

**CHALLENGES IN IMPLEMENTING THE NATIONAL SCHOOLS NUTRITION  
PROGRAMME FOR ACHIEVING EDUCATIONAL OBJECTIVES: A CASE STUDY OF  
SCHOOLS IN VHEMBE DISTRICT, LIMPOPO, SOUTH AFRICA**

by

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## DECLARATION

I, **TSHISIKHAWE MBULAHENI PAUL** declare that this thesis entitled “**CHALLENGES IN IMPLEMENTING THE NATIONAL SCHOOL NUTRITION PROGRAMME FOR ACHIEVING EDUCATIONAL OBJECTIVES: A CASE STUDY OF SCHOOLS IN VHEMBE DISTRICT, LIMPOPO PROVINCE, SOUTH AFRICA**” is my own work and all sources that I have used, have been indicated and acknowledged by means of complete references

**Signature:** .....

**Date:** .....

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God Almighty the Creator for the protection, guidance, and excellent health He has given me throughout this study.

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Mauluma Zion City Apostolic church for always praying for its members to prosper in life and in whatever endeavors they commit themselves to do.

## DEDICATION

This thesis is dedicated to the following people:

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- My lovely gifts in the form of children, Tshedza and Rotondwa for their patience when I was not home for most of the time.
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## ABSTRACT

Although on its introduction the focus of the National School Nutrition Programme (NSNP) was to improve health and nutritional status of South African school children, it was put in place to improve school attendance, curb absenteeism and drop-out by children of school going age as a result of hunger and poverty. It was also meant to improve the learning capacity of children since access to nutritious meals has the potential to improve their concentration levels during instructional discourses, which can enhance the quality of educational outcomes. This study explored the views of education stakeholders on the challenges they encountered in implementing the NSNP in achieving its educational goals at two schools in the Vhembe District in South Africa. Specifically, the study investigated how the NSNP influences school access, attendance and participation at schools that are benefiting from the NSNP in an endeavour to establish strategies for improving the quality of schooling. Abraham Maslow's theory of hierarchy of needs was applied to explain how children's basic needs can be a foundation to their educational needs and aspirations. A case study design involving two schools was adopted for the study and the qualitative research approach was employed. Purposive sampling method was employed to select two secondary school principals, ten secondary school class teachers per school, ten learners who were beneficiaries of the NSNP and ten of their counterparts who were not on NSNP per school, and two circuit NSNP officers. Individual and focus group interviews, documentary study and observations were used to collect data, which were analysed thematically. The findings of the study revealed that: the National School Nutrition Programme is a credible strategy for learners from poor backgrounds to access schooling and reduce their school drop-out; there was no clear difference in academic performance between learners who participated and those who opted out of the Programme; educators felt overwhelmed by administrative work for the feeding programme, which compromised on their co-responsibilities; there were inadequate workshops to equip service providers of the Programme; food was provided under poor hygiene conditions which made some learners to opt out of the Programme; Programme records had inaccurate information. Based on the main study findings, the study recommended that the programme should continue as the majority of learners were benefiting; the Programme should have its own

administrative personnel; there should be regular staff development workshops on the Programme; schools should erect proper infrastructure for food storage and service; a multi- ministerial team of experts from health, education Programme; and all schools that have the Programme should maintain nutrition gardens for provision of fresh food. Finally, for the effective role-taking by duty-bearers for the Programme, the study concluded by recommending a model called the **Increasing Achievement Mode for the National School Nutrition Programme**.

**KEY WORDS:** national school nutrition programme, nutrition, school attendance, educational objectives, implementation.

## LIST OF ACRONYMS

NSNP	National School Nutrition Programme
PSNP	Primary School Nutrition Programme
CBNP	Community Based Nutrition Programme
DoE	Department of Education
DoBE	Department of Basic Education
DORA	Division of Revenue Act
DoH	Department of Health
DALYs	Disability Adjustment Life Years
ANC	African National Congress
DIC	District Implementation Committee
SIC	School Implementation Committee
GCNF	Global Child Nutrition Foundation
PEM	Protein Energy Malnutrition
NSFP	National School Feeding Programme
WFP	World Food Programme
WHO	World Health Organisation
NEPAD	New Partnership for Africa's Development
NSNPO A	National School Nutrition Programme Officer for school A
NSNPO B	National School Nutrition Programme Officer for school B
PA	Principal for school A
PB	Principal for school B
CTA	Class teachers for school A
CTB	Class teachers for school B
LPA	Learners participating in NSNP A
LPB	Learners participating in NSNP B
LNPA	Learners not participating in NSNP A
LNPB	Learners not participating in NSNP B

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## CHAPTER ONE

### INTRODUCTION AND BACKGROUND TO THE STUDY

#### 1.1 INTRODUCTION

This chapter focuses on the background to the study, statement of the problem, research objectives and the related questions. The research design and methodology to guide the study is also discussed in detail, including the approach to be used, the population, sampling procedures and data collection and analysis techniques. Other aspects covered in the chapter are key concepts of the study, delimitation, ethical consideration and the structure of the research.

#### 1.2 BACKGROUND TO THE STUDY

Many changes have occurred since the democratic dispensation in South Africa. These changes have taken place in a number of areas inclusive of the education sector. According to the Constitution of South Africa, every child has the right to basic education (The Constitution of the Republic of South Africa, Bill of Rights, 1996:14). Despite this pronouncement, not all children receive basic education. Poverty, has, among other reasons, prevented some parents from providing nutritious food that is required for the health development of their children. In September 1994, the National School Nutrition Programme (NSNP) was introduced as a Presidential Lead Project of the Reconstruction and Development Programme (RDP). The new government which was led by the African National Congress introduced the RDP to correct the inequalities and imbalances of apartheid (Government of South Africa, 1994:46). The goal was to provide learners with food to mitigate the negative effects of hunger as a way to enhance their learning capacity (DoE, 2013:5).

In most cases children leave school as a result of poverty, a scenario which stands against the Bill of rights as espoused in the Constitution of the Republic of South Africa

1996. It is stated in the Constitution that every child possesses a right to basic nutrition. Owing to a realisation that the attendance of learners in school was affected by poor nutrition as a result of poverty, the government devised a Strategic Plan 2007-2011 to support the education of learners (DoE Strategic Plan 2007-2011:12). Five broad priority areas were developed focusing on poverty in schools, shortage of skill, quality improvement, institutional improvement and health in education.

This research focuses on the first broad priority area which deals with poverty. This priority area centres on the reduction of financial burdens from parents in their quest to provide quality education to their children. Several projects were initiated at the school level to achieve this objective. The establishment of the NSNP was meant to improve the retention and performance of learners through feeding scheme programmes. These were to be made possible through the establishment of school gardens to complement nutrition efforts in schools and tapping on community-based schemes to assist in the feeding process (DoE, 2013:2).

At the commencement of the NSNP, the dual focus in the growth of South Africa was on nutrition and education. The main objectives of the NSNP were hinged on the following:

- Develop the nutritional status and health of primary school children in South Africa,
- Increase attendance and the learning capacity of children in schools which would further improve educational quality,
- Improve learner punctuality in primary schools,
- Support the basic health development by reducing hunger,
- Providing education to learners on nutrition and boosting nutritional status in the form of micro-nutrition supplementation (Government of South Africa, 1994:46).

Basing on these objectives, this study explored the views of main stakeholders on the level at which the educational objectives of the NSNP have been achieved at schools in Vhembe District. This study proposed to establish the views of key educational

stakeholders at schools in which the NSNP was implemented, particularly on how it impacted on:

- Attendance of participating children to school and their punctuality
- The capacity of participating children to learn
- The quality of school-level education
- The level of education of learners on nutrition and nutritional status

This study, particularly focused on exploring the views of school-based stakeholders on the challenges of implementing the NSNP in improving school attendance, performance in class, punctuality and the knowledge of children on the value of nutrition.

### **1.3 STATEMENT OF THE PROBLEM**

The NSNP is faced with a lot of challenges, amongst others are as reported by John (2013:4), that a Rights organisation indicated that learners at one school in Limpopo had gone for more than two months without having a meal. This led to an urgent application being filed with the high court in Pretoria demanding the delivery of meals to Tshinavha secondary school in the Vhembe district. It was also alleged that hundred and fifty learners from KwenaTshwena Primary school in Ridgefontein in Limpopo were admitted to St Rita's hospital for cramps and vomiting after crushed glasses were found in their food (Writter, 2014:2). The court was also pressed to declare that the lack of meals was a "violation of the rights of learners to basic education, basic nutrition, equality, dignity and public administration in line with section 195 of the Constitution (John, 2013:4). Realising that the issue of learners not getting food is a serious and public concern, the National Department of Education spokesperson, Elijah Mhlanga said: "We are concerned about the contamination of food and we are doing all we can to address the matter". The health and safety of the learners was of great importance to government, hence the Department of Education introduced the programme in the first place. It was reported that the government will continue to safeguard the unqualified constitutional rights of the learners to basic education, health, nutrition and safety (Writter, 2014:1).

Facing all these challenges, learning and teaching was affected because learners' concentration levels were obviously affected by hunger. The above incidents make imperative to look at other challenges that also contribute to the programme's failure to achieve its educational objectives.

Since the introduction of the NSNP, there was an assumption that enrolment at public rural schools would rise and learners would not absent themselves from school unnecessarily (DoE, 2009:1). It was hoped that children who had discontinued their schooling would come back. Reports indicate that learners are actually attending school in response to the free food that is provided to them through the National School Nutrition Programme. It is also the thrust of the programme to improve the capacity of learners to learn, which should subsequently improve the quality of education (Government of South Africa, 1994:46). The NSNP is a government initiative of ensuring that all school age children benefit from the free education initiative. However, reports on the success of NSNP have not been corroborated with research exploring the views of stakeholders on whether the NSNP increases school enrolments and reduces absenteeism. There is also no evidence that has been provided to check if the programme has a positive influence on learning. Therefore, this study was conducted to explore ideas of stakeholders in the basic education sector on the challenges of implementing the NSNP in achieving the objectives on education at schools in Vhembe district in the Limpopo province.

#### **1.4 PURPOSE OF THE STUDY**

The purpose of the study was to explore the views of key stakeholders in education on the challenges of implementing the National School Nutrition Programme in enhancing its educational goals in South African schools. Additionally, the following objectives were developed:

- Investigate the perceptions of the key school-based education stakeholders on the challenges of implementing the National School Nutrition Programme.

- Examine the influence of National School Nutrition Programme on school attendance and punctuality on the participating learners.
- Establish the challenges in the implementation of National School Nutrition Programme.

## **1.5 RESEARCH QUESTIONS**

The main research question is: What are the challenges of implementing the NSNP in achieving educational objectives. The following subsidiary research questions guided the study:

- How do the key school-based education stakeholders perceive the challenges in the implementation of the National School Nutrition Programme?
- How has the National School Nutrition Programme influenced school attendance and punctuality on participating learners?
- What are the challenges in the implementation of the National School Nutrition Programme?

## **1.6 RESEARCH ASSUMPTIONS**

The following research assumptions informed the study:

- Few research has been conducted on the structural functionality of the National School Nutrition Programme in schools.
- There is lack of information on the views of key stakeholders in the implementation of the National School Nutrition Programme in order to address its challenges.
- There is no uniform and tested approach to the implementation of the NSNP in South African schools.

## 1.7 RESEARCH DESIGN AND METHODOLOGY

Research design involves the description of the processes of carrying out a study. This concerns the aspects of when and under what circumstances the data for the study was collected. The research design is the general plan of an investigation. McMillan & Schumacher (2010:20) state that the research design clarifies a plan for generating scientific data that will be employed to address the research questions. De Vos (2001:123) concurs that research design is perceived as a blue print which guides the conduct of research. This framework provides a manual that specifies on the generation of data to be used to respond to the research questions in the most cost-effective way. According to Punch (2009:112), research design describes the entire issues that are involved in research process from planning, identifying the problem, executing a research plan, reporting and publishing the results. Maree (2012:70) posits that research design is a strategy which shifts from philosophical assumptions to the selection of respondents, data gathering and analysis techniques for the study. This study proposes to select two schools from which data will be gathered to assess if the NSNP is achieving its intended educational goals as indicated in the study objectives. The study will therefore, employ a case study design in which the two schools will be the cases for an in-depth study. Creswell (2007:73) argues that case studies provide detailed and in-depth data collection that involves multiple data sources such as interviews, observations, audio-visual materials, reports and documents.

The study used the qualitative approach. According to Casebeer and Verhoef (1997: 1), the qualitative approach puts much focus on meanings and processes which are not rigorously scrutinised in terms of quantity, intensity and frequency. Researchers who use qualitative research emphasise reality which is constructed socially, the intimate relations between the researcher and the researched as well as the environmental constraints that form the study. This study explored the actual reality that is happening at secondary schools in regard to the implementation of the National School Nutrition Programme. The interaction between the programme and learner school attendance and participation was also explored. Qualitative research was the preferred method in this study based on

Mare's (2012:50) observation that it strives to generate descriptive data which is rich in connection with a given phenomenon of study with the intention of developing a deeper understanding about that instance. It is concerned about how individuals or groups of people perceive the world around them and construct meanings from those experiences.

According to Holloway and Wheeler (1996:157), qualitative research focuses on people's understanding of the social and cultural processes that mediate different behaviour patterns. It is deeply concerned with the exploration of the questions that seek explanations on given aspects of research. Qualitative research strives in situations that pertain to the observation of individuals as they interact among themselves and with their natural environment in order to establish meanings and interpretations from those interactions. The study sought to establish the realities of the NSNP through immersion in the real environment of people who are beneficiaries of the National School Nutrition Programme and participated in the everyday activities of the programme.

The thrust in the data collection process was to gather in-depth quality information and not much attention was placed on the breadth of the obtained information. Qualitative research focuses on describing the shared meanings of the participants. This involves seeing through the eyes of the participants to allow for the description of phenomena in a way that reflects the meanings that the participants ascribe to their own situation. Qualitative approach is naturalistic in nature and aims to understand phenomena in its context. In this case, the researcher needs to guard against allowing subjective tendencies to influence the manipulation of the phenomenon of interest. Maree (2012: 79) states that in qualitative studies, the research is conducted in real life situations and not in an experimental situation. Data is collected from the actual people. The researcher actually observed exact things that took place around the programme and received first-hand information from people in the field.

Qualitative approach was suitable for this study as it involves the collection of data from multiple sources and methods. Cohen, Manion and Morrison (2011:219) posit that qualitative approach uses designs that enable the collection of various types of

information that includes verbal, observations of sources such as audio, pictures and documents. Preissle (2006:686) describes qualitative research as one that provides detailed and complicated expressions of meanings, attitudes, intentions and behaviours.

According to Gonzales, Brown and Slatel (2008: 3), the qualitative method provides voice to participants of research and endeavours to reveal information that exist beneath observable actions and behaviours. In the data collection process, attention was paid to ensure all important sources of information for interpretation are captured including different gestures of participants. A tape recorder and a diary were used to preserve the collected information. Participants were encouraged to provide details on the asked questions. This led to the collection of detailed information on the issue under study.

The theoretical framework, assumptions and inquiry procedures influenced the choice of a qualitative approach to the study. Data was collected in a way which was sensitive to the setting, the nature of participants and the site of study. Inductive procedure for data analysis was employed which allows patterns and themes to be established. This thematic approach to analysis enabled the voices of participants to be included in the process of a complex description and interpretation of data (Creswell, 2007:170).

## **1.8 THEORETICAL FRAMEWORK OF THE STUDY**

Theoretical framework refers to a set of concepts or understanding regarding the functioning of the world in the field of research or empirical work. The analysis of data is related to the framework of understanding which is also reflected in the literature of the study. The study draws heavily on the perspective of the literature from which it was drawn or on the literature related to that particular point of view (Atkins & Wallace, 2012:81). According to McMillan and Schumacher (2010: 74), a theoretical framework is employed to give justification on the selection of participants, variables and the research design.

Maslow's theory of motivation was chosen among a lot of other theories because it developed from the simple need to understand the influence of human needs on their

behaviour. It was realised that food was a basic need without which human beings lack the motivation to perform important actions in life. Nothing can be done in an empty stomach. Food can be used as a motivation to lure learners to go to school and to learn as some learners could stop attending school because of hunger and a poor health status.

According to the World Food Programme (2013: VI), a meal that children get at school works as a magnet to lure them into the classroom. The continuation of providing children with a meal per day in their growth process assist to retain them at school and serves as a powerful support tool for achieving educational goals. It is also an investment in the future of the child to make sure that the meals provide children the nutrition that they need to learn and grow. The provision of school meals ensure that children are ready to utilise the advantage presented to them in terms of learning opportunities where quality education is available.

## **1.9 SIGNIFICANCE OF THE STUDY**

The main essence of the investigation was to explore challenges of implementing the National School Nutrition Programme for the purpose of achieving educational objectives. It is hoped that the study will be of immense benefit to principals of schools who are managers of teaching and learning processes as well as the overseers of the National School Nutrition Programme. It is likely to avail critical insight into the current state of the feeding programme and suggest strategies in which it can be improved. The educators are prone to benefit from the treatise as they will obtain more understanding regarding their responsibilities in the teaching and learning environment. Learners as the main beneficiaries may come to appreciate the aims and objectives of running the programme which will also help to harness their full cooperation towards the achievement of those set objectives. The government, through the Department of Education and school management, will obtain accurate information on the challenges of the programme and plan to improve the provision of this important social service from an informed position. Challenges that are hindering the progress of the programme will be brought to light by people who are part of the programme.

The study might benefit other researchers. It is hoped that the outcomes of this study will create avenues for further study, incite interest and awareness in the area which may be used as a basis to run workshops, seminars and conferences as well as orientation kits for learners. The importance of the National School Nutrition Programme will be exposed to learners such that they will know why it was started. The Department of Education will be encouraged to orient and give information to learners on the importance of the programme and how they can make good use of it to enhance their academic performance.

## **1.10 DEFINITION OF KEY CONCEPTS**

### **1.10.1 National School Nutrition Programme**

This initiative of the government was established in 1994 to mitigate hunger as a vehicle to contribute to effective teaching and learning in schools through provision of quality nutritious meals to learners (DoBE, 2010:1). At its inception, the feeding programme was named the Primary School Nutrition Programme (PNSP) and operated under the Department of Health. It was in 2004 that the programme was shifted to the Department of Education (DoE). The target of the NSNP was initially the primary school learners who were in need, but was expanded in 2009 to include secondary school learners as well. The food which is served through this programme is earmarked to aid learner alertness and concentration during lessons, and to inject them the energy that is required for physical activities (DoE, 2010:1).

It is worth noting that the NSNP is a pivotal component of the Government's Programme of Action whose thrust is to improve access to education and the health of children that attend schools. The prime focus was to enhance the learning of children by providing them with nutritious meals. It was in May 2012 that the NSNP was extended to all secondary school learners in the bottom quintiles nationally. This emerged from a realisation that feeding schemes assist in the cognitive development and performance of

learners (DoBE, 2013:17). In this study, NSNP is defined as the programme that offers food to mostly poor learners as an incentive to lure them to attend school even though their parents are poor such that they cannot afford to put food on the table for them. It is the programme that aims to curb school drop-out and increase school attendance to children.

### **1.10.2 Nutrition**

Wardlow and Smith (2011:65) states that nutrition is the process of consuming food, utilising it for growth, metabolism and replacement of worn out tissues. It is the sum of the processes by which people eat and use food substances (Yach, Mckee, Lopez & Novotmy, 2000:900). In this study, nutrition relates to the food that is eaten by learners in the NSNP to enhance their health and improve their learning capacity.

### **1.10.3 School Attendance**

According to the School Attendance Improvement Handbook (2000:15), School attendance refers to the time in which the learners is at school. It is the period that the learner is present in class or is authorised to be out of school on a school activity. In this study, school attendance is concerned with the time when the learner is actually at school and participating in learning activities.

### **1.10.4 Educational Objectives**

This refers to statements that describe the expected outcomes of the teaching and learning process (Abbadeni, Ghoneim & AlGhamdi, 2013:34). Adam (2007:5) views educational objectives as the statements of what a successful learner is able to achieve after exposure to experiences of a module or qualification. In this study, educational objectives refer to what learners will be able to do after participation in the NSNP, in terms of school attendance, participation and academic performance.

### **1.10.5 Implementation**

This process is described as a set of activities that are proposed to put into practice a programme (Fixsen, Naoom, Blase, Friedman & Wallace, 2005:5). Kahn and Kasprzak (2014:4) defines implementation as the process of moving an idea into reality. In this study, implementation involves putting into practice the activities of the NSNP.

### **1.11 DELIMITATION OF THE STUDY**

The research focused on the challenges of implementing the National School Nutrition Programme for the purpose of achieving educational objectives. It is a case study of two secondary schools located in the Vhembe District of Limpopo Province. The district is made up of six educational areas which comprise Thohoyandou, Soutpansberg, Malamulele, Mutale, Vuwani and Hlanganani. A majority of schools in these areas participate in the National School Nutrition Programme. The research focused on one school which was found in a rural area and another school which was found in a township as it was impossible to study all schools in the district. The rural school was from Thohoyandou cluster which is consisted of five circuits comprising Mutshindudi, Tshinane, Sibasa, Mvudi and Luvuvhu. The township school was from Soutpansberg cluster which consisted of six circuits including Soutpansberg East, Soutpansberg West, Soutpansberg North, Nzhelele West, Nzhelele North and Nzhelele East Circuit.

The reasons for choosing the Thohoyandou and Soutpansberg clusters were that the researcher is resident and works under the Department of Education in Vhembe District. This lessened the research expenses and reduced the emotional stress of having to travel through the entire district. Less time was taken to travel from one study area to another. A comparison of the study sites was easy because both clusters have rural and township schools. The schools share the same socio-economic status and participate in the National School Nutrition Programme.

## 1.12 ETHICAL CONSIDERATIONS

According to Burton and Bartlett (2009:30), ethics describe a systematic study of value concepts such as good or bad, right or wrong and as well as the principles which offer reasons for the application of such concepts. It pertains the goodwill of individuals to permit investigators to carry out a research. Researchers are able to conduct studies owing to the trust that the researched offer them. De Vos, Strydom, Fouche and Delport (2005:57) state that ethics refers to moral principles that are proposed by people and which are accepted to offer guidelines on expectations of behaviour in regard to conduct towards research participants, sponsors and other researchers. Neuman (1997:445) advises that researchers should never cause unnecessary harm, degrade or humiliate participants. They should instead, seek voluntary consent of participants and keep information obtained from them secure, from the above admonition, it is paramount for the researcher to protect sensitive and intimate matters that might cause discomfort to individuals or groups of people.

Since the study involved human participants or subjects, it followed the procedures that are in line with the ethical considerations for their freewill in participation. A consent form was prepared which was then completed by participants after an explanation was made on all the procedures that were to be followed before, during and after the study. It was explained to them that participation in the study was voluntary and that they could withdraw their participation without any explanation. Confidentiality of information was also assured. These ethical matters were supplemented with the research quality measures such as credibility, transferability, dependability and conformability. The issue of ethical consideration and research quality measures are discussed in detail in chapter four.

## 1.13 STRUCTURE OF THE THESIS

### **Chapter One: Introduction and Background**

Chapter one introduced the research topic and then outlined the background to the study, statement of the problem, research questions, research assumptions, significance of the study, definition of key concepts, delimitation of the study, ethical consideration and the structure of the thesis.

### **Chapter Two: Literature Review**

This chapter focused on the review of literature relevant to the study. The chapter covered what other researchers have done on the topic under study.

### **Chapter Three: Theoretical Framework**

Chapter three shows how Maslow's theory of needs to learning is suitable for this research.

### **Chapter Four: Research Design and Methodology**

This chapter dealt with research design and methodology used in the study, including research instruments, data collection and analysis procedures.

### **Chapter Five: Data Presentation and Analysis**

This chapter dealt with data presentation, analysis and interpretation.

### **Chapter Six: Discussion of Results**

The chapter highlighted the findings of the study from the presented and analysed data and discussed the results using the chosen theoretical framework and reviewed literature.

### **Chapter Seven: Summary, conclusions and recommendations.**

The chapter concludes reporting on the study and makes recommendations on policy and practice on NSNP and for further study.

## 1. 14 CHAPTER SUMMARY

This chapter introduced the study about challenges of implementing the National School Nutrition Programme. Amongst other things, the chapter presented the background to the study, statement of the problem, objectives of the study, research questions, research assumptions, significance of the study, definition of key concepts, delimitation of the study and ethical considerations. The study was put into perspective by outlining the theoretical framework that underpins the whole study. The methodological procedures of the study were briefly discussed. The next chapter reviews literature relevant to the study.

## CHAPTER TWO

### THEORETICAL FRAMEWORK OF THE STUDY

#### 2.1 INTRODUCTION

The previous chapter focused on the introductory aspects of the study. This chapter will define and discuss Maslow's theory of learning because it forms an important part of the theoretical framework of the study. Theoretical framework as a concept is outlined and then followed with a detailed discussion of Maslow's theory of learning as it relates to the challenges of implementing NSNP in secondary schools of Vhembe District.

#### 2.2 THEORETICAL FRAMEWORK

Theoretical framework is a concept which focuses on the main features of the research design. It forces the researcher to be explicit about what he/she is doing (Holiday, 2001:52). Theoretical framework is viewed as a set of understanding on the way in which the world functions in relation to research or the scientific practice. The analysis of data is done in relation to this structure of understanding of things and reflects the reviewed literature. This effectively causes the study to heavily rely on the literature that is produced in the mould of the same perspective (Atkins & Wallace, 2012:81).

A theoretical framework works to justify the choice of participants, variables as well as the search design (McMillan & Schumacher, 2010:74). Results should be interpreted and explained in light of the selected theory. The major function of a theoretical framework is to position the researcher in relation to the research. It is a guide in which the ideology inherent in qualitative research can be properly addressed. A theoretical framework facilitates the link among various aspects of the study, including the selection of participants, methods of data collection and analysis, and the presentation of data. It helps to delineate the study and to position research in the bigger world view (Holiday, 2001:52).

Henning, Van Rensburg and Smit (2004: 25) posit that a theoretical framework positions the research within the discipline. It enables the researcher to theorise about the study. It helps to make explicit assumptions about the interconnectedness of the way in which things are related in the world. A theoretical framework is like the lens through which one views the world. It also provides an orientation to the study and reflects the stance the researcher adopts in his research. Its purpose in this case is to frame the work.

According to Swanson (2013:1), a theoretical framework comprises a set of beliefs and their definitions, location of relevant academic literature and the theory that is employed for a given study. It demonstrates knowledge on the concepts and theories which are pertinent to a particular study. The selection of a theory should hinge on issues of its suitability, easiness of application and power to explain the processes of the research.

Swanson (2013:1) further argues that a theoretical framework strengthens the study by permitting the audience to evaluate the research assumptions and connects the researcher to existing knowledge. It also guides the researcher on the formulation of hypotheses and the selection of research methods. The theoretical framework assists the researchers to address the why and how questions in a study. It allows researchers to extend beyond simply describing an observed phenomenon to generalising about its different aspects. It also serves to emphasise the main variables that influence the phenomenon of a study, the need to examine them and to understand how they may differ in certain conditions.

A good theory is of great value in the social sciences as it is expected to explain meanings, the nature and problems regarding a particular phenomenon of study. These are often encountered even though not explained in the world that people live in. This is crucial to allow people to utilise the available knowledge to perform in more informed and effective ways (Swanson, 2013:1). This is relevant to this study which focuses on the challenges of implementing the NSNP in achieving its educational objectives.

The study is underpinned by Maslow's theory of learning and motivation. Abraham Maslow is a social psychology theorist whose theory has also been used in curriculum studies. Maslow's theory is suitable for this study because it suggests that if basic needs like food are provided to satisfy the needs of learners, their learning can be enhanced. If learners' basic needs are met, they can be motivated to attend school and concentrate on their studies which leads to improved educational outcomes (Dembo, 1994:204). In the light of the foregoing, the section below discusses Maslow's theory of learning.

### **2.3 MASLOW'S THEORY OF LEARNING**

Abraham Maslow proposed a theoretical model made up of five stages known as Maslow's hierarchy of needs (Chapman, 2012:2). This theory with its ordered levels of needs remains useful even today for understanding the motivation of human beings, management training and the development of human capital. Maslow's idea concerning the order of needs pertaining the functions of workers to achieve their own unique potential (self-actualisation) is more applicable today than ever due to current global trends which emphasise efficiency in business production. Maslow is recognised as one of the eminent advocate of humanistic psychology. His focus on the importance of satisfying human needs is very influential in understanding human motivation.

Maslow believes that there are some human needs that are more basic than others and which require to be satisfied before the individual can be concerned about other needs at a higher level (Dembo,1994:204). These basic needs comprise the biological and physiological needs. According to Crawl, Kaminsky and Podell (1997:238), Maslow was convinced that human beings experience diverse needs that are arranged orderly from the basic ones to the more specialised and that these have also to be satisfied from the basic to the higher order ones. In this study, the focus is to find out how basic needs such as food can influence individual motivation to learn if they have been satisfied.

Parsons, Hinson and Brown (2001:218) state that the needs that require to be satisfied are organised hierarchically according to precedence. In the hierarchy, the survival or

lower order need demands that it should be prioritised over the growth needs which are perched at a higher level. This implies that the higher order needs which tend to direct human actions become influential only after the lower level needs have been satisfied. This scenario explains the importance of implementing the National School Nutrition Programme as a strategy to motivate learners, especially those who lack food at home to attend school, participate and achieve academically.

## 2.4 MOTIVATION AND NEEDS

Lunenburg and Ornstein (2004:73) indicate that motivation comes from a Latin word *movere* meaning “to move”. It relates to processes inside a human being which trigger the demonstration of a behaviour that is meant to benefit either the individual or the organisation. It is this drive which acts on or come from within the individual that cause the willful engagement of efforts towards the achievement of specific goals. Motivation implies that the person works hard, keeps at his or her work and directs his or her behaviour towards appropriate goals. Generally, motivation contains three aspects, which are effort, persistence and direction (Lunenburg & Ornstein, 2004:73).

Parsons, Hinson, and Brown (2001:284) define motivation as the force that energises and directs a behaviour towards a goal. The concept of motivation is usually applied when a person is energised to satisfy some needs or desire. The study focused on the need to satisfy hunger so that the learner may learn without any problem of thinking about the issue of sourcing a meal for the day. The person will engage in or be attracted towards activities that are perceived as having the potential to meet this need or desire. Motivation is a crucial element in the learning process. The research clearly shows a positive correlation between motivation and achievement (Lunenburg & Ornstein, 2004:73).

Motivation is also very important in learning and can support Maslow’s theory because motivation is an internal state that arouses, directs and maintains behaviour. Motivation suggests an energetic move in the direction of goal attainment even when an individual is bored by the task. It energises and directs our behaviour. Motivation is concerned with

individual drives, desires, needs, incentives, fears, goals, beliefs, social pressures, interests, self-confidence, curiosity, values and expectations (Woolfolk, 2014:462).

Crowl, Kaminsky and Podell (1997:231) indicate that motivation is an internal state that activates and gives direction to our feelings, thoughts and actions. The most salient characteristics of motivation are persistence and focused behaviour. Motivated people engage in goal-directed behaviour and persist until they have achieved the goal. As a personality trait, motivation represents a relatively stable predisposition to engage in persistent and sustained behaviour.

In Donald, Lazarus and Lolwana (2012: 95) Maslow argues that the primary source of motivation in human behaviour is the fulfilment of needs. Maslow's hierarchy is useful as a very broad framework for understanding how internal needs interact with the external influences of social context and life experiences. In South Africa, as in most other developing countries, there are millions of children living under severe conditions of poverty and as results do not get sufficient food. The majority of South African children could not even go to school because of hunger hence the development of the National School Nutrition Programme by the government. This gave learners motivation to attend school since their basic need for food had been taken care of.

There are two types of motivation. These are intrinsic and extrinsic motivation and they are outlined in the next section.

#### **2.4.1 Intrinsic Motivation**

This is the natural human tendency to seek out and overcome challenges as individuals chase personal interests and exercise their capabilities. Intrinsically motivated individuals have no need for incentives or punishments because the activity itself is satisfying and rewarding (Woolfolk, 2010:377). Intrinsic motivation occurs in the event that an individual performs on the basis of an internal impetus to complete an activity without regard of whether there will be external rewards or not at the end. This has to do with performing

a task for its own sake. People involved in a task because of intrinsic motivation appear to be engaged and even consumed, since they are motivated by the activity itself and not some goal that is achieved at the end or as a result of the activity (Parsons, Hinson & Brown, 2001:284). Kaplan (1990:275) also observes that intrinsically motivated work is exhibited when the learning is motivated by curiosity and the incentive to work is for one's own satisfaction. The preference in this case is for challenging work rather than easy work, to work independently and to satisfy internal criteria for success rather than external criteria. Implied in this instance, is that, there are some learners who may persevere without food due to the need to achieve a goal.

#### **2.4.2 Extrinsic Motivation**

This is operative when an individual is motivated by an outcome that is external or somehow related to the activity in which he/she is engaged. It is the motivation to engage in an activity as a means to an end (Parsons, Hinson & Brown, 2001:284). It is motivation that is directed by more cognitive psychological systems or external factors (Swarts, De la Ray, Duncan and Townsend, 2008:215). Extrinsic motivation arises from outside the individual. External rewards can induce interest and participation in something in which the individual had no interest (Plotnik & Kouyoumjian, 2011:5). Sprinthall, Sprinthall and Oja (1994:531) indicate that extrinsic motivations relate to needs that must be satisfied by external reinforcers. Extrinsically motivated behaviours are performed out of interest in the behaviour itself but because they are seen as instrumental to some separate goal. Extrinsic motivation may be necessary to get the learner to initiate certain actions or to get the learning process started. This study focused on extrinsic motivation wherein learners are given some food at school as a way of encouraging them to attend school regularly and hopefully improve their academic performance. In this scenario food is used as an incentive or external motivator. Kaplan (1990:283) argues that extrinsic motivation is very much useful and is regarded as a form of external incentive. Extrinsic incentives are often successful at motivating a learner to become involved in some educational activity in which he/she would not normally participate. For instance, a hungry learner will not even think of going to school on an empty stomach owing to poverty. The introduction

of the NSNP by government has provided adequate motivation for learners to go to school and learn.

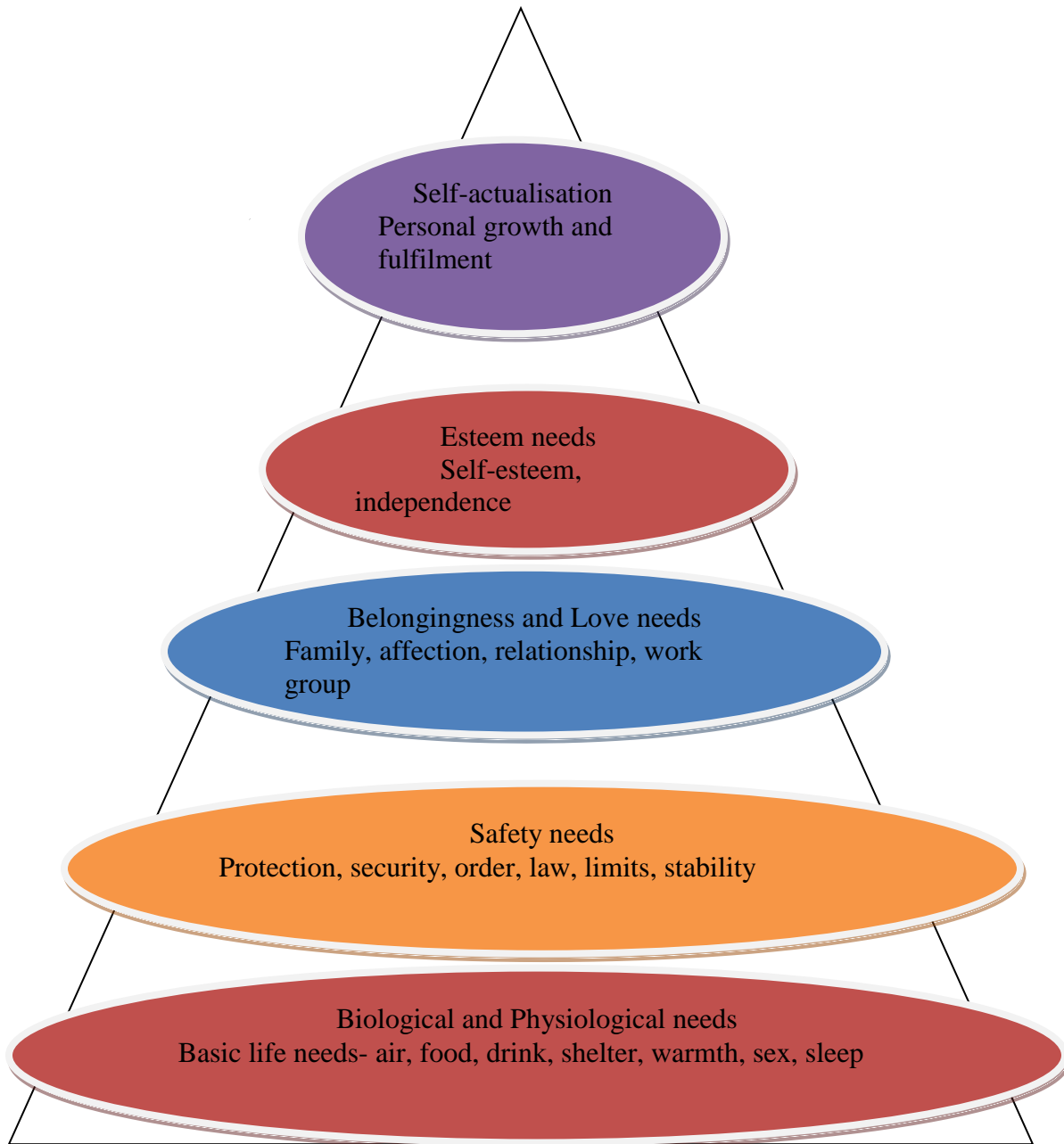
The special value of extrinsic motivation is that there is a possibility for it ending up being changed to intrinsic motivation. This occurs especially when the need at the lowest level has been met and is further used as a force to achieve the next goal. Plotnik and Kouyoumjian (2011:5) concur that extrinsic rewards are employed to inspire people to obtain new knowledge and skills. In the event that early skills have been learned, people may subsequently be more intrinsically inspired to pursue other skills or activities at a higher level. This relates to this study where learners are provided with food which then motivates them to learn.

## **2.5 MASLOW'S HIERARCHY OF NEEDS**

Maslow proposed a typology of needs which are common to people and placed them into five categories. These needs were then organised in a hierarchy which assumed the shape of a pyramid. The concept hierarchy describes the arrangement of concepts or people in a vertical form according to some defined characteristics from the lowest to the highest. At the bottom of the pyramid exists the biological or physiological needs while the need for self-actualisation is perched at the top. Maslow believed that individuals need to satisfy the needs that are at the lowest level of the pyramid before they can be inspired to successfully work to meet those at the next levels. (Martin & Joomis, 2007:72). Basic human needs are natural and in born. The primary needs that are critical to human beings are the needs for survival. These include the need for basic things such as water, air, warmth and food. The sequence of these needs is such that they can only be addressed following an ascending order. One can only strive to meet these needs working from the ones that focus on the physical and emotional well-being to those of influence and personal growth, and not vice versa. Failure to make achievements that help to respond to the lower end needs stifles the motivation to strive to attain higher order needs (Maslow, 1943:370).

McCown and Roop (1992:304) argue that human beings need essential things in life. They need water to drink, food to eat, shelter and love. They also need to feel safe, both physically and psychologically. Human beings need to feel good about themselves and to understand the world around them. People have different needs which usually vary in degrees. Some may need shelter more than others who may choose food as their more important need. This may explain the reason why some learners whose parents cannot afford to put food on the table due to poverty and unemployment end up deciding not to go to school. These learners need food to give them energy to go to school, as they cannot learn or concentrate in an empty stomach. In this regard, the government of the Republic of South Africa introduced the National School Nutrition Programme mainly for the poorest of the poor within the communities so that those children who slept on empty stomachs could be motivated to go to school the next day knowing that they will receive adequate and nutritious meals.

Redmond (2010:12) posits that Maslow's hierarchy of needs concept places the basic needs at the base and higher order needs at the top in a pyramidal fashion. Ozguner and Ozguner (2014:208) concur that the needs theory of Maslow places the physiological needs at the bottom and the higher needs of self-actualisation at the upper end. The arrangement of these needs portrays the significance of each need in relation to others and their overall influence in the motivation of human functioning. Physiological needs, however, stand out as the broadest and most important category in mediating human behaviour. Figure 2.1 illustrates Maslow's hierarchy of needs.



**Fig 2.1: Maslow's Hierarchy of Needs: Adapted from Slavin (1991:321)**

### 2.5.1 Biological and Physiological Needs

Figure 2.1 shows the biological and physiological needs which include air, drink, food, warmth, shelter, sex and sleep. These are basic ones which need to be satisfied prior to those of a higher order. They are our first concern. Satisfying these to a reasonable extent gives impetus to the individual to think about the higher order needs (Ozguner & Ozguner, 2014:208). Martin and Joomis (2007:72) notice that the physiological needs are the foundation of the pyramid. Maslow suggests that the number one and very basic need that people crave for is the need for survival, which is their physiological requirement for food. Heylighen (1992:40) posits that physiological needs are those that are required by the body in order to maintain homeostatic balance. These needs can lead to the death of an organism if they are not satisfied. Jerome (2013:42) observes that these biological needs are the strongest by virtue of their assumption of the first position in an individual's search for satisfaction.

