ Ghana/ Sudan/ Haiti/ Somali/ Niger
27	40+	31	40+	Sub-Saharan Africa/Cambodia/ Afghanistan
Source: NationMaster 2014				

Table 4.3: Average learner ratio of developing countries in 2012

Country	Average learner/educator ratio
Central African Republic	80.2
Chad	74.1
Rwanda	59.3
Mozambique	54.8
Mali	54.8
Tanzania	45.7
Namibia	40.7
Bangladesh	40.2
South Africa	29.5
Global	**24**
Source: NationMaster 2014	

As there is a link between poor infrastructure and resources and the socio-economic background of an area, government policies aimed at addressing the issues of quality and equity should target those areas with poor economic development.

Most developed countries have a leaner/educator ratio of 10–19 (Table 4.2). For quality teaching and learner individualisation in classes, the developing countries may have to learn from the developed countries that small classes are accompanied by quality teaching. Government policy

should stress the issue of equity in poorly developed areas as these are areas where we find huge backlogs in terms of class size and the provision of infrastructure and resources.

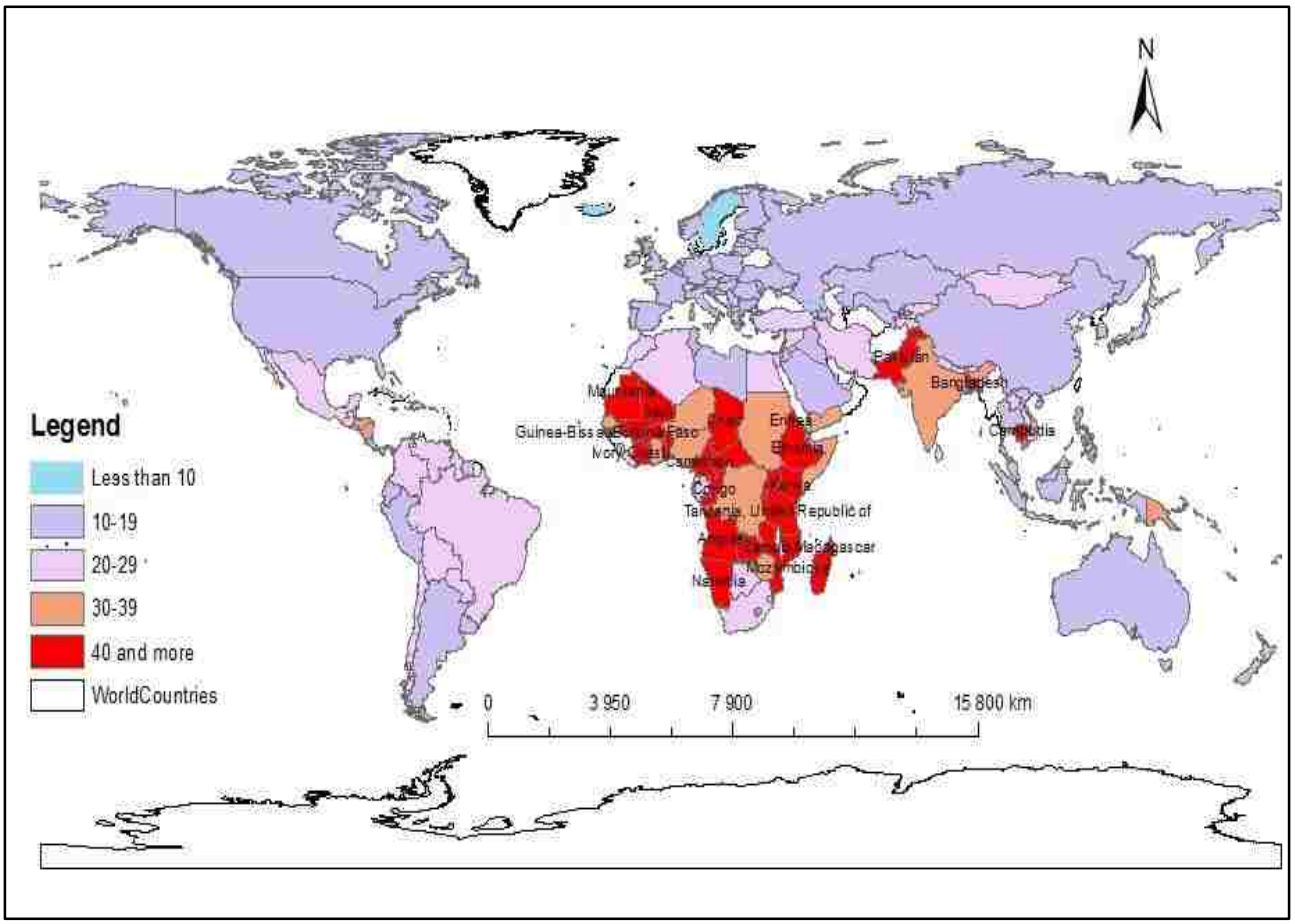

Figure 4.2: Global pupil/ teacher ratio in 2012
Source: NationMaster 2014

In contrast to the learner/educator ratio in developed countries, developing countries in 2012 had large classes in general. Central African Republic schools have very large classes (80.2 learners per educator) Table 4.3). Most countries in sub-Saharan countries had large classes (Figure 4.2), with Mozambique and Rwanda having 54.8 and 59.3 learners per educator respectively. The rest of the African countries had an average class size ranging from the 40s to the 80s. The exception was South Africa, which had an average class size of 29.5 learners per educator. The countries with a very high learner/educator ratio are poorly developed. South Africa's economic development is much better than that of most developing countries. However, there are huge disparities here between the formerly disadvantaged and advantaged areas. The formerly advantaged areas are

well resourced and also enjoy support from former students, companies and business people. Most parents in these areas are also able to pay school fees.

Table 4.4: Trends in learner/educator ratios in South Africa, 1999–2009

Year	Ratio
1999	34.15
2000	33.00
2001	33.00
2002	33.00
2003	33.00
2004	34.00
2005	32.00
2006	32.00
2007	31.00
2009 (from World Bank)	30.71
2012	29.5
Source: development Indicator 2007; The World Bank 2013; NationMaster 2014	

The distribution of educators in South Africa has been unequal historically and the average learner/educator ratio was 38.1 in 1975 and 33.1 in 1985. The average learner/educator ratio did not decrease because of additional educators, but rather went down because many learners dropped out of school during the 1980s as a result of political instability in South Africa. Learner enrolment increased again in the 1990s after the political situation in the country had stabilised. Before 1995 there were huge disparities among the learner/educator ratios of the various race groups, and it was agreed that the ratio should be 40 for primary schools and 35 for secondary schools. Since then there has been considerable improvement in the learner/educator ratio, from 34 learners per educator in 1999 to 31 in 2007 (DoE 2009b). Analysis of educator/learner ratio trend in South Africa shows that it has been stable at 33 between the year 2000 and 2003. It increased to 34 in 2004 but dropped again to 32 in 2005 and 2006 and finally to 29.5 in 2012 (Table 4.4). According to the South African education policy the learner/educator ratio at primary schools is 40:1 In 2007 the average learner/educator ratio for all schools was 31.5:1 but private schools have lower learner/educator ratios. The global average is 24 pupils per educator (NationMaster 2012). The South African education system compares favourably with other developing countries in terms of learner/educator ratios (Table 4.3). The educator/learner ratio has decreased slightly as stated

above, from 34 learners per educator in 1999 to 31 learners in 2007 and to 29.5 in 2012. In 2012 the learner/educator ratio for primary schools in Vhembe District was 30.8 (calculated from EMIS school enrolments data on learner enrolments and total number of educators).

The Department of Basic Education is responsible for paying the salaries of educators. The provision of state-paid teaching posts is done according to a model based essentially on the number of learners, the school phase and curriculum choice (Roos 2010). The challenge in the supply of educators is to get quality teachers who are dedicated. The communities may supplement the teaching staff by hiring educators who are paid by parents. In some communities, especially in poor and rural communities, parents may not be able to pay higher fees in order to supplement school staffing.

From an interview carried out with officials in the Department of Basic Education in Vhembe District, it was learnt that the Limpopo government recommends that a school should be shut down if it has fewer than 50 learners. If it were a foundation phase school with five grades (Grade R–Grade 4), this would mean that five educators would be needed for each grade. This would imply that the learner/educator ratio on average would be less than 10. For a senior primary school with three grades, the learner/educator ratio would be less than 20. Therefore, in a senior primary school, one educator would be forced to teach many subjects.

Low enrolments at schools result in multi-grade and multi-subject teaching. Multi-subject teaching occurs when one educator teaches more than one subject and it is used in the foundation phase classes in South African primary schools. In 2009 there were 6 619 schools with multi-grade classes throughout South Africa, and this rose to 6 694 in 2010. In Limpopo there were 665 schools with multi-grade classes in 2009 and this number increased to 829 in 2010. Multi-grade classes are not favoured by either parents or educators, but politicians see this approach as a means of bringing to the required balance between the number of learners and educators based on the stipulated learner/educator ratio in South Africa. However, it is noted that the budget should be designed in such a way that pedagogic needs are prioritised.

Apartheid laws were characterised by inequality in the provision of education. The funding of ‘African’ schools was much lower than that of schools for other groups, especially whites, and infrastructure was inferior when compared with that in the former advantaged areas. In order to improve the quality of education for all, the government introduced measures that are universally applicable and were adopted from the “Education for All” campaign initiated at international conferences.

Since 2010, Grades 3 and 6 have been writing annual assessment tests that are assessed independently. In 2011 the number of schools participating in this assessment increased to 1800 (Department of Basic Education 2011b). A new action plan, known as Schooling 2025, is aimed at improving all aspects of education: teacher recruitment; learner enrolments; school funding; mass literacy; numeracy and the overall quality of education. According to the Southern and Eastern Africa Consortium for Measuring Education Quality (SACMEQ 2011), the South African national and provincial governments can legislate on any matter concerning basic education.

Annual assessment examinations were also introduced into secondary schools in Limpopo in 2012. Grade 9 learners are participating in these exams, which involve English and Mathematics and are set at the national level. All primary school learners except those in Grade R are expected to write the exams, which enable the Department of Basic Education to assess whether there is quality teaching taking place at schools.

However, according to one subject advisor in Vhembe, the system is problematic owing to poor communication with some of the schools. Poor communication networks result in the schools in Vhembe missing some of the crucial departmental meetings on the annual exams. Sometimes schools are not informed in time about the exams and learners are thus underprepared for them. These scenarios render the performance results questionable.

Efficiency on the part of officials at the provincial, district, circuit and school levels is seen as crucial in order to improve the quality of education in South African schools. Efficiency involves management of the schooling system at all levels, from the department down to schools. Policies may be documented, but if they are not properly implemented then educational outcomes are affected. At the highest level, the department provides infrastructure, personnel, funds, educators' stationery and so on to facilitate learning and teaching at schools. What the government supplies to schools must be managed efficiently. Funds, textbooks, stationery and facilities such as desks and chairs must be supplied on time. A delay in supplying the basic requirements frustrates both learners and educators and therefore disturbs the learning and teaching processes. A shortage in the supply of basic requirements may sacrifice desirable outcomes at specific schools and consequently render such schools unattractive to learners.

Table 4.5: Percentage of repeaters and dropouts at primary school level by grade, 2009

Grade	Repeaters	Dropouts per grade
Grade 1	7.2	1.0
Grade 2	7.4	0.5
Grade 3	7.4	1.2
Grade 4	7.1	0.3
Grade 5	6.9	2.0
Grade 6	6.7	1.5
Grade 7	5.1	2.7
Source: Department of Basic Education 2011b		

Efficiency also involves throughput. When many learners repeat classes in a particular school, it can be construed that teaching is not efficient or that proper management is lacking at that school. In South Africa, the level of repetition in primary schools is as high as 7% while on average it is 5% in developing countries and less than 1% in the developed countries. In 2009 the percentages of repeaters in primary schools showed a decrease along with increases in the grade level (Department of Basic Education 2011b) as shown in (Table 4.5.) The fact that pre-school is not compulsory may account for this, because some learners enter Grade 1 not ready for school. In Chapter 1 it was stated that the level of illiteracy is high in South Africa and that many parents are unable to assist their children with homework. The result is poor learner performance, especially in rural areas. The number of dropouts among primary school learners has decreased significantly but increases with an increase in the grade level.

In the assessment projects undertaken by SACMEQ in 2000 and 2007, South African Grade 3 learners did not perform well in either literacy or numeracy; while the performance of South African Grade 6 learners in language and Mathematics was also disappointing (Department of Basic Education 2011b). SACMEQ's basic inputs are basic learning materials, Mathematics textbooks, learner/educator ratios and class size. It is desirable for each learner to have basic learning materials such as exercise books and a ruler. This ensures the learner participation as soon as the school calendar starts. It is also desirable to have textbooks for core subjects such as Mathematics and science and for reading.

Table 4.6: National benchmark for selected indicators according to SACMEQ

Selected indicator	Description of indicator	National benchmark
Basic materials	At least one exercise book, a pencil or pen and a ruler	100%
Mathematics	Sole use of Mathematics textbook during Mathematics lesson	No benchmark
Learner/educator ratio	Total number of learners divided by total number of educators	40:1
Grade 6 class size	Average number of Grade 6 learners per class	40
Source: SACMEQ 2011		

Regarding class size, it has been established that educators teach efficiently in small classes because these enable the educator and the learner to have more interaction, resulting in better-quality education. The learner/educator ratio and the class size are key indicators in checking whether an expansion in participation rates is accompanied by an adequate provision of teachers and classrooms. The recommended learner/educator ratio in primary schools in South Africa is 1:40. The supply of qualified teachers has improved dramatically since 2005. In 1990, only 53% of educators were qualified, but this improved to 91.6% in 2005 and 95.1% in 2010 (Department of Basic Education, 2011d). The national benchmark for selected indicators according to SACMEQ requirements for schools is indicated in Table 4.6. For quality teaching and improved performance results, the Department of Basic Education has to honour this by supplying the required learning materials to schools.

The extent of the availability of basic learning materials by province and the sole use of Mathematics textbooks among Grade 6 learners in 2007 is shown in Table 4.7. In 2000 the availability of basic learning materials in respect of Grade 6 learners in South Africa was 68%, and this improved to 82% in 2007. Regarding the supply and sole use of Mathematics learning materials among Grade 6 learners, the low figure of 41% in 2000 had been further reduced to 36% in 2007. The supply of Mathematics textbooks to Grade 6 learners is still very low in South Africa, and is below the figures for the average sole use of Mathematics textbooks throughout Southern and Eastern Africa. There was a slight difference in the supply of reading materials to rural (83%) and urban (82%) areas, a difference of 1%. In 2007 there was a difference of 6% in the supply of Mathematics textbooks to the rural (33%) and the urban (39%) areas. These figures are evidence that Mathematics is not highly considered despite being an important subject.

Table 4.7: Supply of basic learning materials and Mathematics textbooks to Grade 6 learners by province, 2007

Province	**Basic learning materials (%)**	**Mathematics (%)**
Eastern Cape	67	33
Free state	80	37
Gauteng	85	33
KwaZulu-Natal	91	25
Limpopo	93	47
Mpumalanga	79	53
Northern Cape	80	31
North West	82	41
Western Cape	74	46
Rural	***83***	***33***
Urban	***82***	***39***
South Africa	**82**	**36**
SACMEQ	**79**	**41**
Source of data: SACMEQ 2011		

The South African primary school curriculum has presented both learners and educators with challenges because it has kept on changing since the dawn of the new government. The new curriculum in 1994 started with outcomes-based through curriculum 2005 (Jensen 1998). Curriculum 2005 was reviewed and a Revised National Curriculum statement was introduced in 2000 (Chisolm 2003). The Revised National Curriculum was changed again to a National Curriculum Statement and in 2013 a new approach known as Curriculum and Assessment Policy Statement was introduced (Coetzee 2012). Each of the ministers responsible for the Department of Basic Education since 1994 came with a new teaching approach and this was taxing and frustrating on the part of educators and learners who have to continuously adapt to these changes.

Another aspect of the new curriculum has been the phasing out of a number of practical subjects such as gardening, handwork and sowing, which developed learners' interest and ability in such skills. The learners therefore complete their primary education with virtually no practical skills. Education at primary school level focuses mainly on formal education (literacy and numeracy). The lack of sports facilities in the rural areas also denies learners the opportunity to realise talents they

could develop and maybe even earn a living from. All these challenges make primary schools in Vhembe District and other rural areas less attractive to young parents with school-age children.. These challenges, lead to continuous decline in learner enrolment in Vhembe District schools and other rural-based municipalities. The effect of curriculum change on performance by learners is discussed in Chapter 5, which focuses on this aspect more fully.

4.3. SCHOOL INFRASTRUCTURE

An environment conducive to learning is one of the aspects taken seriously by parents when registering children in particular schools. It refers to the environment that provides conditions that makes it easy to work or learn. These conditions can be physical or social. Children need to be taught in safe and decent environments with facilities such as a safe water supply, an adequate sewage disposal system, sufficient and sanitary toilet facilities and plumbing fixtures, adequate storage space, adequate light, and attractively painted rooms with acoustics or noise control. The nature of school infrastructure is believed to contribute to school effectiveness in the form of learner achievement and well-being.

Once the basic physical infrastructure of a school is established the school is recognised, and the funds required to run the school are allocated. The Silvermine community in former Lebowa in Limpopo decided to start a school where learners were taught under trees by volunteers, in protest against the children having to travel more than 10 km through the bush to the neighbouring village (*Sunday Times* 27 May 2012; *Sowetan* 29 May 2012). The Limpopo education authority could not recognise the school because of the absence of infrastructure. There was no official monitoring of the learners' progress, and neither textbooks nor stationery were provided for about 165 learners from Grade R to Grade 7. Some of the volunteers were not qualified educators. The community's cry was heard only after the department's inefficiency had been exposed by the media, then formal temporary classrooms were provided.

In 2009 the Minister of Education drafted the minimum norms and standards for school infrastructure that were to be fully implemented by 2011 (Department of Education 2009d). In 2011 the issue of norms and standards made the headlines in newspapers when educators in the Eastern Cape took the present Minister of Basic Education to court for failing to prescribe the minimum standards regarding school infrastructure. These norms are meant to facilitate the actualisation of aspects of key sector policy, namely quality, equity, relevance and efficiency.

Table 4.8: Percentages of schools with more than 40 learners per class by province, 2008–2009

Province	Class size, 2008	Class size, 2009	Difference
Mpumalanga	51.1	47.5	3.6
Limpopo	50.4	46.3	4.1
Kwazulu-Natal	44.4	43.9	0.5
Gauteng	44.8	39.8	5.0
Eastern Cape	36.4	34.6	1.8
Western Cape	32.6	31.8	0.8
North West	36.6	31.8	4.8
Free State	30.5	26.5	4.0
Northern Cape	17.1	13.6	3.5
South Africa	**40.9**	**39.6**	1.3
Source: Department of Basic Education 2011c			

The average class size in 2007 was 38, and this decreased to 36 in 2009. Eight thousand schools in South Africa have a class size of more than 40 learners. In Mpumalang 48% of schools have large classes (Department of Basic Education 2011c). The percentages of schools with large classes of more than 40 learners are shown on the map in Figure 4.3, which depicts the situation in each province. Limpopo, KwaZulu-Natal and Mpumalanga are still lagging behind in terms of reducing their class sizes. These are the provinces with a larger percentage of schools with an average class size of more than 40 learners. Northern Cape is a sparsely populated province – hence its small average class size (Table 4.8). Large classes are found in areas where settlement is dominated by the black population and also coincide with patterns of population density which increases as we move from west to east). The reduction in overcrowding of classes however improved by only 1.3% for the whole country, and by about 4% for Limpopo between 2008 and 2009.

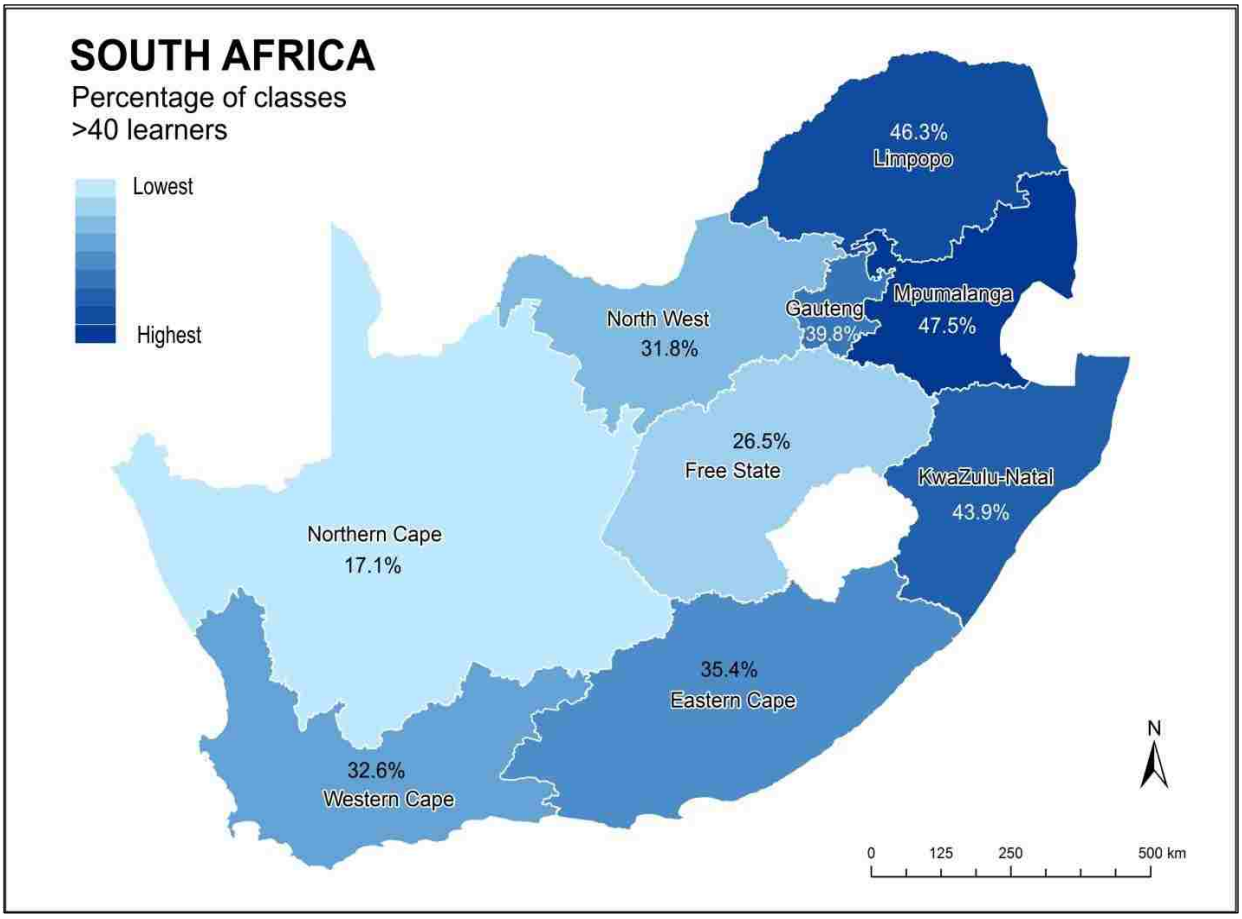

Figure 4.3: Percentage of schools with large class size (more than 40 learners) by province in 2009
Source: Department of Basic Education 2011c

Schools in the rural areas and rural-based provinces also have poor toilet facilities. This is evident in the statistics showing toilet facilities throughout the country. In both Limpopo and the Eastern Cape, for example, only 20% of the schools had flush toilets by the year 2007, while in Gauteng and the Western Cape respectively the figures were 94% and 97%. This is strange when one notes that more than 90% of the schools in Limpopo have access to water near or on site. (In the Western Cape and Gauteng, 98% of schools had access to water (Table 4.9).

Table 4.9: Schools' toilet facilities by province in South Africa in 2007

Province	Flush toilets	Water near or on site
Northern Cape	52%	98%
Gauteng	94%	98%
Western Cape	97%	98%
North West	69%	95%
Limpopo	20%	90%
KwaZulu-Natal	27%	89%
Mpumalanga	49%	89%
Free State	50%	81%
Eastern Cape	20%	80%
South Africa in 1996	**33%**	**65%**
South Africa in 2006	**40%**	**89%**
South Africa in 2007	**38%**	**71%**
Source: Children's Institute 2009		

Poor facilities and the inability of the Department of Basic Education to provide the necessary infrastructure result in people in Vhembe District and other rural-based provinces perceiving the education provided in their schools as being of poor quality. The young and ambitious adults who aspire for better education for their children relocate to towns and cities where schools have better facilities. Poor education in rural-based provinces is one of the reasons why young and economical active adults are taking their families with them and no longer leave children with grandparents. Low quality education in provinces such as the Eastern Cape and Limpopo is reflected in their poor matric results. Limpopo and Eastern Cape always occupy the bottom of the matric results. Hence the negative net migration in provinces such as Limpopo and the Eastern Cape. Limpopo and the Eastern Cape are the poor of the poorest municipalities. Negative net migration is responsible for decreasing school-age population and dwindling learner enrolments in some primary schools.

The problem of dwindling learner enrolment and the existence of very small and non-viable schools in South Africa during the post-apartheid era demand new planning strategies. In 2007 the Department of Education established a Rural Education Directorate that was tasked with the drafting of national guidelines for the rationalisation of small and non-viable schools in collaboration with provincial rural education co-ordinators (Department of Education 2009a). The guidelines were

established to focus on rural schools located on farms and private land. Several schools located on farms were shut down owing to very low enrolments. From the interviews conducted with circuit managers and officers in the Department of Education in Vhembe District, it was learnt that if the enrolment of learners was below 50, the school concerned must be shut down and merge with a neighbouring school. Although the directive was originally aimed at schools on farms and private land, it has been extended to public schools with serious declines in learner enrolments in villages and towns. Learners affected are relocated to neighbouring schools irrespective of the distance travelled from home to school.

According to the norms and standards for South African public schools, the maximum distance that primary schoolchildren should be walking from home to school should not exceed 5 km (DBE 2010b). In the United Kingdom distance from home to school is measured in in terms of walking time where learners are supposed to walk for not more than 20 minutes. Children Count (2014) put the maximum walking time at not more than 30 minutes. The South African maximum walking time of 5 km will obviously take more than 30. Walking distance or time between home and the school is a most significant spatio-temporal dynamic. The maximum distance travelled by leaners through walking is the same for both primary and secondary school learners (DBE 2010b). The aim of rationalisation is, to create larger and better-resourced schools that aim to alleviate poverty in the rural schools. Poverty alleviation includes, among other things, no-fee schools and school feeding schemes. The other aims of rationalisation are to improve the quality of education, promote access and expedite resourcing. The community may reject this move. The guidelines do not stipulate the minimum number of learners that classifies a school as a “small school”: this was left to the discretion of the provincial education departments. The problems cited in the guidelines with regard to very low enrolment are the following:

- Schools affected are unable to provide adequate curriculum choice. This is relevant only to secondary schools because there is no subject choice at primary school level.
- Educators are forced to teach multi-grade classes in schools where enrolments are very low.

The guidelines specify issues to take into consideration when merging and closing schools. These issues are as follows:

- Distance travelled by primary school learners from their household to school. It is assumed that learners walk from home to school and that the maximum walking distance should therefore not exceed 5 km. Learners who travel longer distances should be accommodated in hostels or be provided with transport at the expense of the department.

- Safe transport must be provided.
- The closure and merger of schools should not impede learners' progress. For this reason it is supposed to take place at the beginning of the year. The steps to be followed in merger and closure processes are as follows:

Step 1: *Provinces must identify schools eligible for merger and closure.*

Step 2: *The Department of Education concerned must ensure that it has a clear indication of present and predicted population trends in the area.*

Step 3: *Schools are expected to explore ways to retain their learners.*

Step 4: *The support required by learners moving from small to larger schools must be determined (*Department of Education 2009a).

Decisions to close and merge schools are taken at government level within the country's political structure. Closing a school is made public and the communities are engaged in the whole process that involve several meetings between the department and the community. Intention to close the school is also published for public comments.The steps taken in the merger and closure are these:

Step 1: *A written notice must be sent to the schools in question.*

Step 2: *A notice must also be published in the Government Gazette and local newspapers. The intention is to invite comment.*

Step 3: *School governing bodies (SGBs) and other interested parties must be allowed to make presentations.*

Step 4: *The presentations from SGBs and other interested parties must be considered.*

Step 5: *Possible appeals against the decision must be heard.*

Step 6: *Compliance with labour law must be ensured.*

Step 7: *Support programmes for educators who are relocating must be provided.*

Step 8: *Unutilised schools must be deregistered.*

Step 9: *Notice of the merger of the two schools must be published*. (Department of Education 2009a).

The guidelines pose some challenges in Vhembe District regarding the transfer of learners to boarding schools because boarding facilities in public schools were phased out there. Transportation is another challenge because roads in the greater part of Vhembe District are not tarred and transport owners are reluctant to make several trips per day on such bad roads. The

other concern regards the timing of the redeployment of educators where implementation is done in the middle of the year instead of the beginning and both educators and learners are destabilised as a result. The issue of exploring ways of retaining learners at a specific school is possible in areas where there are several schools in the same locality, but proves difficult in places where schools are far apart owing to both economic and demographic challenges. Out-migration, for example, has a negative impact on the size of enrolments since parents migrate together with their children. In-migration, on the other hand, results in areas gaining population and potential learners, and also works positively in respect of the potential school-age population since young adults who are still in their childbearing years and are in search of better opportunities might migrate into the area. The migration of persons out of an area in large numbers reduces the potential number of children of school-going age feeding into local schools. Over time, if out-migration is not curbed, a mismatch is created between the location of schools and the population. Strategies to improve life in rural areas need to be sought in order to reduce the out-migration of their young and economically active population.

4.4. ECONOMIC DEVELOPMENT AND SOUTH AFRICAN POLICIES

Policies are direct if they are clearly and explicitly directed at influencing or shaping a particular issue; or they may have incidental or unintentional influence. Policies and politics are closely related because they are both actions initiated by governments. The improvement of education policies cannot, singlehandedly, improve the lives of persons living in rural areas, including those in Vhembe District. The improvement of conditions in rural areas should be looked at holistically, taking into account environmental social, economic and social factors. Social policy can be instrumental in economic development.

It is for this reason that developmental issues and policies pertaining to rural places are important aspects in this study. Such factors operate in an integrated manner in order to produce the desired effects. Rural development policies are important because they help countries to achieve valuable goals for the countryside and for the people who live and work there (European Union Commission 2011). Rural areas have, on average, a lower income per head; a narrower skills base; and a less developed service sector.

The South African government may improve rural life by learning from global communities and their rural development policies, for example those adopted in Europe and China. The countries of the

European Union (EU) mobilised to develop a common rural policy that was adopted by its member states. This focused on improving three things:

- the competitiveness of agriculture and the forestry sector
- the environment and the countryside
- the quality of life in rural areas and the diversification of the rural economy.

In 2005 the European Commission re-launched the Lisbon strategy, which aimed to achieve high economic growth; job creation; and greater competitiveness in world markets. It sought to provide people with a better standard of living in an environmentally and socially sustainable way. The motto for this Common Agricultural Policy (CAP) is "strong economic performance that goes hand in hand with the sustainable use of natural resources" (European Commission 2005). The CAP is based on the belief that rural development measures can play a significant role in fostering and maintaining prosperity in rural areas and make a contribution to job creation. The EU priorities are to improve infrastructure, and to connect rural communities with major investments under regional and cohesion policies, by improving telecommunication, transport, energy and water. Other EU priorities are to improve education by assisting people to adapt to a more market-oriented agriculture; raise economic and employment activity rates; encourage the development of micro business; and facilitate innovation (European Union 2006).

It has been highlighted in this research that economic development has an indirect bearing on school enrolments. South Africa had identified China as an exemplary model for successful agricultural development (Huang Chengwei 2008). One of the lessons learnt related to land reform, and this gave South Africa a foundation on which to develop its land reform policies and strategies. The land system in China is seen as the base and core of the country's agricultural system, playing a remarkable role in agricultural growth and rural development. In the 1980s, China launched a household contract management system through which land ownership was separated from the right to use land. This promoted the growth of agriculture at an increasing pace and was accompanied by the development of villages and township-owned enterprises involving secondary and tertiary industries in rural China (Huang Chengwei 2008).

Agriculture in China is the basis of that country's stabilised national economy, and it is seen as an important industry in solving rural unemployment and farmers' income (Cheng Guoqiang 2006). China has implemented the household responsibility system, township enterprises and market-oriented farming. The effort to improve rural life in China focuses on education, culture, healthcare

and infrastructural development. Road construction has been undertaken on a large scale in the countryside and rural transportation has consequently improved. Besides liberalisation, the two major principles of rural policy are “give more” and “take less”. Giving more involves the redistribution of national income, while taking less refers to a degree of tax reduction. Among other aspects, liberalisation involves the facilitation of production and the flow of goods between rural and urban areas. Despite all this, however, rural development in China is not without its challenges. The two main problems confronting the country are the shortage of land as a result of high population numbers, and the shortage of water because of drought and the uneven distribution of water resources.

Before 1994 policies in South Africa emphasised separate development and inequality among the four racial groups, and the post-1994 government inherited huge disparities in economic development in different parts of South Africa. In order to address the injustices of the past, the new government adopted five-year plans aimed at strengthening economic development, broadening employment, and levelling and broadening the distribution of income and social and economic opportunities. The macro-economic strategy developed in 1994, known as the Reconstruction and Development Programme (RDP), was launched. The RDP aimed to improve the lives of poor South Africans by providing housing; electricity; land reform; social security; a better water supply; healthcare; job creation through public works; and education and training (Knight 2001).

In 1996 the Department of Finance developed another macro-economic strategy known as the Growth, Employment and Redistribution Strategy (GEAR). The RDP strategy is a social policy while GEAR is an economic policy aimed at economic growth and the creation of economic employment opportunities. The RDP strategy made significant progress in providing housing, making education compulsory and accessible to all children in the appropriate school-age population, and providing free access to health services by senior citizens and children under the age of seven. This policy, however, did not accomplish much in terms of land reform, improving transport routes or attracting investors to the formerly disadvantaged areas of South Africa. Road networks in the former homeland units are in poor condition, making these areas unattractive to business investors because they are inaccessible. Young adults still in the childbearing stage opt to out-migrate in search of better opportunities elsewhere. Out-migration by these young adults and their children affect the school-age population and learner enrolments at local schools.

