UNIVERSITY OF EDUCATION, WINNEBA

GHANA SCHOOL FEEDING PROGRAMME AND ITS EFFECTS ON ENROLLMENT AND RETENTION AMONG SELECTED BASIC SCHOOLS IN THE KASSENA NANKANA WEST DISTRICT

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DECEMBR, 2018

DECLARATION

STUDENT'S DECLARATION

I, EDMUND KUDE DIDERUTUA, declare that this project report with the exception of quotations references contained in published works which have all been identified and duly acknowledged, is entirely the result of my own original research work, and it has not been submitted either in part or whole for another degree elsewhere.

SIGNATURE:……

DATE: ……

SUPERVISOR'S DECLARATION

I declare that, the preparation and presentation of this work was supervised in accordance with the guidelines on supervision of project report as laid down by the University of Education, Winneba.

SUPERVISOR'S NAME: REV. FR. DR. FRANCIS K. SAM

SIGNATURE:……..

DATE: ……

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DEDICATION

To my mum Mrs. Kude Talata Abageri and my lovely daughter Faunette Kude Wezeanamo.

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LIST OF ACRONYMS

WFP	:	World Food Programme
WHO	:	World Health Organisation
UNICEF	:	United Nations Children Education Fund
UN	:	United Nations
UNHTF	:	United Nation Hunger Task Force
HGSFP	:	Home Grown School Feeding Programme
SPF	:	School Feeding Programme
GSFP	:	Ghana School Feeding Programme
KNWD	:	Kassena Nankana West District
CAAD	:	Comprehensive African Agriculture Development
MDG	:	Millennium Development Goals
GNA	:	Ghana News Agency
MoFA	:	Ministry of Agriculture
PCI	:	Per Capital Income
MoFEP	:	Ministry of Finance and Economic Planning
GDP	:	Gross Domestic Product
NEPAD	:	New Partnership for African Development
UNDP	:	United Nations Development Fund
SIC	:	School Implementation Committee
DIC	:	District Implementation committee
GSPER	:	Gross Primary School Enrolment Rate
NSPER	:	Net Primary School Enrolment Rate
MoWCA	:	Ministry of Women and Children Affairs

FFE	:	Food For Education
SFPS	:	School Feeding Programme Schools
NSFPS	:	Non School Feeding Programme Schools

ABSTRACT

The study assessed the Ghana school feeding program and its effects on enrollment and retention of pupils in schools in the Kassena-Nankana West District. The study used the case study method research design. The total population was 250 respondents in the Kassena Nankana West District. Census method was used to select all the 250 teachers from the selected schools. Questionnaires were the main instrument used to gather primary data. Microsoft Excel and Statistical Package for Social Studies (SPSS) was used for the analysis. The study results revealed that the enrollment rate of School Feeding Programme Schools (SFPS) rose compared to non-beneficiary school feeding programme schools. To add more, the retention rate of the school feeding programme schools also increased compared to non-beneficiary school feeding programme schools. The challenges affecting the implementation of the school feeding programme in Kassena Nankana West District are that in Ghana the release of funds for the programme has been inconsistent, a delay in the release of feeding grants subsequently affects beneficiary pupils, moreover, evidences from the schools on School Feeding Programme shows that facilities for sanitation and hygiene are not up to the required standard. The study recommended that the coordinators of the School Feeding Programme should organise periodic seminars, conferences and training programmes to educate caterers of the School Feeding Programme regarding hygienic practices that could guarantee the pupils health.

CHAPTER ONE

INTRODUCTION

1.0 Background to the Study

According to Del Rosso (2009), the provision of food acts as a strong incentive for children to attend school on a regular basis. In many communities, Basic schools pupils mostly benefit from School Feeding Programme (SFP) because most of families, Basic school pupils are culturally disadvantaged especially girls such that in hardship situations, male children are given opportunity to go to school over girls. SFP can provide a way in which parents can save money by spending less food and thereby allow the girls to attend school. In Jamaica the study carried out by Del Rosso (2009), showed that the provision of breakfast to primary school students significantly increased enrollment and attendance.

The pilot study conducted by World Food Programme (WFP) over three months in Malawi showed that SFP increased enrolment by 5% and up to 36% improvement in attendance (WFP, 2016). Also the evaluation findings of SFP in Burkina Faso indicated that, school canteens were associated with increased school enrolment, regular attendance, consistently lower repeater rates, lower dropout rates, and higher success rates on national exams, especially among girls (Moore & Kuntze, 2008).

According to the analysis by Gelli (2016), done from WFP‘s assisted 4,175 schools in 32 Sub-Saharan African countries which provided food to 21.7 million children in 2015, showed a 14 percentage yearly increase in school enrolment for both boys and girls. Also the United Nations reported that providing children with take-home ratios in addition to school meals increased enrolment in 32 countries and particularly beneficial for girls in the primary school (WFP, 2009).

In 2014 Pakistan tried to address the issue of low enrolment amongst girls and introduced SFP which provided snack of rice to families. This encouraged parents to send their children to school especially girls and this led to increase of enrolment of girls (WFP, 2010). Study carried o in Burkina Faso findings showed that in rural schools at four provinces of the Sahel region in which the school gross enrollment was the lowest in the country (48.8 % vs. 72.5%) with high gender disparity, especially at the beginning of SFP in 2003. The programme started with 234 schools and 30,000 pupils in which statistics show that the admission rate increased from 50.5 % in 2003/4 the first year of the programme to 69.7 in 2008 while the gross rate enrolment also increased from 21.8% to 48.8% over the same period.

Also the study conducted by World Food Programme (2006) in Zambia showed that after the introduction of SFP, the enrollment of children in basic schools increased from 11.1% of the total enrolment in 2002 to 20.1% in 2004 (WFP, 2006). In Tanzania according to the study carried by Oniago (2011), the findings have shown that the enrolment of standard one in primary schools in 2007 was 8,396,925 from 6,562,722 by 2003, in which the average has risen from 90% in 2004, to 99% in 2010 while dropouts have declined from 6% to 3% (Oniago, 2011).

The School Feeding Programme has significant impact on attendance and performance resulting in positive impact of the programme (Abui, 2013). This study therefore seeks to assess the Ghana School Feeding Programme on enrolment and retention in KNWD. The research gap of this study is that, there is a lack of empirical evidence concerning the impact of school feeding on performance and retention within the selected Basic Schools in the Kassena Nankana West District. Therefore, this study examined Ghana school feeding programme and its effects on enrollment and retention

among selected basic schools in the Kassena Nankana West District to provide empirical evidence of this gap.

1.1 Statement of the Problem

Most public Basic Schools in the Kassena Nankana West District enroll children from disadvantaged households. These children suffer from hunger and malnutrition, due to their poor socio-economic backgrounds. Due to their poor socio-economic status, they are only able to pay a small amount of money to cater for the meals offered in school. This leads to intake of unbalanced meals by their children. For schools to have an effective enrollment rates, there are areas of concern that ought to be addressed well. Studies in other areas showed that hunger easily handicap students mental, physical, emotional growth and development (Oniago, 2011).

Research findings on the role of SFP on education development found that it is a valuable instrument for stimulating enrollment and establishing attendance as well. It also helps to enhance learning performance because of the regular attendance. No study has been done in the Basic schools in the Kassena Nankana West District to establish the impact of school feeding on school enrollment. Therefore, this study investigated Ghana School Feeding Programme and its effects on enrollment and retention among selected basic schools in the Kassena Nankana West District.

1.2 Purpose of the Study

The study sought to assess Ghana School Feeding Programme and its effects on enrollment and retention among selected basic schools in the Kassena Nankana West District.

1.3 Objectives of the Study

The following specific objectives were used for the study, including;

1. To investigate the effects of Ghana School Feeding Programme on enrollment rates of pupils in selected basic schools in KNWD.
2. To assess the effects of Ghana School Feeding Programme on retention rates of pupils in selected basic schools in KNWD
3. To identify the challenges facing Ghana School Feeding Programme in selected Basic schools within the KNWD.
4. To evaluate the effects of Ghana School Feeding Programme on students' academic performance in the KNWD.

1.4 Research Questions

The study sought to address the following questions;

1. What is the effect of Ghana school feeding programme on enrollment rates of pupils in selected basic schools in KNWD?
2. What is the effect of Ghana school feeding programme on retention rates of pupils in selected basic schools in KNWD?
3. What is the challenges facing Ghana school feeding programme in selected Basic schools within the KNWD?
4. What is the effect of Ghana School Feeding programme on students' academic performance in the KNWD?

1.5 Significance of the Study

The study will contribute immensely to policy development by providing insights into enhancing the administration of the GSFP. Knowledge of the impact of SFP on enrolment and retention will provide sufficient grounds to critique current management regime of the GSFP in order to formulate a suitable policy. The study will further provide policy makers with relevant information that will feed into other educational policy framework(s) that seeks to achieve universal basic education in a long run.

A better understanding of the effects of the GSFP will help create new structures or measures that will deliver on the developmental aspirations of the beneficiary schools in the District and the country as a whole; For instance, increasing access without compromising quality. It must be understood, however, that the work may present or reveal some weakness of the structures regarding enrolment and performance in the observed schools and the prescription/recommendation will pave the way for further research into the ever changing or unstable aspect of the education process and consequently give policy direction.

1.6 Limitations of the Study

The unwillingness of respondents like all other study in the field to answer the questionnaires was a challenge. Notwithstanding, the personal involvement and endurance of the researchers paid dividend. The road network to some schools were quiet challenging some Head Teachers also had their biases about GSFP and were thus reluctant to allow the administration of the questionnaires; but for the persuasion of the researcher it could not have been completed.

1.7 Delimitation of the Study

The study focused on the effects of GSFP on enrolment and retention of School Feeding Programme (SFP) of beneficiary schools in the KNWD. The study was carried out in selected beneficiary and non-beneficiary schools in the district in the Upper East Region of Ghana. The respondents were head teachers and class teachers.

1.8 Organisation of the Study

The study is divided into five chapters. Chapter one embodied the background of the study, problem statement, research objectives and questions, significance of the study, theoretical framework/conceptual framework. Chapter two presented the literature review. The Home Grown School Feeding Programme (HGSFP) in Ghana, enrolment, nutrition retention and academic performance are to be considered. The Chapter critically reviewed similar studies that have been done on the topic and draws inferences expected to support or challenge the problem statement of the study. Chapter three offered a detailed methodological approach to the study. Chapter Four focused on data presentation and analysis of the study. This chapter revealed the views of respondents concerning enrolment and retention in the beneficiary schools as well as some implementation challenges and possible solutions to the problems. Chapter five provided the summary of findings recommendations and conclusions of the study.

1.9 Definition of Terms

Enrolment: The number of pupils admitted in school at a particular time

Retention: The number of pupils consistently remain in the school after enrolment

Drop-out: The number of pupils who quit prematurely before completion

Performance: A task or operation seen in terms of how successfully it is perform

Programme: A set of related measures or activities with a particular long -term aim

Feeding: One hot meal serve to pupils in school per day to sustain them in learning

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.1 Introduction

This chapter dealt with an overview of SFP with proper nutrition and reviewed related factors such as higher enrolment, attendance rate, good health, increased

participation, attention in class and prevention of hunger, using literature to support them.

2.2 An Overview of Ghana School Feeding Programme

Ghana is the first of ten countries in Sub-Saharan Africa is implementing an SFP modeled to the guidelines of the NEPAD as described in the CAADP. The formulation of the GSFP started in the year 2004 and the programme has been running from January 2006 until December 2010. It was preceded by a pilot programme, which was carried out from September to December 2005 (NEPAD, 2005). In the year 2010, the programme intended to serve about 1.04 million children in all 138 districts of Ghana (NEPAD, 2005). The long-term objective of the GSFP is to contribute to poverty reduction and food security and to increase school enrolment, attendance and retention.

The SFP is based on locally grown food products, which should promote domestic food production and improve market access for resource-poor farmers. The government wants to achieve this objective through an increase in employment and income level of farmers at community and national level. In addition, greater availability, access and utilization of food crops and products at community level are assumed to enhance food security. By the end of the programme, it is expected that there will be: a real increase in income at national and community levels, an increased employment at community level and a greater availability, access, utilization and stability of food crops at community level. This strategy complements the development strategies of the government of Ghana (Quaye, Essegbey, Frempong, & Ruivenkamp, 2010).

2.2.1 School Feeding

The term school feeding has been used over the years to mean the provision of meals or snacks at school to reduce children's hunger during the school day (WFP, 2004). School feeding is also defined as in-school meals only. School feeding has increasingly come to represent a more varied and comprehensive set of uses of food for the achievement of educational outcomes.

2.2.2 The Purpose of School Feeding in Schools

According to WHO (2003), these objectives are to be achieved through measurable targets by the year 2015. Many countries throughout the world, including the Netherlands, South Korea and the Philippines have in the years before the 2000 MDGs adopted poverty reduction strategies including school feeding programme. Education is widely regarded to be significant for the development of many countries. Afoakwa (2009) emphasized the impact of education on economic growth, although some others, such as Ahmed (2004) raised questions about the causal relationship between education and economic growth. Education has also been found to play a crucial role in the adoption of new agricultural technologies in those countries (Del Rosso, 2009).