It is not easy for one to learn on an empty stomach and that is rationale for the introduction of the National School Nutrition Programme by the government of South Africa in order to satisfy human need for food. The understanding is that the lower survival based need comes first over the higher-level needs which are growth oriented. The higher level needs become more directive and predominant of the actions humans engage in only after the needs at a lower rang have been satisfied. It is imperative therefore, to think that a free breakfast or lunch programme is paramount for the right motivation of learners who are unable to access the needed resources to meet such demands outside school. The learner has to be provided with adequate food to really appreciate and be interested in quadratic equations (Parsons, Hinson & Brown, 2001:293). Free breakfast and lunch programmes are rolled out in schools to assist learners to address the physiological needs of the stomach.

The Constitution of the Republic of South Africa (1996:13) is in harmony with Maslow's first need by stating that "*everyone has the right to have access to sufficient food and water, and that the state must take reasonable legislative and other measures, within its*

*available resources, to achieve the progressive realisation of each of these rights".* It is also espoused in the constitution that each child has a right to shelter, health and social services as well as basic nutrition. These form part of the biological and physiological requirements which have to be satisfied before moving on to the next hierarchy of needs. Ozguner and Ozguner (2014:209) state that physiological needs are basic as there be no shift to higher level needs to motivate behaviour before they are satisfied. The National School Nutrition Programme was therefore introduced as a motivation for learners to attend school and work to achieve the intended learning outcomes. The learner that is not getting enough food to satisfy the physiological needs will be distracted in his/her endeavour to achieve academically. This is because the desire for food cannot be postponed in an educational context. The learner may initially be attracted to school by the provision of food but may later on be interested in education as the prior quest for food is satisfied through the NSNP. This might end up helping the learner to understand the learning matter which ultimately contributes to building the learner's future.

### **2.5.2 Safety Needs**

Martin and Joomis (2007:73) contend that until physiological needs have been satisfied, it is not possible for individuals to institute behaviours that seek to address the safety and security needs. They describe safety as the experience of knowing that no danger will affect a person in a physical, mental and emotional way. Security on the other hand is concerned with the feeling that individuals experience in the absence of fear and anxiety.

According to Redmond (2010:13), safety needs comprise protection and involve elements of security such as law, order and stability. As a result of the physical needs having been addressed, the learner would experience safety and security in the knowledge that the challenge of food would have been solved. The learners might even be eager to attend school as they would have stopped being anxious about food. The threats of diseases that are a result of malnutrition are also diminished by the decent nutritious meals that schools are expected to provide. Learners would no longer think of doing things that are against the law like stealing food from other people as they would be assured of another

meal the next day. Learners would have a better state of mind to concentrate and learn. In meeting the needs that are at the second level of the pyramid, learners will then begin to focus on the next higher order needs.

### **2.5.3 Belongingness and Love Needs**

An individual is motivated to attend to the higher-level needs in the pyramid after the physiological needs for safety and security have been addressed. The needs that are related to love and belonging are contained at the third level of the hierarchical structure. The people that the individuals are interested in are those that usually create satisfactorily relationships with them and they include friends, classmates, family members and teachers. Relationships which are satisfying encompass those that involve being accepted by others (Martin & Joomis, 2007:73). Love as well as belonging needs have an affinitive motive which drive humans to look for a connection with other as a way of developing relations that are satisfying with them (Heylighen, 1992:41). Jerome (2013:42) contends that people will always work to prevail over conditions where they feel lonely and alienated. This covers the need to give out and receive a sense of affection, love and belonging.

Once the safety needs are achieved, learners strive to fulfil social needs that are at the third level of the structure. These are concerned with family, affection, work group and relationships. The individual has to be assured that he/she is with others in the world in such a way that needs feelings can be exchanged (Redmond, 2010:13). These are also needs to feel connected with others. The need to live with friends and family as well as enjoying interpersonal linkages are representations of this area of motivation (Parsons, Hinson & Brown, 2001:293). This implies that after having food and feeling safe and secure, learners can then share the experiences they have with people they would have formed relationships. Even if some learners might not have real or immediate families, they may make family with other people around them. Friends in class might be part of the group with whom learners have a sense of belonging and feel loved. In the long run, learners become courageous such that they can even be in some affectionate

relationships with other learners. With the feeling of belonging and love, learners are encouraged to work towards esteem needs.

#### **2.5.4 Self-Esteem Needs**

Jerome (2013: 42) argues that the need for self-esteem can be realised when the first group of needs have been satisfied. The need for independence and self-esteem are the focus in at this level. Human beings require a great degree of self-respect and the respect for others. The person feels valued and confident at the instance of the fulfilment of these needs. The frustration of these needs creates feelings of inferiority, weakness, helpless and worthless. Ozguner and Ozguner (2014:209) concur that self-esteem needs reflect the concern of the individual about the feeling of importance as well as being respected and others. The esteem needs, which are also referred to as ego needs pertain the desire for achievement, status and recognition. A search for recognition and approval always resides in human beings.

According to Redmond (2010:13), individuals always yearn for social status. This spills beyond just the need for social relations. The individual need to feel that schooling has an impact on his/her well-being. The recognition of their achievement is also included in this case. Parsons, Hinson and Brown (2001:293) add that this also has to do with the desire to have respect, confidence as well as a sense of personal worth and value. Once the esteem needs are met, learners will feel that they are worthy and independent enough to explore the world on their own. Learners become managers who are responsible for their own learning. Learners earn some respect from the community which gives them confidence as they feel worthy and valued. This urges them on to make a contribution within the school and the community.

McLeod (2014:4) states that learners must be shown that they are valued and respected in the classroom and that the teacher should create a supportive learning environment. Learners with low self-esteem are less likely to progress at an optimum rate academically until their self-esteem is strengthened. This relates to this study which involves the

feeding of all learners at school to raise the self-esteem of learners as a way of creating suitable teaching and learning conditions for the achievement of the objectives of the NSNP.

### **2.5.5 Self-Actualization**

The need for self-actualisation is perched at the top of the pyramid. This relates to an aspiration of individuals to become what they are capable of achieving in life. It pertains to the realisation and use of the individual's talents, capabilities and full potential. This need level is possible to be attended to only when the prior needs have been satisfied (Martin & Joomis, 2007:75). Heylighen (1992:40) also observes that self-actualisation is realised after all bottom needs are satisfied. It is not a fixed state but a process of development which does not end. Self-actualisation is not static but a lifelong journey that has no end. The concept emerges from the understanding that people have plenty of talents and potentials which are hidden but with room for their development. Self-actualisation suggests that there are human potentials which can be actualised in a continuing process.

Self-actualisation needs emphasise self-fulfilment and experience that border around growth. To satisfy the need for self-actualisation the person has to constantly focus on such issues as problem solving, appreciation of life, and personal growth (Huitt, 2004:17). This concept of self-actualisation as propounded by Maslow, mirrors the totality of that which a person can aspire to become (Alderfer, 2009:11). These include the experience of order, truth, beauty, symmetry, closure and the sense of completion of an act. The paths towards self-actualisation can be many and varied, ranging from career or vocational choices, life style choices and even leisure activity choices (Parsons, Hinson & Brown, 2001:293). The attainment of these needs by an individual is indicative of maturity in terms of appreciating life, enriching oneself through experiences and focusing on real existential challenges. Once the learner has met these needs, he/she will be mature enough to focus on real life challenges, appreciate life and use the experiences to enrich the self. Whenever this level has been reached, the learner will feel that he/she

is a worthy adult that has gone through many life challenges and withstood the test of time. This concept pertains to this study which focuses on the role of external motivation in influencing academic achievement of learners in ways that encourage them to realise lifelong learning and meet their goals.

Maslow' theory of motivation has its weaknesses that impede its complete application in practice. The theory is able to present a coherent discussion on ways in which individuals are motivated to work towards their desired end. However, in reality, human needs do not always occur or are arranged in a perfect hierarchical order. They may assume a different arrangement depending on the characteristics of individuals and environmental variables. Human beings also prioritise different needs. Some may place more value on the need for social belonging rather than food as indicated in the model. The assumptions of the model are based on its formulation in the developed world and which are mainly alien to African contexts. Enrolling at a day secondary school and walking a distance to and from school can serve to motivate a learner to work hard to achieve, but which can be impossible to accepted in other cultural context.

## **2.6 CHAPTER SUMMARY**

In conclusion, the chapter discussed theoretical framework as a concept and proceeded to outline Maslow's theory of learning. A theoretical framework was presented as a guide that directs the research process. It provides the lens or window through which the study is viewed and conducted. Motivation emerged as the incentive which propels individuals to engage in an activity. This was discussed in relation to Maslow's theory of learning, which underpinned the study. The theory propounds that needs can be arranged in a hierarchy, beginning with the biological and physiological needs, need for safety and security, belonging and love, self-esteem and lastly, self-actualisation. A learner can learn because of the motivation that he/she receives and this can be intrinsic or extrinsic. Intrinsic motivation is from within the individual and emanates from a personal desire to achieve a goal. Extrinsic motivation, on the other hand, comes from outside the individual. It has been realised that a person can be motivated by the needs which are of value to

him/her. The needs are in a hierarchical order, wherein the lowest needs are the basic ones and the individual cannot move to the next needs if the basic needs are not met and fulfilled. The lowest needs can lead to the achievement of the highest needs provided the lower needs are met. In other words, the desire to satisfy the higher needs in the hierarchy arises from the fulfillment of the lower needs. This study focused on the need for food which when fulfilled encourages the learner to attend school and work to achieve expected outcomes. Alleviating hunger through providing food to learners in the form of the NSNP allows them to explore the world without fear and to grow through the expected life paths.

## CHAPTER THREE

### LITERATURE REVIEW

#### 3.1 INTRODUCTION

This chapter reviews literature related to the study. Reviewing literature serves to sharpen and broaden the theoretical framework of the research, reveal new development in the field, expose gaps in existing knowledge and short falls in previous investigations. Preliminary literature review study helps to examine the available body of knowledge in order to expand information and give the research some direction. This chapter also discusses the concept of school feeding, models of school feeding schemes, rationale of school feeding, school feeding schemes in selected countries and South Africa in particular and the benefits of school feeding. The relationships between nutrition, physical development and academic performance are also discussed. Finally, attention is given to the challenges of implementing the programme of feeding learners at school as well as the criteria of evaluating the NSNP.

#### 3.2 THE CONCEPT SCHOOL FEEDING SCHEME

School feeding is a concept of government which was established in 1994 to reduce food shortage and play a part in schools through giving learners nutritious meals of quality (DoBE, 2010:1). At its inception, the program was known as the Primary School Nutrition Program (PNSP) and was presided over by the Department of Health (DoH). It was moved to the Department of Education (DoE) in 1994. At first, the National School Nutrition Education Programme focused on learners who were in need in primary schools. From April 2009, the program was spread out to secondary schools. Food that was supplied in the National School Nutrition Program aim to keep learners to experience alertness and concentration during lessons, and provide them the energy that is required engaging in physical activities (DoE, 2010:1).

It is important to note that the National School Nutrition Program (NSNP) is one of the components of the Government Program of Action that strives to forge an improvement in the area of access to education as well as the health of those children that attend school. The responsibility of the programme to address the ability of children through offering them nutritious and healthy meals. All secondary school learners in the bottom quintile institutions began to benefit in May 2011. Feeding of learners serves the good of improving their cognitive development as well as academic performance (DoBE, 2013:17). In this study, the researcher looked at the challenges in the implementation of the NSNP in achieving the objectives of education.

The National School Nutrition Program strives to make sure that there is quality education through:

- improving the learning capacity of children;
- reducing hunger in the short term;
- offering motivation to be regular and punctual in attendance to school; and
- attending to some micro-nutrient deficiencies (Government of South Africa, 1994:46).

### **3.3 BENEFICIARIES OF THE SCHOOL FEEDING SCHEME**

The process of selecting schools for the feeding scheme functions in two ways. Initially all the schools are chosen for funding with regard to school feeding as most learners are generally from disadvantaged families. In the schools that are selected, learners to be fed are identified on the basis of their age, grade or other criteria. The policy aims to feed all learners from Grades R-12. Studies, however, show that not every child that is entitled to receive food actually gets it in schools. 90% of those learners that are eligible receive free food at school that are in rural areas, while just 56% of such learners receive food in urban areas. Children in urban schools are shown to receive food on a more regular basis compared to those in rural areas (Government Programs and Policies, 2002:1).

### **3.4 SCHOOL FEEDING IN PRACTICE**

In practice, the feeding of learners in schools contribute, in a small way, to ease the challenge of food shortage and to reduce burden from caregivers who may find it difficult to source adequate meals to their children. Parents, teachers and school governing bodies need to take note of a myriad of problems which mar the roll out of the feeding scheme. There are a number of common problems with school feeding schemes that parents, teachers and school governing bodies should watch out for. A majority of service providers have tended to choose cold menus which do not need cooking from the twenty-two approved menus. These comprise peanut butter, brown bread and butter, which are served out the micro-nutrient enriched powdered milkshake supplements (Government Programs and Policies, 2002:1).

Children, however, appear not to be given all the officially allocated food. Urban schools usually report having enough stocks for regular meals while those in rural areas experience the shortage of ingredients. It is common for reports of theft and corruption to be heard regarding the food that should be given to learners. While it is the objective of the government to feed all learners, there is a perception that the food should be served only to children of unemployed parents and the orphaned. Schools at times do not operate normally, with some either closing in the early morning of the day or not functioning at all. Rural roads can be impassable at times, more so during the rainy season. This renders it difficult for the delivery trucks to get to schools to supply the needed food to run the feeding programme. Children reported to suffer from diarrhoea have been reported as a result of feeding activities being conducted in schools that do not have portable water (Government Programs and Policies, 2002:1).

### **3.5 SCHOOL FEEDING PROGRAMME AND NUTRITION**

Solon, Sarol, Barnado, Mehantsho, Sanchez-Fermin, Wambangio and Juhlin (2003:130) state that food provided in schools should be as nutritious as possible. Improvement of nutritional standards and health of school children lead to enhanced learning and low

which craft the way for a healthier life. The fortification of food with micronutrients means that relates to the enhancement of nutrition for improved health of the child and school educational attainment.

School feeding activities improve diet and provides a net increase in energy available to the child. Moreover, school feeding focuses on micronutrient deficiencies that are common with school age children which are widespread among school age children in countries of the developing world, making them prone to infection, absenteeism at school, retarded learning and cognition. The fortification of food with micronutrients, in particular vitamin A, B, iodine and iron, lead to increased cognition and learning capacity (Solon *et al.*, 2003:131).

### **3.6 EXCLUSION OF CHILDREN FROM SCHOOL FEEDING**

School age learners that are in areas that are far from schools or near schools that are not operational are left out of the National School Nutrition Program. This is mediated by the terms of the School Fee Exemption and No-fee Schools policies. There are however, some exclusions that emanate from the design of the programme. This includes those children under the age of six years who would not yet be at school. (Government Programs and Policies, 2002:1).

Kallman (2005:22) argues that the National School Nutrition Program covers a small number of learners since the word child refers to all persons under the age of 18 years. Ideally, the feeding programme excludes those learners who are too young to be at school and those that attend secondary schools that are in areas that are not covered by the programme. The programme also side-lines those that are not enrolled or attending school owing to a multitude of reasons. There are some children that may find themselves left out of school either because the family is so poor to afford them fees, school uniforms or transport fares to school. Other potential learners can be forced to stay at home looking after sick relatives, parents or siblings. Such children might still find themselves partaking in work for a wage instead of participating in school activities. Children living with

disabilities and who are unable to access specialised or main stream tuition also find themselves in the category of those that are excluded in the programme. The implementation of the programme in schools is intended to capture the largest possible group of children but has the potential of leaving out those that are most in need. Children that come from poor families but attend school in affluent schools are also candidates of being excluded in the roll out of the NSNP (Kallman, 2005:22).

### **3.7 LEGISLATIVE FRAMEWORK OF SCHOOL FEEDING PROGRAMMES**

Various international treaties recognise that human beings have a right to education. UNICEF (2007:1) contend that the objective of upholding the rights to education is to ensure that all children are able to access education that is of quality and to endorse human dignity and maximum development. Among the conventions and treaties, they encourage the advancement of the right to education, the United Nations Convention on the Rights of the Child is the most vibrant. According to UNICEF (1989), Article 28 and 29, the right of the child to education includes:

- primary education that is compulsory and free
- increasing availability and access to secondary education
- equalising opportunity
- ensuring attendance is promoted
- growing up children to complete potential.

The negative effects of hunger and malnutrition cannot be embraced in the world that boasts of the possession of knowledge as well as the resources to address its disastrous consequences. Access to adequate nutrition, inclusive of services and safe food for nutrition education is the right of each individual (World Health Organization, 2004:17).

The realisation of the primacy of complete health, as supported through the provision of adequate food as a fundamental right of humans was enshrined in the 1948 Universal

Declaration of Human Rights. The 1989 Convention on the rights of the Child, declared nutrition and health as an important human right. The need to provide citizens with adequate nutrition also finds consideration in the constitutions of most countries inclusive of Guatemala, Ethiopia, Peru, India and South Africa. The governments of these countries are expected to make sure that these rights are served, especially for the vulnerable, children, elderly and the sick. The Southern African Development Community is also signatory to the agreement on the principle to uphold the rights-based approach to development. It is widely held that the intervention in regard to nutrition is considered as a form of a social safety net against shocks. This is typical of countries that are experiencing reforms in which the ability to obtain safety nets in the fold of nutrition interventions might raise the acceptance for shocks that emerge from the public sector reformations. This increases the likelihood for the reforms to succeed while at the same time safeguarding basic human rights (World Bank, 2006:37).

Fish (2004:105) observes that part of the last century witnessed the growth of a number of worldwide instruments whose focus pertain the codification and declaration of fundamental human rights values as consented to at the international arena. Below is the list of standard and legal bases for human rights in relation to sufficient food and nutrition and to adequate food and nutrition, and independence from malnutrition:

- 1946 Constitution of the World Health Organization (1946) which entrust the body to “promote... the improvement of nutrition” as a way of accomplishing its basic goal: “the attainment by all people of the highest possible level of health “;
- The Universal Declaration of Human Rights (1948) declare “everyone has the right to a standard of living adequate for the health and well-being of himself and his family, including food”;
- The International Covenant on Economic, Social and Cultural Rights (1966) claims: “The States Parties to the present covenant recognize the right of everyone to an adequate standard of living for himself and his family, including adequate food, clothing, and housing”;
- The Convention of the Rights of the Child (1989), proclaims: “States Parties recognize the right of the child to the enjoyment of the highest attainable standard

of health” and to take necessary measures “to combat disease and malnutrition” through providing sufficient nutritious food, portable water to drink and health care” In addition, Article 27(3) spells out that States Parties “shall in case of need provide material assistance and support programmes, particularly with regard to nutrition, clothing, and housing”.

- The Rome Declaration on World Food Security (1996) reaffirms “the right of everyone to have access to safe and nutritious food, consistent with the right to adequate food and the fundamental right of everyone to be free from hunger”.

It can be argued that the World Declaration on Nutrition (1992:234) provides the most articulate statement in the perspective of human rights. This consideration emerged from the conference that involved the World Health Organisation and the Food and Agricultural Organization. The proclamation focused on the issue of nutrition through the perspective of arresting hunger. The proclamation was anchored on the position of the Universal Declaration of Human Rights that states that member states should “[bear] in mind the right to an adequate standard of living, including food”, particularly to “access to nutritionally adequate safe food” as a “right of each individual”. The link between nutrition and human rights was apparent and that everyone is entitled to nutritious food in order to attain an adequate standard of living (Fish, 2004:106).

The Constitution of the Republic of South Africa (1996:14) demands the transformation and democratisation of education in line with the standards of human equality, dignity, freedom, human rights, non-racism and sexism. The Constitution ensures that people should enjoy their rights to education for all, inclusive of basic adult education. The three spheres of government, including the national, provincial and local should work together in a co-operative way. Because South African does not mandate municipalities to run education, it is the national arm that legislate the functions of tertiary education and shares that responsibility with other spheres in controlling the remaining levels of education (Ischinger, 2008:38).

The White Paper on Reconstruction and Development (1994:15) harbours provisions for the implementation of the NSNP, which are outlined as follows:

- To have food of quality as well as fundamental nutrition as stipulated in the Constitution of South Africa and a section of the International Children's Charter;
- Provision of basic education that is of quality to ensure success of the learner as contained in South African Schools Act 84 of 1996 and the National Educational Policy Act 27 of 1996;
- Earmarking schools for the feeding of learners as guided by the Norms and Standards for funding of Public Schools;
- Establishment of Grade R which is encapsulated in the White Paper No. 5 and the Cabinet Resolution of January 2002.
- Taking care of HIV/AIDS affected children and Orphaned and Vulnerable Children (Sangweni, 2008:6).
- The Rights of children to education as provided in the Constitution of the Republic of South Africa, 1996 Act 108 of 1996, Section 28 of the Bill of Rights.
- The United Nations Convention on the Rights of Children as ratified by the Republic of South Africa on 1 May 1996, and
- The Rights of children to education as enshrined in the South African Schools Act 84 of 1996, Section 3491.

The Limpopo Department of Education (2004:14) posits that the available instruments and provisions are just there to offer a broad scope on the roll out of the NSNP but the actual implementation of the programme in the area should be shaped by the unique conditions and concerns that exist. Bennet (2003:15) suggests that advocates of the National School Nutrition Programme indicate the presence of crucial factors some of which are logistical and empirical in nature as regard the feeding programmes in schools:

- In spite of the reality of having large numbers of children that are not at school today, it is worth noting that an even greater size of them is enrolled in school compared to past decades. School settings are seen as providing conducive environments in which interventions directed at education and health can be put

to action. The infrastructure in schools allows for the practice of interventions that are cost effective.

- Studies show that the feeding of learners at school lessens the problems of the shortage of food in the short term, keeps children at school and encourages learning through enhancing health and mental abilities. Feeding programmes are significant for social protection and capital as well as national development (Bundy, Burbano, Grosh, Gelli, Jukes & Drake, 2009:23).

The World Food Programme (2009:6) reiterates that school feeding programmes assist to lower susceptibility to hunger and encourage human life by contributing to the development of human skills, good health, education and nutrition. According to Bundy *et al.* (2009:43) the shortage of food especially as it affects children in the third world countries work to blur health quality life as well as their general survival. The school feeding might bridge energy and measures for recovery with medium and long-term developments in effective and efficient ways. School feeding leads to outcomes that are mutually reinforcing. These include improving nutrition, attendance at school and educational outcomes. Advancement in this area augers well with the Millennium Development Goals 1 and 2, which advance the need to reduce the number of people that experience hunger across the world by half and to make sure that the entire population of children undergo a complete primary school course. School feeding also assists in lifting households from poverty and ending the inter-generational cycle of hunger and supports education, especially for the girl child.

The provision of feeding programmes have a huge impact on the status of the nation in terms of nutrition as well as the educational achievement of learners. However, these programmes have no capacity to redress past loses of previous years as regard to health and nutrition. According to Tan, Lane and Lassibille (1999:497), well-nourished children are more involved and attentive in class. They are also better behaved and exhibit increased activity in learning. Feeding schemes also contribute to increased learner attendance, study skills and test scores. The reality of affording learners' decent meals at school further raises enrolments and reduces the dropout rate.

The main cause of poor health in people is under nutrition. This consequently triggers a knock-on effect on human achievement and national development. Under nutrition is also associated with stunting, wasting and micronutrient deficiency. According to West, Caballero and Black (2006:190), the condition which presents itself in the form of stunted growth suggests the existence of a long period of malnutrition. Wasting or low weight for age indicates severe cases of malnutrition. These conditions are prevalent among school going children in the developing world. The usually hidden forms of undernourished conditions are expressed in terms of low protein, energy and deficiencies in micronutrients. These impair the growth of the child, quality of life, resistance to infection and survival. It is the objective of this study to examine challenges of the NSNP in order to address the effects of the nutritional as well as health deficiencies among learners at the two selected schools in the Limpopo province of South Africa.

### 3.8 MODELS FOR SCHOOL FEEDING SCHEMES

The World Food Programme (2009:19) states that there are different models used for the school feeding schemes which include the centralised, decentralised, school-based, community-based and a combination of models.

- **Centralised:** Food is imported or procured centrally for distribution to the schools; traditional school feeding programmes use this model.
- **Decentralised:** Cash is transferred by the government to local authorities who contract suppliers to provide food for school meals.
- **School-based:** Schools receive cash or vouchers from the government or others to purchase food from markets, farmers or cooperatives.
- **Community-Based:** Communities that can afford to provide food to the schools, either choose to send their children with a packed lunch or pay schools to provide such meals.
- **Combination:** A combination of models caters for different contexts.

### **3.9 THE RATIONAL FOR SCHOOL FEEDING SCHEMES**

This section provides the justification for implementing the NSNP which includes the well-being of learners, the link between nutrition and school, health and education and health and school.

#### **3.9.1 Learner's Well-being**

The role of promoting the well-being of learner appears to rest hugely with schools. This might be caused by the fact that the well-being of learner's plays a part in the education of the child and that psychological and physical health are just crucial imperatives. This requirement is strong in those schools which are located in communities that are the most poor. There are close link among well-being, health and education. Effective learning tends to occur as a product of the well-being of an individual and his/her healthy mind. Individuals that are better educated are perceived to be well placed to contribute, in some way, to their own emotional and physical health. The ability to read with understanding allows individuals to grasp the risks of HIV/AIDS, for instance, and to engage appropriate behaviours to prevent or manage it. The bad effects of social ills such as bullying, teenage pregnancy and abuses of various kinds become understood (Rehle, Hallet, Shisana, & Pillay Van Wyk, 2010:6).

The Department of Basic Education (2011:158) states that the bulk of the contributions of people with regard to the first draft of the 2010 Action Plan hinged on strategies that schools can adopt to enhance the well-being of learners. The concept of well-being, ideally, should be intertwined with aspects of belonging to some space, either a community or country. Schools can cultivate the spirit of belonging through exposing learners to various activities such as in sports, culture and community engagements. In addition, the forms of support that schools can provide to learners can encompass the social and psychological supports which can be given on individual and collective bases. Collective forms of support encompass ideals such as encouraging tolerance, denouncing violence and prejudice. Principals and teachers should continue to preach

the message that all forms of abuse, whether physical, emotional or psychological are wrong and have no place in a humane world. However, teachers are handicapped in their capacity to adequately impact the critical ideals that help to develop the life that people aspire due to their limited psycho-social support skills, shortage of outside professionals like psychologists, social workers, and cultural workers to assist in schools. The National School Nutrition Program (NSNP) has stood out as the visible programme that serves to tackle the issue of learner health and well-being.

The real daunting task currently is the maintenance of the momentum of the NSNP in addressing the nutritional and health status of children that attend school. The roll out of the programme is nationally, is affected by provincial inequalities. The challenge of this is expressed in the treatment of learners, wherein, those that are at the same level of disadvantage are treated differently depending on the province in which they attend school. The ability to provide learners nutritious meals in cost-effective ways and making sure jobs continue to be created in the school nutrition industry continues to be a challenge. There is need again to revamp the monitoring system of the programme to enhance its viability. Related to health and well-being, is the need to hasten HIV/AIDS education in order to move towards an HIV-free generation (DoBE, 2011:158).

### **3.9.2 Nutrition and School Health**

The concept of health is understood differently by individuals as well as communities. It is important that nutritious meals be part of the daily food that people take as part of the needs that add to the social, physical and cognitive health. The well-being of people in terms of nutrition implies that they take in forms of food that constitute a balanced diet, that is, food with a combination of nutrients that are required by the body. The health status of a human being is indicative of the nature of food that one eats and its overall contribution to physical, mental and social well-being. The way in which attention and support is rendered to people or community to address the food and health demands of the child is referred to as care. In most African societies, the giving of food is significant

as it is used to maintain relations as food is related to affection, love and friendship (Alder & Jones, 1998:1).

Health and nutrition programmes in schools contribute directly or indirectly to the gender issue. This owes to the facts that conditions that are health related affect girls the most in as far as education is concerned (Bundy, 2011:3). Girls are also at a much higher risk of poor health and hunger in situations that expose children to physical and psychological vulnerability. It is hoped that schools should play a leading role in tackling matters of gender imbalance among learners. Girls are known to experience increased levels of iron-deficiency anaemia which has negative effects on cognition (Tomlinson, 2007:5). De-worming and iron supplements are some of the interventions that are used in schools. Each one of these interventions address anaemia directly in ways that offer particular benefits to girls (Bundy, 2011:3).

Tomlinson (2007:5) indicates that school feeding as an intervention to fight hunger, falls within the initiatives of the school on health issues. School health covers a wider span of considerations of which the feeding programme is a part. These include HIV/AIDS education, de-worming and health and life skills education. Feeding programmes that are run in schools seek to promote health in a number of ways and provide the best platform to serve health promotions.

In developing countries poor health plays a major part in the achievement of weak educational results. These nations tended to split the functions of health and education as represented in the formation of separate government departments with very independent functions. The symbiotic relationship between health and education is visibly evident in the interlocking functions that are observed in schools. According to Tomlinson (2007:5), convincing evidence exists that indicates ways in which the learning of children can profit from the wider interventions on health and nutrition.

According to Bennet (2003:14), school feeding programmes (SFPs) can assume many forms which depend on the environment and the time of delivery. The two major

objectives of school feeding programmes are to enhance the education of the child and food security. Education goals encompass enrolment, improved attendance, especially for the girl child as well as increased participation which is supported by the offered food. In terms of food, the goals are the lowering of the shortage of food and the enhancement of the status of school going children in terms of nutrition. The ultimate concern is being the reduction of levels of malnutrition.

Partnership for Child Development (1998:256) indicates that the status of children in terms of nutrition and health have a great push of their learning, more so, on the way in which the child performs at school. Learners with certain forms of nutrient deficiencies such as iodine and iron, and are affected by infections, hunger and diseases are incapable of performing with those that are healthy. Children with poor health and nutritional status experience reduced mental development which comes as a consequence of changes physically or reduced capacity to engage in learning activities. However, the nutritional status of people does not change with maturation or as a result of growth by age. The participation of school going children in house chores and the energy they expend in travelling to school makes them candidates for energy giving food compared to children that are much younger. These evidences the presence of children at school that experience protein-energy malnutrition and short-term hunger.

### **3.9.3 Health and Education**

The cornerstones of human capital are concerns of health and education which constitutes the foundations of a person's economic productivity. These two contributes to the health of an economy as well as the literate levels of a society. Education brings a lot of benefits which accrue particularly through the empowerment of women. Educated women have a significant place in the development agenda of a country as they help in the building of small family sizes and an increased production in agriculture (Tomlinson, 2007:4).

Drake, McMahon, Burbano, Singh, Gelli, Cirri and Bundy (2012:6) indicates that about 500 million days of schooling are squandered each year in low-income nations as a result of general health concerns school children. The provision of quality teaching and learning requires learners to be regular in attending school and be ready to learn when in class. This calls for partners in education to increase efforts towards measures that aim to improve the learning of the marginalised. These can come in the fold of school health, bursaries and school feeding.

Children from disadvantaged backgrounds experience a number of setbacks compared to those from affluent environments. They tend to have poor health and retarded language skills development, which subsequently affects achievement at school. Their physical, social and psychological orientation does not motivate them to interact well with school programmes. The school system needs to ensure they receive the needed assistance so that they benefit meaningfully from the learning process. Julius Nyerere, former President of the United Republic of Tanzania once said: "Education is not a way to escape poverty - It is a way of fighting it" (UNESCO, 2001:3).

Alderman and Bundy (2011:231) state that school feeding programmes improves school attendance, mental and educational achievement. This programme can help to get learners into school and to be retained. They enhance enrolment and reduce absenteeism which further contributes to their learning. NSNP helps to alleviate hunger and promotes cognitive abilities. In addition, school feeding programmes improve the health of, especially when infused into broad school health and nutrition programmes. Healthy and well-fed children learn better. School feeding and school health and nutrition programmes generally are currently realised as contributing immensely to the attainment of the Millennium Development Goals and Education for All commitment (Adelman, Alderman, Gilligan & Lehrer, 2008:12).

### 3.9.4 Health and School

Steyn, Lambert, Parker, Mchize and De Villiers (2009:8) emphasise that schools are stable settings that use their theoretical advantages to promote health activities. They assist to plant health-based beliefs as well as behaviours at an early period in the growth of children. Learners at school constitute a massive group which is reachable over long periods within a setting which is reflectively protected and which teaching and learning are the norms. The capacity to influence learners in their tender age is the best strategy impact on the beliefs regarding the health and culture of communities.

The added reward in the improvement of the health status of learners is the enhancement of their educational performance. Constructive outcomes of education which are connected to better health in learners encompass enhanced classroom achievement, participation, attendance and positive attitudes. It is evident that the promotion of school health activities that include families and the society have a widespread influence, inclusive of school-going children (Symons, Cincelli, James & Groff, 1997:221).

According to Grantham-McGregor and Olney (2006:106), the nutritional status is connected with the behaviours of learners that focus on attendance, concentration and participation. Many research works demonstrate a linkage between weak nutrition levels and disruptive class behaviours and high drop drop-out rates from school. Alleviation of hunger from participation in School Nutrition Programme might encourage learner's attention and reduced delinquent behaviour. School meals that are of low quality, delivered in an irregular manner and in limited portions would never be expected to achieve the intended outcomes. This is relevant to this study which explores challenges of implementing the NSNP in Vhembe District.

The first step is to enroll children at school. While at school, vulnerable learners prove to need support along the direction of their school engagement so as to reduce the danger of them being absent or dropping-out. The unpredictable school participation of malnourished learners might be a crucial factor to cause weak performance. Attendance

to school without taking a breakfast meal might create drastic effects on learning (Jacoby, Cueto & Pollitt, 1996:54). Learners that experience hunger have challenges of concentration and performing complex exercises (Grantham-McGregor, Chang & Walker, 1998:785).

The performance of school age learners can also be impacted negatively by deficiencies in Iodine, vitamin and Iron. It is believed that about 53% of learners suffer from anaemia and shortage of iron disorders that emanate from a shortage of iron are thought to affect about 85 million (7%) children (Jukes, Drake & Bundy, 2008:76). Children that regularly skip meals in addition to having nutrient deficient food are at high risk of underperforming academically. Results from school feeding programmes run by WFP based on 12 low income countries that experience food shortages reveal that above 60% of learners in assisted schools do not eat breakfast prior to attending school (WFP, 2007:12).

### **3.10 SCHOOL FEEDING PROGRAMMES IN SELECTED COUNTRIES**

This section addresses the implementation of school feeding programmes in developed countries, South Africa and the Southern African Development Community (SADC).

#### **3.10.1 School Feeding Scheme in Developed Countries**

The food diet of children has worsened drastically in the past decades and is now the main centre of pre-occupation in first world nations, particularly in regard to high levels of obesity in children (Belot & James, 2009:2). Nutrition is associated with the five major risks of the burden of diseases calculated in DALYs (Disability Adjusted Life Years). These include cholesterol, iron deficiency, high blood pressure and obesity. The poor diet of children impacts not only their health and weight but even creates shortage of nutrients that play a crucial part in mental development. Diet is also envisaged to have a paramount effect on human behaviour, cognition and concentration. The immunity levels of individuals is also affected and the related capability to report at school (World Health Organization, 2004:4).

### **3.10.1.1 School feeding scheme in the United States of America**

Pollitt, Gersovitz and Gargiulo (1978:477), indicated that the involvement of the United States government in the feeding of learners can be tracked to the Agricultural Adjustment Act of 1935. This enabled the state to give dairy products, wheat and excess meat to families and schools which were in need. The establishment of the National School Lunch Programme marked the institutionalisation of feeding activities across the country. The control of summer and child care programmes, Breakfast and Special Milk Programmes as well as Maternal and Infant Feeding Programmes was guided through the notification of the 1966 Child Nutrition Act. The objectives of this Act, as stated in Section 2, are as follows:

*"In recognition of the demonstrated relationship between food and good nutrition and the capacity of children to develop and learn, based on the years of cumulative successful experience under the national school lunch program with its significant contributions in the field of applied nutrition research, it is hereby declared to be the policy of congress that these efforts shall be extended, expanded, and strengthened under the authority of the Secretary of Agriculture as a measure to safeguard the health and well-being of the nation's children and to encourage the domestic consumption of agricultural and other foods, by assisting states, through grants-in-aid and other means, to meet more effectively the nutritional needs of our children."*

### **3.10.1.2 School nutrition in Britain**

According to Belot and James (2009:8), the provision of meals to learners started in England in the 20<sup>th</sup> century as a response to increasing worry on the high levels of malnutrition among children. Post-World War II, this was a change from parceling out meals only to malnourished learners to cover the entire child population. The standards of nutrition were began in 1941 to encompass protein, fat and energy. A change of policy began in 1980 to do away with giving the government the sole responsibility of meeting nutritional standards. The quality, type and price of meals then rested with discretion of

local authorities. Basic standards of nutrition were reintroduced in 2001. An enforcement of these standards, however, remained fluid.

According to Belot and James (2009:4), the school feeding programme was initiated as the “Feed Me Better” campaign which emerged in the period 2004- 2005, whose objective was to improve the standards of nutrition in schools. This campaign assumed the form of a widespread experiment that presented latitude to investigate the impact of diet on outcomes of education. This resulted in dramatic shifts in the menus that were started in the 80 participating schools in Greenwich. The schools were used to as a basis to introduce changes across schools.

The critical value of school meals in British Schools saw around 45% of learners in to secondary and primary schools accessing lunch on each day of schooling as a dietary intervention strategy. The programme sought to assist learners from deprived families to access free meals at school. About 18% of the local population of learners were suitable to benefit from free meals in 2006. The feeding programme provided an opportunity for policy makers to limit the differences in diet between learners from well to do and poor social and economic environments. This was supposed to reduce disparities in educational outcomes between learners from different economic groups.

### **3.10.2 School Feeding Scheme in African Countries**

This section discusses the implementation of school feeding programmes in Southern African Development Countries including Ghana, Kenya and Angola.

#### **3.10.2.1 School feeding scheme in Ghana**

School feeding in Ghana is conducted under Ghana School Feeding Program (GSFP) that was established in 2005 to contribute to reduce poverty and raise the security of food in Ghana (Ghana School Feeding Programme, 2010:3). Just like South Africa, Ghana has three objectives, which are to lower hunger and levels of malnutrition through supplying kindergarten and primary school learners with meals that are nutritious on each

day of schooling. The aim is to increase school enrolment, attendance, retention and to encourage national production of food by purchasing meals locally. This also contributes in the sustainability of the market for agricultural producers in the country. The goals of the GSFP are sensitive to the United Nations' Millennium Development Goals in relation poverty, hunger, poverty and primary education. The GSFP is the baby of the government of Ghana and the Dutch Government (Ghana School Feeding Programme, 2010:3).

The government of Ghana initiated two forms of feeding schemes to increase enrolment and raise the well-being of school going children. The first one involves giving school girls from poor families take home rations. This programme is provided in the three regions which are in the Northern Province of the country. The other model involves giving a hot meal to children at school based on the use of food that is provided from local producers. The second model of the programme started by offering lunch to above 975 schools constituting above 400 000 learners. It was expected that by 2010 the number of schools covered would be at 2,900 with a sum of 1,04 million learners. Currently, the programme feeds 656 000 learners, which is approximately 22% of the entire schools country wide. About 75% of primary aged learners attend school in Ghana. A decline in school enrolment is, however, being experienced at junior high and secondary institutions, particularly with regard to children from very poor backgrounds. (Lagarde, LeBlanc & McKenna, 2008:46).

The model which involves learners taking home rations of food is part of the pilot work which is done under the World Food Programme and a New Partnership for Africa's Development (NEPAD). The programme is structured in such a way that it should foster a connection between agricultural development and school feeding through the purchase of locally produced materials. The aim is to create a constant demand for local products as well as increasing enrolment, attendance and retention, with a focus on the girl child.

While locally manufactured food is mostly used, the WFP avails fortified products consisting of corn-soya blend, palm oil and iodised salt to add to the food substances that are locally produced (WFP, 2007:6).

The implementation of the take home model has shown that this is more expensive than other strategies of food distribution. These costs appear to emanate from the large quantities of items of food in the distribution per learner. It is estimated that the rations are two times in volume compared to the centralised school feeding programme. Admittedly, the programme has hugely assisted in the quest to achieve gender equality in the three provinces where it is rolled out but will be slowly transformed into the national school feeding program (Gelli, Al-Shaiba & Espejo, 2009:7).

In Ghana, the decentralised approach to school feeding is used like most African states and relies on structures in the local area for implementing the feeding programme. The servicing of the programme differs according to regions, districts and schools. This also relates to the way in which food is sourced, the development of menus and the preparation of that food. It is the School Implementation Committee (SIC) that is provided with resources to buy, store and prepare food. The SIC gets resources from the District Implementation Committee (DIC) to purchase the required supplies. It is the District Assemblies that set DICs and see to it that there is infrastructure and to run the programme and people are mobilised to give the needed inputs to schools. Regional Coordination Offices and the Regional Coordinating Council are mandated to preside over operations at regional and district levels (Bundy *et al.*, 2009:49).