The other economic strategy developed to improve the lives of formerly disadvantaged persons, namely black people, women, the youth and disabled people, is the Black Economic Empowerment

(BEE) programme. This is aimed at supporting small business in order to situate black economic empowerment within the context of the broader national empowerment strategy. BEE has made some strides in benefiting the few, but overall the approach has lacked focus and an overarching strategic framework. The formerly disadvantaged areas continue to be poorly developed economically.

In 2010, South Africa signed an agreement with the World Bank to help South Africa's Department of Rural Development and Land Reform develop and implement comprehensive rural development and land reforms. The main aim of the agreement was to build a relationship of trust between South Africa and the World Bank. The bank needed to be reassured that South Africans could bring added value to these processes. It also needed to understand South African needs and challenges, and to provide capacity. The current challenge in the way of achieving these objectives is the new land reform policy, which is taking too long to be finalised. In the previous discussion, it was stated that before 1994, government policies restricted black South Africans to only 13% of the total land area of South Africa. Without rural reform policies, sustainable rural development in the former densely populated areas will be difficult to achieve. The shortage of land on which to engage in agricultural activities is responsible for the out-migration of masses of black people from the rural areas in search of employment opportunities in the industrialised areas. Giving land back to the mass of South Africans will help to curb some of the unnecessary out-migration from the rural areas.

The main challenges in rural areas are shortage of land, and lack of finance and skills. In 2012 the government, through the National Treasury, published a set of new and existing rural development priorities for the following three years in order to balance present needs with intergenerational equity. Areas of inefficiency are also to be identified, and funds have to be redirected towards the priorities.

A national office for land reform has been created, tasked with taking responsibility for developing and coordinating land reform products; facilitating and implementing land reform programmes and projects; and providing support service in the provinces identified. About 411 farms (in the year 2010/11) and 387 farms (in the year 2011/12) were to be restored or improved. The land reform programme was divided into several sub-programmes. Some of the programmes that address the challenges mentioned according to Department of Rural Development and Land Reform (2011) are:

The National Land Reform Office, which develops policies on land reform.

- The Land Reform Provincial Office, which is responsible for implementing projects. It administers state land, measures project success, creates jobs, and recapitalises and develops distressed land reform projects. It also strengthens the security of tenure of farm dwellers and labour tenants by providing them with legal support.
- The Land Reform Grants Programme, which provide funds for projects and programmes, and land acquisition and settlement, and allows the Department to maintain, plan, develop and improve property.
- The Communal Land Rights programme, which aims to give secure land tenure rights to communities and people who occupy and use land previously reserved for occupation by African people.
- The Agricultural Land Holding Account, which takes care of buying land and holding it until suitable beneficiaries are identified. The Account had a budget of R2.1 billion.

The Department of Rural Development and Land Reform (2013) has identified land reform as a priority in alleviating poverty and ensuring food security. It maximises and manages the use of natural resources in creating viable and sustainable rural communities

- The pre-1994 land reform policy provided restitution to those previously dispossessed of their land without disrupting agricultural production or food security. The new (amended in 2013) focus is on:
- sustainable agrarian reform, with thriving small and large farming sectors.
- improved access to diverse and affordable food.
- rural job creation linked to skills training and.
- enabling an institutional environment for sustainable and improved growth.

To achieve all of these goals, the Department of Agriculture and Rural Development will have to collaborate with other departments and non-government organisations (Department of Agriculture and Rural Development 2013). For rural development, the department aims to train young adults and to recruit about 500 or more of them per annum. The department also aims to ensure 100% productivity on all redistributed land by 2016. There was still a backlog of 4 000 land claims, and all claims were to be finalised by the end of the 2012/13 financial year. Land identified for farming will need to be leased to people with an interest in farming. Regarding its financial, technical and operational support programmes, the department will work with the Land Bank; the Department of Agriculture, Forestry and Fisheries; and The National Treasury. Limpopo, KwaZulu-Natal, the Northern Cape, North West and Mpumalanga were identified as priority areas for comprehensive rural development (Department of Rural Development and Land Reform 2013).

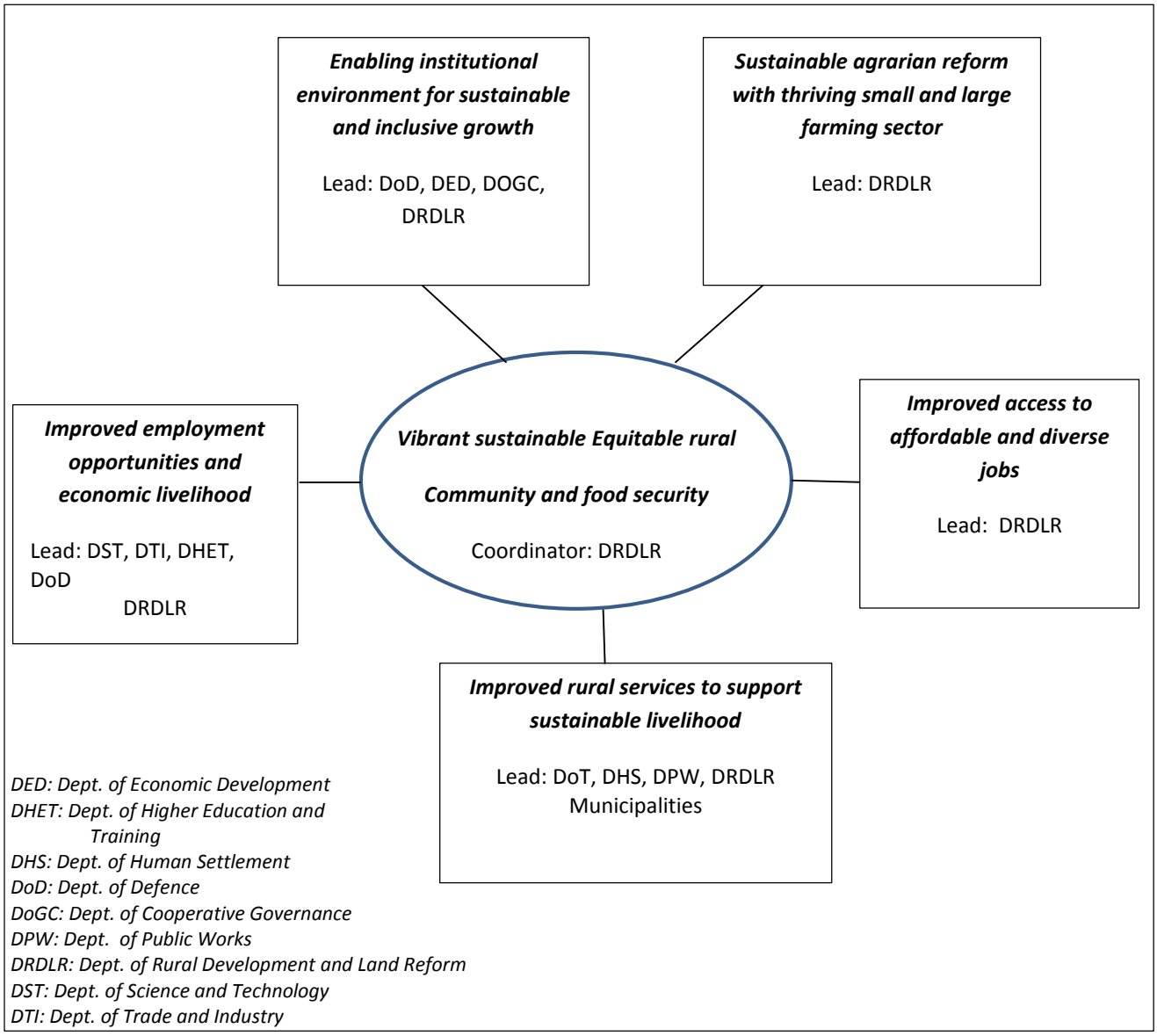

Figure 4.4: Collaboration of departments in creating viable and sustainable rural communities
Source: Department of Rural Development and Land Reform 2013

The rural development programme aims to reduce spatial inequalities by providing households with access to clean water and energy. It also intends to harness technological innovation and indigenous knowledge, establishing food gardens and increasing employment for the youth through the co-operatives and enterprises of the National Rural Youth Service. The National Rural Youth Corp is responsible for training youths in different skills (Department of Rural Development and Land Reform 2013). The Rural Development and Land Reform Programme has a wide scope and thus requires the collaboration of various departments. It encompasses many areas such as

agrarian reform, job creation, improved rural services, employment opportunities, institutional development for sustainable growth, sustainable equitable rural communities and food security. Figure 4.4 shows how the various departments can contribute to creating sustainable rural communities and food security. “Lead” in the boxes indicates the departments that will play leading roles in achieving particular outcomes. The Department of Rural Development and Land Reform acts as a co-ordinator bringing the other departments together. The creation of sustainable rural communities will improve the quality of life in rural areas and thus reduce the out-migration of young adults.

Rural land reform will create enabling environments and opportunities and it is likely going to reduce high rates of out-migration. Reducing out-migration rates will enable the retention of the school-age population and thus prevent the closure of schools. A boosted economy in rural areas will reduce economic disparities between the rural and the urban areas and reduce food insecurity in the rural areas.

Issues identified in this chapter are seen to have an impact on schooling, be it in terms of access, funding, equity, norms or standards; and also on developmental issues that directly or indirectly affect the provision of education. As conceptualised in Figure 1.2 in (Chapter 1), it is clear that demographic processes such as fertility, mortality and migration have a direct and indirect relationship with learner enrolments at schools. Thus government policies are address the issue of access to education by all children and the dynamism of population processes clearly have to be taken into account. Developing policies and implementing them are two different things. Good policies may be developed and documented, but implementing them may pose many challenges that may be social, economic, political or environmental. The reason for studying the geography of the provision of primary school education is to identify the causes of variation across space and over time.

It is necessary to look at policies from a different perspective because the well-being of current and future generations depends on policies that emphasise investment in people of all ages – in their health, education, livelihood, living conditions and human rights – in all the world’s countries. These are policies that promote equity and empower communities, and that strive to bring equitable and sustainable development everywhere. Population issues in one country may have impacts in neighbouring countries, and for the well-being of all persons in the world it is crucial for countries to have a common understanding of particular issues.

4.5: EDUCATION AS A SOCIETAL REALITY

This chapter has shown that the implementation and non-implementation of population policies may have an adverse impact on population dynamics, the school-age population and the quality of education. It was established that, through sustainable population policies, the morbidity and mortality of those children who feed schools can be reduced. It was also established that, in order to increase the quality of education offered at primary schools and to improve teaching and learning in the rural areas, the Department of Education needs to adhere to the norms and standards set out in the Education for All programme. Rural development and land reform policies are also crucial in creating the vibrant and sustainable rural communities needed to curb the out-migration of young people to the metropolitan areas of South Africa.

The interconnections between population dynamics, education and economic development (Figure 4.5) are dynamic and real. The connection of the main variables and government policies shows a two-way relationship. Population dynamics may be driven by policies set by the government. On the other hand, issues emerging from the study of population dynamics may inform the formulation of policies. Population policies are used by the government to direct population dynamics to desired goals. Population policies may be used to prevent high birth and mortality rates, while education policies may be asked to direct the provision of education in a country to desired goals such as improved performance. The introduction of the school nutrition programme and free and compulsory education in South Africa has helped to make education accessible to all children of the relevant age group.

Economic and rural development policies have helped to curb out-migration in rural Europe and China. South Africa can learn from other countries and adopt strategies to develop rural areas. Development in the rural areas will ultimately curb the out-migration that typifies them, and also the concentration of unemployed persons in urban areas (as is the case in South African cities, with their large increases in shack-dweller numbers.

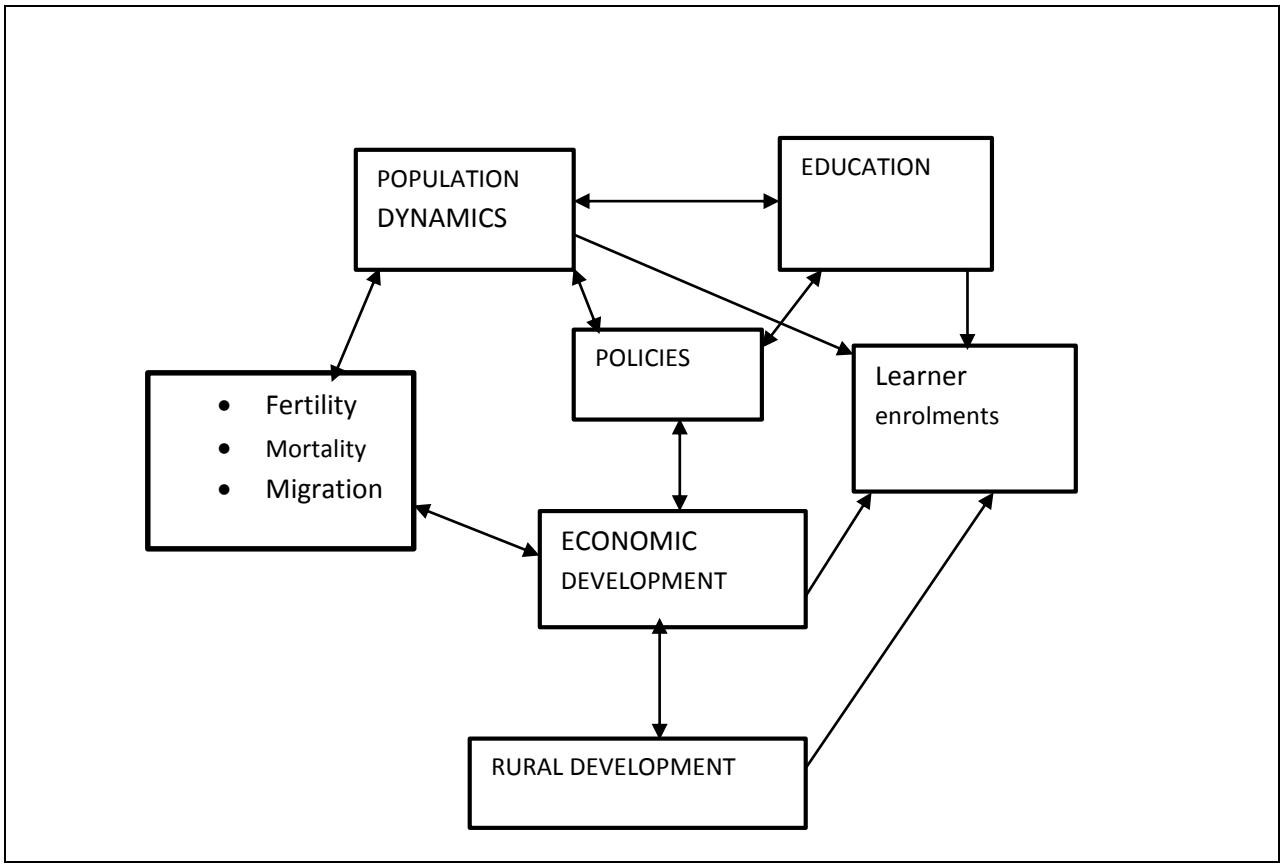

Figure 4.5: Interconnections of the variables that play a role in learner enrolments as conceptualised by the researcher

The discussion in this chapter focused on policies which, if implemented, could help address the problem of declining learner enrolments in areas experiencing learner enrolment decline as a result of out-migration. The creation of employment opportunities, the provision of quality education, and the improvement of socio-economic conditions in former disadvantaged areas, particularly in provinces that are largely rural, could help curb the out-migration of the young and economically active population. Without an enabling environment, young people who are still at the childbearing stage will continue to move out of these areas; and learner enrolments will continue to be negatively impacted upon. Figure 4.6 shows how population, education and socio-economic policies, if integrated, could result in conditions in the rural areas favourable enough to attract young people back into these areas and feed the local schools. Population dynamics, the cultural and the physical landscapes are the variables that influence the location and the provision of primary school education.

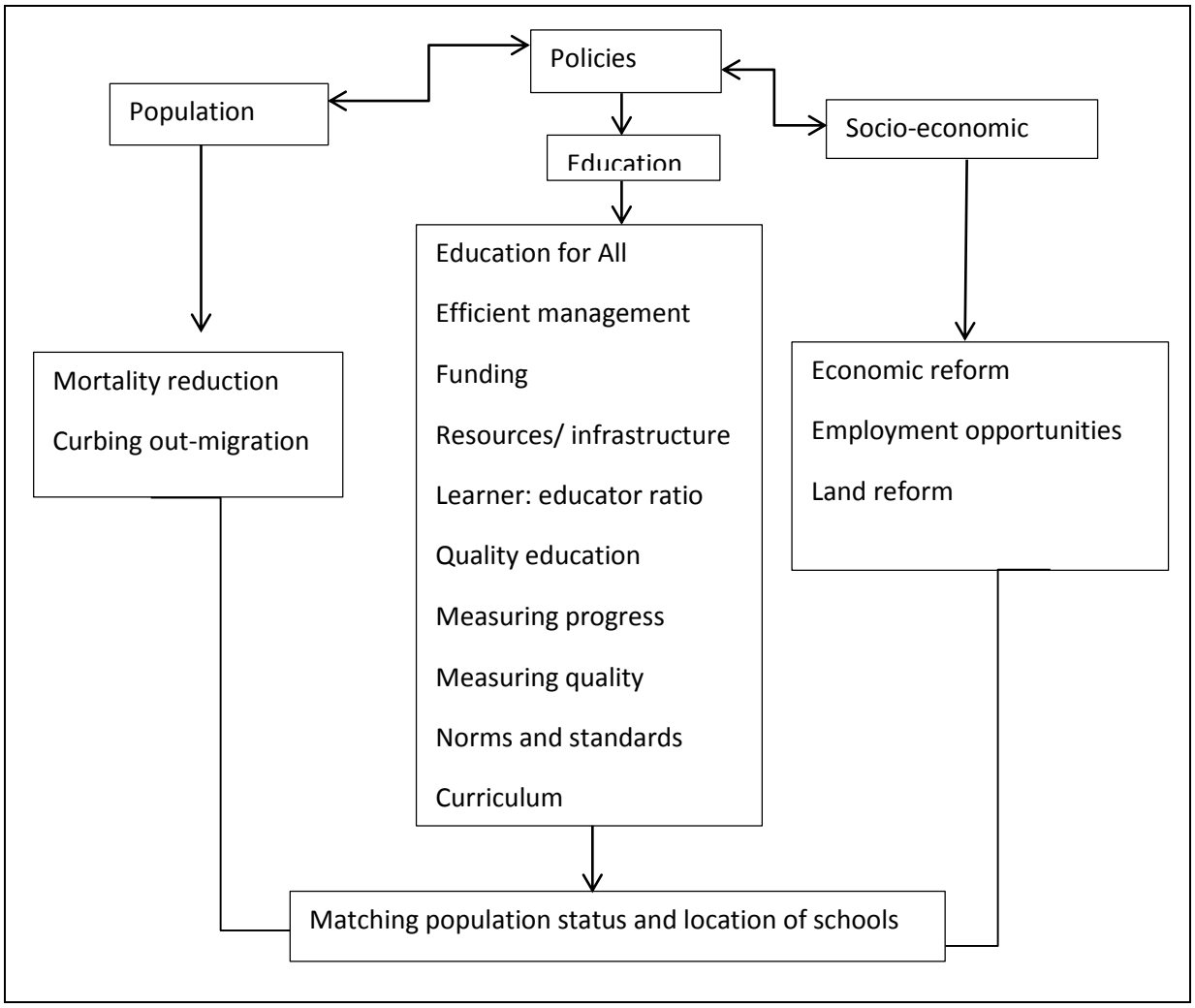

Figure 4.6: Integration of population, education and socio-economic policies for sustainable primary schools
Source: Conceptualised by the researcher

Building on the geographical interpretation of the setting of this case study, Chapter 5 focuses on the people of Vhembe, their home life and their schools. It also examines all the challenges facing communities and the authorities in the Department of Basic Education.

CHAPTER 5: LIVING SPACES AND SCHOOLING IN VHEMBE DISTRICT

The themes of this chapter reflect on the population characteristics and the nature of the provision of primary schools in Vhembe District as background to understanding the problems created by official decisions to close certain schools. Using the sampled population in Vhembe District, which is representative of the status quo, this chapter presents information about the age and gender structure within households, the value attached to the place of residence and parenting in the home. The socio-economic status of those surveyed and the features of schools and schooling are detailed. The data analysed and interpreted in this chapter comes from several primary sources such as the use of questionnaires at household level, interviewing educators at schools, circuit managers, officials in the Vhembe District Department of Basic Education and traditional leaders and from written documents as sources of secondary data (Section 1.2.4: Chapter 1).

5.1: PEOPLE AND THEIR HOUSEHOLDS

This section on the people and their households focuses on household structure, i.e. the gender and the age-structure of the respondents, their parenting and their children. Knowing about the home life of the respondents is important for this study as it provides the link between the people's perceptions and their way of life and the nature and provision of primary school education in the study area. A questionnaire (Appendix 1) and guided interview questions for schools and circuit managers (Appendices 2 and 3 respectively) provided information about the people and their households. Topics covered were demographic characteristics of the sampled population; information about the schools; and the interviewee's perceptions of the provision of primary school education and its challenges; and what they thought could be done to address them**.** The respondents represented 306 households which included 938 children of which 745 were at school.

5.1.1 Household structure

Information on household structure included issues pertaining to gender within the household, age structure and parenting. These aspects are particularly significant for this study because of their possible influence on the issue of schooling in a typical local area in South Africa of which Vhembe District is an example. Appendix 1 enabled the researcher to gather the relevant information from the households. The results reveal that households are heterogeneous and comprise persons of both sexes and different ages. The households as such are distinguished as being nuclear families (parents and their children) and extended families consisting of relatives and non-relatives.

Information pertaining to the composition of the households was obtained by using questions 6 to 19 (Appendix 1).The questions established the marital status of the participants, facts about children, both the respondent's own children and those of relatives and non-relatives staying in the household. The gender structure and then the age of household members are dealt with first.

5.1.1.1 Gender structure

The reactions of people to certain issues in the community sometimes emerge as a gender issue. The high percentage of females in the population in the province implies that most decision making at household level, and perhaps even at community level are likely to be in the hands of women. Furthermore, the female population is responsible for household affairs including taking children to school and helping them with their school work. The questionnaires had to be completed by the head of the household or their representative. Females are increasingly becoming homeowners, especially unmarried women with children, and as a result, about 78.75% of the respondents were females (Table 5.1) "n" at the bottom of the table or graph throughout this document stands for the number of cases used in that calculation. According to Census 2011, females in Vhembe District make up 53.3% of the total population (Statistics South Africa 2012).

Table 5.1: Gender of household head: questionnaire responses, Vhembe District, 2012

Municipality	Females	Males	%
Mutale	47	14	19.93
Musina	37	9	15.03
Makhado	61	18	25.81
Thulamela	96	24	39.21
Total respondents (n = 306)	241	65	99.98
Percentages	**78.75%**	**21.24%**	**99.98%**
Source: Fieldwork 2012			

The distribution of children by gender in the surveyed households shows that there was slight difference in the numbers of boys and girls below the age of 20. However, the overall number of girls was slightly greater than the number of boys (by less than 1%). Gender balance (Section 2.3: Chapter 2) was important to look at in this study to determine if there was gender balance in the population including children as well as their representation at schools. The South African government promotes gender equity in all spheres of public life and Vhembe District seems to be moving in the right direction in terms of promoting the belief that both boys and girls need to take schooling seriously. The comparison of children by gender from the sampled households indicates

that in Mutale the gender difference was very small (1), while in Musina the difference was 18 with more girls than boys. In Makhado and Thulamela there were more boys than girls, with a difference of 2 and 8 children respectively. Musina had more girls than the other three Vhembe municipalities. Although there were some differences in the number of boys and girls among the municipalities, the overall difference between the two genders in the whole district was only 0.6%.

Table 5.2: Distribution of children by gender in 2012 in surveyed households

Municipality	Boys	Boys %	Girls	Girls %	Total	Total %
Mutale (n = 199)	100	50.31	99	49.68	199	21.21
Musina (n = 156)	69	44.05	87	55.94	156	16.63
Makhado (n = 255)	129	50.68	126	49.31	255	27.19
Thulamela (n = 328)	168	51.31	160	48.68	328	34.97
Total	**466**		**472**		**938**	
Percentages		**49.68%**		**50.31%**		100%
Source: Fieldwork 2012						

5.1.1.2 Age structure

The age structure of a population is important in determining the school-age population, which is the source of learners who would support the local schools in a community. Children are the potential market for local schools. A young population implies an on-going source and stems from a pattern of increasing birth rates and a likelihood that there will be learners to attend the local schools. Attaching value to having children in households is a positive sign that ensures that there will be a continuous supply of school-going learners in the local schools. It is therefore important in this study to consider the household mother's age, to determine if the mother is still in her child-bearing years. In African communities, it is normal for grandparents to look after their grandchildren while the parents stay elsewhere, perhaps on a work assignment. A household with grandchildren ensures a continuous supply of learners for local schools, even when the community is becoming increasingly dominated by older persons who are no longer in their child-bearing years. It is for this reason that this researcher was interested in establishing the age structure of the Vhembe District population. Table 5.3 shows the number and percentage of sampled households with children of school-going age.

The official school starting age for primary school leaners (excluding Grade R) in South Africa is 7 (DBE 2013d). However it is acceptable start attending school at the age of 6. The household questionnaires (Question 10: Appendix 1) provided information about the children's age and those

of school-going in both the rural (rural areas in tribal land are under the custody of traditional leaders) in Vhembe District area and the urban places (mostly service centres) of Vhembe District to compare trends in learner enrolments in both these places. An urban place is generally understood as an area constituting a town or settlement dominated by secondary and tertiary activities such as manufacturing, trading and administrative offices. Vhembe District does not have big towns but has small town settlements focusing mainly on trading, government administrative work, police station and insurance offices. Some rural settlements like Muledane and Miluwani were declared urban by the former homeland government and were provided with services similar to those found in urban areas - hence the use of "urbanised" concept in this document. The people living in these settlements are not provided with land for farming and they pay levies and service fees (garbage is collected from their houses once a week).

Table 5.3: Distribution of children in surveyed households in both rural and urban areas, 2012

Municipality	Households with children	Households without children	Total in rural	Total in urban	Total school-going children	School-going children (%)
Mutale (n = 199)	58	3	195	4	171	86.80%
Musina (n = 156)	46	0	90	66	125	80.10%
Makhado (n = 255)	73	6	213	42	204	80.00%
Thulamela (n = 328)	116	4	309	19	245	74.70%
Total	**293**	**13**	**807**	**131**	**745**	**79.40%**
Percentage %	**95.75%**	**4.24%**	**86.03%**	**13.90%**		
Source: Fieldwork 2012						

Fourteen per cent of the children from the sampled households lived in these urban households. The survey results also showed that 95.75% of the sampled households had children, implying that individuals still value the presence of children in their households. In the Mutale, Musina and Makhado municipalities, the percentages of households with school-going children were 80% and more. Thulamela (Table 5.3) was the only municipality with a school-going population less than 80% (i.e. 74%). The school-going children percentages in Table 5.3 were calculated from the total number of children in each municipality (from both rural and urban) less those who were not of school-going age. Thulamela is increasingly adopting urban life and has relatively large urban settlements constituting, Thohoyandou (42 600 population), Sibasa (16 000), Malamulele (13.070) and Shayandima (10 300).

The Vhembe District Education Department's head office is located in Thulamela Municipality in Thohoyandou. The villages surrounding Thohoyandou are transforming into urbanised areas i.e.

they are increasingly moving away from rural life dominated by farming to the lifestyle similar to that of urban places, earning a living from the secondary and tertiary sectors. Muledane and Miluwani near Thohoyandou are now classified as urban. Malamulele town is also located in Thulamela and it is growing very fast. Urbanisation in Thulamela might be contributing to a decline in the school-age population owing to declining fertility. The average number of children per household in the four municipalities varied between 2.3 children in Musina and 4.6 children in Mutale. The school-age population from the sampled households varied from 74.7% in Thulamela to 86.8% in Mutale (Figure 5.1). The high percentages of school-going children in the sampled households indicate the youthful nature of Vhembe District population.

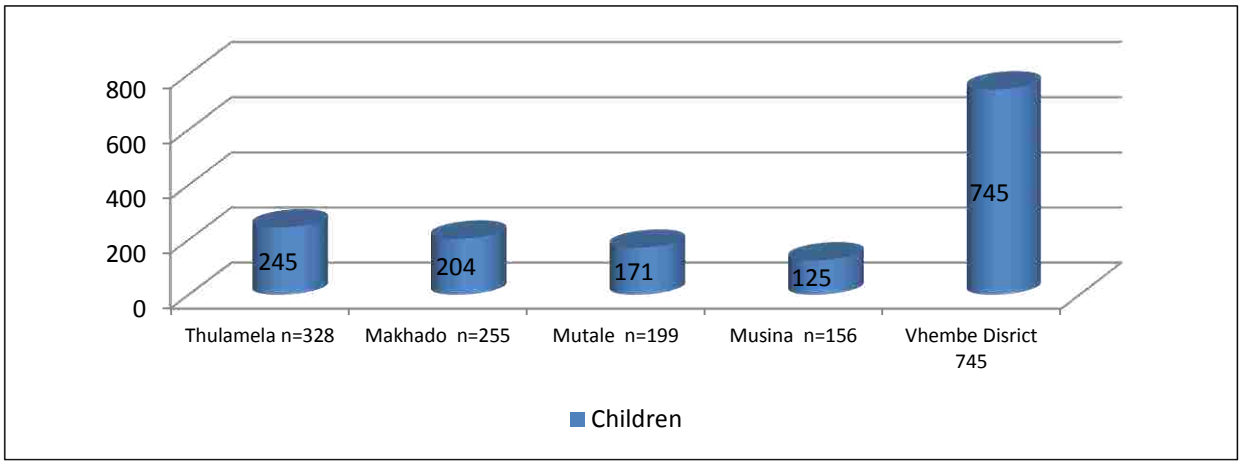

Figure 5.1: Size of school-going population from sampled households in Vhembe District
Source: Fieldwork 2012

Of the sampled household, Mutale had the largest percentage (86.8%) of school-age population, followed by Musina and Makhado (80%). Musina is largely urban with more than 50% of the children from the sampled households coming from the urban area, while the other municipalities had few children (between 2% and 16%) residing in urban areas. The sampled population included participants from both rural and urban areas in order to establish if location influences learner enrolment trends. The youthful population age structure of Vhembe District is responsible for a higher proportion of people under 34 years of age and this group accounted for two thirds of the total population in all the municipalities in 2011 (Statistics South Africa 2012a). Musina, Mutale and Thulamela's population aged 0-34 years old accounts for more than 70% of their totals while that of Makhado was 55%. Makhado Municipality seem to be moving towards a mature population age structure. White commercial farmers occupy half of the total area of Makhado Municipality. The household questionnaires also helped to establish if households included children from extended

families and 40% of these households lived with children other than their own. Makhado had the highest percentage (50.23%) of households living with children other than their own, while Thulamela had the lowest percentage (27.5%).

Culturally black people lived and some still live in extended families, where children of relatives are also accommodated. Fewer households with children other than their own indicate a shift away from the traditional type of households that accommodated the children of relatives and grandchildren. Table 5.4 indicate the households having children from extended families. In the past, children lived with grandparents while their parents were working far from home in towns or on commercial farms. A decline in the number of extended families has implications for communities where elderly people dominate. This could result in a decline in the number of children and the size of the school-age population. It may also ultimately affect the number of children entering a school in an area. The survey also established that 18% of the household had been living with foster children. Foster children are children whose parents are deceased and who are officially cared for by other people, not necessarily relatives. Because of their age they are placed under the care of adult persons who receive state support grants to help raise the children. Children living in foster households add up to total children and keep the schools going especially if they are living in households where parents have stopped giving birth.

Table 5.4: Surveyed households having children from extended families

Municipality	**Total Households**	**Number of households with children other than their own**	**Percentages**
Mutale (n = 199)	61	30	49.2
Musina (n = 156)	46	20	43.5
Thulamela (n = 328)	120	33	27.5
Makhado (n = 255)	79	40	50.6
Total	306	123	40.2%
Source: Fieldwork 2012			

The average number of children per household for Vhembe District was 3.06 (Table 5.5). Although Musina and Makhado are characterised by young populations they display low fertility. Musina's population is concentrated in Musina Town. Mutale, on the other hand, is a rural-based local municipality with a small urbanised place (also known as Mutale) and it is characterised by high total fertility. A small urban place like Mutale and Vuwani consists mainly of the police station,

magisterial and circuit office, and one or two supermarkets. It has few residential houses for renting and those renting mainly work for the government.

Table 5.5: Age and number of children in the surveyed households

Municipality	Younger than 5	5–9 years	10–13 years	14 years and older	Total	Average number per household
Mutale (n = 199)	28	43	53	75	199	**4.6**
Musina (n = 156)	37	43	35	41	156	**2.3**
Makhado (n = 255)	51	73	56	75	255	**3.2**
Thulamela (n = 328	83	77	59	109	328	**2.7**
Total	199	236	203	300	938	**3.06**
Source: Fieldwork 2012						

The average number of children per household from the surveyed population in Vhembe District was in 2012 was 3.06. This figure was obtained by adding all the children in the surveyed households and divided their total by the total number of the sampled households. The same was done for each municipality using the total sample of each municipality and arrived at 4.6 for Mutale, 3.2 for Makhado, 2.7 for Thulamele and 2.3 for Musina. Mutale's average number of children per household is higher than that of Vhembe District as whole (3.06 children per household). And that of the national level (3.5 as indicated by Census 2011). Table 5.5 shows the distribution of children by age from the sampled households and forty-seven per cent of these children were of primary school age (age 6-13 for Grade R-7). The children that are still below the school-going age are potential school goers of the future when they reach the school attendance age. Statistics of children below the school- attendance age can give an indication of future enrolment numbers.