Finally, the effectiveness of the school feeding programme has succeeded in making education a means to improve health and nutritional requirements of pupils so as to motivate them to stay in school thereby reducing fertility (Ahmed, 2004) and is seen as an intrinsic good in itself (He, 2009). This general notion is emphatically expressed under the Millennium Development Goal aimed at achieving universal access to primary education by the year 2015, and eliminating gender disparity in education by 2015 (He, 2009).

2.2.3 Implementation of GSFP

GSFP varies at the regional, district, and school levels in structure, procurement of food, menu development, and the preparation of the meal (Quaye, *et al.,* 2010). However, in many of the regions in the country, resources are channeled to a School Implementation Committee (SIC) (Quaye, *et al.,* 2010). At the district level, the SIC receives resources from the District Implementation Committee (DIC) set up by District Assemblies to procure necessary supplies for the programme. According to Quaye, *et al*., (2010) the District Assemblies are responsible for establishing DICs and SICs and ensuring that the communities are mobilized through the provision of the necessary infrastructure whose responsibility it is to provide the needed inputs to schools participating in the programme.

At the regional level, the Regional Coordination Offices and the Regional Coordinating Council are assigned to oversee district-level operations and provide regional leadership. A review of the school feeding programmes in 5 regions in Ghana by the Netherlands Development Organization revealed that regional/district/school partnerships and organizational mechanisms were limited, and many schools lacked a functional school implementation committee (Quaye, *et al* 2010).

Quaye*, et al*., (2010) summarizes the challenges as follows:

Ghana School Feeding Programme lacks kitches, storage, and dining. Insufficient food supply to schools creating inadequate/irregular food portions and lack of training in hygiene and nutrition for school cooks. Lack of sanitation facilities and regular safe water (a large proportion of schools are still without poly tanks) couple

with inadequate resource for students following influx of attendees in response to School Feeding Programmes. cooks paid irregularly, low community involvement, student not receiving daily meal, and lack of communication with parents. Increasing school enrolment without commensurate increases in food supply, number of classrooms and teachers.

In spite of the challenges some notable successes have been chalked by the programme. These successes are enumerated by Quaye, et al., (2010) in five regions in Ghana:

The programme increased school enrolment by 20% in pilot schools (WFP), Reduce in truancy and absences, improved punctuality, reduced dropout rates and improved school performance. It reduces the number of children reported sick to the school authority and create opportunities for local employment for school food vendors, cooks, and programme administrators.

2.2.4 School Feeding Programmes

Among the poor, there is often not enough food at home, and most schools in developing countries lack canteens or cafeterias. School meals are a good way to channel vital nourishment to poor children. Having a full stomach also helps them to concentrate better on their lessons. In countries where school attendance is low, the promise of at least one nutritious meal each day boosts enrolment and promotes regular attendance. Parents are motivated to send their children to school instead of keeping them at home to work or care for siblings. In the poorest parts of the world, school meal programmes can double primary school enrolment in one year. Among the key beneficiaries are girls, who otherwise may never be given the opportunity to learn.

Food programmes work towards achieving several Millennium Development Goals (MDGs). The programmes directly address the goals of reducing hunger by half and achieving universal primary education by 2015, and of achieving gender parity in education by 2005 (Sessional Paper, 2005). School meals contribute in, the long term to combating poverty, but it also helps to reduce disease. It provides a platform for directly addressing child health and nutrition. It can also be a platform for other health interventions. WFP (2004) school meals can take the form of a mid-morning snack or a nutritious breakfast of porridge. WFP uses fortified food to ensure that children get the micronutrients they need. Studies show that diet and nutrition play a critical role in physical and intellectual development, however, something more is needed to attract the poorest girls to school. In its "take-home rations" projects, WFP provide basic food items, often including a sack of rice and a can of cooking oil, to families who send their daughters to school.

2.2.5 Educational Benefits of the School Feeding Programme

School feeding programmes can help to get children into school and help to keep them there through enhancing enrolment and reducing absenteeism and once the children are in school, the programmes can contribute to their learning, through avoiding hunger and enhancing cognitive abilities. These effects may be potentiated by complementary actions, especially deworming and providing micronutrients. The analysis presented here benefited from early work in this area and from three recent reviews (Bundy & Burbano, 2009), which arrived at similar conclusions about the direction of the effects. What is less clear is the scale of the effect.

Different studies have shown an increase in both Gross Primary School Enrolment Rates (GSPER) and Net Primary School Enrolment Rates (NSPER), an

increase in school attendance rates and a reduction of dropout rates compared to controlled schools (Ahmed & Billah, 2004). The fact that poorly nourished children benefit cognitively from SFPs has also been demonstrated in several studies (Ahmed & Billah, 2004). In all these studies, a significant increase was detected in school test-performance between under-nourished children receiving breakfast or lunch and children in the control group not receiving breakfast or lunch at school.

2.3 The Objectives of Ghana School Feeding Programme

According to GSFP policy document, GSFP (2006) Programme Pilot Review Report, and Programme Document 2007-2010, the basic objectives of GSFP is to provide children in public primary schools and kindergartens with one hot nutritious meal prepared from locally grown foodstuffs on every school going day. The policy has a secondary objective of improving education, health and agriculture of the country. The health component involves the fact that the pupils of the beneficiary schools are to be given good drinking water, de-wormed and fed in a good sanitary environment. In line with the improvement of education, enrolment of pupils will improve so as to achieve universal basic education. In the agriculture sub sector the patronage of locally produced goods will be and food security in the country will be achieved. Programme implementation partner organizations such as Netherlands Development Co-operation (SNV), (SEPD), and World Food Programme (WFP, 2004) are to carry out training sessions for caterers and cooks to enhance their capacities. To achieve the objectives of the programme, roles were assigned to the following key stakeholders as follows;

- The government made up of Cabinet and Parliament is responsible for passing the GSFP Bill to legitimize the operations of the programme and sourcing for funds;

- The Ministry of Local Government and Rural Development (MLGRD), in collaboration of the Ministry of Education (MoE) is responsible for the implementation and supervision of the programme;
- Ministry of Food and Agriculture (MoFA) is responsible for achievement of the agric objectives;
- Ministry of Finance and Economic Planning (MoFEP) responsible for the release of funds;
- Ministry of Women and Children Affairs (MoWCA) responsible for monitoring and supervision;
- Ghana School Feeding Programme National Secretariat responsible for the implementation of the policy at the national level.

2.4. Effects of School Feeding Programs on Performance

Afoakwa (2009) noted that the school feeding programme is one of several interventions that can address some of the nutrition and health problems of school-age children. SFPs, and other school-based nutrition and health programs, can also motivate parents to enroll their children in school and to see that they attend regularly.

2.4.1. Cognition Improvement and Alleviation of Hunger

The number of hungry school-age children is unknown, but is likely to be a significant problem in various circumstances. Many factors contribute to hunger in school children; the long distances children have to travel to school, cultural meal practices that include no or small breakfasts or a lack of family time or resources to provide adequate meals to children before and/or during the school day. Simply

alleviating this hunger in schoolchildren helps them to perform better in school (Afoakwa, 2009).

2.4.2. Improvement of Attendance and Enrolment

Children in poor health start school later in life or not at all. A study in Nepal found that the probability of attending school was 5% for stunted children versus 27% for children of normal nutritional status (Afoakwa, 2009). In Ghana, malnourished children entered school at a later age and completed fewer years of school than better nourished children (Ghana News Agency, 20I4). The number of days that a child attends school is related to cognition and performance. SFPs can have a positive effect on rates of enrolment and attendance. A recent evaluation of an on-going school feeding program found that school canteens were associated with increased school enrolment, regular attendance, consistently lower repeater rates, lower dropout rates in disadvantaged provinces, and higher success rates on national exams, especially among girls (Afoakwa, 2009).

Afoakwa (2009) further noted that the availability of subsidized in-school meals will increase school enrolment if the program changes the household's schooling decision for some children who would not have been enrolled in school otherwise. And for these households to enrol their children, they need to be convinced that the net benefits of participating in the program exceed the gap between direct and opportunity cost of schooling and the expected benefit of schooling (Afoakwa, 2009). In other words, households usually compare the size of the transfer relative to the size of the cost-benefit gap and these comparisons ultimately determine the magnitude of the increase in enrolment rates. Another important point is about the roles that school meals play in encouraging early enrolment. Afoakwa (2009) found increased participation

resulting from school breakfasts respectively. On the other hand, Levinger (2006) found that school lunches as well as take home rations increase new enrolment for girls by 5 to 6 percentage points.

On the other hand, one of the important impacts of SFP is that it has a power of reducing the gender gap by increasing girls' primary school enrolment than boys which leads the gross enrolment difference to be smaller between boys and girls Del Rosso (2009). In addition, Levinger (2006) found that a 44% increase in enrolment for girls and a 28% increase in boys' enrolment in Food for Education (FFE) schools in Bangladesh where take home rations were provided to children.

2.4.3 School Feeding Program and Class Attendance

Class attendance is believed that school meals can be effective at increasing class attendance because children receive the meal only when they attend school. According to Levinger (2006) the impact of school feeding on attendance in Bangladesh was evaluated and found that the SFP has a statistically significant positive impact and the programme showed an increment of class attendance of participating pupils by 1.34 days per month. However, class attendance from school registers showed attendance increased in both programme and control schools during this period, and that the increase was 1.1 percentage points higher in programme schools Case, (2010).

2.4.4 School Feeding Program and Student Drop-out

Adelman, Gilligan and Lehrer (2009) presented the interplay between school meals on one hand and grade repetition, learning achievement, and school performance on the other. They show that this effect works in two mechanisms. First, because school meals improve class attendance, children will spend more time learning in school. So

the more time children spend in school, the better they learn and these interplays ultimately result in improved school performance, which thus minimizes the probabilities of drop-out. This is, however, dependent on other factors such as school quality, availability of learning materials and teacher quality.

Thus, unless properly implemented, school feeding has rather the potential to increase drop-outs. Second, improved nutrition may also enhance school retention and performance in the short and overlong run. In the short run, school meals could alleviate hunger and make children concentrate and learn better so that school performance will be improved and hence drop-out is minimized. In the long run, school meals could enhance learning, provided that school meals improve the nutritional status of children and if nutritional status also affects learning. According to Ahmed (2004), School Feeding Programmes have a statistically significant negative impact on pupil drop-out.

2.4.5 School Feeding Program and School Performance

Pollit (2005) noted that school feeding programmes have indeed positive impact on school pupils' performance school enrolment, class attendance, student drop-out. According to Galloway (2009) school meals programmes are seen as an effective tool for attracting pupils to school, reducing drop-out rate, increasing female enrolment, alleviating short term hunger, thereby improving concentration ability and academic achievement, and improving nutritional and micronutrient status, thereby improving learning capacity (Del Rosso, 2009). The total development of pupils' well-being is the prime concern of every government, parents and the states at large. Most countries in the world use several means to get the citizenry to be well informed and contribute to the national development. The school feeding programmes, the school lunches or snacks are used by several countries to achieve these universal goals for education. In

order to realize this vision, pupils' output in schools and outside schools must be put into consideration (UNESCO, 1990).

According to World Food Programme (2001) the Millennium Development Goals phase two sought to increase enrolment, attendance and retention through its several policies put in place to realize this vision ranging from improving teacher quality and infrastructure development. The school feeding programme is the target to foster universal basic education to all children in the world. The target also encompasses the improvement of pupils` out-put of work in the classrooms and outside the classrooms to enhance rapid social-economic development. Furthermore, Vermeersch and Kremer (2004) asserted that school feeding programme improves enrolment and attendance. They added that children looked better and healthy in schools with the program than those without from her findings in the district. The performance of the schools with SFP stood tall against those schools without the program. They concluded that there was a relationship between the SFP and learning outcomes as children attending school regularly fosters their cognitive development and goes a long way to improve their performances.

Levinger (2009) noted that some pupils from poor families or the disadvantage children around the world go to school with an empty stomach. Giving them free meals a day, especially the breakfast and take home ration play a vital role in ensuring the active participation and performance in schools. The various studies conducted by WFP (2004) indicated that the SFP has helped the pupils to concentrate at school and perfect their academic performance. Levinger (2011) stated that SFP and its fortified meal has improved attendance and performance based on the nutritional content of the meal which has the potency to improve pupils' brain for the learning process. In three Northern regions of Ghana, Mohammed and Sakara (2011) examined that the

performance of the pupils had improved when the SFP was initiated in 2007. It had reduced dropout rate among pupils especially the girl-children. Chambers (2001) discusses that an estimated 120 million pupils were beneficiaries to the SFP in India. The daily diet for the pupils‟ at school has enriched their performance in the country. The deworming segment of the programme in India has reduced the pupils` burden of worms which obstruct cognitive development, and has improved pupils' achievements.