### **3.10.2.2 School feeding scheme in Kenya**

In Kenya, school feeding has been on offer since 1980 owing to the partnership between the Ministry of Education in Kenya and the WFP. Extreme poverty and the nomadic livelihood of people greatly affect education endeavours. As a result, approximately 1.4 million children do not attend school in Kenya (Fleshman, 2005:19). The establishment of free primary education in Kenya in 2003 resulted in a 77% rise in school enrolment in 2002 and 92% recorded in 2007. New enrolment figures ballooned by 1.3 million which propelled nation nearer to the Millennium Development Goal that advocates compulsory participation in primary education by all children as well as the attainment of gender equality. The feeding of learners promotes the free offer of education at primary level, allowing these children that belong to food insecure families to attend. Feeding schemes

also have the potential to pull less privileged girls to school even though the realisation of gender equality is still elusive. Regional differences still exist in the provision of education in terms of Nairobi for example, above 70% of primary age learners do not attend school in comparison with the 8% national average (Fleshman, 2005:19).

In an attempt to promoting universal primary education, the SFP in Kenya targets the socio-economically handicapped learners who have either not attended primary school or those in primary school in selected districts, the objective of feeding learners is to increase attention, learning abilities as well as improving learning facilities and the nutrient intake, among those children. To achieve this feat, improved food access, facilities, resources and training is imperative (Global Child Nutrition Forum, 2007:5).

The feeding programmes in Kenya are basically propped up by the Ministry of Education and the WFP. The duties of these organisations are directed at the 12 million learners in appropriately 4000 institutions. This translates to 1/6<sup>th</sup> of the population of children that attend primary school. The programme has been extended to reach out to areas that are food insecure. A National School Feeding programme has not been reached in Kenya but the Policy Framework for Education 2005 advocates for the growth of the programme and persuade policy to offer much meals to learners that are in need. School feeding also features as a key compose of the Kenyan Education Support Programme. Other target area includes nutrition and school health. Primary and pre-primary schools in the dry areas, unplanned areas in urban locations of Nairobi and kindergarten centres are meant to benefit from the feeding programme. Learners in selected schools are provided lunch meals while learners from slums and ECD centre receive 40g of corn soya as additional from the basic provisions accessible to learners in beneficiary schools. The private sector and non-governmental organisations also assist in the programme. It is estimated that the cost of feeding each learner per year totals \$28 (WFP, 2009:3).

### **3.10.2.3 School feeding scheme in Angola**

The programme for recovery of Angola places great emphasis on strategies that can be implemented to reduce poverty. School feeding stands out as one of the priority targets.

Many communities lack basic services with large number of school age learners not attending school. Education is considered compulsory for all children at the age of eight. A lot of children, however, do not attend school as a result of shortage of teachers and buildings. Parents also encounter challenges to meet education related costs related to school fees, stationary and other supplies. The years of looting and destruction of school infrastructure during the period of civil war are believed to have retarded efforts to improve education in the country (Bureau of International Labour Affairs, 2005:1).

The government in partnership with many organisations in Angola participated in the implementation of school feeding programmes. About 147,182 learners take part in the feeding schemes that receive assistance from the WFP. Enrolment totals shot up from 88% in 2006 to 94% in 2007/8. The WFP has also focused attention on creating an awareness among parents on the importance of education, mainly for the girl child. A three year feeding programme was piloted in the areas that were previously serviced by the WFP to provide baseline data on the feasibility of implementing the school national feeding programme across the country. The Brazilian government through the Brazilian Fund for Education Development has contributed in school feeding initiatives in Angola. The crafting of policies and programmes for the national school feeding programme received participation from The Global Child Nutrition Foundation (GCNF) which worked hand in hand with the Angolan Ministry of Education. The principal objective was the reduction of the consequences of food shortage in the short-term (Lambers, 2009:27).

### **3.11 SCHOOL FEEDING SCHEME IN SOUTH AFRICA**

Owing to the commencement of the Government of National Unity in 1994, South Africa's system of education reform was a number one priority and it has contributed significantly to address imbalances and the injustices of apartheid. A lot of strides have been realised in connection with legislation on curriculum reform, policy development and the strategy for the delivery of education. All these efforts were made for the betterment of South African citizens, more especially the young who are still going to school. Evidently, improving the nutritional status of people, more especially learners, is one of the prime

duties of the government and is an essential factor in improving their health status and quality of life.

It is common that strategies to supplement incomes in many developing countries are limited. Programmes that are nutrition based have tended to take over in the fight against malnutrition. In this view, feeding programmes have appeared prominently among policy masters as it is believed that the provision of income additions less likely reach the intended target, especially children that are more vulnerable to health and education challenges. The government of South Africa has the obligation to support school feeding endeavours, especially within the current attitude to implement financial cutbacks (Ankomah, 2001:12).

### **3.11.1 School Feeding in South Africa Prior to Democracy**

According to Iversen, Marais, Du Plessis and Harselman (2012:3), the Union Government of South Africa (previously a British colony) initiated programmes to provide food to people at the time of World War II in which food supplements in the form of butter and milk were served to the malnourished. The distribution of milk to some coloured and whites only primary school was started in 1938. Intervention that involved food subsidisation enrichment and aid were permitted later on. In all implemented programmes, the blacks were excluded making the process flawed.

According to Kallaway (1996:4), the National Party while still in opposition, had supported the provision of food only to white children but consistently acted against equivalent provision for African children. The ascendance of the National Party to power in 1948 saw the issue of food distribution being upheld immediately, but it was some time before a clear policy emerged. There was justification on the constitution of a committee which was mandated to respond to representations concerning the rising costs and claimed malpractices in 1949. A policy was then crafted to legalise the reduction of school feeding schemes for blacks and to eventually phase them out. The committee also recommended that school committees should assume the running of feeding schemes, support their

existence and that the feeding of learners had to be limited to those below fourteen years. The entire feeding programme was called upon to close examination.

Behr (2008:4) states that the Protein Energy Malnutrition (PEM) scheme was established about forty years ago. This was a programme meant to provide food supplements to children under six years, women that were pregnant or nursing babies were also included in the programme which was administered through health centres. Food that was distributed covered powdered milk, maize meal and substitutes for breast milk. Some of the problems in regard to the PEM concerned staff shortage, poorly coordinated structures, provision of meals that were not accepted in the communities and a supply of a complete range of breast milk substitutes. However, PEM was broadened to provide foodstuffs such as milk with cream, corn soya and maize meal. The lifespan of this programme was short lived owing to a number of challenges that bedevilled it. A shift of focus then ensued with attention being given to the provision of nutrition education especially to the rich white communities. The role of central government to subsidise efforts by local authorities to mitigate the effects of hunger continued to hold.

### **3.11.2 School Feeding Scheme in Democratic South Africa**

Before 1994, South Africa was ruled by a repressive white minority government that used the instruments of state power to deny equality to all non-white South Africans. Through a highly organised system, known as apartheid (separateness), non-white South Africans were politically, socially, legally and economically discriminated against, to the advantage of white South Africans. This apartheid system, which was formally legislated from 1948, began to unravel in the late 1970s due to increased internal opposition and the negative effect that international economic sanctions were having on the South African economy. Despite trying to maintain its power by relaxing some minor apartheid laws and introducing very limited power-sharing arrangements, the white government reluctantly acknowledged at the end of the 1980s that majority rule was inevitable. This led to the unbanning of the ANC in 1990 and South Africa's first democratic elections in 1994 which

saw the African National Congress (ANC) sweep to power with nearly 70% of the popular vote (Neil, 2010:18).

School feeding scheme was also initiated in South Africa in 1994. This was initially rolled out as the primary school feeding programme under the auspices of the department of health. It was in 2004 that the programme was moved to the department of Education. The principles of the school feeding programme are contained in the Constitution, which views basic education as a fundamental right of human beings. The NSNP in South Africa strives to encourage better quality of teaching and learning through an enhancement of learning capacity, punctuality and regular attendance. It also aimed to reduce gender differences, micronutrient deficiencies, and hunger in the short term. The immediate need was to quickly start the programme, make use of school gardens and enhance healthy lifestyles. In 2008, about 83% females and 80% males attended primary school in South Africa (Van Stuijvenberg, 2005:2).

About 7 out of 12 million learners at school in 2008-2009 period received food assistance. Schools that are in rural and low-income areas were candidates of the programme. Participation depends on grade levels focused by each of the schools in the programme. A study carried out in 2002 showed that the principles of the programme were not being followed at either the school or the provincial level (Education Policy, 2010:10). Lack of uniformity in the provided menus, time for serving of meals and the days that are set for feeding were presented as some of the challenges of the programme. In this regard, measures were taken to standardise programme coverage and options in menus. The basic expectation was that all learners from Grade R to Grade 7 were to be fed in the 196 days of schooling in the year. The menus need to contain 20% of the accepted dietary amounts of energy, iron, zinc, vitamin A, calcium and protein. It is required that meals be given to learners before 10 am to boost the learning capacity of children. The feeding programmes in South Africa generally contain rice, sump, canned fish, beans, fortified maize meal, soya bread, fruits and vegetables (Education Policy, 2010:10).

Discrepancies in processes and outcomes persist in spite of the existence of provincial and national provisions for monitoring and evaluation of the programme as a condition to attract funding. It worth emphasising that the bottom-up of the decentralised model of school feeding is used in South Africa and hugely depends on local structures for implementation. The decentralised option however, results in varied implementation among schools, districts and provinces of the country (NEPAD, 2007:12).

### **3.11.3 The National Nutrition and Social Development Programme**

This begun in 1990 to workers as a safety net targeted at those individuals regarded as prone to the impact of the value added tax on general food stuffs. Its purpose with time breaded to consider the ability of people attains self-reliance with regard to the provision of basic requirements such as shelter, water nutrition and clothing. The money for the programme was given to the provinces depending on income estimates and size of the population. The running of the programme was done through community based and non-governmental organisations as a real scale. The programme has essentially remained a food dissemination exercise. Its support in reducing malnutrition and providing food security in families was never doubled. Challenges that affected the programme included its limited focus, incapacity in terms of administration and shortage of man power to distribute funding. In 1994, the programme was recast to be a component of nutrition orientated initiative based in the community. It is currently referred to by the name Community Based Nutrition Programme (CBNP). The realisation that school going children were not benefitting enough, they were coming to school on an empty stomach, is what led to the birth of the Primary School Nutrition Programme (Ankomah, 2001:13).

### **3.11.4 The National School Nutrition Programme (NSNP)**

The first Millennium Development Goal targets the lessening of poverty across the entire world. This goal also resonates with the interests of the government of South African government in as far as the reduction of poverty is concerned. Reduction of poverty is an imperative in South Africa where there is high unemployment rate and high shortage of

skills. This is the reason that saw the need for basic education feature prominently in the ruling party election manifesto for 2008 and a recurrent demand within the ranks of democratic South Africans. The 1955 Freedom Charter as well as Polokwane Resolutions of 2007 are evidence of the commitment by the ruling party to provide quality education to the population, with a call for “people’s education for people’s power”. Education was also pronounced as a basic human right as far back as in the 1996 Constitution. There was a declaration again to improve the quality of education in 2010, within the government's plan to revamp its planning systems. In addition to education, industry, trade as well as macroeconomic sectors top the government list in its attempt to enhance the well-being of its populace. However, it is basically through education that achievement in the other areas can be realised (Department of Basic Education, 2011:24). In this study, The National School Nutrition Programme is perceived as the solution to reducing poverty and successfully educating learners.

The NSNP is a component of the 2002 Food Security Strategy for South Africa that is intended to supply school learners with meals in order to mitigate effects of hunger and malnutrition, promote school attendance, participation and learner well-being. It is believed that the ability to realise quality education can be stifled by disease, hunger, lack of energy foods and inadequate micronutrients in the body. Although learning depends on many factors, there is evidence that it is also affected by hunger, low-energy diets, disease, parasite infestations and micro-nutrient deficiencies. Hunger and poor nutrition is shown among learners in the form of disorders like anaemia and stunting (Ischinger, 2008:162).

The feeding of learners in South Africa is an aspect of the consolidated food security model that was established by the democratic government through the Departments of Health, Social Development, Agriculture and Land Affairs. It is particularly a scheme that addresses the needs in regard to nutrition but does not serve as a panacea to all challenges embracing hunger, food security and diminished nutrition status (Education Policy, 1996:1). Ischinger (2008:62) shows that the PSFP commenced in 1994 as a component of the lead projects of the president of South Africa. The programme was

initially run by the Department of Health as an aspect of the Integrated Nutrition Programme (INP). Its change from the department of health in 2004 went with its being renamed as the National School Nutrition Programme (NSNP).

The Division of Revenue Act determines the allocation of funds to provinces for the NSNP (DORA, 2003:76). Additional instruments for the running of the food scheme reside in the Department of Education and National Treasury (Circular 29/2004:3). Key issues in roll out of school feeding programme pertains to:

- Recognising areas in which the extent of poverty soaring;
- Map the chosen areas as guided by the harshness of poverty; and
- Locate schools for feeding within the delineated land areas with particular focus on schools in informal settlements and rural areas.

### **3.11.5 Beneficiaries of School Feeding Scheme in South Africa**

According to Sangweni (2008:x), in the entire provinces, many school going children that are served by the programme belong to poor households. The majority of learners reside with relatives who may not be their biological parents, as these may either be incapacitated to assist or have passed on. In some instances, these learners belong to child headed families.

In order to give benefits to the relevant learners, the schools are organised as per the economic position of the households that border them into five quintiles. The very poor households constitute quintile 1. Provinces containing the highest degrees of poverty receive a large number of schools as well as learners that are put in the bottom quintile. The total number of schools and learners can differ across quintiles. Demographic information was employed to come up with cut-off points to define quintiles. In addition to this, the size of independent learners and their profiles become helpful in determining the categorisation of quintiles. The schools are not easily moved from one quintile to the other over even if enrolments change over the years for the sake of ensuring stability in

the rankings. In cases where it is conclusive that the school is wrongly placed, the provincial departments make an application of appeal to institute the change. Quintiles are not necessarily of the same sizes but need to clearly capture the divide between schools that are in communities which are less poor and the very poor. Admittedly, the quintile system is very useful as it has allowed resources to be targeted to support schools in the communities which are in most need (DoBE, 2011:21).

The beneficiaries of NSNP are rolled out in quintile 1 to 3 schools which serve the poorest communities in society. Children attending quintile 1 schools are considered the poorest of the poor and their school fees as well as other related expenses (such as the NSNP) are wholly subsidised by the government. Several other concerns must be borne in mind as well, such as culture, religion and norms. Cultural awareness and sensitivity must be observed when creating and implementing the menu since there is no point in prescribing meals for children if the food they are served violates cultural conventions (Langsford, 2012:13).

The recipients of school feeding schemes are poor individuals who are caught up in poverty and for whom economic and social development is critical in order to experience a better life. Education is a necessary component of school administered feeding schemes for two reasons. The first relates to the impact feeding schemes have on children's school performance and achievement. The second is that from a national point of view, education leads to development. Societies do not exist in isolation and so feeding schemes form part of a larger social context, which in South Africa is coloured by other social pressures such as poverty, HIV/AIDS, unemployment and even the legacy of the country's political history. As these can also be classified as developmental issues, there is significant overlap and common ground between the two areas. However, the issue of individual children's school performance and achievement is academic in nature whereas education across the population is developmental in nature (Langsford, 2012:16).

### **3.12 BENEFITS OF SCHOOL FEEDING PROGRAMMES**

According to Bundy *et al.* (2009: xvi), the feeding programmes at school give an open or concealed return to the family regarding the cost of the food that is offered to the learners. In times of crisis they can be expanded to provide at least 10% contribution to the total costs of living in families. This cost increases exponentially in regard to the offer of take home rations. Feeding programmes are prone to effective targeting but rarely work as an option for cash transfers. In those countries of the third world with such poverty that limits children from schooling, food programmes hardly reach the targeted poor. Alternative provision of safety nets is difficult in such cases although the consideration of geography for assistance can work out moderately. Take home portion can also be trusted to achieve intended outcomes. However, there is need for more research on the advantages of school feeding in comparison to some similar safety net activities in communities.

It is the huge benefit that feeding programmes offer to schools that justifies the feasibility of implementing them in schools. The programmes also provide the motivation for social protection. The implementation of the programme through education industry policies sustains the effectiveness of school feeding across nations. It is the educational benefits of school feeding that enable it to remain a recognised safety net and its continuation in the education environment. Food distributions that are well structured and encompassing the deworming and micro nutrient fortification can complement programmes that take care of the nutrition of young children and not compete with them (Bundy *et al.*, 2009:xvi).

#### **3.12.1 School Feeding as an Emergency Intervention**

Bennet (2003:15) indicates that the feeding of learners at schools has been used as the main plan to alleviate food shortages in times of crisis such as war or drought. These school feeding programmes however, cease to be a priority issue in extreme crises points but become supplements to the food that will be given to households. The withdrawal of children from school is usually experienced in times of crises as they would be expected

to contribute in income generation. However, school feeding programmes may come as an attractive incentive to re-admit children in school. In situations where schools operate normally, a school feeding programme may work to offer both direct and indirect forms of assistance. Direct strategy comes in the form of a take-home portion while indirect takes the shape of a school meal.

### **3.12.1.1 HIV/AIDS and food security**

Bennet (2003:15) views the HIV/AIDS scourge as an urgent situation as it results in a huge population of orphans and the dropout of learners from school to look after family members and engage in income generation activities in case where a parent has died or is ill. The effect of HIV/AIDS in South Africa, like in other countries has been a growing number of vulnerable children, orphans and households that are child headed. This has an impact on child nutrition, food security and the subsequent interventions which the government should implement.

According to Pieterse and Van Wyk (2006:27), a synergistic relation exists among food security, HIV/AIDS and agriculture. Malnutrition raises the chances of being infected with HIV/AIDS. On the other hand, HIV increases the prospects of failure to eat nutritious meals and malnutrition. It is pointed out that, although HIV/AIDS has not been proven as a single cause of famine, it has however contributed to the worsening of chronic food insecurity. Health care costs also increase on family members experiencing an illness from HIV/AIDS infection. Incomes of family members that are HIV positive subsequently decline as they either ill health worsens or become exposed to primarily to seasonal labour demands in the agricultural industry.

When the depletion of household resources occurs because of HIV/AIDS, the state of nutrition of the people gets affected as they have to change from a depressed capital-intensive system of farming to easily produced crops which are less nutritious like cassava. Children also take the responsibility of producing family food in the absence of parents and community members to mentor them (Chopra, 2004:65). A child's access to education is likely to be pretentious if his or her family is affected by HIV. Financial

pressures increase when a family member is infected with HIV. When parents are ill, they may not be able to work or they may lose jobs due to absenteeism or stigma (Bachmann & Booysen, 2004:821). In addition, children in families affected by HIV/AIDS face discrimination and stigma by fellow community members (UNICEF, 2006:12; Pridmore, 2008:33). Discrimination in schools may lead them to drop out (Robson & Sylvester, 2007:260).

### **3.12.2 School Feeding Programme and School Attendance**

Children who are educated are more likely to be able to feed themselves and their families in adulthood life. School feeding has long served as an incentive for parents to enroll their children in school and ensure their regular attendance. The amount of the value transfer and child labour market factors will influence the impact of school feeding on school access, that is, enrolment, attendance and retention, especially among the most food insecure households (Gelli, Meir & Espejo, 2007:150).

Edstrom, Lucas, Sabates-Wheeler and Simwaka (2008:213) further indicate that school feeding is effective in targeting groups. This has proved helpful in increasing enrolment of girls in situations where there are limited chances of attendance to school. The offer of meals to learners might mitigate school periods of food shortage which is crucial for teaching and learning. Learners that have eaten adequately become attentive and exhibit higher levels of mental abilities. The meals need to be served early in the day to give maximum rewards during the period of lessons. Therefore, the timing of meals is crucial in addressing the effects of food shortage and cognitive gains.

Provision of food to learners can assist to contribute to enhanced performance in assignment, tests and examinations and learners' progression for the goal of achieving basic education among the population (Adelman, Gilligan & Lehrer, 2008:9).

### 3.12.3 School Feeding Programme and Gender

The saying, ‘if you educate a woman you educate the nation’, is relevant to school feeding programme because this programme has proven to contribute to educational attainments. It is believed that girls that are educated are more likely to produce less children who are healthy and to provide over families that are secure food-wise. This programme reduces the grades divide in schools by contributing in the empowerment of women. It also provides increased protection from HIV/AIDS and employment opportunities for women (World Bank, 2007:53).

Feeding schemes in schools help to narrow the gap by gender in terms of education provision for boys and girls. This addresses situations where the population of boys in schools greatly exceeds that of the girl child. The difficulty that confronts families in terms of meeting direct and indirect costs of education tends to favour girls than boys in school attendance. The trend hinges on cultural stereotypes which encourage the education of boys compared to girls, as boys are perceived to be more valuable than their female counterparts. Girls are required to attend to home chores and tend to be affected by distances to schools and related security issues compared to boys. However, girls have also scored some of the highest educational gains and investments that have accrued from education (Harkin, Lugar, Durbin & Leahy, 2002:8).

It is a worthy health and social investment to increase the opportunities for girls to access education. Improving the health status of girls has a positive impact on the overall health of their families and children as they tend to adopt the responsibility of looking after other people in society. This covers aspects with a direct effect on health such as monitoring children, preparing food, cleaning surroundings and seeking health care (World Bank, 1993:32).

The more educated girls are, the healthier they tend to become. Educated women and girls are prone to seek prenatal care, birth healthier babies and subsequently look after them in clean spaces. The level of education of the mother impacts hugely on the health

and status of the child in terms of nutrition. Mothers that are undernourished are likely to give birth to low weight babies which have negative effect in the fight to break the intergenerational cycles of malnutrition in families. Maternal iodine deficiency in pregnant women, for example, results in children that are born with a retarded ability to learn. It is therefore, economic to support the good health of women as a strategy to enhance the nutritional value of the future generations. The NSNP is ideally valuable to provide supplementary meals to young girls to make sure that their remaining development probability is realised (Alder & Jones, 1998:9).

#### **3.12.4 School Feeding Programme as a Social Safety Net**

Feeding programmes in schools have been employed for the purposes of social protection in as much as they also serve educational reasons. The value of school feeding varies greatly from the provision of snacks at school to great amounts of take home portions at the top end of the structures. There is a need however, to closely assess the benefits that results from feeding programmes at school compared to other forms of social safety nets (Grosh, Del Ninno, Tesliuc & Ouerghi, 2008:24 & Bundy *et al.*, 2009:13).

The reduced purchasing power of families leads them to resort to negative mechanisms of coping, which may include removing children from school to avoid the expenses that relate to schooling. These schemes can also protect family investments in schooling by assisting to reduce educational costs. Parents are encouraged to register their children, make sure they participate in lessons and complete the courses. Children are effectively protected from child labour and their social integration abilities are facilitated (Paruzzolo, 2009:324).

Grosh *et al.* (2008:24) also observes feeding of learners represents a recognised safety net which confers a meaningful level of value transfer in school meals which effectively constitutes about 11% of household income.

### **3.12.5 School Feeding Scheme and School Enrolment**

A mutual relationship exists between school feeding and enrolment. Feeding programmes have the capacity to increase enrolment if they are targeted at the preferred population. These programmes normally target low income groups that experience a low supply of food and low enrolment at school. Feeding programmes play a role of transferring income when they function as a strategy to increase enrolment. The impact of school feeding is affected when the distance that learners have to walk to school is increased, education quality is viewed to be low and when school age children have a disability. However, it is not cost-effective for the provision of food to be spread across the nation. It is considered more beneficial to target communities that are at high risk than individual learners in schools as this may result in dysfunctional competition, food sharing and weak support of the community (Harkin *et al.*, 2002:8).

### **3.12.6 Nutrition and Economic Production**

Alder and Jones (1998:12) indicate that children that receive desired levels of nutrition grow to become fit adults that are able to play well their expected duties in life. Individuals that are educated and healthy can be highly productive in such a way as to increase their income and boost the economy of the nation. Mothers that are healthy subsequently assist in the realisation of a well-nourished family and this aids to lower financial burdens for the entire family. More time is saved which would otherwise be wasted when people continuously seek medical attention. The availability of time then, in addition to the resources that the family is able to acquire can be channelled into income generating projects, participating in social activities and in further education.

The burden of disease in middle and low-income nations can be alleviated through the implementation of vibrant public health programmes. This can involve health and nutrition considerations which can be implemented through advocacy and edutainment services. Multiple health interventions may be adopted, inclusive of the NSNP, whose benefits may at times be judged to exceed the costs, if other sets of interventions are brought into the

fray. Alder and Jones (1998:12) argue that interventions on nutrition can assist to lower the costs of health due to chronic diseases and related productivity losses.

### **3.12.7 School Feeding and Access to Education**

The World Food Programme (2004:7) observes that the provision of food can be used to deal with issues of access to education as children from depressed backgrounds fail to have easy access to teachers, schools and resources. Low income countries experience problems in providing social services to the rural poor groups. These areas are usually characterised by dilapidated structures, low teacher motivation and long travel distances to schools. This scenario demotivates learners, especially girls whose school attendance is usually limited by safety and security concerns.

There are some aspects of school feeding that may enhance access to education by vulnerable children:

- Supply of meals at school might encourage community support for the required infrastructural improvement, supplies and services. Food assisted institutions tend to attract community engagement even in cases where there is not actually planned programme for development. Community mobilisation approach is pivotal in the enhancement of educational processes and these include the institution of a teacher parent association and involvement of women in the feeding exercise.
- At an early stage of establishment, school feeding can provide direct improvement in infrastructure. It has the capacity to attract other players to participate in the development of poor communities such as access from the government, private sector and development agencies. It is beneficial to develop strong partnerships around feeding programmes in schools (World Food Programme, 2004:7).

### **3.12.8 School Feeding as a Developmental Intervention to Aid Recovery**

There seems to be a thin line between the use of school feeding as an emergency strategy and a type of intervention for development. The principles that guide school

feeding as function of development also apply in the context of it being an intervention measure. However, the target tends to be refined in employing school feeding as an aid for recovery (Bennett, 2003:16).

Developmental school feeding programmes entail the improvement of certain people who are susceptible to food insecurity and not just to improve enrolment at school. The goal of an increase in school enrolment would require the government to waive or reduce fees with its funds rather than provide learners in the form of a school feeding programme (Bennett, 2003:16). School feeding as a development agenda would also rely more of employing take-home portions which learns more on the transfer of income among community members than school feeding for its own sake. The emphasis should be to increase security in the community in the form of food availability and making it easily accessible to people.

The use of a school feeding programme in development interventions implies that the feeding of learners at school and take-home portions contribute to family food baskets which, in an indirect way reduce the cost of education. As a developmental method, school feeding is implemented as an incentive for the private sector and the community to become involved in the education of their children (Bennett, 2003:16).

### **3.12.9 School Feeding as a Nutritional Intervention**

At face value, school feeding concept may seem to approximate a branch of nutrition intervention. These feeding programmes also work as a short-term mechanism to raise the enrolment of the girl child and the general stay of learners at school. The nutritional value of feeding programmes is outlined as follows:

- The politically charged and sensitive area of school feeding makes it difficult for robust tests to be carried out (Grantham-McGregor, 2005:146).
- Complaints about poor health and nutrition which lead to subdued performance at school are affected by many socio-economic situations, which in themselves affect

school attendance. To control all these factors in crisis times may prove to be difficult (Grantham-McGregor, 2005:146).

- Most growth and nutrition problems that affect learners at primary school emerge within the first two years of child development (Bennett, 2003:17). According to Mendez and Adair (1999:1557) deficiencies that relate to nutrition are limited after the child has passed the age of two. Dell Rosso and Marek (1996:123) believe that problems which result from lack of nutrients in the body affect all school-age children. Adair (1999:1143) posits that catch up after stunting is possible between the age 2 and 8 years. School age girls can benefit from micronutrient supplements for growth and mitigation of childbirth complications (Bennett, 2003:17).

### **3.12.10 School Feeding to Improve Child Cognitive Development**

A connection exists between cognitive performance and nutritional deficiency. It is quite possible however, that hunger can cause retardation in concentration, problems in recalling information and fluency in speech (Bennett, 2003:18). Vaisman, Voet, Akivis and Vakil (1996:1092) posit that there are gains that accrue from eating a heavy breakfast which lead to improved mental performance of a child in tests. Human performance is also best soon after eating. Physical and mental activity also decreases when temporary food shortage is experienced (Levinger, 1994:98). In an effort to avoid weak mental performance owing to deficiencies in iron and iodine, mineral supplements can be taken. Micronutrient supplementation of iron and iodine is perceived to improve mental functioning and growth, particularly among girls (Jamison & Leslie, 1990:12).

### **3.12.11 School Feeding as Short-and Long-term Food Security**

School feeding has been related to food security from the way in which the SFPs enhance learning outcomes. These subsequently aid literacy, encourage smaller family sizes, better management of households and improved education, particularly for the girl child. Long term and short-term food security are envisaged to mediate these noted

improvements. All of these improvements are linked to short-and long-term food security. Hicks (1996:12) outlines the three determinates of food security:

- Presence of food;
- Obtainability of food which rests on family income, safety nets and the management of resources by women; and
- Nutritional status of food in terms of iron, iodine, protein, energy and so on.

Hicks (1996:12) observes that the short-term supply of food, in the short term, for NSNP has no impact on diverse production of food, crop yields and the management of natural resources. Proper implementation of school feeding programmes, however, might affect food security through the provision of take-home portions in the form of transfer of income to the family. In the short term, improving micronutrient status of learners and protein level might improve food security, if the NSNP is well implemented. The long-term gains of food security as regard to availability, utilisation and access are very much connected to the enhancement of numeracy, literacy and educational outcomes.

### **3.13 IMPACT OF NUTRITION ON PHYSICAL DEVELOPMENT**

According to Sorhaindo and Feinstein (2006:10), the development of the physical component of individuals is dependent on mental growth. The shortage of nutrients start by impacting the brain and then manifests in the physical form. Diet becomes of importance mainly on certain specific areas of the body. The type of exercise that children also engage in at a tender age determine their habits later on in life. These physically activity enhances the motor skills of individuals in the form of catching, jumping and running. Lack of opportunities for children to develop psychomotor skills results in inactive adults.

The ability to activate a physical task to a given level constitutes a physical performance. It is dependent on modifiable variables such as nutrition and non-modifiable factors in the form of body structure and height. The physical fitness of the body to perform hinges on

genetics which is believed to influence 30-50 % of the differences in physical fitness. The nature of body fat and muscle content emanates from the influence of heredity consideration. The capacity to demonstrate a physical exercise rests on the inherited vascular respiratory and cardiac systems (Nutrition Foundation of India, 2009:12).

The maintenance of a healthy body requires good nutrition and exercise. The body weight, ability to recover from exercise and physical performance are mediated by the quantity and content of the food that individuals consume. Physical exercise needs energy to repair muscles, fuel actions and keep a certain form of body weight. A limited supply of energy results in the body fat and muscles being used as fuel while loss of strength can be realised with a reduced body mass. Deficiency in energy indicates lack of elements such as protein, vitamins, carbohydrates and minerals. Excess levels of energy are also problematic to activity as this leads to an increase in body percentage and weight (Mc Ardle, Katch & Katch, 2006:23).

### **3.13.1 Sight, Hearing and Speech**

It is critical for the body to contain fatty acids that are unsaturated. Highly unsaturated fatty acids facilitate physical growth in areas of health and cardiovascular health. African diets tend to be devoid of oily fish which assist in the development of these areas, including neuro development malfunctions (Richardson & Puri, 2002:234). The shortage of fatty acids in the body has been associated to the existence of learning disorders that includes dyspraxia, dyslexia and autistic spectrum. In a study conducted with 102 dyslexic between the age of 8 and 12, it was shown that supplements of fatty acids enhanced the reading on single word reading (Richardson, 2004:383). In a related study, the efficacy of HUFA in addressing common developmental disorders inclusive of dyslexia was also established (Richardson & Puri, 2002:235).

### **3.13.2 Motor Skills**

Problems related to the disorder which pertains developmental are also linked to the shortage of fatty acids. Dyspraxia affects approximately 5 per cent of school-aged children and results in impairments of motor function, independent of general ability (Richardson, 2002:284). Dyslexia and dyspraxia share many common characteristics. Both manifest difficulties with spelling, handwriting and written expression. Moreover, Developmental coordination disorder and dyspraxia are implicated in shortages in attention, coordination and poor motor control (Richardson, 2002:386).

### **3.14 THE INFLUENCE OF NUTRITION ON ACADEMIC ACHIEVEMENT**

The Centre on Hunger, Poverty and Nutrition (1995:12) states that students who are well fed tend to be better students, while ill-nourished children tend to have weaker academic performance and score lower on standardised achievement tests. Given that the majority of South Africa's youth have poor eating habits; this creates a tremendous challenge for meeting achievement outcomes. This link between nutrition and academic achievement exists for a variety of reasons. Inadequate consumption of key food groups deprives children of essential vitamins, minerals, fats, and proteins that are necessary for optimal cognitive function. For example, iron deficiency has been linked to shortened attention span, irritability, fatigue, and difficulty with concentration, while low protein intake has been associated with lower achievement scores. Poor nutrition and hunger also interfere with cognitive function and are associated with lower academic achievement, and these conditions can be present in underweight, normal weight, or overweight children.

Research reveals that learners achieve low scores in Mathematics and are more likely to repeat a grade, be suspended from school or visit a psychologist as a result of emotional disorder (Alaimo, Olson & Frongillo, 2001:108).

These learners also experience impaired functioning, increased levels of hyperactivity, tardiness and absenteeism from school (Murphy, 1998:164). Malnutrition has negative

influence on school going children as it can impair aptitudes, period of enrolment and concentration. Such learners normally do badly on IQ tests and factual understanding. A malnourished child that suffer from poor health hardly benefits from the use of instructional materials. Enhanced health study of learners allows individuals to effectively engage in learning activities (Alder & Jones, 1998:6).

The National Governors Association Centre for Best Practices (2000:2) indicates that several studies have shown a direct link between nutritional intake and academic performance. Transient hunger from missing meals and moderate under-nutrition can compromise cognitive development and school performance. Omitting breakfast can interfere with learning even in well-nourished children. Numerous studies have found that increased participation in School Breakfast Programs is associated with increases in academic test scores, daily attendance, and class participation, and it has also been linked to reductions in absences and tardiness. Both parents and teachers report that students participating in these breakfast programs are calmer in class and have more energy for studying.

Pollit (1995:1135) adds that chronically undernourished children attain lower scores on standardised achievement tests, are more irritable, have difficulty concentrating, and have lower energy levels. Undernourished students have less ability to resist infection and are more likely to become sick, and therefore miss school, which can undermine academic achievement since attendance is positively correlated with school completion and academic success.

### **3.15 THE RELATIONSHIP BETWEEN PHYSICAL ACTIVITY AND ACADEMIC ACHIEVEMENT**

Crawley (2005:12) shows that learning institutions play an active role of availing opportunities for physical activities that are ideal for learners and young children. Engagement in physical activities raises self-esteem and confidence of individuals. These

also prevent people from being obsess but to trigger an appetite for food. Schools are places in which learners can improve their image through exercise and healthy eating.

Eating a healthy diet does not in itself guarantee good health. A healthy diet is however an important part of a healthy lifestyle that also includes physical exercise, not using tobacco in any form, not drinking alcoholic beverages in excess and not abusing drugs. All of these issues should thus be addressed by a Health-Promoting School in an organised and complementary manner. The importance of addressing lifestyle holistically is clearly illustrated in the linkage between nutrition and active living. Physical exercise, recreation and sport help individuals acquire and maintain physical fitness and serve as a healthy means of self-expression and social development (WHO, 1997:76).

Physical activity such as involvement in sports increases human appetite for energy food. In rural communities, people expend energy through heading animals, farming and walking long distances. This implies that physical activity and nutrition should be viewed as intertwined aspects of a school that seeks to promote a healthy status among its population. In situations that experienced over nutrition an emphasis on physical activity should be based on alleviating the risks of obesity through active physical engagement. The risks of overweight are prone in sedentary than in areas of active people with obesity (WHO, 1997:77).

Thus, physical exercise and sport, together with healthy nutrition, can help reduce the effects of age and chronic disease on heart, lungs and muscles; reduce fatigue, mild anxiety and depression; and diminish the loss of bone calcium while creating vigor, stamina and other fundamental requirements for well-being. Additionally, recreation activities and healthy nutrition can restore strength and spirits after school and work. Ball games, dances or other recreational events can be supportive of good health and offer nutritious food. In a Health-Promoting School, personnel, community members and families can participate together in planning and implementing such activities which in turn strengthen community spirit (Alder & Jones, 1998:27).

Physical activity has also been linked to academic performance. A recent study found that schools with high percentages of students who did not routinely engage in physical activity and healthy eating habits had smaller gains in test scores than did other schools (Symons *et al.*, 1997:224). Schools that offer intense physical activity programmes have seen positive effects on academic performance and achievement (e.g., improved mathematics, reading, and writing test scores, less disruptive behaviour), even when the added physical education time takes away from class time for academic activities (Symons *et al.*, 1997:224).

Satcher (2001:121) reports of a study which associated programmes that involved physical activity to improved reading and writing in tests, in concentration, proficiency in Mathematics and academic achievement. A similar study also established that learners involved in physical education experience regular attendance, reflect an optimistic attitude to school and an impressive performance academically. It is revealed that physical activity has a sound effect on the function of immunity while more study is required on the linkage between physical activity and attendance at school. It is accepted that there are various causes for human sickness even among active individuals. Good nutrition ideally enhances the immune system and protects individuals against ailments such as flu and colds.

### **3.16 EVALUATION OF NATIONAL SCHOOL NUTRITION PROGRAMME**

Tomlinson (2007:14) indicates that a number of evaluations of the NSNP have been carried out. A number of significant weaknesses in the programme were found. These includes:

- School feeding is expensive and logically complicated and, in the South African context, has been beset by significant administrative difficulties and problems related to corruption.
- Many of the implementation problems have been due to management difficulties.

- Coverage in South Africa was poor and inconsistent. Unfortunately, the number of schools that were reached by feeding programmes is often seen as a marker of success. But this is misleading because it says nothing about the quality of the food, which days were missed, which children were at school to receive the meal, or which schools were able to provide the food only later in the day, and not at breakfast.

The rewards of School Nutrition Programme far exceeds the related expenses. An evaluation of this programme has however, tended to focus on the principles and not the actual processes of implementation. The benefits of school feeding border around its positive impact on learner attendance, attentiveness, reduced absenteeism and health status. An honest evaluation of the implementation of NSNP is evasive on the fact that data on other variance that act to influence learner attendance, performance, concentration and drop-out has not been interrogated (Tomlinson, 2007:15).

Hochfeld, Graham, Peters, Patel, Nyathela and Moodley (2013:9) argues that from the evaluation done by Tiger Brands, a momentary picture of the assessment is highlighted through the points below:

- There is prominent inequity in access to nutrition between rural and urban populations. A national study showed that 26.6% of South African children in rural areas were underdeveloped compared to 16.7% in urban areas.
- There is disproportion in access to nutrition between and within population groups, and there is a clear link between poverty and stunted or underweight people in South Africa.
- Hidden hunger is predominant in South Africa. Micronutrient deficiencies include a lack of calcium and iron, zinc, riboflavin, vitamin B6, folate, vitamin C and vitamin A.

According to the Department of Performance Monitoring and Evaluation (DoPME) (2012:3) the NSNP aims to enhance the educational experience of the neediest primary

school learners through promoting punctual school attendance, alleviating short-term hunger, improving concentration and contributing to their healthy development. About 8.8 million learners are beneficiaries of the NSNP (DoPME, 2012:3). The aim of government was that by 2014, 75% of learners in Quintiles 1-3 public primary and secondary schools should be receiving free school lunches.

In addressing **Outcome 1** (Improved Quality of Basic Education) the Department of Basic Education has to guarantee that the contact time of learners with their teachers is maximised by reducing learner absenteeism. High levels of absenteeism are often an early signal of dropping out of school. Measures such as school lunches for learners in poorer schools are one means of improving daily attendance (Department of Performance Monitoring and Evaluation, 2012:5).

The roll out of the NSNP entails a quarter of all teachers in the selected schools obtain food that is supplied to them through the Department of Education in the Province. The remaining population receive lunch that is funded by the National Department. About 8.8 million out of 11.8 million learners country wide received meals through NSNP. The aim of the government was 75% of primary and secondary school in quintiles 1-3 should have been receiving free meals by 2014. Public outcry was however, registered on the feasibility of the programme in terms of large sums of money required to run the programme, the poor quality of meals prepared in some institutions and the corrupt tender processes all play in the country. It is also necessary to evaluate the effects of meals on the health status of learners (National Evaluation Plan 2012/13, 2012:5).

