

**ASSESSING EDUCATIONAL INFRASTRUCTURE DELIVERY IN THE SESHEGO
CIRCUIT, LIMPOPO PROVINCE**

BY

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DEDICATION

Dedicated to my late father Phillip Nebat Mavundla and my mother Thandy
Constance Mavundla

And

My husband Nyiko, my children Fumani, Nsovo, the twins, Andzani & Akani

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DECLARATION

I declare that AN ASSESSMENT OF THE DELIVERY OF EDUCATIONAL INFRASTRUCTURE IN THE SESHEGO CIRCUIT, LIMPOPO PROVINCE (mini-dissertation) hereby submitted to the University of Limpopo, for the degree of Masters of Public Administration has not previously been submitted by me for a degree at this or any other university; that it is my work in design and in execution, and that all material contained herein has been duly acknowledged.

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ABSTRACT

In post - apartheid South Africa, a lack of adequate financial and physical resources in historically disadvantaged public schools is a major barrier to effective teaching and learning. Schools in the rural South Africa are part of communities and therefore can be seen as microcosms of societal conditions. The national Ministry of Basic Education has a responsibility to provide a necessary educational infrastructure to all public schools. Other relevant stakeholders such as the community and businesses need to assist the government to supplement the delivery of educational infrastructure. It is against this background that the study undertakes to assess the delivery of educational infrastructure that will lead to service delivery improvement.

Some of the considered focused areas in the study include the demographics of the schools, the condition of the school infrastructure and the legislative frameworks that serve to support educational infrastructure. Literature on various forms has been reviewed in order to understand the regulatory framework upon which the delivery of educational infrastructure is based. The study used the qualitative method to investigate the delivery of educational infrastructure. The main findings indicated that educational infrastructure in rural schools is generally poor and there is a shortage of physical resources in schools. It is clear in this regard that current processes are hampering the Department of Basic Education to improve service delivery in public schools especially those that are in rural areas.

KEYWORDS

- Department of Basic Education in Limpopo Province
- Educational infrastructure
- Assessment
- Physical resources
- Public schools
- Service delivery
- Teaching and learning

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CHAPTER 1

INTRODUCTORY CHAPTER ON ASSESSING EDUCATIONAL INFRASTRUCTURE DELIVERY

1.1 INTRODUCTION

This research assesses educational infrastructure delivery in Seshego Circuit which is under Capricorn District Municipality, Limpopo Province. This has become a serious concern to the government, partly because the government places service delivery at the heart of its duties and commits abundant resources toward this end. But regrettably, despite huge resources being committed, effective and efficient service delivery remains a pipedream for many people. Problems in the delivery of educational infrastructure appear to contribute to the reason why most schools in Limpopo Province find it impossible to perform according to expectation. In this chapter the background, statement of the problem, delimitations of the study, objectives and clarification of concepts are considered. Furthermore, research methodology, ethical considerations as well as the research report outline are provided.

1.2 BACKGROUND

In the new democratic era which was ushered in during the 1994's first democratic elections, the Department of Basic Education has made plans to make sure that education in the rural areas is recognised as an important tool to empower children who come from the poor families as much as it is an important tool for children from urban schools. These schools, rural and urban schools are governed by similar curriculum, conditions of service, national legislation and policies as all other public schools in the country (Education in Rural Areas, 2008:7). A serious challenge faces public schools in South Africa which impedes development and growth. There are many problems with regard to public school infrastructure which include over population of learners due to a lack of properly qualified teachers, the learning

conditions are poor because there are no classrooms and other related resources that are important in ensuring that learning is efficient and effective.

The dawn of democracy in South Africa with the democratic Constitution of Republic of South Africa of 1996 serves as the supreme law of the country, paved the way for the South African Schools Act (Act 84 of 1996). The Act stipulates one education system which undertook all discriminatory laws that affected development in schools. Over the last decade, a vast amount of academic as well as policy-support research has been conducted on integrity, transparency and corruption in the public sector. The issue of ethical conduct of public employees received a great deal of focus from international, regional and national organisations, interested in promoting the performance of the public schools. Thus, this research intends to assess the problems in the delivery of educational infrastructure of both the primary and secondary schools particularly in Seshego circuit, Limpopo Province.

This study has been partly prompted by the parents' protests and petitioning that took place in the Seshego area, due to dissatisfaction concerning the infrastructure of these public schools. This research is an attempt to make an assessment to enhance effective and efficient delivery of educational infrastructure in the public schools of semi urban and rural areas of Limpopo. This study is important given the urgent need to address the problem of delivering educational infrastructure in Limpopo Province and other provinces within the Republic of South Africa, (Department of Basic Education, 2011:125).

The study also is intended to assist the Seshego circuit office within the Capricorn District Municipality to ensure that the provision of educational infrastructure is effective. The study will also assist to assess the problems of delivery of educational infrastructure, the state of the educational system in the Limpopo Province and how it has enhanced or impeded effective service delivery to the public. The study also identifies problems inhibiting proper delivery of educational infrastructure and service delivery on the part of government officials. Such discovery informs government executives on a way forward to addressing this important phenomenon. The study is

also informative to academics for further research area to contribute to effective service delivery.

Overall findings from this study will in addition provide necessary pointers to restoring lack of delivery, also contribute to reducing growing service delivery protects with associated casualties.

1.3 THE PROBLEM STATEMENT

In view of the background provided above, the researcher assessed whether the Department of Basic Education in the Seshego circuit is able to deliver educational infrastructure such as classrooms, ablution facilities and learning materials to support teaching and learning in schools. The main focus in this study was on the basic schooling system in the Republic of South Africa.

1.4 OBJECTIVES

The objectives of the study are:

- To assess the process of delivering educational infrastructure at the schools under Seshego circuit.
- To analyse the challenges facing the Department of Basic Education in the delivery of educational infrastructure of schools in Seshego circuit.

1.5 RESEARCH QUESTIONS

From the preceding objectives, this research shall address the following questions:

- What is the educational infrastructure processes involved in delivering educational infrastructural needs in Seshego circuit?
- What are the challenges facing the schools under Seshego circuit with regard to educational infrastructure?

1.6 DELIMITATION OF THE STUDY

Seshego circuit is within the Capricorn District Municipality which is one of the five (5) districts of Limpopo Province in South Africa. The research's focus is on the educational infrastructure delivery of one circuit within the Capricorn District Municipality area. Largely the findings of the study were considered within the

Seshego circuit due to the qualitative nature of the research, although many of the issues considered and findings may be applicable within many parts of South African basic educational system landscape.

1.7 CLARIFICATION OF KEY CONCEPTS

1.7.1 Infrastructure

Infrastructure refers to resource systems that have been harnessed for the development of a society. Such systems include telecommunications, energy, transportation, governance, and other public utilities (Frischmann, 2007: 744). The development of a society depends on availability of infrastructure at homes or industries. Acute shortages of infrastructure in South Africa affect individuals and organisations in the country. For example, rural public schools are deprived of resources, facilities and qualified teachers. It is extremely unimaginable to have efficiency, effectiveness and quality in education under these circumstances. The concepts of infrastructure in this study refers to the physical infrastructure such as classrooms, sanitation or ablution facilities, laboratories and libraries; learning materials such as text books and writing books and human resources such as well skilled teachers.

1.7.2 Public Service Delivery

According to Andries du Toit (2002:88) service delivery originated thousands of years before the birth of Christ. Every individual, groupings, community and society requires particular services which are basic to their existence. Public service delivery is explained as the provision of public activities, benefits, satisfactions. Service relates both to the provision of tangible public goods and intangible services (William Fox & Meyer 1995:118). Service delivery forms the basis of all government activities.

According to Polite & Taylor (2003), services means the performance of work or duty by an official or an act of helping others, or power to control or make use of resources, or an organization or system providing the public with something useful to meet their demands.

Delivery is defined as producing or performing, handing over, taking goods to the intended recipient, or producing results as expected. Therefore public service delivery is concerned with the provision of a product or service by the government body to a community that it was promised to, or which is expected by a community.

In the context of this study therefore, public service delivery refers to identifying educational infrastructure in order to determine the existing state of educational facilities in the province, transforming existing facilities in line with the new needs and technologies, also making sure that the educational facilities have a value beyond the school premises, in order to achieve an interaction between school and society. Involving different stakeholders in the design of educational infrastructure is important because it should be noted that educational infrastructure represents human values and ways of thinking about the nature of human beings. The participation of experts that is; educators, sociologists, psychologists, and computer experts and the society as the future user in the design of educational facilities suitable for the society and the culture is imperative (Benavides, 2002).

1.7.3 Education

Don Berg (2004) defines education as the delivery of knowledge, skills and information from teachers to students. This concept of education contributes to harming students and teachers by driving policy makers to insist on accounting for the units of information that students demonstrate knowledge by writing tests. Students outcome as measured by tests bear little relationship to true education because education is a continuous process that goes beyond the classroom.

Education occurs through any experience that has a formative effect on the way one thinks, feels or acts. Education is a lifelong process in a knowledge society; education never ends nor can be reduced to a single event or limited to a single building. A multitude of definitions exist in terms of education. It is for instance, regarded by Bush & West-Burnham (1994:171) as services rendered to ensure that every aspect of the institution and every employee is focusing all the time in meeting and then exceeding the customer requirements.