World Food Programme, (2001) enumerated that in Niger, the programme has induced attendance and improved pupils' out-put of work since its introduction in 2007. The arid regions in Niger have witnessed tremendous attendance and positive outcomes. The main aim of the programme has been achieved in Niger, Ghana, India, and New Zealand in relation to pupils' output of work and performance. In Pakistan, the initiative has increased attendance and performance in schools and health needs of the children (Neumann, 2009). According to Levinger (2006) school breakfast has a significant impact on the children's performance because of the fortified grains which enrich mental development.

2.5 Impact on Educational Achievements

To NEPAD (2002) the potential impact of targeting children through school feeding programmes is to increase their educational achievement so as to improve their potential future productivity and earnings. There are three paths through which school feeding programme help to achieve the desired educational achievement impact. The three paths of school feeding programme programmes are enumerated below. These paths are the benefits that school feeding programmes offer beneficiaries.

1. School feeding programmes increase school attendance by lowering the opportunity costs of attending school and providing additional incentives to

engage in formal education. This leads to more time spent in school and more time spent towards learning

2. School feeding programmes help to alleviate short term hunger thereby improving children's cognitive functioning and attention span particularly in class
3. School feeding programmes improved nutritional status of children which provides them with calories and nutrients promotes good health, strong resistance to infectious diseases and illnesses that keep children from school is identified as the third path. Consequently, better nutrition indirectly improves educational achievement of children by increasing their school attendance.

Increases in school enrolment may lead to overcrowding thereby lowering the effectiveness of classroom time or stretch the limited amount of school resources as well as increase the work load of teachers affects the first and third paths Neumann, 2009). Depending on how the SFP is set up, teaching time may be reduced if teachers are used in overseeing the meal time (Services, 2001). However, the School feeding programmes have demonstrated the potential for improved educational attainment. Pollitt and Jacoby (2005) in a study on the impact of breakfast on cognitive development found that eating breakfast before being taught enables students to perform better on a number of discrimination activities.

In supporting these findings, Simeon (2008) found that students who eat breakfast are better inclined to study, concentrate and listen better, Ranivnder (2007) found that students' attention to task in school increased significantly with the provision of breakfast. School meals increase test scores in school where the teacher is experienced (Neumann, 2009). More so, NEPAD (2005), has shown that the implementation of SFPs have led to increases in test scores, and improved attendance

and study skills. Consequently, the school feeding programme impacts on the academic achievement of pupils.

School meals keep children in school more frequently. For instance, parents feel that children who do eat breakfast are absent from school less (UNHTF, 2003). This leads to decreased rates of absence and tardiness. Nutritionally at risk students significantly had lower grades than students not classified as being at risk; with the introduction of SFP. Students whose nutritional risk decreased significantly saw greater improvement in academic performance than students who did not see a decrease in their nutritional risk (UNHTF, 2003). Secondly, pupils who suffer stress and amount of sleep also have great influences on students' performances because it affects their health (UNHTF, 2003).

In spite of the school feeding programme, the socio-economic status of parents does affect the academic achievement of pupils. Simeon (2008) observes that there is a sort of positive relationship between parental SES and academic performance of students. More so, parents' educational levels have influence on their teaching styles, parents' educational level enables them to engage their children in higher quality verbal interactions (Werner and Bower, 2002). Consequently, they are able to provide cognitively stimulating learning environment and literacy activities in the home (Werner and Bower, 2002). Additionally, students who have financial problems face various hurdles in school. This negatively affects the performance students because they miss too many classes (Simeon, 2008). In effect, students can participate in the school feeding programme yet their performance may not improve.

2.6 Successes and Challenges of School Feeding Programmes

Since the introduction and implementation of SFPs globally, a lot of successes have been achieved. As noted by Darko (2014), school feeding assists the "creation of job opportunities for skilled and semi-skilled workers." Japan, Brazil, Chile, South Korea and the United States where the programme has been practiced for decades had witnessed major impact on the creation of jobs for local farmers, cooks and caterers. This has contributed to the rise of the Gross Domestic Product (GDP) and Per Capita Income (PCI) as well as the creation of a larger market for those countries". Darko (2014) further observes that in Kenya, school meals have an impact on families by reducing the amount of money families spend to buy food which has automatically increased their savings for other purposes. In addition, parents use the time children are in school to work on a part time basis to earn extra money. Moreover, pupils who were underweight gained tremendously after weeks of good quality of food served whiles in school as well as being dewormed regularly. World Food Programme (2013) indicates that in Japan and Mexico, SFPs have gone a long way to help solve obesity problems. Foods, which were low in calories and made up of vegetables and fruits as well as milk, were basically executed on local preferences with the hiring of qualified nutritionists in the various schools.

It has been well documented in both developed and developing countries that school feeding with the right amount of quality ingredients have gone a long way to improve on pupil's performance. Badri (2014) explains how in the USA the school feeding has improved on pupil's academic performance, especially in mathematics and to some extent history based on the amount of calories in the food served them. From India, a report in the national meal program saw an increment in girls' attendance and a slight increase in school enrolment. A study conducted in Burkina Faso shows

increase in enrolment of girls due to the cereals take- home rations (WB, 2012). Highlighting a similar account from Mali, Hoof (2014) indicates that SFPs especially in the Northern part of Mali witnessed a significant percentage of student enrolment. SFPs enticed pupils to get to school early since they are served with food before classes commence.

From the Ghanaian perspective a lot of successes have been chalked as well. Arhin (2015) indicates that since the inception of the GSFP, public basic schools benefitting from the programme have recorded an appreciable increment in enrolment of pupils. A study conducted on the GSFP in the Garu-Tempane District in Ghana revealed that the programme increased gross enrolment rate by 24% among participating schools but decreased by 7% in non-participating schools (Bukari & Hajara, 2015). The Ghana News Agency (2014) observed an increment of pupils from 413,493 since the implementation of the GSFP in the year 2006/2007 to 1, 739,352 pupils in 2013/2014.

In sub-Saharan Africa, Ghana is said to be the first country to achieve the MDG goal on poverty reduction and hunger by the standard set by the United Nations (UN) in the Millennium development initiatives (GNA, 2013). The creation of jobs through the SFPs generated incomes to caterers and farmers to enable them feed their families. In spite of the successes that SFPs have achieved, SFPs are saddled with many challenges. Every project needs a good budget and adequate financing. However, the SFPs in many developing countries are faced with financial constraints. Ellis (2013) observes in a survey in Malawi that the SFP is under threat. This is as a result of insufficient funds to acquire more firewood due to the increment of enrolled children. In Namibia, Ellis (2012) indicates that individual households are required to supply firewood for cooking meals due to financial constraints. In the view of Ellis (2012), the

situation is so bad that sometimes particular schools pay two bags of maize in exchange of firewood. Researchers believe that this practice is quite widespread. The National Coordinator for the GSFP attributed the financial challenges facing the GSFP to recent economic crises facing the country (Ghana News Agency, 2014). This has made the release of money from the GSFP more difficult since the budget allocated to the program is too small. In Ghana the release of funds for the programme has been inconsistent. A delay in the release of feeding grants subsequently affects beneficiary pupils. The situation implies that caterers may not have access to funds to procure the needed items, cook and serve the beneficiary pupils. The delay in getting funds for caterers to cook has reduced the number of days meant for food to be served from five days to three days in a week (Kedze, 2013).

Evidences from schools on SFP shows that facilities for sanitation and hygiene are not up to the required standard. The Ghana News Agency (2013) further reports, that the Karaga district in the Northern Ghana is well noted for poor sanitation in the discharge of the GSFP. It emphasizes lack of water and unhygienic practices among caterers and children as well. Due to political interference sometimes schools that need to be targeted are excluded from the GSFP. As indicated by Abu and Quaye, *et al*., (2012), "Political party favouritism within the school feeding programme remains a persistent challenge".

2.7 Theoretical Framework

This study was guided by the human needs theory of Maslow (1954). According to this theory, there are certain minimum requirements that are essential to decent standards of living. These are known as physiological needs. They include food, shelter, health and clothing. They are primary needs and have to be catered for before other

needs such as security and shelter, sense of belonging and affection, love, esteem and finally self-actualization are pursued. Maslow proposed that man's drive towards a certain direction can be arranged in a hierarchical order according to his needs as follows.

2.7.1 Maslow's Hierarchy of Human Needs

The first level of physiological needs is the needs that everyone needs on a daily basis for survival and includes basic needs like food, shelter and clothing. The second level is that of security of the self and of the physiological needs. The third level is of social need, which is a need to belong to a certain group or association. This includes friendship, love and belonging. The fourth level is that of self-esteem, which a sense of self-respect and self-motivation is. It also includes how one may relate to other people. The last level is of self-actualization, whereby man strives towards a viable experience and personal growth.

Maslow says that a human being goes through a hierarchy needs, starting with physical needs, for example, food to much higher needs for example, and emotions. For a child to achieve this, care givers for example, teachers or parents should ensure that they provide nutritious foods to the child in order to have a healthy growth. Safety and security needs are referred to as freedom from fear and anxiety and also protection from emotional harm. Children should be provided with safety and security so as to do well in school and even at home. Failure to provide security creates discontentment. The social needs include love and belonging where children should be acceptable and provided with friendship. The self-esteem needs are the prestige needs whereby one feels he/she wants to be recognized. This makes children feel proud of themselves. The

utmost need is the self-actualization, which is the motive to become all that a person is able to be. This requires self-drive so as to achieve the goal one desires.

According to Maslow's hierarchy of needs, it demonstrates that when needs are met or fulfilled, pupils are generally happy and contented. The atmosphere in the school is good and learning goes on smoothly. The reverse is true in that when the needs are not met or fulfilled there is discontentment. This model highlights the importance of food provision and security. From a broader view of development, it means that countries must also struggle to provide basic needs for use by their population. For a developing country like Ghana, it means that poverty must be prevented by making basic needs like food, clothing and shelter available to all citizens.

Since man cannot survive without food, the government should make an effort to reduce food insecurity, especially amongst vulnerable groups like children. Where food aid is available, for instance, in schools through school feeding programmes, it will encourage good health, high motivation, participation, attention in class and will obviously reduce hunger. It should be properly monitored to ensure it assists the children (UNESCO, 1990).

2.8 Food for Education Conceptual Model

The SFPs are a visible social safety net used by political leaders around the world. Communities that participate in these programs can see the tangible benefits to their children, such as their children being fed regularly or families supplied with additional food. The Food for Education (FFE) programmes are typically targeted towards populations that are food insecure, reside in areas with high concentrations of low socio-economic status, which are facing poor attendance and enrolment in schools.

According to Adelman *et al*. (2009), first thousand days of a child is the most vital period during which malnutrition may have its largest impact.

The possible goal of targeting children through FFE programme is to scale up their educational achievement so as to enhance their potential future productivity and earnings. However, school meals improvement in educational achievement due to serving food in SFPs is interdependent and connected, as shown in Figure 2.1 below. To begin with, FFE programs increase school attendance by lowering the opportunity costs of attending school and providing additional incentives to engage in learning (formal education). This culminates to more time spent in school and more time spent towards learning. When a child is interested in learning, there is high probability of being retained in school to reap the assured benefits of education. Households may elect to have their children in schools for academic work because of the expectation of high return that comes with literacy.

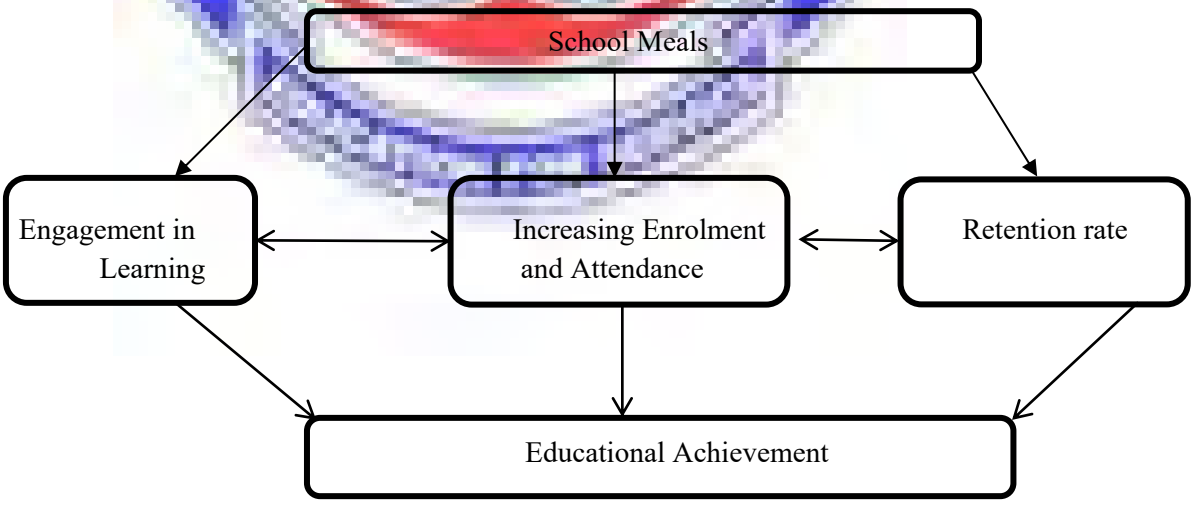

Figure 2.1: Conceptual frameworks for food for education

Source: Author's own construct (2017)

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

The research examines the effects of GSFP on enrolment and retention in the Kassena-Nankana West District (KNWD). The researcher designed a plan and visited, administered questionnaires in 4 beneficiaries and 4 non-beneficiary schools in order to obtain data to answer the research questions.