Bundy *et al.* (2009:34) argue that school feeding programmes impact positively on the physical health of school going children by improving their nutritional status, reducing short term hunger and allowing for better nutrient intake. In addition, it is found that nutrition provided at school leads to intergenerational benefits. These are benefits that extend beyond addressing short term hunger, helping children to stay in school using school feeding programmes. It is only unfortunate because nothing has been said about

staying at school and performing. Learners may be at school but not focusing on their studies. Learning can only be seen through good performance in school work.

Another impact of school feeding programme is that it contributes to educational gender parity through focusing on the socially vulnerable girls that tend to be loaded with family chores that sacrifice their participation in education or weigh negatively on their achievement. This calls for the structuring and implementation of the NSNP to take cognisance of the existence differences by gender. The need to consider the needs of groups that are affected by certain conditions such as HIV/AIDS and other disabilities should be high on the agenda. There is need also for the development of local economies through increased use of foods that are sourced from local communities (Bundy *et al.*, 2009:35).

In summary, the provision of the NSNP is based on the thinking that a relationship exists between high levels of poverty and the deficiencies in nutrition which leads to an impairment to learn amongst school age children. The NSNP functions as a strategy to offer food to the most deprived primary schools country wide. The effectiveness of the NSNP is ensured through embedding it in the education sector (Gelli, 2010:23).

### **3.17 CHALLENGES FACED BY NATIONAL SCHOOL NUTRITION PROGRAMME**

There is pressure from civic society groupings and the community for the NSNP to spread wider its distribution of nutritious food to learners. It is the funding issue that presents some constraints to the programme. Funds are allocated once a year to run this project, implying that the review of the adequacy of funds is also yearly. One lunch is served to learners comprising vegetables, starch and a portion of protein. The scheme is earmarked for all learners at selected schools and does not target only those from worse off families. This helps to remove stigmatisation which may affect those selected for feeding. In spite of the programme being spread across the country and other cash benefits being extended to learners, the problem of the shortage of food still remains as a result of stiff rates of poverty and unemployment (Hall & Wright, 2011:56).

Evaluation of the NSNP should consider factors that include the size of the population covered by the programme and the way in which it functions. This applies to the number of learners that are provided with meals and the total number of schools that participate (DoBE, 2010:3). This kind of evaluation, however, does not shed light on the nutrient status of learners and their academic performance (Hochfeld et al., 2013:7). This motivated this study on the effectiveness of the implementation of the NSNP with particular attention on its contribution to enrolment, attendance, participation and learner performance.

The Department of Basic Education (2013:17) reveals that the hurdles to implementation that still occur include the provision of equipment and the environment which is conducive for the preparation of food at most schools. Other challenges of the school feeding programme in South Africa include inconsistencies in the roll out of the programme, varied menus amongst provinces, shortage of resources, inadequate basic supplies, portable water, weak connections to local agriculture, corruption and food theft.

### **3.18 SUCCESSES OF NATIONAL SCHOOL NUTRITION PROGRAMME**

School nutrition schemes have scored meaningful achievements in regard to child nutrition and health status (World Food Programme, 2009:12). The provision of meals in schools lessens hunger, fosters the intake of micronutrient as well as avoids stunting (Gelli, 2010:8). The consumption of micronutrients also causes the learner to gain weight and experience an increase in the capacity to learn (Hochfeld et al., 2013:6). The origins of weak educational outcomes as a result of malnutrition in children dates back in history and results from inequalities in the social structure. The NSNP is therefore, of particular significance in that it attempts to break the intergenerational cycle of exposure of children to poverty and economic inequality (Devereux & Sabates-Wheeler, 2011:23).

It is imperative to fortify efforts towards reducing the effects of poverty in education through reviewing the status of furniture, transport, nutrition and methods used in

curriculum delivery (DoBE, 2013:5). Households in poor communities have had improvements in sanitation, water and other basic services. There has been mitigation against poverty through safety, nutrition and health promoting interventions to enable learner performance improvements. Currently, over 8 million learners are fed daily through the National School Nutrition Programme. The National School Nutrition Programme (NSNP) will continue to be the Department of Basic Education's entrenched strategy to alleviate poverty and it will assist towards the realisation of learning outcomes.

### **3.19 CHAPTER SUMMARY**

There have been a lot of debates in an attempt to gain a deeper and more informed insight into the National School Nutrition Programme effectiveness. Kumar (2005:30) argues that an essential preliminary task of undertaking research is to go through the existing literature in order to acquaint oneself with the available body of knowledge in one's research area of interest.

The related literature that the researcher has reviewed on the effectiveness of the National School Nutrition Programme was helpful in establishing link between what is known and what needs to be investigated. The researcher discussed feeding schemes, as they are commonly known, in developing and developed countries. In both developed and developing, countries hunger is the main and common challenge that needs to be addressed urgently in order for school children from poor backgrounds to fully focus on their education.

Literature review also revealed that South Africa is not the first or the only country to introduce school feeding scheme as a way of encouraging learners to attend school. The school feeding scheme was there even before the advent of South African democracy in 1994. In democratic South Africa, the National School Nutrition Programme was initiated by President Nelson Mandela as a Reconstruction Development Programme to influence or fulfill the Right to Education which is free as stipulated in the Constitution of the Republic. The programme has been rolling since then and increasing from being a

primary school scheme to becoming secondary school scheme feeding learners from quintile 1-3 which are poorer communities.

The literature review also revealed the importance, the models, the benefits, and the types of school feeding scheme, the influence of school feeding scheme on school attendance by learners, the impact of nutrition on physical development, on gender, school enrolment, and above all, academic achievements by the children who are beneficiaries of school feeding schemes. The challenges and the successes of the National School Nutrition Programme were also discussed.

Literature review also indicated that there has been little research on the effectiveness of NSNP in improving school attendance, fighting absenteeism, and its influence on learner's performance in their academic work. It is this gap in knowledge that warranted the study.

## CHAPTER FOUR

### RESEARCH DESIGN AND METHODOLOGY

#### 4.1 INTRODUCTION

The previous chapter reviewed literature related to this study. This chapter discusses the research design and methodology, inclusive of the research paradigm and the study's methodological approaches. The selection of data collection and analysis techniques was guided by the research objectives and research questions which sought to explore the experiences of learners, teachers, principals and circuit officials on the challenges of implementing the National School Nutrition Programme. The post-positivist/interpretivist paradigm and phenomenological design guided the study. This chapter discusses the relevance of qualitative research approach for this study. The chapter also addresses the issue of the selection of participants, data gathering processes and procedures used for data collection which are individual face interviews, focus group interviews, observations and documentations.

#### 4.2 RESEARCH PARADIGM

A good research undertaking starts with the selection of the topic, problem or area of interest as well as the paradigm (Groenewald, 2004: 6). The term paradigm originated from the Greek word '*paradeigma*' which means pattern and was first used by Kuhn (1962) to denote a conceptual framework shared by a community of scientists which provided them with a convenient model for examining problems and finding solutions. The term paradigm refers to a research culture with a set of beliefs, values and assumptions that a community of researchers has in common regarding the nature and conduct of research. A paradigm therefore, implies a pattern, structure and system of scientific ideas, values and assumptions. It is an approach to thinking about doing research (Antwi & Hamza, 2015:218). A paradigm is a loose collection of logically related assumptions,

concepts or propositions that orient thinking and research. It is the philosophical intent for undertaking a study (Mack, 2010:5 and Mackenzie & Knipe, 2006:194).

According to Monette, Sullivan, DeJong and Hilton (2014:38), paradigms are general ways of thinking about how the world works and how people gain knowledge about the world. Paradigms are fundamental orientations, perspectives or world views that are not often questioned or subjected to empirical tests. Bunnis and Kelly (2010:359) define a paradigm as a set of beliefs and practices which are shared by communities to regulate inquiry within disciplines. Various paradigms are characterised by ontological, epistemological and methodological differences in their approaches to conceptualising and conducting research. These contribute towards disciplinary knowledge construction.

According to Antwi and Hamza (2015:218), research inquiry should be based on the concepts of ontology, epistemology and methodology. The term ontology is from the Greek words '*onto*' which means 'being' and '*logia*', which means science, study or theory. Ontology refers to a branch of philosophy concerned with articulating the nature and structure of the world. It specifies the form and nature of reality and what can be known about it. It is the way the investigator defines the truth and reality (Antwi & Hamza, 2015:218). Ontology concerns the philosophy of existence and the assumptions and beliefs that hold about the nature of being and existence (Cohen & Crabtree, 2006). This study made use of ontology to define truth and reality from the perspective of the participants who were purposefully sampled. The truth was obtained through the use of interviews, observations and documents that were found in schools.

The word epistemology comes from the Greek word '*episteme*', which means knowledge. In simple terms, it is the philosophy of knowledge or how people come to know (Krauss, 2005:759). According to Antwi and Hamza (2015:219), epistemology refers to the nature of relationship between the researcher and it denotes the nature of human knowledge and understanding that can possibly be acquired through different types of inquiry and alternative methods of investigation. Morgan (2007:53) adds that epistemology is the distinctive belief system that influence how research questions are asked and answered

and takes a narrower approach by concentrating on one's world views about issues within the philosophy of knowledge. Different questions were asked from different stakeholders in order to find different experiences on how the NSNP was being administered, and also the experiences of challenges that are affecting the smooth running of the programme.

Methodology as the third characteristic of paradigm refers to how the researcher goes about practically finding out whatever he or she believes can be known. It is the research strategy that translate ontological and epistemological principles into guidelines that show how research is conducted and principles, procedures, and practices that govern research. Qualitative methodology is underpinned by interpretivist epistemology and constructionist ontology. This assumes that meaning is embedded in the participant's experiences and that this meaning is mediated through the researcher's own perceptions. Researchers using qualitative methodology immerse themselves in the culture of the people and their interactions, often participating in activities, interviewing key people, taking life histories, constructing case studies and analysing existing documents or other cultural artefacts. The qualitative researcher's goal is to attain an insider's view of the group under study (Antwi & Hamza, 2015:220). In short, methodology is the strategy or plan of action which lies behind the choice and use of particular methods (Scotland, 2012:9).

Groenewald (2004:6) concludes that a paradigm is the patterning of the thinking of a person, it is a principal example among examples, an exemplar or model to follow according to which design actions are taken. Burton, Brundrett and Jones (2014:52) indicate that there are a number of research paradigms that can be used in a study. The next section discusses the positivist, anti-positivism and critical paradigms.

#### **4.2.1 Positivist Paradigm**

The positivist paradigm of exploring social reality is based on the philosophical ideas of August Comte who emphasised observation and reason as means of understanding human behaviour. According to Mertens (2005:8), true knowledge is based on the

experience of senses and can be obtained by observation and experiment. Positivist thinkers adopt Comte's scientific methods as a means of knowledge generation. Hence, Comte's ideas are to be understood within the framework of the principles and assumptions of pure science (Mertens, 2005:8 & Dash, 2000:1). Punch (2009:18) states that positivism's belief is that objective accounts of the world can be given, and that the function of science is to develop explanations in the form of universal laws, that is, to develop nomothetic knowledge. A positivistic researcher seeks generalisation and hard quantitative, measurable data by means of employing a scientific approach. The positivist paradigm was considered unsuitable for this study which focused on the lived experiences of participants on the challenges of implementing the NSNP.

#### **4.2.2 Critical Paradigm**

According to Shaw (2012: 131), critical paradigm is also known as critical theory which is a catch-all term to include neo-Marxist evaluation, some feminist positions, the work of Paulo Freire and some forms of participatory inquiry. These approaches are critical in the sense that problems are conceptualised as part of social, political and cultural patterns in which they are shaped. The form of critical inquiry focuses on the contradictions of practice. Hence the basic logic is not preoccupied solely with the formal organisation of argument, but also particular forms of reasoning that give focus to scepticism towards social institutions. Smart and Paulsen (2011:275) also observe that critical research paradigm highlights the importance of power dynamics in society as central to comprehending the way the world operates and to understanding any human enterprise or endeavour. The aim of critical paradigm as suggested by Mackenzie and Knipe (2006:194), McMillan and Schumacher (2010:24), was to eliminate injustice in society and critical researchers today also aim to transform society to address inequality, particularly in relation to ethnicity, gender, sexual orientation, disability, and other parts of society that are marginalised.

Smart and Paulsen (2011:275) continue to say that the goal of critical paradigm is to uncover oppressive features of society and to work towards more egalitarian and

equitable practices. Researchers who work within the critical paradigm often bring in unique methodologies and theories such as feminism and critical race theory to better understand and analyse the experiences of study participants. Asghar (2013:3123) state that critical theory explains the wrong that exists in society, identify the means to change the status quo and articulates the norm and values for implementing the needed change. The critical paradigm theory was not employed in this study as it tends to focus on the mobilisation of members of the society with the objective of transforming practices which are considered unsuitable for society.

### **4.2.3 Anti-Positivism**

Anti-positivism paradigm is also called the interpretivist paradigm. It was developed as a reaction to positivism. It is sometimes referred to as constructivism because it emphasises the ability of the individual to construct meaning (Mack, 2010:7). According to Creswell (2003:9), anti-positivist theory tends to rely upon the participants' views of the situation being studied and recognises the impact on the research of their own background and experiences. Monette *et al.* (2014:40) add that anti-positivist approach contends that social reality has a subjective component that arises out of the creation and exchange of social interaction. Social science must have ways to understand subjects' realities. Reality is seen as something emergent and in constant flux that arises out of the creation and exchange of social meanings during the process of social interaction. Rather than seeing reality as something apart from human perceptions, interpretive social sciences see reality or social reality as created out of human perception and the interpretation of meaning.

This study was conducted within the post-positivist paradigm. According to McGregor and Murnane (2010:422), post-positivism is a concept which assumes that there are many ways of knowing aside from using scientific methods. Rather than testing hypothesis, the post-positivistic research paradigm generates hypothesis through inductive reasoning. Instead of trying to explain how something operates, scholars strive to understand why it operates or why people operate in the manner that they do. This

paradigm was the most suitable for this research because it allowed for the observation of participants as they engaged in their everyday activities.

Post-positivist researchers believe that reality consists of people's subjective experiences of the external world. To them, reality is socially constructed and it is a human construct. Post-positivists assume that knowledge and meanings are acts of interpretation, hence there is no objective knowledge which is independent of human reasoning. Post-positivist paradigm is underpinned by observation and interpretation. To observe is to collect information about events, while to interpret is to make meaning of that information by drawing inferences or by judging the match between the information and some abstract pattern.

The post-positivist paradigm is concerned with understanding the world as it is from subjective experiences of individuals (Antwi & Hamza, 2015:218). In line with post-positivist paradigm, the researcher became part and parcel of the participants in order to understand and feel what they were experiencing. Shaningwa (2007:30) indicates that post-positivist paradigm allows the researcher to understand the situation or the phenomena being studied and to interpret meanings within the 'social or cultural context' of the participants. Personal visits to the selected schools for data collection helped the researcher to interpret the experiences, thoughts, opinions and actions of the participants in their own social settings and cultural contexts.

### **4.3 RESEARCH DESIGN**

Research design relates to the process of carrying out a study, inclusive of the time, participants and the environment in which data will be gathered. It is concerned with the overall plan as regard the arrangement of the research, the treatment of participants and the methods to be employed. According to McMillan and Schumacher (2010:20), research design clarifies the plan for realising scientific evidence which will be used to answer research questions. For this study, data was generated from the secondary

school learners, class teachers, NSNP officers and the principals, through the observation of participants in action.

Research design is perceived as the blue print that spells out the procedures to be followed in conducting a research (De Vos, 2001:123). This plan provides a framework of the way in which data are to be collected in order to address the research questions in a cost serving approach. Trochim (2006:63) adds that research design acts like a glue which binds the procedures of the research into a unified whole. A design is used to structure the research. It serves to show how the major parts of the research project work together to try to address the central research questions, including the samples or group measures, treatments or programs and methods of assignment.

Generally, research design refers the entire activities that embrace planning and putting into action the plans on a research endeavour, from problem identification, reporting and dissemination of the findings (Punch, 2009:112). According to Maree (2012:70), research design describes a strategy that shifts from a broad overview of research to the choice of participants, and data collection and analysis methods. This understanding guided the selection of the purposive sampling of only those respondents who are knowledgeable about the NSNP. These included learners, class teachers, principals and the NSNP officer who control and monitor the smooth running of the programme at their respective circuits. In order to get enough data, individual interviews were used for school principals and NSNP officials, while for class teachers and learners focus group interviews were used.

Terre Blanche, Durrheim and Painter (2012:34) observe that a research design happens to be a framework that links the research questions with the actual conduct of research. It is a plan which controls the setting up of an environment for data collection and analysis in a way that takes cognition of the purpose of the study as well as the cost of the process. A research design should provide a plan that specifies how the research is going to be executed in such a way that it answers the research questions. Designing a study involves

multiple decisions about the way in which the data will be collected and analysed to ensure that the final report answers the initial research questions.

According to Punch and Oancea (2014:142), the term research design has been used in literature to encompass every decision which constitutes planning and the carrying out of research as from problem identification to the publication of the outcomes. The term has also been used in a more specific sense, to situate the investigator in the scientific world and connect research questions to data. Research design forms the general plan of a research which encompasses the concepts such as framework, strategy, and participants for data collection and analysis. The following section discusses some qualitative designs which are informed by the post-positivism paradigm.

#### **4.3.1 Ethnography**

Punch (2009:124) shows that the term ethnography comes from cultural anthropology. '*Ethno*' means people or folk, while '*graphy*' refers to describing something. Thus ethnography means describing a culture and understanding a way of life from the point of view of its participants. It is the art and science of describing a group or culture. McMillan and Schumacher (2010:23) argue that ethnography is a description and interpretation of a cultural or social group or system. The focus is on learned pattern of actions, languages, beliefs, rituals and ways of life. As a process, ethnography involves prolonged fieldwork, typically employing observation and casual interviews with participants of a shared group activity and collecting group artefacts. Wagner, Kawulich and Garner (2012:127) indicate that ethnography focuses on the study of culture, and the purpose is to describe and interpret cultural behaviour. Cultural behaviours of interest in ethnographic studies include the attitude and belief values, and practices that are carried out by community members. Ethnography may refer to one's approach to conducting research or to the methods one uses to carry out that research. Lichtman (2013:72) also states that the purpose of ethnography is to describe the culture and social interactions of a particular group or subgroup. It involves extensive immersion in a natural setting like school, classroom, playing field, and lunchroom.

### 4.3.2 Case Study

A case study is a specific instance that is frequently designed to illustrate a more general principle, it is the study of an instance in action. It is a single instance of a bounded system such as a child, class, school or community (Cohen, Manion & Morrison, 2000:289). Yin (2009:72) states that a case study provides an exclusive study of people in actual situations, allowing the audience to grasp ideas clearly instead of presenting them basing on principles and theories that are abstract. McMillan and Schumacher (2010:24) mention that a case study examines an entity in depth over time using many data sources contained in the setting. The case maybe an activity, event, programme, a group of individuals bounded in time and place.

### 4.3.3 Grounded Theory

Although the hallmark of qualitative research is detailed description and analysis of phenomena, grounded theory goes beyond the description to develop dense concepts or conditional propositional statements that relate to a particular phenomenon. The term grounded theory is often used in a nonspecific way to refer to any approach to forming theoretical ideas for producing substantive theory (McMillan & Schumacher, 2010:24). In a grounded theory approach to qualitative research, one can generate theory from the data or expand or otherwise modify existing theory. Grounded theory differs from other approaches in that its emphasis is on the development of theory from the constant movement between data collection and theoretical analysis (Wagner, Kawulich & Garner, 2012:131). Interestingly, Punch (2009: 130) argues that grounded theory is not a theory at all. It is a method, an approach, a strategy. Grounded theory is a research strategy whose purpose is to generate theory from data. Grounded means that the theory will be generated on the basis of data, the theory will therefore be grounded in data. Theory means that the objective of collecting and analysing the research data is to generate a theory to explain data. The essential idea in grounded theory is that theory will be developed inductively from data. Grounded theory, then, is an overall strategy for doing research. Punch and Oancea (2014:165) also state that grounded theory is a research

strategy, the purpose of which is to generate theory from data. Grounded means that the theory will be generated on the basis of data, the theory will therefore be grounded in data.

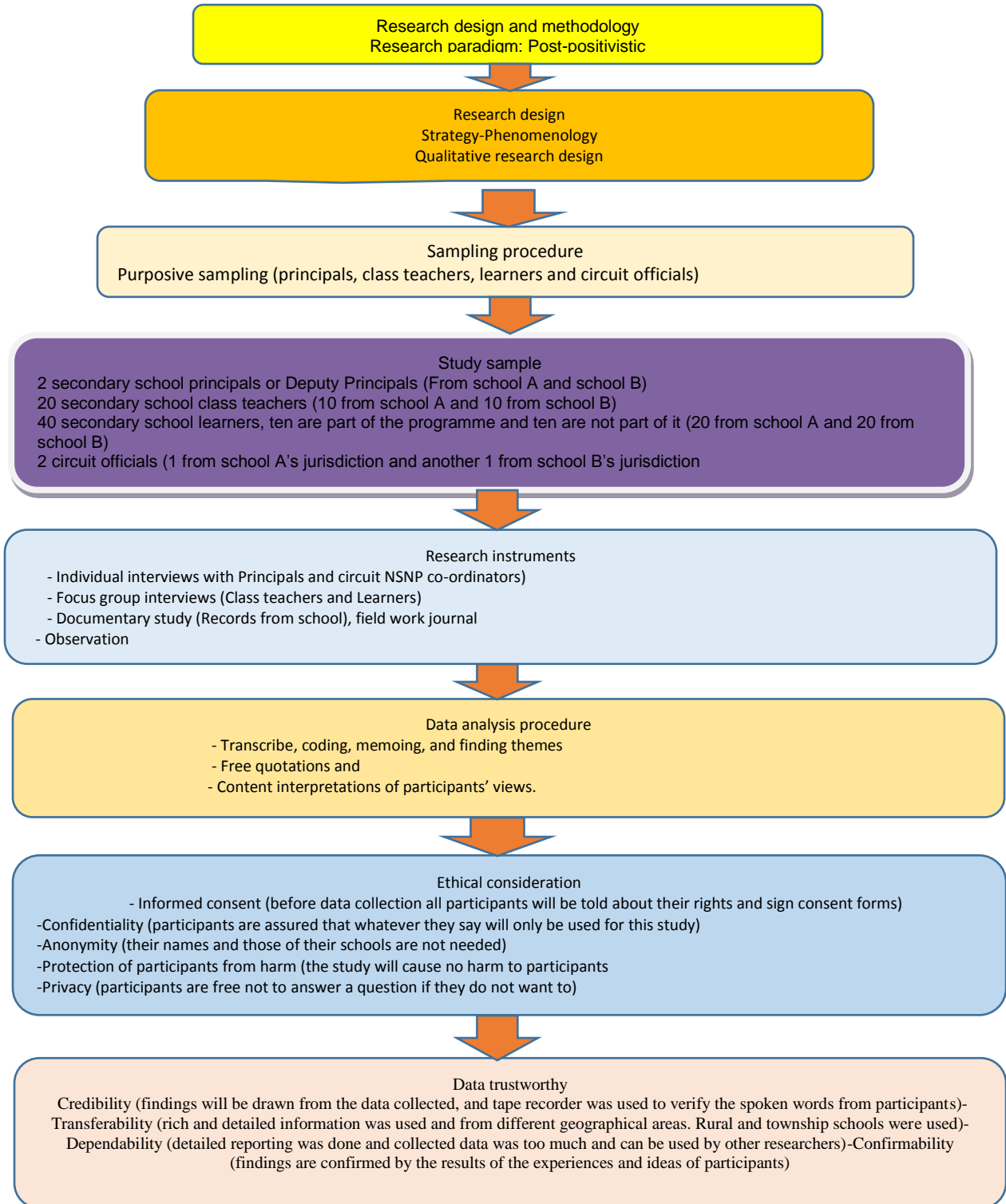
#### **4.3.4 Phenomenology**

Phenomenological studies focus on the meaning that certain lived experiences hold for participants. Rooted in philosophical perspective of consciousness, phenomenology is viewed as having its beginnings in the works of Husserl. Phenomenology simply describes a person's experience, it does not attempt to explain the experience. It is used in a variety of social science disciplines (Wagner, Kawulich & Garner, 2012:132). Phenomenology in its broadest meaning, is a theoretical point of view that advocates the study of direct experience taken at face value, and one which sees behaviour as determined by the phenomena of experience rather than by external, objective and physically described reality (Cohen, Manion & Morrison, 2000:23). McMillan and Schumacher (2010:24) also echo these views when they say that phenomenology study describes the meanings of a lived experience. The researcher brackets or puts aside all prejudgements and collects data on how individuals make sense out of a particular experience or situation. The aim of phenomenology is to transform lived experience into a description of its essence, allowing for reflection and analysis. This study adopted phenomenological research design as informed by the post-positivism paradigm. This is because the research is more social and focused on the experiences of the participants.

Walsh, Irwin, Meier and DeWalt (2008:730) define phenomenology as research methodology which has its roots in philosophy focusing on the experience of individuals. Phenomenological researchers are interested in the nature or meaning of something, their questions are about essence and not about appearance. Data are collected through a variety of means such as observation, interviews, focus group, diaries, video tapes and written descriptions by subject.

Phenomenology literally means the study of phenomena. It is a way of describing something that exists as part of the world in which we live. Phenomena maybe events, situations, experiences or concepts, which for this study are the experiences of participants on the administration of the NSNP and how it influences learning of the learners. Phenomenological research begins with the acknowledgement that there is a gap in our understanding and that clarification or illumination will be of benefit. Phenomenological research does not necessarily provide definitive explanations but it does raise awareness and increase insight (Education, Research and Consultancy Centre, 2010:9).

Guided by phenomenological research design, this study used individual interviews with secondary school principals of each of the two schools and NSNP circuit officer of each circuit. Focus group interviews were used with learners and class teachers of the two purposefully selected schools. This was in order to get first-hand information from the people who are concerned with the National School Nutrition Programme on a daily basis. Before an interview started, the researcher explained to participants the purpose of the research study, their rights, the absence of risks in participating in the research study and that whatever they would say would remain private and confidential. I also showed them the letters from the district senior manager and the circuit office granting permission to conduct a research. All these procedures were taken in order to assure the participants that I was sincere so that they could freely participate and share their experiences.



**Figure 4.1: Outline of the Research Design and Methodology Process**

#### 4.4 QUALITATIVE RESEARCH

As the study sought to evaluate the research participant's views, opinions and perceptions towards the challenges faced in the NSNP, I chose to make use of the qualitative research design as informed by the post-positivist paradigm to collect data that answered my research questions (Cohen, Manion & Morrison, 2007:17). Welman, Kruger and Mitchell (2005:188) indicate that qualitative research can, theoretical speaking, be described as an approach rather than a design or set of techniques. It is a collective phrase covering an array of interpretive techniques which seek to describe, decode, translate, and otherwise come to terms with the meaning of naturally occurring phenomena in the social world. Qualitative approach is also fundamentally a descriptive form of research. It can be used successfully in the descriptive of groups, communities, and organisations. Hence, I chose to gather information from groups that are part of communities and schools as organisations.

Maree (2012:50) views qualitative research as a form of investigation that attempts to generate rich data I regard to a phenomenon under study with the aim of making readers understand the object of study. It is concerned with the way in which individuals view the world and construct subjective meanings from their experiences. As such, people who are participants to this study have their own views on how the programme should be run and managed and their views were captured verbatim.

Qualitative research emphasises the richness of information and puts less stress on the breadth of the gathered data (Maree, 2012:79). There is interest in the description of the phenomena under study as it occurs in its natural environment with a view to reflect the lived experiences of participants. The aim is to perceive reality in the eyes of the participants. In essence, the study is conducted in practical rather than experimental situation (Maree, 2012:79). I found the information right from the actual people. I even saw for myself the exact things that were happening around the programme. I received first-hand information from the people on the ground. As informed by the phenomenology, I was right at the phenomena observing everything that was happening before me.

Qualitative approach involves the use of a number of loosely structured plans that are able to cater for verbal, tactile and observational data from such sources as pictures, and documents (Cohen, Manion & Morrison, 2010:219). Preissle (2006:686) also states that qualitative research offers information which is detailed as well as complex from actions, attitudes, behaviours and intentions. Gonzales, Brown and Slate (2008:3) argues that qualitative method gives voices to participants and probes issues that lie beneath the surface of presenting behaviours and actions. For this reason, it was deemed appropriate for this research. I conducted interviews with the respondents, and I was able to see and observe all the respondents' body language. I recorded the proceedings on a tape recorder and wrote down notes from the field. Observable attitudes, behaviours and phenomena were recorded down as these communicated important messages to me. Participants were requested and encouraged to explain their views in detail.

The qualitative method was also chosen because, I began my research with a worldview in which assumptions were developed to assist in the inquiry into the meanings that people give to a social phenomenon. In this investigation, I used an emerging qualitative approach in which data collection was sensitive to participants, study sites. An inductive data analysis procedure that is able to organise information into patterns and themes was employed. The verbatim statements were included in the analysis to add to the intricacy of the interpretation process (Creswell, 2007:170).

According to Gay and Airasian (2003:13), methods used in qualitative study assist the investigator to gain detailed information about reality of things and how they are perceived. There is also interest in providing insights into people's feelings and beliefs. This helped both the participants and myself to better understand the challenges that participants of the NSNP face and experience. I presented the findings as they are and as the participants have given them.

#### **4.4.1 Scope of Qualitative Research**

According to Punch (2009:115), qualitative research method is a complex, changing and contested field, a multiple methodology research practice. Qualitative research therefore is not a single entity, but a term that encompasses enormous variety. Qualitative research, reflected in its designs, is that it is naturalistic, preferring to study people, things and events in their natural settings. Qualitative research primarily follows the explanatory scientific method. Qualitative research is used to describe what is seen locally and sometimes to come up with or generate new hypothesis and theories. Qualitative research is used when little is known about a topic or phenomenon and when one wants to discover or learn more about it. It is commonly used to understand people's experiences and to express their perspectives (Antwi & Hamza, 2015:220). Qualitative research as an approach is a general way of thinking about conducting qualitative research. It describes either explicitly or implicitly, the stage of research, and the method of data analysis (Trochim, 2006:193).

#### **4.4.2 Rationale and Advantages of Qualitative Research**

I chose qualitative research because it is conducted through an intense and prolonged contact with a field or life situation. These situations are typically banal or normal ones, reflective of the everyday life of individuals, groups, societies and organisations. The researcher's role is to gain a holistic overview of context under study (Punch, 2009:117). Leedy and Ormrod (2010:135) indicate that qualitative research encompasses several approaches to research that are, in some respects, quite different from one another. Yet all approaches have two things in common. First, they focus on phenomena that occur in natural settings, that is, in the real world. Second, they involve studying those phenomena in all their complexity. Qualitative researchers rarely try to simplify what they observe. Instead, they recognise that the issue they are studying has many dimensions and layers, and so they try to portray the issue in its multi-faceted form. It was very proper for me to choose qualitative research because according to Antwi and Hamza (2015:219), qualitative research informed by post-positivist perspective, became the theoretical

framework for most qualitative research as it sees the world as constructed and experienced by people in their interactions with each other and with wider social systems. According to this paradigm the nature of inquiry is interpretive and the purpose of inquiry is to understand a particular phenomenon.

Qualitative research tends to use data in the form of words rather than numerical information. It seeks to explain social phenomena through understanding the ways in which individuals make sense of their social worlds and sees knowledge as historically and culturally situated. The primary aim being to understand individuals' own accounts of their perceptions, views and feelings and the meanings they attach to social phenomena (Whittacker, 2012:9). Qualitative research is more interested in people and is empathetic towards them, their situations and the environment around them. It is interested in real people in their natural setting. It looks at behaviour, thoughts, or feelings of individuals with certain traits or characteristics (Lichtman, 2013:35). For this study, the setting is the school and I observed all learners regardless of whether they were part or not of the NSNP. As I was interviewing and observing I became part of participants' real environmental.

According to The World Food Programme (2009:2), qualitative data are often textual observation that portray attitudes, perceptions and intentions. Conclusions made from collected qualitative data take the form of informed assertions about the meaning and experience of certain groups of affected populations. The key contribution of qualitative data is that it provides information about the human aspect of the emergency by acknowledging the priority needs of affected populations. It respects the core principle of needs based assistance and ownership by affected populations.

Qualitative research is very good at simplifying and managing data without destroying complexity and content. It is highly appropriate for questioning where pre-emptive reduction of data will prevent discovery (Antieno, 2009:16). The strength of qualitative research is the richness and depth of explorations and descriptions of data (Wagner,

Kawulich & Garner, 2012:126). Anderson (2010:3) indicates that qualitative research has numerous strengths when properly conducted, some of these are:

- Issues can be examined in detail and in depth
- Interviews are not restricted to specific questions and can be guided or redirected by the researcher in real time;
- The research framework and direction can be quickly revised as new information emerges;
- The data based on human experience that is obtained is powerful and sometimes more compelling; and
- Data usually are collected from a few cases or individuals, so findings can be transferable to other settings.

The purpose of this study is to explore without manipulation the challenges in implementing the National School Nutrition Programme for achieving educational objectives. The focus was on the views and perceptions of the participants. The procedure of this study involved individual interviews and focus groups in order to discover the participants' experiences on the nutrition programme. I also used non-participant observation in order to be on the sport checking, although without interfering, what was going on throughout the process on the day to day running of the nutrition programme. I documented every event that I observed and I requested some documentation in connection with the programme in the form of records. This gave me a deeper understanding of the situation. Qualitative approach permitted for the thick and rich narrative explanations of the phenomena under study. I was given a chance and opportunity to take into account the views of participants and interactions in their natural school environment.

#### **4.5 STUDY POPULATION**

A population refers to a group of people or individuals that are focused in the study. A population is the full set of cases from which a sample is taken (Welman, Kruger &

Mitchell, 2005:52). McMillan and Schumacher (2001:129) state that it is a group of individuals that have certain defined characteristics in common and to which the findings of the study can be generalised. Engel and Schutt (2013:112) state that population refers to the whole group of people to which the study is generalised. It refers to individuals in the universe who possess specific characteristics. De Vos (2001:190) also states that population is defined as that which constitutes the complete set from which the units of a study are selected. It is the entire population for which the problem of study is centred.

According to Monette et al., (2014:132), population definition should specify four things, which are:

- **Content:** the content of the population refers to the particular characteristics that members of the population have in common, of which, in this study, population are all the secondary school principals whose schools are taking part in the government initiated programme to feed hungry kids at schools. Principals of schools serve as accounting officials and have the responsibility of putting in place structures for the running of feeding projects. These include places to store food resources for the NSNP (Department of Education, 2013:8). The population also includes secondary school class teachers who make sure that learners get meals, all secondary school learners as beneficiaries of the programme, and all circuit officer who are directly involved in the implementation of the programme at schools as monitors of the programme on behalf of the government (LDoE, 2013:11).
- **The unit:** it indicates the unit of analysis, which in this research is an organisation rather than individuals or groups. The school here represented a unit because whatever happened at a school can be easily generalisable to other schools were research was not done.
- **The extent:** the extent refers to the population's spatial or geographic coverage, of which in this research, it is where the school is found in terms of its locality. The

locality of schools used is a deep rural school and a township school that are part of the NSNP.

- **Time:** time factor refers to the period during which a unit possessed the appropriate characteristic to qualify for the sample. As long as the secondary school has been part of the NSNP programme for at least more than a year, then it qualifies to be used for population. So, the schools which were purposively selected qualify because they have been part of the NSNP for more than the stipulated time which is year (Monette *et al.*, 2014:132).

The reason for choosing this population is its involvement with the National School Nutrition Programme on a daily basis. This population is made up of the people who are able to evaluate if the NSNP is achieving its set objectives.

This study focused on the challenges in implementing the National School Nutrition Programme with regard to improvement of learner attendance, participation, and performance.

#### **4.6 SAMPLING METHOD AND PROCEDURE**

Sampling is the selection of research participants from an entire population, and it involves decisions about which people, settings, events, behaviours and/or social processes to observe (Terre Blanche, Durrheim & Painter, 2012:49). Sampling is the process of selecting units from a population of interest so that by studying the sample we may fairly generalise our results back to the population from which they were chosen (Trochim, 2006:194). Marlow and Boone (2005:136) also note that sampling involves choosing participants in the study. Sampling is necessary because it usually impossible to include everyone in the study, just as in practice it is difficult to interview or meet with all those involved in a situation.

There are two types of sampling methods that one can use: probability and non-probability. The probability sampling method is any method of sampling that utilises some form of random selection. In order to have a random selection method, one must set up some procedure that assures that the different units in the population have equal probabilities of being chosen (Trochim, 2006:195). According to Cohen, Manion and Morrison (2011:152), a probability sample, because it draws randomly from the wider population, will be useful if the researcher wishes to make generalisations, because it seeks representativeness of the wider population. This is a form of sampling that is popular in randomized controlled trials.

The second type of sampling method is non-probability sampling, which according to Marlow and Boone (2005:138) allows the researcher to handpick the sample according to the nature of the research problem and the phenomenon under study. Non-probability sampling method deliberately avoids representing the wider population, it seeks only to represent a particular group, a particular named section of the wider population (Cohen, Manion & Morrison, 2011:153).

This study adopted non-probability sampling method because qualitative research is generally based on non-probability or purposive sampling rather than the probability or random sampling method (Engel & Schutt, 2013:123). Below are some types of non-probability sampling.

#### **4.6.1 Snowball Sampling**

This type of sampling is generally used when members of a specific population are difficult to locate. In the first phase of this sampling method, a few individuals within the relevant population are approached. These individuals are then asked to approach other individuals who in turn are asked to approach more individuals (Wagner, Kawulich & Garner, 2012:92). Cohen, Manion and Morrison (2011:158) simplify snowballing by indicating that researchers identify a small number of individuals who have the characteristics in which they are interested. These people are then used as informants

to identify or put the researchers in touch with others who qualify for inclusion and these, in turn, identify yet others-hence the term snowball sampling. It is also known as the chain referral method. This method is useful for sampling a population where access is difficult, maybe because the topic for research is sensitive or where participants might be suspicious of researchers or where contact is difficult. Engel and Schutt (2013:126) note that snowball sampling is useful for hard to reach or hard to identify populations for which there is no sampling frame, but the members of the population are somewhat interconnected. When using snowball sampling, one identifies one member of the population and speaks to him or her, asks that person to identify others in the population and speaks to them, asks them to identify others and so on.

#### **4.6.2 Purposive Sampling**

Purposive sampling is the technique mainly used in naturalistic inquiry studies. It is described as a process of choosing participants on the basis of a specified purpose in relation to the research questions (Teddie & Yu, 2007:77). Purposive sampling is considered to be the most useful type of non-probability sampling. It is sometimes also referred to as judgemental sampling. With purposive sampling, the researcher relies on his or her own experience, previous research or ingenuity to find the participants in such a manner that they can be considered to be representative of the population and usually uses specific selection criterion to identify the most suitable individuals (Wagner, Kawulich & Garner, 2012:93). In purposive selection, the researcher can hand pick participants for the study based on a judgement of their possession of qualities that meet the needs of the study. In many instances, it functions to select people that are deemed knowledgeable on an issue under study. This might be guided by their professional roles, expertise, power or experience (Cohen, Manion & Morrison, 2011:156). In purposive sampling, each sample element is selected for a purpose usually because of the unique position of the sample elements. Purposive sampling may involve studying the entire population of some limited group or a subset of a population. Purposive sampling may be used to examine the effectiveness of some intervention with a set of subjects or clients who have particular characteristics. A purposive sample may be a key informant survey

targeting individuals who are particularly knowledgeable about the issues under investigation (Engel & Schutt, 2013:126).

#### **4.6.3 Quota Sampling**

According to Cohen, Manion and Morrison (2011:156), quota sampling is the non-probability equivalent to stratified sampling. Quota sampling strives to represent significant characteristics of the population. In this method of sampling, it is important to have various strata or subgroups adequately represented in the sample according to their proportion in the population. This type of sampling may work if the proportions of the various strata are known with reasonable accuracy and if there is a sufficient number of cases of the sub-population within the population to allow for satisfactory estimates to be made (Wagner, Kawulich & Garner, 2012:93). Quota sampling is intended to overcome the most obvious flaw of availability sampling that the sample will consist of only whoever or whatever is available, without any concern for its similarity to the population of interest. The distinguishing features of a quota sample is that quotas are set to ensure that the sample represents certain characteristics in proportion to their prevalence in the population (Engel & Schutt, 2013:124).

#### **4.6.4 Convenience Sampling**

Convenience sampling or as it is sometimes called accidental or opportunity sampling involves choosing the nearest individual to serve as respondents and continuing that process until the required sample size has been obtained or those who happen to be available and accessible at the time have all been contacted (Cohen, Mannion & Morrison, 2011:155). Wagner, Kawulich and Garner (2012:92) also observe that convenience sampling is the most expedient form of sampling that there is, because the researcher simply uses whoever is readily available.

#### 4.6.5 The Sampling Method Adopted for the Study

This study used purposive sampling method. McMichael (2008:463) says that this means that the researcher looks for participants who possess certain traits or qualities. I considered the aim of the research and selected the sample accordingly. In purposeful sampling, the most important guiding principle is maximum variation, that is, researchers should seek to include people who represent the widest variety of perspectives possible within the range specified by their purpose (McMichael, 2008:463).