In addition, the Government Gazette on Quality Education (National Department of Education, 2003) defines education as the learning of learners and facilitation of the learning content by committed and competent educators which promotes values, not only for the sake of personal development, but also to ensure that a national South African is built on values. This type of education is based on respect, democracy, equality, human dignity and social justice. In this study educational infrastructure refers to all categories of schools and higher institutions.

1.7.4 Assessment

Assessment is defined by Huba & Freed (2000) as the process of gathering and discussing information from multiple and diverse sources in order to develop a deep understanding of what people know, understand, and can do with their knowledge as a result of their experiences; the process culminates when the assessment results are used to improve learning. This research is looking at assessing the delivery of educational infrastructure in the Seshego circuit.

1.7.5 Public Schools

Every public school is a juristic person, with legal capacity to perform its functions in terms of the Schools Act (Republic of South Africa, 1996). Public schools can either be “fee paying” or “no fee”, and are located in townships, urban, semi-urban or rural areas. Whilst fee paying schools are able to charge for school fees, no fee schools cannot and may have to supplement their income through other fund raising channels (Mestry, Hendricks & Bisschoff 2009:32).

1.8 RESOURCES ESSENTIAL TO EDUCATIONAL INFRASTRUCTURE

1.8.1 Policy

A policy is basically a statement either expressed or implied of those principles and rules that are set up by executive leadership as guides and constraints for the organisation’s thought and action. Its principal purpose is to enable executive leadership to relate properly with the organisation’s work to its objective (Singh, 1996:3).

The critical point is the infrastructural backlog. Despite the good intentions and efforts of national and provincial authorities, there seems to be a lack of clear, concrete objectives and planning. For example, the review team were very disappointed that in 2007 there are still schools built with mud by local communities with mud floors, no electricity, no water, no heating, no sanitation and where children have to be sent home because they are cold and soaking wet (Department of Education, 2007:155).

The team is well aware that the national and provincial authorities are equally disappointed that such conditions still exist, but feels that a joint crusade to replace such schools must now be a national priority. It reflects badly on South Africa as a country with reasonable financial resources and good economic growth that so many of its children continue to be educated in such unacceptable environments. The team respectfully suggests that this is an excellent issue upon which to launch an exemplary, co-operative initiative by both the national and provincial powers, in line with South Africa's enlightened concept of "concurrent legislative competence" and its high, constitutional ideals (Department of Education, 2007:155).

1.8.2 Budget

One of the significant aspects that can make the delivery of educational infrastructure possible is budgeting, and the schools mission and objectives can only be realised through a budget (Bisshoff & Mestry, 2009:124). Budgeting is fundamental to the delivery of educational infrastructure because much of the schools funds are spent on acquiring physical resources (Department of Education, 2008:93). It is worth considering how the budgetary process is undertaken, who is involved and how staff makes contributions to the process so as to regard it as a financial expression of the educational goals of the schools rather than a secretive plot by senior staff to exploit them (Davies & Anderson 1992:131).

The department provides approximately one billion each year to the infrastructure programme for major repairs, upgrades and additions at schools Limpopo (Department of Education, 2011/12). From the above figures, it is clear that the department is having a waiting list of approximately 20 years before all Limpopo schools will be adequate. With the severe backlog and conflicting needs, project

prioritization, project scoping and budget allocation must be carefully balanced to provide “the neediest” schools first. The budget is allocated to priority areas as follows:

- 17% (R159m) of the budget has been allocated to new schools, replacement schools, and new district and circuit offices. Construction of a new large primary school costs about R35m, and serves up to 960 learners. However 7 schools can be rehabilitated using the same budget, which will benefit up to 7000 learners. Thus, in general, rehabilitation has more impact on learning outcomes than construction of new schools.
- 16% (R156, 8m) of the budget has been allocated to rehabilitation and refurbishment, involving major repair and re-capitalisation of existing facilities at storm damaged schools. The scope of work at these dilapidated and storm damaged schools includes demolition and replacement, additional buildings and rehabilitation of dilapidated buildings.
- 57% (R550m) of the budget has been allocated to upgrading and additions. These projects include the addition of water, sanitation, classrooms, administration blocks and mobile classrooms at existing schools.
- 10% (R94, 2m) of the budget has been allocated to routine and preventative maintenance. This is current expenditure as it does not add materially to the asset value, but it ensures that the existing buildings can continue to be used.

According to the Treasury Guidelines, major maintenance is classified as rehabilitation and refurbishment”. The delivery approach is to address the worst schools first, with repairs at damaged schools taking top priority. First the buildings and facilities must be safe to use; secondly; enough classrooms and basic facilities are provided for the school to function as defined in the national norms and standards. Thirdly, in future years, extra facilities are to be provided to bring Limpopo schools to the effectiveness of norms and standards provisions.

In addition, the department provides as per the Norms and Standards funds each year to the school principals to fund their responsibilities in terms of the South African Schools Act, including routine and preventative maintenance at schools. To

maintain the existing facilities and ensure existing buildings remain in use, each school principal needs to spend a significant part of their norms and standards allocation on routine and preventative maintenance. Where the Public Works cost centre can provide labour and supervision, expenditure by each school would be up to 30% of the norms and standards allocation, depending on the actual work needed at the school.

1.8.3 Human Resources

Human Resource Management (HRM) is a relatively new approach to managing people in any organisation. People are considered the key resource in this approach. It is concerned with the people dimension in management of an organisation. Since an organisation is a body of people, their acquisition, development of skills, motivation for higher levels of attainments, as well as ensuring maintenance of their level of commitment are all significant activities. These activities fall in the domain of HRM. Human Resource Management is a process, which consists of four main activities, namely, acquisition, development, motivation, as well as maintenance of human resources.

Scott, Clothier & Spriegel (2000) have defined human resource management as that branch of management which is responsible on a staff basis for concentrating on those aspects of operations which are primarily concerned with the relationship of management to employees and employees to employees and with the development of the individual and the group. Human resource management is responsible for maintaining good human relations in the organisation. It is also concerned with development of individuals and achieving integration of goals of the organisation and those of the individuals.

It is important for the Department of Basic Education to provide a sufficient number of teachers in public schools. All learners are in classes that fall within the prescribed age-appropriate learner: teacher ratio: Grade R: 30:1; other: 40:1. All allocated teacher posts are filled, especially in rural areas. The Department of Basic Education recognises that many schools have overcrowded classrooms. It acknowledged that in 2011 about 15% of public school classes have more than 50 learners. A key

reason for overcrowding is the insufficiency of teachers (South African Human Rights Commission, 2012:24).

The Department of Basic Education makes provision for revised minimum qualifications, support to educators, and incentives to attract young quality educators into the sector. The Department of Basic Education has committed to improving the number of teachers in rural areas through more effective implementation of the policy for better pay for teachers in rural areas. In addition, it has committed to revise the policy on teaching posts to ensure a closer match between demand and supply (Department of Education 2011:6-9).

In order to remedy the shortage of Grade R teachers, the Department of Basic Education should consider the development of provincial staffing plans that identify the numbers of teachers required, as well as a comprehensive training strategy and implementation plan for Grade R educators with short, medium and longer-term targets. All teachers (including Grade R teachers) have the minimum qualifications prescribed by the Government of the Republic of South Africa. The National Qualifications Framework Act (ACT No. 67 of 2008). All teachers at rural primary schools teaching multi-grade classes have been trained in multi-grade teaching strategies as required by the policy on the minimum requirements for teacher education qualifications (Mulkeen & Higgins, 2009:33). Even though there was a vast improvement in the number of qualified teachers between 1990 and 2008 (from 53% to 94, 4%), in 2012 there are a number of inadequacies regarding the qualifications and competencies of teachers to teach all learners, including those with disabilities.

1.9 METHOD OF DATA COLLECTION, ANALYSIS AND INTERPRETATION

For this study a qualitative research method was selected as it involves an in-depth understanding of participants' behaviour and the reasons that govern participants' behaviour (Babooa, 2008:137). The researcher used semi-structured questionnaire to obtain reliable data (De Vos 2005:297). The questionnaire was distributed to both primary and secondary schools within the circuit area office of Seshego, Limpopo Province. The Research was conducted by collecting data from the school

management team members, namely The target population of this study includes; four (4) principals of selected primary schools and eight (8) Principals of selected Secondary schools.

Respondents have been selected on the basis that they are familiar with what is happening in the schools and also at the Department of Basic Education regarding infrastructure. The selected heads of schools have been requested to respond to questionnaires which were hand delivered. The questionnaires were designed to obtain data on the respondents' expectation and perception regarding the quality of the delivery of educational infrastructure in Seshego circuit.

1.10 OUTLINE OF RESEARCH REPORT

The research report consists of five chapters which are as follows:

Chapter One: Introduction

This chapter provides a general introduction to the entire study. It provides the background of the study, explanation of the research problem and what the researcher seeks to find out. The importance or significance of the study is also highlighted in this chapter as well as the limitation of the study and clarification of concepts. Furthermore, the research methodology, ethical considerations as well as the outline of the research report is discussed.

Chapter Two: Literature Review

The chapter explores the available literature on how other scholars have reported on the aspects of educational infrastructure. The literature consulted includes published scholarly books, completed theses and dissertations, journals both for education and public administration disciplines.

Chapter Three: Regulatory framework supporting educational infrastructure

Legislative and regulatory framework underpinning the delivery of educational infrastructure are discussed. The main objective of this chapter is to assist in addressing the understanding of educational infrastructure and the importance of its

delivery thereof as supported by the acts of Parliament and other legislative frameworks.