3.2 Research Design

The study sought to assess Ghana school feeding programme and its effects on enrollment and retention among selected basic schools in the Kassena Nankana West District. The research design is a blue print for conducting the study, which maximizes control over factors that could interfere with the validity of the findings. According to Burn and Grove (2001), designing a study help the researcher to plan and implement

the study in a way that will help the researcher to obtain intended results, thus increasing the chances of obtaining information that could be associated with the real situation. The study used the case study method. The researcher used questionnaires in order to help administer the research questions. The reason for adopting the case study research design is that it provides relevant information for more extensive investigation and creates opportunity for innovation. In a study such as the GSFP the research would come across various respondents whose responses could be motivated by several contextual dictates and subjective perceptions. The researcher therefore placed much emphasised in the subject experiences of head teachers and classroom teachers of their experience with the School Feeding Programme (SFP) in the KNWD.

3.3 Population of the Study

A population is the total of all the individual or items which have certain characteristics and are of interest to the researcher (Creswell, 2013). Population is the group from which the researcher would like the results of the study to be generalized; it included all individuals with certain characteristics. The total population was 250 respondents in the Kassena Nankana West District. The study population comprised of 169 teachers and headteachers from the 4 selected school feeding programme schools and 81 teachers and headteachers from selected non- school feeding programme schools.

Table 3.1 Sample schools for the study

Beneficiary schools	Population size	Sampled population
Kalivio Basic School	42	42
Mirigu Basic School	41	41

Kayaro Basic School	42	42
Christ the King Basic School	44	44
Total	169	169
Non-Beneficiary schools		
Ayagetam Basic school	20	20
Abulu Basic school	21	21
Katiu Basic school	19	19
Yidania Basic school	21	21
Total	81	81
Grand Total	250	250

Source: Field data, 2018

3.4 Sample Size

In research, the researcher often obtains data from a smaller group or subset of the total population in such a way that the knowledge gained is representative of the total population under the study. The larger the sample, the more representative of the population it becomes and so the more reliable and valid the results. The researcher used a sample of 8 schools for the study. Within this sample, one is able to draw conclusion with high degree of accuracy. Census method was used to select all the 250 teachers and head teachers from the selected schools.

3.5 Sampling Techniques

Census method was used to select all the 250 teachers and head teachers from the selected schools. Census method refers to the complete enumeration of a universe. A universe may be a place, a group of people or a specific locality through which we collected the data. Census method is necessary in some cases like population census, for gaining vast knowledge. The study used census method that gave opportunity to the

researcher to have an intensive study about the problem. The researcher gathers a lot of knowledge through this method. In this method there would be higher degree of accuracy in data. No other method is accurate like census method when the universe is used. This method is also applicable for units having heterogeneity or difference. In certain cases this method is very important and suitable to be used for data collection. Without this method the study of a universe remains uncompleted.

3.6 Sources of Data Collection

Primary and secondary sources of data were utilized for the study. These were two different sources of data but they are complementary approaches that were used through the review of relevant secondary documents and the collection of primary data in the study area using census method. The primary data was gathered from fieldwork in the study area. Relevant literature on the topic was reviewed to understand the concept school feeding and it implication around the world, books, journals, reports, newspapers and thesis from different places, were used as secondary sources of data for the study.

3.7 Data Collection Instrument

Questionnaire were the instruments used for the study. The questionnaire were used to collect data on students' enrolment and retention in both beneficiary and non-beneficiary schools. It was used to reduce complications in the arrangement and making analysis less tedious. Closed and open ended questionnaire items were designed to collect primary data; this is because it has proven to be consistent and popular method of data collection. This questionnaire was designed for the respondents. The questionnaire consists of five sections. Section one contains the gender of the

respondents, age ranges, highest educational qualifications, and working experience of the respondents. Section 2 investigated the effects of Ghana school feeding programme on enrollment rates of pupils in selected basic schools in KNWD. Section 3 assessed the effects of Ghana school feeding programme on retention rates of pupils in selected basic schools in KNWD. Section 4 identified the challenges facing Ghana school feeding programme in selected Basic schools within the KNWD and section 5 evaluated the effects of Ghana School Feeding programme on students' academic performance in the KNWD. The analysis of the study was based on these issues. The researcher visited the selected schools with the questionnaire and explained the importance of the research work where questionnaires were hand delivered to the teachers. The answered questionnaires were received by the researcher during a follow up visit to the schools.

3.8 Pilot Testing Questionnaire

To ensure validity and reliability of a test instrument, the instruments were developed under closed guidance of my supervisor. Validity is the extent to which the instrument used during the study measures the issues they are intended to measure (Amin, 2005). The questionnaire was pre-tested in Kalivio primary school in the KNWD within the sample which helped to identify ambiguous questions or questions respondents found difficulty answering. Comments from the respondents were used to enrich the questionnaire to re-align them to the objects of the study.

3.9 Validity

Golafshani (2003) suggests various ways of ensuring the validity of a study. For example, the validity of the quantitative data "are addressed through the honesty, depth, richness and scope of the data achieved (600-602)." However, one hundred per cent

validity must not be expected. Validity deals with how well an instrument measures what the researcher intends to measure. Content validity deals with designed questionnaire items, which focus on the key variables. In addition, validity narrates the ability of the respondents to answer the questions listed on the data collection instrument. The respondents in this study were the head masters and teachers who had the ability to answer the questionnaire. At the same time, the researcher would take care to choose words to ensure the clarity of the instruments and relevance of this study to ensure that the validity and consistency of data collection tools were appropriate for this study.

3.10 Reliability

Golafshani (2003), reliability is perceived by scholars as the stability of response to a data collection tool regardless of the number of times the tool is administrated to the same respondents. Cohen, Manio, Morrison & Morrison (2013) explain that the words *reliability* and *consistency* basically have the same meaning. Therefore, it is possible to generalise that validity is the ability of respondents to answer the questions by providing data and reliability is how the questionnaires are answered consistently. According to Huang (2014) in Hansson and Lagerkvist (2012,746-748), the Cronbach alpha of a study of 0.6 is acceptable in case study research, such as in this research. This links closely with Nunnally (1985) as used in Huang (2004) that states that the Cronbach alpha result can be 0.7 hence Cronbach's alpha of 0.6 from the researcher analysis was considered adequate in the research to ensure internal consistency of the questionnaire for mass distribution.

3.11 Data Analysis

Data analysis played a major part in the completion of this study. Data was reviewed after the collection of filled questionnaires and compilation of data from the interview was performed. A critical analysis was done after which the data was interpreted and graphically represented. Quantitative analysis of data was conducted. Quantitative methods involves proceeding for the positivist assumption that, if something exists, it exists in some degree and can therefore be numerically measured. Quantitative methods were more of open-ended and required the researcher to elaborate with words convincingly, concerning the motive. The approaches for quantitative analysis of data involved data reduction, coding, tabulation and calculation of summarizing statistics. Microsoft Excel and Statistical Package for Social Studies (SPSS) was used. The scores for all questions were summed up and the average score taken.

3.12 Ethical Considerations

The researcher therefor followed a number of guidelines in research such as, seeking informed consent of the respondent and making it known to them their participants in the questionnaire was volunteer. The researcher also agreed with the researcher that the information provided will be used for academic purposes only and shall be treated with the utmost confidentiality it deserves.

3.13 Profile of Study Area

The Kassena-Nankana West District is one of the thirteen districts in the Upper East Region of Ghana. It was carved out of the Kassena Nankana Municipal in 2007 and inaugurated on Friday, 29 February 2008. The Local Government Instrument which

established the district is Legislative Instrument (L.I) 1855. The paramount aim of creating this Assembly was to bring the business of governance to the doorsteps of the ordinary Ghanaian. It is located approximately between latitude 10.97° North and longitude 01.10° West. The district has a total land area of approximately 1,004 sq. km. The Kassena-Nankana West District shares boundaries with Burkina Faso to the north, Bongo District to the north-east, Bolgatanga Municipal to east, Kassena Nankana Municipal to the south, Bulsa District south-west and Sissala East District to the west.

The population of Kassena Nankana West District, according to the 2010 Population and Housing Census, is 70,667 representing 6.8 percent of the region's total population. Males constitute 50.8 percent and females represent 49.2 percent. Seventy nine percent of the population is rural. The district has a sex ratio of 96.7. The population of the district is youthful (47.9%) depicting a broad base population pyramid which tapers off with a small number of elderly persons (7.3%). The total age dependency ratio for the District is 83.4, the age dependency ratio for males is higher (87.7) than that of females (78.5).

The district has a household population of 69,965 with a total number of 12,813 households. The average household size in the district is 5.5 persons per household. Children constitute the largest proportion of the household structure accounting for 47.9 percent. Spouses form about 10.6 percent. Nuclear households (head, spouse(s) and children) constitute 26.1 percent of the total number of households in the district.

About four in ten (46.4%) of the population aged 12 years and older are married, 40.4 percent have never married,0.4 percent are in consensual unions, 8.7 percent are widowed, 1.7 percent are divorced and 2.4 percent are separated. By age 25-29 years, more than half of females (68.8%) are married compared to a little over forty two percent of males (42.3%). At age 65 and above, widowed females account for as high

as 58.2 percent while widowed males account for only 11.8 percent. Among the married, 71.7 percent have no education while about 16.8 percent of the unmarried have never been to school. More than half of the married population (59.1 percent) are employed, 42.8 percent are unemployed and 18.3 percent are economically not active. A greater proportion of those who have never married (69.9%) are economically not active with 45.5 percent unemployed. The proportion of Ghanaians by birth in the district is 95.5 percent. Those who have naturalised constitute 0.7 percent and the non-Ghanaian population in the district is 2.1 percent.

Of the population 11 years and above, 50.2 percent are literate and 49.8 percent are non-literate. The proportion of literate males is higher (57.5 %) than that of females (433%). Five out of ten people (68.9%) indicated they could speak and write both English and Ghanaian languages. Of the population aged 3 years and above (110,282) in the district, 41.8 percent has never attended school, 42.2 percent are currently attending and 16.0 percent have attended in the past.

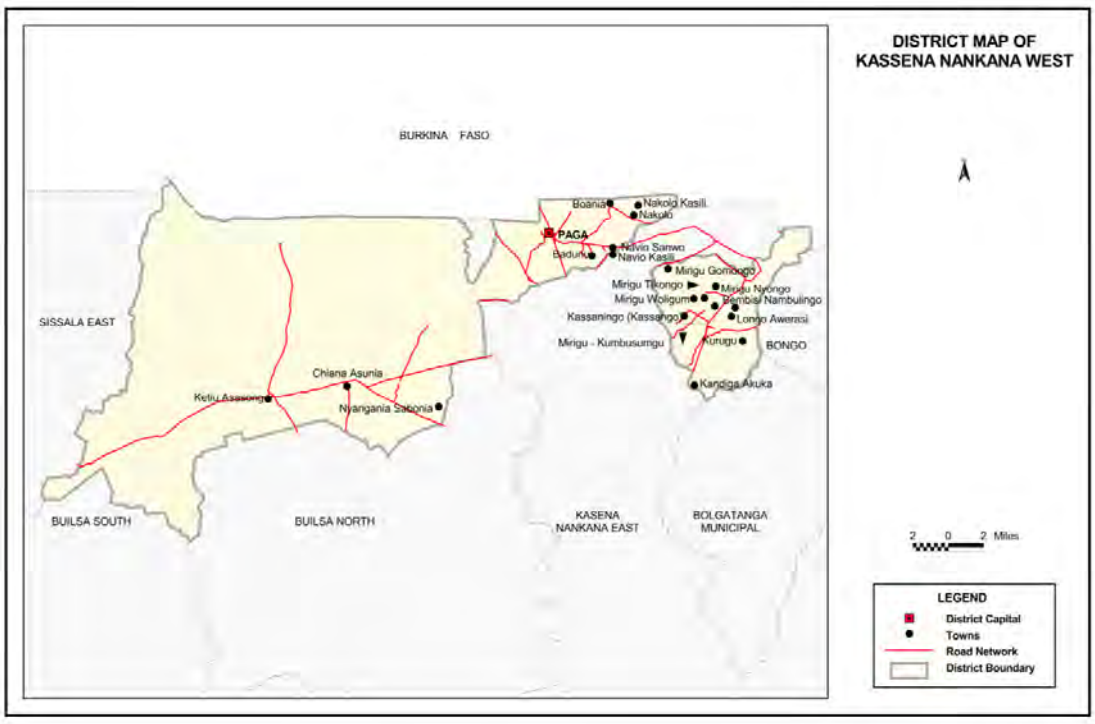

Figure 3.1: District map of Kassena Nankana West District

Source: Ghana Statistical Service, 2010 Population and Housing Census

CHAPTER FOUR

RESULTS AND DISCUSSIONS

4.0 Introduction

The study sought to assess the effects of Ghana school feeding program on enrolment and retentionof pupils in schools in the Kassena-Nankana West District. The following specific objectives used for the study includes investigating the effects of Ghana school feeding programme on enrollment rates of pupils in selected basic

schools in KNWD, assessing the effects of Ghana school feeding programme on retention rates of pupils in selected basic schools in KNWD, identifying the challenges facing Ghana school feeding programme in selected Basic schools within the KNWD and establishing the impact of SFP on pupils academic performance in the KNWD. The analysis of the study was based on these research objectives.