Maree (2012:79) also argues that purposive sampling means that participants are selected because of some defining characteristics that make them the holders of the data needed for the study. Sampling decisions are therefore made for the explicit purpose of obtaining the richest possible source of information to answer the research questions. Researchers rely on their experience, ingenuity and/or previous research findings to deliberately obtain units of analysis in such a manner that the sample they obtain may be regarded as being representative of the relevant population (Welman, Kruger & Mitcheell, 2005:69). Engel and Schutt (2013:126) indicate that in purposive sampling, each sample element is selected for a purpose usually because of the unique position of the sample elements.

I chose purposive sampling because the respondents are people who are part of the NSNP, in the form of secondary school principals or deputy principals, secondary school class teachers in form of monitors of the programme at school level, secondary school learners either as beneficiaries, NSNP circuit monitors or those that are intended to benefit but are not taking part for unknown reasons. Sometimes it is appropriate for one to select a sample on the bases of knowledge of the population, its elements, and the nature of research aims, in short, based on one's judgement and the purpose of the study. Therefore, for the purpose of this study only people who are part of the NSNP were purposefully sampled.

## 4.7 THE STUDY SAMPLE

A sample is the element of the population considered for actual inclusion in the study. It can also be viewed as a subject of measurements drawn from a population in which the researcher is interested. A sample is a small portion of the total set of objects, events or persons which together comprise the subject of one's study (De Vos, 2001:191). According to McMillan and Schumacher (2001:129), a sample refers to a small number of participants that provide data for the study. Denhere (2010:87) similarly notes that sampling addresses three fundamental questions pertaining to people that will participate, their number and the reasons for their selection.

In this study, two secondary schools were purposefully selected for being part of the NSNP. One school is in the rural area and another one in an urban location. From the chosen secondary schools, the following study sample was drawn:

- Two secondary school principals or deputy principals from each selected school participated in the individual interview to explore their challenges that in administering the NSNP and how the programme was actually influencing learners' performance.
- Ten secondary school educators who are class teachers from each selected school participated in focus group interviews since they are the ones who monitor how the learners have their meals during breaks and also monitor learners' attendance and performance in their respective classes. Educators discussed the challenges that they experience in monitoring the programme on issues of health and hygiene.
- Ten secondary school learners from each school who are benefiting from the NSNP participated in focus group interview sharing their experiences on how they are benefitting educationally, and what needs to be done to improve the programme for the sake of academic achievement.
- Ten secondary school learners from each school who are not part of the programme participated in focus group interview and shared their experiences on

why they do not enjoy the meals provided by the government. They also discussed how their not being part of the programme affects their school attendance and performance in class.

- Two NSNP officers from each circuit where the secondary schools selected are found participated in individual interviews discussed their challenges and experiences when they move around monitoring and supporting the schools. Table 4.1 summarises the study's sampled participants.

**Table 4.1: The Sample and the Instrument used**

<b>Sample</b>	<b>Number of Participants</b>	<b>Instrument used to collect data</b>
Secondary school principals or deputy principals	2 (one per school)	Individual interview (done separately)
Secondary school class teachers	20 (ten per school)	Focus group interview (done separately at each school)
Secondary school learners who are part of the programme	20 (ten per school)	Focus group interview (done separately at each school)
Secondary school learners willingly not part of the programme	20 (ten per school)	Focus group interview (done separately at each school)
NSNP officer as monitors of the programme	2 (one per circuit)	individual interview (done separately)

#### **4.8 RESEARCH INSTRUMENTS AND DATA COLLECTION PROCEDURE**

Data collection is the process of gathering and measuring information in an established systematic fashion that enables one to answer stated research questions and evaluate outcomes. The data collection component in research is common to all fields of study. While methods vary by discipline, the emphasis on ensuring accurate and honest collection remains the same (Most, Craddick, Crawford, Redican, Rhodes, Rukenburg &

Laws, 2003:1339). According to Kumar (2005:143), choice of a particular method of collecting data depends upon the purpose of collecting information, the type of information being collected, the resources available to the researcher, skills in the use of a particular method of data collection. Each method has its own advantages and disadvantages. The choice of a particular method for collecting data is important in itself for ensuring the quality of information.

Antwi and Hamza (2015:219) indicate that qualitative research methodology often rely on personal contact and interpretive researchers place strong emphasis on better understanding of the world through first-hand experience, truthful reporting and quotations of actual conversation from insiders' perspectives. They employ data gathering methods that are sensitive to content and which enable rich and detailed, or thick description of social phenomena by encouraging participants to speak freely and understand the investigator's quest for insight into a phenomenon that the participants have experienced. Owing to this, interviews, focus group discussions and naturalistic observations are the most widely used data gathering methods for researchers using qualitative research methodology.

Based on the argument above, I chose to use the qualitative research approach in collecting data and used a combination of instruments for different respondents such as individual interviews, focus group interviews and observations. I also used a combination of data collection instruments in order to achieve data saturation by widening the perception of respondents (See Appendix 14 p250).

#### **4.8.1 Individual Interview**

According to Creswell (2007:215), individual interview is also called one on one interview and is a data collection process where the researcher asks questions to and records answers from only one participant at a time. One on one interviews are ideal for interviewing participants who are not hesitant to speak, are articulate, and who can share ideas comfortably. I decided to use individual interviews to get information from the

school principals and the circuit officials who deal with nutrition. This is in line with Terre Blanche, Durrheim and Painter's (2012:297) observation that conducting an interview is a more natural form of interacting with people than making them fill out a questionnaire, do a test, or perform some experimental tasks, and therefore it fits well with the interpretive approach to research. It gives the researcher an opportunity to get to know the people quite intimately, so that the researcher can really understand how they think and feel.

Holstein and Gubrium (2003:253) also note that an interview is a type of conversation in the social environment which offers scientific data to the researcher through speech. It is a common method of data gathering which captures perceptions, descriptions of conditions and meanings from interactions of people. In an endeavour to grasp an individual's construction of reality, the researcher needs to allow participants to explain in detail and in their language how they view the issue being investigated.

According to Monette *et al.*, (2014:183), the individual interview has the following advantages:

- Interviews can help motivate respondents to give accurate and complete information. The control that an interview affords, encourages better responses, which are especially important as the information sought becomes more complex.
- Interviewing offers an opportunity to explain questions that respondents may not otherwise understand. In other words, the researcher is able to rephrase the question to make it more understandable to the respondents but not moving away from the question.
- The presence of an interviewer allows control over factors that are uncontrollable. The interviewer can ensure not only that the proper person responds to the questions, but also that he or she does so in sequence. Furthermore, the interviewer can arrange to conduct the interview so that the respondent does not consult with and is not influenced by other people before responding. This helps the researcher to get first-hand information without any other person's influence.

Each respondent gives out what he or she thinks is right and proper for the question asked.

- Interviewing is a more flexible form of data collection. The style of interviewing can be tailored to the needs of the study. Since respondents would be relaxed, they feel free to answer all the questions and whenever they get out of the way or become irrelevant, the researcher can easily remind them of the research.
- The interviewer can add observational information to the responses by asking himself or herself the following questions: What was the respondent's attitude towards the interview? Was he or she cooperative? Indifferent or hostile? Did the respondent appear to fabricate answers? Did he/she react emotionally to some questions? This additional information helps the researcher better evaluate the responses, especially when the subject matter is highly personal or controversial.

In this study, the participants' attitudes towards the interview was very good and they were cooperative, no one got angry when expressing their ideas. Participants answered as expected of them without adding or leaving out some information. The body language of the respondents also helped the researcher gain better understanding of the respondents' views.

Cohen, Manion and Morrison (2000:267) conclude that the use of an interview in research marks a move away from seeing human subjects as simply manipulable and data as somehow external to individuals, towards regarding knowledge as generated between humans, often through conversations. It is an interchange of views between two people on a topic of mutual interest and sees the centrality of human interaction for knowledge production and emphasises the social situatedness of research data. Interviews enable participants, be they interviewers or interviewees to discuss their interpretations of the world in which they live, and to express how they regard situations from their own point of view. Therefore, the interview is not simply concerned with collecting data about life, it is part of life itself, its human embeddedness is inescapable.

## 4.8.2 Focus Group Interview

Focus group interview was one of the major research instruments for the study because it involved most of the study participants in the discussions. It allowed them to critique and support each other and made discussions interesting and informative. The focus group interview is also called group interviewing and is essentially a qualitative method (Babbie, 2007:308). In focus group, the researcher works with several people simultaneously, rather than just one (Punch, 2009:146). It is based on structured or semi structured interview questions. It allows the researcher/interviewer to question several individuals systematically and simultaneously. The subjects are selected on the basis of relevance to the topic under study (Babbie, 2007:308). Therefore, class teachers and learners who are part of the NSNP and those that are not part of it were interviewed using focus group and they were ten per each group and per school. This helped a lot because respondents were able to critique each other and discuss the asked questions. As a result, a lot of information about their experiences was brought out.

Welman, Kruger and Mitchell (2005:201) describe focus group interviews as in-depth interviews. These groups consist of a small number of individuals or interviewees that are drawn together for the purpose of expressing their opinions on a specific set of open questions. The aim of using group interviews is not to replace individual interviewing but to gather information that can perhaps not be collected easily by means of individual interviews. Terre Blanche, Durrhein and Painter (2012:304) indicate that a focus group interview is a general term given to a research interview conducted with a group. A focus group is typically a group of people who share a similar type of experience, but a group that is not naturally constituted as an existing social group. In this study, the group used for focus group interviews were learners and class teachers from purposefully selected schools who were benefiting from the NSNP programme.

Focus group interviews were favoured because they resulted in the following advantages laid down by Zikmund (2003:118):

- **Synergy:** The combined effort of the group will produce a wider range of information, insights, and ideas than will be accumulation of separately secured responses of a number of individuals. It is a better move to have focus group interview because a group can explore and bring out a lot of information. When one stops talking, the other one adds on what was left out. At the end of the interview, one finds that he has a lot of easily generalisable information.
- **Serendipity:** It is more often the case in a group than in an individual interview that some idea will drop out of the blue. The group also affords the opportunity to develop the idea to its full significance. Information important for the study always comes out from the group unexpectedly and this helps in getting valuable and useful information.
- **Snowballing:** A comment by one individual often triggers a chain of responses from the other participants. In other words, small talk might lead to big talk. One respondent might say something that leads to greater and bigger things that brings out a lot of information from other members of the group. Information which would have been left out becomes very helpful.
- **Stimulation:** Usually after a brief introductory period, the respondents want to express their ideas and expose their feelings as the general level of excitement about the topic increases. When an interview starts, some respondents feel reserved and do not want to open up but as the interviews progress usually everyone starts to show interest and wants to be part of the discussions. At the end, everybody shows enjoyment and it even becomes difficult to end the discussion.
- **Security:** In a well - structured group, the individual can usually find some comfort in the fact that his or her feelings are similar to those of others in the group. Moreover, each participant can express an idea without being obliged to defend it or to follow through and elaborate on it. One is more likely to be candid because

the focus is on the group rather than on the individual, the participant soon realises that the things said are not necessarily being identified with him or her. Eventually, when one feels secure within the group, one starts to voice one's opinions without fear. This often leads to a lot of information coming out.

- **Spontaneity:** Since no individual is required to answer any given question in a group interview, the individual's responses can be more spontaneous and less conventional. A spontaneous answer may provide a more accurate picture of the person's position on some issues. In a group interview, people speak only when they have definite feelings about a subject, not because a question requires a response. Therefore, in an interview, there is no question that will never be attempted as there are different respondents with different interests and ideas.
- **Structure:** the group interview affords more control than the individual interview with regard to the topics covered and the depth in which they are treated. The interviewer has the opportunity to re-open topics that received too shallow a discussion when initially presented. This helps in revisiting initial questions which would have been asked when respondents were still hesitant to air their views. As the interview progresses, interviewer may revisit questions that were not given the attention they deserve. When such questions are revisited, better responses are usually found.

Hardwick and Worsley (2011:86) argue that focus groups are important because:

- Focus groups are well suited for obtaining several different perspectives on a topic. People are able to argue on the tabled topic and lots of ideas may come up.
- Focus groups can provide insight into shared understanding of people's lives and also the ways in which individuals are influenced by others in a group situation. When people are discussing, one can easily see how other people live and how they are influenced by others who are part of the group.

### 4.8.3 Observation

Observations were also utilised as another way of getting information from the respondents. According to Maree (2012:83), observation is the systematic process of recording the behavioural patterns of participants, objects and occurrences without necessarily questioning or communicating with them. It is an everyday activity whereby people use their senses (seeing, hearing, touching, smelling and tasting) but also their intuition to gather bits of data. Creswell (2005:211) defines observation as a process of gathering open ended, first-hand information by observing people at a research site.

Maree (2012:83) also points out that observation is used to enable the researcher to gain a deeper insight and understanding of the phenomenon being observed. Observation is an essential data gathering technique as it holds the possibility of providing the researcher with an insider perspective of the group dynamics and behaviours in different settings. It allows the researcher to hear, see and begin to experience reality as participants do. As a researcher, one can learn through personal experience and reflection on how the setting is socially constructed in terms of power, communication lines, discourse and language.

Observation was used because in qualitative study, it is intentional and free flowing. The researcher is able to shift focus from one thing to another as new and potentially significant objects and events present themselves. The primary advantage of conducting observations in this manner is flexibility. The researcher can take advantage of unforeseen data sources as they surface (Leedy & Ormrod, 2010:147). Observation is more than just looking. It is looking and noting systematically people, events, behaviour, settings, artefacts, routines and so on. Observation offers an investigator the opportunity to gather live data from naturally occurring situations (Yin, 2009:456).

Observational data are attractive as they afford the researcher the opportunity to gather “live” data from “live” situations. The researcher is given the opportunity to look at what is taking place in situations rather than getting second hand information. This enables the researcher to understand the context of programmes, to be open ended and inductive to

the things that might otherwise be unconsciously missed, to discover things that participants might not freely talk about in interview situations, to move beyond perception base data and to access personal knowledge (Cohen, Manion & Morrison, 2000:305).

There are two common types of observation. They are simple observation or non-participant observation and participant observation. Babbie (2007:312) states that in non-participant observation, the researcher observes a situation without being a part of it in any way. The subjects may not even realise that they are being studied. This kind of observer is less likely to affect the situation, but at the same time he or she is less likely to develop a full appreciation of what is being studied. Based on these sentiments, the researcher decided to use non-participant observation which according to Monette *et al.* (2014:227), is also called unobstructive observation, where in some research questions call for or require the investigator to refrain from participation in the group being investigated. This is the case when the intrusive impact of an outsider might change the behaviour of group members in ways that are detrimental to the research questions. In such cases, the relationship adopted by the investigator is labelled the complete observer role, that is, the observer has no direct contact with or no substantial influence on those who are being observed. The research subjects are not even aware that they are being studied, and the investigator does not change their behaviour by his or her presence. In this study, I kept an observation sheet of how many learners were eating food daily (Appendix 7, p232).

#### **4.8.4 Documents Study**

According to Creswell (2005:219), documents consist of public and private records that qualitative researchers obtain about a site or participants in a study and they can include newspapers, minutes of meetings, personal journals and letters. These sources provide valuable information in helping researchers understand central phenomena in qualitative studies. Cohen, Manion and Morrison (2011:249) define a document as a record of an event or process. Such records may be produced by individuals or groups, and take many different forms. I received academic schedule to compare learners who are part of

the NSNP and those who are not, attendance registers, number of learners on NSNP, and inspection reports (Appendix 1 p221; 8 p233; 10 p235).

#### 4.9 DATA ANALYSIS PROCEDURE

Data analysis involves the observation of patterns in the data. It is concerned with raising questions and making assumptions in regard to the collected data. Data collection pertains asking individual questions on particular issues and seeking to arrive at a deeper understanding of their answers. The analysis requires an engagement in the activities of thinking, arranging and testing the initial guesses (Mayan, 2001:21).

The Miles and Huberman's framework for qualitative data analysis, was employed in this study. The collected data was coded. This is a process of giving labels or names to certain forms of data as directed by the considered characteristics. Coding of data is a strategy to attach meaning to particular sets of data (Punch, 2009:179).

Data was read again and again to achieve a broader and deeper understanding of the reflected meanings. After an intense review of data in order to grasp its context and the experiences of participants, coding was resorted to as a way to provide a formal strategy for analysis. The continued process of data analysis exposed new data linkages which assisted in the refinement of patterns and a deeper understanding of the meanings of the collected data (Punch, 2009:201).

As indicated, I analysed the data guided by Miles and Huberman's framework and followed the procedures outlined by Punch (2009:202) as follows:

- **Transcribe:** I transcribed what the respondents said into written words so that I could analyse the spoken words easily. Transcription is word for word writing down of voice recorded responses and even the non-verbal expressions. I transcribed the interview data.

- **Checking:** After the interview, I gave my respondents a chance to listen to what they were saying and also read what I wrote so that they could confirm their responses.
- **Data segments:** Segments and summaries were made through the data system. Coding was done to establish themes, clusters and patterns. I conceptualised and explained concepts without a significant loss of information. I put similar questions into one category for easy of analysis. I tried not to alter the respondent's responses.
- **Data display:** I organised, compressed and assembled information. This process is the major avenue for validating qualitative analysis in the form of diagrams, graphs or charts. Where necessary, some diagrams or charts were used to show the validity of the information.

When the above process was over, I gave a thick description that elaborated on the feelings, attitudes and experiences of participants. The narrations and descriptions gave insights into the collected data.

#### 4.10 ETHICAL CONSIDERATIONS

According to Burton and Bartlett (2009:30), ethics refers to the scientific study of concepts such as bad or good, right or wrong as well as ways that explains their application in contexts. Research rests on the trust that researchers get from participants and, in turn, researchers have to return the gesture through observing principles of good practice. Behaviours that cause harm or injury to participants have to be avoided. Monette, Sullivan and De Jong (2008:45) also observe that ethics is the study of what is proper and improper behaviour, of moral duty and obligation. Moral principles can be grounded in philosophy, theology, or both. For social researchers, ethics involves the responsibilities that the researchers bear toward those who participate in research, those who sponsor the research, and those who are potential beneficiaries of research.

During this research, I remained professional in everything I did. I assured my respondents that they were free to be part of the interview. I explained that if they felt liked is continuing the process they were at liberty to do so. I explained to them that I would use an audio tape for purposes of accurate recording. I issued them consent forms for them to read and sign as an indication that they were voluntary participating in the study.

De Vos, Strydom, Fouche and Delport (2005:57) also state that:

*"ethics is a set of moral principles which are suggested by an individual or group, are subsequently widely accepted, and offer rules and behavioural expectations about the most current conduct towards experimental subjects and respondents, employers, sponsors, other researchers, assistance and students".*

It is also argued that most societies have legal rules that govern behaviour, but ethical norms tend to be broader and more informal than laws. Although most societies use laws to enforce widely accepted moral standards and ethical and legal rules use similar concepts, it is important to remember that ethics and law are not the same (Gajjar, 2013:8). I assured my respondents that whatever they said in the interview would remain confidential. Moreover, names of respondents were not used. Respondents were given all the respect that they deserved. Throughout the discussions respondents were reminded to respect each other's opinion and never berate another's comments.

According to Strydom (2002:63), anyone involved in research needs to be aware of the general agreements about what is proper and improper in scientific research. It is essential that throughout the research process, the researcher follows and abides by ethical guidelines. When working with individuals, it is essential to understand and pay attention to the following ethical principles:

#### 4.10.1 Informed Consent

Mack, Woodsong, MacQueeen, Guest and Namey (2005:9) define informed consent as a mechanism for ensuring that people understand what it means to participate in a particular research study so they can decide in a conscious, deliberate way whether they want to participate. Informed consent is one of the most important tools for ensuring *respect for persons* during research. Many people think of informed consent primarily as a *form*, that is, a piece of paper that describes in detail what the research is about, including the risks and benefits. This form generally goes through ethics committee approval procedures, and includes legalistic language, and is signed by the participant, the researcher, and possibly a witness. Such informed consent forms are appropriate for biomedical and other research – including qualitative – when the risks faced by participants may be substantial. They may also be necessary for minimal risk research when the foundation for trust between researchers and participants is weak.

According to Monette, Sullivan and De Jong (2008:52), informed consent refers to telling potential research participants about all aspects of the research that might reasonably influence the decision to participate. Very often, people are asked to sign a consent form, which describes the elements of the research that might influence a person's decision to participate. If done properly, the consent process ensures that individuals are voluntarily participating in the research with full knowledge of relevant risks and benefits. The person must have all of the information that might reasonably influence their willingness to participate in a form that they can understand and comprehend (Gajjar, 2013:13). Consent is normally seen as having three elements which must be in place for the consent to be valid. Firstly, the person must be capable of making the consent decision, that is, they are competent. Secondly, the person must be acting voluntarily and must not, for example, be placed under duress or an obligation to give their consent. Finally, the person must be provided with enough information to enable that person to make an informed decision, hence informed consent (Hardwick & Worsley, 2011:33).

For this research project, participants were informed about the following before they signed their consent forms (Appendix 13 p 237):

Purpose of the research, expected time and the procedures. I explained to the respondents the reason why I was conducting the research. I told them that the research is meant to make people aware of the challenges that different stake holders like principals, educators, learners and circuit officials are encountering in the day to day running of the programme. I indicated to them the urgency of finishing the research and explained to them that I am going to interview them and they are free to voice out their feelings and no information would-be used against them.

Participants were told about their rights to decline to be part of the research and to withdraw from the research if so wished, and that they would be no negative consequences for doing so. No participant was forced to be part of the research.

Factors that might influence their willingness to participate, such as potential risks, discomfort or any other adverse effects. I indicated to them that there was no risk at all in being part of this research and there would not experience any negative effects as a result of participating.

Benefits from the research participation. I explained to participants that after the completion of the research, most stake holders would benefit because the challenges experienced might be tackled and make the programme run better.

Limits of confidentiality, such as data coding, disposal, sharing and archiving (Gajjar, 2013:13). The respondents were assured that whatever they say would be strictly confidential and used only for the research.

Before commencing the research, I completed a form and submitted it to the School, Health, Safety and Research Ethics Committee for recommendations to the University Health, Safety and Research Ethics Committee (HSREC) for the certificate (Appendix 11

p235). After the certificate was issued, I then requested permission to conduct the research from the District Senior Manager of the Department of Education (Appendix 12 p236). I wrote letters to the principals of the selected secondary schools. I requested the principal's permission to talk to the teacher responsible for the programme at school. Through the principal, I requested the responsible teacher to be a mediator between myself and the learners that are participating in the programme and those not participating. At the circuit level, I requested the circuit official for an interview.

Before the interview begun, I disclosed the permissions received from the Department of Education regional office, the circuit office and the one from the principal of the schools for the participants to see that everything had official approval (Appendix 12 p237).

#### **4.10.2 Confidentiality**

According to Maree (2012:307), the confidentiality of the findings of the study need to be upheld. The information that participants provide in the process of the study must not be disclosed to other people. It has to be a guarded secret. The results of the study should be presented in such a way that the anonymity of the participants is preserved. Monette, Sullivan and De Jong (2008:56) note that confidentiality means ensuring that information about or data collected from those who participate in a study are not made public in a way that can be linked to an individual.

Participants have the right to privacy. The thinking is that even though the researcher is aware of the person who provided data, such knowledge should be kept from the public. The scope involving the knowledge sharing activity has to be protected (Cohen, Manion & Morrison, 2000:62). It means ensuring that information about or data collected from those who participate in a study are not made public in a way that can be linked to an individual (Monette *et al.*, 2014:58).

I informed the respondents about confidentiality in writing while asking for the permission from the respondents. I assured the respondents that their names or the names of their

schools are not important and no spaces were provided for such in the consent form. Participants were assured that the collected data would be used only for this particular research.

#### **4.10.3 Anonymity**

Anonymity means no one, including the researcher, can link any data to a particular respondent. This can be accomplished by not including any identifying names or numbers with the data collected. True anonymity means that even the researcher can never link data to a particular respondent (Monette, Sullivan & De Jong, 2008:56 and Monette *et al.*, 2014:58).

The obligation to protect the anonymity of research participants and to keep research data confidential is all inclusive. It should be fulfilled at all costs unless arrangements to the contrary are made with the participants in advance. The essence of anonymity is that information provided by participants should in no way reveal their identity (Cohen, Manion & Morrison, 2000:60).

I assured all my participants about their anonymity. I informed them that their names will never be revealed and in fact, there will be no need at all to provide their names or those for their schools or institutions.

#### **4.10.4 Protection of Participants from Harm**

Of all the principles associated with research ethics, it is safe to say that this admonition is the cornerstone of ethical conduct. There should be a reasonable expectation by those participating in a research study that they will not be involved in any situation in which they might be harmed (Lichtman, 2013:52). According to the principle of no harm to participants, researchers are expected to provide participants with an outline of the risks involved to the participants in the study (Halai, 2006:2). Fortunately, there was no risk or harm that would be experienced from this study and participants were made aware of it.

The researcher should ensure that participants are not exposed to any undue physical or psychological harm (Maree, 2012:306).

To make this research work, I adhered to the abovementioned precepts. I ensured that there was no question that would anger or upset respondents, the physical, mental and the emotional state of the participants were never compromised. I followed all ethical principles of causing no harm to the respondents. The self-esteem of the respondents was a priority to me. Participants were never angered or frustrated.

#### **4.10.5 Privacy**

This is a primordial value, a basic human need which like the right to self-determination, triumphs over utilitarian calculations. Privacy is more than simple confidentiality. The right to privacy means that a person has the right not to take part in research, not to answer questions, not to be interviewed, not to have their home intruded into, and to engage in private behaviour in their own private place without fear of being observed (Cohen, Manion & Morrison, 2011:90). Hardwick and Worsley (2011:35) emphasise that securing privacy for participants involves ensuring that they are given an opportunity to control if, when, and under what circumstances they reveal or grant access to personal information on their behaviour, values and beliefs. The right encompasses almost all of the data that are likely to be collected which relate to participants.

In this study, participants were alerted regarding the privacy of all the information that was shared during the process. They were assured that the confidentiality was to be promoted even after the results of the study have been reported and published.

#### **4.11 RESEARCH QUALITY CONTROL MEASURES**

In quantitative research, research vigour is measured by validity and reliability, while in qualitative research, researchers use data trustworthiness in order to measure credibility, transferability, dependability and confirmability of the gathered data and research findings

(McMillan & Schumacher, 2001:102). Trustworthiness is of the utmost importance in qualitative research. Assessing trustworthiness is the acid test of your data analysis, findings and conclusions. Accordingly, you need to keep the procedures that can be used for assessing the trustworthiness of the data analysis constantly in mind. These procedures include consistency checks and credibility or stakeholder checks (Maree, 2012:113).

The confidence that the findings of the study need to be given attention by the readers and the guarantee that the study is of quality constitutes the concept on trustworthiness (Maree, 2012:305). According to Sadiki (2003:99), trustworthiness relates to the qualities of the study as follows:

- Show a belief in its value
- Offer the relevance to use it
- Permit outsider decision to be made on the consistency processes and impartiality of results.

In order to achieve data trustworthiness in this study, I employed multiple ways such as triangulation. According to Stake (2000:443), triangulation involves employing various views to express meaning and testing that the observation can be repeated. In the study, I triangulated the instruments and participants. I also used member checking and thick descriptions in the study as part of the strategy to produce convincing outcomes. I ensured that I triangulated all data collected during the research process, including results from the focus group interview, individual interview, observations and field notes in order to search for common themes to provide reliable findings. Furthermore, I strived to eliminate any bias that might have been brought to the study by constantly reflecting on research process (Maree, 2012:305).

The aim of trustworthiness in a qualitative inquiry is to support the argument that the inquiry's findings are worth paying attention to. In any qualitative research project, four

issues of trustworthiness demand attention. These are credibility, transferability, dependability and confirmability (Shenton, 2004:64).

#### **4.11.1 Credibility**

According to Teddie (2007:79), credibility is defined as the confidence that can be placed in the truth of the research findings. Credibility establishes whether or not the research findings represent plausible information drawn from the participant's original data and is a correct interpretation of the participant's original views. Maree (2012:305) shows credibility as the assurance that the researcher's conclusions stem from the data. The goal in applying the strategy of credibility is to demonstrate that the research was conducted in such a manner as to ensure that the phenomena were accurately identified and described (De Vos, 2001:353).

In order to show credibility, different methods to collect data were used, that is, triangulation, focus group interviews, individual interviews, observations and field notes. All these form the major data collection strategies for most qualitative research. Whilst focus groups and individual interviews suffer from some common methodological shortcomings since both are interviews of a kind, their distinct characteristics also result in individual strength. But the use of different methods in concert compensates for their individual limitations and exploits their respective benefits (Shenton, 2004:65).

As a way to make data collection more credible, I tape recorded participants' responses. After each interview, I allowed the participants to listen to the recorded text so that they could clarify, comment and add on what they would have said. The transcriptions from vocal to written scripts were done word-for-word. This is what is referred to as member check which Shenton (2004:68) considers to be the single most important provision that can be made to bolster a study's credibility. Checks relating to the accuracy of data took place on the spot in the course, and at the end of data collection dialogues, as the interview was in mother tongue, it was easy for participants to verify what they said. Participants were asked to read any transcripts of dialogues in which they had

participated. Here the emphasis was on whether the participants considered that their words match what they actually intended, since the articulation had been accurately captured.

#### **4.11.2 Transferability**

Transferability refers to the degree to which the results of qualitative research can be transferred to other contexts with other respondents (Halai, 2006:278). Maree (2012:305) says transferability refers to the extent to which the study can be transferred to a larger population or settings with reliance on its findings. Shenton (2004:69) indicates that transferability has to do with external validity which involves the degree to which the results of a study might be used to mirror other situations. According to Bitsch (2005:85), it is the investigator that assists the potential user with the decisions of transferability by sampling purposively and making thick descriptions in data analysis.

Since my research was on the national issue of National School Nutrition Programme, findings could be transferred to other circuits, districts, and provinces. I used rich, thick descriptions of the data and processes of the study to enhance transferability (Maree, 2012:306). Shenton (2004:70) argues that it is easy for researchers to develop a preoccupation with transferability. Ultimately, the results of a qualitative study must be understood within the context of the particular characteristics of the organisation or organisations and, perhaps geographical area in which the fieldwork was carried out. In order to assess the extent to which findings may be true of people in other settings, similar projects employing the same methods but conducted in different environments could well be of great value.

#### **4.11.3 Dependability**

Bitsch (2005:86) indicates that dependability refers to the stability of findings over time. Dependability involves participants evaluating the findings and the interpretations and recommendations of the study to make sure that they are all supported by the data

received from the informants of the study. Dependability also refers to the degree to which the reader can be convinced that the findings did indeed occur as the researcher says they did (Maree, 2012:305). Shenton (2004:71) argues that in order to address the dependability issue more directly, the processes within the study should be reported in detail, thereby enabling a future researcher to repeat the work, if necessary, to gain the same results. Thus, the research design may be viewed as a 'prototype model'. Such in-depth coverage also allows the reader to assess the extent to which proper research practices have been followed.

I achieved dependability by checking the members. Themes were identified and then discussed with the participants to ensure that they are accurate and dependable. I triangulated data collected during focus group interviews, individual interviews, observations and field notes in order to search for common themes to provide reliable findings. I attempted to account for changing conditions to the phenomenon chosen for research as well as changes in the design created by increasingly refined understanding of the setting (De Vos,2001:351).

#### **4.11.4 Confirmability**

De Vos (2001:351) says that confirmability is focused on whether the results of the research could be confirmed by another and places the evaluation on the data themselves. Steps must be taken to help ensure as far as possible that the work's findings are the result of the experiences and ideas of the participants, rather than the characteristics and preferences of the researcher. The role of triangulation in promoting such confirmability was again emphasised in the context to reduce the effect of investigator or researcher bias. Cohen, Manion and Morrison (2007:113) say that in qualitative data, validity might be addressed through the honesty, depth, richness and scope of the data achieved, the participants approached, the extent of triangulation and the disinterestedness of the researcher.

Before I started gathering the data, I ensured that no participant was forced to do an interview. Views from different participants were recorded verbatim through a tape recorder. An informed consent was signed so that participants could feel free to voice their opinion.

#### **4.12 CHAPTER SUMMARY**

The chapter dealt with research design and methodology used for the study. Post-positivist paradigm was used and it informed the study to use the qualitative research method as it is concerned with descriptive analysis of data rather than numbers. As a way of collecting data, I employed focus group interviews, individual interviews, non-participating observation and documentations. Two schools from different localities were purposefully selected, one from a rural area and another from a township. The collected data aimed at finding challenges that different study groups encounter in making the National School Nutrition Programme a success. The study aimed at finding challenges hindering the programme from achieving educational objectives such as regular school attendance, academic improvement and curbing absenteeism.

## CHAPTER FIVE

### DATA PRESENTATION AND ANALYSIS

#### 5.1 INTRODUCTION

This study sought to investigate challenges in the implementation of the NSNP which prevent it from achieving educational objectives in two schools in Vhembe District of Limpopo province in South Africa. In the previous chapter, the research design and methodology were presented and discussed as well as the study data gathering procedures. This chapter presents and analyses data gathered through interviews conducted with five different categories of participants. These comprised secondary school principals, class teachers, learners who are part of the NSNP and those who were not part of the programme and the National School Nutrition Programme officers who were in charge of the NSNP.

Data collected from interviews were interpreted using content analysis (Cohen, Manion & Morrison, 2000:197). The analysis was based on themes and patterns that emerged from the data. I corroborated the gathered data from individual interviews and focus group interviews with observations that were recorded in my reflective research journal and documentary records that were made available at the two schools. The content analysis made it possible to compare and contrast the views of participants according to the study site, category, gender and research findings from other studies (McMillan & Schumaker, 2010:197).

#### 5.2 DATA ANALYSIS PROCEDURE

This section presents the analysis of data. The first part focuses on the biographical data and the second part on the analysis of the contextual questions.

**Table 5.1: Demographic Data of Working Study Participants**

Participants	Number	Experience
Principal B	1	07 years
Deputy Principal A	1	12 years
Class teachers attached to School A	4	0-10 years
	6	11 years and above
Class teachers attached to School A	3	0-10 years
	7	11 years and above
NSNP officer attached to School A	1	12 years
NSNP officer attached to School B	1	10 years
Total	22	

The Table 5.1 reveals that participants in the programme have adequate experience with the administration of the NSNP. They were expected to possess adequate knowledge about the programme as they either participated in it or they are experienced in its processes. All participants had over five years' experience in the programme.

**Table 5.2: Demographic Data of Sampled Learners by Grade**

Participants	Number	Grade
School A NSNP participants	3	10
	3	11
	4	12
School A non-NSNP participants	2	10
	4	11
	4	12
School B NSNP participants	3	10
	4	11
	3	12
School B non-NSNP participants	4	10
	3	11
	3	12
Total number of participants	40	

Table 5.2 above summarises the learners who participated in the study into two main categories, namely those who participated in the NSNP and those who chose not to. In brief, the information indicates that 20 sample learners were in the NSNP while 20 were not eating food provided by the NSNP. While only 20 learners participated in the study, the majority of the learners at both schools were participating in the NSNP due to their poor socio-economic background. The few who were non-participants were therefore sampled using snowballing whereby they helped the researcher to identify their colleagues (Wagner, Kawulich & Garner, 2012:92 & Cohen, Manion & Morrison, 2011:158).

### **5.3 QUALITATIVE ANALYSIS OF CONTEXTUAL QUESTIONS**

The presentation, analysis and interpretation employed qualitative approaches as outlined in the previous chapter. The data emerged from interviews conducted with NSNP officers, principals, class teachers, learners as well from observations and document analyses. The analysis process was also guided by the theoretical frame work, research questions, research objectives and literature review. The participants were coded as follows: National School Nutrition Programme Officers for School A as NSNPO A and NSNPO B for school B; principal for School A as PA and PB for the principal for School B. Class teachers for School A were coded as CTA and numbered according to the order in which they were interviewed while those of School B were coded CTB and numbered in the order of the interviews. The 20 learners from each of the two sampled schools were divided into two groups, one group participated in the NSNP and the other did not. Those who were in the programme from School A were coded LPA while those from School B were coded LPB and numbered accordingly. Learners who were not participating from School A were coded LNPA while those from School B were coded LNPB and numbered accordingly. The analysis was carried out as informed by the themes that emerged from the collected data and guided by the research questions.

## 5.4 EMERGING THEMES

Five major themes emerged from the gathered data. These major themes were further sub-divided into categories or sub-themes in order to present and analyse participants' views.

Table 5.3 summarises the themes and sub-themes that emerged from the gathered data and upon which the presentation of data was organised.

**Table 5.3: Themes and Sub-themes of the Study**

Themes	Sub-themes
5.4.1 Background knowledge of the National School Nutrition Programme (NSNP)	5.4.1.1 Knowledge of participants on reasons for starting the NSNP. 5.4.1.2 Knowledge on objectives of the NSNP. 5.4.1.3 Importance of workshops on the NSNP. 5.4.1.4 Participants' views on achievements of NSNP.
5.4.2 Roles of different stakeholders in organising the NSNP	5.4.2.1 Role of the principals in organising and managing the NSNP 5.4.2.2 Role of class teachers in organising the NSNP 5.4.2.3 Role of the learners in organising the NSNP 5.4.2.4 Role of the food handlers in organising the NSNP 5.4.2.5 Role of the NSNP officers in organising and managing the NSNP 5.4.2.6 Role of the food suppliers in organising the NSNP.
5.4.3. Quality control system on NSNP	5.4.3.1 Monitoring of the NSNP 5.4.3.2 Learners' views on monitoring the NSNP for hygiene 5.4.3.3 Quality of food in the NSNP
5.4.4 Benefits of the NSNP	5.4.4.1 Benefits of the NSNP on school attendance 5.4.4.2 Benefits of the NSNP in minimising school dropouts 5.4.4.3 Benefits of NSNP to teaching and learning 5.4.4.4 Main academic benefits of the NSNP
5.4.5 Challenges encountered in the provision of the NSNP	5.4.5.1 Hygiene of learners and food handlers 5.4.5.2 Infrastructure for food storage and preparation for the NSNP 5.4.5.3 Challenges class teachers face during the NSNP feeding time 5.4.5.4 Resources for food preparation in the NSNP 5.4.5.5 Feeding learners on the NSNP during school recess periods

## 5.4.1 Theme 1: Background Knowledge of the National School Nutrition Programme

The theme sought to describe the knowledge that different stakeholders have about the NSNP. The theme intends to assess the awareness of participants regarding the reasons for the establishment of the NSNP at schools, their knowledge of the objectives of the programme and whether these were being achieved.

### 5.4.1.1 Knowledge of participants on reasons for establishing the NSNP

It is critical that those who participate in a programme are aware of the circumstances that led to its being set up. The study revealed that participants were generally familiar with the reasons for the introduction of the NSNP. The face-to-face interviews and focus group discussions showed that the NSNP emerged in an attempt by the government to provide food to learners, particularly to those who come from disadvantaged backgrounds. Learners from poor families barely have enough food to sustain them at school and the feeding programme serves as a stop gap measure to remove class distinctions at school and facilitate learning. It intended to make all learners equal so that those from poor and rich families cannot be distinguishable in ways that negatively impact on teaching and learning. Participants said:

*...the government realised that when learners are from different families, rich and poor families. So, the government start this feeding programme, so that all learners be equal, so that we cannot see those who have and those who don't have money as all would have eaten. [LPA5]*

*...I think the government has seen that families are not the same, they are different, so there are those who come to school in the morning without eaten anything. They realise that if their stomachs are empty they cannot concentrate in their education. So, the government see it fit that they bring food to school so that all could look the same. [LPB8]*

*The programme was started because some learners were coming to school with empty stomachs. Now they are getting help from school because they are eating, this programme gives them opportunity to have a meal [LNPA5].*

*It was seen that there were other learners who came to school in the morning with empty stomachs, without anything for breakfast at home, they could not even concentrate in their education. Even during break if the learner does not have money to buy food, he would eat at school and will just be like all other learners [LNPB5].*

*...to make sure that all learners are equal, because there are some who are coming from well to do families which are able to give them pocket money while others are from poor families who cannot afford pocket money. Now money or no money one will be able to have something to eat during break [LNPB1].*

The observations above illustrate that both learners who participated in the programme and those who did not are very much aware of the reasons for the institution of the NSNP at different schools. They understood that poverty was the main impetus for the start of the programme as many parents could not afford to get their children to school, let alone provide some food that could sustain them at school throughout the day. It was to bring about social justice and equality of opportunity to the learners so that no one might blame failure to succeed academically on poverty (Belot & James, 2009:4). The government then introduced the NSNP so that learners, especially those from poor families would concentrate on school activities without worry of food provision which tend to push them out of classes. This is supported by literature which states that the government used the national quintile rankings to select institutions that would benefit from the no fee schools and fell in the range of the poorest of the poor (Langsford, 2012:13).