Chapter Four: Research Design and Methodology

The focus in this chapter is on the overall strategy for conducting research and the design of a research instrument. The population of the study, sampling method, data collection methods and procedures are discussed.

Chapter Five: Data Analysis

Data analysis and interpretation are considered in this chapter. The chapter makes use of themes presented in the study to present analysis of the research findings.

Chapter Six: Conclusion and Recommendations

The chapter seeks to answer whether the research questions have been adequately answered and what the implications of the findings are. This approach is undertaken to consider the manner in which the overall research problem of the study as outlined in chapter one has been addressed.

CHAPTER 2

LITERATURE REVIEW – THE DELIVERY OF EDUCATIONAL INFRASTRUCTURE

2.1 INTRODUCTION

Chapter one of this study generally provided an introduction and background. The focus of this chapter is the review of literature that is related to the delivery of educational infrastructure. Rowley & Slack (2004) suggests that all research needs to be informed by existing knowledge in the relevant field of study. The aim of reviewing literature is to see how other scholars have investigated the research problem, how they have theorized on and conceptualized issues, what they have found empirical, what instruments they have used and to what effect (Mouton 2001:90).

A literature review is important in research because it assists the researcher to identify suitable information and sources that are relevant to the topic and provide insight on the research topic. The review presents information gathered from different researchers and sources, namely, scholarly books and journal articles among others. Majam and Theron (2006), caution that literature review should relate to the research problem of the study and must be logically structured. The literature review in this study is organised into three parts which serve as attempts to analyse the problem of public service delivery which is affecting public schools, infrastructure and education. Before the literature on delivery of educational infrastructure is deliberated, the literature review as a concept is explained in order to give a clear understanding on the approach taken in this study.

2.2 UNDERSTANDING THE CONCEPT OF A LITERATURE REVIEW

Bless & Higson -Smith (2006) suggest that in order to conceive a research topic in a way that permits a clear formulation of the problem, some background information is necessary. This is obtained mainly by reading whatever has been scholarly published that appears relevant to the research topic. This process is called literature

review. According to Leedy & Ormrod (2013) a literature review is the process that describes theoretical perspectives and previous research findings related to the problem at hand.

The function of literature review is to review, or to look again at what others have done in areas that are similar, though not necessarily identical to one's own topic of investigation. A literature review is necessary in that it sharpens and deepens the theoretical framework of the research. That is, to study the different theories related to the topic, taking an interdisciplinary perspective where possible, familiarise the researcher with the latest developments in the area of research as well as in related areas and identify gaps in knowledge, as well as weaknesses in previous studies. That is, to determine what has already been done and what is yet to be studied or improved (Bless, 2006:24).

Babbie (1998) states that one of the most crucial elements of a good literature review is that it assesses whether there has been a consistent finding on the proposed research or whether past studies disagree with each other. A literature review can offer new ideas, perspectives and approaches that may not have occurred to the researcher. It can also boost the researcher's confidence that the topic is worth studying, because others have invested considerable time, effort and resources in studying it. A literature review can be defined as a critical evaluation of previous scholarly writings that are relevant to the research topic (Bless, Higson-smith & Kagee, 2006:24). According to Knopf (2006) Literature review is an attempt to summarise the existing state of knowledge about a subject and, in research's expected contribution to knowledge.

2.3 EDUCATIONAL INFRASTRUCTURE

Considering that there is a need for infrastructure and that there are limited resources available, there is a responsibility on government and development partners to work together to develop approaches that will contribute to significant, measurable and sustainable progress towards national goals and targets. Good school infrastructures always support the educational activities (Buckley, Sheider, & Shang, 2004:9-17). Educational infrastructure in this study refers to proper

classrooms, running water, ablution or sanitary facilities, electricity, libraries and laboratories as well as qualified educators.

The approach required to achieve infrastructure development should be based around the development of long term partnerships with a strong focus on good governance, capacity building, developing management systems and on ensuring that schools and communities (through school management committees and parent teacher associations) have participation in the process. Communities, non-governmental organisations, the private sector and religious organisations can and do make valuable contributions but do not replace the government's responsibility for providing adequate facilities (Department for International Development, 2002).

2.3.1 The Importance of Educational Infrastructure Facilities

The condition, location and nature of school infrastructure have an impact on access and quality of education due to the following reasons:

The closer a school is to children's homes; the more likely they are to attend, both because of distance and safety issues. In addition, where the quality of infrastructure (particularly water and sanitation facilities) is improved, enrolment and completion rates are also improved and there is less teacher absenteeism, and where the condition of school facilities is improved, learning outcomes are also improved. A basic minimum package of school infrastructure which is accessible, durable, functional, safe, hygienic and easily maintained therefore needs to be part of any strategy to meet the goals for any functional basic education system.

In terms of educational infrastructure what will have most impact will vary from school to school. This kind of impact therefore defines educational infrastructure as all of the facilities required for effective teaching and learning such as classrooms, outdoor learning and play areas, furniture, water and sanitation, administration buildings, storage, cooking and boarding facilities (Bonner, 1996:A1-A8). Adequate facilities such as classrooms, halls, libraries, laboratories and playing fields are good examples of developed educational infrastructure. Schools need adequate classrooms to alleviate overcrowding of learners. This is because it is difficult for effective learning to take place if classrooms are overcrowded.

Accordingly, a proper classroom with adequate ventilation is conducive for learning and teaching (Lemlech, 1998:79). Other learning areas, such as arts and culture and life orientation, need a hall for learning and teaching to take place effectively. Drama and dance exercises should be done in an open space like in a hall (Department of Education, 2004:173). The normal classroom with chairs and tables is not conducive for drama and dance exercises. In addition, the availability of laboratories in schools is important because experiments in learning areas such as Natural Science cannot be done in a classroom situation. Therefore, availability of resources, funds, training, educators and a positive school climate are equally important to promote learning and improve the state of educational infrastructure in Limpopo Province.

2.3.2 Educational Infrastructure in Limpopo Province

The Department of Public Works and the Construction Industry Development Board in South Africa have openly acknowledged that the country is facing a challenge with developing infrastructure in previously disadvantaged communities as well as upgrading the existing infrastructure to cope with the high demand of good educational infrastructure (Agumba, 2006). The education system in Limpopo Province is divided into five districts which are controlled by the district senior managers. Each district is divided into several circuits comprising a group of primary and secondary schools. The schools in Limpopo Province are managed by Senior Management Teams, consisting of principals, deputy principals, heads of departments and selected senior teachers responsible for the day to day running of the school.

During 2004, the Limpopo Province had a total of 4,294 public schools and independent schools (Department of Education, 2005:20). Many of these public schools are not considered to be in good condition to support teaching and learning. In the same vein, a national newspaper City Press (2011:12) reports: "In the past year, 239 schools in Limpopo have collapsed – 14 collapsed in one day." This suggests that education in many schools in Limpopo takes place in an environment not conducive to teaching and learning.

In February 2013, the President of the Republic of South Africa highlighted that 98 new schools would be built by the end of March 2013 and that more than 40 of these would be in the Limpopo and would replace mud schools. By May 2013 only 17 schools had been built in the Eastern Cape through Accelerated Schools Infrastructure Delivery Initiative (ASIDI), a programme that was initially meant to eradicate and replace 495 inappropriate structures across the country by the end of 2013/14 financial year. The first batch of 49 schools was meant to have been completed in the 2010/11 financial year (State of the Nation Address, 2011).

This contradicts the President's words at his first State of the Nation Address (SONA) in 2009, where he mentioned that government would, "have to act prudently- no wastage, no roll-overs of funds- [and] [that] every cent must be spent wisely and fruitfully". The tragic death of a Grade R learner falling into a pit-latrines at school in Limpopo highlights how far the Department of Basic Education has to go in order to provide a safe and conducive learning environment. President Jacob Zuma needs to take the issue of inadequate school infrastructure more seriously and be more explicit about his plans for ensuring all infrastructure programmes are properly executed.

The adoption of the Regulations on Minimum Norms and Standards for School Infrastructure is an important step in alleviating the infrastructure crisis, but the challenge now is to implement these Norms within the prescribed timeframes. The delivery of educational infrastructure is a concern and it can no longer be ignored because it reflect public pride, the level of prosperity in the community, social values and behavior and all the many influences both past and present, which combine to give the community a unique character (Kolosa, 2010).

Although the country considers some changes with the improvement of educational infrastructure, there are areas that still need to be addressed and this is central to the focus of this study. Dilapidated infrastructure of public schools is not a feature desirable for any country irrespective of the extent of poverty or wealth of the economy.

2.4 INADEQUATE FUNDING FOR SCHOOL MAINTENANCE

One of the greatest challenges being faced by the Department of Basic Education in Limpopo as cited by the school heads is that of poor funding in rural schools. The budget allocated to the Ministry of Education is inadequate as a result this has caused widespread problems with Infrastructure and commitment to teaching. According to (Morgan, Atkin, Adedeji, & Sieve, 2006) poor funding of education results in poor salaries as well infrastructure and facilities and this heavily compromises on the quality of education delivered to rural students.

Many rural schools lack the essential infrastructure to enable them function as safe, efficient and effective schools. The physical state of classrooms is very poor, with high overcrowding, roofs and ceilings broken and pertinent facilities in a poor state of repair. The budget allocated for facilities maintenance in schools is generally inadequate. In most cases the Department of Basic Education take responsibility for the expenditure of major repairs or replacements of existing school components so that the education process may safely continue (Luisa, Morgan, & Garrity, 2006:247-263).