4.1 Response Rate of the Respondents

The researcher sent 250 (SFPS=169, NSFPS= 81) questionnaires to the field to gather primary data. However, out of the 250 questionnaires sent out for primary data, 246 (SFPS= 168, NSFPS=78) questionnaires were received while 4 questionnaires were not received. Therefore, the analysis of the study was based on 98% response rate as shown in Figure 4.1 below.

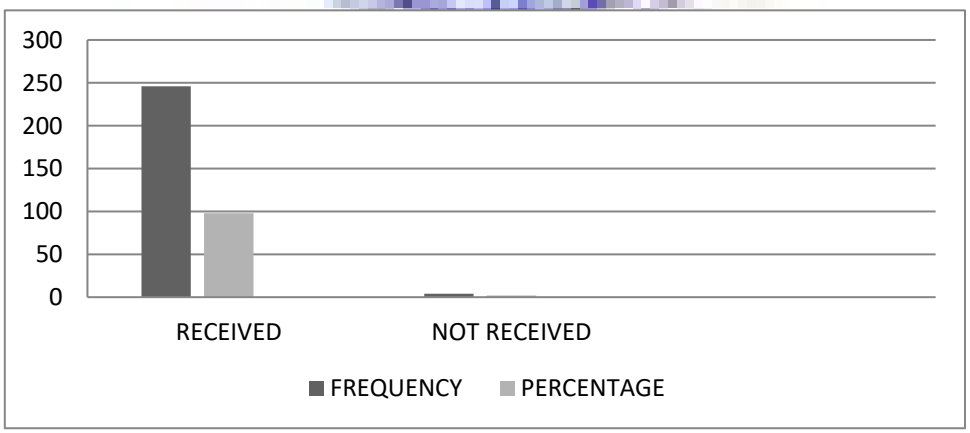

Figure 4.1: Response rate of the questionnaires

4.2 Demographic Characteristics of Study Participants

Table 4.1 gives results on the demographic characteristics of the respondents used for the study, including the respondent's gender, age categories, highest academic qualification and working experience of the respondents.

Table 4.1: Demographic Characteristics of Study Participants

		Number of Respondents	
Characteristic	**Sub-character**	**Teachers from NSFPS**	**Teachers from SFPS**
Gender	Male	54 (69.23)	95 (57)
	Female	24 (30.77)	73 (43)
Age (Years)	Below 25	18 (23.08)	9 (5.4)
	25 – 30	25 (32.05)	56 (33.3)
	Above 30	35 (44.87)	103 (61.3)
Educational qualification	Basic	0	0
	Diploma	35 (44.87)	80 (47.6)
	Bachelor's	27 (34.62)	56 (33.3)
	Masters	16 (20.51)	32 (19.1)

n=246, Source: Field survey, (2018)

Table 4.1 shows that 54 teachers from NSFPS representing 69.23% were males while 24 teachers from NSFPS representing 30.77% were females. Moreover, 95 teachers from SFPS representing 57% were males while 73 teachers from SFPS representing 43% were females. Moreover, 35 teachers from NSFPS representing 44.87% were above 30 years, 25 teachers from NSFPS representing were between 25-30 years, 18 teachers from NSFPS representing 23.08% were below 25 years while 103 teachers from SFPS representing 61.3% were above 30 years, 56 teachers from SFPS representing 33.3% were between the age category 25-30 years, and 9 teachers from

SFPS representing 5.4% were below 25 years. Furthermore, 35 teachers from NSFPS representing 44.87% were holding Diploma as their highest academic qualification, 27 teachers from NSFPS representing 34.62% were holding Bachelor's degrees, 16 teachers from NSFPS representing 20.51% were possessing Masters degrees while 80 teachers from SFPS representing 47.6% were possessing Diplomas, 56 teachers from SFPS representing 33.3% were holding Bachelor's degrees, while 32 teachers from SFPS were holding Masters degrees as their highest academic certificates.

4.3 What is the Effect of Ghana School Feeding Programme on Enrollment Rates of Pupils in Selected Basic Schools in KNWD?

The first objective of the study was to assess the effects of Ghana school feeding programme on enrollment rates of pupils in selected basic schools in KNWD. Table 4.2 assessed the effects of Ghana school feeding programme on enrollment rates of pupils in selected basic schools in KNWD.

Table 4.2: SFP Beneficiary and NSFP Beneficiary pupil's enrolment rate

Beneficiary schools	**2015/2016**	**2016/2017**	**2017/2018**
Kalivio Primary School	480	502	508
Mirigu Primary School	720	720	725
Kayaro Primary School	560	572	581
Christ the King Primary School	780	783	783
Non-Beneficiary schools	**2015/2016**	**2016/2017**	**2017/2018**
Ayagetam primary school	430	480	480
Abulu primary school	422	423	401
Katiu primary school	525	523	522
Yidania primary school	421	408	408

Source: Field survey, (2018)

Table 4.2 reveals that in Kalivio Primary school the pupils' enrollment rate increased from 480 in the 2015/2016 academic year, 502 in 2016/2017 academic year and 508 in 2017/2018 academic year respectively. Furthermore, in Mirigu primary school the pupils enrollment rate increased from 720 in the 2016/2017 academic year, 720 in the 2016/2017 academic year and 725 in the 2017/2018 academic year respectively. Also in Kayaro primary school the pupils enrollment rate increased from 560 in the 2015/2016 academic year, 572 in the 2016/2017 academic year, and 581 in the 2017/2018 academic year. Moreover, Christ the King primary school the pupils enrollment rate increased from 780 in the 2015/2016 academic year, 783 in the 2016/2017 academic year, and 783 in the 2017/2018 academic year.

Furthermore, in Ayegetam Primary school the pupil's enrollment rate increased from 430 in the 2015/2016 academic year, 480 in 2016/2017 academic year and 480 in 2017/2018 academic year respectively. Furthermore, in Abulu primary school the pupil's enrollment rate increased from 422 in the 2016/2017 academic year, 423 in the 2016/2017 academic year and decreased to 401 in the 2017/2018 academic year respectively. Also in Katiu primary school the pupil's enrollment rate increased from 525 in the 2015/2016 academic year, 523 in the 2016/2017 academic year, and 522 in the 2017/2018 academic year. Moreover, Yidania primary school the pupil's enrollment rate increased from 421 in the 2015/2016 academic year, 408 in the 2016/2017 academic year, and 408 in the 2017/2018 academic year.

These findings support UNHTF (2003), which revealed that school meals keep children in school more frequently. For instance, parents feel that children who do eat breakfast are absent from school less (UNHTF, 2003). This leads to decreased rates of absence and tardiness. Nutritionally at risk students significantly had lower grades than

students not classified as being at risk; with the introduction of SFP. Students whose nutritional risk decreased significantly saw greater improvement in academic performance than students who did not see a decrease in their nutritional risk (UNHTF, 2003). Secondly, pupils who suffer stress and amount of sleep also have great influences on students' performances because it affects their health (UNHTF, 2003).

4.4 What is the Effect of Ghana School Feeding Programme on Retention Rates of Pupils in Selected Basic Schools in KNWD?

The second objective of the study was to evaluate the effects of Ghana school feeding programme on retention rates of pupils in selected basic schools in KNWD. Table 4.3 shows the effects of Ghana school feeding programme on retention rates of pupils in selected basic schools in KNWD.

Table 4.3: The effects of Ghana school feeding programme on retention rates of pupils in selected basic schools in KNWD

Beneficiary schools	**2015/2016**	**2016/2017**	**2017/2018**
Kalivio Primary School	70%-89%	70%-89%	70%-89%
Mirigu Primary School	70%-89%	>90%	>90%
Kayaro Primary School	50%-69%	50%-69%	70%-89%
Christ the King Primary School	70%-89%	>90%	>90%
Non-Beneficiary schools	**2015/2016**	**2016/2017**	**2017/2018**
Ayagetam primary school	50%-69%	< 50%	< 50%
Abulu primary school	< 50%	50%-69%	50%-69%
Katiu primary school	< 50%	< 50%	50%-69%
Yidania primary school	< 50%	< 50%	50%-69%

Source: Field survey, (2018)

Table 4.3 indicates that the pupils' retention rate in Kalivio primary school was between 70%-89% in the 2015/2016 academic year, 70%-89% in the 2016/2017 academic year and 70%-89% in the 2017/2018 academic year. Moreover, retention rate in Mirigu primary school rose from 70%-89% academic year to >90% in the 2016/2017, 2017/2018 academic years respectively. Furthermore, in Kayaro primary school pupils retention rate decreased from 50%-69% in the 205/2016, 2016/2017 academic year and rose to 700%-89% in the 2017/2018 academic year. Also, pupils retention rate in Yidania primary school rose from 70%-89% in the 2015/2016 academic year and >90% in the 2016/2017 and 2017/2018 academic years.

This means that indeed school feeding programme improves pupil's school participation. These findings agree with Arhin (2015) who revealed that from the Ghanaian perspective a lot of successes have been chalked as well. Arhin (2015) indicates that since the inception of the GSFP, public basic schools benefitting from the programme have recorded an appreciable increment in enrolment of pupils. According to Oduro-Ofori and Yeboah-Gyapong (2014), the GSFP has reduced the level of primary School drop-out in the Kwaebibrim District in the Eastern Region since it serves as a motivational tool for primary children to stay in school. A study conducted on the GSFP in the Garu-Tempane District in Ghana revealed that the programme increased gross enrollment rate by 24% among participating schools but decreased by 7% in non-participating schools (Bukari & Hajara, 2015). The Ghana News Agency (2014) observed an increment of pupils from 413,493 since the implementation of the GSFP in the year 2006/2007 to 1,739,352 pupils in 2013/2014.

However, in Ayegetam primary schools pupils retention rate rose from 50%-69% and decreased to < 50% in the 2016/2017, 2017/2018 academic years respectively. Furthermore, in Abulu primary school pupil's retention rate decreased from < 50% in

the 2015/2016 academic year and increased to 50%-69% in the 2016/2017 and 2017/2018 academic year respectively. Moreover, in Katiu primary school pupil's retention rate decreased to < 50% in the 2015/2016 and 2016/2017 academic year and increased to 50%-69% in the 2017/2018 academic year. Finally, in Yidania primary school, pupil's retention rate decreased to < 50% in the 2015/2016/2016/2017 academic years respectively and increased to 50%-69% academic year.

These results are in agreement with Levinger (2006), he asserted that the impact of school feeding on attendance in Bangladesh was evaluated and found that the SFP has a statistically significant positive impact and the programme showed an increment of class attendance of participating pupils by 1.34 days per month. However, class attendance from school registers showed attendance increased in both programme and control schools during this period, and that the increase was 1.1 percentage points higher in programme schools Case, (2010).

In spite of the challenges some notable successes have been chalked by the programme. These successes are enumerated by Quaye *et al.*, (2010) in five regions in Ghana:

- Increased school enrolment by 20% in pilot schools (WFP).
- Reduction in truancy and absences, improved punctuality.
- Reduced dropout rates.
- Improved school performance.
- Reduction in the number of children reported sick to the school authority.
- Opportunities for local employment for school food vendors, cooks, and programme administrators.
- Integration of nutrition education into school curriculum.

4.5 What is the challenges facing Ghana School Feeding Programme in Selected Basic Schools within the KNWD?

The third objective of the study identified the challenges facing Ghana school feeding programme in selected Basic schools within the KNWD. Table 4.4 assessed the challenges facing Ghana school feeding programme in selected Basic schools within the KNWD.