#### 5.4.1.2 Knowledge on the objectives of the NSNP

The success of a project normally depends on the presence of some laid down objectives that can be used as a yardstick to check the extent to which the project achieves the goals. The views of participants were solicited in regard to their understanding of the objectives of the NSNP as outlined in the policy of the programme. It was revealed that the programme was meant to address the problem of poverty and hunger so that learners would stay at school. The nutritious meals were to be given to learners to boost their attendance and attention at school and to allow teachers to extend contact time with learners. Lessons could be extended into the afternoons. The knowledge about the programme is important as it enhances implementation and interpretation of related activities and practices. On the knowledge of NSNP, the participants said:

*I remember when they picked the issue of alleviating poverty, hunger and this issue of school dropouts [DPA].*

*Ok, the main objectives were to provide nutritious meals to all learners, in primary and secondary schools. The food supplied gave learners energy which made them to be alert and receptive during the lesson [NSNPOB].*

*I think the programme was started with the aim of extending working hours, in order for educators to go an extra mile, so that they can have afternoon studies, and learners be able to attend without the problem of being hungry [CTB2].*

The above views indicate that participants are familiar and knowledgeable about the objectives of the programme. Literature states that the NSFP enhances the well-being of learners' school attendance and participation (DoBE, 2011:158; DoE Strategic Plan 2007-2011:12). Participants were aware that the programme was meant to alleviate hunger among the school going children, as they come from families with different socio-economic backgrounds. It served to assist poor families that cannot afford food for their

children to curb school drop outs as children cannot concentrate in education on an empty stomach.

#### **5.4.1.3 Importance of Workshops on the NSNP**

People that are involved in the running, implementation and organisation of programmes should be trained through workshops so that they are familiar with the expectations of such a programme. This sub-theme outlines the knowledge that participants gained in the NSNP workshops. The study revealed that workshops were organised to appraise teachers on the activities of the NSNP. Some principals were also included in the workshops to enable them to explain how the programme should run in their particular schools. In fact, they could not remember if they were ever involved in the workshops on the programme. Principals said:

*As principal no, but well these educators who are responsible, they keep on work shopping them but principals no [PB].*

*I can say yes, the principal is the one who is directly involved with the programme, but he shared with us, he is sharing with us on how to manage this programme. He is the one who attend workshops most of the time. I don't go to the workshops most of the time, he is the one who attend but when he come back he empowers us [DPA].*

The views above show that not all principals were work shopped on the running of the programme but teachers were trained as these were directly involved in the implementation of the programme. For the sake of the betterment of the programme, all principals should be work shopped regularly as they are the overseers of the activities at schools. However, the goals of school feeding will not be achieved without adequate training of people involved in the running of the programme (Global Child Nutrition Forum, 2007:5).

#### **5.4.1.4 Participants' views on achievement of NSNP**

Programmes are said to be prospering and progressing when the set objectives are being met. Participants were requested to express their views in regard to the achievement of NSNP in the schools selected for study. It emerged that they are positive about the achievement of the objectives of the NSNP. These included increased school attendance, participation and extension of teaching and learning time. Participants stated:

*I feel satisfied because learners' attendance is high and absenteeism is low because learners are getting a meal at school [CTA2].*

*...Before NSNP, absenteeism was very high, but with the introduction of this programme, only one or two learners are absent. Before you could see that some learners were hungry, because they were not paying attention, concentration was not there, but these days they concentrate a lot [PB].*

*Since the introduction of this programme, attendance has grown and the pass rate has even increased [NSNPOA].*

The findings reveal that secondary school principals, class teachers and NSNP officers were aware of the achievements of the NSNP programme. The achievements of the programme included its efforts to alleviate hunger among the school going children and ease the financial burden of schooling from parents that are trapped in the poverty bracket (DoE, 2013:5). This also entailed curbing absenteeism from the school going learners and increase the attendance and pass rates (Gelli, Meir & Espejo, 2007:150; Adelman, Gilligan & Lehrer, 2008:9).

#### **5.4.2 Theme 2: Roles of Different Stakeholders in Organising the NSNP**

In this section, participants were asked to present their responses on the roles that different stakeholders play in the organisation of the NSNP. Included in the following

discussion are the principals, class teachers, learners, food handlers, the NSNP officers and food suppliers.

#### **5.4.2.1 Role of the principals in organising and managing the NSNP**

This sub-theme outlines the role of the principals in organising and managing the NSNP in the two schools of the study. A review of documents and the responses of participants from interviews revealed that principals were the overseers in the running of the programme. They work as accounting officers to ensure books that are used for the programme are balanced and that the activities are carried out as guided by policy. This included the grant frame of the government and the school-based regulations. They ensure that the meals are as per daily plans, that all learners are served and receive food deliveries during school holidays. Participants stated:

*..in our department, the principal is an accounting officer, he or she is the one who monitors the whole programme daily, he or she monitors if the meal is prepared according to the real measurement and following the right menu. The principal also monitors the learners who are consuming meals, monitors the administration process which is done by a delegated NSNP educator if he or she is doing the paper work that needs to be done [NSNPO B].*

*The principal moves around checking if things are going on in order. He checks things like menu, if the food handlers are cooking the right food for the day. The principal checks if learners are being provided food or dished in a fair manner [CTB1].*

*The principal helps by checking and signing all the documents that are taken to the department. He oversees all the processes of the feeding programme [CTA1].*

The excerpts above reveal that the principal is responsible for managing the NSNP. However, some of the roles indicated above contradicted with my observations, as during my visit at the school I never saw the principal of either school moving around checking what was happening during eating time. They were both seated in their offices. So, this means that the roles are there and known by different participants but they are not consistently put into practice. One might claim that they might have delegated, but still there was no teacher who was monitoring or whom I saw going around during break helping learners. This is consistent with literature which states that the programme is beset with management difficulties, which entails monitoring (Tomlinson, 2007:14)

#### **5.4.2.2 Role of class teachers in organising the NSNP**

Teachers are close to the learners who are NSNP beneficiaries. This section explored the roles that class teachers play in organising the NSNP. It emerged that class teachers are responsible for distributing food to learners in a fair manner so that learners would not fight over food. They maintain order as learners queue for food, complete forms which are required by the district which request statistics of learners that ate the prepared food and those that did not. Teachers also ensure that learners wash their hands and eat during break time. Participants revealed:

*We help by dishing out the prepared food to learners, and we help so that learners do not fight for the food and to maintain discipline while eating [CTA3].*

*When the department started this programme, it emphasises that learners must be given food in their respective class rooms by their class teachers. That simply means during break as a class teacher I must go to my class and dish out food for them [CTB4].*

*Teachers are the ones who should observe learners during breaks while consuming meal and take the statistics of the learners who are eating and not eating, to find the challenges for those who are not eating the meal so*

*that they can report it and find a proper solution because the meal was meant for all learners [NSNPOB].*

*Class teachers check if the right menu for the day is cooked, the right kilograms cooked and monitor the feeding process, when its break time. They must see to it that learners have washed their hands, then they are eating in class, so that table manners are being followed by learners [NSNPOA].*

The above verbatim statements show that participants were aware of the roles that are supposed to be played by the class teachers in running the programme; which are to supervise learners while eating during break, checking if the correct menu was cooked and making sure that hygiene was maintained by those involved in the programme. The lack of uniformity in school menus and the timing thereof constitute some of the weaknesses of the NSNP (Kallaway, 1996:4). Some class teachers tend to withdraw their involvement in the programme, serve for those attached to the programme, which explains the existence of some challenges in the running of the NSNP. One participant said:

*...but with us here I only see one educator, class teachers are supposed to be there for learners during break, making sure learners are eating well but they are not doing their work. The only teacher who is there all the time, is the one who is attached to this programme, if all our class teachers were supporting it would be very fine but they are not supporting only one educator who is there all the time [PB].*

*... educators are not part of the programme, in fact they don't help during break as learners go for their meals. It would be better if our educators were part of the processes of feeding the learners so that all learners could get equal share of food [LNP8B].*

This confirms that some class teachers were not executing their roles effectively, which are to see to it that learners are eating food in class, making sure that learners wash their hands before and after eating, keeping order while learners are eating and filling the day to day eating registers. Literature is, however, emphatic that children should enjoy the highest standard of health through the provision of nutritious meals and water, which they should use, in this case to drink and wash their hands during meals (WHO, 2004:17). When I made my observation on the two selected schools during break when learners were queuing for their meals, it was chaos as learners were all over each other. There was no order at all, no single teacher was there to help learners in the process. I realised that teachers may have been familiar with their roles but they were not executing them as expected. This implies that monitoring systems need to be improved (DoBE, 2011:158).

#### **5.4.2.3 Role of the learners in organising the NSNP**

This section sought to find out whether learners have roles to play in organising the feeding in the NSNP. Most learners generally do not have much to do except to eat and enjoy the nutritious meals which aid their concentration during learning. Learners are, however, expected to assist in maintaining order that is expected in the feeding process. It is also helpful that some selected learners are given the responsibility to keep order, serve others and ensure that the concerns of other learners are brought to the attention of administration to enhance the running of the programme. These include class representatives and prefects. This assists in teaching learners to be responsible as they are an important part of the school. Participants said:

*...in learners we are just expecting them to consume the meal. That's all [NSNPOB].*

*...remember, you can't do this alone, learners are also doing their part of leadership, they distribute food and make sure that there is order when learner are queuing for food [DPA].*

...Class representatives are the ones who made other learners to be in a queue. *They are the once who are responsible for dishing out food [PB].*

In order to ensure the programme runs smoothly, learners are incorporated in organising the NSNP. They should be given responsibilities while still young and trained for future leadership roles. There is need to empower learners with life skills in the process, to develop value in them and to encourage them to cooperate and show respect to others. Literature states that learners should be introduced to social, cultural and political spaces of communities in ways that teach them tolerance and to condemn violence, bullying and prejudice (Rehle *et al.*, 2010:6).

#### **5.4.2.4 Role of the food handlers in organising the NSNP**

Food handlers are expected to play a critical role in organising the NSNP. The study revealed that food handlers are the most important people in the NSNP as they make sure that food that is delivered is prepared on time for learners. This constitutes the most committed part of the staff which runs the programme. These also make sure that the food store rooms are clean, food is prepared in clean environments and that utensils are washed and returned to their respective places after use. Participants said:

*...they are responsible for preparing the food. They are responsible for cleaning where they prepare food for learners. They have to make sure that the utensils that they are using are also clean [NSNPOA].*

*Food handlers are so committed, they come early in the morning before us. They make sure they prepare food on time. After dishing the food, they wash those pots and all those utensils and make sure everything is in order. They clean the kitchen [DPA].*

*They see to it that the store room is always clean, because food should be put in a clean area with no dirt. They also help by cleaning all the utensils that is used for cooking and dishing [CTA2].*

The above accounts indicated that food handlers are the ones that cook and clean the area where they prepare food for learners. This is backed by literature which concurs that food handlers prepare meals and that they should also ensure that the places for preparing food are kept clean (DoE, 2013:2). My observations corroborated the above view, when I arrived at one of the selected schools at half past six, the food handlers were already there busy with the big food pots. That brought me to a conclusion that food handlers were very much committed to their work of preparing the correct quality of food for learners every morning of each day and for making sure that the food was ready for consumption on time. They dish out the food into bowls, clean the food storage rooms and the kitchen.

#### **5.4.2.5 Role of the NSNP officers in organising and managing the NSNP**

This sub-theme outlines the roles that the NSNP officers play in organising the feeding of learners on the NSNP. Individual interviews with NSNP officers, principals and focus group interviews with class teachers revealed that the NSNP officers have important roles to play as they are the monitors of the programme. They work as liaison personnel between schools and suppliers, train food handlers and staff development teachers on issues pertaining the NSNP. NSNP officers are important to ensure that menus for different times are supplied to schools. They also assist in the awarding of tenders, administration of funds and linking with other departments such as agriculture for the development of school gardens. Participants echoed these sentiments about food handlers:

*...this person is the one who is responsible for work shopping the educators and the food handlers. If there are problems at school, maybe the supplier didn't supply enough food we contact the NSNP officer. We get menu from the circuit office because these learners don't eat same stuff every day [PB].*

*NSNP officer came, went to the principal's office and then they will visit different areas like the store room, the kitchen and the garden, checked if*

*there are some vegetables which are helping in the feeding scheme [CTA2].*

*The NSNP officer check the kitchen if it is clean and if it has been built in a proper standard. She also checks if there is a hole for garbage and also the uniform that food handlers should wear while preparing food [CTB6].*

The excerpts above revealed that all NSNP officers themselves, principals and class teachers from both schools were aware of the roles of the NSNP officers in organising the programme. The statements revealed that the NSNP officers visited schools for monitoring. This was supported by an analysis of records collected from both selected schools which were left by the NSNP officers as evidence that they were there to monitor and indicated their findings (Appendix 1 p220). The documents focused on the files for records, what was happening at the kitchens, what type of food was cooked, the quantity and the nutrients. The issue of health and safety was checked, including the presence of a garden and its condition. The basic intent to make use of school gardens is to encourage domestic consumption of agricultural and other locally produced food stuffs (Pollitt, Gersovitz & Gargiulo, 1978:477). However, insufficient linkage to local agriculture still prevails (DoBE, 2013:17). Challenges were written down and the responsible teacher would then write what was to be done to improve the situation. If concerns were with the government, then the NSNP officer would indicate what was to be done. Then scores were given within three colours, which are from 0-49= red school, 50-80= yellow school and 81-100= green school. If the score is below 49 it means the school needs to do something about the way it was handling the NSNP, 50 to 80 indicate a better school but which needs to improve. It is ideal for all schools to be within 81 to 100 as this indicates that they are doing well in terms of all those things that are monitored (Appendix 1 p220).

#### **5.4.2.6 Role of the food suppliers in organising the NSNP**

This section outlines the roles of food suppliers in organising and supporting the NSNP. The findings show that food suppliers were supplying food that has been requested in schools. During both focus group and individual interviews, class teachers and principals

were asked to explain how food suppliers were supporting the feeding of learners on NSNP. It is the duty of food suppliers to source the required food qualities and quantities for food handlers to prepare. The supplied food needs to be fresh. On the role of food suppliers, participants said:

*They are the ones that deliver food to school. Without them there would be no food to prepare for learners. They go all out to make sure that they bring food closer for food handlers to prepare [DPA].*

*...they are supplying correct type of food as specified by the menu. They are liable to bring food that is healthy and within the expiry dates [CTA1].*

*They make sure that when they deliver food, they are protected from dust and such food should reach the storeroom without dust. If they supply food that has expired, they are told and the food is returned then they bring other food which is fresh [CTB5].*

The above citations reveal that suppliers are doing a good job of bringing healthy food most of the time and observe the good hygiene when delivering food. The expression of doubt from the principal of School B on whether the suppliers deliver good and healthy food shows that there are times when stale food was brought to school. Studies support the response of principal B in confirming that lack of basic supplies still muddle the implementation of the process (DoBE, 2013:17).

#### **5.4.3 Theme 3: Quality Control System on NSNP**

In this section, participants were required to give their responses on whether the NSNP officers were doing their monitoring role at the two selected schools. The theme describes the monitoring processes done by NSNP officers at different areas of the schools. The focus was on the number of times that they visit schools and the aim of their visits. The quality of NSNP food, menu and the preparation of food are also discussed.

#### 5.4.3.1 Monitoring of the NSNP

This section was intended to verify if monitoring was done at the two selected schools. Individual interviews and observations were done and revealed that monitoring was being done regularly on a quarterly basis. The purpose of the visit to schools is to support the NSNP to ensure that the activities are carried out as intended. This is to make sure that learners are fed with nutritious meals, feeding is done on time, correct menus are prepared and that the cleanliness of the hygienic conditions is observed. Participants said:

*Normally all schools should be monitored on a quarterly basis [NSNPOB].*

*...it depends on the days which we are going to feed for the month, but usually its two days, two schools per day, six schools per week [NSNPOA].*

*...the main aim for us to go and monitor is to support the NSNP. To check if learners are eating the correct meals, and correct grams per day. If we find challenges, it is our responsibility to make sure that we find the solution [NSNPOB].*

An analysis of records concurred with the results of interviews in confirming the visits to schools for monitoring the NSNP (Appendix 1 p220). These were usually to solve problems that arise between the suppliers and the schools. It focused on supporting the schools. Whenever the monitors found that a wrong scale was used for measuring the meal for a day, they show the food handlers how they must measure. The monitoring tool has a space for the class teacher to make suggestions on how to correct things that were not in order so that he/she plays a part to finding solutions.

Observations revealed that old classes were used as storage facilities in the two selected schools. At least the classes had locks. The ladies made sure that these were polished and kept clean. It was however, not easy for food handlers to keep the places used as kitchens clean as they used shacks that were built of corrugated iron. This scenario is

backed by literature which reveals that the programme experiences setbacks in resourcing equipment and spaces which are appropriate for the preparation of food at schools (DoBE, 2013:17).

#### **5.4.3.2 Learners views on monitoring the NSNP for hygiene**

This section aimed at assessing the views of learners on the monitoring of the NSNP for hygiene purposes at the two schools. Learners revealed what they felt were unhygienic practices in the running of the NSNP. They indicated that some of the things that they are given are not original, more especially milk and fish. The fish is at times prepared without being properly cleaned and at times this creates health problems for learners who are allergic to fish. The milk at times causes diarrhea which leads to dysentery and dehydration. Some of the food that is given causes some learners to develop rash which also affects their learning as they have to go to clinic instead of attending their classes. Participants said:

*Another thing we are eating fresh milk on Monday and cause us diarrhoea [LPA4].*

*When it comes to cooking, they cook fish with all the things that are found inside like the intestines and everything, and they leave learners with poor health. Some of the learners develop rash and they are always scratching themselves, more especially those who are not used to eating fish at home [LPA1].*

Learners also brought in the issue of the kitchen and the way food is cooked that was not hygienic. The rice is not rinsed while pumpkins are usually tasteless. The food handlers at times appear dirty to handle food and work in kitchens that at times are not conducive to be used to cook food for learners.

*...even the kitchen itself is not conducive for cooking. Foods are not cooked in a better way that makes learners to be healthy. The rice is dished with starch, it is not rinsed, and the pumpkins are tasteless [LPA2.]*

*When you look at the way they are prepared, we look at the issue of cleanliness on the side of the food handlers, it is not good enough. It is contributing that as students we don't go and eat their food [LP1B].*

The above statements revealed that some of the food that learners are given causes problems. Learners felt that the way food handlers carried themselves is not very hygienic. They are not always clean. The shortage of an appropriate staff to implement the programme, in addition to the existence of a fragmented monitoring system may contribute to this undesired situation (Behr, 2008:4). However, from my observation, based on the conditions that these food handlers are working on, they are doing everything they can. As I observed in both schools, the food handlers were looking clean in their uniforms. Their pots were clean. They however, could not be clean for the whole day as they are not using proper kitchens. These were just old sheds which had no cement floors, dust easily got into the pots and other utensils. Food handlers from School B even went on to use cow dung in order to limit the dust around while those from School B sprinkled water to settle down the dust.

#### **5.4.3.3 Quality of food in the NSNP**

The programme intended to offer nutritious meals to learners. This section set out to assess the quality of food that is provided to learners. Individual and focus group interviews with participants in this study revealed that different methods of observing the quality of food were used. The food is checked at delivery to ensure suppliers bring to school quality consignments. The delivery books are not signed if those receiving the food are not satisfied about its quality. They check expiry dates and the extent to which balanced diets are considered in the supplies. The store rooms are assessed for cleanliness so that the food is kept in hygienic conditions. Responsible officials also check

if daily menus are respected and taste the cooked meals for edibility in terms of freshness and taste. Participants said:

*...when food is delivered we don't accept food which is not quality from the service providers. We don't sign if the food is not good enough. That has made us to be sure that we have received quality food from the service providers [DPA].*

*...the educator attached to this programme, myself as a principal, and the members of the SMT, sometimes we went to our storeroom and check the food that the suppliers have supplied to us. We sometimes visit the kitchen to check whether the place was conducive enough to cook food for our learners in. We check the expiry dates on the supplied food [PB].*

*...the educator who is responsible with food goes to an extent of tasting the food that has been prepared to check if they are well cooked or not [CTB1].*

The statements above reveal that the monitoring of the quality of food given to learners on the NSNP was taken very seriously at both schools. Different ways are used to check on the quality of food. Expiry dates of the supplied food are checked on delivery so that those which have expired are returned and the fresh ones delivered. Respect for the provided menu is also assessed (Appendix 1 p220). Some class teachers check the quality of food through tasting which is however against the regulations of the department. It is however, the plan of government to supply learners with quality nutritious meals to stay healthy and alert to educational discourses (DoBE, 2010:1). Denying responsible authorities to taste the prepared meals may work to obstruct the achievement of objectives of the NSNP to ensure that well-cooked nutritious meals are provided to learners for enhanced educational engagement.

#### 5.4.4 Benefits of the National Schools Nutrition Programme

This section solicited the responses of participants at the two schools on the benefits that learners receive from the implementation of the NSNP. The discussion focuses on the benefits of NSNP to school attendance, minimising school dropouts, teaching and learning and learner performance.

##### 5.4.4.1 Benefits of the NSNP on school attendance

The study revealed that school attendance by learners increased as a result of meals which were given to them at school. Participants were asked to express their views on the attendance of learners before and after the implementation of the NSNP. They were unanimous that the introduction of the NSNP led to an increase in school enrolment. Learners regularly attend school with the assurance of getting a meal that assists them to participate in learning activities. Participants said:

*Before the programme learners didn't come to school in large numbers afraid of hunger because the school dismisses late, but now because there is food they come to school regularly knowing that they will eat and go home happy [LNPA7].*

*Before this programme, the rate of absenteeism was very high, but with the introduction of this programme, you can see only one or two learners are absent [PB].*

*Attendance increased since the introduction of the NSNP in 1994 [NSNPO A].*

The quotes above reveal that school attendance increased due to the introduction of the NSNP. The review of the learners' attendance register revealed indeed that learners were attending school regularly. These are marked every day to show the learners that are present and those absent (Appendix 8 p232). The marking must be done by the class

teacher in class, verifying by head count if learners are there or not. The daily feeding register was also used to confirm learner attendance, although in this case, the teachers counted only the number of learners who were fed during a particular meal (Appendix 7 p231).

According to my observations, all these registers were marked, however what they reflected left much to be desired in terms of the truth. It emerged that on a particular day, there were some learners who were not marked as absent in the school attendance register but surprisingly all learners were indicated as present in the daily school feeding register. Still on a similar visit to a school I witnessed some learners who were not taking part in the NSNP food but were enjoying food that they had brought from home, but to my surprise the number of learners indicated to have been fed on the day was equal to the size of the school enrolment. This implied that teachers involved in the NSNP and class teachers were not marking their registers faithfully. They were just marking in order to fill the spaces without whether learners were present or not. As such, it is difficult to determine if attendance was improving or not based on the records. However, it was evident that learner enrolment for the past year was lower than for the year my study was carried out. Maslow's theory of learning assumes that providing learners with basic needs such as food motivates them to attend school and learn for better outcomes (World Food Programme, 2013:vi).

#### **5.4.4.2 Benefits of the NSNP in minimising school dropouts**

The study showed that the introduction of the NSNP helped in minimising learner dropout. Interviews with different participants revealed a decrease in school dropout as a result of the programme. More learners were indicated to be retained at school because they believed that school attendance would guarantee them free reliable meals unlike when they stay away from school. Two participants said:

*This programme is limiting the number of dropouts as learners know that there is no more worries about what to eat during breaks [CTB4].*

*...like I have indicated no more dropouts, even if they are there they are very few [PB].*

Statements from participants and analysis of records confirm that school dropout is very minimal because learners are getting meals at school. The theoretical framework corroborates this view which presents food as working as a motivation for learners to attend school and to benefit academically (Jerome, 2013:42). This indicated that one of the objectives of the programme was met as the NSNP was meant to curb learners from dropping out of school because of hunger and poverty (Pollit, 1995:1135).

#### **5.4.4.3 Benefits of the NSNP to Teaching and Learning**

The main reason for learners to be at school is for teaching and learning to take place. This is facilitated by the provision of food through the NSNP which is intended to alleviate hunger especially for learners coming from poor backgrounds. To determine if learners were learning better due to the introduction of the NSNP, participants were asked how NSNP has benefitted the learning in the school. The responses indicated that learners are no longer eager to dismiss early for home as they will have eaten at school. This has also reduced theft of food from other learners as all of them are assured of a meal. Learner participation in class activities is boosted and learning time has even been extended into the afternoon. Participants said:

*I feel that it is helping a lot because we eat at half past nine and before we eat I don't have problems of hunger. Then after eating, I feel alright until we even do our afternoon studies. I feel I still have energy until then. I can learn until school is out and even do my studies [LPB8].*

*Yes, I see it helping a lot because those learners are now able to concentrate when we are learning and they can also be part of what is happening in class in terms of teaching and learning [LNPB9].*

*I also see these learners as changed people as they are now very fond of learning. They are also very active because they have eaten and they can even participate in class activities. You can easily see that these learners are really learning [CTA4].*

The study revealed that in both schools where the study was conducted, learners, teachers and the principals are in agreement that teaching and learning is taking place. Learners are always at school from morning until afternoons, they attend classes, play truancy less, a sign that learning is taking place. A meal per day acts as a magnet to get learners into class (World Food Programme, 2013:vi). The programme is helping a lot in making sure that learners do not worry about what they are going to eat at school.

#### **5.4.4.4 Main academic benefits of the NSNP**

A well implemented NSNP has the merit to improve the academic performance of learners. In this section, participants were asked to respond about the academic performance of learners in view of their participation in the programme. The performance of learners was generally shown as having improved with the implementation of the NSNP. The increased participation of learners in class and the extended teaching periods have raised the learning outcomes in schools. However, some participants indicated that the feeding done in schools has retarded their learning progress as they spend time sleeping at school owing to too much eating. Participants said:

*Before the issue of food was introduced, I used to study very hard and pass, but since we are eating here at school I think I am no longer doing fine because I eat a lot then sleep and not read [LPA1].*

*Learners are performing very well, better than before, because they can even go an extra mile and remain behind after lessons busy studying as they will still be satisfied [CTB5].*

*...pass rates have increased [NSNPOA].*

The above excerpts suggest that the NSNP is benefitting learners academically even though some individuals slumber or sleep after eating the nutritious meals. Overall, learners are able to concentrate in their studies as a result of the food that they eat at school. The pass rates have been raised to show that learners are benefitting from the programme. Studies concur that the provisions of food to learners boost their active participation in school activities and performance in tests (Adelman, Gilligan & Lehrer, 2008:9).

A comparison of the performance of learners who are part of the NSNP and those who are not was done from the results of document analysis in order to check their performance (Appendix 10 p234). The class teachers from the two schools selected learners who were part of NSNP and those who were not part. The schedules used were for December 2015, 2016 first, second and third quarters. The schedules indicated how learners worked in terms of their academic achievements. Five learners who are part of NSNP and five who are not part of NSNP from each school were checked on their academic achievements. There were those who were in Grade 10 in 2015 and those who were in Grade 11 in 2016. They were checked on how they performed in December 2015 to see if they had been promoted or not in the first, second and third quarter of 2016. Table 5.3 shows learners who were part of the NSNP from School A.

**Table 5.4: Learners who were Part of the NSNP at School A**

<b>Learners</b>	<b>2015 Final Examination Results in Average</b>	<b>2016 Term 1 Test Results Average</b>	<b>2016 Term 2 June Examination Average</b>	<b>2016 term 3 Test Results Average</b>
Learner No.1	51.3	55.4	42.1	40.2
Learner No.2	52.9	53.3	51.4	53.1
Learner No.3	43.7	39.3	39.6	40.1
Learner No.4	61.3	58.1	57.0	54
Learner No.5	42.1	36.6	36.1	37.2

Table 5.4 above indicates that learners who are part of the NSNP passed at the end of the year 2015, so they were promoted to the next grade. During the first quarter of the New Year 2016, the learners did well except for learner number three and five who could not pass their first test of the next grade. Then during the June examination, the same learners who failed the test in March failed again but those who passed also did well except that their performance was lower than in their previous performance. Four learners performed better in the third term test and only learner number five failed. Of the four who passed, three of the learners' marks were lower than their previous marks except for learner number three who failed in term one and term two. Table 5.5 shows learners who were part of the NSNP from School B.

**Table 5.5: Learners who were Part of the NSNP at School B**

<b>Learners</b>	<b>2015 Final Examination Results in Average</b>	<b>2016 Term 1 Test Results Average</b>	<b>2016 Term 2 June Examination Average</b>	<b>2016 Term 3 Test Results Average</b>
Learner No.1	61	64.4	64.4	64.1
Learner No.2	48	53.3	39.1	42.7
Learner No.3	54	52.4	51.9	52.6
Learner No.4	Fail grade 12 in 2015	59.6	52.4	57
Learner No.5	60	60.1	52.1	51.3

Records from School B indicated that all those who were part of the NSNP performed very well as they passed Grade 11. They also performed better throughout the three quarters of 2016 as indicated by the schedule, except for learner number four who failed Grade 12 in 2015, but worked harder to improve performance in 2016. This shows the positive effect of feeding learners as it leads to their progression to the next grade (Adelman, Gilligan & Lehrer, 2008:9).

In conclusion, learners who are part of the NSNP in both selected schools appear to perform better. This may be attributed to the meals that they receive at school. Having

free meals at school allows learners to concentrate on their academic work. Maslow's hierarchy of needs shows that first to be satisfied are biological and physiological needs. Once the need for food is satisfied, the learner moves up the hierarchy of needs (Ozguner & Ozguner, 2014:209). Since the NSNP caters for the learners' physiological needs, this allows them to focus on their academic work. The average result of all those learners as indicated in their school records suggests that the NSNP has helped learners to improve their academic performance. The objectives of the NSNP are to improve school attendance and the learning capacity of children which would in turn lead to an improvement in the quality of education (Van Stuijvenberg, 2005:2).

**Table 5.6: Learners who were not Part of the NSNP from School A**

<b>Learners</b>	<b>2015 Final Examination Results Average</b>	<b>2016 Term 1 Test Results Average</b>	<b>2016 Term 2 June Examination Average</b>	<b>2016 Term 3 Test Results Average</b>
Learner No.1	46.4	42.1	38.3	37.4
Learner No.2	52.1	51.9	50.3	50.1
Learner No.3	44.1	45.1	39.4	37.3
Learner No.4	39.6 QP	40.4	32.7	41.2
Learner No.5	44.6	44.4	36.6	40.3

Table 5.6 shows that four of the learners passed their December final examination on their own while learner number four passed through qualified progression. All learners passed first quarter tests, but in June examination, only learner number 2 managed to pass while the other four failed. In the term three test learner number 1 and 3 failed but learner number 2, 4 and 5 passed and their performance was better than in June. Table 5.6 shows learners who were not part of the NSNP from School B.

**Table 5.7: Learners who were not Part of the NSNP from School B**

<b>Learners</b>	<b>2015 Final Examination Results Average</b>	<b>2016 Term 1 Test Results Average</b>	<b>2016 Term 2 June Examination Average</b>	<b>2016 Term 3 Test Results Average</b>
Learner No.1	49	64.9	55.3	52.1
Learner No.2	Failed Grade 12 in 2015	61.3	51.3	53.9
Learner No.3	Passed grade 10 with 63%	62.0	65.1	54.6
Learner No.4	43	29.6	42.7	45.0
Learner No.5	Failed grade 12	49.7	43.7	48.4

The second group of learners is those that are not part of NSNP. Out of the five selected, two failed Grade 12, one failed term one, but the rest are shown to have a better performance in their academic work. The interviewed learners indicated that their performance was never as low as indicated since they always worked hard. This could be because these learners come from better and well to do families. They worried less about what they were to eat, their parents gave them enough pocket money or they carried lunch boxes to school with good food.

However, for the sake of those learners from poor families, the NSNP is important and must be continued. Learners who are part of the NSNP did very well in their academic work throughout the observed records. The availability of food at school allowed learners from insecure households to concentrate on their school work without worrying about hunger (DoE, 2010:1).

#### **5.4.5 Challenges Encountered in the Administration of the National School Nutrition Programme**

This section requested participants' responses about challenges encountered during the implementation of the NSNP at the two selected schools. The focus was on the

challenges of hygiene to learners and food handlers, NSNP infrastructure for food storage and preparation, feeding time, resources for food preparation and challenges for learners on the NSNP during weekends and school holidays.

#### **5.4.5.1 Hygiene of learners and food handlers**

Participants were requested to give their responses on the hygiene of learners and food handlers in relation to the NSNP. Learners' health should be a priority and they should be taught to be responsible for their own health. Food handlers should also take the health of learners seriously by being health conscious in their practices. It emerged that some learners were not partaking in the meals as they felt that food handlers were either not cooking well or not always clean enough to cook for them.

*It is because some of the food handlers are not clean enough, and when we look at it we feel that we can't be part of the programme [LPB8].*

*Even the food handlers are not cooking in a better way that can make learners to be happy with what they are eating [LPB3].*

During observations, I discovered that what the learners were saying about the lack of hygiene of food handlers is not true. Food handlers appeared clean and presentable. They had proper uniforms with hats on their heads to avoid the hair falling into the food. Both schools however, did not have enough water taps to cater for their learners. In School A, there were only six taps that cater for primary and secondary learners as it is a combined school. In School B, there were only four water taps to cater for more than six hundred learners. During break time, learners from both schools rushed to their eating places which in both schools were the tree next to improvised kitchens. Most learners from both participating schools did not bother to wash their hands before eating. They rushed straight to be first in the queue for food. This is contravenes stipulations from literature which say that children have the right to obtain the highest state of health through receiving rich food and clean water (WHO, 2004:17).

Some learners from both participating schools did not use plates at all. Instead, they used papers from their books as improvised plates. When they came from the toilet, they did not wash their hands. When they did, there were no soaps to use. Learners were eating in an open space which was dusty where bacteria and germs could easily contaminate the food. This situation against admonishing from literature which states that schools should use their advantage to develop hygiene beliefs and behaviours among learners in the implementation of the NSNP at school (Steyn *et al.*, 2009:8). Figure 5.1 shows learners eating in a dusty environment.



**Figure 5.1: Learners Eating in a Dusty Environment**

#### **5.4.5.2 Infrastructure for food storage and preparation for the NSNP**

There were no proper kitchens or dining halls to be used to feed learners in the two schools that were visited. Makeshift sheds were used as in firewood powered kitchens. There were no properly built storage facilities for learners' food. Old class rooms with no

proper shelves were being used to store food. Learners, at times, eat food in dirty surroundings.

*Learners eat outside and they always leave the place very dirty, and it is boring [LNPA5].*

*The main challenge is that the conditions of the storerooms and the kitchens were very poor. There were no proper storerooms and the kitchens at the schools. Learners were still eating their meals outside the classrooms, some under the trees, in the open space and we are not expecting that. We are expecting learners to eat their meals in the dining hall or on their classes [NSNPOB].*

The quotes above reveal that there is still a lot to be done in order to meet the expected standards of the implementation of the NSNP, which requires the existence of a proper kitchen, dining room and a storage facility for food. The absence of adequate infrastructure shows that the government has not provided suitable infrastructure such as dining halls, kitchen, and proper storerooms so that the hygiene of learners is not compromised. It is the shortage of equipment and resources that presents challenges in the administration of the NSNP (DoBE, 2013:17). Figure 5.2 and 5.3 show the kitchen and store room used for the NSNP.



**Figure 5.2: The Kitchen used for the NSNP**



**Figure 5.3: The Store Room used for Keeping Food for the NSNP**

### 5.4.5.3 Challenges class teachers face during the NSNP feeding time

The feeding period during break time is crucial in the implementation of the NSNP as a majority of learners are part of the programme. Class teachers are expected to play an active part in monitoring the feeding process. They have to ensure learners go for meals on time, queue and collect food in an orderly manner and to complete forms after the feeding process. However, observations showed that class teachers do not have adequate time to monitor the activities because they also have their own meals during break time. They also endure some levels of harassment from learners who may at times experience shortages of food.

*It would be better if our educators are part of the processes of feeding the learners so that all learners could get equal share of food [LNPB8].*

*Time allocated for break is too little, because by this thirty minutes the educator has to help learners while eating and then when they finish the educator does not have enough time to eat [CTB4].*

*The first challenge is the personnel, the staff, I think to us teachers, it is burdening because on the other hand we are supposed to be teaching our learners, at the same time we have to submit forms to circuit. We need to make sure that learners have eaten, we are also supposed to have our lunch too and within thirty minutes is impossible [DPA].*

The above quotations show that there are problems during feeding time. Teachers are not helping and that may lead to learners fighting. Teachers consider this programme as another way government is punishing them by adding more work as they already feel over-loaded with their academic duties. They end up not giving adequate support and supervision to learners during break time. The time for feeding is also a serious challenge because thirty minutes is too little compared to the number of learners to be fed. The limited time for feeding tends to affect the periods that come after the feeding process as some learners will still be eating when break time ends. It is however, difficult to curb

social and emotional harm in the feeding process due to limitations of teachers in psycho-social support skills and the shortage of external professionals such as social workers to visit schools for assistance (DoBE, 2011:158).

#### **5.4.5.4 Resources for food preparation in the NSNP**

It is essential that adequate resources be provided for the successful implementation of the NSNP. During individual and focus group interviews, participants were asked to state the main challenges in the form of resources for food preparation in the NSNP. There are no proper kitchens or dining halls for the preparation and serving of food to learners. This problem becomes worse during the rainy season when fire wood has to be kept dry. The Department of Education also provides inadequate funding for fire wood that is used for cooking meals. This forces schools to use money which is for norms and standards or to ask for funding from parents, a practice that is not permitted by authorities. Participants stated:

*Sometimes when it is raining and maybe the food handlers forgot to put fire wood inside the shed and firewood gets wet, learners will have their break in an unusual time because food is prepared late. Our time will also be disturbed because learners will not eat during the normal time [CTA6].*

*...another challenge is the issue of funds, sometimes the government, delays depositing funds in our account. We then overlap and take the funds of the school, which is of norms and standards and if norms and standards funds are exhausted, now there is another problem again, remember we are no fee school, we are not allowed to charge parents money, so at the same time we need to balance, learners have to eat so it is a challenge on its own [DPA].*

These statements may suggest that the government started the programme prematurely as there are no adequate resources for the task of food preparation. There are no proper kitchens, dining halls and store rooms which were supposed to have been built before the

programme started. Schools should be using electricity and gas stoves but the two schools selected for my study are still using fire wood, when in fact both schools have electricity. The use of firewood has many challenges such as getting it and storing it during rainy weather condition. These challenges disturb the whole process of feeding and learning as schools are forced to change their routine because the cooking of food takes longer when it rains. The money that schools are given to buy fire wood is very little which leads to the management of the schools to use funds for norms and standards which is not designated for this purpose. The government sometimes delays disbursing the money for fire wood and it became a challenge too, as the school will not be able to purchase fire wood on time. The best approach however is for schools to partner with development agencies, government departments or the private sector to obtain sustainable investment in school infrastructure (WFP, 2004:7). The stored fire wood is shown in Figure 5.4.



**Figure 5.4: Fire Wood used for Preparing Meals for Learners**

#### 5.4.5.5 Feeding learners on the NSNP during school breaks

Class teachers, principals and NSNP officers try to provide learners from poor background with food during weekends and holidays. Participants from the two schools were asked about what they do about learners who might not have enough food during weekends and school holidays. It emerged that either guardians are called to schools to be given left overs to give to their children over the holidays or these left overs are handed over to learners themselves. Three participants said:

*...what is done by the school is to identify those children who are from poor families. We call upon their guardians and we give them the remains so that they can help the learners at home [CTB2].*

*We identified needy learners, and if we have more than enough food, because we are sometimes left with food in our storeroom. We make sure that we give them to eat during holidays [DPA].*

*...we give some left overs to the needy learners to eat at home, because you will find that during feeding time there are some learners who are not interested in eating the food and they are not forced to eat so we take that food and give it to learners who are needy so that they can eat at home [NSNPOB].*

These statements reveal that class teachers, principals and NSNP officers were doing everything within their power to help learners who might not have food to eat during weekends and holidays. They identify needy or learners from poor families and then give them the left overs so that they have food during holidays. This encourages learners to always go to school knowing that they are taken care of even during school holidays. This provides a direct way for policy-makers to possibly reduce disparities in diet between children from more and less privileged socio-economic backgrounds (Belot & James, 2009:4).

## 5.5 CHAPTER SUMMARY

This chapter presented the empirical data that was gathered through focus group interviews, individual interviews, observations and reflections that were made from the interviews and available documentary records on National School Nutrition Programme. The major purpose of the chapter was to explore and understand the challenges in implementing the NSNP for achieving educational objectives. School principals, class teachers, learners and the NSNP officers of the two schools were requested to respond to issues relating to challenges in the implementation of the NSNP. Data were presented and analysed in accordance with the five delineated but interrelated themes on the background knowledge of the National School Nutrition Programme, roles of stakeholders in organising for the NSNP, quality control system on the NSNP, benefits of the NSNP and challenges encountered in the provision of the NSNP.

The main findings of the study were that participants were knowledgeable about the genesis and objectives of the NSNP. The main objective of this programme is the quest by the government of South Africa to alleviate hunger of all learners, particularly those who belong to poor backgrounds. Nutritious meals are given to learners to enable them to participate and concentrate in schooling without worries of food. This also serves to place all learners at par in ways that conceal class distinctions which are a characteristic of society. Class teachers are trained about the NSNP during workshops regularly organised for them. Some principals reported that they were not catered for in these workshops. This directly impacts on the successful implementation of the programme.