Analysis of the data obtained from responses to the questions asked about grandchildren staying in the households showed interesting information about household structure in Vhembe District. Traditionally, many households in the rural areas have grandchildren living with grandparents as part of the extended family structure while the parents work and live elsewhere sometimes in distant urban places like Gauteng, of work or on commercial farms. However, a new trend to note is that a declining number of parents are leaving children in the care of the elderly in the rural areas. If they decide to move, young parents these days prefer to take their families with them to the places where they are employed. The current approach in teaching at schools demands a great deal of parental involvement and leaving children behind with their illiterate grandparents disadvantages the children who will not get any of the required assistance from their parents.

Having grandchildren staying with grandparents is something that is also positive for communities dominated by senior citizens as such children will keep the local schools with sustainable enrolments. Most (45.73%) of children staying with grandparents were younger than 5 years of age. Children in the age group 10–14 living with grandparents constituted only 13.79% of the total. The number of children living with grandparents was therefore decreasing with an increase in the children's ages. Only 26 children (9.26%) aged 14 and older stayed with grandparents. Young children (usually younger than 5) are brought home to stay with grandparents before they start school. Parents prefer to stay with their children when they are still at school, to assist them with their schoolwork and monitor their progress. The grandparents staying with the grandchildren were from both the patrilineal and the matrilineal sides. Both maternal and paternal grandparents are willing to look after the children of adult daughters and sons while the parents are working far from home. The percentage of primary-school-age children (42.5%) was slightly less than that of children aged 0 to 5 (44.73%).

Mutale is largely rural, and had the largest number of households with grandchildren (50.8%). The other three municipalities, with their growing numbers of persons living in or near urban areas, had less than 40% of the households with grandchildren. Musina, which has a higher percentage of people living in the town, had less than 30% of households with grandchildren. Musina Town is a growing (42 000 population) urban area which had started as a mining town. It is the only town in Vhembe involved in mining as a primary activity. Moreover, it is favourably situated because it serves as a very busy border post for people entering and leaving South Africa. Sixty per cent of Musina population live in Musina town.

Table 5.6: Age of the mothers in the households surveyed

Municipality	Younger than 21	21–25	26–30	31–35	36–40	41–45	46–50
Mutale (n = 49)	1		14	4	10	10	10
Musina (n = 42)	3	7	9	8	9	3	3
Makhado (n = 68)	2	4	8	18	21	5	10
Thulamela (n = 101)	3	6	25	25	19	12	11
Total	**9**	**17**	**56**	**55**	**59**	**30**	**34**
Percentage	**2.90%**	**5.50%**	**18.30%**	**17.90%**	**19.20%**	**9.80%**	**11.10%**
Source: Fieldwork 2012							

Table 5.6 shows that most of the mothers were under 40 years old (some in the age group 36–40 (19.2%), 26–30 years old 18% and 31-35 (17.9%). There has been a decline in the proportion of

teenage mothers, since fewer than 2.9% of the mothers were younger than 21. There were also a small number of births among the age group 21–25, amounting to only 5.55**%** probably because an increasing number females spend more of their early years studying and fertility is delayed until the mid-twenties This has implications for future births, as the age at which females give birth to their first children has been increasing. Future births in Vhembe District will continue to decline as more females postpone having children. Declining births and children migrating with their parents, all contribute to declining school-age population in Vhembe District

Table 5.7: Adult children staying in parents' households

Municipality	**Not applicable**	**Household having adult children**	**Living with adult children (%)**	**Not living with adult children**	**Not living with adult children %**
Mutale (n=44)	17	18	41	26	59
Musina (n=29)	17	16	55	13	45
Makhado (n=44)	32	28	35	19	40
Thulamela (n=60)	60	39	65	21	35
Total	**66**	**101**	**56**	**79**	**44**
Source: Fieldwork 2012					

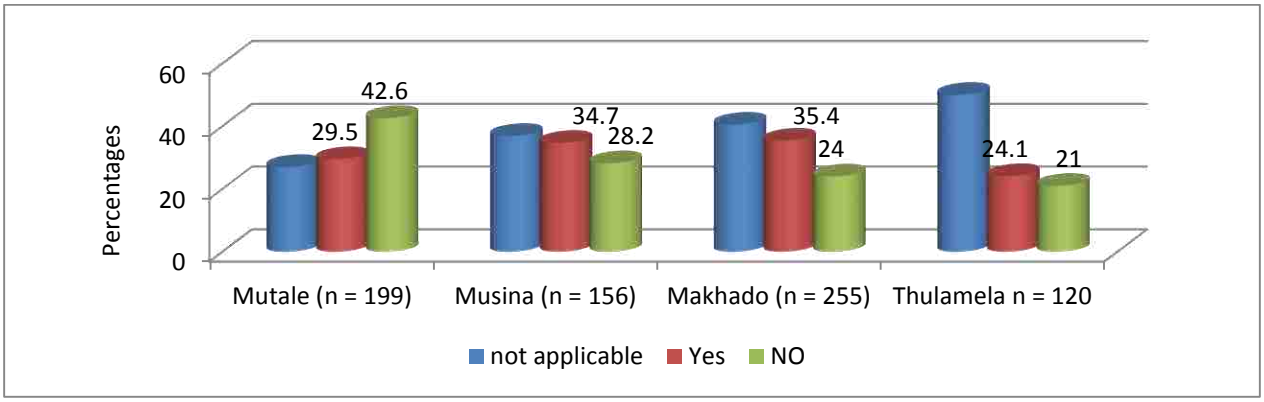

Figure 5.2: Percentages of households with adult children staying with parents
Source: Fieldwork 2012

The households with adult children living in their parents' household constituted 56% of the total number of sampled households (Table 5.7). Forty four per cent of the households had adult children not living in their parent's household. These are adult children who had moved out to form their own nuclear families after getting married or else were working far from home and had relocated to the places where they were employed. Figure 5.2 shows that Thulamela had the lowest percentage (35%) of households where adult children had moved out of their parents' household. This was

followed by Makhado, with 40% and Musina 45% of adult children no longer living in their parents' household. Thulamela has shortage of land for settlement purpose while Mutale had plenty of land for new settlements (59% of the adult children had moved out). The high percentage of young adults moving out of their parents' households has implications for the supply of learners to places of origin. This trend supports the demographic transition theory (explained in section 3.1 of Chapter 3), where the transformation of South African society, is leading to shift from the traditional, extended type of family towards a nuclear one. Young parents are increasingly moving out of their own parents' households to become independent. Vhembe District's people, even though they live in rural areas and not in economically advanced and industrialised places, have adopted the idea of a smaller family size through acculturation and modernisation.

This research arrived at three major reasons why young adults move out of their parents' home. From 79 participants, 40 cited employments far from home, 38 were away studying and only one person cited living with relatives. Mostly black people in habit Vhembe District and, in the past believed in extended families. Parents also allowed children to be raised by relatives, especially when they were working far from home. This survey makes it clear that this cultural system will soon be a thing of the past, with few people accommodating children other than their own in their households and sharing a house with the parents. Moving out of parents' household leads to household formation and ownership of a resident and the discussion on residential ownership follows.

5.1.2 Residential ownership

Information on home ownership sheds light on whether particular residents are permanent or temporary, and whether they identify with local communities. Questions 3 and 4 on the household questionnaire (Appendix 1) were used to establish ownership of residential unit and duration of stay in that unit. The extent of dwelling ownership, coupled with the population age structure is important in this research because it indicates the potential size of the population that will be supplying local schools with learners in future. It is logical to assume that if people own their own homes they are not likely to move away from the area especially if they and their family have been there for several generations. This study found that on average 82% of the respondents owned their dwellings units. This reflects a stable population. Mutale, Thulamela and Makhado had on average 5% of the respondents renting their dwelling units. Musina had only 2% respondents who were renting the houses they lived in. The respondents living in parents' home constituted 13%.

The desire to have one's own nuclear family results in persons moving out of extended families to start their own homes. *Mahosi* are willing to give land to all who need it, including single mothers. Under tribal authority law, the *Khosi* (the chief) does not sell land to his subjects. When an individual is of age and needs a place on which to settle, *Gota* (headman) gladly gives it to him or her. An individual who needs a place to settle may look for it in a different place and not necessarily in his or her original village. Moving out of one's original village, even if it is for a few kilometres away, can have an adverse effect on the enrolment of local primary schools. Primary schools are attended by young children who cannot walk long distances to get to school.

Vhembe District Municipality is largely rural and most residents own their residential dwellings. There is also possibility that those who are now renting may out-migrate when they get their own homes. The small percentage of persons staying in their parents' household indicates that the potential supply of learners for local schools is not likely to increase because these days adult children opt to move out of parents' households to establish their own family unit. Mutale had the highest percentage (92%) of persons owning their residential dwelling, followed by Musina (87%), then Thulamela (81%) and lastly Makhado (76%). The desire to own a house promotes out-migration from parents' homes, and this in turn is responsible for a decline in learner enrolments in the areas of out-migration; and an increase in learner enrolments in newly established settlements or in areas with potential settlement expansion. When young adults move out of an area that area will eventually turn "grey", and become dominated by senior citizens whose childbearing days are over. Home ownership is crucial, because it ensures stability over space and time.

On the question of duration of stay, the majority (65%) of the respondents had stayed in the same household for more than 10 years, while 17% had stayed in the same household for less than 10 years. Forty-two per cent of the respondents were single parents while 58% were married. There was an indication of a growing number of single females in the area who had started their own families. Ownership of dwelling units by single females signifies change in living arrangements. In the past single women were not allowed to occupy or own a plot unless they were widowed or divorced. In African culture, the males were the decision makers in their households and the community at large, while females served as their subordinates. The increasing number of female heads of households implies that the voice of women will also play a significant role in the communities from this point onwards, including decisions regarding matters affecting the education of their children.

There has been a shift away from traditional ways because a single female parent who wishes to be independent and own a stand can now request one from *Khosi* or *Gota*. *Khosi* has custody over his or her tribal land, and allocates plots for settlement purposes to his or her subjects or to anyone who wishes to move into that area. Allowing new people to settle on specific tribal land, guarantees *mahosi* (chiefs) their status as traditional leaders. It also ensures a continual supply of learners for local schools. A traditional leader experiences a reduction in power when many of his or her subjects are out-migrating, because subjects are there to support and carry the communal cultural heritage forward. In one village at Tshiendeulu, the local *Gota*, acting on the advice of a circuit manager, summoned his subjects to a meeting to make them realise that allowing their children to attend schools outside their village would lead to a fall in learner enrolment and the possible closure of their school. This move by the traditional leader enabled the community members to understand why it is important to support local schools.

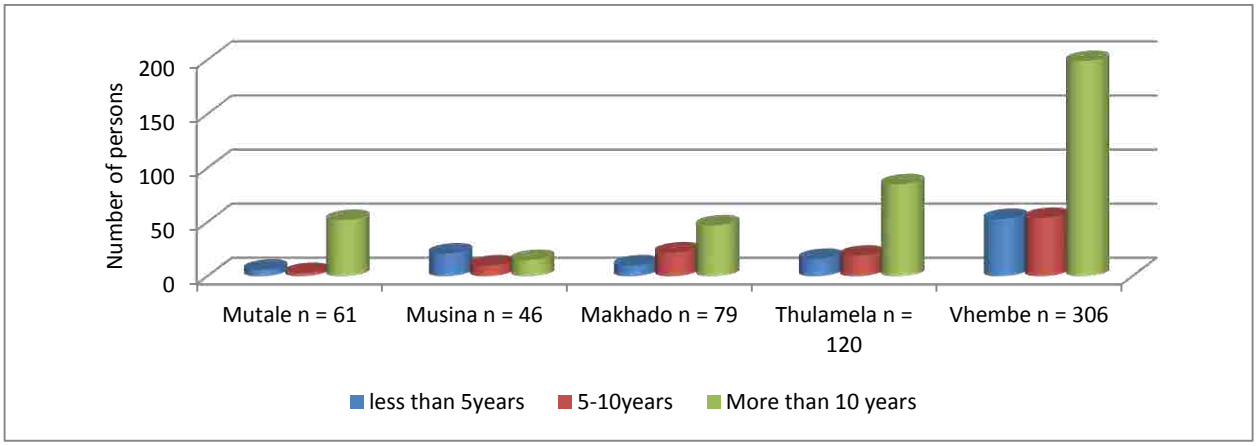

Figure 5.3: Number of persons and years spent living in the same dwelling units
Source: Fieldwork 2012

Regarding the duration of stay in the same household, the majority of respondents (199 or 65%; n = 306) indicated that they had lived in their own households together with their children for more than 10 years (Figure 5.3). The indigenous laws do not discriminate against unmarried women with children, and such women may request a plot on which to build a home for a nuclear family if they wish to do so. The descriptions of Vhembe District's age structure and children have shown their importance in sustaining primary schools. This information alone cannot tell much if the social and economic life of the people concerned is unknown and therefor the next section focuses on Vhembe District's social and economic life and how these affect the provision of primary school education in the area.

5.1.3 Socio-economic characteristics

Educational attainment, employment status and source of household income are equally important in the analysis of schooling and schools in Vhembe District. Schools need funds, but if the surrounding communities are poor they may not be in a position to help raise such funds. A study of the educational status of the respondents showed that 51.6% had some secondary education while 12.74% had no formal education at all. Educational achievement in the Vhembe region was still low; and respondents who had a tertiary education accounted for only 14.7% of the total (Table 5.8). Mutale is the least developed when compared to the other Vhembe local municipalities and had the highest number of persons with no formal education.

Table 5.8: Educational status of respondents

Municipality	None	Primary	Secondary	Tertiary	Total
Mutale (n = 61)	12	16	26	7	61
Musina (n = 46)	9	12	22	3	46
Makhado (n = 79)	11	8	45	15	79
Thulamela (n= 120)	7	28	65	20	120
Total (n = 306)	39	64	158	45	306
Percentages	**12.74%**	**20.91%**	**51.6%**	**14.7%**	100%
Source: Fieldwork 2012					

The level of education of the parents is important because it may play a role in decisions affecting the education of their children at local schools. Educated parents have a relatively better understanding of why certain decisions are made; and also of the factors that may affect teaching and learning at schools.

Table 5.9: Employment status of respondents

Municipality	**Employed**	**Employed %**	**unemployed**	**Unemployed %**	**Self-employed**
Mutale (n = 61)	22	36	36	59	3
Musina (n = 46)	11	24	24	52	11
Makhado (n =79	26	33	44	57	9
Thulamela (n = 120)	35	29	71	59	14
Total (n=306)	94		175		37
Percentages		**30.7%**		**57.1%**	**12.1%**
Source: Fieldwork 2012					

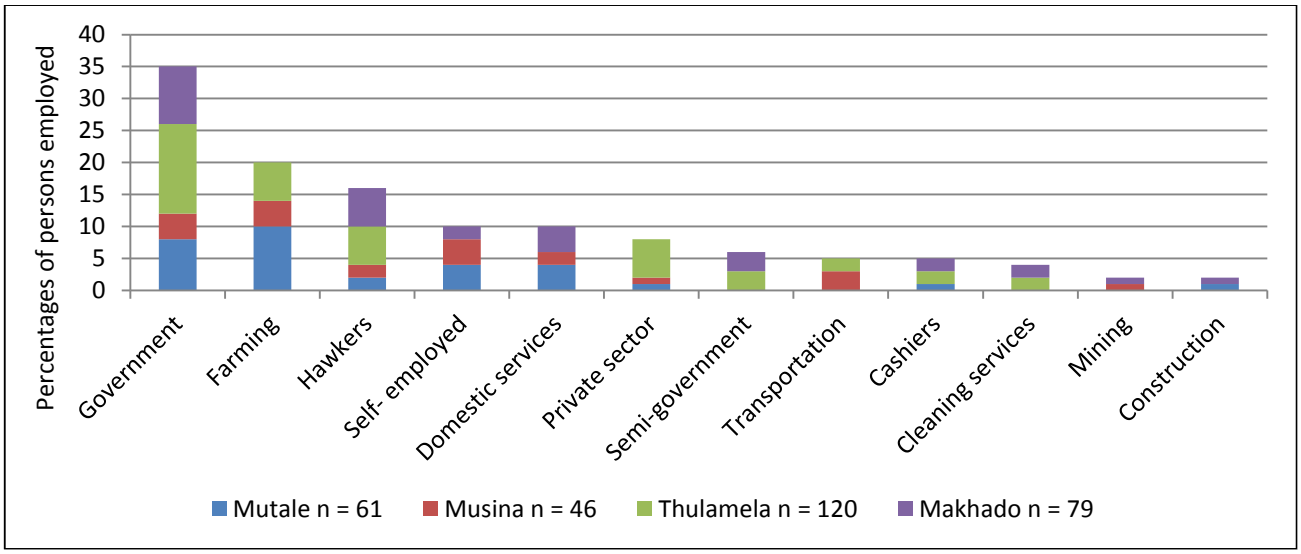

Figure 5.4: Persons per employment sector, sample survey Vhembe
Source: Fieldwork 2012

District unemployment was very high in Vhembe District in 2012 during the time of data collection, with more than 50 per cent of the respondents indicating that they were unemployed (Table 5.9). Figure 5.4 show the employment sectors and the number of those employed in the surveyed households. Figure 5.4 shows both the employment sectors and the number of persons employed across the four municipalities. The government sector is the largest employer (35%; n=306) employing persons from all four municipalities. The second-largest sector is farming (20%), both commercial and subsistence. Hawking ranks third (16%) and these persons are dependent on selling fruit, vegetables and other goods Hawkers are usually self-employed and are found in all the municipalities. The fourth employment sector was domestic work.

In 2006 the human development index (HDI) of Musina Municipality was the highest (at 0.53) when compared to the other three municipalities. Its HDI was even higher than that of Limpopo as a whole (at 0.52). The HDI in Musina had decreased from 0.54 in 2005 (Vhembe District Municipality 2008b). Fifty seven per cent of the respondents in the sampled households indicated that economic development is not improving at the desired rate. According to the results of Census 2011 on employment status, Limpopo's unemployment rate was 49.9% (Statistics South Africa 2012a). From the list of employment sectors mentioned by the respondents, it can be seen that there were few employment opportunities in Vhembe District. Only 30.7% of the respondents were formally employed (Table 5.9).

Knowledge of these employment sectors is important in this research for the analysis of the socio-economic status of the people of Vhembe and of the driving forces behind the high rate of out-migration that ultimately affects the school-age population. It will also help to determine whether these sectors have the potential to help fund the schools. The employment status of members of local communities is important when parents arrange to fundraising for school funds to supplement the funds provided by the government. With the majority of the local population unemployed, extra funding from parents would prove difficult if not impossible to obtain. Therefore, schools will have to rely only on what the state provides or find other ways to have more money available to meet the school's operational costs. Employment opportunities are sources of household income. Household income is important in this research because money is needed for children's transport to school and various essential things deemed important by the schools. These extra costs are not covered by the funds provided by the government. Where schools are located far from learners' homes, parents need to spend precious money to transport children to school.

This has study revealed that government funds allocated to schools are not adequate, and that parents should be encouraged to donate money to schools to supplement the funds provided by the state. In former Model C and private schools, parents pay school fees and such schools have better facilities than the "no-fee" schools. Model C schools are the former white public schools that enrolled children from population groups other than that of the whites. Low household income also acts as a push factor for young adults who wish to accumulate wealth, build their own houses and generally improve their lives. It is therefore understandable to witness young adults opting to not go back to their villages after completing their education. The school-age population, therefore, is affected by the out-migration of young adults over time.

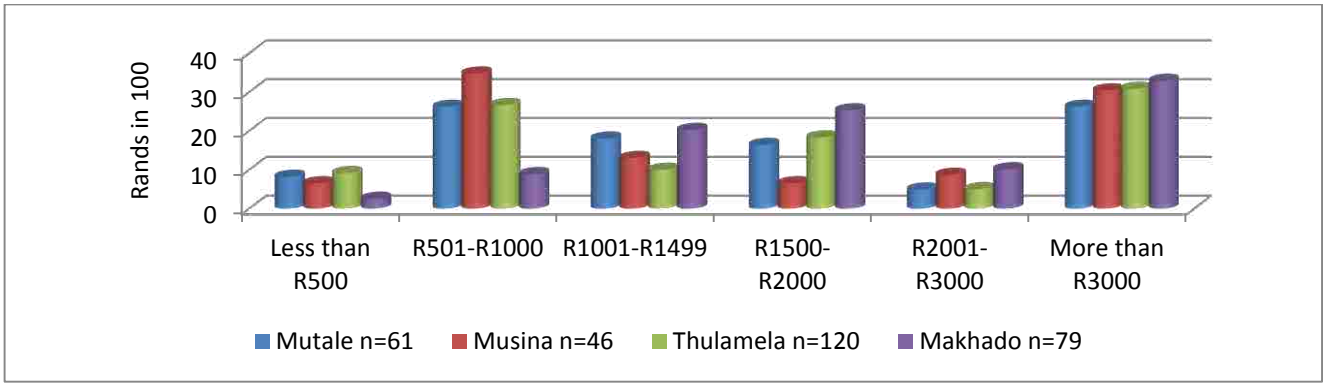

Figure 5.5: Total household income per month
Source: Fieldwork 2012

Income analysis of the people of Vhembe District revealed that third of respondents survived on R1 000 or less per month, while fewer than another third had an income of more than R3 000 a month (Figure 5.5). Vhembe District is a poor municipality since 49% of the households live below the breadline limit of R620 per capita per month (Statistics South Africa 2014). The large number of people living below the bread line is responsible for the high out-migration from the province. Young unemployed adults and those looking for greener pastures leave Vhembe District in search of employment and business opportunities in other places. The negative net migration rate has implications for the school-age population because the persons most likely to migrate are young and they migrate with their families. Clearly the household income patterns give an indication of level of wealth which determines if parents can afford supplementing funds provided to schools when needs arise. It is no wonder that so many of the schools in Vhembe District are categorised by the Department of Basic Education as falling in quintiles 2 and 3 (Section 4.2).

Table 5.10: Source of household income per municipality

Municipality	Salary	Wage	Old-age grant	Child grant	Child and old-age grant
Mutale (n =61)	27.86	21.00	34.42	52.45	21.30
Musina (n =46)	26.08	19.00	13.00	69.56	6.52
Thulamela (n =120)	44.16	18.00	15.83	58.33	10.80
Makhado (n =79)	37.97	20.00	8.86	65.82	6.32
Vhembe N =306	36.60	25.49	16.90	80.78	11.10
Source: Fieldwork 2012					

Household sources of income vary across the district. Regarding salary as a source of income, Musina and Mutale had the lowest percentages, at 26.08% and 27.86% respectively. Although Musina's HDI was found to be high, only one section of the population (consisting mainly of whites) was economically better off than the rest of the population (consisting mainly of blacks). Musina Municipality is a commercial farming municipality where a limited number of individuals (mainly white) own extensive game, citrus, pastoral and arable farms. Thulamela had the highest percentage (44.16%) of those earning a salary (Table 5.10). It was followed by Makhado, where 37.97% of respondents were getting a salary each month. Thohoyandou, which is the headquarters of Vhembe District is located in Thulamela Municipality. It is growing very fast and has had attracted many retailers. This is also indicated by the larger number of government employees in the Thulamela Municipality (Figure 5.6). The earning from wages constitutes 25% it comprises individuals that receive their income weekly or after every two weeks. This is higher than the South

African national figure of 22.5% constituting those employed in informal sector, agriculture and private households and received wages in 2010 (Statistics South Africa 2010). Statistics South Africa (2010) further revealed that the bottom 25% of the workers earned an average income of R900 while the bottom 10% earned R500.

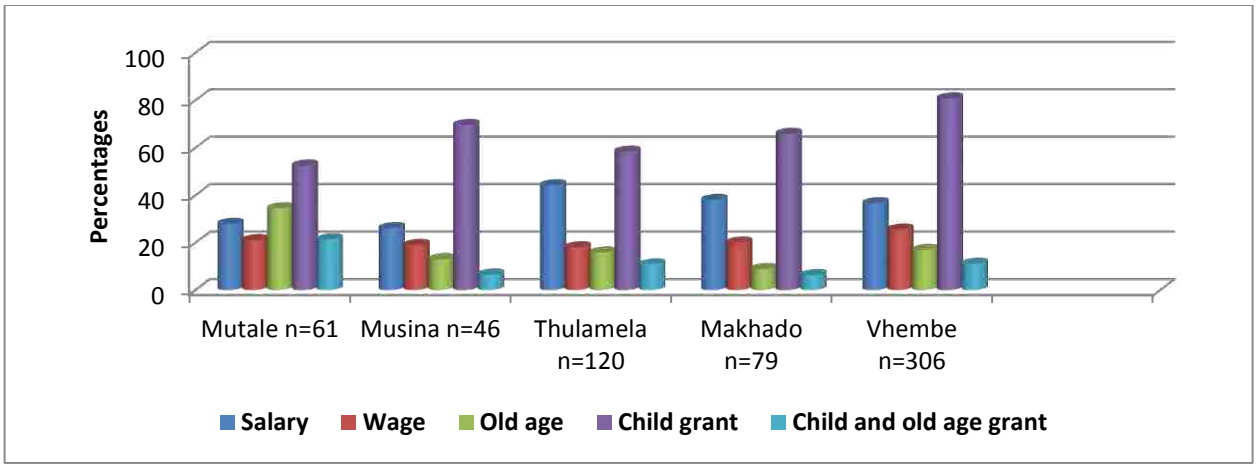

Figure 5.6: Source of household income per municipality
Source: Fieldwork 2012

According to Vhembe District Municipality (2012), in 2007 there were 372 557 had no income and this is reflected in high numbers of the persons dependent on social grant. The situation had not improved since as this will be reflected in the findings of this study. Social grants from the government are the main source of income for most of the households with Musina having the highest percentage (69%) of households dependent on child-support grants. Although Musina has the highest human development index of 0.51 (Section 2.2) in comparison to other Vhembe municipalities, the wealth is concentrated in farming and mining. The majority of the people are casual labourers, whom are needed during seasons of high demand (i.e. picking up oranges when they are ready). To survive, families of these labourers are dependent on wages which are limited to the abovementioned seasons and thus the child care grants become more appealing. Children of immigrants born in South Africa also add up to the number of children receiving child support grant in Musina. Makhado, was the next in line with 65% of its households dependent on child-support grants. Although Mutale had only 52.45% (the lowest percentage) of its households dependent on child-support grants, it had the highest percentage (34.42%) of households

dependent on old-age support grants. It also had the highest percentage of households reliant on both the child and the old-age support grants.

It is not strange to see a large number of children being registered for social grants as the District has a large number of children in its population structure. Many rely on child care grants clearly showing that Vhembe District is still in its youthful age structure phase. In 2007 Thulamela alone had registered 174 049 (29% of all grants paid in the district) for child care grants (Thulamela Municipality 2013). The dominance of social grants and the manner in which the distribution is observed reflects the effect of geographical and population dynamics in Vhembe District.

Apart from fertility and mortality patterns, net-migration is negative, a pattern that responds to the presence of a large number of persons who are unemployed and decide to leave the area. In Chapter 3 (Section 3.5) it is documented that young people are more migratory when compared to the older ones. Consequently, the school-age population decreases. The combination of these two factors in particular, poverty and migration, account for most of the primary schools in Vhembe District falling in quintiles 1-3. Out of 675 primary schools in 2013 only four schools fell under quintile 5, two under quintile 4 and thirteen were independent. Six hundred and fifty six schools were grouped under quintile 1-3 and were all no-fee schools (DBE 2013a. The link between the location of schools, population characteristics and the economy in this geographical setting is evident.

Twenty-five per cent of Vhembe households were dependent on wages and the percentage of these households income varied between 18% and 21% in the four municipalities. Table 5.10 and Figure 5.6 show that only 36.60% of the participants had a salary as a source of household income; and that 80% of the Vhembe households were dependent on child support grants as a source of income. The group that is dependent on temporary employment and received wages consisted of persons working as domestic servants, farmers and workers involved in construction work on roads and building.

Although the analysis of the demographic profile of the people in Vhembe District was based on data provided by the sample population (n = 306), it has described the reality of the people's living space in the study area. How the demographics of Vhembe District can affect the provision of education has been highlighted and the following section focuses on schools and schooling in the area.

5.2 SCHOOLS AND SCHOOLING

Data on schools and schooling focused on the age of schools and their buildings; access to primary education; and the aspects that parents take into account when choosing schools for their children. The information about schools and schooling shed light on why learner enrolments change over time and across space, and why some schools have declining enrolments while others have increasing enrolments. Information about schools was obtained through interviews (Appendix 2 and 3) and through observation by the researcher.

5.2.1 Age of visited primary schools and buildings

For the identification of spatial and temporal dynamics in the district with regard to learner enrolments, this research established the age of 60 schools visited during interviews with educators and principals. The purpose of establishing the school age was to assess if there were differences in infrastructure and facilities between the relatively older and the newer schools as well as learner enrolments. As illustrated in the study's conceptual framework (Figure 1.2 Chapter 1) demographic factors are closely connected to the location of schools and learner enrolments fluctuate in space over time.

The ages of the sampled schools (Figure 5.7) varied from less than 10 years to over 90 years. The majority of the schools (13 schools) fell in the age category 30–49 years and these are the schools that were built between 1972 and 1982, followed by those (11 schools) built in the 1960s. Next were the schools in the age category 20–29, which were built between 1982 and 1992, during the reign of the Venda homeland independence. Seven of the schools sampled (i.e. 11% of the total) were built after 1994. This research found that there was no difference in building appearance between the old and the new schools, except that in the older schools iron sheeting used for roofing were worn and the classrooms floors had potholes. The old schools in this study are those build before the 1990s.

The other reason for ascertaining the age of schools was to determine whether the age of a school could influence its learner enrolment, thereby ultimately influencing the survival of the school. The schools built in the former homelands and black residential areas were inferior because the homeland government did not have adequate funds to construct quality educational facilities. This research found that although learners can be attracted to a school because of the quality of its buildings, there was no apparent relationship between what parents perceive as a good school and the age of the school. Instead, in their assessment of what constitutes a good school, parents were

influenced by enrolment figures at individual schools. There were cases in both new and old schools where there were either very low or very large learner enrolments. Helula Primary School, for example, was a new school built after 2000 in a very remote small village with a total population under 100 people, but it was shut down in 2012 because of the decline in its learner enrolment. Nzhelele Primary School, which was built in the late 1930s and is located in a densely populated area, currently, has an enrolment of fewer than 100 learners. Makwarela Primary School turned 98 years old in 2012, but had an enrolment of over 1 000 learners.

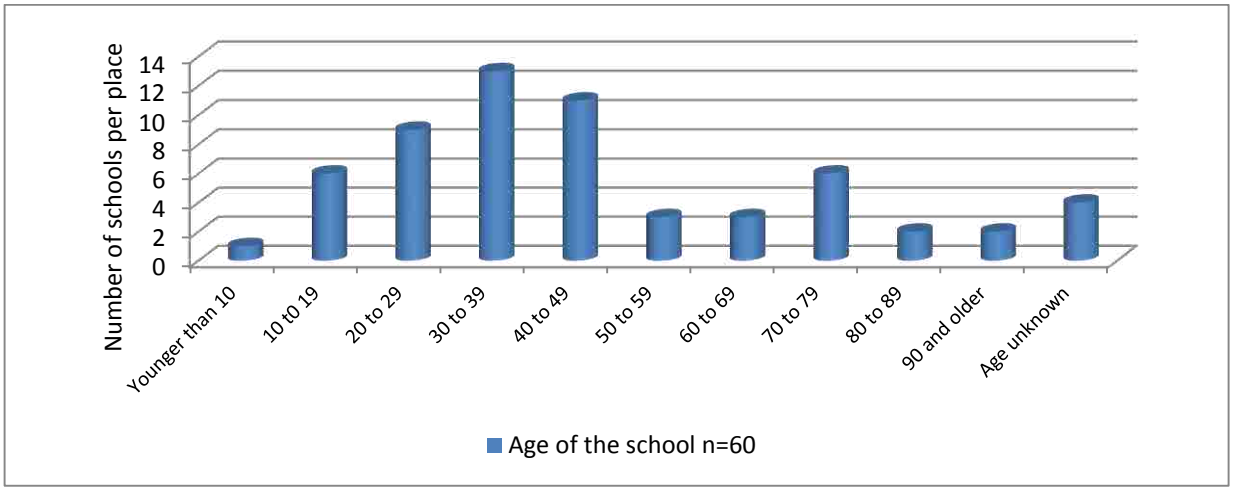

Figure 5.7: Classification of schools by age where interviews took place
Source: Fieldwork 2012

Table 5.11: Age of school and trend in enrolment cross-tabulation

School age	Trend in enrolment over time								
	Decreasing		Stable		Fluctuating		Increasing		Total n = 60
	%	Count	%	Count	%	Count	%	Count	
Younger than 10	0	–	0	–	0	–	100	1	1
10–19	67	4	0	–	0	–	33	2	6
20–29	44	4	11	1	0	–	44	4	9
30–39	38	5	23	3	8	1	31	4	13
40–49	64	7	9	1	9	1	18	2	11
50–59	33	1	0	–	33	1	33	1	3
60–69	33	1	33	1	0	–	33	1	3
70– 79	83	5	17	1	0	–	0	–	6
80–89	0	–	100	2	0	–	0	–	2
90 & older	33	1	33	1	0	–	33	1	3
Age unknown	67	2	33	1	0	–	0	–	3
Total	**50**	**30**	**18**	**11**	**5**	**3**	**27**	**16**	**60**
Source: Fieldwork 2012									

Chi-square tests

	Value	df	Asymp. Sig. (2-sided)
Pearson chi-square	29.464[a]	30	**.493**
Likelihood ratio	29.522	30	.490
Linear-by-linear association	.716	1	.397
N of valid cases	60		

a. 42 cells (95.5%) have expected count less than 5. The minimum expected count is .05.

Data on the age of schools and the total learner enrolment at such schools in 2012 was compared to establish if there was a relationship between the age of a school and its declining enrolment. It was found that there was no relationship between the age of the school and declining enrolments. Decline in learner enrolment was occurring in both older and newer schools. Table 5.11 shows the age of the schools and the perceptions of educators regarding trends in learner enrolments. The schools with increasing enrolments have been spread in all age groups except in groups 70-89. Also those with decreasing learner enrolments are spread in all the groups except those younger than 10 and those 80-89. The perceptions of educators regarding trends in learner enrolments were obtained through Question 2: Appendix 2.