Table 4.4: The challenges facing Ghana school feeding programme

Statement(s)	Cat	SA n(%)	A n(%)	D n(%)	SD n(%)	Total n(%)
In Ghana the release of funds for the programme has been inconsistent	SFPS	76(45.2)	66(39.3)	18(10.7)	8(4.8)	168(100)
	NSFPS	72(92.3)	6(7.7)	-	-	78(100)
A delay in the release of feeding grants subsequently affects beneficiary pupils	SFPS	90(53.6)	63(37.5)	13(7.7)	2(1.2)	168(100)
	NSFPS	71(91)	7(9)	-	-	78(100)
Evidences from the schools on SFP shows that facilities for sanitation and hygiene are not up	SFPS	89(53)	50(29.8)	22(13.1)	7(4.2)-	168(100)
to the required standard.	NSFPS	57(73.1)	18(51.4)	3(3.8)	-	78(100)
Lack of water and unhygienic practices among caterers and children affect the SFP	SFPS	39(23.2)	92(54.8)	28(16.7)	9(5.4)	168(100)
	NSFPS	62(79.5)	9(11.5)	7(9)		78(100)
Political party favouritism within the school feeding programme remains a persistent challenge	SFPS	37(22)	100(59.5)	27(16.1)	4(2.4)	168(100)
	NSFPS	53(67.9)	16(20.5)	9(11.5)	-	78(100)
Lack of kitchens, storage and dining halls in SFP schools	SFPS	131(78)	20(11.9)	10(6)	7(4.2)	168(100)
	NSFPS	52(66.7)	14(17.9)	12(15.4)	-	78(100)
Inadequate/irregular food portions and lack of training in hygiene and nutrition for school	SFPS	79(47)	52(31)	37(22)		168(100)
cooks	NSFPS	9(11.5)	62(79.5)	7(9)		78(100)
lack of sanitation facilities and regular safe water supply (a large proportion of school are	SFPS	45(26.8)	63(37.5)	44(26.2)	16(9.5)	168(100)
without poly tanks)	NSFPS	52(66.7)	12(15.4)	14(17.9)		
Difficulties in monitoring cooking done outside the school	SFPS	50(29.8)	89(53)	22(13.1)	7(4.2)	168(100)
	NSFPS	62(79.5)	9(11.5)	7(9)		
Cooks paid irregularly and low community involvement	SFPS	90(53.6)	63(37.5)	13(7.7)	2(1.2)	168(100)
	NSFPS	35(44.9)	30(38.5)	13(16.7)	-	78(100)
Increasing school enrolment without commensurate increases in food supply, number of	SFPS	89(53)	50(29.8)	22(13.1)	7(4.2)	168(100)
classrooms and teachers	NSFPS	38(48.7)	22(28.2)	18(23.1)	-	78(100)

n=246, Source: Field survey, (2018)

Table 4.4 revealed that 76 teachers from SFPS representing 45.2% strongly agreed that in Ghana the release of funds for the programme has been inconsistent, 66 teachers from SFPS representing 39.3% agreed, 18 teachers from SFPS representing 10.7% disagreed, 8 teachers from SFPS representing 4.8% strongly disagreed while 72 teachers from NSFPS representing 92.3% strongly agreed that in Ghana the release of funds for the programme has been inconsistent, while 6 teachers from NSFPS representing 7.7% agreed. Moreover, 90 teachers from SFPS representing 53.6% strongly agreed that a delay in the release of feeding grants subsequently affects beneficiary pupils, 63 teachers from SFPS representing 37.5% agreed, 13 teachers from SFPS representing 7.7% disagreed, while 71 teachers from NSFPS representing 91% strongly agreed that a delay in the release of feeding grants subsequently affects beneficiary pupils, while 7 teachers from NSFPS representing 9% agreed.

Moreover, 89 teachers from SFPS representing 53% strongly agreed that evidence's from the schools on SFP shows that facilities for sanitation and hygiene are not up to the required standard, 50 teachers from SFPS representing 29.8% agreed, 22 teachers from SFPS representing 13.1% disagreed, 7 teachers from SFPS representing 4.2% strongly disagreed, 57 teachers from NSFPS representing 73.1% strongly agreed that evidence's from the schools on SFP shows that facilities for sanitation and hygiene are not up to the required standard, 18 teachers from NSFPS representing 51.4% agreed, while 3 teachers from NSFPS representing 3.8% disagreed. Furthermore, 92 teachers from SFPS representing 54.8% agreed that lack of water and unhygienic practices among caterers and children affect the SFP, 39 teachers from SFPS representing 23.2% strongly agreed, 28 teachers from SFPS representing 16.7% disagreed, 9 teachers from SFPS representing

5.4% strongly disagreed, 62 teachers from NSFPS representing 79.5% strongly agreed that lack of water and unhygienic practices among caterers and children affect the SFP, 9 teachers from NSFPS representing 11.5% agreed, while 7 teachers from NSFPS representing 9% disagreed.

Also, 100 teachers from SFPS representing 59.5% agreed that political party favouritism within the school feeding programme remains a persistent challenge, 37 teachers from SFPS representing 22% strongly agreed, 27 teachers from SFPS representing 16.1% disagreed, 4 teachers from SFPS representing 2.4% strongly disagreed, compared to 53 teachers from NSFPS representing 67.9% strongly agreed that political party favouritism within the school feeding programme remains a persistent challenge, 16 teachers from NSFPS representing 20.5% agreed, while 9 teachers from NSFPS representing 11.5% disagreed. To add more, 131 teachers from SFPS representing 78% strongly agreed that lack of kitchens, storage and dining halls in SFP schools can affect SFP, 20 teachers from SFPS representing 11.9% agreed, 10 teachers from SFPS representing 6% disagreed, 7 teachers from NSFPS representing 4.2% teachers from SFPS representing strongly disagreed, compared to 52 teachers from NSFPS representing 66.7% strongly agreed that lack of kitchens, storage and dining halls in SFP schools, 14 teachers from NSFPS representing 17.9% agreed, while 12 teachers from NSFPS representing 15.4% disagreed.

Furthermore, 79 teachers from SFPS representing 47% strongly agreed that inadequate/irregular food portions and lack of training in hygiene and nutrition for school cooks affected the SFP, 52 teachers from SFPS representing 31% agreed, 37 teachers from SFPS representing 22% disagreed, 62 teachers from NSFPS representing 79.5% agreed

that inadequate/irregular food portions and lack of training in hygiene and nutrition for school cooks, 9 teachers from NSFPS representing 11.5% strongly agreed, while 7 teachers from NSFPS representing 9% disagreed. The study results revealed that 63 teachers from SFPS representing 37.5% agreed that lack of sanitation facilities and regular safe water supply (a large proportion of school are without poly tanks) affects SFP, 45 teachers from SFPS representing 26.8% strongly agreed, 44 teachers from SFPS representing 26.2% disagreed, 16 teachers from SFPS representing 9.5% strongly disagreed, 52 teachers from NSFPS representing 66.7% strongly agreed that lack of sanitation facilities and regular safe water supply (a large proportion of school are without poly tanks) affects SFP, 14 teachers from NSFPS representing 17.9% disagreed, while 12 teachers from NSFPS representing 15.4% agreed.

To add more, 89 teachers from SFPS representing 53% agreed that difficulties' in monitoring cooking done outside the school negative affect SFP, 50 teachers from SFPS representing 29.8% strongly agreed, 22 teachers from SFPS representing 13.1% disagreed, 7 teachers from SFPS representing 4.2% strongly disagreed, 62 teachers from NSFPS representing 79.5% strongly agreed that difficulties' in monitoring cooking done outside the school is a challenge, 9 teachers from NSFPS representing 11.5% agreed, while 7 teachers from NSFPS representing 9% disagreed. Also, 90 teachers from SFPS representing 53.6% strongly agreed that cooks paid irregularly and low community involvement can affect the SFP, 63 teachers from SFPS representing 37.5% agreed, 13 teachers from SFPS representing 7.7% disagreed, 2 teachers from SFPS representing 1.2% strongly disagreed, 35 teachers from NSFPS representing 44.9% strongly agreed that cooks paid irregularly and low community involvement can affect the SFP, 30 teachers from

NSFPS representing 38.5% agreed, while 13 teachers from NSFPS representing 16.7% disagreed.

The study results indicate that 89 teachers from SFPS representing 53% strongly agreed that increasing school enrolment without commensurate increases in food supply, number of classrooms and teachers affected SFP, 50 teachers from SFPS representing 29.8% agreed, 22 teachers from SFPS representing 13.1% disagreed, 7 teachers from SFPS representing 4.2% strongly disagreed, 38 teachers from NSFPS representing 48.7% strongly agreed that increasing school enrolment without commensurate increases in food supply, number of classrooms and teachers can affect SFP, 22 teachers from NSFPS representing 28.2% agreed, while 18 teachers from NSFPS representing 23.1% disagreed.

This findings agrees with Quaye, et al., (2010), they reviewed school feeding programmes in 5 regions in Ghana by the Netherlands Development Organization revealed that regional/district/school partnerships and organizational mechanisms were limited, and many schools lacked a functional school implementation committee. Quaye, et al., (2010) summarizes the challenges as follows:

- Lack of kitchens, storage, and dining halls in GSFP schools.
- Insufficient supply of food to schools, creating inadequate/irregular food portions.
- Lack of training in hygiene and nutrition for school cooks.
- Lack of sanitation facilities and regular safe water (a large proportion of schools are still without poly tanks).
- Inadequate resources for students following influx of attendees in response to school feeding programmes.
- Varying degrees of linkage to local farmers/local food supply for food procurement.

- Difficulties in monitoring cooking done outside the school.
- Lack of transparency in records of food supply and payment procedures.
- Students not receiving daily meal, lack of communication with parents.
- Cooks paid irregularly.
- Low community involvement.
- High regional disparity in the allocation of beneficiary schools.
- Lack of preparedness of most districts to pre-finance supplies.
- Increasing school enrolment without commensurate increases in food supply, number of classrooms and teachers.

4.6 What is the Effect of Ghana School Feeding Programme on Students' Academic Performance in the KNWD?

Analysis of the questionnaires for the class teachers of school feeding programme beneficiary schools

The researcher sent 168 questionnaires to the class teachers of school feeding programme beneficiary schools in the KNWD. The analysis of the outcome of the questionnaires distribution are analysed below. The pupils academic performance in English language, Mathematics and Information and Communication Technology in the academic years 2015/ 2016, 2016/2017, 2017/2018 were analysed below.

Table 4.5: SFP Beneficiary pupil's academic performance

English Language (Academic Year)	Excellent	Average	Poor	Total
2015/2016	78	50	40	168
2016/2017	80	53	35	168

2017/2018	85	52	31	168
Total	243	155	106	504
Percentage	48.2	30.8	21	100
Mathematics (Academic Year)	**Excellent**	**Average**	**Poor**	**Total**
2015/2016	54	85	29	168
2016/2017	62	76	30	168
2017/2018	59	82	27	168
Total	175	243	86	504
Percentage	34.7	48.2	17.1	100
Information and Communication Technology (Academic Year)	**Excellent**	**Average**	**Poor**	**Total**
2015/2016	45	87	36	168
2016/2017	57	65	46	168
2017/2018	66	79	23	168
Total	168	231	105	504
Percentage	33.3	45.8	20.9	100

n=168, Source: Field survey, (2018)

Table 4.5 shows results of responses from the teachers of beneficiary pupils on the academic performance of the beneficiary pupils in English language. Out of 504 responses, majority 243 responses representing 48.2% indicated that pupils performance in English language in the academic years 2015/ 2016, 2016/2017, 2017/2018 were excellent. Moreover, out of the 504 responses 155 responses representing 30.8% said that pupil's academic performance was average while minority 106 responses representing 21% said that pupils performance in English language was poor.

Furthermore, the study depicts results of responses from the teachers of beneficiary pupils on the academic performance of the beneficiary pupils in Mathematics subject. Out of 504 responses, majority 243 responses representing 48.2% indicated that pupil's performance in Mathematics subject in the academic years 2015/ 2016, 2016/2017,

2017/2018 were average. Moreover, 175 responses representing 34.7% passed with excellent marks, while 86 responses representing 17.1% had poor academic performance in mathematics. Moreover, Out of 504 responses, majority 231 responses representing 45.8% indicated that pupil's performance in ICT subject in the academic years 2015/ 2016, 2016/2017, 2017/2018 were average.

This finding agrees with Badri (2014), who asserted that it has been well documented in both developed and developing countries that school feeding with the right amount of quality ingredients have gone a long way to improve on pupil's performance. Badri (2014) explains how in the USA the school feeding has improved on pupil's academic performance, especially in mathematics and to some extent history based on the amount of calories in the food served them. From India, Harounan *et al.,* (2012) report that the national meal program saw an increment in girls' attendance and a slight increase in school enrollment. A study conducted in Burkina Faso shows increase in enrolment of girls due to the cereals take- home rations (WB, 2012). Highlighting a similar account from Mali, Hoof (2014) indicates that SFPs especially in the Northern part of Mali witnessed a significant percentage of student enrollment. SFPs enticed pupils to get to school early since they are served with food before classes commence.

4.7 Analysis of the Questionnaires for the Class Teachers of Non-School Feeding Programme Beneficiary Schools

The researcher sent 78 questionnaires to the class teachers of non-school feeding programme beneficiary schools in the KNWD. The results of the questionnaires distribution are analysed below. The pupils' academic performance in English language,

Mathematics and Information and Communication Technology in the academic years 2015/ 2016, 2016/2017, 2017/2018 were analysed below.