The study also revealed that NSNP officers, principals, class teachers, food handlers, suppliers, learners who were part of the programme and those who were who were not, knew their roles very well. Class teachers were cited as the group that was not executing its roles as expected. Instead of closely monitoring learners in the queues, collection of meals and observance of times, they chose to sit back and concentrate on their personal business. However, teachers faced challenges in monitoring all the processes of the

programme as they were also to use the available meal times for learners to also eat and prepare for lessons.

Observations indicated that learners were not meticulously following the hygienic standards during meal times. The majority of learners were not washing their hands before and after they ate. They were using papers instead of plates. Although, the cooked food seemed to be of good quality records for monitoring indicated food measurements were not enough for the pool of learners. Fortunately, other aspects of the programme were done well.

Records revealed that food handlers have their own records that they keep such as contract forms, food handler's attendance register and acknowledgement of payment. Educators have theirs in form of learners' attendance registers, daily feeding register and schedule. The main challenge was that the attendance registers were not properly marked from the two schools. At times, learners were marked present even when they were absent. The daily feeding register was marked showing that all learners were part of the meal when in fact some were not in the programme. This makes it difficult to have a proper account of the programme in terms of its spread and its influence in schools as regard the objectives of the NSNP.

The study showed that there were lots of benefits that were brought by the NSNP. Some of the benefits included minimising learner drop out and enhancing teaching and learning as learners tend to focus on their education when they do not have to worry about how they would get food. The NSNP was positively associated with the improved performance and achievements of learners. The challenges of the NSNP include the period for feeding or break time which is too short and inadequate infrastructure such as kitchens and dining halls. The challenge of late delivery and expired food by the suppliers also emerged as militating against the effective implementation of the NSNP.

The next chapter identifies and discusses the findings that emerged from the data presented in Chapter Five. The discussion focuses on establishing and explaining

relationships between data from the two case study sites. The data is further linked with their views of other related studies as well as the theoretical framework that underpinned this study.

## CHAPTER SIX

### DISCUSSION OF RESULTS

#### 6.1 INTRODUCTION

The previous chapter analysed and interpreted data based on the research questions, theoretical framework and literature review. This chapter discusses the study findings and synthesises issues that emerged during the research process. Literature review, responses of participants, the theoretical framework and personal experiences were infused in an endeavour to develop a fuller understanding of the challenges in the implementation of the NSNP in schools in Vhembe district.

The data emerged from interviews that were conducted with NSNP officers, principals, class teachers, learners as well from observations and document analyses. The analysis process was also guided by the theoretical frame work, research questions, research objectives and literature review. The findings of the study unfolded under the following themes: the background knowledge on the NSNP, roles of different stakeholders in organising the NSNP, quality control system, benefits of the NSNP and challenges encountered in the provision of the NSNP.

#### 6.2 RESEARCH QUESTION 1: How do school stakeholders perceive the implementation of National School Nutrition Programme?

This section presents and discusses the findings of the study under the following themes: the background knowledge on the NSNP, roles of different stakeholders in organising the NSNP, quality control system, benefits of the NSNP, challenges encountered in the provision of the NSNP and recommendations for improving the NSNP.

### **6.2.1 Theme 1: Background Knowledge of the National School Nutrition Programme**

The study sought to describe the knowledge that different stakeholders have in as far as the NSNP is concerned. It emerged that the NSNP was established as an attempt by the government to provide food to learners. There was a realisation of the urgent need to address the injustices of apartheid which prevented the black child from realising high academic achievement. Plans were then made to assist learners from disadvantaged communities with food support so that they would then benefit fully in the free education system which started after the 1994 democratic dispensation. The NSNP targeted those parents who did not afford to pay for their children's school fees and provide them with food while at school (Belot & James, 2009:4).

The major thrust was to bring about social justice and equality of opportunity to the learners so that no one would blame failure to succeed on poverty (Belot & James, 2009:4). While the programme clearly intended to achieve equality of opportunity in education, it however negated equity considerations as all the learners in the selected schools were free to partake in the provided food, whether they came from well to do families or very disadvantaged environments. In fact, literature reveals that the government used the national quintile rankings to select institutions to benefit from the no fee schools and fell in the range of the poorest to the poor (Langsford, 2012:13). The main motivation for the feeding model was the need to build social relations among learners so that they would work and mutually assist each other in the learning process (Martin & Joomis, 2007:73).

Participants showed an awareness of the objectives of the NSNP as outlined in the policy of the programme. The issues of poverty, hunger and retention at school came out strongly during the investigation. The nutritious meals were to be given to learners as a motivation to boost their attendance and attention at school and to allow teachers to extend contact time with learners (DoE Strategic Plan 2007-2011:12). The programme was meant to alleviate hunger from the school going children from families with poor

backgrounds (Bundy *et al.*, 2009:23). It served to assist poor families that cannot afford food for their children as a strategy to curb school drop outs. It cannot, however, be said with certainty that school attendance and retention are the outcome of school feeding. It is also difficult to determine the extent to which the programme contributes to regular school attendance and to a decrease in school drop outs.

It is difficult to expect goal achievement when programme activities are assigned to people without expertise in the area. The study revealed that not all principals were trained about the running of the NSNP. However, teachers were trained as they are directly involved in the implementation of the programme. For the sake of the improvement of the programme, all principals should be trained as they are the overseers of the activities at schools. Studies indicate that the objectives of school feeding will not be achieved without adequate training of people involved in the running of the programme (Global Child Nutrition Forum, 2007:5).

It emerged that the objectives of the NSNP are noble. These include efforts to alleviate hunger among school going children and to ease the financial burden of schooling from parents that are trapped in the poverty bracket (DoE, 2013:5). The NSNP also intends curbing absenteeism among learners and increase attendance and pass rates (Gelli, Meir & Espejo, 2007:150 and Adelman, Gilligan & Lehrer, 2008:9). The regular presence of learners in class increases their exposure to teaching and learning content with subsequent prospects of enhanced outcomes. Relieving parents of the costs of providing food for their children gives them the latitude to use the little money that they get on other educational needs which support learning.

### **6.2.2 Theme 2: Roles of Stakeholders in Organising the NSNP**

This discussion focuses on the roles of principals, class teachers, learners and NSNP officers in organising the roll out of the programme. Principals work as accounting officers to ensure books that are used for the programme are balanced and that the activities are carried out as guided by policy. Their functions include accounting for the use of the grant

funds of the government and the application of school-based regulations. They ensure that meals are as per daily plans, that all learners are served and receive food deliveries during school holidays. However, in my visit observations, I never saw the principal of either school moving around checking what was happening during eating time. They were seated in their offices. This suggests that principals do not always play their stipulated roles. There was no indication that principals had delegated this duty to one of their members of staff. There was no teacher monitoring or going around during break helping learners. This seems to confirm literature which states that the programme is beset with management difficulties such as with the monitoring process (Tomlinson, 2007:14).

Class teachers are expected to dish food to learners in a fair manner without to prevent learners from fighting over the food. Class teachers are also expected to maintain order as learners queue for food, complete forms which are required by the district. Teachers also ensure that learners wash their hands before they eat and check if the correct menu was cooked. Children also should enjoy the highest standard of health through provision of nutritious meals and water (Kallaway, 1996:4). Lack of uniformity in school menus and the timing thereof constitute some of the weaknesses of the NSNP (WHO, 2004:17). Observations also confirmed that most teachers are not involved in the programme, serve for those attached to the programme. This behaviour of teachers is disturbing as it reflects a structural dysfunction in the NSNP which seeks to empower learners to take charge of their learning.

Learners are expected to assist in maintaining the order that is desired in the feeding process. It is also helpful that some selected learners are given the responsibility to maintain order, serve others and ensure that the concerns of other learners are brought to the attention of the administration. There is need to empower learners with life skills in the process, to develop value in them and to encourage them to cooperate and show respect to others. Literature states that learners should be introduced to social, cultural and political spaces of communities in ways that teach them tolerance and to condemn violence, bullying and prejudice (Rehle *et al.*, 2010:6). Learners should be trained for

future leadership roles during the NSNP to enable other unexpected benefits to accrue in the process of achieving the objectives of the programme.

Food handlers cook and clean the area where they prepare food for learners. This is in accordance with studies which state that food handlers prepare meals and that they should also ensure that the places for preparing food are kept clean (DoBE, 2013:2). Learners indicated that, at times, the place where the food was prepared was dirty, with food handlers not being clean enough to cook for learners. Observations, however, led to a conclusion that food handlers were very much committed to their work of preparing the correct quality of food for learners every morning. They also ensured that food was ready for consumption on time. They served food into bowls, cleaned the food storage rooms and the kitchen. Clearly, food handlers work hard to ensure learners are fed and the nature of their work makes them dirty before the end of the day or when learners interact with them at break time.

The NSNP officers monitor the programme. They work as the liaison personnel between schools and suppliers, train food handlers and instruct teachers on issues pertaining to the NSNP. NSNP officers are important to ensure that menus for different times are supplied to schools. They also assist in the awarding of tenders, administration of funds and linking with other departments such as agriculture. The documents analysis confirmed that NSNP officers visit schools for monitoring and focus on the files for records, what was happening at the kitchens, what type of food was cooked, the quantity and the nutrients. The issue of health and safety is checked, including the presence of a garden and its condition. The basic intent to make use of school gardens is to encourage domestic consumption of agricultural and other locally produced food stuff (Pollitt, Gersovitz & Gargiulo, 1978:477). However, insufficient linkage to local agriculture still prevails (DoBE, 2013:17).

The study demonstrated that it is the duty of food suppliers to source the required good quality food in correct quantities for food handlers to prepare. Participants attested to the good work of suppliers in bringing healthy food most of the time and that they observe

good hygiene when delivering food. However, comments of the principal of School B about the suppliers' delivery of good and healthy food showed that there are times when stale food was brought to schools. Studies support the response of principal B in conforming that lack of basic supplies still muddles the implementation of the NSNP (DoBE, 2013:17). The supply of unhealthy food to schools goes against the objectives of the programme which include the provision of nutritious meals to enhance learner school participation.

### **6.2.3 Theme 3: Quality Control System on NSNP**

The findings of the study showed that monitoring was being done normally on a quarterly basis. The purpose of the visit to schools is to support the NSNP to ensure that the activities are carried out as intended. This is to make sure that learners are fed with nutritious meals, that feeding is done on time, that correct menus are prepared and the cleanliness of the hygienic conditions are observed. Observations confirmed that old classes were used as storage facilities in both selected schools. It also confirmed that these classes had locks. The food handlers make sure that the storerooms are polished and kept clean. It was however, not easy for food handlers to keep the places used as kitchens clean because these were just shacks built of corrugated iron. This scenario is backed by literature which reveals that the programme is experiencing setbacks in resourcing equipment and spaces appropriate for the preparation of food at schools (DoBE, 2013:17). It is however apparent that efforts are being made to ensure the premises for storing food are secure to deter thieves.

The monitoring by the NSNP officers for hygiene purposes were being done at the two schools. However, learners complained that some of the food that they are given are not properly prepared, especially milk and fish. The fish is at times prepared with intestines which lead to health problems for those learners that are allergic to fish. The milk at times causes diarrhea. Some of the food leads to the development of rash in some learners and this affects their learning as they need to go to clinics for medical attention. Food handlers are not always clean in ways that raises hygiene concerns. The shortage of an

appropriate staff to implement the programme, in addition to the existence of a fragmented monitoring system may contribute to this undesired situation (Behr, 2008:4). However, observations in both schools indicated that food handlers were looking clean in their uniforms. Their pots were clean. They, however, could not remain clean the whole day due to the poor standard of their kitchens. Food handlers from School B resorted to use cow dung in attempt to limit the dust in the kitchen while those from School A sprinkled water to settle the dust. Clearly, food handlers need to be complimented for their ability to improvise in the face of shortages.

Different ways were used to ensure the high quality of food. The expiry dates of the supplied food are checked on delivery so that expired stuff is returned. Compliance with the expected menu for the day is also assessed (Appendix 1 p220). Some class teachers check the quality of food through tasting it. This, however, is against the regulations of the department. Nonetheless, it is the plan of government to supply learners with quality nutritious meals to stay healthy and alert to educational discourses (DoE, 2010:1). Denying responsible authorities to taste the prepared meals may work to obstruct the achievement of the objectives of the NSNP to ensure well-cooked nutritious meals are provided to improve learning in schools. However, the tasting of meals by individuals to assess its quality may also be too subjective to be relied upon as some teachers might not even be good cooks themselves.

### **6.3 RESEARCH QUESTION 2: How has the National School Nutrition Programme influenced school access, attendance and participation at different South African schools in Vhembe district?**

Participants were unanimous that the introduction of the NSNP led to an increase in school enrolment. Learners regularly attend school with the assurance of getting a meal. My review of the learners' attendance registers revealed that learners were attending school regularly. The daily feeding register was also used to confirm learner attendance. Inconsistencies were however recorded in the marking of registers. In some instances, learners marked as absent in the school attendance register are indicated as present in

the daily school feeding register. This implied that teachers involved in the NSNP and class teachers are not marking their registers accurately. As such, it may be difficult to notice if attendance is improving or not based on the records. It was however, evident that learner enrolment for the past year was lower than the one for the year of study. Maslow's theory of learning assumes that providing learners with basic needs such as food motivates them to attend school and learn for better outcomes (WFP, 2013:vi).

Participants also revealed a decrease in school dropout as a result of the programme. More learners were indicated to be retained at school because they realised that school attendance would guarantee them free reliable meals. The theoretical framework employed in this study corroborates this view which presents food as working as a motivator for learners to go to school and to subsequently benefit academically (Plotnik & Kouyoumjian, 2011:5). The provision of food at school attracts learners to attend regularly, and once they are fed at school, their confidence to engage in learning activities is raised.

To confirm my assumptions that learners were learning better because of the food provided, most participants confirmed that the introduction of the NSNP was improving teaching and learning in the school. Learners are not pressured to dismiss early for home as they will have eaten. Findings confirmed that participation in class activities is boosted and learning time has even been extended into the afternoon. A meal per day acts as a magnet to get learners into class (WFP, 2013:vi). The constant presence of learners in class has the merit to improve their academic performance. However, some participants said the school feeding has retarded their learning progress as they spend time sleeping at school owing to over eating. However, most studies suggest that the provision of food to learners boosts their active participation in school activities and performance in tests. These further ties well with the positive effect of feeding of learners on learner progression (Adelman, Gilligan & Lehrer, 2008:9). Maslow's hierarchy of needs show that if hunger is satisfied, the learner may want to try the second need (Self-Esteem needs) (Ozguner & Ozguner, 2014:209).

#### **6.4 RESEARCH QUESTION 3: What are the challenges and prospects for improving the implementation of the National School Nutrition Programme?**

The hygiene of learners and food handlers emerged as a challenge in the feeding of learners at school. Learners' health should be the priority and they should be taught to be responsible for their own health. Food handlers should also be sure that they are taking the health of learners seriously by being health conscious in their practices. It was indicated that some learners were not partaking in the meals as they felt that food handlers were either not cooking well or were not adequately clean. However, I noted that my own observations, found that food handlers were clean and adhered to hygiene guidelines for cooks. They had proper uniforms. However, there were inadequate water taps at both schools to cater for all learners. As a result, most learners did not bother to wash their hands before eating. Some had their meals served on papers instead of plates. This is against written guidelines that children have the right to obtain the highest state of health through receiving rich food and clean water (WHO, 2004:17). Schools also should use their advantage to develop hygiene standards and behaviours in learners in the implementation of the NSNP at school (Steyn *et al.*, 2009:8).

The study showed that there is still a lot to be done in order to meet the expected standards of the implementation of the NSNP. The infrastructure for food storage and preparation for the NSNP requires attention as demonstrated by the absence of proper kitchens, dining rooms and food storage facilities. It is the shortage of equipment and resources that presents challenges in the provision of the NSNP (DoBE, 2013:17).

The feeding during break time is the most crucial period of the day in the implementation of the NSNP since most learners are part of the programme. However, this period presents class teachers with a notable challenge as they are expected to play an active part in monitoring the feeding process. Essentially, class teachers do not have adequate time to monitor the activities and at the same time have their own meals during the 30-minute break. As a result of time constraints, some teachers see this programme as a burden since they are already overloaded with teaching and other administrative duties.

The limited time for feeding tends to affect the periods that come after the feeding process as some learners will still be eating when the break time ends. This moment offers emotional, psychological and physical concerns to teachers which have the power to interfere with effective teaching. It is however, difficult to curb social and emotional harm in the feeding process due to limitations of teachers in psycho-social support skills and the shortage of external professionals such as social workers to visit schools and provide them with assistance (DoBE, 2011:158).

It is essential that adequate resources be provided for the successful implementation of the NSNP. The study showed that there are no proper kitchens or dining halls which are built for the preparation and serving of food to learners. The Department of Education also provides inadequate funding for fire wood used for cooking meals. This forces schools to use money designated for norms and standards or to ask for funding from parents, a practice that is not permitted by authorities. The best approach, however, is for schools to partner with development agencies, government departments or the private sector to obtain sustainable investment in school infrastructure (WFP, 2004:7). Under normal circumstances, schools should be using electricity and gas stoves but the two schools of my study still use fire wood, a situation which militates against efficient delivery of the NSNP and the realisation of its educational objectives.

Class teachers, principals and NSNP officers were doing everything within their power to help learners who might not have food to eat during weekends and holidays. They identify needy learners and then give them left overs so that they may also enjoy the meals while on holiday. This encourages learners to always go to school knowing that they are taken care of even during school holidays. These take home meals provide a direct way for policy-makers to possibly reduce disparities in diet between children from more and less privileged socio-economic backgrounds, which in turn could contribute to reduce differences in educational outcomes (Belot & James, 2009:4). The ability to feed learners from poor homes even during school holidays ensures continuity in the implementation of the NSNP and encourages a sustained effort by learners to engage in school work.

## 6.5 CHAPTER SUMMARY

The chapter discussed the results that emerged from the study. Participants showed that there are aware of the reasons for the establishment of the NSNP. The objective was to ensure equality of opportunity for all learners in the education system. The provision of food intended to reduce hunger, encourage learners to attend school, participate in lessons and achieve enhanced performance. Principals of schools were shown to act as accounting officers, to see to it that funds for the NSNP are well accounted for. They also acted to ensure policies for the implementation of the NSNP are applied and safeguarded. Food handlers worked to prepare meals and received training from the NSNP officers who also assist in the awarding of tenders. It was revealed that food suppliers sometimes deliver food which is stale to further cause health problems on the part of learners. The feeding programme was also shown to experience impediments related to poor infrastructure and hygiene. The programme was, however presented as helpful in raising learner, confidence and self-esteem. Time availed to feed learners was indicated to be inadequate which tend to affect the teaching process for subjects that come soon after the exercise. Teachers expressed their desire to be excused from monitoring the feeding activities as this deprived them time to adequately focus on their main business of teaching.

## CHAPTER SEVEN

### SUMMARY, CONCLUSION AND RECOMMENDATIONS FROM THE STUDY

#### 7.1 INTRODUCTION

The previous chapter discussed the findings of the study through strategies of interpretation and description, use of personal experiences and literature review. The research questions provided the framework that guided the discussion process in a way that highlights the significance of the results. This chapter presents the summary, conclusions, recommendations and suggestions for further study.

#### 7.2 SUMMARY

The summary of this investigation was guided by research questions, literature review and empirical findings.

##### 7.2.1 How the Study Responded to the Research Questions

The study was informed by the following main research question: What challenges effect the implementation of the NSNP in achieving educational objectives in Vhembe district schools? The following subsidiary questions were raised:

**Research question 1:** How do the key school-based education stakeholders perceive the challenges of the implementation of National School Nutrition Programme?

The study established that the NSNP emerged as a government strategy to provide food to learners, especially those that came from insecure economic backgrounds. It sought to assist parents who could not afford to get their children to school, let alone provide food for them while at school (Belot & James, 2009:4). Workshops were viewed as an essential component of the programme for those involved in the running, implementation

and organisation of the programme so that they are familiarised with its expectations. There is need for all teachers and principals to be trained to achieve the objectives of the NSNP (Global Child Nutrition Forum, 2007:5). Participants were happy about the achievement of the objectives of the NSNP which included increased school attendance, participation and extension of teaching and learning time. This also entailed curbing absenteeism among school going learners and an increase in pass rates (Gelli, Meir & Espejo, 2007:150).

**Research question 2:** How has the National School Nutrition Programme influenced school access, attendance and participation at different South African schools in Vhembe district?

The study participants were unanimous that the introduction of the NSNP led to an increase in school enrolment, attendance and participation. The school attendance register and the daily school feeding register were used to confirm learner attendance, although at times, information from the two documents was not the same. This signified that teachers involved in the NSNP and class teachers were not marking their registers properly. It was however, evident that learner enrolment increased and dropout rates decreased owing to the school feeding programme. Providing learners with basic needs such as food, motivates them to attend school and learn for better outcomes (WFP, 2013: vi). The introduction of the NSNP also benefits the teaching and learning programme as learners are no longer eager to dismiss early for home as they would have had a meal. Learner participation in class activities is boosted and learning time is even extended into the afternoon. The study also revealed that the NSNP has the possibility of improving the academic performance of learners (Jerome, 2013:42). Some participants however, indicated that the feeding done in schools has retarded their learning progress as they spend time sleeping at school owing to over eating

**Research question 3:** What are the challenges and prospects for improving in the implementation of the National School Nutrition Programme?

It emerged that the health of learners and hygiene of food handlers should be a priority and that those in charge of it need to be always conscious to uphold it. Interviews with learners revealed that some of them were not taking part in the feeding programme because they felt that food handlers were either not cooking well or not always adequately clean. However, observations found out that food handlers did their best to adhere to regulations that guide their practice. A majority of learners did not bother to wash their hands before eating and others used papers instead of plates for food handling. However, guidelines state that children have the right to obtain the highest state of health through receiving rich food and clean water (WHO, 2004:17). Schools also should use their advantage to develop hygiene standards and behaviours among learners in the implementation of the NSNP (Steyn *et al.*, 2009:8).

Participants said there was inadequate infrastructure such as kitchens, dining rooms and food storage facilities. This prevented the meeting of the expected standards of the implementation of the NSNP. The shortage of equipment and resources presents challenges in the provision of the NSNP (DoBE, 2013:17). Class teachers do not have adequate time to monitor activities and at the same time have their own meals during the 30-minute break time. It may be the best thing for the government to appoint staff to particularly monitor school feeding programmes to allow teachers to focus on their main functions of teaching. The Department of Education also provides inadequate funding for fire wood used for cooking meals, forcing schools to use money which is for norms and standards or to ask for funding from parents, a situation not permitted by authorities. The use of fire wood to cook instead of electricity or gas presents a challenge for the programme as the method is less effective in preparing meals for large numbers of learners. The programme has to be delivered to needy learners even during weekends and school holidays which cause the responsibility of officials to overflow school boundaries into the community.

## 7.2.2 Summary of the Literature Review

The review of literature demonstrated that the NSNP was established in 1994 as a strategy to facilitate the learning of children from poor backgrounds. The objective was to ensure social justice and equality in the supply of education to school going children. It was hoped that it would encourage children to attend school and to participate productively in its activities. Feeding learners has the potential to improve confidence and self-esteem of individuals which help to promote learner well-being, better learning and reading skills (DoBE, 2011:158 and DoE Strategic Plan 2007-2011:12).

Human beings require motivation to engage and to accomplish tasks. Maslow's theory of motivation assumes that there are defined needs that people must satisfy to obtain a sustained progress towards the achievement of targeted ends. These needs are arranged in an ascending order or hierarchy. The lower order needs are at the bottom of the structure and have to be attended to first before progressing to the next level. Food constitutes the lower order needs and is critical to motivate one to work. In this regard, learners should be provided with food so that they stop worrying about finding ways to source it but to concentrate on schooling for better performance (WFP, 2013:vi).

Schools which qualify for school feeding programme are those falling within the lower quintile in the ranking of schools and these are composed of learners who are mainly from poor backgrounds. The provision of food enhances the social, emotional and academic situations of learners. The food should be nutritious to build a healthy mind and body of learners. The suppliers are expected to timeously deliver fresh food in compliance with component specifications to allow food handlers to prepare meals for learners. A management structure composed of principals, class teachers, NSNP officials and food handlers should be in place in schools to ensure the programme runs as smoothly as possible (Langsford, 2012:13).

There are resources that are needed to drive the programme. Schools should make sure store rooms, chickens and eating places are available to service the programme. The

delivered consignment of food stuff has to be kept in a safe and hygienic place before meals are prepared. The kitchen is necessary to allow cooking to take place in clean and protected conditions. Running tapes are also a necessity to enable learners to wash their hands prior and after partaking in meals to prevent the spread of diseases. The government provide money to buy fire wood and this is usually a source of discontent as it is inadequate to cover all the expenses that go with running the programme (DoBE, 2013:17).

### **7.2.3 Summary of the Empirical Findings**

This section presents a summary of empirical findings as guided by the research questions of the study.

The findings of the study revealed that principals, class teachers, learners and NSNP officers are aware of the background behind the establishment of the NSNP in schools. This is intended to provide food to learners especially those that come from insecure economic backgrounds. Workshops were viewed as an essential component of the programme to ensure stakeholders are familiar with expectations. There is need for all teachers and principals to be trained to achieve the objectives of the NSNP. It emerged that some principals were not trained in the programme, a situation that works to derail the programme from achieving its objectives. Participants were unanimous that the programme was set up to increased school performance. The programme also aimed at raising pass rates and curbing absenteeism among school going learners. (Adelman, Gilligan & Lehrer, 2008:9).

The introduction of the NSNP led to an increase in school enrolment, attendance and participation. The outcomes of attendance from the daily feeding register and the daily school feeding register often do not tally, suggesting that teachers involved in the NSNP and class teachers are not marking their registers properly. It was found that learner enrolment increased and dropout rates decreased owing to the school feeding programme (WFP, 2013:vi). The introduction of the NSNP also benefited teaching and

learning through improved learner participation and prolonged teaching time. The study also revealed that the NSNP has offers the possibility of improving the academic performance of learners although some learners indicated experiencing a retarded learning progress as a result of being fed at school (Adelman, Gilligan & Lehrer, 2008:9).

Interviews with learners revealed that some of them were not taking part in the meals as they felt that food handlers were either not cooking well or not adequately clean to handle food for them. However, my observations discovered that food handlers did their best to adhere to regulations that guide their practice. Most learners did not bother to wash their hands before eating and others used papers instead of plates as food eating receptacles. Participants reported inadequate infrastructure in the form of kitchens, dining rooms and food storage facilities to meet the expected standards of the implementation of the NSNP.s the existence of class teachers do not have adequate time to monitor activities and at the same time have their own meals during the 30minutes break time. The Department of Education also provides inadequate funding for fire wood used for cooking meals, forcing schools to use money which is for norms and standards or to ask for funds from parents, a situation not permitted by authorities. The use of fire wood to cook by schools instead of electricity or gas presents a challenge for the programme (DoBE, 2013:17).

### **7.3 CONCLUSIONS**

The study explored challenges in implementing the National Schools Nutrition Programme for enhancing educational objectives. Basing on the findings of the study, the following conclusions are made:

The NSNP can be delivered effectively if the challenges that militate against its implementation are addressed. Stakeholders need to be fully informed about the reasons for the establishment of the programme to ensure that activities are done guided by the desired outcomes. It is critical that learners, in particular, understand the purpose of

school feeding so that they do not perceive it as just a project to satisfy their physical needs.

The NSNP is critical in assisting learners to attend school and to participate fruitfully in the teaching and learning activities. The roll out of the programme need to be continued. However, improvements in structural and infrastructural systems ought to be made to make it more beneficial to learners. The monitoring process need to be enhanced so that all stakeholders act according to the expectations of the programme. Suppliers have to supply food of high quality in the correct quantities. Class teachers should effectively supervise the feeding process while food handlers ensure hygiene is enforced in the storage and preparation of food. The NSNP officers should make it a point that regular workshops are organised to empower staff involved in the programme.

The government is playing an important role in providing funds to ensure that the programme continues. However, it is essential that funds for the running of the programme be adequate and released on time for the needed services. The issue of learner performance need not be attached solely to the feeding of learners but should be viewed in the broader picture of the general inputs to teaching and learning, which also include teacher quality, teaching methods and the curriculum.

#### **7.4 RECOMMENDATIONS**

Guided by the research findings, the study recommends the following:

- The Ministry of Education should ensure the supply of food for the programme is done early before the opening of schools.
- The Department of Education should employ people to administer the storage and preparation of food in order to allow teachers to concentrate on their core business of teaching.
- The Department of Education need to ensure money for firewood is increased to ensure it lasts up to the end of the term.

- The Department of Education should increase the time for feeding from 30 minutes to about an hour.
- Schools should include learners in the supervision of the feeding process to give them a sense that they own the programme and to teach them future leadership roles.
- The government must continue with the programme as it is popular in the community.
- The government must consider even some schools in the upper quintile to ensure that more learners benefit from the programme.
- The Department of Education should make sure that the food that is supplied to schools is sensitive to the cultural backgrounds of learners to avoid violating their respected beliefs.
- Schools should buy plates to be used by learners during feeding and keep them in a common place to avoid learners using papers and plastics as food receptacles.
- Schools should increase the number of running taps for use by learners and provide soaps for washing hands.
- The government should build infrastructure in the form of kitchens, dining halls and store rooms.
- Schools should liaise with the Department of Agriculture to teach learners farming skills to boost production in school gardens.

## **7.5 LIMITATIONS OF THE STUDY**

The study experienced limitations which are discussed as follows:

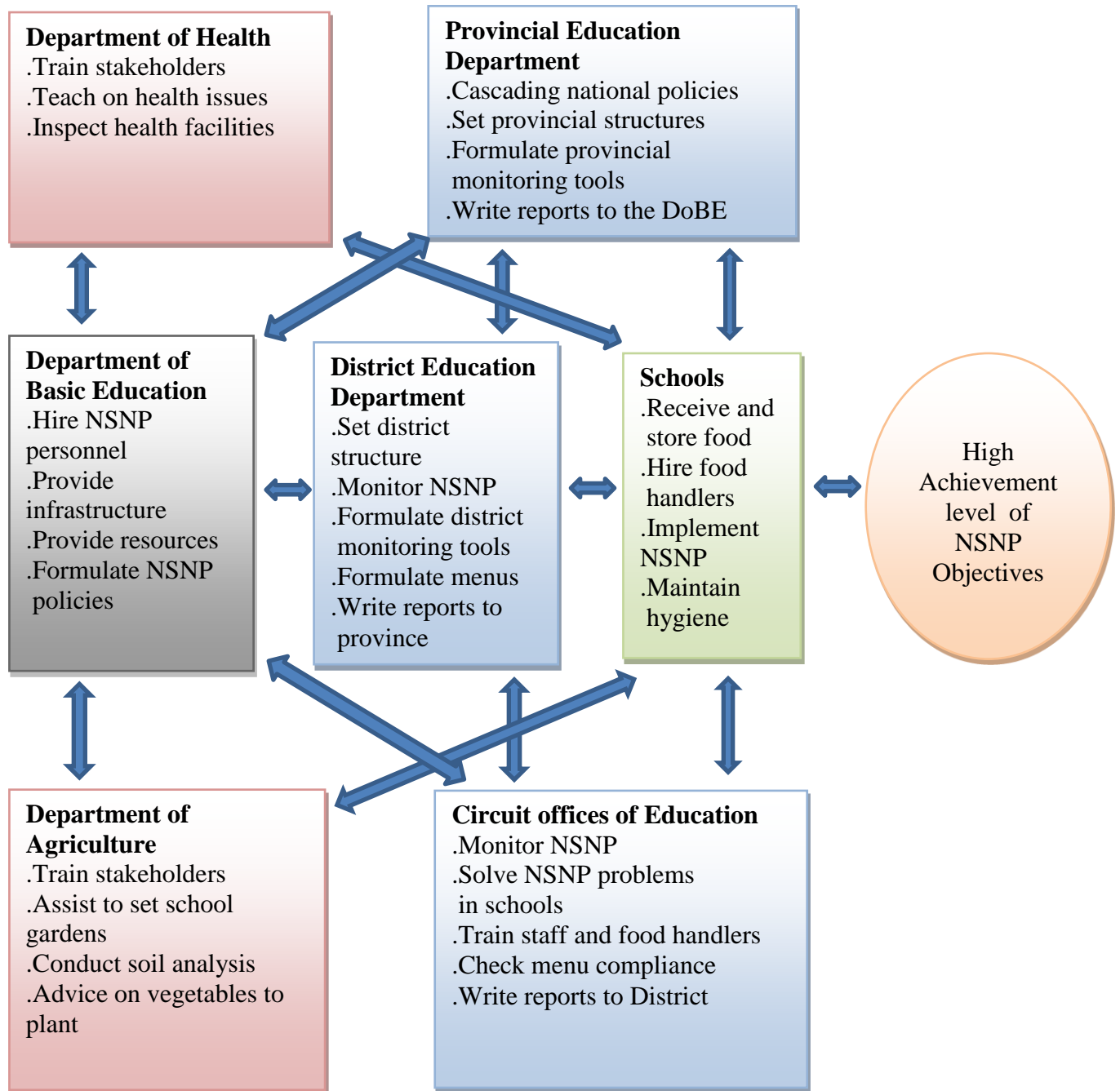
The research used a case study design of the qualitative approach to obtain an in-depth investigation of the two selected schools. This makes it difficult to generalise the results of the study to other similar contexts. Food handlers also needed to be interviewed as information rich participants owing to their roles as people who are directly in charge of food storage and preparation.

## **7.6 SUGGESTIONS FOR FURTHER STUDY**

This study provides opportunities for other investigations to be conducted based on the implementation of the NSNP. Studies utilising quantitative and mixed research studies can be carried out to yield significant outcomes in the same field. A similar study could be conducted focusing on a wider research boundary or including food handlers and parents as participants.

## **7.7 PROPOSED MODEL FOR THE IMPLEMENTATION OF THE NSNP**

This section presents a model on how the implementation of the NSNP can be enhanced in order to achieve its educational objectives.



**Figure 7.1: Proposed Increasing Achievement for NSNP Model**

This section discusses the model which is proposed for improved implementation of the NSNP as follows:

### **7.7.1 The Department of Basic Education**

The Department of Education as the initiator of the NSNP should ensure there are adequate facilities for the effective administering of the programme. There is need for proper infrastructure for the smooth performance of relevant activities. Suitable kitchens, dining halls and store rooms should be build. Store rooms should be of a standard that ensures the supplied food is protected from gems and bacteria. Dining halls with running water are needed. Dining halls should have adequate space to accommodate chairs and tables to allow learners to sit down during meal times. Proper kitchens should equipped with efficient stoves and electric pots. Gas stoves need also to be supplied as an alternative in case of power cuts or load shedding. More human resource should be employed for the running of the NSNP. The department need to also put in place proper policies for the implementation of the feeding programme.

### **7.7.2 The Provincial Department of Education**

This department should liaise meaningfully with the Department of Basic Education to ensure proper infrastructure is put in place for the running of the NSNP. Accurate information regarding the situation in schools as provided by the district should be communicated to the National Department of Education and responses taken back to the district for downward communication to the circuit. The provincial department need to lead in building community partnerships to facilitate the spread of national policies in regard to the NSNP. Provincial structures and tools to help in rolling out the programme also need to be put in place.

### **7.7.3 The District Department of Education**

This district department should link well with the province and the circuit in the roll out of the programme. The officers at this level should monitor services at the circuit level and sometimes visit schools to familiarise themselves with issues on the ground. They need to play an active role in the training of school partners and preparing district monitoring tools to ensure compliance with policies and the maintenance of quality standards. This department should also be active in menu formulation to ensure learners are served with the right selection of food. Detailed reports on the running of the programme have to be regular to divergence from the norm is detected and remedied.

### **7.7.4 The Circuit Office**

This should ensure the NSNP officers visit schools on a regular basis to monitor the implementation of the programme. Circuit officers, under normal circumstances need to check the conditions of the relevant infrastructure, hygiene issues, menu and if the food is being prepared as planned. They should check if food handlers have uniforms and if food is served at stipulated times as guided by policy. They should make sure there are enough toilets and running taps per school to facilitate hygienic conditions for learners. Circuit officers need to closely link with schools and preside over school-based training of SMTs. These should also constantly check on the quality of food and adherence to regulated feeding times.

### **7.7.5 The School**

Schools are basically the place of NSNP implementation. They involve actors such as principals, class teachers, food handlers and learners. The community is also critical in the implementation of the NSNP even though it is not directly involved in this programme on a daily basis.

The principal as the overseer who is allowed to taste the food should always encourage food handlers to prepare meals that are well cooked and advise them properly in cases of anomalies. The principal has to remind class teachers that it is their duty to help learners during feeding times and monitor the execution of this exercise. Principals need to discern signs of problems and report them immediately to circuit managers or the NSNP officer. Class teachers need to monitor diligently the feeding process to ensure learners are fed and adhere to time schedules. They should make sure daily feeding registers are marked faithfully and accurately. The teacher responsible for the programme at school should work closely with food handlers to make sure they exercise their roles as expected and assist them in making accurate measurements.

The food handlers must make sure they prepare meals according to the menu of the day. They need to assume duty early to allow learners to eat on time to avoid the feeding process disrupting teaching and learning time. Food handlers should be clean, wash the utensils, and tidy the place in which they cook and attend workshops organised for them. Learners need to engage in hygienic practices such as washing their hands before and after meals and have their food served on clean plates. The use of papers to handle food should be avoided at all cost. They also need to organise themselves and be orderly during meal times for the process to run smoothly.

Food suppliers must provide healthy food whose shelf life has not expired. They have to comply with generated orders and deliver the supplies on time to avoid disrupting the whole feeding process. Food suppliers should vary the fruits that they supply and these should be fresh. The community should play an important part in the NSNP. They need to assist the school to conscientise their children about the importance of the programme so that they do not view it as solely a project for the stomach.

### **7.7.6 Department of Health**

The department of health should ensure that it trains stakeholders on health issues like hygiene and living a healthy life. It is the duty of this department to see to it that there is proper inspection on all the facilities that are found at schools, they need to see to it that the toilets are available and clean, that there is proper running water for learners to wash their hands before and after eating their meals. Department officials must check if the utensils that the food handlers and learners are using are clean. The environment itself should be inspected if it is hygienically conducive for the health of the learners in order to avoid unnecessary illnesses. The infrastructure should be inspected to ensure it is clean and learners' food are stored properly and prepared in a clean place.

### **7.7.7 Department of Agriculture**

This department should help in ensuring that the stakeholders are trained and developed on how to plant fresh vegetables in the school garden which could be a skill that they can even take home with. These will help the learners to eat fresh products from their own gardens planted by themselves. The department should help in analysing the soil so that stakeholders can plant crops that are well suitable to the type of the soil within their gardens. The department should even go to an extent of helping in training the stakeholders on agricultural issues like how to practice safe cultivation methods and taking care of the soil.

### **7.7.8 Achievement of Objectives**

The programme, if well implemented, should increase learner attendance, participation and performance. Learners should be motivated to enroll at school and stay until they complete their studies. The dropout rates should be drastically reduced. The confidence and self-esteem of learners should be enhanced to engage effectively in school work. Academic improvement and achievement in school work should be the ultimate objective of the NSNP.

## **7.8 CONTRIBUTION OF THE STUDY TO NEW KNOWLEDGE**

This study managed to extend the existing knowledge on the implementation of the NSNP without making a complete change to the status quo. The Department of Agriculture through the Department of Education should assist schools to produce vegetables to be used in the feeding of learners. This can be enhanced by conducting effective assessments of the soil components to ensure vegetables that suit the types of soils are grown. The Department of health needs to train stakeholders on health and hygiene issues and regularly inspect facilities to make sure that the storage, preparation and serving of food meet the standards set for the NSNP. The two Departments have to work in tandem with the Provincial Education Department, District Education Department, Circuit officers and to achieve the objectives of the NSNP. The study concludes that stakeholders such as teachers, circuit officers and principals are not very much aware of their roles in the implementation of the NSNP. This presents the biggest challenge. A policy has to be put in place, with an emphasis on the roles of stakeholders to improve the delivery of the programme.

## **7.9 CHAPTER SUMMARY**

The study set out to investigate the challenges in the implementation of the NSNP in order to achieve the educational goals in Vhembe District schools. The study established that not all principals were work shopped on the implementation of the NSNP. This has a negative effect on roll out of the programme as principals are main drivers of the activities in schools. Ideally, the principals should receive regular training on the activities of the NSNP. This would allow them to guide other staff members appropriately. They need to monitor class teachers and encourage them to perform their duties diligently. Principals must test the food learners are served and give the necessary advice honestly to food handlers for needed adjustments.

Class teachers were found to slacken on their duty to monitor learners as they feed during break time. While the principals have the responsibility to encourage teachers to assist in

the feeding process, break time can be extended to about an hour to afford teachers and learners enough time to feed and then be ready for lessons with less hassles. The Department of Education needs to consider employing other people to administer the NSNP to enable teachers to focus on their core business of teaching.