The first row of chi-square test table presents the Pearson chi-square analysis of the relationship between the age of the school and trend in learner enrolments. The chi-square value was 29.464. There were 30 degrees of freedom. The significance value was 0.493. Because 0.493 >.05, this did not represent a statistically significant relationship between the two variables. The relationship between the schools' age and enrolments as shown in Figure 5.8 was found not to be statistically significant. There were schools with decreasing enrolments in all age groups, e.g. 10-19 (33%), 20-29 (44%), 30-39 (38%), and 40-49 (64%), 70-79 (84% and those 90 and older (33%) On the other hand there were schools aged less than 10 (100%), 10-19 (33%), 40-49 (18), 60-69 (33%) and 90 years and older (33%) with increasing enrolment. The same holds true for those with stable enrolments and those with fluctuating enrolments, which were found in groups 30-59.

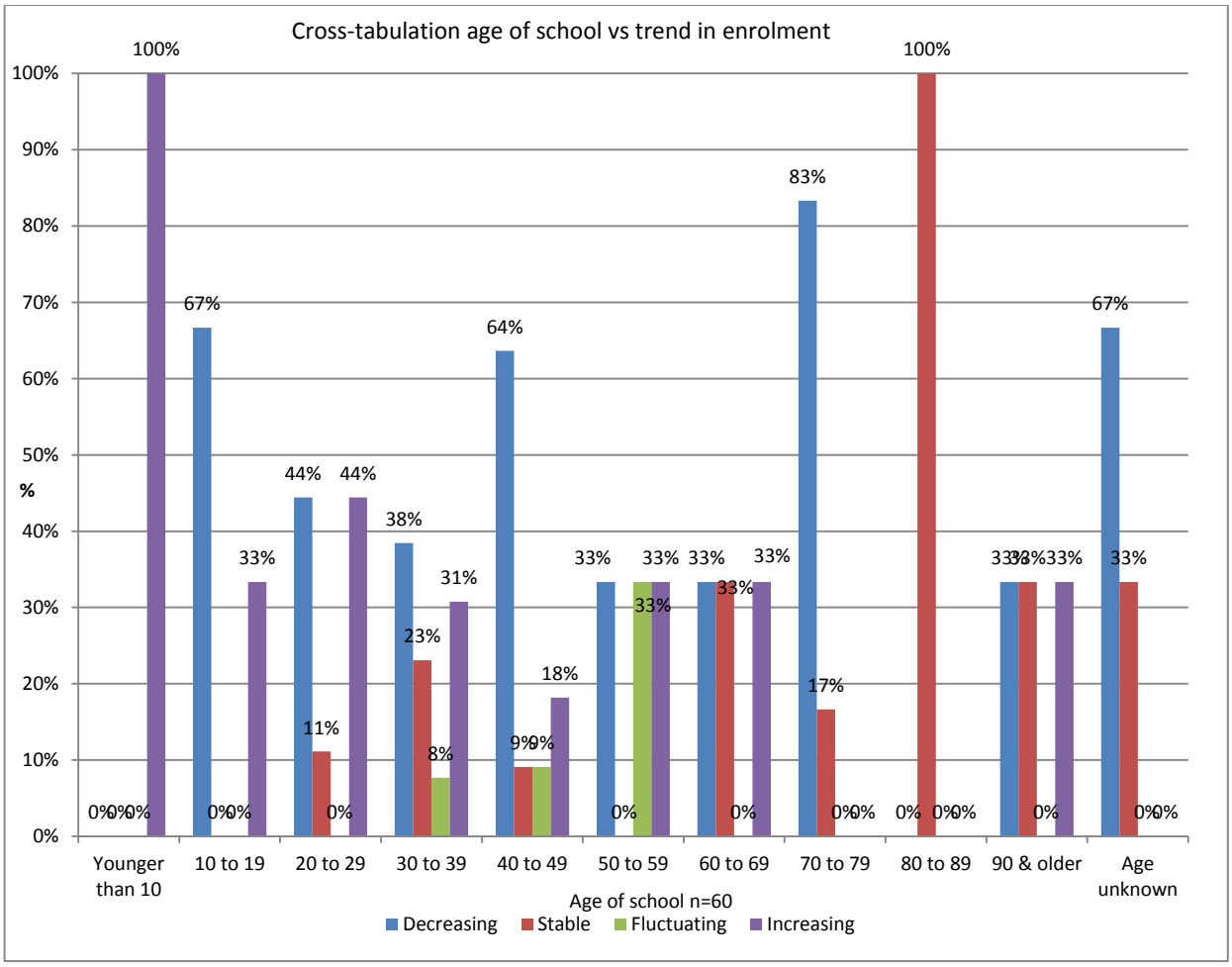

Figure 5.8: Cross-tabulating age of school and learner enrolment
Source: Fieldwork 2012

5.2.2 Access to a primary school from home

For access to primary schools, this research sought information about the number of local schools and the means of transport to school. The household questionnaire enabled the researcher to get information on the number of schools located in the places where data was collected (Question 24: Appendix 1). The majority of households (i.e. 195 households making up 63.7% of the total) in all the municipalities were located in places where there was only one primary school, while 18 (5.9%) households were located in places where there was no school. Places where up to four primary schools were located close together were found in densely populated settlements of Thakhuma and Elim-Mpheni, Louis Trichardt, Kutama-Sinthumule, Musina-Nancefield, Thohoyandou-Sibasa and in Malamulele town (Figure 5.9).

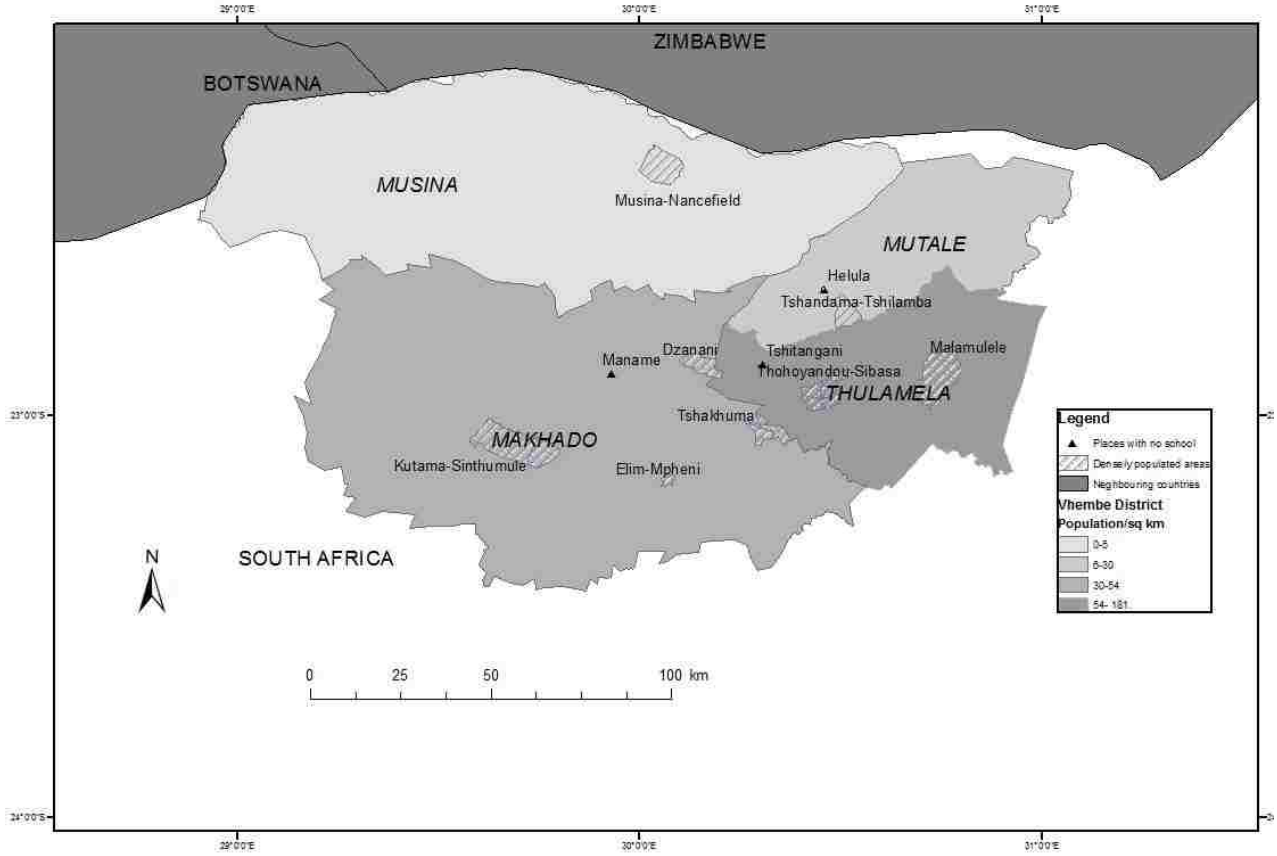

Figure 5.9: Location of places with many schools
Source: EMIS 2012

The gross residential areas of villages are not large. One of the bigger settlements is Maphophe that covers only 9.57 km^2 (Table 2.4, Section 2.2). Maphophe Primary School is located in the southern part of the village and the longest travel distance from the furthest home to the school is 2.6 km (ArcGIS ruler was used to measure the distance). Responses to Question 25 of the questionnaire (Appendix 1), directed to the household head, and Question 9 (Appendix 2) were also used to establish the distance travelled by learners from home to the nearest school. Ninety-one per cent of the households had their schools located within a distance of 2 km from home, 2.2% between 3 and 4 km, and 2.9% between 5 km and more. Those who travelled more than 5 km were located in the remote areas of Mutale.

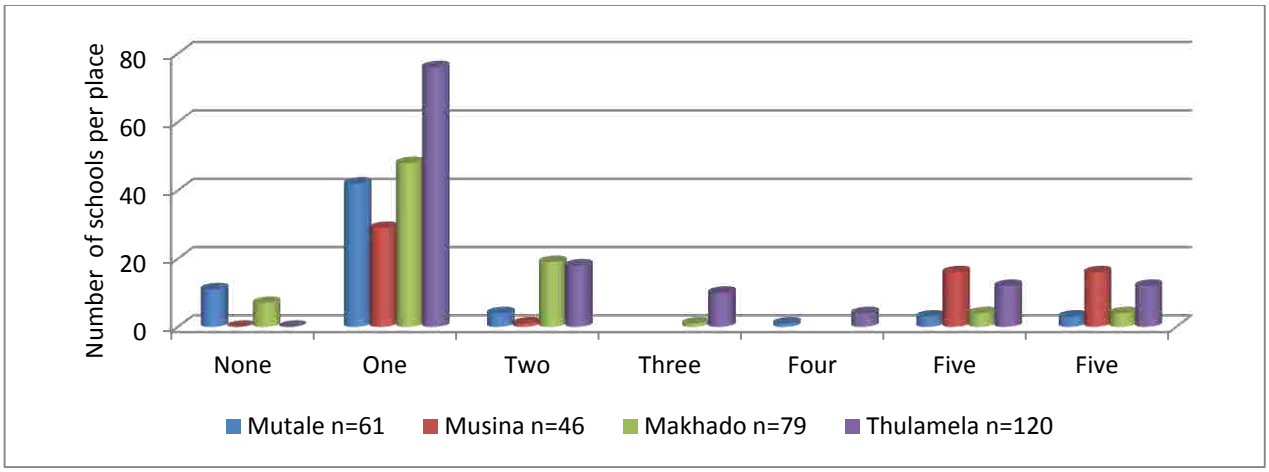

Figure 5.10: Number of schools in one locality, village or section of a town
Source: Fieldwork 2012

From the interviews with educators and principals almost half, 29 of the 60 primary schools visited, were located not far from other primary schools – within a 4 km radius). Some of those travelling further than 5 km came mostly from other villages and had registered at schools outside their home village by choice, and not necessarily because of the absence of schools in their villages. The more urbanised areas of all the municipalities had five or more schools in one locality. The number (Figure 5.10) of schools in one locality helps in understanding the competition for the same learners that might occur if many schools are located in close proximity. Muledane and Tshakhuma are two examples of areas where several schools are located at close range. In this particular case, learners were found to prefer attending the newer schools. This would be a matter of personal preference agreed on within the household but, in general, it is clear that the location of the school in a community is a very critical factor, particularly for the provision of a basic primary school education for the children living nearby. The education authorities need to be distinctly aware of this finding. In fact, it endorses the inclusion of the requirement in official policy that refers to distance between home and school was not to exceed a maximum 5 km (distance norms, Section 4.3 of Chapter 4). This study had found that in Makhado and Mutale municipalities, there were places where there were no primary schools and these places were located at Nzhelele West and Tshilamba circuits respectively (Figure 1.5 shows the location of these circuit areas, Section 1.2.3).

The size of the schools according the number of registered learners varies spatially throughout the Vhembe District. An analysis of the size of schools shows that only 8.8% of all the primary schools in Vhembe District had 500 learners or more. Twenty-five per cent of the Nzhelele Circuit schools had enrolments of 500 and more, while only 5% of schools in the Nzhelele East Circuit had

enrolments of this size (location of these circuit areas, (Figure 1.5, Section 1.2.3). The Soutpansberg East and Soutpansberg West circuit offices in Makhado Municipality had 52% and 21.4% respectively of schools with learner enrolments of 500 and more. Soutpansberg East had new settlements that were developed after a land claim – hence the high learner enrolments in such places. Thulamela has more urban development, and in-migration, and has a number of circuit areas, and schools with high enrolments. These areas are Malamulele Central, where 42.85% of schools have high enrolments; Malamulele North East, where the percentage of schools with high enrolments is 47.82%; Mvudi, with 22.7%; and Sibasa, with 22%. In Thulamela Municipality, there is the Sambandou Circuit, which monitors rural schools, and in this circuit, there was not a single school with an enrolment of 500 learners or more.

Administratively schools fall under circuits as designated by the Department of National Education. The administration of the schools is arranged hierarchically with the national department at the top, then the provincial department, then the district and then circuit regions in their descending order (Figure 4.1, Section 4.2 in Chapter 4). The circuit regions deal directly with the schools. The distribution of circuit regions in Vhembe (Figure 1.5 in Chapter 1) shows that Soutpansberg North is the largest circuit in terms of area size and has 34 primary schools. Schools with large enrolments in Soutpansberg North are located in Musina Town. Soutpansberg East is the largest in terms of the number of schools (45), but these schools are concentrated in the eastern part of Makhado Municipality because of the high population density there. In this area, travelling from one school to the next is probably not a problem for the circuit manager.

Ethnicity has also played a role in the location of primary schools. There were schools for Tsonga-speaking learners and schools for Venda-speaking learners, especially in the Elim-Mpheni area. Primary school learners are taught in their mother tongue and this was the case even in the pre-1994 era. Tanganedzwa Primary School is a farm school near Louis Trichardt catering for black learners. It is located 15 km from Soutpansberg Primary School in the Soutpanberg East Circuit and has an enrolment of fewer than 135 learners. The circuit manager mentioned it as one of schools facing merger (with Soutpansberg Primary School) and closure. The merger of schools here is likely to create very large schools; as well as a need to introduce bilingual schooling. The Niani Circuit region is the second largest in terms of the number of schools (36), and these schools are small and isolated. If some of them are shut down, the government at provincial and national levels will be obliged to shoulder the responsibility of providing transport for those learners who suddenly have to travel long distances to school.

It was established that learners travelled long distances in places where there were no primary schools in the vicinity. Learners in those places travelled for more than 5 km from home to school and the main challenge was consistently lack of public transport. These schools are located in the sparsely populated and remote settlements in the Mutale Municipality. Learners in densely populated areas travel for shorter distances to school.

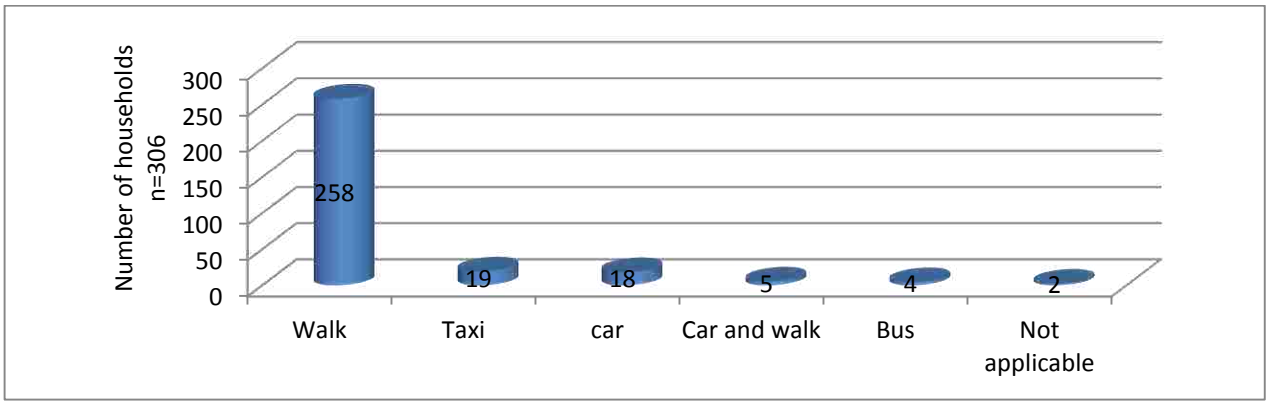

Figure 5.11: Number of households and type of transport used by children to travel from home to school
Source: Fieldwork 2012

Regarding the means of transport used to get from home to school (Figure 5.11), it was found that the majority of learners (84.3%) walked to school. This was possible because most learners lived within 4 km of the nearest primary school. Those learners who were dependent on car, bus and taxi transport were few in number, accounting for only 15% of the learners responding to this question (i.e. learners from 46 households). The taxi seemed to be the most important means of transport (19) when compared to the bus (only 4 families used a bus)). Eighteen families use their own private cars, while five families combined using a car or taxi with travelling on foot.

The number and location of schools in the greater part of Vhembe District make it easier for more children to have easy access to primary school education. It is only in a few cases that learners have to travel to neighbouring villages to access basic elementary school education, as is the case in the Mutale and Makhado municipalities. This compares well with the fact that the primary school net enrolment rate in South Africa had reached 99% in 2009 (Republic of South Africa 2011g). In 2011 the gross enrolment ratio (Section 3.6.2 in Chapter 3) in Limpopo schools was 99% (Department of Basic Education 2013b). All children of the appropriate age have registered at primary schools.

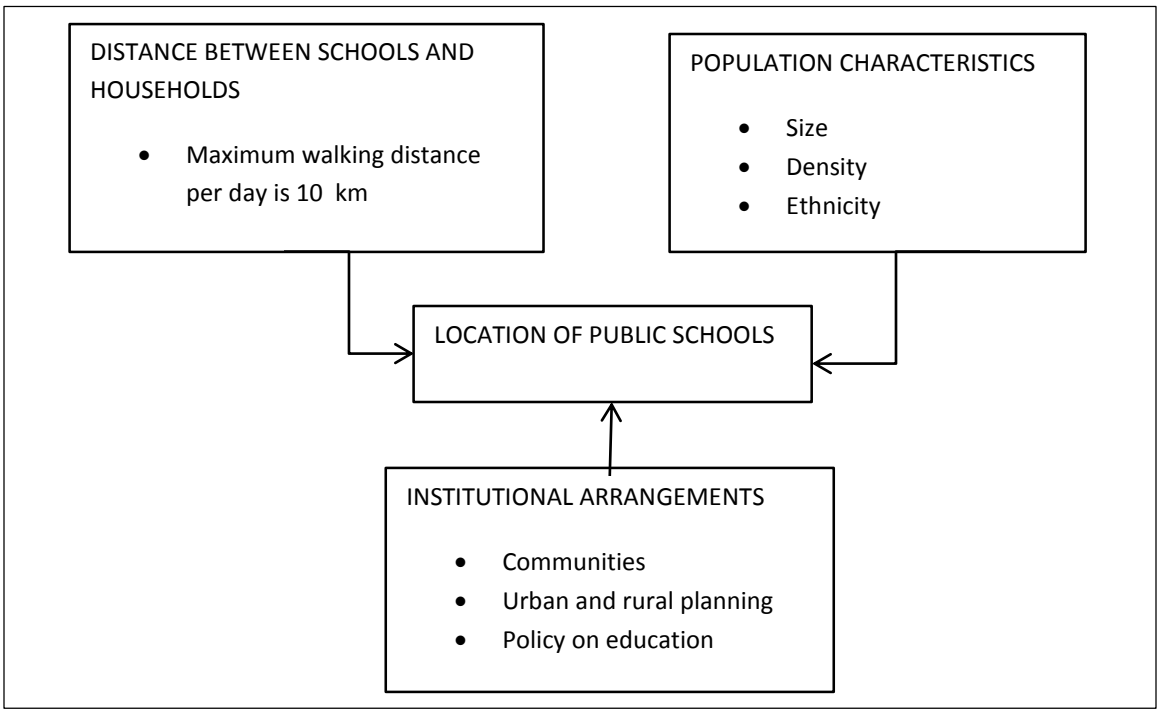

Figure 5.12: Illustrating the factors related to the choice of location of a school
Source: Conceptualised by the researcher

From this analysis of the factors determining the location of schools, it can be deduced that the strategy used by the Department of Basic Education takes into account distance, population characteristics and institutional arrangements (Figure 5.12). Institutional arrangements involve the role played by the government through its national, provincial and local education and development policies; and by communities through their tribal authorities. It was already been documented (Section 2.5) that *Khosi* plays an important role in decisions affecting activities on his tribal land.

5.2.3 Choosing a school: the parents' choice

Primary schoolchildren depend on their parents to choose schools for them, as they are very young. In making this choice, parents first weigh up various options where circumstances allow them to do this, then settle for the school that suits them best. Where an area offers several primary schools and parents can afford to pay school fees and transport costs, they have much greater freedom in selecting schools of their choice, irrespective of distance costs and the distance from home to school. Overcoming distance is the challenge and an essential element in using spatial analysis in political decision making as well as in the family situation. Socio-economic and political factors are at play here too. Economic factors include the ability or inability of parents to pay fees in cases where there is a choice between private schools where fees are payable and public schools where

no or only minimal fees are payable. In cases where the school is located far from the household, the ability to pay for transport is also part of the economic aspects that will affect the outcome. Social factors include language and ethnicity. South Africa is a heterogeneous society with eleven official languages, and learners are encouraged to learn to use their mother tongue. Historically politics had a profound effect when entrenching the ideology of separate development (Section 2.5 Chapter 2) leaving a major socio-political situation for future governments to restore to normality through transformative governance. This emerged as particularly necessary in the field of education. The South African government sought to implement "Education for All" strategy in order to offer, equity and quality education to all the learners irrespective of the locations of schools.

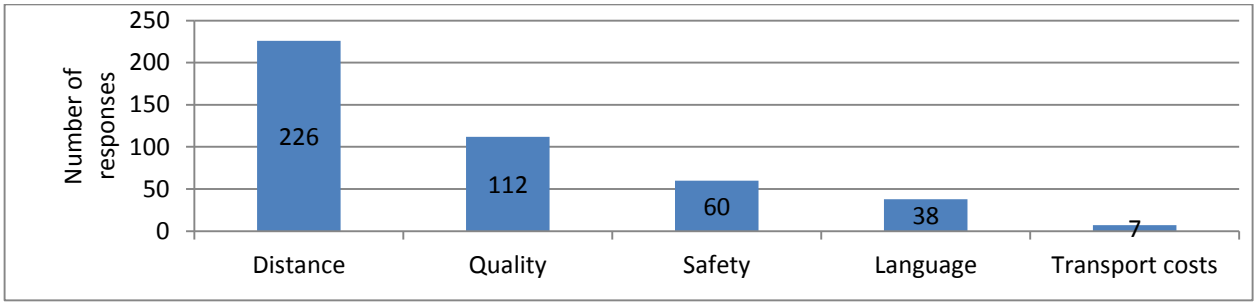

Figure 5.13: Factors influencing the choice of a school by parents as articulated by the participants
Source: Fieldwork 2012

The respondents in this sampled household survey provided valuable information on the factors they took into account when choosing a school for their children (Question 28: Appendix 1). The respondents were allowed to cite more than one factor where applicable and as a result the responses far exceeded the 306 participants. From the given options a clear majority (226) cited distance as the main factor influencing their choice of school (Figure 5.13). This seems like a reasonable choice, as this research established that most primary schools are located within 4 km from the learner's home. The total area covered by an individual rural village is small (Table 2.4 and Figure 2.10 Section 2.2) and places that cover more 25 km^2 are towns, Thohoyandou, Musina and Makhado. These are the so-called urban areas with many primary schools. The distance from home to school was established by using proximity analysis in the ArcGIS program. The reference point was a school in large settlements and the distance from the school to furthest housing unit was measured as a radius to determine if the total distance was within the 5 km limit. The ArcGIS program allows one to use a ruler tool to measure distance between two points or to apply the

"*selection by location*" menu to find all features located within a given distance from a reference point.

A relationship existed between the transport mode and what parents perceived as schools that offered quality teaching. Sixty per cent of the 46 households whose children used transport cited quality as a reason for selecting a school (Appendix 1, responses to Questions 28). This is an indication that some (46 of the participants) parents could afford transport costs and were prepared to incur travelling costs to a school far from their home if they believed that their children would receive quality education. Some parents who could neither afford to pay for transport or did they have their own cars. Some used buses and taxis to transport their children between home and school. The rest of parents had to let their children walk to school. These results indicate a positive relationship between the parent's socio-economic status and the means of transport that learners use to travel to school. Furthermore, they reflect the need for locating schools in such way that the educational needs of communities, both rural and urban, are met, as well as recognition of the effect of spatio-temporal dynamics – the time factor is as important as the physical distance and the economic implications.

Second in importance, although certainly not as dominant as distance, was the desire for quality education chosen by 112 respondents as a factor that determined the choice of the school. Other reasons (Figure 5.13) included safety (60), language of instruction (38) and transport (7). The third important factor cited by the participants was safety. Safety here referred to various factors: the physical state of buildings; fenced schools that barred unwanted elements from entering; and schools where children were not exposed to situations that endangered their lives or influenced them to learn bad behaviour.

Independent and private schools offer their lessons in English and a number of such schools were initiated in both rural and towns in Vhembe District. In 2012 there were 42 independent schools throughout Vhembe District (EMIS 2012). Parents who had enrolled their children at independent schools cited the medium (English) of instruction as a consideration when selecting a school.

Other factors that determined the choice of a school included good school management; and the ability to afford fee payments in places where a household was located near a fee-paying school. In places where there was only one school in a locality, the learners were compelled to enrol at that school unless their parents could afford to pay for transport to a different school. Clean surroundings and Christian values were other factors cited as determinants of choosing a school.

Regarding the choice of a school by parents, therefore, it can be seen that distance between home and school, quality teaching and a safe environment for children ranked highest among the factors that influence parents when selecting schools for their children. All these factors have implications for policy making regarding the provision of primary school education, and should be taken into account very seriously. Where the situation does not allow the establishment of a primary school, or where a school is forced to close down because of the size of its learner population, the Department of Basic Education should make transport available for the learners. Poor teaching and unsafe environments may induce parents to withdraw their children from such schools, and if enrolments drop to levels considered unacceptable, schools may be forced to close down.

The closure of a school almost always has negative consequences for learners, parents and educators. Evidence from global and South African experiences confirmed this (Section 3.6.3 in Chapter 3). Attention now turns to documenting how the created living space of people, and the provision of basic primary education, have been dealt with in the Vhembe District of Limpopo,

5.3 IMPACT OF SCHOOL CLOSURES

This research sought to establish the effect of the closure of schools on the affected communities. The members of the communities displayed discontent and cited issues like increased distance between the household and the nearest primary schools and also displayed a feeling of disempowerment. Parents felt a loss of control when their children were attending school in a different village and they ended up playing a reduced role or no role at all in school governance or their children's learning. One respondent explained at length about the problem caused by increased distance:

> *Our children as young as five years old are expected to walk for long distances in the veldt. The children cross a rivulet that has a low bridge, which overflows during periods of heavy rainfall. It is not safe because there is a possibility that the children could be swept away by the strong water currents. We therefore have to wake up early in the morning to assist the children when crossing the river. In the afternoon we are also forced to wait for them at the river to make sure that they cross the river safely.*

Figure 5.14: Location of Helula and Mabila
Source: Google Earth annotated14 May 2013

The central part of Vhembe District is mountainous, with some neighbouring villages separated by steep terrain or forested land. These features of the natural environment may make it difficult for individuals to take shortcuts to the next village. Helula village (Figure 5.14) is located in an isolated place surrounded by forested area. The learners are forced to walk around a hill and a stretch of forested land to access Mabila Primary School. This lengthens the trip to school for learners and increases the isolation of villages in that region. Helula community was recently affected by the closure of its primary school. The forested or bushy area also makes it unsafe for young children to walk unaccompanied. In order for the children to feel safe, they walk in groups while going to school. If the group leaves a child behind, the parent will then accompany their child to school that day or else the child turns back home and does not attend school that day.

Children who are relocated to another school are supposed to take their own furniture, such as tables and chairs, and also their own reading materials, stationery, textbooks and cooking and eating utensils along to the new school. Also at Helula, one of the respondents shared the following:

> *We contributed money to buy pots and utensils to be used in the feeding scheme programme. The Department of Basic Education sent people to the school to collect them without consulting us. They have even removed the green notice boards that were mounted on the walls. We were planning to use the classrooms to give our children who are attending a secondary school extra lessons using those boards for writing. We were promised government transport in February when the school got shut down, but it is now September and nothing has been done. We initially refused to sign papers for the closure of our school, but a few days later an official from Vhembe District Department of Education tricked us into signing when he stated that our children would lag behind in lessons at the new school. We were told that the transport problem was being addressed and that transport would soon be provided, but nothing has been done so far.*

Six months later this researcher followed-up on this enquiry but found that transport had not yet been provided and nothing had been done to meet this need. Children as young as five and a half years of age were, and are, still walking through the bush to the nearest school at Mabila, more than 5 km away. During the rainy season some young children do not go to school because they are unable to cross the river when it is in flood, and this happens regularly.

It was furthermore ascertained that the closure of a school also affected educators who, over time, had established a relationship with the local community. Some parents trusted their children's educators and felt comfortable when asking them for advice on personal issues too, as well as their children's progress at school. Others also affected, for example, were the women engaged in informal trade as they sold snacks to children during their lesson breaks. Figure 5.15 shows women selling snacks to children during a school lesson break. The closure of a school affects them not only economically but also socially, since, when their services are no longer required, they lose their ties with the school community. Socially, their relationship with the learners and among themselves as people who share local experiences is disrupted. Then there are the women who prepare the food supplied by the school's nutrition feeding scheme and are paid about R600.00 each month for this service. These women, who would otherwise be unemployed, welcome this cash income.

Figure 5.15: Learners buying snacks during lesson break at Mmbara Primary School, Sibasa
Source: Photograph taken by researcher in May 2012

Parents also formed relationships among themselves when coming to collect their children after school or when they came to attend meetings organised by the school. They met other parents, talked about their children's experiences, and learned more about children from some of the informal talk that took place. The closure of a school therefore disrupts the social cohesion of the community. Social cohesion refers to the bond that brings and keeps people together, and even the government adopts the firmly established perspective that it relates to the extent to which society is coherent, united and functional, providing an enabling environment within which its citizens can prosper (South Africa 2007).

5.4 CHALLENGES IN THE PROVISION OF EDUCATION

The survey for this research included identifying the challenges experienced by the participants relating to the provision of education in their local area. Question 30-31 on the household questionnaire (Appendix 1) and Question 16 (Appendix 2) from the interviews with the educators enabled the researcher to collect information on problems associated with the provision of education in local schools and these challenges are listed randomly in Table 5.12. The challenges from educators and from the parents (representing households) are grouped together as most of them

are similar. These are classified as the internal ones, i.e. those that are directly linked to the Department of Basic Education as a system.

The second group are the external ones that are, strictly speaking, outside the sphere of education although are connected to the provision of education in some way or another. However, these specific concerns or challenges as mentioned by the respondents should not easily be discussed in isolation as some are closely linked.

Table 5.12: Problems associated with provision of education in local schools: Vhembe District in 2012

Internal	External
• Poor teaching standards • Inadequate number of educators • Multi-grade classes • Lack of parental involvement • Lack of or poor infrastructure • Shortage of funds • Educator absenteeism • High dropout rates • No basic school facilities • Lack of resources • Curriculum changes • Overcrowding • Lack of discipline • Combined schools • Shortage of funds • Dilapidated building • High failure rates	• Lack of transport • Unsafe environment • Teenage pregnancy • Orphaned children • Proximity to undesirable activities • No recreation facilities • Poor roads • Out-migration • Lack of development in the area • Lack of service delivery in the area • No parental involvement
Source: Fieldwork 2012	

Internal challenges affecting the provision of primary school education raised as concerns were mainly from the educators. They included non-existent school facilities that were either totally lacking or were of poor quality; the shortage of human and learning-material resources; inadequate funding; low teaching and learning standards; and poor learner performance. Table 5.13 presents the extent of school facilities in Vhembe District (Appendix 2: Question 6). It is clear that there is still

a backlog when it comes to the provision of essential and basic facilities such as the supply of libraries, sports facilities and flush toilets in Vhembe District schools. In some rural schools where a borehole had been provided, only staff members could use the flush toilets. Learners used pit latrines. Twenty-three schools (43% of the total) had computers for learners in 2012. Eighty per cent of the schools had at least one computer for the staff, which was used for administrative work such as school reports, letters to parents and correspondence with the Department of Basic Education at circuit level. In modern society, teaching is dependent on teachers supplementing learning materials by using the Internet as well as library sources.