Table 4.6: NSFP Beneficiary pupil's academic performance

English Language (Academic Year)	**Excellent**	**Average**	**Poor**	**Total**
2015/2016	19	31	28	78
2016/2017	25	37	16	78
2017/2018	23	29	26	78
Total	67	97	70	234
Percentage	28.6	41.5	29.9	100
Mathematics (Academic Year)	**Excellent**	**Average**	**Poor**	**Total**
2015/2016	20	28	30	78
2016/2017	23	38	17	78
2017/2018	26	27	25	78
Total	69	93	72	234
Percentage	29.5	39.7	30.8	100
Information and Communication Technology (Academic Year)	**Excellent**	**Average**	**Poor**	**Total**
2015/2016	19	31	28	78
2016/2017	25	37	16	78
2017/2018	23	29	26	78
Total	67	97	70	234
Percentage	28.6	41.5	29.9	100

n= 78, Source: Field survey, (2018)

Table 4.3 indicates the results of responses from the teachers of non-beneficiary pupils on the academic performance of the beneficiary pupils in English language. Out of 234 responses, majority 97 responses representing 41.5% indicated that pupils performance in English language in the academic years 2015/ 2016, 2016/2017, 2017/2018 were average. Moreover, out of the 234 responses 70 responses representing 29.9% said that

pupils' academic performance was poor while minority 67 responses representing 28.6% said that pupils performance in English language was excellent.

To add more, the study shows results of responses from the teachers of non-beneficiary pupils on the academic performance of the beneficiary pupils in Mathematics subject. Out of 234 responses, majority 93 responses representing 39.7% indicated that pupil's performance in Mathematics subject in the academic years 2015/ 2016, 2016/2017, 2017/2018 were average. Moreover, 97 responses representing 41.5% passed with average marks, while 70 responses representing 29.9% had poor academic performance in mathematics. Moreover, out of 234 responses, majority 97 responses representing 41.5% revealed that pupils' performance in ICT subject in the academic years 2015/ 2016, 2016/2017, 2017/2018 were average.

These finding agrees with the various studies conducted by WFP (2004) that indicated that the SFP has helped the pupils to concentrate at school and perfect their academic performance. Moreover, Levinger (2011) stated that SFP and its fortified meal have improved attendance and performance based on the nutritional content of the meal which has the potency to improve pupils' brain for the learning process. In three Northern regions of Ghana, Mohammed and Sakara (2011) examined that the performance of the pupils had improved when the SFP was initiated in 2007. It had reduced dropout rate among pupils especially the girl-children. Chambers (2001) discusses that an estimated 120 million pupils were beneficiaries to the SFP in India. The daily diet for the pupils' at school has enriched their performance in the country.

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

5.1 Summary

The study assessed the effectiveness of Ghana school feeding program on performance and retention of pupils in schools in the Kassena-Nankana West District. The study used the case study method research design. The total population was 250 respondents in the Kassena Nankana West District. Purposive sampling method was used

to select all the 250 teachers from the selected schools. Quantitative research approach was used. Questionnaires were the main instrument used to gather primary data. Microsoft Excel and Statistical Package for Social Studies (SPSS) would be used. The scores for all questions would be summed up and the average score taken.

5.2 Major Findings of the Study

The first and second objectives of the study investigated the effects of Ghana school feeding programme on enrollment rates of pupils in selected basic schools in KNWD. The study results revealed that the enrollment rate of SFPS rose compared to non-beneficiary school feeding programme schools. To add more, the retention rate of the school feeding programme schools also increased compared to non-beneficiary school feeding programme schools.

The third objective of the study sought to establish the challenges facing Ghana school feeding programme in selected Basic schools within the KNWD. The study results revealed that 76 teachers from SFPS representing 45.2% strongly agreed that in Ghana the release of funds for the programme has been inconsistent while 72 teachers from NSFPS representing 92.3% strongly agreed. Moreover, 90 teachers from SFPS representing 53.6% strongly agreed that a delay in the release of feeding grants subsequently affects beneficiary pupils while 71 teachers from NSFPS representing 91% strongly agreed. Moreover, 89 teachers from SFPS representing 53% strongly agreed that evidences from the schools on SFP shows that facilities for sanitation and hygiene are not up to the required standard while 57 teachers from NSFPS representing 73.1% strongly agreed. Furthermore, 92 teachers from SFPS representing 54.8% agreed that lack of water and unhygienic practices

among caterers and children affect the SFP while 62 teachers from NSFPS representing 79.5% strongly agreed.

Also, 100 teachers from SFPS representing 59.5% agreed that political party favouritism within the school feeding programme remains a persistent challenge compared to 53 teachers from NSFPS representing 67.9% strongly agreed. To add more, 131 teachers from SFPS representing 78% strongly agreed that lack of kitchens, storage and dining halls in SFP schools can affect SFP, compared to 52 teachers from NSFPS representing 66.7% strongly agreed. Furthermore, 79 teachers from SFPS representing 47% strongly agreed that inadequate/irregular food portions and lack of training in hygiene and nutrition for school cooks affected the SFP, while 62 teachers from NSFPS representing 79.5% agreed. The study results revealed that 63 teachers from SFPS representing 37.5% agreed that lack of sanitation facilities and regular safe water supply (a large proportion of school are without poly tanks) affects SFP while 52 teachers from NSFPS representing 66.7% strongly agreed.

To add more, 89 teachers from SFPS representing 53% agreed that difficulties in monitoring cooking done outside the school negative affect SFP while 62 teachers from NSFPS representing 79.5% strongly agreed. Also, 90 teachers from SFPS representing 53.6% strongly agreed that cooks paid irregularly and low community involvement can affect the SFP compared to 35 teachers from NSFPS representing 44.9% strongly agreed. The study results indicate that 89 teachers from SFPS representing 53% strongly agreed that increasing school enrolment without commensurate increases in food supply, number of classrooms and teachers affected SFP while 38 teachers from NSFPS representing 48.7% strongly agreed.

The fourth objective of the study evaluated the effects of Ghana School Feeding programme on students' academic performance in the KNWD. The study shows that the academic performance of the SFPS increased compared to the academic performance of the NSFPS. Also, 48.2% indicated that SFPS pupils performance in English language in the academic years 2015/ 2016, 2016/2017, 2017/2018 were excellent. Moreover, 48.2% indicated that pupil's performance in Mathematics subject in the academic years 2015/ 2016, 2016/2017, 2017/2018 were average. Furthermore, 45.8% indicated that pupil's performance in ICT subject in the academic years 2015/ 2016, 2016/2017, 2017/2018 were average.

The study indicates that in the NSFPS 41.5% indicated that pupils performance in English language in the academic years 2015/ 2016, 2016/2017, 2017/2018 were average. To add more, 39.7% indicated that pupil's performance in Mathematics subject in the academic years 2015/ 2016, 2016/2017, 2017/2018 were average. Also, 41.5% revealed that pupils' performance in ICT subject in the academic years 2015/ 2016, 2016/2017, 2017/2018 were average.

5.3 Conclusions

The study results concluded that the academic performance of the school feeding programme beneficiary schools were better than their counter parts in the non-school feeding programme beneficiary schools. Moreover, the school attendance of the beneficiary pupils was excellent while the school attendance of the non-beneficiary schools were average. This concluded that indeed school feeding programme improved pupils school participation. Moreover, the SFP increased school attendance by lowering the

opportunity cost of attending school and providing additional incentives to engage in formal education, SFP leads to more time spent in school, more time spent towards learning, increased attention span particularly in class and hence enhanced pupils academic performance. Furthermore, SFP alleviated hunger and make children concentrate and learn better so that school performance improved and hence minimized drop out and SFP had a positive effect on rates of enrolment.

To add more, the challenges affecting the implementation of the school feeding programme in KNWD municipality are that in Ghana the release of funds for the programme has been inconsistent, a delay in the release of feeding grants subsequently affects beneficiary pupils, moreover, evidences from the schools on SFP shows that facilities for sanitation and hygiene are not up to the required standard. Moreover, lack of water and unhygienic practices among caterers and children affect the SFP, political party favouritism within the school feeding programme remains a persistent challenge, lack of kitchens, storage and dining halls in SFP schools. To add more, inadequate/irregular food portions and lack of training in hygiene and nutrition for school cooks, lack of sanitation facilities and regular safe water supply (a large proportion of school are without poly tanks), difficulties in monitoring cooking done outside the school, cooks paid irregularly and low community involvement and increasing school enrolment without commensurate increases in food supply, number of classrooms and teachers.

5.4 Recommendations

Based on the major findings and conclusions of the study, the researcher recommended that;

1. The Government of Ghana through the coordinators of the school feeding programme should consistently release funds to sustain the SFP in the Ghanaian schools.
2. The coordinators of the SFP should organise periodic seminars, conferences and training programmes to educate caterers of the SFP regarding hygienic practices that could guarantee the pupils health.
3. There is the need to provide sanitation facilities and regular safe water supply, for example the availability of dustbins and large poly tanks will improve sanitation and regular safe water supply to the SFP caterers.
4. The authorities of the schools should monitor cooking done outside the school to ensure that the consumers are safe to avoid food contamination.
5. The government of Ghana and the coordinators of the SFP should extend the feeding scheme to non-SFP schools to enhance school participation.

5.5 Suggestions for Further Research

According to the limitations of the study, the researcher suggested that a similar study should be conducted to investigate the challenges affecting the implementation of the Ghana school feeding programme using the entire basic schools in the KNWD Region as a case study.

REFERENCES

Abui, A. R. (2013). *School feeding as a mechanism for promoting school enrolment in some selected schools in the Afigya Kwabre District.* Unpublished thesis, University of Education, Winneba.

Adelman, S. W., D. O., Gilligan, & Lehrer, K. (2009). *How effective are food for education programs?* International Food Policy Research Institute.

Afoakwa, O. E. (2009). *Home Grown School Feeding Programme – The Ghanaian Model as Icon for Africa*. University of Ghana, Legon – Accra, Ghana.

Ahmed, A. U. (2004). *Impact of feeding children in school: Evidence from Bangladesh.* Washington, D.C. Mimeo: International Food Policy Research Institute.

Ahmed, A. U., & Billah, C. D. (2004). *The food for education program in Bangladesh: An evaluation of its impact on educational attainment and food security. FCND Discussion Paper 138.* Washington, D.C.: International Food Policy Research Institute.

Amin, K. (2005). *Effects of Ghana School Feeding Programme in selected primary schools in Kasena Nakana East District.* A thesis submitted to the University of Education, Winneba,

Arhin, H. (2015). *Educational and Health Impacts of Two School Feeding Schemes: Evidence from a Randomized Trial in Rural Burkina Faso*. Policy Research Working Paper No. 4976. Washington, D.C.: World Bank.

Badri, E. (2014). Benefits of a school breakfast programme among Andean children in Huaraz, Peru. *Food and Nutrition Bulletin*, *17*(1), 54-64.

Bukari, K. S., & Hajara, D. (2015). *Factors affecting female's participation in education:* The Case of Tocha Woreda in SNNPR. School of Graduate Studies, Addis Ababa, Addis Ababa University.

Bundy, D., & Burbano, C. (2009). *Rethinking school feeding: Social safety nets, child development and the education sector.* Washington, DC: World Food Programme and the World Bank.

Buttenheim, A., Alderman, H., & Friedman, J. (2011). Impact evaluation of school feeding. *International Food Policy Research Institute*. Washington, DC: World Bank.

Case, T. (2010). *Urban school farming to improve school feeding: The case of Nakuru Town, Kenya children.* Youth and Environments, 20(1) Catholic Relief Services, Consultant Report (Unpublished).

Chambers, L. J. (2001). School Feeding Program and its impact on academic achievement in ECDE in Roret Division, Bureti District in Kenya. *Journal of Emerging Trends in Educational Research and Policy Studies (JETERAPS) 4*(3), 407-412.

Cohen, L., Manio, L., Morrison, K., & Morrison, B. B. (2007). *Research methods in education*. London: Routledge.

Creswell, W. J. (2013). *Qualitative inquiry and research design:* Choosing among five approaches. London: Sage Publications.

Del Rosso, J. M. (2009). *School feeding programs: Improving effectiveness, development Goals and Girls' empowerment.*

Ellis, A. U. (2012). *Food for education*: A Review of Program. *International Food Policy Research Institute*. Washington, DC: World Bank.

Food Programme. (2009). Feed Minds, Change Lives: School Feeding. *The Millennium Development Goal*.www.wishh.org/workshops/intl/ghana/ghana07/afoakwa-07.pdf Accessed 20/2/14.

Galloway, B. (2009). *Assessment on the Effects of Child Undernourishment on the Academic Performance of Students in Governmental Primary School: The Case of "Atselibnedingel" Governmental Primary School in Addis Ababa* (Master's Thesis, Addis Ababa University, Addis Ababa, Ethiopia)

Gelli, P. (2016). Schools and skills in developing countries: Education policies and socioeconomic outcomes. *Journal of Economic Literature 40*(2), 436–482.