2.5 BASIC SERVICE DELIVERY

The White Paper on Local Government calls for the development of service delivery capacity to meet the basic needs of the communities. In order for local government to meet the needs of the people, it should ensure that their own service provision priorities are in line with national goals. Local governments also have important roles to play in targeting the poor, instituting programmes that are in synergy with national and provincial programmes, and in addressing service delivery issues that are peculiar to their own communities (Mokate, 1999:17-20).

2.5.1 Service Delivery in Rural Areas

Many governments face competition between rural and urban communities for access to services and delivering appropriate intervention schemes to meet the demands of educational infrastructure (Infrastructure Design Suit, 2006:21). However the extension of these services to rural communities is seen to be inadequate. According to Hemson (2004) the rural backlogs lead to deprivation of

rural areas as a result of lack of access to sustaining services, under-spending and poor management. He further notes that the under delivery of services deny rural communities services that are their fundamental human right which may be crucial to reduce poverty and destitution of these people.

Hemson (2004) cites some institutional challenges that contribute to service delivery under the municipal leadership which are as a result of lack of technical expertise. In order to address these institutional challenges a policy framework for the delivery of infrastructure was developed. This policy point out that infrastructure development in rural public schools is shared between many departments including relevant public utilities (Wildeman 2001:1).

2.5.2 Batho Pele Principles

The white paper on Transforming Public Service Delivery (Batho Pele) of 1997, states that the government of South Africa has been the same as the red tape, due to inefficiency, ineffectiveness, bad attitude and lack of customer service (Van der Waldt, 2004:87). It is unusual to point out public service delivery without mentioning the Batho Pele principles. The introduction of Batho Pele policy (meaning people first) in the public institutions of South Africa has intended to radically change the way public servants treat the communities that they serve.

The policy has specified principles which aim to transform the behaviour of public servants including educators and politicians in the way they interact with the citizens, and to hold these officials and politicians accountable. According to the White Paper on Transforming Public Service Delivery (1997), all public servants in all public institutions must put service to the people first and show improvement in the way they have been rendering service to the public. The principles as set out by the White Paper on Transforming Public Service Delivery (Batho Pele of 1997) are: Consultation, access, courtesy, service standards, information, openness and transparency, redress and value for money. These eight Batho Pele principles were developed so serve as acceptable policy and legislative framework regarding service delivery in the public service.

Although it is an arguable point that not everyone has benefited meaningfully from the higher standard of living, the extensive provision of health and education facilities as well as access to water tends to muddle this. The White Paper on Transforming Public Service Delivery (Batho Pele of 1997) puts more emphasis on the fact that the national and provincial departments should make service delivery a priority. Improving the delivery of public services means redressing the imbalances of the past and includes those who were previously disadvantaged such as woman and the disabled people (Van der Waldt, 2004:87).

2.5.3 Financial Support from the Department of Basic Education

Schools need financial support either from the government and/or private business to improve the conditions of the infrastructure. The government should give financial assistance to public schools if it is concerned with all learners having equal access to basic education. Financial assistance from private businesses to all schools cannot be guaranteed. Funds are required for purchasing learning and teaching support materials, building libraries to encourage learners to read, laboratories for experiments and artwork, and sports facilities for various sporting codes (Bush & Bell, 2002:191).

Numerous funding systems for schools exist in other parts of the world and most of them seem to have been designed to address inequalities in education (Davies, 2005:168). He indicates that the central government allocates some funds directly to schools and other funds to schools via the Local Education Authorities. This arrangement was made to improve the funding to schools and to ensure that basic entitlement conformed to the requirements of the fair funding lobby.

However, they explain that while the intention to fund fairly across England was clear, the opportunity to address the historic inequality of funding across Key Stages had been missed. Bush and Bell (2002) indicate that the traditional welfare state model of school provision (in the USA, in particular in Milwaukee, West Indies; Chile; Colombia; and Sweden) consists of state funding together with state provisioning. They explain that funding comes from either the state or the private sector (parents, charities, churches and business sponsorship), depending on whether or not the

school's assets (building and grounds) are owned and its management employed by the state.

In South Africa, schools receive funds from the Provincial Government and they are allowed to supplement the funds by school fees from parents. In terms of the South African Schools Act [SASA] (RSA 1996) the state funds public schools from public revenue on an equitable basis in order to ensure the proper exercise of the rights of learners to education and the redress of past inequalities in education. Section 21 schools, is those institutions that have been given the status to manage their own financial affairs, receive a lump sum per learner for the payments for which they have responsibility (South African School Act, 2006).

2.6 CONCLUSION

Chapter 2 provided an overview of the existing literature pursued by different scholars. The literature that exists on educational infrastructure has been reviewed and areas of studies that were pursued by different scholars were explored in detail. Scholars agree that educational infrastructure is a universal vehicle by which university entrants are afforded the opportunity to obtain their qualifications (United Nations Children's Fund, 2003).

It has come to the attention of government and policy makers and the community members in rural areas that the dilapidated state of public schools infrastructure can no longer be ignored. This is evident from the publishing of the National Policy for an Equitable Provision of an Enabling School Physical Teaching and Learning Environment by the Minister of Basic Education on the side of government. The policy focuses on issues concerning the dilapidated state of school infrastructure, particularly public schools. Communication between the Government and schools is important, currently it is difficult for schools to access information on when their infrastructure needs will be dealt with by the provincial department and what they can do in the interim to improve the situation. This is partly due to the fact that policies on how schools should be fairly targeted over time are not specific enough which, in some provinces, leads to the use of unclear or unplanned criteria.

After the literature has been reviewed, there is still a need to pursue the study of whether the delivery of educational infrastructure in Limpopo Province could improve. The next chapter reviews the regulatory frameworks in an attempt to understand features of the regulatory framework within which the study is conducted.

CHAPTER 3

REGULATORY FRAMEWORK SUPPORTING THE DELIVERY OF EDUCATIONAL INFRASTRUCTURE

3.1 INTRODUCTION

The literature review in the previous chapter has directed the research to the idea that educational infrastructure is supported by several legislative and regulatory frameworks. Various studies have portrayed that the educational environment has a considerable effect on the outcomes of learning and that better education is achieved when the environment is conducive for learning (Duyar, 2009:3-15). There are different acts of parliament and other statutory guidelines which guide the delivery of educational infrastructure in the previously disadvantaged communities and provinces such as Limpopo.

3.2 LEGISLATIVE AND REGULATORY FRAMEWORK

There are legislative guidelines that support the delivery of educational infrastructure in the previously disadvantaged public schools of South Africa. In terms of section 15 of the South African Schools Act (SASA), every public school is a juristic person with legal capacity to perform only such functions and exercise only such rights and to perform only such obligations as provided in this act (South Africa, 1996b). The management and administration of the education system is structured around two spheres, namely, national and provincial (Naidu, 2008:21). The legal framework that governs education through the establishment and functioning of the different structures at these levels is the National Education Policy Act of 1996 (Van Rooyen, 2012:30).

3.2.1 The South African Schools Act (SASA, 1996)

The introduction and implementation of the South African Schools Act and the several Education Laws Amendment Acts (Amendments to the South African Schools Act) has made several inroads into the governance and the management of all South African schools, in particular public schools. An assessment into how South

African Schools Act impacts upon the delivery of school infrastructure and the status of schools as a legal, public entity can now be made.

In terms of South African Schools Act, 1996, the objectives of the regulations are to provide minimum uniform norms and standards for public schools infrastructure; to ensure that there is compliance with the minimum uniform norms and standards in the design and construction of new schools and additions, alterations and improvements to schools which exist when these regulations are published; and, to provide for timeframes within which school infrastructure backlogs must be eradicated (South Africa, 1996).

The South African Schools Act (Republic of South Africa, 1996) ushered in a new direction in school infrastructure in South Africa. With regard to school infrastructure, the Schools Act prescribes that the state has a responsibility to provide basic school infrastructure to all public schools, particularly those that were previously disadvantaged. Section 34 of Schools Act prescribes that the state must fund public schools from public revenue on an equitable basis in order to ensure the proper exercise of the Schools Act.

The South African School Act serves as a guideline in terms of who has to make sure that educational infrastructure meets the required standards as it put more emphasis on the fact that the Member of the Executive Council must, for the purpose of sub regulation prioritise the norms and standards relating to the availability of classrooms, electricity, water, sanitation, electronic connectivity and again the MEC must specifically focus on the norms and standards relating to libraries and laboratories for science, technology and life sciences (Republic of South Africa, 1996).

3.2.2 Infrastructure Development Act 23 of 2014

The purpose of this Act is to provide for the facilitation and co-ordination of public infrastructure development which is of significant economic and social importance to the Republic; to insure that infrastructure development in the Republic is given priority in planning, approval and implementation; to ensure that the development

goals of the state are promoted through infrastructure development and to improve the management of such infrastructure during all life-cycle phases (South Africa: Infrastructure Development Act 23 of 2014).

In South Africa, as in every country, infrastructure underpins economic and social development. Both the New Growth Path and the National Development Plan stress the importance of infrastructure as a jobs driver. They agree that a central task for the state is to ensure that infrastructure grows sufficiently to serve the expanding economy and population, and that it is built, operated and maintained efficiently and cost-effectively, South Africa: (Infrastructure Development Act 23 of 2014).