Table 5.13: Facilities at the sampled schools in 2012

Facilities	**Number of schools n = 60**	**Percentage of schools having such facilities (%)**
Library	11	19
Sports facilities	20	33
Flush toilets	21	35
Computers for learners	26	43
School telephone	33	55
Computers for staff	48	80
Source: Fieldwork 2012		

The infrastructure in some schools, especially the old schools was not conducive to effective teaching and learning owing to overcrowding and dilapidated building structures. One example of infrastructure that was in bad shape was Makushu Primary School in Nancefield, Musina. Musina Town is characterised by an influx of migrants from countries north of the Limpopo River. The town has grown very fast in recent years and infrastructural development at schools is not keeping pace with population growth. Because of the high learner enrolments in the local school, some classes are conducted in sheds provided by the communities themselves. The school did not even have a proper office for the principal (Figure 5.16), let alone proper classrooms (Figure 5.17). In general, overcrowding in classrooms was encountered in schools with large enrolments in areas where population has increased at a faster rate than normal owing to newly established settlements and in areas experiencing in-migration. Such areas include Musina Town, Tshilamba (Mutale), Maniini (Thulamela) and Maila (in Makhado Municipality).

The information on school facilities was obtained during visits and through interviews with principals and educators (Appendix 2: Question 6) and personal observation. The lack of sports fields was observed during such visits. The neglect of the provision of sporting facilities by the department is another aspect that is detrimental to the physical, intellectual and spiritual development essential for a child's well-being and growth. Only 11 of the 60 schools visited had library facilities (Table 5.13), and only 20 (33.3%) of them had sports grounds. The only facilities visible in the sports grounds were netball equipment and a soccer field that appeared not to be properly maintained. This is an indication that sport in Vhembe District does not form part of the curriculum and is therefore grossly neglected. Children spend most of their time at school each week and this is where some of their sporting talent could be realised.

Figure 5.16: Administration building at Makushu Primary School in Musina Town
Source: Photograph captured by the researcher in May 2011

The Department of Basic Education emphasises effective communication between parents and the schools as well as between the circuit offices and the schools. Without effective communication between the schools and the circuit offices, principals may miss important meetings because they are invited through short message style (SMS) notification. Regarding those examinations that are set externally, principals experience problems when some sections on the question paper are missing and they need to contact the circuit office urgently. Without this urgent communication, exams are delayed. Thirty-three schools, just over half, had a school telephone. This is hardly a satisfactory state of affairs as communication with the authorities should be instant and efficient, especially in emergency situations. In the more remote areas, poor communication adds another challenge to schools that already face accessibility constraints owing to the poor road network and the unavailability of public transport. The Department of Basic Education expects schools to offer quality teaching, but it is hard to see how this can be achieved if the relevant resources and facilities are not available.

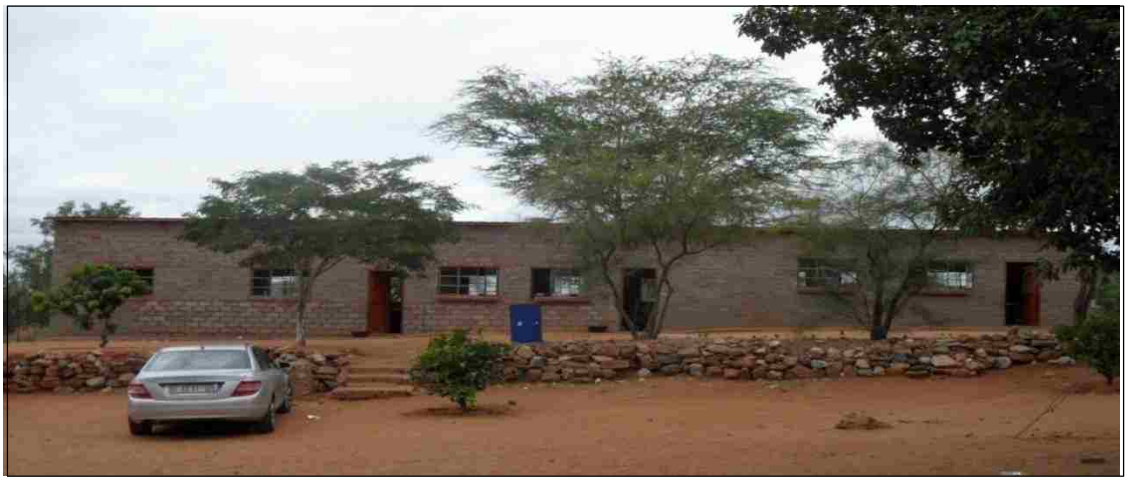

Figure 5.17: Shortage of classrooms leading to makeshift structures: Makushu Primary School
Source: Photograph captured by the researcher in May 2011

Educators pointed to the lack of resources, especially funds for purchasing necessities, as a challenge hampering the provision of quality education in Limpopo schools. In 2012 educators in Limpopo complained that funds from the previous year were still not available in the second semester. Schools expected certain funds to be available during the first term of 2012, but only a quarter of that amount was given because the provincial Department of Basic Education had exhausted all its funds through mismanagement. This led the national government to place the Limpopo Department of Basic Education under national administration *(City Press* December 2011*).* One challenge was the school nutrition scheme through which learners were supposed to be fed every day. In order to continue supplying food to the children, some schools requested donations from parents in the form of money in order to buy wood for cooking. Several schools in Limpopo have been declared “no-fee” schools, and parents are not expected to pay any school fees at these schools.

Eighty-five per cent of the sampled schools fell under quintiles 2 and 3. Where learner enrolment figures are low, the funding per learner have implications for the availability of funds for the smooth running of schools (Section 4.2: Chapter4: Table 5.14 shows the number of schools visited according to each quintile level. From this table it can be seen that the majority (85%) of schools fell within quintiles 2 and 3. This scenario supports the discussion of the socio-economic status of Vhembe District population in Section 2.1 in Chapter 2. Almost all the sampled schools except one were no-fee schools. Raising funds to supplement those provided by the Department of Basic Education is faced with many challenges.

Table 5.14: Number of sampled schools by quintile level

Quintile level	Number of schools (n = 60)	Percentages
Quintile 1	8	13.3
Quintile 2	25	41.7
Quintile 3	26	43.3
Quintile 4	0	0.0
Quintile 5	1	1.7
Source: Fieldwork 2012		

From the amount of money provided by the state, and the no-fee policy at these schools, it was learnt that most schools were struggling to keep going. The money from the Department of Basic Education is utilised according to the way it is stipulated by the Department and no deviation from this is permitted (Limpopo Education Department 2011). Currently the schools are forbidden to utilise the school funds to pay persons employed by the school governing body (SGB) to clean the schools, maintain the school grounds or work in school gardens. The schools cannot even use the funds to repair damaged floors or buy desks to replace broken ones. Learners are expected to clean the classrooms and the toilets. At one school, the flush toilets were no longer properly functioning because of a blockage. One parent who had withdrawn her son from an independent school and enrolled him in the public school concerned regretted the decision she had taken. After the principal and the SGB at the parents' meeting had explained the dilemma they were facing, she remarked:

> "*I did not know that I was exposing my son to a health hazard. Next year I am going to remove my son from this school*."

Parents at a meeting at Shayandima School in April 2011 agreed that they would raise funds and had decided on an amount of R150 per learner, but three months later at another parents' meeting the school representative reported that the parents of only six learners had paid in their contribution. The school continues to run under unacceptable conditions. The attractiveness of a school's environment is likely to act as a drawcard for learners and their parents. Some schools encounter challenges when trying to convince parents to supplement school funds. From my observation at a parents' meeting on the issue relating to funding by parents I concluded that the lack of understanding by parents makes it difficult for schools to raise funds through donations from the parents. To some parents there's a false perception that in democratic South Africa, the government

has to provide for all the funds schools need. Strategies that aim to reverse this perception are crucial.

There are some conflicting decisions when it comes to donations from the parents. It seems as if the government does not openly want to state that it cannot meet all the funding requirements of schools. Some years back, schools used to raise funds through a "building fund**"** into which each parent was expected to pay, but this was stopped in 2010 and money already paid in was given back to the parents when the state declared the "no-fee" status of almost all the schools in Vhembe District. At one meeting at a school in Shayandima parents agreed to pay some money towards employing persons to keep the school clean, but the money collected had to be first declared to the Department before workers could be employed. The schools are even afraid to issue receipts after payments by parents. A principal at a parents' meeting explained that the school prefers parents to visit the school in person to make payments because their names will be put down on one list until all the parents have paid, and a single receipt for the total amount will be issued and shown to the provincial government for approval. When trying to establish why individuals who have paid should not be issued with receipts, one principal said:

> *Last year we requested parents to donate money for buying computers for the learners. We issued receipts, but one parent took it to the district office to show the officials that our school is making parents pay. We do not want to find ourselves on the wrong side of the law.*

This research established that neither parents nor the educators favour multi-grade classes at schools. To the parents, multi-grade teaching is associated with compromising quality teaching. In Mutale Municipality 34% of the household participants perceived multi-grade teaching as being responsible for inferior teaching. Educators in 25% of the schools where interviews were conducted complained that they were not trained to handle such a situation. To the educators, multi-grade teaching implies extra teaching preparation and always having to adjust their teaching practices according the different levels of learner in one classroom. This could be distracting for both the teacher and the learner.

Absenteeism on the part of educators, and teachers who send learners to the shops during lessons, were some of the concerns raised. One school in the Dzindi Circuit was closed down after parents had removed their children from the school because they were unhappy that their children were often left on their own while the educators stayed away. Parents were so unhappy about the problem of absenteeism that they demanded that the principal be expelled. When that did not happen, they removed their children from the school and relocated them to a neighbouring school. The enrolment

at the original school came down to an unsustainable level and the provincial government shut it down. .Learner absenteeism from school was also seen as a challenge to schools because educators teach according to the teaching plan prescribed by the Department of Basic Education. School children who miss classes make teaching a difficult task for the educators who have to compile learner performance portfolios. These portfolios are regularly checked by subject advisers from circuit offices who visit schools.

The lack of discipline displayed by some educators at work was found to be a concern in some schools. In one school there were serious arguments and disagreements among the educators, which impacted negatively on teaching and learning. It was such a serious problem that the SGB and the circuit manager had been called in to intervene. Some parents had decided to withdraw their children from the school. One respondent said:

> *What are our children going to learn from educators who are fighting among themselves? We are disappointed because we send our children to school to be educated and learn good manners, but instead they are exposed to unacceptable acts*.

Teenage pregnancy is a thorny issue at public schools. Pregnant girls are allowed to continue attending classes and only leave the classroom when they are about to give birth. The primary school-age ranges between 6 and 13 and girls aged between 12 and 13 are at the risk of falling pregnant if exposed to sexual activities. According to the Department of Education (DoE 2009c), the teenage pregnancy rate among school-going learners in 2008 in South African schools was 58/1 000. In Limpopo, it was 60.38/1 000 in both primary and secondary schools. At Madimbo clinic in Musina Municipality 17 out of 25 delivered babies each month were from girls between the ages 13-14.(Musetha 2013). At a national level current figures on teenage pregnancy are unavailable and the national figure available of 57.42/1 000 was recorded in 2008. Teenage pregnancies at school have internal and external implications for the learners, the educators and the community at large. Teen pregnancies may result in some girls dropping out of school, especially when there is no one to look after the baby. Educators in six schools (10%) felt that pregnancies at school send the wrong message to young learners who are looking up to the schools to learn acceptable behaviour (Appendix 2: Question 16). The situation is also frustrating for educators, who have not been trained to handle pregnancy at primary school. Allowing pregnant girls to continue attending classes signifies a conflict of values between the two institutions of home and government. At home, children are taught about what is culturally acceptable, but the government policy is condoning the opposite.

Allowing pregnant girls to continue attending classes was also perceived as not a good thing and respondents felt that pregnant girls should be expelled. One parent responded as follows:

> *What do our children learn from all this? A girl who is pregnant continues to attend classes until she is due to give birth. We have moved away from our moral standards. In the past it was a shame to fall pregnant out of marriage not to say girls who are 12 or 13 years of age. Being pregnant, you would not even want your friends to see you.*

Although pregnancy at schools in South Africa is not condoned by the Department of Basic Education, a child who falls pregnant is not expelled from school. A pregnant girl remains at school until when she gives birth where after birth she would continue with her schooling. Some educators also oppose girls' pregnancy at school and one educator added:

> *We let the mother of a pregnant girl come to school every day for the duration of the pregnancy. We were not trained to help mothers who are in labour and if it happens the mother of the pregnant girl should be around to assist.*

Some parents feel that allowing pregnant girls to continue attending classes is immoral and opt to take their children to private schools, where they feel that unacceptable behaviour is not tolerated

At Tshikota, a residential area near Makhado town, primary and secondary schools were combined. One participant complained that combining the two exposes the younger primary school level learners to unacceptable behaviour from the senior students at secondary school level. Unacceptable behaviour mentioned included smoking and using drugs; bullying; watching porn videos; sexual relationships between boys and girls; gambling; and joining groups of gangsters. Parents (10.8%) also raised the issue of children attending classes with pregnant girls who sometimes accidentally give birth in class. The percentages of respondents who complained about pregnancy at primary schools in the four municipalities varied from 24% in Musina, 14% in Makhado and Thulamela 8%.

The South African teaching approach and curriculum has changed four times since 1994. Teaching approaches have changed from outcomes-based through National Curriculum. Revised National Curriculum and currently the Curriculum Assessment Policy Statement (CAPS) approach has been adopted. It has changed from an approach where educators were seen as facilitators while learners were expected to do more of the work themselves, to a situation where educators were burdened with a great deal of administration work at the expense of teaching. The current approach to teaching requires educators to first teach before giving learners work; but to still give learners work to do on

their own since the latter are expected to write tests set at national level. The purpose of these national tests and exams is to try to verify that each child in every school is learning what is appropriate for their grade; and to ensure that the principle and practice of quality teaching is adhered to (Department of Basic Education 2011b). Too much administrative work at the expense of teaching frustrates educators, who then opt to retire early from teaching. Five per cent of the schools whose teaching staff was interviewed complained about continual changes in the school curriculum because changes are often have to be adopted before educators can adjust to them.

To sum up, the internal concerns discussed here cause people to perceive education offered in public schools as inferior and lacking in moral value. Coupled with the lack of funds, these perceptions make schools in rural areas unattractive for learners and educators and a major concern for parents.

External factors are the outside forces that have impacted on education but are directly or indirectly linked to efficiency in the teaching and learning situation and environment. The problem associated with distance between home and school was experienced in isolated villages. A school is a fixed entity, and the problem of distance occurs when the settlement expands but the overall size of the population does not warrant the creation of a second primary school. One example in the Mutale area is Gundani Primary School, where relocation from the valley to the upper area is resulting in an increased distance between new households and the school. Gundani is a typical rural village surrounded by mountains on both sides and poor access by car because of poor roads. An interview with the principal revealed that the Department of Education was aware of the long distance travelled by learners. Some learners had been supplied with bicycles but were not utilising them because of the nature of the terrain. The school is in the lower part of Gundani and it is difficult to drag a bicycle up the steep slope after school. The bicycles became a burden and learners stopped utilising them and went back to walking. Public transport in the area was found to be very poor because of the quality of the roads. The gravel roads were in bad shape owing to lack of maintenance. Individuals interested in earning money from transportation were transporting persons from these areas only in the morning and the late afternoon after work. There was no public transport during the day, and so learners who left school by 3 p.m. resorted to walking or to waiting for the public transport that only came at 6 o'clock in the evening.

The upper area in Gundani is close to the tarred main road, where access to public transport and lifts from passing motorists is easier to get. Some learners from this part of the village prefer to attend primary school in the nearby village of Matavhela. It is easier to travel to this place than to

their own village school. Learners attending school at Matavhela village are seen lining the road begging for lifts from motorists in the morning when going to school and in the afternoon when returning home after school. Learners from this part of the village who are unable to pay taxi or bus fares have to walk 6 km on the main road to Matavhela.

The safety of their children was another concern of the parents, especially where learners have to cross busy roads in order to access their school. Schools located close to busy major routes have experienced fatal accidents where children have been knocked down by motorists while crossing a road. The lack of traffic officials to control the movement of cars was found to be contributing to fatal accidents at these crossing points. One principal in the Nzhelele area blamed the location of his school for the drastic decline in learner enrolment, to below 100 learners. His school was the first one built in the area, but because learners have to cross a major road to reach it, parents are no longer willing to send their children there.

Figure 5.18: Satellite image of Mutoti Village near Nandoni Dam.
Source: Google Earth

Lack of parental involvement was found to be another issue in Vhembe primary schools. Parents complained that they were not involved in the schools, while from their side the schools complained that parents did not honour invitations to attend events. This made it difficult to improve the quality of teaching because some learners had no one to assist them with schoolwork, including homework. It was also argued that the parents seemed to leave everything in the hands of the educators. Taking into account that there is a high level of illiteracy among the parents, this is not unlikely. Children living with grandparents also lack guidance from the parents. The results of the survey showed that a third of the respondents had no education or had just a primary education (Table 5.8 in section 5.1.3). Even though some parents are illiterate, however, they all aspire to their children being educated because they believe that their lives can be improved through education. This belief was also evident from respondents' perceptions regarding the closure of schools, with the respondents indicating that such a development was unwelcome.

Child-headed families were found to be a challenge facing some learners in Mutoti Village (Figure 5.18). Mutoti Village is located near Nandoni Dam, and was inhabited by immigrants contracted to build the dam for a period of not less than five years. Some respondents believed that the high death rates that occurred in the area at the time were the results of HIV infection. Some children lost both parents as a result of HIV-related killer diseases. Because of lack of parental guidance, some of these orphaned learners do not go to school or do their homework regularly. Some of these children take care of younger siblings and after school are expected to fetch water and collect wood for cooking. These adult responsibilities sometimes leave them with little time to do their homework satisfactorily.

Improvement of infrastructure such as roads and piped water forms an integral part of the general economic development of an area. The absence of proper roads is a great challenge and one educator at Mukumbani village, said:

> *During rainy seasons educators often arrive late at school because this place has steep slopes and red clayey soil that is slippery and cars are unable to access this village. Taxis also drop commuters several kilometres away from home and persons struggle to get in and out of this village*.

Figure 5.19: Typical main route in a rural area of Mulima
Source: Photograph by the researcher in May 2012

Figure 5.19 shows the condition of one of the main roads used by buses and taxis at Mulima in the Sekgosese area. The sandy soil in the Sekgosese area makes it possible for motorists to access places in rainy periods, which is not the case in the Tshivhase and Mphaphuli territories, where the soil is clayey and slippery.

In the Mutale Municipality the water supply was found to be a problem and the learners in some schools were forced to carry drinking water to school. In a village in the area of Tshipise one school relies on underground water, but the parents complained that the water was not safe to drink and affected the learners' teeth and said.

> "*We let our children carry water from home because the underground water at school turns the children's teeth brown,"*

Out-migration is one challenge that is affecting the schools in those rural areas where there are no employment opportunities. These areas' senior citizens are left on their own, sometimes temporarily looking after grandchildren until the parents are settled. A mother at Gundani village whose adult child was employed in Gauteng said

> *Our children no longer want to live here because there are no employment opportunities. They have even taken their wives and children to the cities. We are left on our own and there are no children to send around. My daughter has left me with her two-year-old baby because she does not get enough money to pay for the nanny. She has taken the six-year-old one who had just started attending school. She says she will come and fetch the little one when she is four years old so that she can start attending kindergarten school in Pretoria where she works. .*

This section on challenges facing the provision of education in Vhembe District has shown that these challenges are both internal and external and some of these challenges are responsible for a decline in learner enrolments. Section 5.5 discusses the findings of learner and their decline in Vhembe District.

5.5 LEARNER ENROLMENTS AND THEIR DECLINE

The number of schools in Limpopo between 2000 and 2011 declined by 5%, while in South Africa as a whole there was a decrease of 9% in the number of schools. The only provinces with increasing numbers of schools were Northern Cape and Gauteng. The Eastern Cape, Limpopo, the Free State and Mpumalanga all display declining numbers of learners and all four provinces are characterised by negative net migration (South African Institute of Race Relations 2012). The declining trend is also displayed in Vhembe District schools and various factors were found to be responsible. Though these factors were discussed separately, they do not act in isolation, but in combination. For example, lack of discipline, poor teaching standards, lack of parental involvement, shortage of resources and other factors may work together and render a school unattractive to learners. Learners may opt to enrol at a school far from home, provided transport is available and parents can afford transport costs. Overall, enrolments for the sixty schools for the past six years (2007 – 2012) show a declining trend, from 30 332 learners to 29 002 (Figure 5.20). Enrolment had declined by 4.38% in six years.

A total increase of 389 learners from 28 613 for all the 60 sampled schools to 29 002 in 2012 was influenced by the intake of pre-school learners at primary schools. Pre-school learners were not part of a primary school because early childhood education was not compulsory and it is still not but schools are increasingly taking it seriously. Although there was this slight increase in the 2012, it is clear that the overall trend for all the primary schools is a declining one. Using a statistical slope function for total enrolment data for Vhembe District between 2007 and 2012, the pattern achieved indicated a negative trend of -0.00243. This trend signifies that there is a general decline in enrolments in Vhembe District schools and this decline is in line with the demographic transition in discussed in Chapter 1 (introductory part) and Chapter 3 (Section 3.1).

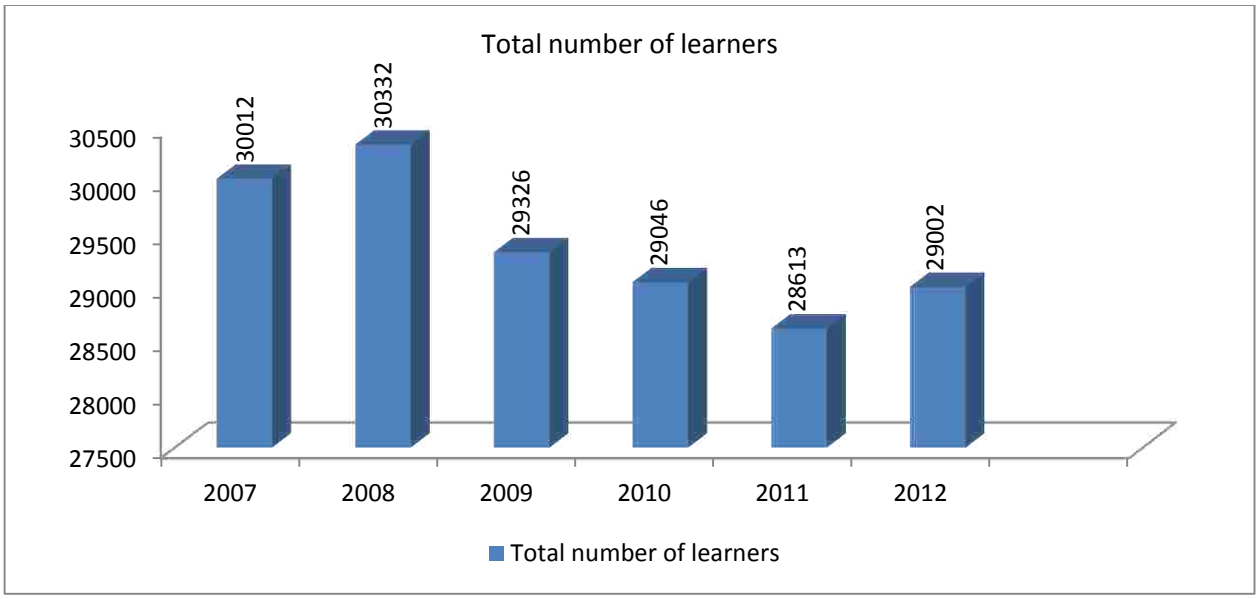

Figure 5.20: Total primary school enrolments per annum, 2007–2012
Source: EMIS 2012

An analysis of the 2012 EMIS school enrolments records show that there were 64 primary schools (out of 715) with enrolments of less than 100 learners in Vhembe District. Eleven of these schools have total enrolments of less than 40 learners, while eight schools have total enrolments of 40–49 learners. Fifty learners is the cut-off number under which a school is expected to close and merge with the nearest school, preferably one located under the same village or headman; or with a school in another village if none is available in the affected village. A school that has to be closed should preferably merge with a school under the same chief, irrespective of whether there are other nearby schools falling under the different jurisdiction of a tribal chief. Tshihe Primary School in the territory of Duthuni was merged with Tshivhambe, located 5 km away, instead of merging with Dovhoni (Phiphidi), located less than 3 km away under headman Tshivhase. *Mahosi* and *Magota* feel more empowered when there are schools within their villages.

Using EMIS (2012) data for a snap survey of 2012, 715 schools offering primary education were found, with a total of 250 452 Grade R to Grade 7 learners. The average number of learners per school was calculated to be 350 learners. (The total enrolment number was divided by the total number of primary schools in Vhembe District in order to arrive at the average.) It was also found that 635 (88.81%) of these schools were located in rural areas, and 80 (11.18%) of them in urban areas. This negative enrolment trend is in line with findings published by the South African Institute of Race Relations (SAIRR) (SABC News 29 February 2012). Contributing factors responsible for declining learner enrolment is the decline in total fertility per woman and not necessarily the place

where the schools are located. The other factor contributing to a decline in learner enrolments of some schools especially in densely populated area were new schools built near existing schools. Lufule primary school enrolment was affected by the location of Muratho Primary School, while Mvudi primary school took away learners that were supposed to feed Muledane and Mahwasane primary schools.

Table 5.15: Trends in enrolment at the sampled schools, 2007–2012

Trend	**Number of schools n=60**	**%**
Declining	44	73.33
Stable	5	8.33
Increasing	8	13.33
Fluctuating	3	5.00
Source: Fieldwork 2012		

There were large and small schools in both rural and urban places. The total number of learners per school in urban areas varied from 90 learners at Miluwani to 1439 at Makwarela in Sibasa. In rural areas there were large schools like Maphophe Primary School (located near Saselemani urbanised area) with more than 1 200 learners. Proximity to towns or urbanised areas influenced some rural schools to draw large enrolments. Examples are Bashsha near Mutale town, Dzindi near Shayandima and schools located in the Kutama–Sinthumule area west of Louis Trichardt, schools near Elim and near Dzanani town (Figure 5.10). The trend analysis of all the sampled schools (Table 5.15) revealed that most (73.33%) show a more declining trend than what the educators perceived (Table 5.11). Only 13.33% of the schools displayed an increasing trend, while 8.33% had stable and 5% fluctuating, trends. The number of schools with declining learner enrolments out of the total sampled schools confirms that the current demographic transition of Vhembe District population is here to stay and this decline will continue to dominate in the few years to come until it stabilises. The low enrolment numbers in Vhembe District schools should serve as a wake-up call to the planners that they should focus on quality products. These changes imply that the provision of education should rather strive for quality products than mass production of individuals who do not have a basic sound education as an essential foundation for their personal development.

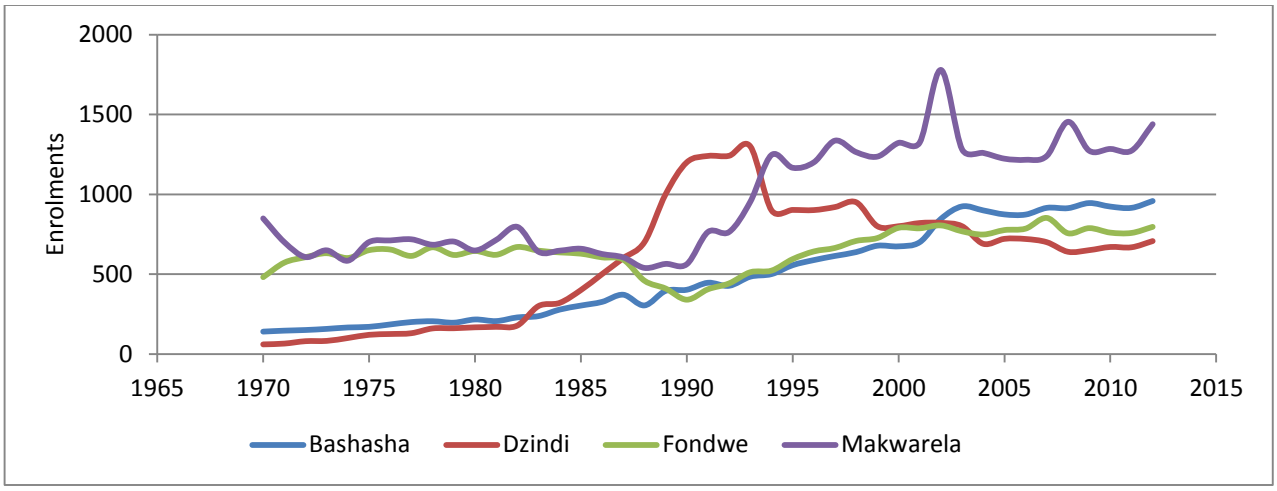

Figure 5.21: Trends in enrolments of four selected large schools located in rural and urban areas
Source: Fieldwork 2012

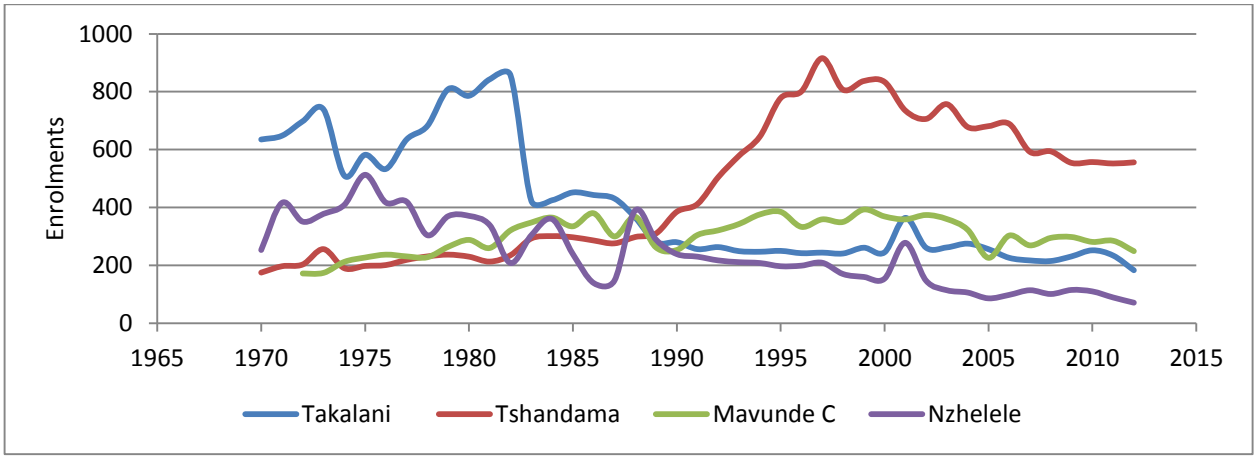

Figure 5.22: Decline in learner enrolment in four selected urban and rural schools
Source: Fieldwork 2012

Records dating back to the 1970s (Figure 5.21) show the enrolment trends at four large schools. Makwarela is located in an urban area, while Bashasha and Dzindi are located in rural areas but close to urban areas. Fondwe is located in the rural area. An analysis at school level shows interesting developments for Dzindi Primary School. Dzindi Primary School displayed increasing trend from 1970 until the mid-1990s reaching enrolment peak of 1 330 learners in 2002, and from 2003 it displayed a decreasing trend reaching 766 enrolment in 2012. The declining enrolments at Dzindi Primary School in Itsani (Figure 5.21), is attributed to the impact of new schools that were added every 10 years. From 2010 it displayed stable enrolment and the reason behind this is that Itsani village no longer has land for settlement expansion.

Makwarela Primary School is located in an area where open land for settlement expansion is available, but because of its urban location and easy access by public transport, it continues to draw learners as far as 40 km away. It has an added advantage because it is a feeder school for Mbilwi Secondary School, one of the top schools not only in Limpopo, but in South Africa as a whole. Mbilwi Secondary obtains 100% pass at matric level each year. Bashsha is located in a densely populated area near Mutale town. Fondwe is located in a rural area but it is easily accessible by public transport and draws learners from other villages.

The schools shown in Figure 5.21 have since 2003 displayed stable trends. These schools are perceived to be offering quality education by the parents. Tshandama, Takalani and Nzhelele show negative trends (Figure 5.22). Nzhele though located in a densely populated area its location across a busy road renders it not safe for young children. Negative trend for Takalani on the other hand was influenced by the introduction of two new schools in the village. Mavunde is the only school in the whole village and stalling fertility is contributing to stable but slow declining enrolments trend.

Table 5.16 shows the rate of change in enrolments of selected schools that had all the records between the 1970s and 2012 and Table 5.17 shows their rate of change between 2002 and 2012.

Table 5.16: Rate of change in enrolments between the 1970s and 2012 in both rural and urban areas

School	Rate	Period	Rural/Urban
Takalani	-13.60	1970–2012	Rural
Nzhelele	-7.98	1970–2012	Rural
Luvhalani	-3.41	1970–2012	Rural
Levubu	-0.69	1970–2012	Rural
Mavunde	1.93	1970–2012	Rural
Fondwe	5.36	1970–2012	Rural
Ravhura	6.13	1970–2012	Rural
Ximixoni	6.26	1976–2012	Rural
Maungani	6.38	1985–2012	Rural
Hlalelani	12.58	1994–2012	Rural
Tshandama	15.09	1972–2012	Rural
Dzindi	20.02	1970–2012	Semi-urban
Makwarela	21.90	1970–2012	Urban
Bashsha	22.68	1970–2012	Rural
St Martin de Porez	26.68	1989–2012	Urban
Masindi	32.39	1980-2012	Rural
Source: Fieldwork 2012			

The rate of change range from -13 for Takalani Primary School to 32 for Masindi school. Schools which displayed negative growth trends are Takalani, Nzhelele, Luvhalani and Levubu and they are all except Levubu located in densely populated areas. When analysing the rate of change from 2002 additional schools display negative growth trends and these schools are Maungani (-22.4), Tshandama (-20.7), Makwarela (-11.9), Ravhura (8.8, Mavunde (-8.3) and Masindi (-5). All these schools are located in densely populated areas. Declining enrolments is attributed to declining school age population. St Martin de Porez Primary School is located in the Musina Town in an area characterised by an influx of immigrants from Zimbabwe and it therefore shows the high growth change rate (22.05) between 2002 and 2012 (Table 5.16. The highest growth change was experienced in Masinndi Primary School located at Maila (land was claimed back by the Maila community after 1994 and has attracted many settlers) in Makhado Municipality. In schools with increasing enrolments, the increases in rates per annum were very small. This is supported by the standard deviation shown in in Table 5.18. The standard deviation from the mean varies between 329 for Makwarela to 26 at Levubu Primary school. Negative growth rates are occurring in schools located in both rural and urban areas; and increases in learner enrolment occur in areas characterised by in-migration because of the availability of space on which to settle and the presence of main routes which make access by public transport easy.