Inadequate resources emerged as a contributory factor in ensuring effective implementation of school feeding. Schools do not have proper kitchens, dining halls and store rooms. Kitchens are makeshift structures that are not suitable for cooking meals for the large numbers of learners. Learners eat their food sometimes in dusty environments. The Department of Education should spearhead the construction of proper infrastructure, in the form of kitchens, dining halls and store rooms for use in schools.

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## APPENDIX 1



### DEPARTMENT OF EDUCATION NSNP MONITORING TOOL

*Interview at the office – request to see NSNP educator and file*

<b>SECTION A Interview and School Details</b>	A1	District		
	A2	Circuit		
	A3	Name of official monitoring		
	A4	Date of visit		
	A5	Name of school		
	A6	EMIS number		
	A7.1	Respondent 1	Name	
			Position	
	A7.2	Respondent 2	Name	
			Position	
A8	School enrolment			
A9	Percentage of learners eating on average on a daily basis			
A10	By what time is feeding completed?			
	By 10am	10 - 11am	After 11am or no feeding	
	20	10	0	

*Inspect the NSNP file for all evidence*

			Yes	No	
<b>SECTION B Record Keeping</b>	B1	Is the NSNP feeding file complete according to the new standard index?	✓	0	
	B2	Is the NSNP SFP File and Generic Training Manual in Food Safety available?	1	0	
	B3	Are the signed Food Handler contracts available?	✓	0	
	<i>Check the following documents for the previous month</i>				
	B4	Has the Food Handler attendance register been completed on a daily basis?	✓	0	
	B5	Is the proof of Food Handler honoraria payments available?	✓	0	
	B6	Is the proof of wood/gas payments available?	✓	0	
	B7	Has the daily feeding registers been completed correctly?	✓	0	
	B8	Is there proof that the school checked whether the quantities on the supplier delivery notes matches the expected quantities?	2	0	
	<i>The interview now moves to the kitchen / food preparation area</i>				
B9	Is there a copy of the school specific menu on the wall in the kitchen / preparation area?	1	0		

**RECORD KEEPING SCORE**      7/10

Visit the food handlers in the kitchen and observe for evidence

<b>SECTION C School Feeding</b>	C1	What is the school cooking today? (raw/dry)		
		<b>MENU ITEMS</b>	<b>PRODUCTS</b>	<b>QUANTITY DESCRIPTION</b> (eg. 2 x 5 kg bags, 20 x 425g tins, etc)
				<b>QUANTITY PREPARED</b> (kg, #)
	C1.1	Starch	SAMP	20 / 425g x 02
				32 kg
	C1.2	Protein	BEAN	20 / 425g x 02
				33 kg
	C1.3	Fruit / Vegetables	CABBAGE	14 cabbages + 1/2
				35
		<i>Circle the relevant option below:</i>		
C2.1	Is the school feeding the right menu option for the day of the week?	Yes / No		
C2.2	If no, state reasons why			
C3.1	Does the school experience wastage of cooked food?	Yes / No		
C3.2	If yes, state reasons why			

APPENDIX 2



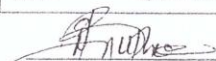
2016/2017 - SECONDARY SCHOOL MENU

DAYS	MEAL:10h00	MEAL PLAN	MENU (FOOD ITEM)	DRY PORTION SIZE
Monday	Soya mince stew with pap and veg	Protein	Soya Mince	50g
		Starch	Fortified maize meal	60g
		Veg / fruit	Cabbage/Spinach	80g
Tuesday	Bean stew with samp and veg	Protein	Dry beans	50g
		Starch	Samp	60g
		Veg / fruit	Pumpkin / Butternut / Squash	80g
Wednesday	Pilchard stew with rice and veg	Protein	Pilchard	50g
		Starch	Rice	60g
		Veg / fruit	Cabbage/Spinach	80g
Thursday	Bean stew with samp and veg	Protein	Dry beans	50g
		Starch	Samp	60g
		Veg / fruit	Pumpkin / Butternut / Squash	80g
Friday	Pap and milk Fruit in season	Protein	Milk	250ml ( Sachets )
		Starch	Maize meal	60g
		Fruit	Fruit	1 medium

**RULES:**

- Milk: Ultra High Temperature (UHT), pasteurized fresh milk or maas should be served Milk should be approved in line with Dairy Standards set by Milk South Africa.
- Soya should be procured from manufactures that have an approved certificate.

SEASONING TO PREPARE MONDAY TO THURSDAY STEWS:	
Iodated salt:	2g per learner per day
Sunflower oil:	5ml per learner per day
Carrot:	3g per learner per day
Onion:	10g per learner per day
Sugar:	5g per learner per day (for Monday & Thursdays only)

  
HEAD OF DEPARTMENT

29/01/2016  
DATE

40

APPENDIX 3



LIMPOPO  
PROVINCIAL GOVERNMENT  
REPUBLIC OF SOUTH AFRICA

DEPARTMENT OF  
EDUCATION

## Limpopo Food Handler Contract

### MEMORANDUM OF AGREEMENT

Entered into by and between

The \_\_\_\_\_ School, duly represented by  
(Name of School)

\_\_\_\_\_ In his /her capacity as Chairperson of the School Governing Body  
(Hereinafter referred to as "the School")

and

\_\_\_\_\_ (Name of food handler)

Identity No. \_\_\_\_\_

(An adult male/Female south African Citizen)

Residential address: \_\_\_\_\_

(Hereinafter referred to as "the Food Handler")

WHEREAS the school is desirous of obtaining Services of the food handler /cook to prepare meals for its learners in terms of the National school Nutrition Programme (Hereinafter referred as "the service")

**AND WHEREAS THE FOOD HANDLER / COOK UNDERTAKES TO PROVIDE THE REQUIRED SERVICES.**

NOW THE PARTIES AGREE AS FOLLOWS:

DEFINITIONS: in this document unless the context indicates otherwise, the following words will bear the corresponding meanings:

"Food handler" refers to cook who volunteered to render the required service;

"Principal" refers to the Head master or Head mistress of the school includes any one so acting.

"School" means .....Primary/Secondary/High school

"Volunteer "or related words, means a service rendered without expectation of payment.

1

“Stipend” means an honorarium/reimbursement payable to the volunteers

“Substitute” refers to someone equally or better qualified to replace the volunteer as agreed with the SGB.

“He” include “She “

“SGB” means school governing body

The singular include the plural and vice versa.

In reckoning days, the first day shall be excluded and last day included, unless the context indicates otherwise.

#### TERMS AND CONDITIONS

##### 1.

- 1.1. The school engages the food handler to prepare the meals for its learners in accordance with the Standardized menu as prescribed in the School Nutrition Programme, as per Annexure “A” hereto.
- 1.2. Administratively, the Food handler will report to the NSNP delegated Educator.
- 1.3. The Food Handler will receive a stipend of \_\_\_\_\_ per Month.
- 1.4. For the purpose of this agreement, the Food handler is not an employee of the school or the Department of education.
- 1.5. The Food Handler shall observe basic standards of hygiene in discharging her voluntary services at the school.
- 1.6. The Food Handler shall sign the necessary attendance register daily.
- 1.7. The Food Handler shall inform the school principal about her absence.
- 1.8. The Food Handler shall compile and maintain an inventory of all the utensils and related items in her care and custody, to the NSNP delegated educator without delay.
- 1.9. The Food handler shall report all shortfalls problems and related issues to the NSNP delegated Educator and copy the Principal of the school without delay.
- 1.10. The Food Handler shall ensure that food is prepared timeously daily and served as prescribed in the menu.

1.11. In the event that the Food Handler cannot render service as agreed, on any given day, then she should inform the Principal and if possible secure the attendance of a substitute at her expense, with the approval of SGB.

1.12. The substitute in 1.11 should as far as possible, possess similar body of knowledge or experience in the field of food handling as she does.

1.13. Notwithstanding the peremptory provisions of the Labour Laws and related prescripts, same shall not apply in this contract.

## 2.

### Duration

2.1. The Food Handler is engaged with effect from the ----- to the -----

2.2. This agreement shall expire on the ----- automatically without the need for a formal notification to that effect or renewal.

2.3. The Food Handler shall do the necessary hand over to the School Principal, at the end of her term.

## 3

### CONDITION

3.1. This Agreement binds only the parties to it.

3.2. It is specifically agreed that the Food Handler is not the employee of the school or the Limpopo Department of Education.

3.3. There will be no other benefits or accruals due to the Food Handler other than what is specifically stated in this Agreement .

3.4. This arrangement constitutes an agreement between the Food Handler and the school governing body only.

3.5. To the extent that the Food Handler has volunteered her services to the school, neither the school governing body, nor the school assumes any liability for injuries or damages to the Food Handler emanating from her voluntary activities at the school.

4.

#### KEY RESPONSIBILITIES OF THE TWO PARTIES

##### **SERVICE PROVIDER:**

- To clean the storage and kitchen rooms every morning and afternoon before and after food preparation.
- To prepare food for learners on each feeding day, the correct quantity and items as per prescribed menu.
- To assist educators in dishing food for learners during feeding time.
- To clean cooking utensils daily.
- In general, to practice food safety and hygiene as trained.
- To assist and guide especially the young children to practice cleanliness.

##### **THE SCHOOL GOVERNING BODY UNDERTAKES:**

- To train the Food Handler on her responsibilities whenever necessary.
- To pay the stated honorarium /stipend amount to the Food Handler monthly without fail.
- To keep record of all payments so effected.
- To keep record of the Food Handler's daily attendance at the school.
- To draw the attention of the Food Handler to any changes affecting her voluntary service at the school.
- To minimize as far as possible any risks of injury and damages to the Food Handler within the school premises.
- To support the Food Handler in the execution of her responsibilities at the school.

5.

#### COMPENSATION

The school Governing Body will not be liable to the Food Handler for unspecified expenses.

6

#### BREACH OF CONTRACT

- 6.1. Should the Food Handler refuse, fail or neglect to perform according to the standards set out in the standardized Menu or at all, the school may terminate this agreement by giving the service provider one week written notice of such termination.
- 6.2. In the event of any dispute between the parties concerning this agreement, same shall be referred for arbitration first to the delegated NSNP educator at the school, the Circuit Manager, District Manager, the responsible Provincial officer in the department, before any recourse to outside Arbitration or agency.
- 6.3. Should such termination occur as states above, then the Food Handler will be paid Pro rata share of her stipend for that month in full and final settlement of her claim.

4

7.

**TERMINATION**

Either party may, upon at least one month's written notice to the other party, terminate this agreement at any time before its expiry.

8.

**AMENDMENT**

No amendment, extension or relaxation of any of the terms of this agreement shall be of any force or effect unless it is in writing and duly signed by either parties or their authorized agents in writing.

9.

**WARRANTY**

The Food Handler declares and guarantees that all particulars, information and certificates supplied for purpose of this agreement are true and correct in all material respects. The Food Handler understands that any false information supplied may lead to summary termination of this agreement.

10

**DOMICILIUM**

The parties choose their domicilium citandi et executandi as follows:

THE SCHOOL

\_\_\_\_\_

ADDRESS

\_\_\_\_\_

\_\_\_\_\_

FOOD HANDLER

\_\_\_\_\_

ADDRESS

\_\_\_\_\_ CELL: \_\_\_\_\_

\_\_\_\_\_

Thus done and signed at \_\_\_\_\_ on this \_\_\_\_\_ day of \_\_\_\_\_ 2012

\_\_\_\_\_  
FOR SCHOOL (CHAIRPERSON OF THE SGB)

APPENDIX 04

DAILY FOODHANDLER ATTENDANCE REGISTER	
EMIS Number	
School Name	
Circuit	
District	VHEMBE
Total learners approved for NSNP	615
Number of Food Handlers engaged	04

MONTH: JUNE 2016

FEED DAYS	DATE	F/H 1:	F/H 2:	F/H 3:	F/H 4:	F/H 5:	F/H 6:	F/H 7:
1	01/06/16							
2	02/06/16							
3	03/06/16							
4	04/06/16							
5	05/06/16							
6	06/06/16							
7	07/06/16							
8	08/06/16							
9	09/06/16							
10	10/06/16							
11	11/06/16							
12	12/06/16							
13	13/06/16							
14	14/06/16							
15	15/06/16							
16	16/06/16							
17								
18								
19								
20								
21								
22								

APPENDIX 5

FOOD HANDLER ACKNOWLEDGEMENT OF PAYMENT FORM	
EMIS Number	_____
School Name	_____
Circuit	_____
District	Vhembe
Total learners approved for NSNP	615
Number of Food Handlers engaged	04

MONTH: June 2016

I, \_\_\_\_\_, ID NO \_\_\_\_\_, HEREBY ACKNOWLEDGE  
 RECEIPT OF PAYMENT FOR THE AMOUNT OF R \_\_\_\_\_ FOR THE MONTH OF 30/06/2016  
 SIGNATURE: \_\_\_\_\_ DATE: \_\_\_\_\_ CHEQUE NO: 50073

I, \_\_\_\_\_, ID NO \_\_\_\_\_, HEREBY ACKNOWLEDGE  
 RECEIPT OF PAYMENT FOR THE AMOUNT OF R \_\_\_\_\_ FOR THE MONTH OF 30/06/2016  
 SIGNATURE: \_\_\_\_\_ DATE: \_\_\_\_\_ CHEQUE NO: \_\_\_\_\_

I, \_\_\_\_\_, ID NO \_\_\_\_\_, HEREBY ACKNOWLEDGE  
 RECEIPT OF PAYMENT FOR THE AMOUNT OF R \_\_\_\_\_ FOR THE MONTH OF 30/06/2016  
 SIGNATURE: \_\_\_\_\_ DATE: \_\_\_\_\_ CHEQUE NO: 50073

I, \_\_\_\_\_, ID NO \_\_\_\_\_, HEREBY ACKNOWLEDGE  
 RECEIPT OF PAYMENT FOR THE AMOUNT OF R \_\_\_\_\_ FOR THE MONTH OF 30/06/2016  
 SIGNATURE: \_\_\_\_\_ DATE: \_\_\_\_\_ CHEQUE NO: \_\_\_\_\_

I, \_\_\_\_\_, ID NO \_\_\_\_\_, HEREBY ACKNOWLEDGE  
 RECEIPT OF PAYMENT FOR THE AMOUNT OF \_\_\_\_\_ FOR THE MONTH OF \_\_\_\_\_  
 SIGNATURE: \_\_\_\_\_ DATE: \_\_\_\_\_ CHEQUE NO: \_\_\_\_\_

I, \_\_\_\_\_, ID NO \_\_\_\_\_, HEREBY ACKNOWLEDGE  
 RECEIPT OF PAYMENT FOR THE AMOUNT OF \_\_\_\_\_ FOR THE MONTH OF \_\_\_\_\_  
 SIGNATURE: \_\_\_\_\_ DATE: \_\_\_\_\_ CHEQUE NO: \_\_\_\_\_

NSNP Schools Monthly Financial Pack – All Schools - Version 1.2

APPENDIX 6

FEEDING SCHEME TIME REGISTER:  
(SECONDARY SECTION)

MONDAY

DATE: 14-03-2016

Code	Surname	Initials	ON	Signature	OFF	Signature	Remarks
1				06:00 Balaoyi T.R	12:45	Balaoyi T.R	
2				06:00 Mukhathi M.S	12:45	Mukhathi M.S	
3				06:00 Mukhathi T.P	12:45	Mukhathi T.P	

TUESDAY

DATE: 15-03-2016

Code	Surname	Initials	ON	Signature	OFF	Signature	Remarks
1				06:00 Balaoyi T.R	12:45	Balaoyi T.R	
2				06:00 Mukhathi M.S	12:45	Mukhathi M.S	
3				06:00 Mukhathi T.P	12:45	Mukhathi T.P	

WEDNESDAY

DATE: 16-03-2016

Code	Surname	Initials	ON	Signature	OFF	Signature	Remarks
1				06:00 Balaoyi T.R	12:45	Balaoyi T.R	
2				06:00 Mukhathi M.S	12:45	Mukhathi M.S	
3				06:00 Mukhathi T.P	12:45	Mukhathi T.P	

THURSDAY

DATE: 17-03-2016

Code	Surname	Initials	ON	Signature	OFF	Signature	Remarks
1				06:00 Balaoyi T.R	12:45	Balaoyi T.R	
2				06:00 Mukhathi M.S	12:45	Mukhathi M.S	
3				06:00 Mukhathi T.P	12:45	Mukhathi T.P	

FRIDAY

DATE: 18-03-2016

Code	Surname	Initials	ON	Signature	OFF	Signature	Remarks
1							
2							
3							

APPENDIX 7

DAILY SCHOOL FEEDING REGISTER		
EMIS Number		
School Name		3EC
Circuit	1	
District	VHEMBE	
School Enrolment	615	
Total learners approved for NSNP	64	

MONTH: June 2016

FEED DAYS	DATE	MENU SERVED			NO. OF LEARNERS FED	Principal or NSNP Educator Signature
		Starch	Protein	Fruit or Veg		
1	01/06/16	RICE	Pilchard	Butternut	615	<i>[Signature]</i>
2	02/06/16	Maizemeal	Soyamine	Cabbage	615	<i>[Signature]</i>
3	03/06/16	Samp	Dry Beans	Butternut	615	<i>[Signature]</i>
4	06/06/16	Maize meal	milk	Fruit	615	<i>[Signature]</i>
5	07/06/16	Samp	Dry Beans	Cabbage	615	<i>[Signature]</i>
6	08/06/16	Rice	Pilchard	Butternut	615	<i>[Signature]</i>
7	09/06/16	Maize meal	Soyamine	Cabbage	615	<i>[Signature]</i>
8	10/06/16	Samp	Dry Beans	Butternut	615	<i>[Signature]</i>
9	13/06/16	Maize meal	milk	Fruit	615	<i>[Signature]</i>
10	14/06/16	Samp	Dry Beans	Cabbage	615	<i>[Signature]</i>
11	15/06/16	Rice	Pilchard	Butternut	615	<i>[Signature]</i>
12	20/06/16	Maize meal	MILK	Fruit	615	<i>[Signature]</i>
13	21/06/16	Samp	Dry Beans	Cabbage	615	<i>[Signature]</i>
14	22/06/16	Rice	Pilchard	Butternut	615	<i>[Signature]</i>
15	23/06/16	Maize meal	Soyamine	Cabbage	615	<i>[Signature]</i>
16	24/06/16	Samp	Dry Beans	Butternut	615	<i>[Signature]</i>
17						
18						
19						
20						
21						
22						
Total no. of learners fed for the month (A)					9840	

No. of days fed in the month (B)	16
----------------------------------	----

Average no. of learners fed for the month (C)	615
---	-----

A = Total no. of learners in shaded column (sum of 1 – 22)

B = No. of days on which feeding took place in the month

C = A divided by B



APPENDIX 9

DAILY SCHOOL FEEDING REGISTER	
EMIS Number	
School Name	
Circuit	
District	Vhembe
School Enrolment	615
Total learners approved for NSNP	04

MONTH: September 2016

FEED DAYS	DATE	MENU SERVED			NO. OF LEARNERS FED	Principal or NSNP Educator Signature
		Starch	Protein	Fruit or Veg		
1	01/09/16	Samp	Dry Beans	Carrots	615	[Signature]
2	02/09/16	Maizemeal	Mince	Cabbage	615	[Signature]
3	05/09/16	Maize meal	Milk	Fruit	615	[Signature]
4	06/09/16	Samp	Dry Beans	Butternut	615	[Signature]
5	07/09/16	Rice	Pitchardt	Cabbage	615	[Signature]
6	08/09/16	Samp	Dry Beans	Carrots	615	[Signature]
7	09/09/16	Maizemeal	Soya Mince	Cabbage	615	[Signature]
8	12/09/16	Maizemeal	Milk	Fruit	615	[Signature]
9	13/09/16	Samp	Dry Beans	Butternut	615	[Signature]
10	14/09/16	Rice	Pitchardt	Cabbage	615	[Signature]
11	15/09/16	Samp	Dry Beans	Carrots	615	[Signature]
12	16/09/16	Maize meal	Mince	Cabbage	615	[Signature]
13	19/09/16	Samp	Dry Beans	Butternut	615	[Signature]
14	20/09/16	Rice	Pitchardt	Cabbage	615	[Signature]
15	21/09/16	Samp	Dry Beans	Butternut	615	[Signature]
16	22/09/16	Maize Meal	Milk	fruit	615	[Signature]
17	23/09/16	Samp	Dry Beans	Butternut	615	[Signature]
18	26/09/16	Rice	Pitchardt	Cabbage	615	[Signature]
19	27/09/16	Samp	Dry Beans	Carrots	615	[Signature]
20	28/09/16	Maize Meal	Soya Mince	Cabbage	615	[Signature]
21	29/09/16	Samp	Soya Mince	Cabbage	615	[Signature]
22	30/09/16	Maizemeal	Soya mince	Cabbage	615	[Signature]
Total no. of learners fed for the month (A)					13530	

No. of days fed in the month (B)	22
----------------------------------	----

Average no. of learners fed for the month (C)	615
---	-----

- A = Total no. of learners in shaded column (sum of 1 - 22)  
 B = No. of days on which feeding took place in the month  
 C = A divided by B

DEPARTMENT OF EDUCATION  
 SECONDARY SCHOOL  
 13 OCT 2016  
 LIMPOPO PROVINCE



APPENDIX II

RESEARCH AND INNOVATION  
OFFICE OF THE DIRECTOR

NAME OF RESEARCHER/INVESTIGATOR:  
**Mr MP Tshisikhawe**

Student No:  
**9509814**

PROJECT TITLE: Challenges in implementing the national school nutrition programme for achieving educational objectives. A case study of School in Vhembe District, Limpopo, South Africa.

PROJECT NO: SEDU/16/CSEM/05/1108

SUPERVISORS/ CO-RESEARCHERS/ CO-INVESTIGATORS

NAME	INSTITUTION & DEPARTMENT	ROLE
Dr T Runhare	University of Venda	Promoter
Dr NF Litshani	University of Venda	Co-Promoter
Mr MP Tshisikhawe	University of Venda	Investigator - Student

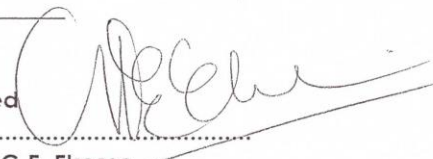
ISSUED BY:  
UNIVERSITY OF VENDA, RESEARCH ETHICS COMMITTEE

Date Considered: August 2016

Decision by Ethical Clearance Committee Granted

Signature of Chairperson of the Committee: .....

Name of the Chairperson of the Committee: Prof. G.E. Ekosse



UNIVERSITY OF VENDA
DIRECTOR RESEARCH AND INNOVATION
2016 -08- 15
Private Bag X5050 Thohoyandou 0950



University of Venda

PRIVATE BAG X5050, THOHOYANDOU, 0950, LIMPOPO PROVINCE, SOUTH AFRICA  
TELEPHONE (015) 962 8504/8313 FAX (015) 962 9060  
"A quality driven financially sustainable, rural-based Comprehensive University"

## APPENDIX 12

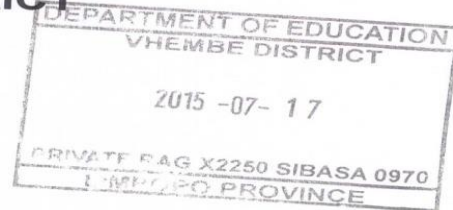


**LIMPOPO**  
PROVINCIAL GOVERNMENT  
REPUBLIC OF SOUTH AFRICA  
REPUBLIC OF SOUTH AFRICA

DEPARTMENT OF  
**EDUCATION**  
**VHEMBE DISTRICT**

REF: 14/7/R  
ENQ: RAVELE N.P  
CONTACT: 015 962 1029

MR TSHISIKHAWE M.P  
P.O.BOX 4542  
THOHOYANDOU  
0950



**REQUEST TO CONDUCT AN EDUCATIONAL RESEARCH IN SCHOOLS WITHIN  
VHEMBE DISTRICT.**

1. The above matter refers.
2. We hereby acknowledge receipt of your letter requesting for permission to conduct research for a Doctoral Degree in education (DED) and the attached memorandum from your supervisor.
3. We have noted that the topic of your theses is: the effectiveness of national school nutrition programme in achieving educational objectives: An evaluation of schools in Vhembe District.
4. Approval to your request is granted subject to the following conditions:
  - 4.1. There should be no interruption of teaching and learning in schools.
  - 4.2. Comply with research ethics inter alia, confidentiality and anonymity and voluntary participation.
  - 4.3. Inform school manager and Circuit Manager(s) of your research visit in advance for necessary arrangements to be made.
5. We wish you success in your research journey.

  
DISTRICT SENIOR MANAGER

17.07.2015  
DATE

Thohoyandou Government Building, Old Parliament, Block D, Private Bag X2250, SIBASA, 0970  
Tel: (015) 962 1313 or (015) 962 1331, Fax: (015) 962 6039 or (015) 962 2288

**The heartland of southern Africa - development is about people!**

## APPENDIX 13

### INFORMATION SHEET AND INFORMED CONSENT DECLARATION FOR PRINCIPALS

### RESEARCH PROJECT ON THE NATIONAL SCHOOL NUTRITION PROGRAMME

#### Introduction

I am Mbulaheni Paul Tshisikhawe a doctoral of Education student at the University of Venda. I would like to request you to be part of my research study, which is on the National School Nutrition Program. I hope to find more on challenges that are hindering the process of NSNP to fulfil its educational objectives.

#### Purpose of the research study

The main objectives of the research study include:

- Investigating the views and perceptions of the key school based education stakeholders on running the NSNP.
- Evaluate the influence of NSNP on learners.
- To investigate the challenges that are encountered in the processes and procedures of running the NSNP.

It is believed that the research study will result in improving the implementation of the NSNP.

#### Participant's rights

The decision to take part in this research study is completely voluntary, that is, everyone is free to refuse to take part in the research study if they feel they have doubts or think that their participation could leave them physically, emotionally or psychologically disturbed. If anyone agree to take part but change their mind later, they are free to withdraw from the research study without being asked to explain themselves.

#### Risks to the participants

Due to the fact that participants shall only be answering interview questions on the subject understudy, there are no foreseeable physical injuries that could result from their participation. However, if there are some questions that participant do not want to answer during the interview, he or she has the right not to answer it.

### **Privacy and confidentiality of participants**

The participants are advised that the research study is not about their private life but about their views and experience on the challenges in implementing NSNP. All the views gathered in the research study will be handled in a strictly private and confidential manner. No names from the participants will be needed. Gathered information will only be used for this research study and will not be disclosed to any unauthorised people.

### **Interview process**

If you accept to take part in the research study, I request your permission to audio record the interview. This will help me to listen to the interview again at a later stage, and if I need the assistance of the second person in a form of a transcriber, then that person can also listen to the recorded interview, however, transcribers are also not allowed to share the information he/she listened to, to anyone. The audio recordings and the transcripts will be kept in a safe place. The final report shall be available to the participants before public and be accessed through the University of Venda.

### **Approval from authorities**

Written permission's to conduct this research study was granted from the Education District Senior Manager, the Circuit Manager and Principals of schools selected. However, this does not mean that participants are forced to take part against their will. If you have any queries about the information sheet, please feel free to contact me or my supervisor.

Mbulaheni Paul Tshisikhawe

Cell number: 083 585 1482

Email address: paultshisi@gmail.com

DrTawandaRunhare (supervisor)

Telephone number: 015 962 9094

Email:tawanda.tunhare@univen.ac.za

Kind regards

M.P Tshisikhawe

## INFORMED CONSENT DECLARATION

In terms of the ethical requirements of the Research Ethics of the University of Venda, I now invite you to complete this form as an indication of your permission to voluntarily participate in this research project.

I, ..... hereby confirm that I have been fully informed about the purpose, procedures, and activities of the research project. The right of participants have also been fully explained to me. I was given full opportunity to ask questions and I understand that participants can withdraw from the project at any stage and time, without giving any reason.

I, therefore, hereby freely **give** my consent to voluntarily take part in the project as outlined.

I, therefore, hereby freely **do not give** my consent to voluntarily take part in the project as outlined.

**Signature:** .....

**Researcher's Name:** .....

**Signature:** .....

**Date:** .....

## **INFORMATION SHEET AND INFORMED CONSENT DECLARATION FOR TEACHERS**

### **RESEARCH PROJECT ON THE NATIONAL SCHOOL NUTRITION PROGRAMME**

#### **Introduction**

I am Mbulaheni Paul Tshisikhawe a doctoral of Education student at the University of Venda. I would like to request you to be part of my research study, which is on the National School Nutrition Program. I hope to find more on challenges that are hindering the process of NSNP to fulfil its educational objectives.

#### **Purpose of the research study**

The main objectives of the research study include:

- Investigating the views and perceptions of the key school based education stakeholders on running the NSNP.
- Evaluate the influence of NSNP on learners.
- To investigate the challenges that are encountered in the processes and procedures of running the NSNP.

It is believed that the research study will result in improving the implementation of the NSNP.

#### **Participant's rights**

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#### **Risks to the participants**

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### **Privacy and confidentiality of participants**

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### **Interview process**

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Mbulaheni Paul Tshisikhawe

Cell number: 083 585 1482

Email address: paultshisi@gmail.com

**Promoters:**DrTawandaRunhare

Telephone number: 015 962 9094

Kind regards

M.P Tshisikhawe

Dr NF Litshani

Telephone number: 015 962 9114

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I, therefore, hereby freely **do not give** my consent to voluntarily take part in the project as outlined.

**Signature:** .....

**Researcher's Name:** .....

**Signature:** .....

**Date:** .....

## **INFORMATION SHEET AND INFORMED CONSENT DECLARATION FOR LEARNERS**

### **RESEARCH PROJECT ON THE NATIONAL SCHOOL NUTRITION PROGRAMME**

#### **Introduction**

I am Mbulaheni Paul Tshisikhawe a doctoral of Education student at the University of Venda. I would like to request you to be part of my research study, which is on the National School Nutrition Program. I hope to find more on challenges that are hindering the process of NSNP to fulfil its educational objectives.

#### **Purpose of the research study**

The main objectives of the research study include:

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#### **Risks to the participants**

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### **Privacy and confidentiality of participants**

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### **Interview process**

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Email address: paultshisi@gmail.com

**Promoters:**DrTawandaRunhare

Telephone number: 015 962 9094

Kind regards

M.P Tshisikhawe

Dr NF Litshani

Telephone number: 015 962 9114

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I, therefore, hereby freely **do not give** my consent to voluntarily take part in the project as outlined.

**Signature:** .....

**Researcher's Name:** .....

**Signature:** .....

**Date:** .....

## **INFORMATION SHEET AND INFORMED CONSENT DECLARATION FOR NSNP OFFICERS**

### **RESEARCH PROJECT ON THE NATIONAL SCHOOL NUTRITION PROGRAMME**

#### **Introduction**

I am Mbulaheni Paul Tshisikhawe a doctoral of Education student at the University of Venda. I would like to request you to be part of my research study, which is on the National School Nutrition Program. I hope to find more on challenges that are hindering the process of NSNP to fulfil its educational objectives.

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### **Interview process**

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Cell number: 083 585 1482

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**Promoters:**DrTawandaRunhare

Telephone number: 015 962 9094

Kind regards

M.P Tshisikhawe

Dr NF Litshani

Telephone number: 015 962 9114

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I, therefore, hereby freely **give** my consent to voluntarily take part in the project as outlined.

I, therefore, hereby freely **do not give** my consent to voluntarily take part in the project as outlined.

**Signature:** .....

**Researcher's Name:** .....

**Signature:** .....

**Date:** .....

## APPENDIX 14

### INDIVIDUAL INTERVIEW SCHEDULE WITH SCHOOL PRINCIPALS

#### INTRODUCTION

I wish to thank you for accepting to take part in this research project. You are assured that everything you say during the interview will only be used for this project. You should never mention your names, names of colleagues or schools. You are also free to use any language that will help you to express your views without compromise.

#### PART ONE: BIOGRAPHICAL QUESTIONS

1. How long have you been a principal?
2. Were you workshopped on running the NSNP?

#### PART TWO: VIEWS AND PERCEPTIONS OF SCHOOL STAKEHOLDERS ON RUNNING THE NSNP.

1. How did the NSNP start in the school?
2. What were the main objectives of the NSNP when it started in the school?
3. In what way do you think the NSNP is achieving these objectives in the school?
4. Please explain how the following people help in organising the feeding of learners on the NSNP:
  - 4.1 Circuit official
  - 4.2 Teachers
  - 4.3 Learners
  - 4.4 Food handlers

#### PART THREE: EVALUATING THE INFLUENCE OF NSNP

1. What are the main reasons why learners join the NSNP?
2. How does the NSNP improves teaching in the school?
3. How does the NSNP improves learning in the school?
4. How does the school monitor the quality of food given to learners on the NSNP?
5. What is the school doing for learners who might not have enough food during the weekend?

## **PART FOUR: CHALLENGES ENCOUNTERED DURING THE RUNNING OF THE NSNP**

1. From your experience, why do some of the learners choose not to be on the NSNP?
2. From your observation, what are the main achievements of the NSNP for the school so far?
3. What do you think are the main challenges of the NSNP at this school on your side as the principal?
4. What do you think should be done to improve the NSNP for the school that might help you as a principal?
5. In your personal opinion, why do you think the NSNP should continue in your school?

## **FOCUS GROUP INTERVIEW SCHEDULE WITH FOR CLASS TEACHERS**

### **INTRODUCTION**

**I wish to thank you for accepting to take part in this research project. You are assured that everything you say during the interview will only be used for this project. You should never mention your names, names of colleagues or schools. You are also free to use any language that will help you to express your views without compromise.**

### **PART ONE: VIEWS AND PERCEPTIONS OF SCHOOL STAKEHOLDERS ON RUNNING THE NSNP.**

1. As a teacher, what were the main objectives of the NSNP when it started in your school?
2. As a teacher in what way are you involved or helping in the organisation or running of the NSNP in the school?
3. What are the objectives of the NSNP?
4. In what way do you think the NSNP is achieving these objectives in your class or the learners you teach?
5. As a teacher, which record do you keep of learners on the NSNP?
6. Please explain how the following people help in organising learners on the NSNP:
  - 6.1 School principal
  - 6.2 Circuit official
  - 6.3 Other teachers
  - 6.4 Learners
  - 6.5 Parents as food handlers

### **PART TWO: EVALUATING THE INFLUENCE OF NSNP**

1. What do you think are the main reasons why learners are entitled to the NSNP?
2. From your experience, what are the main benefits of the NSNP to learners in general?
3. From your observation, how does the NSNP benefit the teaching in the school?
4. From your observation how does the NSNP benefit learning in the school?
5. From your observation, what is done in the school to monitor the quality of food given to learners on the NSNP?

6. What is the school doing about learners who might not have enough food during the weekend?
7. How is the performance of the learners academically now that they are given food?

### **PART THREE: CHALLENGES ENCOUNTERED DURING THE RUNNING OF THE NSNP**

1. From your experience, why do some of the learners choose not to be on the NSNP?
2. From your observation, what are the main achievements of the NSNP for the school so far?
3. What do you think are the main challenges of the NSNP at this school on the side of educators?
4. What do you think should be done to improve the NSNP for the school to make your teaching easier?
5. What else would you like to say on the NSNP?

## **FOCUS GROUP INTERVIEW SCHEDULE FOR LEARNERS PARTICIPATING ON NSNP**

### **INTRODUCTION**

**I wish to thank you for accepting to take part in this research project. You are assured that everything you say during the interview will only be used for this project. You should never mention your names, names of colleagues or schools. You are also free to use any language that will help you to express your views without compromise.**

### **PART ONE: VIEWS AND PERCEPTIONS OF SCHOOL STAKEHOLDERS ON RUNNING THE NSNP.**

1. What types of food are you given on each day of the week?
2. If you were asked to suggest the food to eat would you prefer what is given in the NSNP?  
Explain your answer.
3. What are the reasons why the NSNP was started in the school?
4. As a learner, what are the reasons you joined the NSNP in the school?
5. What do you think were the reasons for starting the NSNP?
6. As a learner, how do you think the NSNP is helping you to improve your learning?
7. What do you think are the reasons for other learners not be part of the NSNP in your school?

### **PART TWO: EVALUATING THE INFLUENCE OF NSNP**

1. Explain how the NSNP is influencing you to learn at school?
2. Explain your performance before and after the implementation of NSNP.
3. Indicate the difference of your school attendance before and after the implementation of the NSNP.

### **PART THREE: CHALLENGES ENCOUNTERED DURING THE RUNNING OF THE NSNP**

1. What do you think are the main problems of the NSNP at your school that makes you?
2. What do you think should be done to improve the way the NSNP is done in the school?
3. In your personal opinion, explain why NSNP should eat your school?
4. What else would you like to say on the NSNP?

## **FOCUS GROUP INTERVIEW SCHEDULE FOR LEARNERS NOT TAKING PART ON NSNP**

### **INTRODUCTION**

**I wish to thank you for accepting to take part in this research project. You are assured that everything you say during the interview will only be used for this project. You should never mention your names, names of colleagues or schools. You are also free to use any language that will help you to express your views without compromise.**

### **PART ONE: VIEWS AND PERCEPTIONS OF SCHOOL STAKEHOLDERS ON RUNNING THE NSNP.**

1. How is the NSNP done in the school?
2. If you were to suggest food to be eaten what would you want to eat in order to be part of the NSNP?
3. What are the reasons why you think the NSNP was started in the school?
4. What are the reasons why you are not eating food from the NSNP?
5. As a learner, what are the reasons you think learners in the school choose to be on the NSNP?
6. As a learner, how do you think the NSNP is helping the learners who are on the feeding programme?

### **PART TWO: CHALLENGES ENCOUNTERED DURING THE RUNNING OF THE NSNP**

1. What do you think are the main problems of the NSNP at your school?
2. What do you think should be done to improve the way the NSNP is done in the school?
3. In your personal opinion, explain why the NSNP should continue at your school?
4. What else would you like to say on the NSNP?

## **INDIVIDUAL INTERVIEW SCHEDULE FOR THE NSNP OFFICERS**

### **INTRODUCTION**

**I wish to thank you for accepting to take part in this research project. You are assured that everything you say during the interview will only be used for this project. You should never mention your names, names of colleagues or schools. You are also free to use any language that will help you to express your views without compromise.**

### **PART ONE: BIOGRAPHICAL QUESTIONS**

1. For how long have you been monitoring the NSNP?
2. Are you getting enough support from the Government on NSNP?
3. How many schools are under your control?
4. How often do you visit the schools, why? Explain your answer.

### **PART TWO: VIEWS AND PERCEPTIONS OF SCHOOL STAKEHOLDERS ON RUNNING THE NSNP.**

1. As the Circuit official, what were the main objectives for starting the NSNP?
2. In what way do you think the NSNP is achieving these objectives in the circuit?
3. As Circuit official, in what way are you helping in organising the NSNP in the school?
4. Please explain how the following people help in organising the NSNP:
  - 4.1 School principal
  - 4.2 Circuit manager
  - 4.3 Teachers
  - 4.4 Learners
  - 4.5 SGB
5. As Circuit official, which records do you keep to help you see how the NSNP is going on in the circuit?
6. In your view, what are the main reasons why learners join the NSNP?
7. As Circuit official, what do you think are the main benefits of the NSNP to learners?

### **PART THREE: EVALUATING THE INFLUENCE OF NSNP**

1. As Circuit official, in what way do you think the NSNP is helping the quality of teaching and learning in schools?
2. As Circuit official, what are you doing to help schools to cater for learners who might not have enough food during the weekend?
3. When food was provided it was meant for all learners, what are you doing to make sure that all learners are taking part on the NSNP?
4. From your experience, what are the main achievements of the NSNP for schools in the circuit so far?

### **PART FOUR: CHALLENGES ENCOUNTERED DURING THE RUNNING OF THE NSNP**

1. What do you think are the main challenges of the NSNP at schools in the circuit?
2. What do you think should be done to improve the NSNP at schools in the circuit?
3. In your personal opinion, explain why the NSNP should continue at schools in your circuit?

#### **Observation Schedule on food handling and feeding**

1. Process of feeding
2. Times of feeding
3. Organization of feeding process
4. Health measures for learners
5. Health measures by food handlers
6. Record keeping
7. Types of food given

#### **Study of Records on NSNP**

1. Population of learners on NSNP
2. Population of learners not on NSNP
3. Register of attendance of learners on NSNP

4. Register of attendance of learners not on NSNP
5. Academic progress records of learners on NSNP (Comparison done on four different subjects studied daily)
6. Register of attendance of learners not on NSNP (Comparison done on four different subjects studied daily)
7. Inspection reports of NSNP

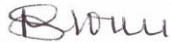
### Editing and Proofreading Report

15 May 2017

This letter serves to confirm that I, Dr I. Ndlovu of the English Department, University of Venda, have proofread and edited a PhD thesis titled “Challenges of Implementing the National School Nutrition Programme in Achieving Educational Objectives: A Case Study of Schools in Vhembe District, Limpopo South Africa” by Tshisikhawe Mbulaheni Paul to be submitted to the Department of Curriculum Studies in the School of Education at the University of Venda.

I carefully read through the thesis, focusing on proofreading and minor editorial issues. The recommended suggestions are clearly highlighted and can either be accepted or rejected using the Microsoft Track Changes Function.

Yours Sincerely



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