Investment in infrastructure is a particular imperative for South Africa because apartheid was characterised by underinvestment in infrastructure in black communities, especially in the rural areas. This situation hobbled economic and social development in these regions, making it more difficult for enterprises to take advantage of economic opportunities and undermining efforts to improve education, health, and security.

Given the scarcity of resources, addressing these backlogs while maintaining adequate infrastructure for the economy and fast-growing areas, requires careful prioritization and collaboration. The division of responsibilities for infrastructure across the state, from the national departments to state-owned companies to municipalities and regulatory bodies, leads to the risk of contradictory plans and priorities or uncoordinated implementation with cost-raising and development-dampening effects.

3.2.3 The White Paper on Education and Training of 1995

According to the White Paper on Education and Training (Republic of South Africa, 1995), the post-apartheid education dispensation in South Africa had to communicate the fundamental principles of transformation in terms of open access to quality education, redress of educational inequalities, and utilisation of state resources to achieve equity, community participation, democratic governance accountability and financial stability.

In this regard, the White Paper states that the present pattern of organisation, governance and funding of schools is a patchwork from the past. It contravenes the rights to equality and non-discrimination which the Constitution guarantees. This policy framework prescribed by the White Paper led to the ratification of various Acts bearing relevance to school facilities. The most relevant legislative provisions are the South African Schools Act No 84 of 1996, which directly relates to school infrastructure, and the Public Finance Management Act No 1 of 1999.

The White Paper on Education (2001), together with its accompanying Guidelines; oblige the Department of Basic Education to ensure access for all children. The Department of Basic Education develops, legislates and implements national education infrastructure norms and standards, which include Universal Design infrastructure standards for learners with disabilities, for an enabling teaching and learning environment. The norms require all provincial departments of Basic Education to align their plans and budgets with the prescribed norms and standards.

Ensure all schools have essential and basic services including safe structures, fencing, ventilation, lighting, safe potable water, adequate and hygienic sanitation, electricity, and information communication technology so as to create a safe and enabling learning and teaching environment and also ensure that all schools and school infrastructure comply with Universal Design (UD) standards for children with disabilities to ensure equal access to, and the enjoyment of, all school facilities and buildings.

All public schools comply with the infrastructure standards for basic services outlined in the National Policy for the Equitable Provisioning of the Enabling School Physical Teaching and Learning Environment (2010) and the Guidelines Relating to Planning for Public School Infrastructure (2012) through the eradication of all mud structures and other unsafe buildings; the provision of a safe basic potable water supply to all schools; the eradication of plain pit and bucket latrines and the provision of sanitation facilities that promote health and hygiene standards; the provision of perimeter fencing; the provision of a reliable and safe source of electricity; and, the provision of a form of connectivity for communication and a telephone and fax machines.

3.2.4 Guidelines Relating To Planning For Public Schools Infrastructure

The Minister of the Department of Basic Education Ms Angie Motshekga published a call for comments on the proposed National Policy for an Equitable Provision of an Enabling School Physical Teaching and Learning Environment (Republic of South Africa, 2008). The proposed framework takes cognisance of the importance of a systematic approach to proper infrastructure at schools. Among other aspects, it makes the following points: Equality of educational opportunities is one of the principles enshrined in our Constitution.

The Department of Basic Education (DBE) interprets this principle as entailing equity of both education resource inputs and thus education outcomes. One of the most visible forms of inequality in the provision of resource inputs has been the physical teaching and learning environment, the key elements of which include infrastructure, basic services, equipment and furniture. Government has made progress in the provision of infrastructure. However, there are still imbalances with regard to the core elements or the basic mix of educational resource inputs constituting an enabling physical teaching and learning environment, Republic of South Africa (SASA,2008).

There is evidence that a lack of guidance in providing for this basic mix of inputs has resulted in inadequate provision of school facilities and a lack of uniformity in providing those facilities; and difficulty in assessing the current environment as adequate or inadequate against clear benchmarks which had been determined in advance. In addressing these, the Department of Basic Education published the National Policy for an Equitable Provision of an Enabling School Physical Teaching and Learning Environment (Government Gazette, 2010:177). The objective of this policy is to guide the provision of an enabling physical teaching and learning environment that is sustainable and equitable for all learners in South Africa, as well as to ensure that future investments are aligned with this definition (South Africa: South African Schools Act, 1996).

It is apparent that proper school facilities still need to receive attention in South Africa. However, it is equally important that, for schools to attain their educational goals, educational infrastructure be regarded as a crucial aspect that cannot be left

out. It is therefore essential to explore this phenomenon of educational infrastructure so as to understand its essence (South Africa: South African Schools Act, 1996). Educational infrastructure entails much more than just building few classroom blocks. It entails proper classrooms, running water, ablution or sanitary facilities, electricity, libraries and laboratories.

3.2.5 The South African Human Rights Commission (Education Rights Charter Part 1)

The South African Human Rights Commission (2012) states clearly that it is the rights of learners to be provided with sufficient, safe, functional educational institutions. The State's obligation is to provide sufficient schools and classrooms to accommodate all children at pre-primary, primary and secondary levels of education in classes of a size amenable to providing an enabling learning and teaching environment. This charter is underpinning the delivery of educational infrastructure as an obligation, especially in the rural communities.

All children from Grades R to 12 are accommodated in a school from the start of the school year. All schools should have the minimum number of classrooms required to adequately accommodate all learners to create an enabling learning and teaching environment: for instance, Primary schools with 135-310 learners have: 1 Grade R classroom and 7 classrooms; Primary schools with 311-620 learners have: 2 Grade R classrooms and 14 other classrooms; Primary schools with 621-930 learners have: 3 Grade R classrooms and 21 other classes; Secondary schools with 200-400 learners have: 10 classrooms; Secondary schools with 401-600 learners have: 15 classrooms; Secondary schools with 601-1000 learners have: 25 classrooms. All children from Grade R-12 are accommodated in classes that do not exceed the prescribed learner: teacher ratio, which is: 1:30 for Grade R; 1:40 for all other Grades. There is equal compliance with prescribed class sizes across the nine provinces (South African Human Rights Commission, 2012:19-23).

The most recent data provided by the Department of Basic Education indicates that the average class reduced in size from 38 in 2008 to 29 in 2010. Whilst this reflects a substantial improvement, there is provincial variation in class sizes, with children in

provinces with high poverty levels, such as Limpopo and the Eastern Cape, continuing to be taught in overcrowded classrooms. In 2010 a substantial number of primary and secondary schools had average class sizes well in excess of the prescribed 40 learners. Six percent of schools had an average class size in excess of 60. The majority of these were in Limpopo and the Eastern Cape (South African Human Rights Commission, 2012:19-23).

In addition, a large number of public school Grade R classes are overcrowded. A three-province study in 2011 found that 55% of classes exceeded the 30:1 learner–teacher ratio. The Department of Basic Education has committed to addressing all backlogs. It is constructing 49 new schools, with priority being given to marginalised communities, scheduled for completion on 31 August 2012. The schools include small and medium-sized primary schools that include Grade R spaces, science laboratories, multi-media centers, rainwater tanks, ablution facilities, assembly and play areas.

3.2.6 National Policy for an Equitable Provision of Enabling School Physical Teaching and Learning Environment (2010)

The National Policy for the Equitable Provision of an Enabling School Physical Teaching and Learning Environment (2010) recognises that infrastructure is critical to quality learning and teaching and good educational outcomes, and that “equity in the provision of an enabling physical teaching and learning environment is ... a constitutional right and not just a desirable state” (Paragraph 2.6.1). In 2011/2012 there were significant infrastructure backlogs and provincial inequities in the rate of access to basic services and Universal Design infrastructure at public schools. The situation is worse in provinces with high poverty levels and which are predominantly rural, such as Limpopo, Eastern Cape, and KwaZulu-Natal (KZN).

Data collected by the Department of Basic Education (DBE) in 2011 show that there were over 400 unsafe mud structures; and of the 24, 793 ordinary public schools;

- 3,544 schools do not have electricity;
- 2,402 schools have no water supply;
- 913 do not have ablution facilities and 11,450 still use pit latrines;

- 22,938 schools do not have stocked libraries;
- 21,021 schools do not have any laboratory facilities;
- 2,703 schools have no fencing and
- 19,037 schools do not have a computer centre (Jemieson, Stein & Waterhouse, 2013/2014)

The National Policy for the Equitable Provision of an Enabling School Physical Teaching and Learning Environment (2010) specifically seeks to ensure and equalise provisioning of infrastructure across all the provinces. In order to ensure provincial equity, the policy commits the national Department of Basic Education to develop national norms and standards for the physical teaching and learning environment. It understands that these norms will explicitly define what constitutes minimum and optimum provisioning, and obliges all provinces to comply with the minimum norms. The Presidential Infrastructure Coordinating Committee develops, monitors implementation of, and reports on a national school infrastructure plan aimed at filling provincial and district-level school infrastructure gaps and inequities (Education White Paper, 2001).

The provincial differences in the rate of public school access to safe school structures, water, sanitation and electricity and infrastructure do not exceed 10%. The National and Provincial Parliamentary oversight committees call for, and comment on, at least two departmental reports per year, on infrastructure budgets, expenditure, backlogs, plans to address backlogs and the state of infrastructure for all children, including children with disabilities. Draft norms and standards were developed in 2008. However, they have never come into effect. Instead, on the instruction of the Council of Education Ministers in 2012, they have been converted and downgraded in legal status to a set of guidelines.