Table 5.17: Rate of change in school enrolments between 2002 and 2012

School	Rate (2002- 2012	Rural/Urban	Municipality
Maungani	-22.40	Rural	Thulamela
Tshandama	-20.75	Rural	Mutale
Makwarela	-11.99	Urban	Thulamela
Ravhura	-8.85	Rural	Thulamela
Mavunde	-8.31	Rural	Thulamela
Levubu	-7.69	Rural	Makhado
Masindi	-5.97	Rural	Makhado
Takalani	-5.75	Rural	Thulamela
Luvhalani	-3.97	Rural	Makhado
Nzhelele	-3.70	Rural	Makhado
Hlalelani	0.14	Rural	Makhado
Dzindi	0.68	Rural	Thulamela
Bashasha	7.072	Rural	Mutale
Ximixoni	8.090	Rural	Thulamela
Fondwe	10.490	Rural	Thulamela
St Martin de Porez	22.0505	Urban	Musina
Source: Fieldwork 2012			

The analysis of the schools mentioned indicate that changes in learner enrolments in Vhembe District schools is attributed to declining fertility, in-migration due to availability of opportunities such as land for residential purposes, employment, and out-migration when adult children move out to start own families or migrating out in search of employment opportunities as well as the impact of new schools built in close proximity with existing ones. Mavunde Primary School for example is the only school on the whole village, but it was displaying negative growth rate in 2012 (Table 5.17) and this example confirms the fact that fertility is not increasing but decreasing causing a decline in learner enrolment. This declining trend is also evident in the number of schools (30% of the sampled schools) with some of the classrooms standing unutilised (see Appendix 2: Question 5).

Table 5.18: Mean annual enrolment and standard deviation from the mean

School	Mean enrolment	Standard deviation	Period
Bashasha	494.69	288.52	1970–2012
Dzindi	540.12	367.78	1970–2012
Fondwe	569.82	120.64	1970–2012
Luvhalani	275.04	64.20	1970–2012
Martin de Porez	424.47	236.90	1980–2012
Makwarela	618.96	329.21	1970–2012
Mavunde	301.19	185.77	1972–2012
Madimbo	685.26	108.20	1998–2012
Hlalelani	444.60	152.70	1972–2012
Masindi	569.82	255.07	1980–2012
Levubu	141.60	26.39	1970–2012
Maungani	459.00	113.17	1984–2012
Source: Fieldwork 2012			

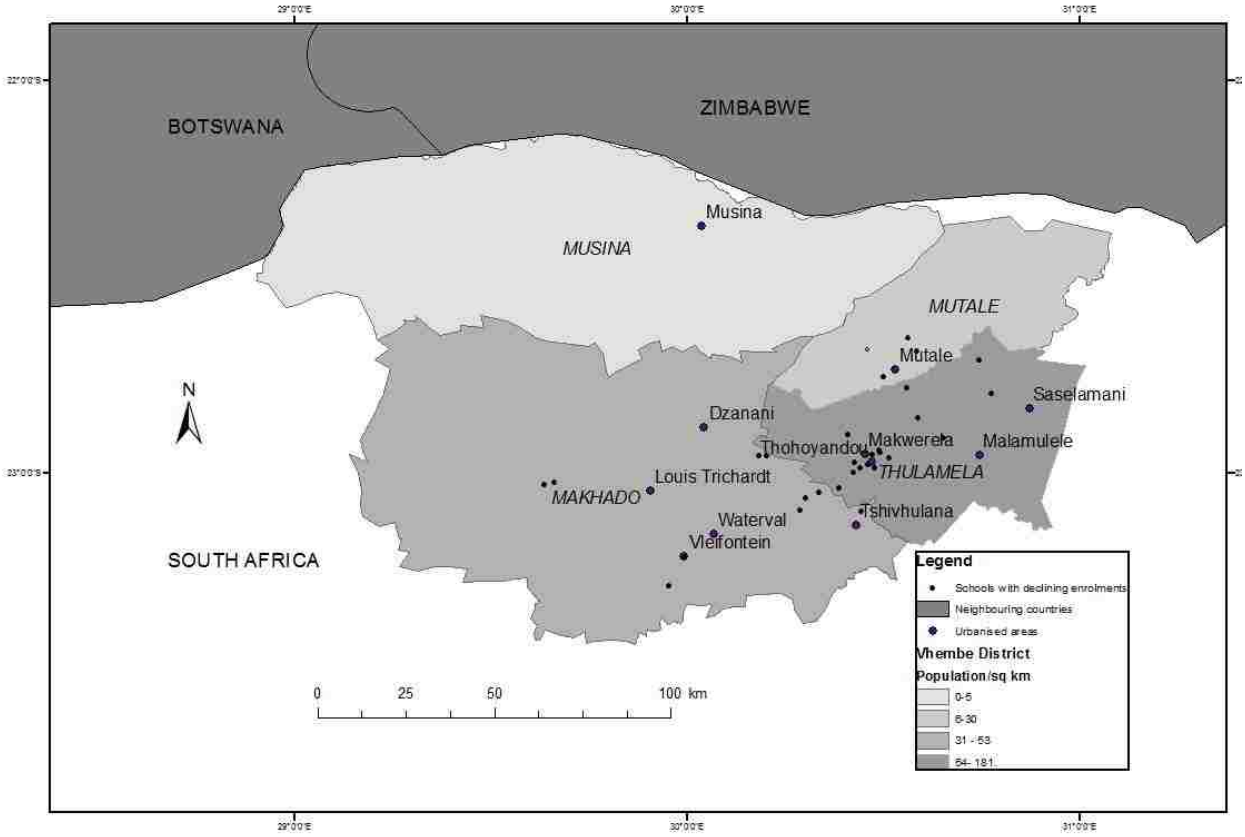

Figure 5.23: Location of schools with declining learner enrolments in Vhembe District
Source: EMIS 2012a

From the analysis of factors that influence the choice of a school (section 5.2.3) it was found that parents in 112 of 306 households cited quality as the factor that influenced them in selecting a school for their children. It was observed during this research that quality teaching can be achieved at any school if there is discipline, hard work and availability of teaching and learning resources.

Learner enrolment decline currently seems to be the trend in most schools, irrespective of their size or location. Figure 5.23 shows the location of schools with declining enrolments. It is clear that the decline is occurring in both rural and urban areas, and in sparsely and densely populated ones. Sparsely populated areas in this study refer villages far from larger settlements by 20 km with settlements less than 500 persons (CSIR 2012). Urban areas in Vhembe District are service centres where residents pay levies for owning a residential plot and a house.

Table 5.19: Perceptions of circuit managers regarding factors contributing to the decline in learner enrolment at primary schools

Reasons for drop in learner enrolment numbers	Frequency among the 20 circuits (n=20)	%
Out-migration	11	55
Fewer births	9	45
Ageing (increasing number of older persons)	5	25
Impact of private schoolings institutions	3	15
Too many primary schools	3	15
Poor economic development in the area	3	15
Poor school management and/or poor teaching	3	13
Morbidity (HIV/AIDS)	2	10
Source: Fieldwork 2012		

When establishing the perceptions of circuit managers on declining learner enrolment at schools, 45% of circuit managers interviewed were of the opinion that the declining number of births as a result of the use of contraceptives is responsible for learner decline at school. Their perceptions relating to fall in learner enrolment are listed in Table 5.19. Women generally have accepted the use of contraceptives and according to Kei (2011) the mean number of children per woman in Vhembe District is 2.5. According to Statistics South Africa (2007), the total fertility rate was 3.6 children per woman in 2006. In 2011, the total fertility per woman dropped to 2.24 (World Bank 2012). This shows that fertility is declining at an ever faster rate.

Fifty five per cent of the circuit managers cited out-migration as demographic factor contributing to the fall in learner enrolments. The out-migration of working mothers to urban places with their children was partly responsible for a decline in learner enrolments at some schools. In general, the out-migration of young people to more advanced, especially urbanised, places with better employment opportunities, better services such as housing, water and electricity and improved roads and transport, contributed to the dominance of the elderly population in such areas, especially remote ones. The increasing domination of communities by older persons was thought to be responsible for the decline in birth rates and slow population growth by five (25%) of the sampled circuit managers.

One of the circuit managers pointed out that HIV and AIDS had a twofold impact on learner enrolment: first through the adult mortality that results in child-headed families, especially in cases

where children lose both parents; and second, through the illness and death of the infected children (sick children may be forced to drop out of school). Child-headed families lack parental supervision and, as a result, children from these families easily drop out of school

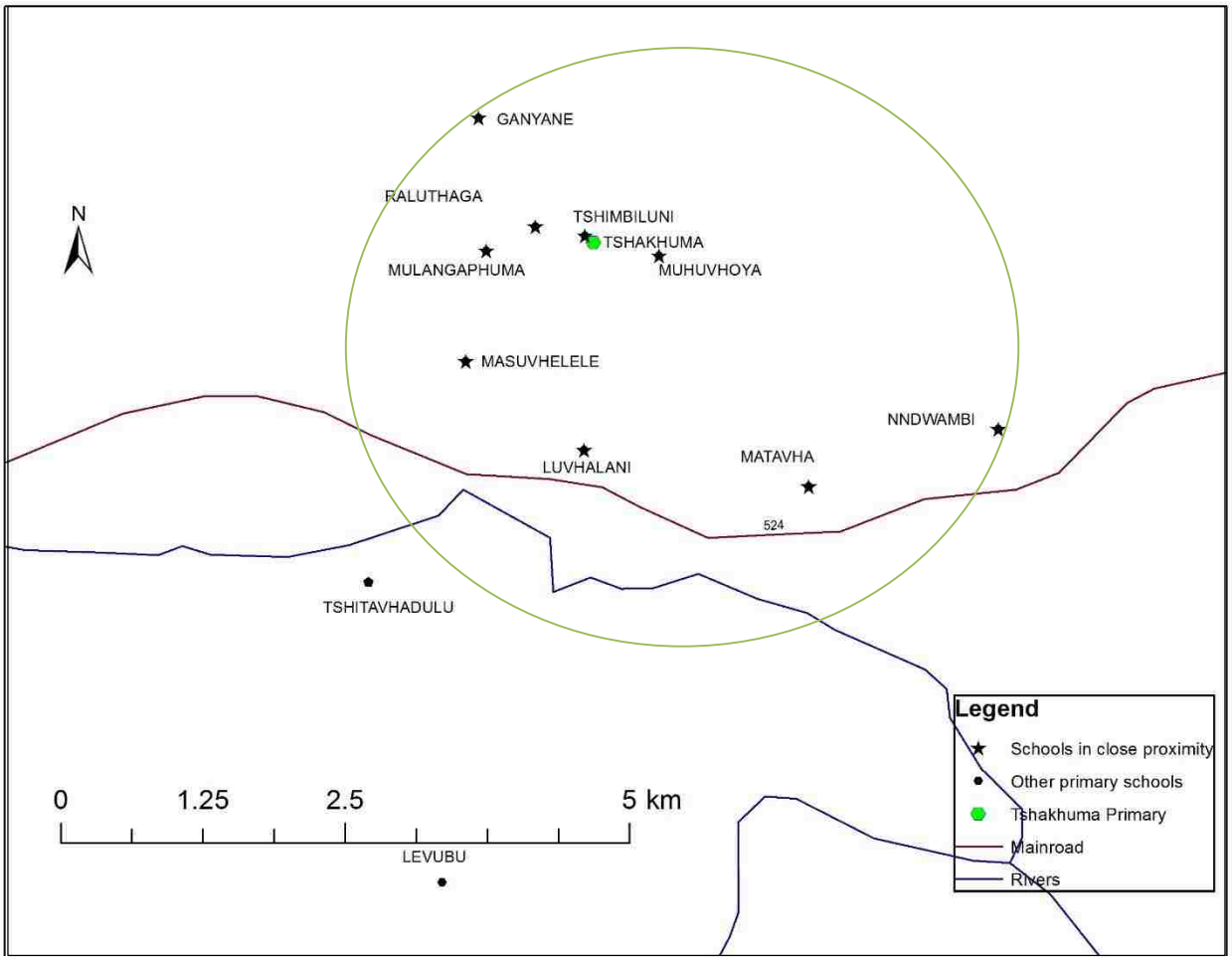

Figure 5.24: Location of Tshakhuma primary schools in Makhado Municipality
Source: EMIS 2012a

Schools located in close proximity with others compete for learners from the same area and those schools perceived by the parents as not offering quality education sometimes lose learners. The falling learner enrolments in some circuits were also thought to be caused by the location of too many schools in the same locality. The location of too many schools in the same area, according to 15% of the circuit managers, occurs in places that are densely populated. In some rural areas such as Tshakhuma (Figure 5.24), there are many headmen and hence many schools because each headman establishes a school for his own people. At Tshakhuma in the Dzondo Circuit, there are 12 primary schools for a total population of 33 498 living in an area covering 17.44 km^2. Tshakhuma

territory now include a parcels of land now known as Mulangaphuma. Mulangaphuma, formally used for agricultural purposes was incorporated back into Tshakhuma community through a land claim in 2006. (Musyoki and Khayesi 2012). The Mulangaphuma, area has since been converted into a residential area and a new primary school (Tshitavhadulu) has been located there.

In 2012, in the Tshakhuma-Levubu area, there were 2 425 primary school learners and 93 educators (EMIS 2012) and the pupil/educator ratio was calculated as being 26. The number of primary school learners amounted to only 7.29% of the total population. Fourteen per cent of the population is assumed to be of primary school-age (CSIR, 2012) and this figure of 7.29 primary school learners shows that there was an over-supply of schools at Tshakhuma. Figure 5.24 shows the schools in Tshakhuma territory that are located close together. Many schools in the same area are responsible for a decline in enrolments in Tshakhuma schools because these schools are competing for learners from the same area. Ten schools (within the circle) are located within 5 km from Tshakhuma Junior Primary. The Tshakhuma and Tshimbiluni primary schools were the first schools in Tshakhuma to be built by the Germany Missionaries in the early 20th century. Too many schools located in the same area and offering the same level of schooling are problematic, since these schools are dependent on, and draw learners from, the same area and population. This is the case in other areas where schools offering the same level of education are located close together. This haphazard location of schools is responsible for a decline in enrolments in some schools. The same situation occurs in Muledane residential area. A new school, Mvudi primary was built in 1998 within a kilometre from Muledane and Mahwasane primary schools. The new school drew a large numbers of learners from these old schools and learner enrolment at Mahwasane dropped from over 600 to just over 200 and Muledane from 450 to a current figure of less than a 100.

Other factors contributing to the drop in learner enrolment figures included the impact of private schools, with parents withdrawing their children from public schools and registering them in private schools instead. There were circuit managers who believed that poor teaching and poor school management in some schools had forced parents to remove their children from such schools. Poor management in one of the schools in the Dzindi Circuit forced parents to withdraw their children from the school and the Department of Basic Education was forced to shut down the school. Poor management, lack of discipline and a low standard of teaching were also thought partly to be contributing to some learners avoiding local schools and opting to travel to faraway schools where they believed that their children would receive quality teaching. These distant schools were both private and public. Makwarela Primary in Sibasa Circuit, Tshivhazwaulu in Vhuronga 1 Circuit and

Bashasha in Tshilamba Circuit are examples of public schools that are rated highly by parents and are drawing learners from areas as far as 40 km away. All these schools have large enrolments.

Quality teaching at primary schools is also demonstrated by the performances of learners who have proceeded to secondary schools after completing their primary education. These learners' former teachers follow up on their performance at their secondary schools in order to reach their own evaluations regarding teaching standards. The same assessment role is performed by secondary schools, which are keen to accept learners from primary schools believed to be offering quality education. Learners at primary school are also not compelled by policy to attend the schools nearest their homes. Each school has been allocated feeder areas from which it draws learners. Devising school into feeder zones has been done to have a fair distribution of learners in local schools and to prevent overcrowding of some schools while others have fewer learners in the same neighbourhood. Only highly ranked secondary schools use the issue of feeder zones as an excuse to avoid overcrowding at their school.

The lack of facilities and inadequate resources both act as drawbacks in the effort to improve teaching standards and attracting more learners. Educators from eleven schools (18%) complained about overcrowding of classes in their schools and believed that it could be addressed by increasing the number of classrooms in schools. From the data gathered, however, 30% of the schools sampled had one or more classrooms that were not in use because there were not enough learners to fill them**.**

On the issue of the sustainability of schools, the household respondents (i.e. parents) stated that improving teaching standards would curb the out-migration of learners from local schools. This would not only attract learners from the local area, but would also draw learners staying beyond the distance of 5 km from the household. Examples of schools that had large numbers of learners who did not live close by were Makwarela Primary in Sibasa and Tshivhazwaulu in the Vuwani area. Both these schools boast enrolments of over 1 000 learners. They are easily accessible by public transport because they are located near busy tarred roads. Both schools are located in old settlement areas where new plots on which individuals can build a house are no longer available. Part of their learner supply, therefore, comes from outside the feeder zones. Quality teaching and learning at these schools is responsible for drawing learners from distances as far as 40 km.

In very small schools where an adequate number of educators cannot be provided to match the number of grades, multi-grade teaching is used as an alternative approach. In Vhembe District, there are schools in both sparsely and densely populated areas where this approach has been

implemented. In densely populated areas, multi-grade teaching results in places where many schools offering the same grades are located close together and the school-age population is decreasing. In the sparsely populated areas, multi-grade teaching is caused by the dwindling school-age population. Multi-grade teaching is an approach used in schools with very low enrolments, where employing additional educators cannot be justified in terms of the pupil/educator ratio.

The multi-grade approach is shunned by parents who believe that their children cannot receive quality teaching in situations where educators are responsible for teaching different grade levels in the same classroom and where learners' abilities and knowledge differ so widely. The parent's feelings about the multi-grade approach were that the Department of Basic Education ought to employ enough teachers and get rid of multi-grade teaching. By enough educators, the respondents meant a situation where classes are separated according to grade when lessons are conducted. The perception of parents regarding multi-grade classes is that learners do not get adequate learning at any level, since the teacher has to focus on learners at different educational levels at the same time. From an economic and sustainability point of view, the wishes of the community could prove to be a challenge. At Onismas Sundani Primary School, for example, there were 27 learners from Grade R to Grade 4 in 2012. The nearest school was less than 2 km away. The more realistic thing to do in this case would be to accept the merger of the two schools, since the walking distance would still be within the accepted norm. In the case of schools that are located more than 5 km apart, the more feasible choice would be to provide transport to the school to which learners are being relocated. Alternatively the grade could be combined into two classes, but this will result in very low learner/educator ratios. South Africa recommend learner/educator ratio of 30. Globally there are 111 countries whose learner educator ratios are less than 20 (Table 4.2, section 4.2) and South Africa can learn from them.

According to both parents and educators, an important strategy for retaining learners is the active involvement of parents. Educators feel that parental involvement helps a great deal, especially in situations where pupils' family problems are impacting negatively on their learning. Educators feel that working together with parents and thereby gaining a better understanding of those children struggling to learn and of their family background, could help to improve learners' performance. The challenge facing the schools is that many parents do not attend the meetings schools arrange and they leave everything in the hands of the educators. The high level of illiteracy in rural areas is another challenge, because illiterate adults are unable to assist the learners with their homework.

The response of some circuit managers and schools regarding efforts to curb declining learner enrolments was to involve the chiefs and members of the local community; and to alert them to the long-term consequences of sending their children to schools outside their villages instead of enrolling them at local schools. When a school with unsustainable learner numbers is closed down, the whole community is affected.

Scholar patrol stops were cited by educators as being necessary where children cross major routes. The principal at Nzhelele Primary School said that the school had often requested that traffic officers be sent to assist the children in crossing the road in the morning and the afternoon, but to no avail:

> *The number of learners has decreased because parents are afraid that their children will be knocked down by speeding cars when crossing the road. This is the first school in the area and some of the well-known people who work in the Department of Education have attended here. It used to be the only senior primary school and the other junior primary schools as far as 15 km away were feeding us with their learners after completing Grade 4. Those junior primary schools have been upgraded to include the senior primary phase. The number of the learners has declined to less than a hundred.*

Nzhelele Primary was the first school to be built, in 1937. It serves learners in the Nzhelele/ Dzanani area, and is located near the Mphephu royal kraal. As the first school in the area, it was catering for learners in villages located along the Nzhelele river valley. The school is located in the southern part of Dzanani village, bordering the area designated for agricultural use. With development, the village expanded northward and a new tarred road separated the southern part from the rest of the village. The new main road made accessibility to the school from the northern part unsafe for young children. Nzhelele was further divided into the senior and junior phases, with the school separated by a fence. The new junior phase school introduced senior phase classrooms, causing Nzhelele to lose most of its potential learners. It had 513 learners in 1975, but in 2012 only 73 learners remained.

The issue of the non-delivery of teaching and learning materials to Limpopo schools ended up in court because parents believed that the government should honour its obligations. Equipping schools with teaching and learning materials will, according to the respondents, improve education throughout the province and also stop parents from enrolling their children in private schools. The issues are the concern of parents, NGOs and civil society as a whole.

Table 5.20: Things that could lead to quality teaching and learning

Quality education	Conducive environment
• Improve teaching standards • Supply enough educators • Supply teaching materials and textbooks • Get rid of multi-grade classes • Introduce computer lessons • Provide libraries • Get circuit managers to monitor schools • Introduce the use of English at foundation level • Get parents involved	• Adequate classrooms • Clean environment • Discipline • Electricity • Good infrastructure • No distractions in the surroundings • Social workers attached to schools
Safety	**Policy**
• Organise school patrols where learners cross roads • Build a bridge where learners cross a river • Supply healthy food • Separate primary school learners from secondary school learners	• Full subsidisation of schools • Funding for private schools • Creation of job opportunities to curb out-migration
Source: Fieldwork 2012	

The respondents cited several things that they believed could help improve the quality of education. These suggestions are shown in Table 5.20, and are grouped into four categories (quality education; conducive learning environments; safety at schools; and the implementation of sound educational policy). Satisfying all these would prevent young adults from migrating out of their home areas or villages. An environment conducive to teaching and learning includes having classrooms that are not congested, a clean physical environment, discipline, good infrastructure and being some distance away from environments with distractions such as bottle stores and noise. Because of the many social problems in the areas, respondents would like social workers to be attached to the schools. Social issues affecting teaching and learning at schools include the bullying of children, broken families, poverty, teen pregnancies and child-headed families. Bullying at school may result

in children being too scared to go to school, while problems at home may affect concentration during lesson presentation.

The other challenge affecting teaching and learning is the lack of computers that learners could use to access information through the Internet. Learners are often given the task of obtaining information from their parents, which can become problematic if the parents are unable to provide them with answers. One educator had this to say:

> *We are living in a fast-changing world that needs computer skills and therefore all the schools should have computer lessons. Using the Internet could assist learners to search for information on their own.*

The concerns of parents, educators, communities and the Department of Basic Education are critical in understanding and addressing the challenges facing learner enrolments at schools. Knowledge of communities concerns, about the provision of primary school education is essential for decision-making and policy formulation.

Some schools, once they realised from around 2001 that the decline in learner enrolment could lead to the redeployment of educators, developed a strategy to address the crisis. One major strategy which educators advocated and which was also approved by the circuit managers was to add grades, especially at those schools that were admitting either junior or senior primary learners (not both). Junior Primary schools introduced the Senior Primary phase (Grade 5-7) classes, while the senior primary schools introduced junior phase (Grade R-4) classes. This strategy was found not to be addressing the problem. Instead, it created tension between the schools in areas where two or more schools were closely located. Muledane Primary School had for many years been admitting junior primary learners and acted as a feeder school for Mahwasane Senior Primary. When Mahwasane Primary's enrolment dropped from 600 learners to 200 learners after the opening of Mvudi Combined School (in 1998), Mahwasane introduced a Grade R class in order to increase its number of learners. Muledane, which was anticipating the admission of new Grade R learners, felt threatened by this development. To get out of its dilemma, the SGB (School Governing Body) refused to send its learners to Mahwasane after they had completed Junior Primary (Grade 4). Muledane introduced a Grade 5 class. This move did not address their plight and the two schools continue to experience declining learner enrolments. The three schools, which are hardly 1 km from one another, admit learners from Grade R to Grade 7. Mvudi has better infrastructures and is located in an area declared urban, while Mahwasane and Muledane are located in tribal land, under the

custody of *Gota* Mahwasane. It is therefore attracting more learners, at the expense of Muledane and Mahwasane.

The circuit managers also believed that the provision of adequate resources, infrastructure and quality teaching would prevent learners from choosing distant schools over local ones. These measures should be coupled with parental involvement, which would enable parents to know how their children were progressing and to work together with the educators to assist where there were challenges. Two circuit managers also felt that the government should stop building more new schools; instead, it should encourage schools to have larger enrolments. The merging of schools with unsustainable learner enrolments was also thought to be a good idea, provided that free transport for the learners to the new school was made available if the new school was outside the maximum distance which learners are expected to travel between home and school. The merging of schools could prevent multi-grade teaching which was not popular to both educators and parents.

Factors outside the education system that would help in preventing out-migration would be the provision of basic services and the creation of employment opportunities in the rural areas. Basic services include a water supply, electricity and good roads. The prevention of the spread of HIV and AIDS was also seen by some circuit managers as a positive step in curbing the loss of life of both parents and children and in preventing the creation of child-headed families.

The circuit managers were also asked about the use of buildings in closed schools (Appendix 3: Question 6). Eleven of them had schools threatened by either closure or merger in their circuits. Nine managers stated that the buildings of closed schools would be handed over to the communities, who would decide what to do with them. The same question was asked of the Helula community in Mutale Municipality, where a Junior Primary school was closed down in 2012. A response from a member of the tribal council was that they were intending to use the buildings as teaching venues to assist secondary-school learners needing the extra lessons offered by volunteers from the community. They were unhappy because officials from the Department had gone to the school and removed all the chalkboards which they had assumed would be there to be used during teaching. In the Luvuvhu Circuit, the manager stated that they had applied to the Vhembe Department of Education to use the school as a library.

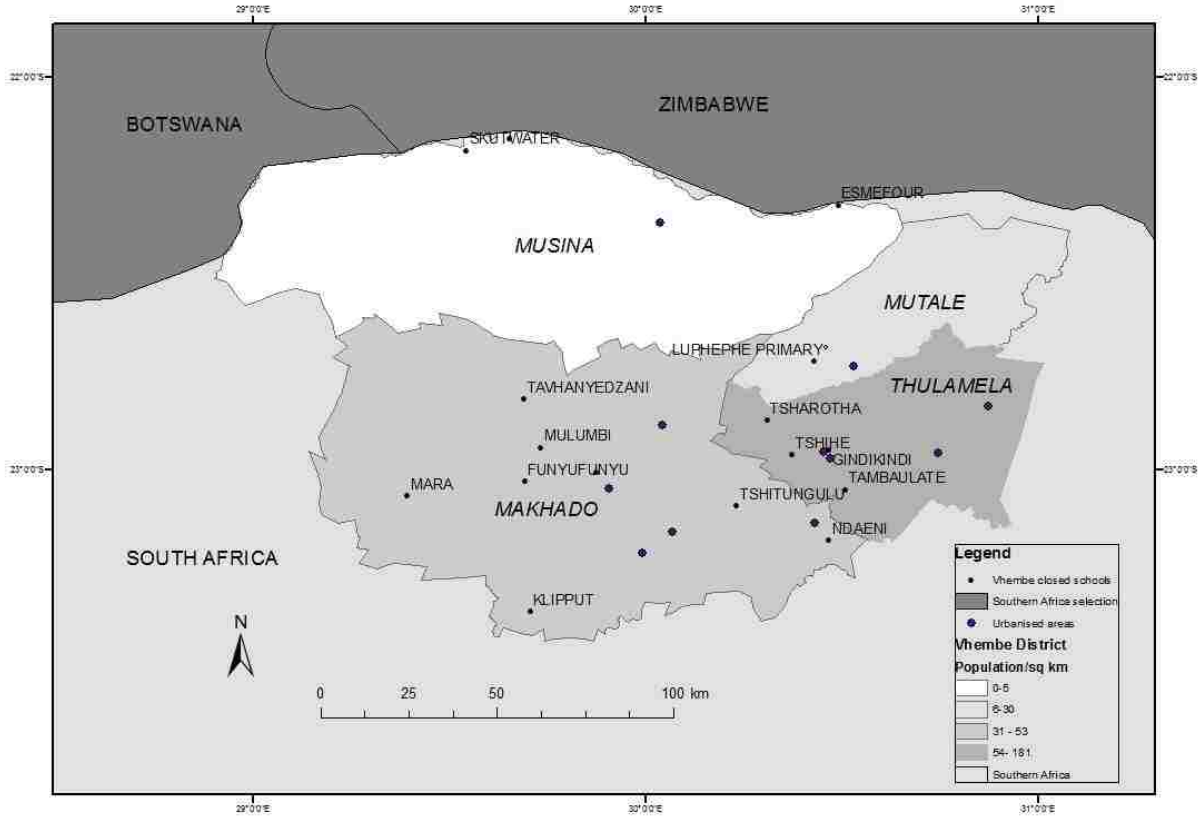

Figure 5.25: Map of the location of closed schools in 2012
Source: Vhembe District Department of Education

The closure of schools in the four municipalities has occurred in both sparsely and densely populated areas (Figure 5.25). This implies that a decline in fertility and not necessarily population size is responsible for the declining school-age population. The data collected covered four important issues: population characteristics of the sample; details on primary schools and their location; challenges facing the provision of education in the area; and strategies respondents believed could be used to address the problem of declining learner enrolments in Vhembe District.

This chapter has established that the population characteristics of Vhembe's people have varied over time and space, and that declining learner enrolments are influenced by changes in population dynamics and poor development. Addressing the problem of declining learner enrolment should be approached from the viewpoint of integrative strategies that encompass socio-economic and political interventions. Chapter 6 concludes this research by recommending strategies aimed at creating sustainable schools.

CHAPTER 6: SUSTAINABLE PRIMARY SCHOOLS

The aim of this research was to apply a spatio-temporal perspective to the relationship between demographic change and the provision of primary school education in Vhembe District in Limpopo, South Africa. To look into this issue more deeply, the situation in Vhembe District's schools and schooling over a period of 42 years (between 1970 and 2012) was investigated. The study has revealed that population dynamics, socio-economic and political factors as well as the physical environment have influenced the spatial distribution of schools in Vhembe District. The problem observed was that the people of Vhembe District are discontent about the state of affairs regarding the provision of primary school education and economic development in the area. Poor economic development induces the young and economically active persons to migrate from the area. Out-migration and declining fertility have affected learner enrolments in schools negatively, forcing the education authorities to close some schools. The closure of schools has left communities dissatisfied and their social lives disrupted. As a final conclusion to this study, an adaptive strategy that envisages achieving sustainable provision of quality primary school education is offered. The spatial and temporal dimensions of the study are reflected in this framework in which demographic factors and the location of schools are linked.

6.1 SPATIAL DISTRIBUTION PATTERNS OF PRIMARY SCHOOLS

The spatial distribution of the primary schools related closely to settlement patterns in Vhembe District and both cultural and physical factors played a role in shaping the location of the schools (Figure 2.12). The development and location of schools (Section 2.5) revealed an over-provision of primary schools in Vhembe District Municipality, especially in the densely populated tribal lands. The factors contributing to the spatial distribution of primary schools in Vhembe District were seen to be multifaceted - political, socio-economic and environmental – and were investigated at national, provincial and local community levels. At a national and provincial level, the Department of Basic Education played a deciding role regarding the provision of schools based on settlement patterns, while *Mahosi* and their communities were responsible for selecting sites on which to locate schools. The location of primary schools in Vhembe District when looked at geographically indicates that it was influenced by the combination of relief, climate and population distribution factors (Figure 1.3. Section 1.2.2; Figure 1.6, Section 1.2.3; Figure 2.11 and Figure 2.12; Section 2.3). Settlement patterns influenced the location of many schools in the areas that receive relatively high rainfall and in river valleys where there is easy access to water (Nzhelele Valley).

From the local or settlement level many factors played a role in determining the location of schools. These ranged from considering the population threshold, the area covered, education policy, role of traditional leaders (*Mahosi)*, the socio- political set-up, local relief, safety and proximity to roads for access. Regarding population threshold it was established in this research that almost all the settlements except a few had at least a primary school in their neighbourhood. Of the 306 sampled households, 258 were located within 4 km of the nearest school. It can be attested that the Department of Basic Education implemented the "Education for All" strategy in order to make primary education more accessible and there are few cases where learners have to travel further than 5 km to school. Because education is a right all children have, availability is a major concern. A problem arises if there is difficulty in accessing it.

Settlement is a normal thing a people need as a place to live but political organisation in space can put restrictions on exact location. The concentration of the population in the eastern part of Vhembe District resulted in over-provision of primary schools. The models that were previously employed when planning for the location of schools in existing settlements were influenced by the policy of separate development, and are currently not meeting the needs of all people in the New South Africa. Because of the previous policy of separate development, the ethnic identity of the different racial groups created a need for varying models of education planning, depending on what the various racial groups deemed as a priority for their children and their communities. A general lack of knowledge about planning led to haphazard implementation as far as the location of schools in the former homeland units was concerned, especially since planning did not take demographic processes into account.

Although in apartheid South Africa with its racial and ethnic divisions, there was no single model that was applicable throughout the country, there were however, certain geographical aspects that were common and were used when planning for the location of primary schools. The location of schools took into account the spatial distance between home and school and population density. In the urban areas the location of schools was infused into the town plan, while in the rural areas it was determined by the location of missionary settlements and then later by population distribution, settled land and population growth. Missionaries played a major role in starting schools among the black population groups of South Africa, especially in the rural areas.