Golafshani. N. (2013). Understanding reliability and validity in qualitative research. *Qualitative Report, 8*(40), 597-609.

He, F. (2009). *School feeding programs and enrollment:* Evidence from Sri Lanka. Unpublished manuscript, Columbia University.

Hoofi, C. (2015). School Feeding Programs in Developing Countries: Impacts on Children's Health and Educational Outcomes. *Nutrition Review*, *69,* 83-98.

Huang, X. (2004). *Construct validity and reliability.* London: High Education Studies.

Huang. J, Liu, M., & Bowling, N.A, (2014). Insufficient efforts responding: Examining an insidious confound in survey data. *Journal of Applied Psychology, 110*, 828-846

Jacoby, H. G. (2002). Is there an Intrahousehold 'Flyper Effect' Evidence from a School Feeding Programme. *The Economic Journal, 112*(1), 196-221.

Levinger, B. (2016). School Feeding Programs in Less Developed Countries: *An Analysis of actual and potential impact: Bureau for Food and Voluntary Aid.* Washington D.C.: World Bank.

Maslow, A. (1954). *Motivational and personality.* New York: Harper and Row

Mohammed, A. (2014). Assessing Ghana School Feeding Programme on the Enrollment of Beneficiary Schools in the Tamale Metropolitan Assembly of Northern Ghana. *International Journal of Economics, Commerce and Management United Kingdom 2*(10), 23-24.

Moore, E., & Kutze, F. (2008). *Evaluation of the Burkina Faso School Feeding Program*. Catholic Relief Services, Consultant Report. (Unpublished).

Neumann, C., Makudi, E. O., & Nimrod, O. B. (2011). Effects of school feeding intervention on school attendance among school children in rural Kenya.

Nunnally, J. C. (1985). *Psychometry theory* (2nd ed.). New York: McGraw-Hill.

Oniago, M. (2011). *Research on impact of School Feeding Programme on Performance of Children in Bondo Division*. Kenya.

Pollit, E. (2015). Does breakfast make a difference in school? *Journal of the American Dietetic Association, 95*(10), 1134-1139.

Pollitt, Cueto, & Jacoby, D. (2005). Fasting and cognition in well-nourished and under-nourished school children. *American Journal of Clinical Nutrition, 67*, 779-784

Quaye, W., Essegbey, G., Frempong, G., & Ruivenkamp, G. (2010). Understanding the concept of School Feeding Programme. *International Review of Sociology, 20*(3), 427-444.

Ranivnder, K. (2017). Practice, contribution challenges and sustainability of school feeding program in Ethiopia Somalia Region state, Ethiopia. *Journal Human and Social Science, 24*(1), 26-40.

Services, C. R. (2001). *School feeding program in the three poorest regions of Ghana,* 1997-2002.

Simeon, D. T., & Grantham-McGregor, S. (2008). Effects of missing breakfast on the cognitive functions of school children of differing nutritional status. *American Journal of Clinical Nutrition, 49*, 646-653.

UN Millennium Development Goals, Progress Report for Kenya (2005)

UNICEF (2007). Achieving Universal Primary Education in Ghana by 2015: A Reality or Dream? *Division of Policy and Planning Working Papers*, 67-76.

UNICEF, (2006). Information fact sheet. p. 2.

United Nations Development Program, (2003). *Human development report.* New York: World Bank.

Vermeersch, C., & Kremer, M. (2004). *School meals, educational achievement and school competition: Evidence from a randomized evaluation.* London: Prentice-Hall.

WFP and UNICEF. (2005). *The essential package: Twelve interventions to improve the Health and nutrition of school-age children. WFP,* Rome.

WFP, (2004). Improving Food and Nutrition Security through Food for Education Programs in Africa 2004.

WFP, (2010). School meals. Available at http://www.wfp.org/schools_meals Accessed 20/2/I4.

WHO, (2003). School Deworming. At a glance. School Feeding Programme-The Ghanaian Model as Icon for Africa.

World Bank (2006). *Malawi poverty and vulnerability assessment.* Paris: World Bank.

World Food Programme (2001). Annual Report, *WFP Public service* Rome, Italy.

World Food Programme (2008). *Operational contract between the government of Kenya and the WFP Kenya Country Programme.* Nairobi.

World Food Programme (2013). Global school food campaign into school, out of hunger, *WFP public affairs service*. Rome, Italy.

World Food Programme (WFP). (2008). *2008 figures on WFP School Feeding Programmes*. WFP.

APPENDIX A

UNIVERSITY OF EDUCATION, WINNEBA

COLLEGE OF TECHNOLOGY EDUCATION, KUMASI

Questionnaire for Teachers of beneficiary school feeding programme

Dear respondents,

I am a student of UEW, Winneba, and Kumasi Campus conducting a piece of research on GHANA SCHOOL FEEDING PROGRAMME AND ITS EFFECTS ON ENROLLMENT AND RETENTION AMONG SELECTED BASIC SCHOOLS IN THE KASSENA NANKANA WEST DISTRICT. I respectively request that you form part of this research by completing the attached questionnaire. This is seeking to solicit your opinion on the impact of school feeding programme on academic performance of pupil's. Anonymity and non-traceability are assured. It is my fervent hope that you participate in the study. May I thank you for your valuable cooperation.

Section A: Demographic and personal characteristics of the respondents

2. Gender: Male [ ] Female [ ]

3. Age (years): [ ]

4. Marital Status: Married [ ] Single [ ]

5. Educational Qualification:

BECE[ ] SSSCE/WASSCE [ ] Teacher Cert A [ ] Diploma [ ] B.Ed/B.A/B.Sc [ ]

6. Teaching Experience (years) [ ]

Section B: The effects of Ghana school feeding programme on enrollment rates of pupils in selected basic schools in KNWD.

Please tick [√] as appropriate

2a. What is the school pupil enrollment at the beginning 2015/2016 academic year?[ ]

2b. What is the school pupil enrollment at the end 2016/2017 academic year? [ ]

2c. What is the school pupil enrollment at the beginning 2017/2018 academic year? [ ]

Section C: The effects of Ghana school feeding programme on retention rates of pupils in selected basic schools in KNWD

What is the attendance rate of pupils in your school?

2015/2016 academic year. {>90% [ ], 70% -89% [ ], 50% -69% [ ], < 50% [ ]}

2016/2017 academic year. {>90% [ ], 70% -89% [ ], 50% -69% [ ], < 50% [ ] }

2017/2018 academic year. {>90% [ ], 70% -89% [ ], 50% -69% [ ], < 50% [ ] }

Section D: The challenges facing Ghana school feeding programme in selected Basic schools within the KNWD.

Please rate using a scale of 1-5 where 1 represents strongly disagree, 2 represent disagree, 3 represents uncertain, 4 represents agree, 5 represents strongly agree.

The Constraints in Effective Implementation of the SFP	1	2	3	4	5	Total

In Ghana the release of funds for the programme has been inconsistent.						
A delay in the release of feeding grants subsequently affects beneficiary pupils.						
Evidences from schools on SFP shows that facilities for sanitation and hygiene are not up to the required standard.						
Lack of water and unhygienic practices among caterers and children affect the SFP.						
Due to political interference sometimes schools that need to be targeted are excluded from the SFP.						
Political party favouritism within the SFP remains a persistent challenge						
Lack of kitchens, storage, and dining halls in SFP schools.						
Inadequate/irregular food portions and lack of training in hygiene and nutrition for school cooks.						
Lack of sanitation facilities and regular safe water (a large proportion of schools are still without poly tanks)						
Difficulties in monitoring cooking done outside the school.						
Lack of transparency in records of food supply and payment procedures and students not receiving daily meal, lack of communication with parents.						
Cooks paid irregularly and low community involvement.						

High regional disparity in the allocation of beneficiary schools and lack of preparedness of most districts to pre-finance supplies.						
Increasing school enrolment without commensurate increases in food supply, number of classrooms and teachers.						

Section E: The effects of Ghana School Feeding programme on students' academic performance in the KNWD

Please, assess your pupils examination score in core subjects (English Language, Mathematics and Integrated Science) in the promotion (third term) examinations for the 2015/2016, 2016/2017, and 2017/2018 academic years. Please tick.

Core Subject	**Pupils Academic Performance**					
	2015/2016	2016/2017	2017/2018			Average Performance
English language						
Excellent						
Average						
Poor						
Total						
Mathematics						
Excellent						
Average						
Poor						

Total						
Core Science						
Excellent						
Average						
Poor						
Total						

Note: Excellent = (70%-100%), Average = (40%-69%), Poor = (<40%)

APPENDIX B

UNIVERSITY OF EDUCATION, WINNEBA

COLLEGE OF TECHNOLOGY EDUCATION, KUMASI

Questionnaire for Class Teachers of Non-School Feeding Programme Beneficiary School

Dear respondents,

I am a student of UEW, Winneba, and Kumasi Campus conducting a piece of research on "GHANA SCHOOL FEEDING PROGRAMME AND ITS EFFECTS ON ENROLLMENT AND RETENTION AMONG SELECTED BASIC SCHOOLS IN THE KASSENA NANKANA WEST DISTRICT". I respectively request that you form part of this research by completing the attached questionnaire. This is seeking to solicit your opinion on the impact of school feeding programme on academic performance of pupil's. Anonymity and non-traceability are assured. It is my fervent hope that you participate in the study. May I thank you for your valuable cooperation.

Section A: Demographic and personal characteristics of the respondents

2. Gender: Male [ ] Female [ ]

3. Age (years): [ ]

4. Marital Status: Married [ ] Single [ ]

5. Educational Qualification:

BECE [ ] SSSCE/WASSCE [ ] Teacher Cert A [ ] Diploma [ ] B.Ed/B.A/B.Sc [ ]

6. Teaching Experience (years) [ ]

Section A: Demographic and personal characteristics of the respondents

2. Gender: Male [ ] Female [ ]

3. Age (years): [ ]

4. Marital Status: Married [ ] Single [ ]

5. Educational Qualification:

BECE [ ] SSSCE/WASSCE [ ] Teacher Cert A [ ] Diploma [ ] B.Ed/B.A/B.Sc [ ]

6. Teaching Experience (years) [ ]

Section B: The effects of Ghana school feeding programme on enrollment rates of pupils in selected basic schools in KNWD.

Please tick [√] as appropriate

2a. What is the school pupil enrollment at the beginning 2015/2016 academic year?[ ]

2b. What is the school pupil enrollment at the end 2016/2017 academic year? [ ]

2c. What is the school pupil enrollment at the beginning 2017/2018 academic year? [ ]

Section C: The effects of Ghana school feeding programme on retention rates of pupils in selected basic schools in KNWD

What is the attendance rate of pupils in your school?

2015/2016 academic year. {>90% [ ], 70% -89% [ ], 50% -69% [ ], < 50% [ ]}

2016/2017 academic year. {>90% [ ], 70% -89% [ ], 50% -69% [ ], < 50% [ ] }

2017/2018 academic year. {>90% [ ], 70% -89% [ ], 50% -69% [ ], < 50% [ ] }

Section D: The challenges facing Ghana school feeding programme in selected Basic schools within the KNWD.

Please rate using a scale of 1-5 where 1 represents strongly disagree, 2 represent disagree, 3 represents uncertain, 4 represents agree, 5 represents strongly agree.

The Constraints in Effective Implementation of the SFP	1	2	3	4	5	Total
In Ghana the release of funds for the programme has been inconsistent.						
A delay in the release of feeding grants subsequently affects beneficiary pupils.						
Evidences from schools on SFP shows that facilities for sanitation and hygiene are not up to the required standard.						
Lack of water and unhygienic practices among caterers and children affect the SFP.						
Due to political interference sometimes schools that need to be targeted are excluded from the SFP.						
Political party favouritism within the SFP remains a persistent challenge						
Lack of kitchens, storage, and dining halls in SFP schools.						
Inadequate/irregular food portions and lack of training in hygiene and nutrition for school cooks.						

Lack of sanitation facilities and regular safe water (a large proportion of schools are still without poly tanks)						
Difficulties in monitoring cooking done outside the school.						
Lack of transparency in records of food supply and payment procedures and students not receiving daily meal, lack of communication with parents.						
Cooks paid irregularly and low community involvement.						

High regional disparity in the allocation of beneficiary schools and lack of preparedness of most districts to pre-finance supplies.						
Increasing school enrolment without commensurate increases in food supply, number of classrooms and teachers.						

Section E: The effects of Ghana School Feeding programme on students' academic performance in the KNWD

Please, assess your pupils examination score in core subjects (English Language, Mathematics and Integrated Science) in the promotion (third term) examinations for the 2015/2016, 2016/2017, and 2017/2018 academic years. Please tick.

Core Subject	**Pupils Academic Performance**					
	2015/2016	2016/2017	2017/2018			Average Performance
English language						
Excellent						
Average						
Poor						
Total						
Mathematics						

Excellent						
Average						
Poor						
Total						
Core Science						
Excellent						
Average						
Poor						
Total						

Note: Excellent = (70%-100%), Average = (40%-69%), Poor = (<40%)