The Guidelines Relating to Planning for Public School Infrastructure (2012) provide that a “school environment will not meet basic safety requirements where there is “a lack of access to potable drinking water and sanitation facilities”, “toxic substances in the school environment”, “extremely unsafe building structures that could collapse on top of learners”, and “inadequate fencing”. In addition, a number of basic services

are recognised as essential for meeting the “minimum functionality requirements”, including ablution facilities and electricity.

It is thus critical that National Uniform Minimum Norms and Standards for School Infrastructure be legislated and implemented as required by the governing policy. The National Department of Basic Education is keenly aware of the backlogs in the provisioning of basic services at schools, and announced an Accelerated Schools Infrastructure Delivery Initiative (ASIDI) in its 2011 - 2014 Strategic Plan. In terms of this programme, it has committed to; eradicate all 496 mud schools by 2014. Fifty will be eradicated by 2011/12; 100 by 2013/14; and 346 by 2013/14. Supply potable water to 1257 schools by 2014; 188 will be serviced by 2011/12 and 1069 by 2012/13. Supply electricity to 878 schools by 2014, with 164 receiving electricity by 2011/12 and 714 by 2012/13. Supply adequate and hygienic sanitation facilities to 868 schools by 2014. Three-hundred-and-fifty-four schools will have sanitation by 2011/12 and 514 by 2012/13.⁴⁴

The Accelerated Schools Infrastructure Delivery Initiative is supported by two dedicated infrastructure grants. The first is the Education Infrastructure Grant of R5.498 billion in 2011/12, increasing to R6.207 billion in 2013/14. The second is the School Infrastructure Backlogs Indirect Grant of R700 million for 2011/12, increasing to R5.189 billion in 2013/14. The Department of Basic Education reported in February 2012 that significant delays in procurement processes for basic services had held back the realisation of the 2011/12 targets and resulted in significant under-expenditure of allocated budgets in the Eastern Cape and Limpopo provinces.

The 2012 parliamentary analysis of the Department’s budget notes with concern that only 63% of the total adjusted Basic Education budget of R9.1 billion allocated for infrastructure backlogs in 2010/11 was spent. The expenditure was significantly lower in the Eastern Cape, where only 24% of the infrastructure budget was spent. In addition, in the Eastern Cape and Limpopo, lack of fiscal discipline resulted in the frustration of policy priorities and deepened inequity in these provinces. In its briefing to Parliament in February 2012, the Department of Basic Education recognized these challenges and reassured the Portfolio Committee on Basic Education that

“sufficient plans are in place to ensure improved delivery in terms of progress and expenditure on the (ASIDI and other) programme[s] and that set targets are met”.

3.3 CONCLUSION

The discussion in this chapter indicates that educational infrastructure delivery should be informed by relevant legislative and regulatory frameworks. To promote effective teaching and learning in schools, the Department should create an environment conducive to learning by making sure that all schools have buildings and other basic infrastructural provisions conducive to their core mandate. This should include aspects such as adequate and appropriate classrooms, staff rooms, office blocks, specialist rooms, electrical power, water and sanitation, among others.

The Department is required to also supply all learners in the system with appropriate learning and teaching support materials in order to promote and support teaching and learning in schools. These should include Textbooks, Stationery, Library materials, Laboratory equipment, devices and chemicals, to mention just a few (Department of Education Annual Performance Plan, 2014/15). The legislation that supports educational infrastructure has been discussed in depth. The next chapter discusses the design and methodology undertaken to validate data that is collected.

CHAPTER 4

RESEARCH DESIGN AND METHODOLOGY

4.1 INTRODUCTION

In the previous chapter the regulatory framework supporting the delivery of educational infrastructure was discussed. The purpose of the research methodology as discussed in this chapter is to review different methodologies available at the researcher's disposal and provide justification for the research method used in this study. Before presenting the research findings on the factors which lead to poor educational infrastructure, it is important to clarify the methodological approaches available and those employed in this study (Christie, 2001:216). Research methodology considers and explains the logic behind research methods and techniques (Welman, Kruger and Mitchel, 2005:149). It therefore has a much wider scope than research methods which, in turn, have a wider scope than research techniques.

For this study a qualitative research method is selected as it involves an in-depth understanding of participants' behaviour and the reasons that govern participants' behaviour (Babooa, 2008:137). This method seeks to understand a given research problem from the perspective of the population it involves. In his dissertation, Budugela also used the qualitative research method when conducting a similar study. In his study, he investigated the challenges that are faced by educators in implementing the national curriculum statement.

Qualitative approach is applicable to the assessment of problems in the delivery of educational infrastructure in Limpopo Province. A study has been conducted in Seshego circuit, Limpopo Province in order to determine the educational infrastructure process involved in delivering educational infrastructural needs as well as to analyse the challenges facing schools with regard to educational infrastructure.

4.2 DIFFERENCES BETWEEN QUANTITATIVE AND QUALITATIVE METHODOLOGY

4.2.1 Quantitative Research Method

Quantitative research method attempt to maximize objectivity, reliability, and generalisability of findings, and are typically interested in prediction (Harwell, 2007:149). The purpose of quantitative research is not to deal directly with everyday life but rather with an abstraction of reality in attempt to understand the facts of a research investigation from an outsider's perspective (Mitchel, 2007). In quantitative research, scientific techniques are used to obtain measurements and the analysis of data therefore yields quantified results and conclusions derived from evaluation of the results in the light of theory and literature (Fellows, 2009:7-8). Lapan and Quartaroli (2009) emphasize the fact that quantitative research results in numeric and quantifiable data and that these type of research could either be experimental or non-experimental.

4.2.2 Qualitative Research Method

Qualitative research is a type of scientific research. In general terms, scientific research consists of an investigation that seeks answers to a question; systematically uses a predefined set of procedures to answer the question; collects evidence; produces findings that were not determined in advance and produces findings that are applicable beyond the immediate boundaries of the study.

Qualitative research approach involves an in-depth understanding of participants' behaviour and the reasons that govern participants' behaviour (Babooa, 2008: 137). Unlike a quantitative research approach, qualitative research relies on reasons behind certain behaviours and experiences of the participants. This research domain makes an attempt to investigate the why and how of educational infrastructure as is the case in this study as compared to what, where and when of the quantitative research domain. If it were the case that this study featured elements of a quantitative research approach, a main focus would have been interested in the numbers and statistical data regarding the Educational infrastructure in the Seshego circuit. For example, the focus of quantitative research would have been on the

compliance rate regarding delivery of educational infrastructure such as how many schools that have been built since 1994. Qualitative researchers often depend on four methods of gathering data, namely, participation in the settings, direct observation, in-depth interviews and analysis of responses (Babooa, 2008: 137).

Mitchel (2007) further adds that qualitative research involves small samples of people being studied by means of in depth methods as it emphasises the meanings and experiences related phenomena. Qualitative research comprises of historical research, phenomenological approach and qualitative measurement.

In qualitative research, the beliefs, understandings, opinions and views of people are investigated. The data may be unstructured at least in their raw form but will tend to be detailed and hence rich in content and scope. Qualitative research takes an exploration subject without prior formulations, the objective is to gain understanding and collect information and data such that theories will emerge (Fellows, 2009).

4.3 SAMPLING

A population is the full set of cases from which a sample is taken (Mitchel, 2007:126). A sample is a small group of research participants from which data is collected. The extent to which the sample has the same characteristics as the general population of interest determines its representativeness quality. The objectives of sampling is to provide a practical means enabling the data collection and processing components of research to be carried out whilst ensuring that the sample provides a good representative

4.4 DIFFERENT SAMPLING METHODS

4.4.1 Simple Random Sampling

Simple random sample is used when the population is uniform or has similar characteristics in all cases usually in a large population (Walliman, 2004:230). There are two steps necessary to draw a random sample. Firstly, we need to identify all the units of analysis in the sampling frame and give them consecutive numbers. Secondly, the mechanism used to choose the units of analysis should ensure that

each number has an equal chance of being selected. This can be done by means of a table of random numbers (Mitchel, 2007).

4.4.2 Purposive Sampling

Purposive sampling is a useful method of getting information from a sample of the population that one thinks knows most about a subject (Walliman, 2004:230). To achieve this, the researcher will clearly define the characteristics that depict the persons, settings, times, independent variables and dependent variables for which the researcher wants to generalise and pick a sample from this (Lapan, 2009). The study used purposive sampling. As Walliman (2001) notes that purposive sampling gives the researcher a typical sample to rely upon in terms of in-depth study of form and substance.

Purposive sampling is a strategy to choose small groups or individuals likely to be knowledgeable and informative about the subject of interest. In purposive sampling, participants are chosen for a particular purpose and the researcher has a reason why s/he has chosen the participants. In this study, the researcher sampled participants who are involved in educational infrastructure development, the principals, or deputy principal in the case where the principals were not available.

4.5 CHOICE OF RESEARCH METHODS FOR THE STUDY

Due to a vast geographical area of Limpopo Province not all public schools could be accessible to the researcher. Consequently, the research was conducted in Seshego circuit, Polokwane (Limpopo Province). The researcher then administered the questionnaire to eighteen schools that were reachable. (Agumba, 2006) comments that when one selects a well chosen few and then observes with insight, they will tell you lot more than all the multitudes together.

The research focuses on the educational infrastructure delivery and challenges that are facing both primary and secondary schools at Seshego circuit with regard to educational infrastructure. This study was conducted by collecting data from both primary and secondary schools within Seshego circuit. Respondents were selected on the basis that they are familiar with activities and management in the Department

of Basic Education regarding the provision of educational infrastructure within schools. The researcher approached the Department of Basic Education in Limpopo for a list of schools that are within Seshego circuit. From the list given the researcher then administered questionnaires to eighteen schools and only twelve schools managed to respond to the questionnaire.