Ethnicity as a determinant of the location of primary schools in South Africa is embedded in the use of mother tongue as a determinant of the location of a school. The location of a school is aligned with the dominant languages spoken in an area. Hence schools using different languages as the

medium of instruction may be separated by a mere fence instead of being located far apart. This shows that the situation in South Africa is more complex than is the case in many other countries. The new democratic government of South Africa has in its educational policy done away with separate schools based on racial differences, and learners are allowed to enrol at any school of their parents' choice. Yet because of past divisions based on race and ethnicity, we still find areas dominated by persons of a particular ethnic origin. The use of mother tongue language is thus still applicable as a determinant of the location of primary schools in those areas in South Africa where mother tongue is used as a medium of instruction.

Initially, schools in rural areas were located far apart and each school catered for learners from a number of villages. The long travel distances involved prevented many children from accessing the schools to receive a formal education. Modernisation and changes in the country's economy, coupled with population growth, resulted in the need to build more schools. When the new government took over from the apartheid government in 1994, it focused on addressing the injustices of the past. The new School Act No. 84 of 1996 focused on addressing issues of equity, accessibility and education for all. The new government thus had to address the issue of overcrowded educational facilities by building more schools and more classrooms. This led to an overcrowding of schools in densely populated areas under the custody of tribal authority.

When considering the political aspect it was found that the policy of the Department of Basic Education was to make primary education accessible and as such, the department built schools in places with established settlements irrespective of the size of the population. Primary schools were therefore found in both densely and sparsely populated areas. The greater part of Vhembe District is under the custody of traditional leaders or *Mahos*i and these are empowered to make decisions to initiate plans for a new school and deciding on the site where such schools should be located in their villages. The responsibility of choosing sites for the location of primary schools was vested in the traditional leaders, but this was implemented haphazardly without a proper plan. This led to a mushrooming of primary schools in Vhembe District especial in tribal areas. In sparsely populated areas in the Soutpansberg North and Soutpansberg West circuits (areas inhabited mainly by commercial farmers) schools were located far apart. In the Niani circuit the sparse distribution of primary schools was influenced by settlements that are small and isolated. The location of schools in Vhembe District was further influenced by the medium of instruction used in particular places. This too did not take into account the aspect of distance between neighbouring schools. The location

of schools particularly in towns took into account the issue of language where multiple languages are used for communication purposes.

For easy access schools are also located near the road and because of slow development in the rural areas schools they were located near gravel roads and in some instances the issue of safety was considered. At Makumeke the primary school was located close to the forest and in 2012 it was relocated to a more central place surrounded by households. The initial site was selected so that the school could cater for learners travelling from the neighbouring village of Mafanele. The location was not safe and a new school at Mafanele was built, and the Makumeke community moved the school westward to a central location in the village.

6.2 POLICY ISSUES AND THE PROVISION OF EDUCATION FOR ALL

Policies were put in place to direct the provision of primary school education in South Africa at the beginning of its democratic era. However, some communities expressed discontent about neglect of the constitutional right to a basic education. Evidence from the research supported this view as some learners had to travel long distances to school and the infrastructure was observed as poor as most of the schools lacked basic facilities, there was a shortage of funds and the non-delivery of textbooks created a range of problems. Both communities and the educators felt that the Departments of Basic Education was not doing enough to fulfil its mandate of providing “Education for All”. The effect of the pre-1994 policy of separate development, associated with racial discrimination, is still felt in the New South Africa. This study has shown that the legacy of apartheid, accompanied by forceful population dynamics over the 20 years since 1994, has left the country in some places with a mismatch between the current status of the population and the location of schools, particularly primary schools offering basic education. South Africa has moved from a policy of separate development to one that integrates all population groups. The legacy of past laws, however, has made it difficult for the majority of South Africans to understand how the new government anticipated resolving the critical issue of providing quality education for all citizens, especially in the areas subjected to the homeland policies of the pre-democracy era. South Africa has a complex form of government, consisting of a democratically elected government with elected ministers but also traditional leaders who inherited land from their great-grandparents. In the black rural areas, land tenure is under the custody of these traditional leaders.

Traditional leaders have the power over their land and its people and are also responsible for allocating land for different activities. It was learned from this research that, in order for traditional

leaders to feel empowered, they needed to have at least one primary school in their respective villages or tribal settlements. Because some of these tribal settlements do not cover large areas, some primary schools were located in close proximity. The Department of Basic Education policy allows *Magota* (headman) and *Mahosi* (chiefs) to identify open spaces within their villages and to use these sites for schools. As they do this for their own communities, the *Mahosi* are not concerned about what is happening in neighbouring villages. Moreover, in order to gain a sense of belonging and identity, the communities themselves have demanded their own primary schools. Communities also prefer that their schools are located within walking distance of their homes since children as young as five years old have to walk to school. Many people in the rural areas are poor and are dependent on walking from one place to another thus locating schools within a reasonable walking distance is appropriate and necessary. The situation is different in urban areas, where public transport is more available and generally efficient. This implies that when schools are merged, and learners are relocated to a distant school, transport for the children will have to be provided.

The post-1994 education policy aims for equal and quality “Education for All”. “Education for All” includes access to education in terms of travel distance between home and school, provision of resources and facilities. Regarding access to a school, the Department of Basic Education prescribes 5 km as the maximum distance both primary and secondary school learners should have to walk between home and school. The *Mahosi* and *Magota* do not seem to be aware of this distance norm. Nevertheless, their haphazard decision to locate schools in their respective villages has worked in the children’s favour because many walk a short distance to school especially in densely populated villages. Travel distance of 5 km seems too long for very young children especially those in the lower grades (Junior Primary). In the other countries like the United Kingdom learners are provided with free transport by age and those under 8 years of age living beyond 2 km from the school, and those between 8 and 11 and live beyond 3 km are legible to apply for free transport to school (Nottingham City Council 2010). Children Count (2014) in South Africa has recommended a 30 minute walk. A 5 km distance walk will take longer than 30 minutes. This implies that those children living at distance further than a 30 minute walk to school will need transport to travel between home and their school.

For the sake of sustainability, people in the communities have to be made aware that they need to share assets such as schools and clinics. In other words, communities need to learn to share their resources in order to have sustainable resources such as schools.

Mahosi (chiefs) and *Magota* (headmen) should work in close co-operation with land planners to ensure that the guidelines are adhered to when allocating land for specific activities. The Department of Basic Education's policy is to make education accessible to all. Receiving education is the right for all South African children. It has been established that the *Mahosi* are entitled to establish primary schools in their territories but the location of such schools is often done haphazardly, without considering the long-term consequences. New schools are simply added to merely on the strength of numbers according to their learner enrolments, without taking into account their long-term sustainability. Sustainability in this instance refers to making provision for the potential size of the school-age population; the age structure of the population; and the availability of opportunities that either curb the out-migration of the young and economically active section of the population or attracting them to the area.

The shortage of funds is another obstacle that prevents improved teaching and learning in public schools. Earlier, the point was made that the utilisation of funds provided by the government is strictly controlled. Schools are not allowed to use these funds for any purposes except those prescribed by the Department of Basic Education. A school governing body (SGB) cannot use the money to hire workers such as cleaners, gardeners or repair persons. This brings us to the challenges faced by no-fee schools. The parents' perception of the situation is that the state provides, or should provide money for all school needs, and it is difficult to convince the entire community that it should contribute something towards improving conditions at a school. In rural areas, some parents cite poverty as the reason for their unwillingness to contribute, claiming that they do not have money.

Inadequate funding is a major concern in all Limpopo schools. Since 2011 parents and the NGOs have been taking the Limpopo provincial government to court for failing to deliver textbooks in some of the Limpopo schools. The government is refusing to admit that it is failing to deliver textbooks to schools or to provide adequate funding for schools. In 2011 the funds that were due to be given to schools in September that year were not made available. Only a quarter of the amount was paid in during the first half of 2012, causing schools to struggle with few or no funds. According to the information provided by educators, schools have no idea as to what happened to the rest of the 2011 funds. They blame the national government for poor administration and the misuse of funds by the Limpopo provincial government.

It seems as if the problems affecting funding are never-ending. In 2012, there was the problem of the non-delivery of textbooks to schools. In 2013, all support staff such as administration clerks and

security guards were stopped from working because the provincial department had instructed schools not to use the norms and standards funds to pay for staff employed by school governing bodies. The schools have turned into an environmental health hazard, since the toilets and surroundings are not properly cleaned. The national examination of June 2013 could not start on time because there was no money to buy paper to print the question papers. The battle between the NGOs and the provincial department continues based on endless court cases. Instead of the Department of Basic Education (DBE) being proactive in its planning of education provision, it has become a reactive institution. This situation also shows that efficiency within the department's administration is below standard or not functioning at all, because schools claim that they submit their requisitions to the Department on time.

If unutilised classrooms are converted into halls, such halls could be rented out to generate income and solve some of the funding problems. Small church congregations whose members do not have church buildings use classrooms for their church services and for this they may be charged a nominal fee and thus contribute to income that is controlled by the school and the parents. The Department should relax its control over money contributed by parents and let the SGB and the schools decide on where and how to use the money. Currently the instruction from the provincial Department of Basic Education in Limpopo is that, after parents have contributed their money, a receipt for the total collected must first be presented to the departmental authorities (thereby lengthening the process) before the SGB can hire workers to maintain the schools. It should be noted that, with some parents lacking an understanding of the reasons why they should contribute any funds at all to a no-fee school, the process of convincing all parents to contribute to schooling might take a long time.

It was established that there is no policy regarding the use of closed schools. The buildings of closed schools are left deteriorating and their physical appearance is an eyesore. Moreover, because of the neglect, criminals might use them as hiding places or storerooms for stolen goods. Abandoned schools become a threat to the lives of young children who might be dragged there by criminals like rapists.

6.3 CHANGING SCHOOL ENROLMENTS

This research had established that demographic factors such as fertility, migration and mortality influenced the school-age population and consequently learner enrolments. The discussion on migration (Chapter 3, Section 3.1 and Figure 3.1) explained the influence of migration on learner

enrolments. It was also found that migration is the stronger force when compared to fertility and mortality. The thirst for a better life and opportunities induce persons to migrate from their areas of origin and this out-migration is not necessarily for long distances. Individuals who out-migrate for short distances also have a significant impact on learner enrolments especially if a sizeable number of persons are involved. The lack of employment opportunities in the rural areas induces long distant out-migration to urban areas and areas that appear to have greener pastures. Short distance migration involves those who are looking for new places in which to settle. Declining learner enrolments in schools because short distance migration is easier to reverse than the situation in which children migrate with their parents a long distance away. Effective transport provision, instead of building a new school in areas of new expansion, can prevent a fall in learner enrolments at the existing school.

Out-migration over time at village and intra-urban levels was found to be responsible for the ageing of a community in some sections of a settlement. Grown-up adults move out of their parents' household to be independent and start own nuclear family leading to older people being dominant in areas of out-migration. Places like Zone 1 and 2 in Shayandima suburb, near Thohoyandou, is dominated by the older citizens because the younger adults have moved out of the area. Tshidumbi Primary School was the first school in the township and it is located in Zone 1. Settlement is expanding southward the additional schools are capturing the learners who might have registered at Tshidumbi. To save Tshidumbi Primary School and other schools in a similar situation, efficient transport is needed to transport learners from other sections of the settlement where relatively younger persons to the school that is now surrounded by members of the community who have passed the child-bearing stage. Besides short distance migration, places in Vhembe District are affected by long distance migration towards cities and metropolitan areas and these hit the size of the school-age population hard. This, in turn, affects learner enrolments at schools.

Fertility patterns too influence the school-age population. It was established that the average number of children among the surveyed household in Vhembe District 2012 was 3.06 children per household. A decline in fertility will accompany a decline in learner enrolments over time. The change from a traditional extended type of family to a nuclear type is evident as there is wider acceptance of having smaller families. From the study of the age structure and number of children in sampled households, it was found that there is a decline in the number of families that accommodate members of the extended family and only 40% of the households lived with children other their own. Without members of the extended families residing in the same household it

becomes difficult for young mothers to raise children by themselves. Some of these mothers work or are self-employed. Employment and raising children do not match well. Even those who are working might not be able to afford hiring nannies to look after the children. Regarding household income in this sample a third of the respondents earned more than R 3 000 and another third earned less than R 1 500 (Section 5.1.3). Low household income status makes it difficult for parents to afford transport costs or to supplement fees for funds needed by schools.

Although fertility in South Africa fell after the 1970s, learner enrolments continued to increase with fluctuating trends (Section 5.5). Enrolment trends were affected from the late 1970s to the early 1990s due to the student unrest that took place when students revolted against Bantu Education. From 1994, enrolments increased when the new government encouraged all children of school-going age to enrol at schools. Enrolments in Vhembe District schools reached a figure of 30 332 in 2008 and since then trends decreased except for a slight increase in 2012 (Figure 5.20). This decline accompanied the fertility decline where the total population aged 0-14 in Vhembe District fell from 43.5% in 1996 to 34.9% in 2011 (Statistics South Africa 2003; Statistics South Africa 2012a).
The net enrolment in primary schools reached 99% in Limpopo in 2011(South Africa 2013b). This implies that overall learner enrolments in Limpopo primary schools had stabilised and any significant increase in enrolments is unlikely. The stable point had been reached by several schools both large and small (Figures 5.21 and 5.22) Seventy-three per cent of the sampled schools displayed declining trends and only 13% had increasing trends with the remaining 14% displaying stable or fluctuating trends to 2012. This is an indication that this declining tendency in school enrolments will be experienced in all the schools very soon, except in those areas characterised by in-migration of young people. The decline in learner enrolments led to the closure of some schools. Poor planning regarding the location of schools exacerbated the problem of providing basic education for all children. Despite the decline in learner enrolment, the fact that many schools were located close each other meant that some were competing for the same learners (Section 5.3).

Mortality affects the school-age population to a lesser extent than fertility and migration trends. Educators are anxious when learners have to cross busy routes that expose them to the possibility of vehicle accidents and fear such situations. Parents also do not favour schools located near busy roads. Some schools like Nzhelele Primary School have declining learner enrolments because of their unsafe location (Table 5.12).

6.4 COPING STRATEGIES ADOPTED BY SCHOOLS

Realising the threat of closure facing schools with unsustainable enrolments, schools have adopted some strategies to cope with the changing learner enrolment numbers. Schools employ different strategies as an endeavour achieve sustainable learner enrolments and to avoid the redeployment of some of their educators. Some schools attract learners by offering computer lessons in the afternoon at schools. It was established that forty-three per cent of the sampled schools had computers (Table 5.13: Section 5.4). In the second strategy some schools are upgraded to offer a complete primary school stream. Currently primary schools have foundation, intermediate and senior phases. Foundation phase schools admit learners from Grade R to Grade 3, while intermediate schools cater for learners from Grade 4 to Grade 6. Grade 7 which currently form part of the primary schools is part of the senior phase. Before 1994, in former Venda, the junior and senior primary schools were separate institutions and very few schools had combined phases. By the early 2000s, many schools were beginning to face declining learner enrolments with the redeployment of their educators being a real threat. To prevent this from happening, schools opted to upgrade and admit learners from Grade R to Grade7. This strategy could not address the problem of declining learner enrolments, since the decline was not caused by having fewer grades in a school but by a general decrease in the size of the school-age population. Moreover, in most instances, foundation phase schools were located close to senior phase schools: if both schools upgraded and offered similar streams, then the two schools simply ended up competing for learners from the same area. The only possible result was tension between the two schools, as occurred in schools in many circuit areas (e.g. Dzondo, Soutpansberg East, Dzindi, Nzhelele West, Sibasa Vhuronga 1, Sambandou, Mutshindudi and Mvudi) and in all circuits serving schools in densely populated areas (Figure 1.5).

A third main strategy favoured by the schools is known as the “marketing strategy”, with the schools doing what they could to attract and retain more learners. School principals who were concerned about their declining learner enrolments were often advised by the circuit managers to market their schools. The strategies used range from introducing computer lessons and undertaking field trips to giving top learners awards at year-end school functions. These strategies were not much of help in increasing learner enrolments, as they merely encouraged learners to remain in particular schools instead of relocating to schools outside their local areas. Moreover, a lack of funds often served as a stumbling block to buying a stock of educational aids such as computers and other learning materials.

The fourth strategy schools have adopted in adjusting the learner/educator ratio is known as “last in, first out”. This strategy does not take into account the needs of schools and good educators who were the last to be employed are the first to be redeployed. The prospect of knowing that soon they might be leaving school demoralises the affected educators who no longer execute their school duties as willingly or as freely. Redeployment affects educators not only psychologically and socially, but also economically. Educators get attached to the learners, their colleagues and also some of the parents, and have to adjust to new people and environments when relocating. Economically, the redeployed educator might face additional costs because of long distances to travel to and from the new school; or accommodation expenses if the new school is located very far from home. Some redeployed educators are sent to circuit offices to become clerks or work in areas or jobs that are very different from those for which they were trained. This too may frustrate and demoralise them. The redeployment of educators affects all those learners who are forced to adjust to new educators in new schools. It was learned from this study that redeployment is implemented in the middle of the year. According to the views of many educators, this timing is incorrect and unfair to the learners. Redeployment according to the educators should take place only at the beginning of a school year. Within the community, some parents will have established rapport with various educators, who are sometimes approached for advice not only about the children but also about issues pertaining to the community as a whole. Thus, school closures rob them of these valuable individuals in their communities.

The fact that these coping strategies, in some way or another, have affected people’s social life within a community has come through clearly. It is the theme of the next section.

6.5 THE SOCIAL IMPACT OF CLOSURE OF SCHOOLS

The decline in learner enrolments leads to school closure when enrolments fall below the specified level. The Limpopo Education Department decided on 50 as a minimum enrolment to keep a school going, below that the school is closed. School closure affects learners, educators, communities and the Department of Basic Education too. School closures were found to have negative socio-economic impacts on learners, educators and the community as a whole. The rapport that was built between the educators and the learners and between the educators and members of the community is disrupted when schools get shut down. The impact of the closure of schools on educators is the same as would apply to redeployment because educators are merely sent to other schools or the circuit or head offices. Once educators know about the government’s intention to close down the

school, tension at school arises; educators become discouraged and no longer carry out their tasks with zeal.

The closure of schools leads to disruption of social cohesion among the community members. Schools are important places for parents to meet and are also used for community gatherings in those rural areas where there are no community halls. Communities become disempowered as schools symbolise their sense of belonging and pride. The buildings of closed schools are often abandoned because both the communities and the Department of Basic Education do not have any plan for them. Learners on the other hand are faced with long travel distances to the new schools because transport is not provided. At the new school learners have to adjust to new educators.

The Department of Basic Education has invested in schools by supplying infrastructure. It was learned in the course of this research that 30 per cent of the schools sampled had classes that were not utilised because of low enrolments (Section 5.5). This seems like wasted resources, since classrooms are fixed structures that cannot be moved to where there is a need for them. These classrooms are still in good condition because they were built after 1994 and could be converted into the staff rooms, libraries or school halls that are lacking in most primary schools in South Africa. The Department of Basic Education is further faced with a difficult task of finding places for excess educators so that they could remain employed. In the process of right sizing and rationalisation tension between the officials of the Department of Basic Education and schools has arisen, and between the principals and the educators. Very often, the Department of Basic Education officials are not willing to face the affected individual educators and shift this responsibility of notifying those affected to the principals.

To address concerns (Table 5.20) the participants felt that the government ought to provide adequate funds and, where possible, parents should be encouraged to supplement school funds through donations. It was established that there is a false perception among parents that at “no-fee” schools parents were not supposed to contribute money to supplement school funds if there are shortages. The provincial education department should devise new ways and means of addressing the funding of schools in the province. Being short of funds disrupts the smooth functioning of schools and critical issues like examinations when there is no paper for printing question papers. Speaking on the issue of the postponement of examinations due to the shortage of funds during the Radio Phalaphala Talk Show on 13 June 2013, parents seemed keen to pay a nominal fee to help

run the schools until government funds became available. This is an indication that there are individuals who understand the need to supplement school funds by the parents

Society is obliged to invest in the creation of a proper learning environment for an individual's proper education. The inadequate supply of teaching and learning materials and the shortage of funds is compromising quality education in Limpopo schools. Schools in formerly disadvantaged areas do not have libraries or computers where learners can work on their projects on their own: they are fully dependent on the input they receive from their educators. Some parents in the area perceive the education offered in Vhembe District schools as inferior because of this lack of resources. Parents who can afford to pay private school fees move their children to private schools where, they believe, the education offered is better.

The multi-grade class approach is one of the adaptive strategies used to address declining learner enrolment. However, it was established that neither parents nor educators favour multi-grade classes. Because of the continuous decline in the size of school-age population and consequently in learner enrolments in most of the schools, it appears that multi-grade teaching will become a frequent reality. Multi-grade teaching methods should therefore form part of the curriculum in all the institutions that train educators. The parents will also need to be educated to accept it as a reality that cannot be wished away. It is the parents who supply children for schools, and if there are not enough children to sustain a school, a workable adaptive strategy has to be sought and implemented.

The performance of learners in reading and mathematics in Limpopo and in South Africa as a whole is known to be poor, even poorer than that of the entire Southern African region (Section 4.2: Chapter 4). In terms of resources at schools, South Africa is on average in a better position than other SADC countries. The parents and the educators blame the provincial education department for the non-delivery of teaching and learning materials for this. The continual implementation of new teaching approaches before old ones were mastered by either educators or learners exacerbated this problem. Some of these approaches demand a great deal of reading on the part of both teachers and learners. The new approaches have been proven difficult to implement because of the total lack or poor availability of resources such as libraries and computers. Often, the teaching approaches imposed are imported from developed countries. They fail in South Africa because the majority of learners are from deprived backgrounds where the parents are poor and frequently illiterate. Many learners do not have facilities such as a home computer to help them with school tasks that have to be done at home. The government authorities should first determine the feasibility and practicability

of certain teaching approaches before implementing them. Equipping the schools with the required resources will help to improve the quality of teaching. With this in place, parents will no longer perceive education in public schools as being inferior.

The government is concerned about quality teaching and, to address this, common examinations are becoming the norm in South African schools. The Department of Basic Education is monitoring learner performance at schools. Educators are supposed to submit work schedules to their circuit managers. This is proper, but the demands from the department take most of the educators' time and they are left with inadequate time to prepare lessons and even teach the children. This is frustrating for them, thus some of them are opting to retire before they reach the age of 65. Self-discipline for both educators and learners accompanies quality teaching. Educator absenteeism angers parents, who may demand that the educators concerned be dismissed. Alternatively they may decide to remove their children from schools with this sort of problem.

The pregnancy of female learners in schools is another thorny issue. The government is blamed for not keeping records of pregnancies at schools. According to one newspaper article, records regarding school-girl pregnancies have not been updated since 2009 (*Sowetan* 27 May 2013). Parents are blamed for not talking about sex with their children and it is argued that both boys and girls should be taught about the consequences of unsafe sex. While the government has developed a policy to allow pregnant girls to continue attending classes, educators who are faced with this challenge are not happy about it (ibid.) The leader of the Democratic Alliance in Mpumalanga remarked that this approach was putting the girls future at risk, and argued that often these girls never completed their schooling career. The government was also blamed for not providing facilities such as sports grounds to keep the children busy. The argument here was that, because there is nothing to keep them busy, learners resort to sexual activity (ibid.) The *Mail & Guardian* (12 April 2013) also blames both the parents and the educators who do not willingly and openly discuss sex with the children. The findings of this study show that the blame is shifted onto others and that no one wants to accept responsibility or take a firm decision. Parents, educators, the education authorities and NGOs need to come together to decide what to do about this challenge. The rate of pregnancies in private schools is low, and public schools may be able to learn from their approaches. Sound and proper education of children goes a long way to curbing many social problems that characterise societies wherever they are and Vhembe District is not an exception.

Three critical issues stand out from this research, and these are that:

- ❖ Declining learner enrolments at primary schools in Vhembe District in Limpopo is a reality (Figure 5.20 in section 5.5), falling by 1010 between 2007 and 2012 in Vhembe District.
- ❖ The schools in Vhembe District are poorly equipped in terms of basic facilities such as libraries, sports fields, computers and teaching and learning materials (Table 5.13).
- ❖ Policy interventions in terms of norms and standards and general economic development are therefore crucial in revitalising the provision of education in Limpopo and retaining the young and economically active adults. Limpopo is one of the poorly developed provinces of South Africa.

In social context, challenges to be met appeared to be the creation of employment opportunities, effective land reform, the provision of infrastructure, such as roads, and, in particular, adequate provision of facilities for sound, sustainable basic education for an improved quality of life for all people in the Vhembe District.

6.6 ADAPTING TO CHANGING LEARNER ENROLMENTS

It is clear from the results of this investigation that learner enrolments will, for now, continue to decline. Addressing this situation has been seen to require co-operation and understanding between government-appointed authorities and the community, With regard to schooling, this would mean authorities recognising the needs and aspirations of the people living in a specific area with its own environmental characteristics when planning and implementing policy. Settlement patterns have evolved over time and, as this study has illustrated, the location of a school is significant. However, these patterns change over time this changes in the educational system too have to take place. In this section, two situations presented. First, a guideline framework for a choice of a location for a new school (Figure 6.1) is presented. The second situation deals with overcrowding in existing schools.

When deciding to add a new school (where there is need) the effect of a combination of factors should be considered (Figure 6.1). The location of a new public school requires the integration of information on the age structure of the population; migration and fertility rates; the availability of opportunities to attract or retain settlers in an area, the distance between households and the school; the location of existing schools in the same locality; accessibility; and safety.

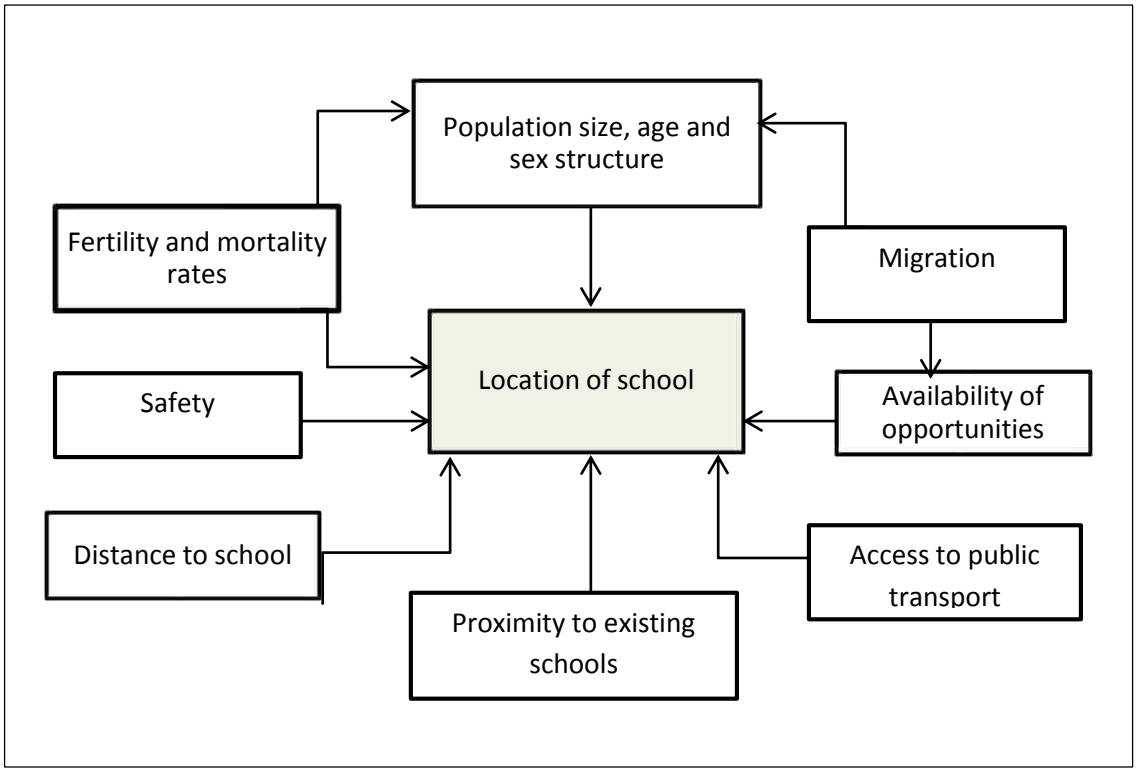

Figure 6.1: Factors to be considered when planning the location of a new school
Source: Conceptualised by the researcher

Out-migration of the young and economically active population results in the ageing of communities and this further contributes to a decline in fertility and school-age population, which may lead to school closure. In-migration occurs if there are opportunities in an area of destination, such as the availability of land on which to build a house, houses for rent, and employment and other business opportunities. Attractive environments with better services (water, electricity, transport, improved roads) also act as pull factors Therefore, the availability of good facilities acts as another important factor that determines the size school-age population in an area. A young age structure has the potential to increase the number of births, and areas that are characterised by this type of age structure will have children to send to the local schools. An imbalance in the sex structure may result in single females deciding on having fewer children. In Limpopo 53% of the population are females and single mothers may not want to have large families.

If there is overcrowding of classrooms in a school, it may be necessary to build additional classrooms, while it may not be advisable to do so in areas dominated by older citizens. In schools that are favourably located and are easily accessible by public transport, the age structure of a

population might not be the major factor in determining the learner enrolment at local schools. In this research, however, the availability of transport featured as an opportunity to attract people to an area.

Demographic factors, In particular, migration, age structure, and size of the population, population density and the availability of opportunities for growth are accommodated in the adaptive strategy adopted to address inequality and to correct the mismatch between population status and the location of schools. Step 2 in the guidelines for rationalisation of non-viable schools (Section 4.3: in Chapter 4), which state that the Department of Education concerned must ensure that it has a clear indication of present and predicted population trends in an area is in this instance also applicable. If population growth figures display a negative growth trend, then it is not advisable to build new schools. Mobile classrooms may be used to ease overcrowding. When there are no longer enough children to utilise them, such classrooms can be moved to other schools that need them. Therefore, the adaptive strategy for building new schools and adding permanent classroom structures should consider these as well as available land for settlement in rural areas, and housing and employment opportunities in urban areas. Building a new school in an area that is physically not expanding its number of households or attracting young people will be a waste of resources. Rural areas have space available for residential expansion and this is an advantage.

Research findings confirm that population dynamics and characteristics play an important role in determining the school-age population's needs in places where people live. The decline in learner enrolment is exacerbated by the lack of opportunities in poorly developed rural areas. To curb the decline in learner enrolment in Vhembe District and other poorly developed areas, integrated strategies to develop these areas have to be implemented.

6.7 RECOMMENDATIONS FOR FUTURE RESEARCH

The following observations from this research could be investigated further:

- The over-provision of schools in densely populated areas of Vhembe District should be addressed by merging schools located in close proximity in relation to total population. The number of required schools in a neighbourhood can be determined by calculating 14% of the total population (Section 5.3 on the analysis of the location of Tshakhuma primary schools). It is assumed that 14% of a population consists of primary school children. In small villages that lie close together the *Mahosi* and the *Magota* should be convinced that for the sake of sustainability primary schools like secondary schools could be shared by children from different villages.

- Since the decline in learner enrolment is a reality, the Department of Transport should consider providing free transport to learners who walk long distances to school. There are children as young as 5½ years of age attending Grade R and it is not fair to let them walk such long distances. This means that they are forced to wake up early to reach school on time. The walking distance for primary schools should rather be reduced to 3 km.
- Migration to areas with better life and work opportunities is a reality that we cannot escape. Migration is contributes to the decline in learner enrolments and curbing out-migration through creating opportunities for people to improve their living conditions in the rural areas will help curb out-migration and thus retain children to support schools in rural areas.
- To make schools in rural areas and public schools attractive the department should endeavour to ensure that all schools are equipped with resources like computers, libraries and sporting facilities.
- Pregnancy at school is a challenge that needs to be addressed from an integrated point of view by different stakeholders i.e. parents, educators, Department of Basic Education and NGOs and teenagers themselves.
- Further investigations similar to the nature of this research could yield a comprehensive picture of the effect of spatio-temporal dynamics of the provision of education in South African secondary schools that could have some specific challenges and needs that might not necessarily be experienced at primary school level.

In observing, developments over time, the history of the area and its effect on present situation were documented together with current demographic and schooling trends in a particular location. It is suggested that planning and in finding ways to meet anticipated future social, and particularly, educational needs of young children in their early stages of formal education is crucial. A long-term view, too, has to be taken, since these children have to be equipped for citizenship, and survival, in a fast-changing world.

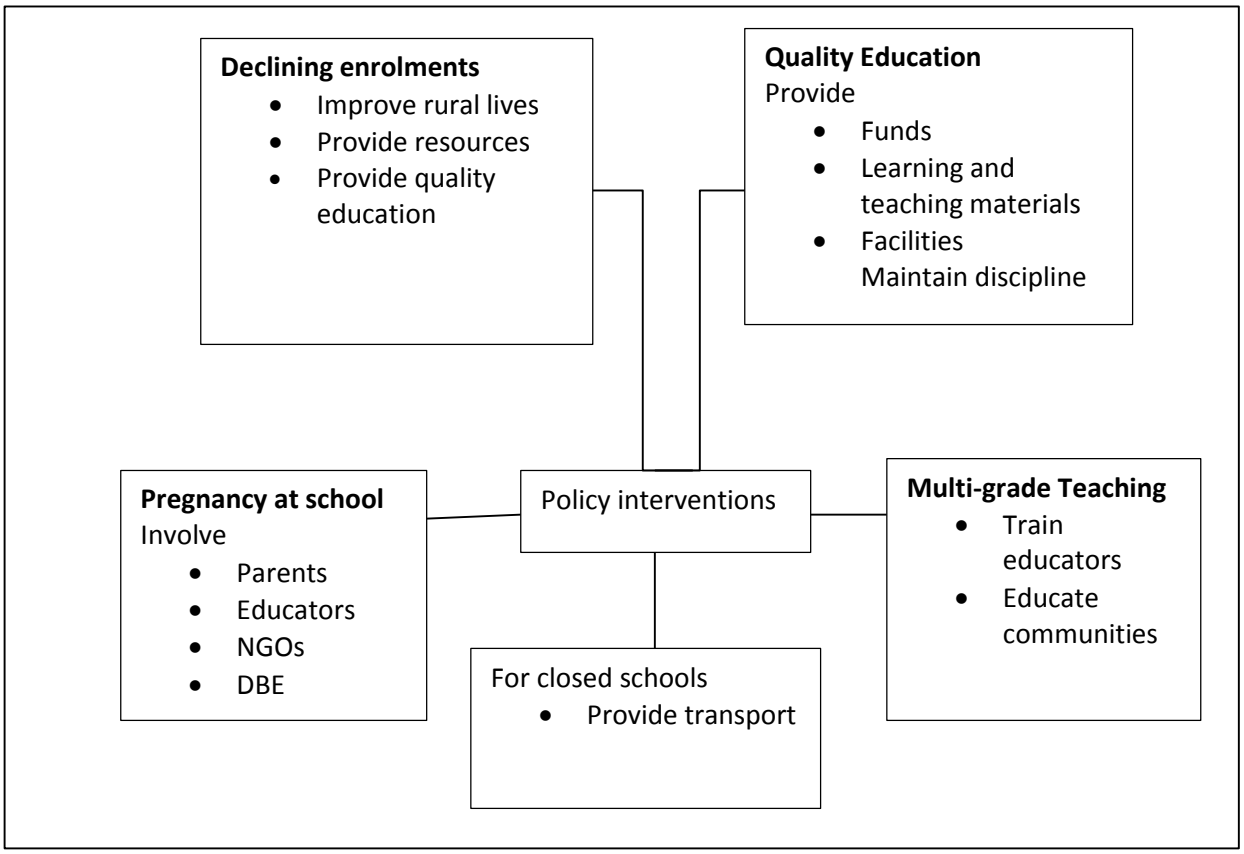

Figure 6.2: Policies for the sustainable provision of school education
Source: Conceptualised by the researcher

Understanding the people living in specific localities and identifying the trends in their lives is a valuable starting point. It is not only the analysis of statistical evidence to determine population structure that is relevant, but also investigating what affects parents' own decision-making strategies in their quest for quality education for their children. Such evidence can piece together a total portrayal of a situation, as has been the case in this study of Vhembe District. The research present proposed priorities required for policy intervention to create vibrant and sustainable primary schools (Figure 6.2). Government policy too plays a significant role as the challenges extend beyond individuals in communities, but any mismatches found have to be addressed as a totality within both the local and the national context. However, a range of international influences cannot be ignored. The closure of schools must take the welfare of learners into account because learners who walk for long distances between home and their school are at high risk of not completing their education. To achieve Goal 2 of "Education for All", the basic needs of primary school learners must be met and no child should be denied access to school. South Africa is a developing country (International Statistical Institute 2014) with limited resources and to improve the quality of education, communities

need to work closely with the Department of Basic Education, and other interested parties like NGOs.

The location of schools, the provision of quality basic education and community needs all have to come together. Clearly, this can only be achieved by applying a sound geographical perspective – one that prioritises the organisation of space within the ambit of time. Understanding the need to adapt to changing circumstances in specific localities is indeed the key to the sustainable provision of appropriate education at primary school level in South Africa. Collaborations at village level by *Mahos*i instead of striving for independence can yield large and well-equipped schools when learners from different villages share a school. Officially funding is on a per learner basis. Large schools will receive more funds than small ones. When learners from different neighbourhoods share a school, the distance from home to school must be taken into account and if some learners live outside the prescribed maximum distance, free transport should be provided. Creating medium to large schools will prevent school closure and save the pain that communities feel when their school is closed due to declining enrolments.

This study focused on the occurrence and effect of closing a school with declining learner enrolments, seen as a phenomenon that is likely to be with us for a long time. Approaching the challenges facing primary schools in such areas by planning holistically will yield positive results in the provision of equal and sustainable education in South Africa, particularly in poorly developed places.

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APPENDICES

APPENDIX 1

QUESTIONNARE DIRECTED TO HEAD OR REPRESENTATIVE OF A HOUSEHOLD

This survey is aimed at establishing information on the demographic profile and the provision of education in primary schools in the Vhembe District Municipality. The information provided will be treated confidentially Your cooperation in this regard will be highly appreciated.

Inquiries: Nembudani Madzinge F E
Tel: 015 962 8590
Cell: madzinge@univen.ac.za

A PERSONAL DETAILS AND HOUSEHOLD STRUCTURE

1 Indicate your gender. Put a cross where applicable

MALE	FEMALE

2 In which municipality is your village or town located?

Musina	
Mutale	
Thulamela	
Makhado	

3 Ownership of house in which you live.

I own the house	
Parent's house	
Rented	

4 Duration of stay in house mentioned in 3 above.

Less than 5years	
5 to 10 years	
More than 10yrs	

6 Indicate your age. Put a cross where applicable.

below 21	
21-25	

26-30	
31-35	
36-40	
41-45	
46-50	
Above 50	

7 Indicate your marital status.

Single	Married

8 Do you have your own children?

yes	No

9 Do you have only your own children staying with you?

yes	No

10 Show number of children in these age groups staying with you.

Under 0-5	5-9	10-13	14 and older

11 How many persons below the age of 20 live in your household? Show number in appropriate space.

Males		Females	

12 Indicate mother's age.

below 15	15-20	21-25	26-30	31-35
36-40	41-45	46-50	above 50	

13 Do your adult children over 20 stay with you? Put a cross where applicable.

Yes
No
Not applicable

14 If your adult children in 13 above are not staying with you give reasons.

Not applicable	
Away studying	
Married and have their own	
Grown up and have moved out	
Any other reason? Please specify	

15 Do you have grandchildren staying with you?

Yes	NO

16 If your grandchildren are living with you, indicate the number in the appropriate space

Age	Number
Below 5	
5-9 years old	
10 -14 years old	
Above 14	

17 Do you live with foster or relative's children attending primary school?

Yes	No

18 If yes in 17 above indicate their total number

19 State your educational status. Put a cross where applicable

None	Primary	Secondary	Tertiary

20 State your employment status

Employed	
Unemployed	
Self-employed	

21 If yes in 20 above, state the sector in which you are employed. Put a cross where applicable.

Domestic worker	
Subsistence farmer	
Government	
Shopkeeper	
Hawker	
Other (specify	

22 What is the source of your household income? You may put a cross to more than one alternative.

Salary	
Wage	
Child grant	

Disability grant	
Old age grant	

23 What is the total household income?

Below R500	
R501 –R1000	
R1001-R1599	
R1500-R2000	
R2001-R3000	
More than R3000	

B DETAILS ABOUT THE SCHOOLS

24 How many primary schools are there in your village or town?

None	1	2	3	4	5 or more

25 How far is the nearest primary school from your home? Put a cross where applicable.

Less than 500 m	
500 m -1 km	
1 km -2 km	
3 km – 4 km	
5 km	
More than 5 km	

26 What is the name of the primary school closest to your home?

……

27 What mode of transport does your children use to go to school?

Walk	
Private car	
Bus	
Taxi	
Donkey cart	
Other. Specify	

28 What factors influence your choice of a school for your children?

Distance from home	
Safety	
Quality teaching	
Transport costs	
Other. Specify	

29 Did you experience any merger or closure of schools in your area?

Yes	No

30 If there was a merger/closure of a school(s) in your area, how were you affected by the decision?

……..
……..
……..

31 What are the problems regarding the provision of primary school education in your area?

……..
……..
……..
……..
……..
……..

32 If there are general problems with the provision of education for young children, how do you think these could be addressed?

……..
……..
……..
……..
……..
……..

APPENDIX 2

INTERVIEWS WITH PRINCIPALS AND EDUCATORS

Name of the school----------

1 How old is your school? ----------

2 What is your school's enrolment trend since the 1970s ----------
---
---

3 Total number of educators ----------

4 Total number of classrooms ----------

5 Are all the classrooms being used ----------

6 Does your school have the following facilities:

6.1 Telephone

6.2 Electricity

6.3 Flush toilet

6.4 Library

6.5 Feeding scheme

6.6 Sports facilities

6.7 Computers for

(a) staff

(b) pupils

6.8 Other facilities

7 Do you offer computer lessons at your school?----------if yes grade(s)----------

8 Do you also enrol pupils travelling/ walking more than 5km from your school?
---

9 Is your school located far from other primary schools?----------. How far?------

10 What do you think are the factors that attract pupils to attend at your or a particular school?

……
……
……
……

……
……
……
……

11 What do you think are the factors responsible for either an increase or decrease in learner enrolment at school?

11.1 Increase……
……
……
……
……

11.2 Decrease……
……
……
……
……
……

12 What do you think is the effect of redeployment on educators and the learners?

12.1

Learners……
……
……
……
……
……

12.2

Educators……
……
……
……

……
……
……

13 Regarding merger or closure of schools. What procedure are schools expected to follow before deciding on the merger or closure of schools?

……
……
……
……
……
……
……

14 How do the local communities feel about the merger/closure of schools as well as the redeployment of educators?

……
……
……
……
……
……

15 How do you think the issue of redeployment should be handled?

……
……
……
……
……
……
……
……

16 What other problems regarding the provision of education do you experience in your area?

.....

.....

.....

.....

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.....

.....

.....

17 17 Provide records of total learner enrolment for each year in the Table since the 1970s

1970	**1971**	**1972**	**1973**	**1974**	**1975**	**1976**	**1977**	**1978**	**1979**
1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
2010	2011	2012							

APPENDIX 3

INTERVIEWS WITH CIRCUIT MANAGERS- VHEMBE DISTRICT

All managers are requested in Vhembe District school circuit offices are requested to please furnish me with the following information: The information provided will be used for research purposes only. The researcher's topic focuses on the impact of population dynamics on learner enrolments.

NB! THIS QUESTIONNAIRE IS DIRECTED TO PRIMARY SCHOOLS ONLY

Inquiries: Nembudani M F E

Department of Geography

University of Venda

Cell: 0721904203

1 Provide the name of your circuit area……

2 Total number of primary schools

3 Total number of primary school learners in your circuit

4.1 Are there schools in your circuit facing closure or are there any that will be merged?

YES	NO

4.2 If yes in 4.1, how many schools are facing closure/merger

4.3 Provide the list of schools facing merger or closure

_____

_____

_____

5 In the case of closed schools what do you do with the buildings?

_____

_____

_____

_____

6 Give the total number of educators

7 What do you think are the factors contributing to dwindling learner enrolments in some of the primary schools?

_____

_____

_____

8 What do you think could be done to prevent the falling learner enrolments at schools?

_____

_____

_____

_____

9 How do you handle the problem of redeployment?

_____

_____

_____

APPENDIX 4A

P O Box 406

Levubu

0929

03 February 2011

District Senior Manager

Vhembe District Department of education

Private Bag x2269

Thohoyandou

Sir

Request to conduct research in Vhembe schools and the Department of education

I am conducting research on the impact of population dynamics on school enrolments in schools located within Vhembe District. Data collection will include visits to schools, circuit offices and the Department of Education. I would appreciate it if I would be given permission to visit schools, circuit offices and the department. This is a longitudinal study and information required towards the success of this study will also include statistics on school enrolment over a number of years (40), and interviewing of educators and officials in the department.

I am working as a lecturer in the Department of Geography & Geo-Information Sciences, School of Environmental Sciences. The purpose of this study is to work towards a doctoral degree and information gathered will be used for academic purposes only.

Yours faithfully

Mrs M E Nembudani

University of Venda
Tel 015 9628590
Cell: 072 190 4203
Email: madzinge@univen.ac.za

REF: 14/7/R
ENQ: M.S.Matlbe

LIMPOPO
PROVINCIAL GOVERNMENT
REPUBLIC OF SOUTH AFRICA

DEPARTMENT OF
EDUCATION

VHEMBE DISTRICT

Mrs. M.E. Nembudani
P.O.Box 04
LEVUBU
0929

REQUEST TO CONDUCT RESEARCH IN THE DISTRICT

1. The above matter bears reference.

2. Your request for permission to conduct research in schools, circuits and District offices for doctorate degree on the impact of population dynamics on school enrolments in Vhembe District has been granted.

3. You are kindly requested to observe the following conditions:

3.1Inform the District office, Circuit Managers and Principals of affected schools prior to your visits for data collection.

3.2 Ensure that your interactions with teaching personnel do not interrupt teaching and learning activities.

4. Wishing you the best in your quest for intellectual achievements.

DISTRICT SENIOR MANAGER

DATE 28/02/2020

APPENDIX 4B

University of Venda

Department of Geography

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06 March 2012

To whom it may concern

I (Madzinge Nembudani) am a lecturer at the University of Venda, Department of Geography. I am currently doing research with the University of South Africa on **Spatio- Temporal Dynamics and the Provision of Primary School Education in Vhembe District**. I intend finding out how changes in population caused by fertility, mortality, migration and trends in population growths are affecting learner enrolments at schools in the Vhembe district. The information thereof may assist the department when planning for the provision of education in South Africa. This letter is accompanied by a questionnaire which needs to be completed by the head of a household or a representative. Participation in this research is voluntary. The information furnished by respondents will be treated confidentially.

Regards

Nembudani Madzinge (Mrs)

Cell: 072 190 4203

Email: Madzinge@univen.ac.za

APPENDIX 4C

UNISA university of south africa

2011-09-01

Ref. Nr.: 2011/CAES/029

To the supervisor:
Prof UJ Fairhurst
Department of Geography,
College of Agriculture and Environmental Sc ences

Dear Prof Fairhurst

Request for Ethical approval for the following research project:

Demographic and spatio-temporal dynamics in the provision of education: Vhembe district, Limpopo, South Africa

The application for ethical clearance in respect of the above mentioned research has been reviewed by the Research Ethics Review Committee of the College of Agriculture and Environmental Sciences, Unisa. At this point Ethics clearance (Ref. Nr.: 2011/CAES/029) **is granted** under condition that you provide the committee with a letter in which the relevancy of question 12 in the questionnaire is addressed as well as clarification whether the research is funded or not as a contradiction is found in C2 with the budget presented further on, and further clarification s given regarding focus group interviews mentioned in the appl cation D4.6 and no specific mention in the proposal. It will be appreciated if the supervisor could address these issues that need some clarification in a letter addressed to CAES Ethics committee to reach us as soon as possible.

Furthermore, please be advised that the committee needs to be informed should any part of the research methodology as outlined in the Ethics application (Ref. Nr.: 2011/CAES/029), change in any way. Should that be the case, a new application, for the amendments, needs to be submitted to the Ethics Review Committee for review.

We trust that sampling, data gathering and processing of the relevant data will further be undertaken in a manner that is respectful of the rights and integrity of all participants, as stipulated in the UNISA Research Ethics Policy.

The Ethics Committee wishes you all the best w th this research undertaking.

Kind regards,

Prof E Kempen
CAES Ethics Review Committee Chair

University of South Africa
Preller Street, Muckleneuk Ridge, City of Tshwane
PO Box 392 UNISA 0003 South Africa
Telephone: +27 12 429 3111 Facsimile: +27 429 12 429 4150
www.unisa.ac.za

APPENDIX 5A

SAMPLE DATA FOR APPENDIX 1

MUSINA HOUSEHOLD QUESTIONNAIRE									
Q_Number	Municipality	Location	Gender	H- Ownership	Duration Stay	Age	Marrital Status	Parenthood	
1	Musina	Malale	M	Own Home	5-10 years	26-30	Married	Yes	
2	Musina	Malale	F	Own Home	>10 years	36-40	Married	Yes	
3	Musina	Malale	F	Own Home	>10 years	26-30	Married	Yes	
4	Musina	Malale	F	Own Home	5-10 years	26-30	Married	Yes	
5	Musina	Malale	F	Own Home	<5 years	26-30	Single	Yes	
6	Musina	Malale	F	Own Home	>10 yeas	<21	Single	Yes	
7	Musina	Malale	F	Own Home	5-10 years	31-35	Married	Yes	
8	Musina	Madimbo	F	Own Home	5-10 years	41-45	Single	Yes	
9	Musina	Madimbo	M	Parent House	>10 years	<21	Single	No	
10	Musina	Madimbo	M	Own Home	5-10 years	31-35	Married	Yes	
11	Musina	Hapha	M	Parent House	>10 years	31-35	Married	Yes	
12	Musina	Madimbo	F	Own Home	>10 years	>50	Widow	Yes	
13	Musina	Madimbo	F	Own Home	<5 years	36-40	Single	Yes	
14	Musina	Malale	F	Own Home	>10 years	31-35	Married	Yes	
15	Musina	Malale	F	Own Home	>10 years	>50	Married	Yes	
16	Musina	Malale	M	Own Home	>10 Years	>50	Married	Yes	
17	Musina	Malale	F	Own Home	<5 years	21-25	Married	Yes	
18	Musina	Malale	F	Parent House	>10 years	21-25	Single	Yes	
19	Musina	Malale	F	Own Home	>10 years	46-50	Widow	Yes	
20	Musina	Malale	M	Own Home	>10 years	>50	Married	Yes	
21	Musina	Madimbo	F	Parent House	<5 years	21-25	Single	Yes	
22	Musina	Madimbo	F	Parent House	5-10 years	21-25	Single	Yes	
23	Musina	Madimbo	F	Own Home	<5 years	31-35	Single	Yes	
24	Musina	Malale	F	Own Home	>10 years	41-45	Single	Yes	
25	Musina	Musina	F	Own Home	<5yrs	26-30	Married	Yes	
26	Musina	Musina	F	Own Home	>10yrs	36-40	Married	Yes	
27	Musina	Musina	F	Own Home	<5yrs	21-25	Single	Yes	
28	Musina	Musina	F	Own Home	<5yrs	26-30	Married	Yes	
29	Musina	Musina	F	Parent House	5-10yrs	>50	Single	Yes	
30	Musina	Musina	M	Own Home	<5yrs	41-45	Married	Yes	
31	Musina	Musina	F	Own Home	<5yrs	31-35	Married	Yes	
32	Musina	Musina	M	Own Home	>10yrs	>50	Married	Yes	
33	Musina	Musina	F	Own Home	5-10yrs	31-35	Married	Yes	
34	Musina	Musina	F	Own Home	<5yrs	21-25	Married	Yes	

SCHOOL DATA for appendix 2

QUESTION NUMBER	1	2	3	4	5	6.1	6.2	6.3
Name	Age	Enrl/trend	Educ/no	Clsrm/tol	cls/use	Fac/tel	fac/ele	fls/toile
Bashasha		increasing	30	19	Yes	yes	yes	no
Beitbridge	6	increasing	16	12	yes	no	yes	yes
Dovhoni	38	stable	21	20	yes	no	yes	no
Dzindi	41	increasing	20	18	yes	no	yes	no
Fondwe	84	stable	22	19	yes	yes	yes	yes
Gundani	36	Decreasing	3	4	yes	no	yes	no
Hlalelani	39	increasing	20	20	yes	yes	yes	yes
Levubu	71	Decreasing	10	10	yes	yes	yes	yes
Livhuwani	40	decreasing	8	10	no	no	yes	no
Lufule		Decreasing	20	19	no	yes	yes	no
Luvhalani	40	decreasing	8	8	no	no	yes	no
Madimbo	39	increasing	22	14	yes	no	yes	no
Magidi	26	decreasing	3	6	no	no	yes	no
Mahagala	84	Stable	10	10	yes	no	yes	no
Maila	23	increasing	29	16	yes	no	yes	yes
Makushu	42	increasing	30	22	yes	yes	yes	yes
Makwarela	98	increasing	38	25	yes	yes	yes	yes
Malale	14	increasing	13	8	yes	no	yes	no
Maniini	52	decreasing	33	19	yes	no	yes	no
Manzere	15	declining	10	8	yes	yes	yes	yes
Masungulo	49	fluctuates	12	15	yes	no	yes	yes
Maungani	78	decreasing	14	15	yes	no	yes	no
Mavunde	77	decreasing	9	10	no	no	yes	no
Mbaleni	35	decreasing	21	21	yes	yes	yes	yes
Mbosobeni	27	increasing	15	16	yes	yes	yes	no
Miluwani	42	decreasing	5	11	no	no	yes	yes
Mphakati	39	Fluctuating	23	20	yes	no	yes	no
Muledane	72	decreasing	7	10	no	no	yes	no
Munzhedzi	30	decreasing	29	26	yes	yes	yes	yes
Muraga	61	decreasing	9	8	yes	yes	yes	no
Mutoti	31	Stable	5	7	no	no	yes	no
Mutshetshe	37	decreasing	17	26	no	no	yes	yes
Nzhelele	5	decreasing	3	14	no	yes	no	no
Nzwelule		decreasing	10	11	yes	no	yes	no
Onismus	14	decreasing	1	4	no	no	yes	no
Pharani	47	decreasing	12	17	no	no	yes	no
Prince Ramaremisa	44	Decreasing	4	6	no	no	yes	no

SCHOOL DATA FACILITIES

QUESTION NUMBER	6.6	6.7a	6.7b	7a	7b	8	9a
Name	sprt/fac	staf/comp	ppl/comp	comp/les	grd/computer	distance/oth/sch	enrl lernfrm >5km
Bashasha	yes	yes	yes	yes		no	yes
Beitbridge	no	no	no	no			
Dovhoni	no	yes	yes	yes			
Dzindi	no	yes	yes	yes			
Fondwe	no	yes	yes	yes		no	yes
Gundani	no	no	no	yes			
Hlalelani	yes	yes	no	no	grd 6-7	no	no
Levubu	yes	no	no	no		yes	
Livhuwani	no	yes	no	yes			
Lufule	yes	yes	no	no		yes	
Luvhalani	no	yes	yes	no			
Madimbo	no	yes	yes	yes	grd 5-7	yes	no
Magidi	no	yes	no	no	not always	yes	
Mahagala	yes	yes	yes	yes		no	no
Maila	no	yes	no	no		no	yes
Makushu	no	yes	yes	no			
Makwarela	yes	yes	yes	yes			
Malale	no	no	no	no		yes	no
Maniini	no	yes	yes	yes		yes	yes
Manzere	no	yes	yes donated	no		yes	no
Masungulo	no	yes	no	no	grd 6-7	no	no
Maungani	yes	yes	no	no		no	no
Mavunde	no	yes	no	no	gr4-7	yes	
Mbaleni	no	yes	no	no			
Mbosobeni	no	yes	yes	yes			
Miluwani	no	yes	no	no			
Mphakati	yes	no	yes	yes			
Muledane	no	no	no	no			
Munzhedzi	no	yes	no	no			

School data for appendix 2

Question	14
Name	Feelings of community members
Bashasha	unaccepted
Beitbridge	
Dovhoni	community is happy if school if schools are in the same area undr the same chief
Dzindi	unhappy
Fondwe	communities are conservative both losing and receiving
Gundani	unacceptable
Hlalelani	depends on what the department is promising the communities
Levubu	discontent
Livhuwani	community members lose faith towards the school
Lufule	the community does not accept
Luvhalani	not acceptable
Madimbo	they accept if children will be transported
Magidi	discontent
Mahagala	discontent
Maila	unhappy/dissatisfied
Makushu	discontent
Makwarela	discontent
Malale	community of the receiving school accept but of where there is closure find it unacceptable
Maniini	discontent
Manzere	discontent
Masungulo	discontent
Maungani	unhappy
Mavunde	discontent/ disrupt social cohesion
Mbaleni	discontent
Mbosobeni	
Miluwani	discontent
Mphakati	unacceptable especially where parents build the school
Muledane	unhappy
Munzhedzi	discontent
Muraga	communities feel stripped off their pride/disrupt family life
Mutoti	communities are unhappy they will have to transport their children too far schools
Mutshetshe	
Nzhelele	unhappy
Nzwelule	not accepted
Onismus	unhappy/ children too young to cross river bridge has collapsed
Pharani	N/a
Prince	discontent
Ramaremisa	
Ravhura	feel undermined
Sambandou	discontent
Shirly	unhappy
ST Martin de Porrez	discontent

Data for appendix 2 Question 16

Name	problems
Bashasha	not provide relevant books/ lack of guidelines
Beitbridge	lack of facilities/pit-toilets/no furniture/old furniture/parents taking children to schools outs
Dovhoni	
Dzindi	government introduces new things but do not make follow up
Fondwe	
Gundani	multigrade teaching/no infrastucture/shortage of teachers/poor roads/no spot facilities
Hlalelani	
Levubu	shortage of resources. E.g books supplied are not enough
Livhuwani	
Lufule	overcrowding/ teachers who were not trained for that level
Luvhalani	
Madimbo	tension at school
Magidi	multigrade teaching/shortage of teachers/poor roads/no spot facilities
Mahagala	
Maila	
Makushu	school yard too small/shortage of infrastructure/overcrowding/child headed families/teena
Makwarela	
Malale	multigrade teaching//shortage of teachers/poor roads/no spot facilitads/no sport facilities
Maniini	
Manzere	vandalism/lack of parental involvement/lack of text books/shortage of teaching aids
Masungulo	
Maungani	parents cannot assist with homework because they are not educated/lack of parental involv
Mavunde	
Mbaleni	
Mbosobeni	
Miluwani	teacher-pupil ratio is high/overcrowding/
Mphakati	
Muledane	delapidated buildings/poor infratructure
Munzhedzi	
Muraga	parents not wanting their children to attend a local school/poor infrastructure/child-headed
Mutoti	
Mutshetshe	budget allocation to school is not constant/budger allocated does not meet all tl the require
Nzhelele	
Nzwelule	high dropout/teenage pregnancy/lack of support from parents/lack of support from curricul
Onismus	multigrade teaching/no infrastucture/shortage of teachers/poor roads/no spot facilities
Pharani	constant change of curriculum/less support from parents
Prince Ramaremisa	
Ravhura	school too old/teenage pregnancy
Sambandou	
Shirly	lack of funds for infrasture/low salaries for educators/untrained SGB/poor discipline/lack of
ST Martin de Porrez	
Tshandama	lack parental care and involvement/teenage pregnancy/dropouts
Tshedza	

Q 34

Musina Town

29/10/2011

APPENDIX 1

QUESTIONNAIRE DIRECTED TO HEAD OR REPRESENTATIVE OF A HOUSEHOLD

This survey is aimed at establishing information on the demographic profile and the provision of education in pre schools in the Vhembe District Municipality. The information provided will be treated confidentially. Your coopera in this regard will be highly appreciated

Inquiries: Nemhudani Madzinge I F
Tel: 015 962 8590
Cell: madzinge@univen.ac.za

A PERSONAL DETAILS AND HOUSEHOLD STRUCTURE

1 Indicate your gender. Put a cross where applicable

MALE	FEMALE
	X

2 In which municipality is your village or town

Musina	X
Mutale	
Thulamela	
Makhado	

3 Ownership of house in which you live

I own the house	X
Parent's house	
Rented	

4 Duration of stay in house mentioned in 3 above.

Less than 5years	X
5 to 10 years	
More than 10yrs	

6 Indicate your age. Put a cross where applicable

below 21	
21-25	X
26-30	
31-35	
36-40	
41-45	
46-50	
Above 50	

1

7 Indicate your marital status

Single		Married	X

8 Do you have your own children?

yes	X	No	

9 Do you have only your own children staying with you.?

yes	X	No	

10 Show number of children in these age groups staying with you.

Under 5	5-9	10-14	Older than 14
		2	

11 How many persons below the age of 20 live in your household? Show number in appropriate space

Males	1	Females	1

12 Indicate mother's age.

below 15	15-20	21-25 X	26-30	31-35
36-40	41-45	46-50	above 50	

13 Do your adult children over 20 stay with you? Put a cross where applicable

Yes		No	
Not applicable	X		

14 If your adult children in 14 above are not staying with you give reasons.

	Not applicable	N/A
Away studying		
Married and have their own families		
Employed far from home		
Grown up and have moved out		
Any other reason? Please specify		

15. Do you have grandchildren staying with you?

Yes	NO X

16. If your grandchildren are living with you, indicate the number in the appropriate space

Age	Numbe
Below 5	
5-9 years old	
10 -14 years old	
Above 14	

17. Do you live with foster or relative's children attending primary school?

Yes	X No

18. If yes in 14 above indicate the number

19. State your educational status. Put a cross where applicable

None	Primary	Secondary	Tertiary
		X	

20. Are you employed or self- employed or unemployed

Employee X	Self- employed	
Unemployed		

21. If yes in 20 above, state the sector in which you are employed. Put a cross where applicable.

Domestic worker	
Subsistence farmer	
Government	
Shopkeeper	X
Hawker	
Other (specify	

22. What is the source of your household income? You may put a cross to more than one alternative.

Salary	X

3

Wage	
Child grant	X
Disability grant	
Old age grant	

23 What is the total household income?

Below R500	
R501—R1000	
R1001-R1595	
R1500-R2000	
R2001-R3000	
More than R3000	X

B DETAILS ABOUT THE SCHOOLS

24 How many primary schools are there in your village or town?

None	1	2 X	3	4	5 or more

25 How far is the nearest primary school from your home? Put a cross where applicable

Less than 500 m	
500 m -1 km	
1 km -2 km	X
3 km—4 km	
5 km	
More than 5 km	

26 Give the name of the primary school nearest your home

ST MARTIN DE PORRES

27 Indicate the means of transport to school

Walk X	Private car	Suv	Donkey cart
Other, Specify			

28 What factors influence your choice of a school for your children?

Distance from home	X
Safety	
Quality teaching	X
Transport costs	
Other. Specify	free / more parking

29 Did you experience the merger or closure of a school in your area?

YES	NO X

30 If there was a merger/closure of a school(s) in your area, how were you affected by the decision and how d
face it?

not applicable

31 What are the problems regarding the provision of primary school education in your area?

High drop out rates

32 If there are general problems with the provision of education for young children, how do you think these could be overcome?

more transport
parent to get involved
to emphasize cure attendance

Dzindi

INTERVIEWS WITH PRINCIPALS AND EDUCATORS

1 How old is your school? 41 yrs

2 What is your school's enrolment trend since the 1970s Increasing
yes after year

3 Total number of educators 120

4 Total number of classrooms 18

5 Are all the classrooms being used Yes

6 Does your school have the following facilities

6.1 telephone NO

6.2 Electricity Yes

6.3 Flush toilet NO

6.4 Library NO

6.5 Feeding scheme Yes

6.6 Sports facilities NIL

6.7 Computers for

(a) staff Yes

(b) pupils Yes

(c)

7 Do you offer computer lessons at your school?- what grade Yes gr 6 & 7

8 Do you also enrol pupils travelling/ walking more than 5km from your school? NO

9 Is your school located far from other primary schools? How far? NO 1km

10 What do you think are the factors that attract pupils to attend at your or a particular school?

Sports
Better quality education
Security
Discipline
Teaching

11 What do you think are the factors responsible for either an increase or decrease in learner enrolment at school?

11.1 Increase New stands established around the school. Quality provision of education. Good leadership. Continuous effective transparent communication with all stakeholders

11.2 Decrease low birth rate & people are afraid of AIDS

Cost of living is too high as education need more money. Family instability and divorce

12 What do you think is the effect of redeployment on educators and the learners?

12.1 Learners

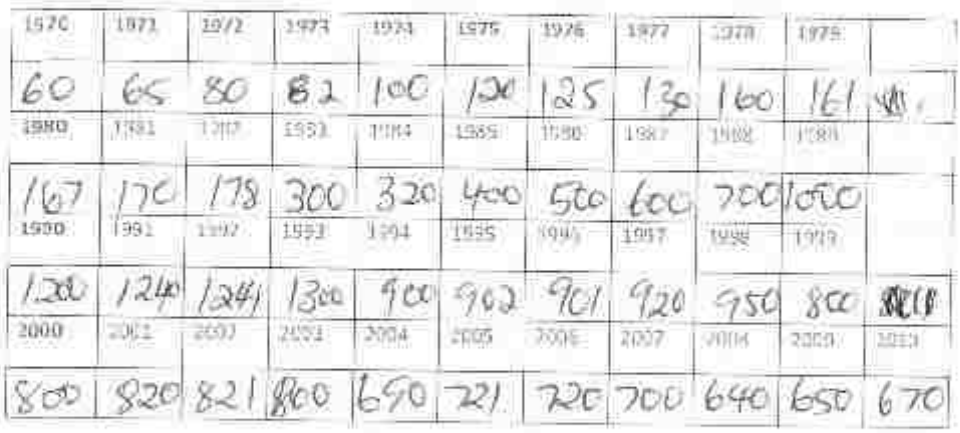
No redeployment in my place currently, my presence has appointed last year. I may suggest that it may cause them to travel long distances to other schools learners may drop out quickly

12.2 Educators No redeployment in our school affected educators, since the knowledge I have is that it is difficult to learn new environment, things of doing things, and change of environment may cause health problems. Expenses on transport is possible

13 Regarding merger or closure of schools. What procedure are schools expected to follow before deciding on the merger or closure of schools?

- The distance which learners will travel from home to school.
- The views of the educators must be considered
- The strengths of fields of study to be offered at learners

14 How do the local communities feel about the merger/closure of schools as well as the redeployment of educators?



1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	
60	65	80	82	100	120	125	130	160	161	165
1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	
167	170	178	300	320	400	500	600	700	650	
1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	
1200	1240	1241	1300	900	902	901	920	950	800	818
2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
800	820	821	800	690	721	720	700	640	650	670

MRS Rounakululeushu Tuki - 0822661299.

All managers in Vhembe district school circuit offices are requested to please furnish me with the following information. This information will be used for research on Population dynamics and school enrolment in Vhembe Schools.

Nzhelele East

This questionnaire is directed to primary schools only.

Enquiries: Nemudzani M.E. Cell: 072 180 3203
University of Venda: Department of Geography

1 Total number of primary schools in your circuit [illegible]

2 Total number of primary school learners in your circuit [illegible]

3 Are there schools facing closure in your circuit or there any that will be merging? [illegible] yes

4 (a) If yes in 3 above, how many schools are facing closure or merger? yes

(b) List of schools facing closure or merger

Maname — Thononda
Tshavhalovha Adzimbani
Nzhelele Dzanani

(c) What do you do with the buildings of closed schools? Used by Community

5 Total number of primary school educators [illegible]

6 What do you think are the factors contributing to the decrease of learner enrolment in some of primary schools in your circuit?

Ageing community
Decrease in birth

7 What do you think should be done to prevent the falling learner enrolment at schools?

[illegible] the community [illegible] let [illegible] children in local schools
we are [illegible] [illegible] to make [illegible] of [illegible] school

8 How does your circuit handle the problem of teacher redeployment?

Follow directive from the Department
[illegible]