4.6 DATA COLLECTION METHOD

There are two kinds of data, namely primary data and secondary data. Primary data refers to the data which is obtained from the original source while secondary data refers to the data that is available in published literature (Hanekom, 1987:28). The collection of primary data for this study was done through a semi-structured questionnaire.

4.6.1 Semi-structured questionnaire

A questionnaire is a set of questions for gathering information from individuals. Participants are to respond in order to obtain data which is relevant to the research topic (Evaluation Briefs, 2008:1). Participants included principals from both primary and secondary schools within the Seshego circuit. The study employed a semi-structured questionnaire comprising of questions which the researcher was able to make follow-up questions on the basis of responses. A semi-structured questionnaire was used to gather data from participants because it provided participants freedom to express their opinions the way they understand the situation. According to Myers (2007) the advantages of using a semi-structured questionnaire include that: it helps the researcher to obtain data fairly easy; information from a questionnaire can be easily coded; benefits the scientific community if the measures are well validated and are reliable and it is often a catharsis for respondents.

4.7 CONCLUSION

This chapter provided a discussion of the research method and it has also outlined the design of the research instrument as one of the important methods of data collection used in this study. Qualitative research as the approach in this study is also discussed. The research area as well as the sample was provided in detail.

Chapter five will examine the research findings as well as the interpretation of the data collected.

CHAPTER 5

DATA ANALYSIS AND INTERPRETATION OF THE RESULTS

5.1 INTRODUCTION

The previous chapter discussed in what way the research was undertaken. The purpose of this chapter is to present and interpret the empirical findings of this research. In interpretation, the immediate results are translated into integrated and meaningful findings. The findings are proved to be related to the objectives of the research. The success of this study is assured through both the data analysis and interpretation which are carried out in an orderly manner.

In this study, the data consist of questionnaires, and was analysed in order to understand the experiences of principals on educational infrastructure of their schools. A questionnaire was developed as a method of collecting data from the target population, principals of both primary and secondary schools of Seshego circuit. The questionnaire was informed by the review of relevant literature. It was designed to identify factors and reasons to investigate the lack and shortage of educational infrastructure.

The questionnaire was divided into three sections. Section A consists of biographical information which consists of 7 questions or items that were responded to. The other two sections B and C provides semi structured questions related to the objectives of the study. The sixteen (16) questions are designed to obtain the experiences of the principals with regard to the delivery of educational infrastructure in their area. The questions are based on the key factors which are regarded as having an influence on the delivery of educational infrastructure.

5.2 RESULTS AND DISCUSSIONS

Data obtained from the questionnaires was analysed and interpreted. This chapter reveals the responses on a question-by-question basis. Results from all sections of the questionnaire are also compared to existing theoretical evidence and obtained from the literature review as well as other empirical evidence to assess consistency. This is the initial section of the research instrument which served to collect general information relating to issues of gender, position of the respondent in circuit, age, years of experience, category, location, and type of highest level of educational qualification and the effectiveness of the interventions that supported educational infrastructure. The participants for this study are school principals. Twelve (12) participants were involved in this study. The participants are from both primary schools and secondary schools in the township as well as the villages under Seshego Circuit.

5.3 FINDINGS FROM THE QUESTIONNAIRE

The participants were asked sixteen questions of which the first seven were based on the need to understand their biographical details. As indicated in chapter four, the focus has been on two categories of the schools, primary schools and secondary schools. The semi-structured questionnaire was distributed to eighteen school principals and twelve of them responded. Participants to the study are all principals. Principals from four primary schools and eight secondary schools responded to questionnaires. The reason for selecting principals of schools is that the authority for the professional management of the school is vested with the principal, supported by the professional staff.

The male principals are seven and constitute 58% of the participants while their female counterparts are five which constitute the remaining 42%. There was a need to determine the gender of respondents in order to enable the researcher to make demographic inferences concerning the respondents. Participants exhibited an inclination towards a gender balance between male and female principals.

The age composition of the research sample of principals is provided. Seven principals are between the age fifty-seven and sixty; four of them are between the

ages forty-six and fifty-five; only one principal is between the age thirty-six and forty-five. It is very important to be aware of the age distribution of the participants. This will enable the researcher to know whether respondents are old or young, Zindiye (2008:150). The majority of respondents have many years of experience; the results indicate that all principals that participated have more than fifteen years work experience.

5.3.1 Participants' definition of the infrastructure condition of the schools

Participants were asked to define the condition of infrastructure in their schools. One respondent indicated that the school has come of age. Some blocks were built by the community a long time ago and they were never renovated, classrooms are old and dilapidated. Ablution facilities are also not enough and the toilets for learners are also not in good condition. He further indicated that generally the infrastructure is not that good; in most of the schools there are few classrooms and often without staffrooms and about twenty teachers have to fit in two offices used as staff rooms. Another participant commented that there is a serious lack of educational infrastructure and the learner's enrolment is very high. In other words, the number of classrooms should be increased to accommodate the number of pupils enrolled.

However, other participants commented that the infrastructure is better but not in a desirable state, while others stated that the infrastructure is reasonable good since the building of the school is new and well taken care of by the learners and community. Only 8% of the participants are satisfied with the infrastructural condition of the schools. The status reflected by the participants implies that many of these public schools are not in a good condition to support teaching and learning. It is evident from the findings of the study that the delivery of educational infrastructure by the Department of Basic Education to the rural and township schools of Seshego circuit is still a challenge.

5.3.2 Reasons why the infrastructure is in the conditions that they are in currently

All schools sampled are no-fee paying schools, which mean that they are totally dependent on the Department of Basic Education for the delivery and improvement of educational infrastructure which might be the reason why it is difficult for the Department of Basic Education to attend to all the infrastructural needs of the schools in Limpopo Province. A question was asked on why principals think that the infrastructures of their schools are in the conditions that are in currently. One participant commented that the reason why the school infrastructure is in a bad condition is that the school building is very old, it was established in 1982 and it has never been renovated due to insufficiency of funds given by the Department of Basic Education, since most of the funds are used for learner's support material.

5.3.3 The number of classrooms per grade

Six schools are from the different sections of Seshego Township and the other six schools are from the surrounding villages of Seshego circuit. The majority of schools have three classrooms per grade and the numbers of pupils in those classrooms are many. This finding emphasizes the fact that the schools are over populated and there is a need for classrooms to be increased or more schools to be built under Seshego circuit.

Crowded classroom conditions not only make it difficult for students to concentrate on their lessons, but inevitably limit the amount of time teachers can spend on innovative teaching methods such as cooperative learning and group work. In addition, because teachers must constantly struggle to maintain order in an overcrowded classroom, the likelihood increases that they will suffer from burnout earlier than might otherwise is the case. The classes are as large as 50 pupils and the teacher has to use creative means of monitoring each child irrespective of the congestion.

5.3.4 What is the type of contribution provided by different stakeholders in ensuring the delivery of educational infrastructure in your schools?

Other stakeholders such as the municipality, business organisations and the community are not fully involved in educational infrastructure delivery in the Seshego circuit, only the Department of Basic Education provides schools with financial and physical resources. The schools in the Seshego circuit source their funding mainly from the Department of Basic Education. The SGB only supports the school on matters relating to governance. According to the South African School Act, the roles of SGB amongst others include the following; starting and administering a school fund, supplementing the funds supplied by the Department of Basic Education and also fund raising efforts.

5.3.5 How effective are the interventions that supports educational infrastructure?

Almost all of the respondents echoed the fact that the intervention from the Department of Basic Education is not effective. They mentioned that the Department sends officials to collect statistics of the infrastructural needs of their schools but after that there is nothing happening and that the schools submit reports to the Department of Basic Education with their needs but the situation remains the same. The respondents mentioned that they don't benefit anything from the National Education Infrastructure Management System (NEIMS). They also mentioned that the Department of Basic Education keeps the database of needs for all schools in the Province, but it takes a long time for the school's needs to be attended to.

5.4 FINDINGS FROM THE ANALYSIS

Educational infrastructure of public schools directly affects teaching and learning. The following subtopics emerged from this study, school building, toilets and school facilities such as library and laboratories.

5.4.1 School Buildings

In some schools among the participants mentioned that generally the buildings are old and dilapidated, the degree of overcrowding in schools is due to insufficient

number of classrooms. In the Seshego circuit there are many schools that do not have an administration block; meanwhile it is an important resource that facilitates the administration of the school which is necessary for sound planning as a foundation for effective schooling (Msibi, 1993:81). The School Register of Needs Survey asserts that in some of the schools there is severe shortage of classrooms and other resources, such as desks for learners. In some cases teachers hold staff meetings, during working hours, under trees as if they “....are members of a tribal court.” (City Press, 2005:19).

Classrooms are not enough to be able to cater for the number of pupils' enrolled. In other schools windows are broken and it takes time to repair them. In most cases learners are the once causing the damage. And if the community members are involved in the education of their children, the conditions of school being vandalised will possibly improve as the community will have pride in the school buildings and they may take responsibility of repairing any damage in the school.

5.4.2 Toilets

The provision of sanitation to schools in Limpopo Province has improved. However, there are still schools with insufficient toilets. The situation is worsened by the fact that there are still schools with toilets that are not working. Accordingly, the School Register of Needs Survey, Department of Education (2000) argue that in 2000 the Limpopo Province had a highest proportion of toilets that were not working when compared to other provinces. In the schools visited, they indicated that there are limited numbers of toilets and in other schools there is no water, hence these toilets were locked and only pit toilets were working. Based on the limited number of toilets, learners could be affected academically and it may also cause learners to be absent from school. Healthy toilet facilities are essential for the learners' health as poor health can affect academic achievement (Hartley & Swanson, 1984:33-37).

5.4.3 Libraries and Computer Laboratories

Both facilities are nonexistent generally in all the sampled schools. The Education African Forum (2003) supports the idea that the culture of teaching and learning in previously disadvantaged schools is declining based on the unequal access to

resources. Access to technology is crucial in today's schools. Fouts (2000) note that with increased access to computers and the internet; researchers extended their efforts to investigate the role of technology in the educational setting, including its impact on teachers and the learning process.

Given the enormous potential of distance learning for rural schools and the universal necessity for today's students to be "computer literate," an adequate education system must ensure that the technology needs of rural students are addressed. Contributing further to this debate Hobbs (2004), mentions that technology is also critically important for rural schools because long distances and sparse populations define many rural places, making it difficult and potentially expensive to offer students a high quality curriculum. Technology is the vehicle through which small rural schools can offer students an advanced, varied, and cost-effective curriculum.

5.5 CONCLUSION

School infrastructure has a direct effect on teaching and learning. Poor school conditions make it more difficult for teachers to deliver satisfactory education to their students. The study established that the reason for the inadequate and dilapidated infrastructure is attributed to inadequate funds. The budget allocated to schools by the Department of Basic Education is not sufficient to carry out maintenance of schools; the department has a backlog in buildings schools; and again head of schools often sends their infrastructural needs to the Department in a form of reports, but those efforts do not yield results.

The research only focused in the schools under Seshego circuit which is in Limpopo Province. Nonetheless, the researcher believes that other rural areas and townships of the Republic of South Africa experience similar challenges, therefore, the recommendations made in this study will be beneficial to the country as a whole. According to Hemson (2004) the rural backlogs lead to deprivation of rural areas as a result of lack of access to sustaining services, under-spending and poor management. He further notes that the under delivery of services deny rural communities services that are their fundamental human right which may be crucial to reduce poverty and destitution of these people.

CHAPTER 6

SUMMARY, RECOMMENDATIONS AND CONCLUSION

6.1 INTRODUCTION

The previous chapter discussed the findings and analysis of the data obtained through a semi-structured questionnaire. The purpose of this chapter of the research is to provide concluding remarks on the research problem raised. Useful recommendations based on the data analysed in the previous chapter is provided in order to assist the Department of Basic Education in the improvement of educational infrastructure delivery in public schools. The South African Government's core responsibility is to provide its citizens with basic essential services, such as water, sanitation, health and education. The delivery of educational infrastructure cannot be limited to urban schools but should be provided to all schools in South Africa especially previously disadvantaged communities. The objective of this study was to assess educational infrastructure delivery in Seshego circuit.

The research also paid attention to the available legislative framework that aims at addressing educational infrastructure in South Africa. Qualitative research method was used to conduct the study. The questionnaire was designed to determine the conditions of infrastructure in both primary and secondary schools under Seshego circuit. Eighteen (18) semi-structured questionnaires were distributed to the school principals but only twelve (12) were responded to. The collected data was analysed and interpreted. This chapter gives a summarised explanation of this study; highlights the objectives and findings of the research; and also makes recommendations. A summary of the preceding chapters is provided below.

6.2 SUMMARY

Chapter 1 presented the background and rationale for the study. The research objectives were outlined. The chapter presented assumptions, significance of the study, overview of the research design and methodology, the delimitation and study limitations.

Chapter 2 presented a literature review of educational infrastructure. It also contextualised the phenomenon of educational infrastructure within the school as an organisation and as a component of educational infrastructure which then defined educational infrastructure delivery as an activity undertaken by the school community in ensuring that school facilities are in a condition that delivers and supports educational programmes in a continuous and optimum manner.

Chapter 3 provides a legislative framework in terms of educational infrastructure in South Africa was also given. This indicated that South Africa is at the initial stages of establishing policy and legislative directives for school infrastructure provisioning.

Chapter 4 outlined the research design and methodology. The paradigmatic orientation was first explained. To this end, this study used a qualitative approach in an attempt to understand phenomena through the meanings that people assign to them and by interacting with them in their natural settings and through their language. Thus the research method as presented involves responding to questionnaires as data collection strategy. This chapter also introduced the participants and the basis of their selection, as well as the selection of research sites. Data analysis as is typical of qualitative research was then outlined. The chapter was concluded with the exposition of ethical considerations.

Chapter 5 presented the data analysis and interpretation. In this regard, the demographic profile of participants and research sites were presented followed by the analysis of data relating to the conditions of school facilities in terms of school buildings, toilets, libraries and computer laboratories.

6.3 ADDRESSING STUDY OBJECTIVES

For effective delivery of educational infrastructure there should be progress across the three spheres of government particularly with regard to facilities required for effective teaching and learning such as classrooms, furniture, administration buildings as well as water and sanitation. Given the need for infrastructure and the limited resources available there is a responsibility on government and development partners to work together to develop approaches that will contribute to significant, measurable and sustainable progress towards national goals and targets and provide good value for money.

The approaches required to achieve this should be based around the development of long term partnerships with a strong focus on good governance, capacity building, developing management systems and on ensuring that schools and communities (through school management committees and parent teacher associations) have participation in the process. Communities, non-governmental organisations, the private sector and religious organisations can and do make valuable contributions but do not replace the government's responsibility for providing adequate facilities.

6.4 RECOMMENDATIONS

From the preceding discussions, the following recommendations are made for the purposes of improving the condition of infrastructure in public schools at Seshego Circuit:

- ✓ The Limpopo Department of Basic Education should prioritize the rural schools in the delivery of educational meaning that the large portion of the Department's budget should be directed towards the improvement of classrooms, toilets, libraries, laboratories, sports fields in the rural areas
- ✓ Public schools toilet facilities require a complete overhaul, upgrading and maintenance to meet the required health standards. All schools must be provided with adequate sanitation facilities which comply with the regulations of the National Building Regulations Act 108 of 1997.
- ✓ Administration blocks in schools are no longer a luxury but a necessity, therefore the Department of Basic Education should prioritize funding towards the provision of that important component of educational infrastructure.
- ✓ The complete reliance of schools on the Government funding is another challenge. Schools as public entities need to embark on projects that will generate

enough capital to address some of their challenges like the provisioning and maintenance of library and sports facilities. Head of schools and members of the School senior management team should lobby the business organizations to sponsor resources or funding that will help them to improve the conditions of the schools other than depending only on government.

6.5 CONCLUSION

This study assessed educational infrastructure delivery in Seshego circuit, Limpopo Province. Due to the shortage of financial and physical resources such as the shortage of classrooms and toilets at most public schools, the effective delivery of educational infrastructure has become a priority. Findings from the literature suggest that educational infrastructure delivery is a concern and it can no longer be ignored because it reflects public pride and the level of success in the community.

It is evident from the findings of the study that the schools under Seshego circuit are experiencing problems with regard to educational infrastructure. Although the research was only limited to Seshego circuit which is in Capricorn District, the researcher strongly believes that there may be other areas in rural Limpopo that are experiencing similar challenges. It is hoped that this study will raise awareness to the Department of Basic Education in Limpopo concerning infrastructure development of public schools in the province, this is necessary for consideration because a new approach is required in the provision of infrastructure for public schools.

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APPENDIX A

SEMI STRUCTURED QUESTIONNAIRE

This research examines the problems in the delivery of educational infrastructure in Seshego circuit which is under Capricorn District municipality, Limpopo Province. The information is only meant for the purpose of this study to allow the researcher to compare groups of respondents.

Please answer the following questions by writing in the space provided or by crossing (x) in the relevant block.

SECTION A: BIOGRAPHICAL INFORMATION

This section of the questionnaire refers to the biographical details.

Name.....

1. Gender

MALE	
FEMALE	

2. Age

25 - 35	
35 - 45	
45 - 55	
55 - 60	

3. What is your position of employment?

Senior Manager	
Circuit Manager	
Manager	
Principal	

4. Working experience in the Department of Basic Education?

0 – 5 years	
5 – 10 years	
10 – 15 years	
Other	

5. What category is your school?

Primary	
Secondary	
Combined	

6. Where is the school located?

.....

.....

.....

.....

7. What is the type of your school?

Fee-paying school	
No-fee paying school	

SECTION B: THE CONDITION OF THE SCHOOL INFRASTRUCTURE

8. How would you define the infrastructure condition of the school?

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.....

9. Why do you think your school is in the condition you defined above?

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10. How many classrooms per grade do the school consists of?

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11. What is the number of pupils per grade?

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12. What is the type of contribution provided by different stakeholders in ensuring the delivery of educational infrastructure in your schools?

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13. Where do the schools in the Circuit source most of the funds to improve the school infrastructure?

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SECTION C: LEGISLATIVE FRAMEWORK SUPPORTING EDUCATIONAL INFRASTRUCTURE (14– 16)

14. How effective are the interventions that supports educational infrastructure?

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15. How effective is the Infrastructure needs database?

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16. What benefits do you derive from the National Education Infrastructure Management System?

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