

UNIVERSITY OF CAPE COAST

EVALUATION OF THE SCHOOL FEEDING PROGRAMME AND PUPILS
ACADEMIC PERFORMANCE IN GHANA: A STUDY OF THE CATHOLIC
RELIEF SERVICE FEEDING PROGRAMME IN SAVELUGU/NANATON
DISTRICT

MOHAMMED ABDUL – KUDUS

2011

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DISTRICT

BY

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DEVELOPMENT

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DECLARATION

Candidate's Declaration

I hereby declare that this dissertation is the results of my fieldwork. It has never been published anywhere for any purpose including for the award of any degree that I am aware of. However, other peoples' works have been consulted and have been dully acknowledged.

Candidate Signature Date

Name: Mohammed Abdul – Kudus

Supervisor's Declaration

I hereby declare that the preparation and presentation of this dissertation was supervised by me in accordance with the guidelines on supervision of dissertation laid down by the University of Cape Coast.

Supervisor's Signature Date

Name: Mr. Justice S. Anoff

ABSTACT

One successful method to ensuring that children attend school on a regular basis is through school feeding programmes. Many different organisations fund school feeding programmes, among them the World Food Programme (WFP) and the World Bank. In Ghana the Catholic Relief Service (CRS) is one such organisation involved with school feeding in the Savelugu/Nanton District. The general objective of the study is to evaluate the CRS intervention of the school feeding programme and its effect on academic performance of pupils in the Savelugu/Nanton district. In this study the Single Subject research design was adopted. One hundred respondents were selected from a population of teachers of beneficiary schools. Questionnaires were used to elicit responses. The major findings as determined from the statistical records available showed that there were three thousand six hundred and one (3,601) children. Out of this total, boys were two thousand and ten (2,010) as the girls were one thousand five hundred and ninety one (1,591).

The respondents attributed some positive effects of the feeding programme including increased in enrolment and retention, improved academic performance, educational access for the girl child and monetary savings for parents. It is recommended that educational infrastructure should be expanded to accommodate the increasing enrolment, reliable source of funding should be secured to sustain the programme and an exit strategy gradually adopted so parents do not feel perpetually dependent on the feeding programme.

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DEDICATION

To my wife Shamawu, my little boy, Sa-ad Terewuni, my Mum and my deceased sister, Nafisa.

TABLE OF CONTENTS

Contents	Page
DECLARATION	ii
ABSTARCT	iii
ACKNOWLEDGEMENTS	iv
DEDICATION	v
TABLE OF CONTENTS	vi
LIST OF TABLES	ix
LIST OF FIGURES	x
LIST OF ACRONYMS	xi
CHAPTER ONE: INTRODUCTION	1
Background to the study	1
Statement of the problem	7
Objectives of the study	7
Research question	8
Justification of the study	8
Organisation of the study	9
CHAPTER TWO: REVIEW OF LITERATURE	10
Introduction	10
Poverty and education	10
School feeding schemes	13
Nutrition and academic performance	15
Impacts of school meals programmes	16

School feeding and academic performance of pupils	18
Empirical Literature on effects of school feeding	22
School feeding scheme of the catholic relief services, school	23
Strengths of CRS/Ghana	28
Effects of school feeding on girl-child education	30
School feeding programme in Brazil and its effect	32
CHAPTER THREE: METHODOLOGY	34
Introduction	34
Study area	34
Demographic characteristics	36
Research design	39
Population of the study	40
Sampling and sampling procedure	40
Research instruments	42
Data collection	43
Data analysis	44
CHAPTER FOUR: RESULTS AND DISCUSSION	45
Introduction	45
Background characteristics of respondent	45
Number of children benefiting from school feeding	46
Effect of feeding on enrolment and retention	46
Relationship between school feeding and academic performance	50
SFP and access to education for the girl-child	52

Effect of CRS school on house-holds	54
CHAPTER FIVE: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS	56
Introduction	56
Summary of findings	56
Conclusions	57
Recommendations	58
REFERENCES	60
APPENDICES	68
Appendix A Questionnaire	68
Appendix B Interview schedule	72

LIST OF TABLES

Table	Page
1. Selection of respondents from circuits and school	42
2. Differences in drop - out rate	49
3. What accounts for the academic progression	50

LIST OF FIGURES

Figure	Page
1. Savelugu/Nanton District Map	35
2. Composite graph showing the differences in class size between two academic years	47
3. Drop out rate in 2006/2007	48
4. Area of girl-child the SF programme has affected	53

LIST OF ACRONYMS

BECE	Basic Education Certificate Examination
CFMC	Community Food Management Committee
CRS	Catholic Relief Service
CWSA	Community Water and Sanitation
DA	District Assembly
FCUBE	Free Compulsory Universal Basic Education
GDP	Gross Domestic Product
GES	Ghana Education Service
GoG	Government of Ghana
GPRS	Ghana Poverty Reduction Strategy
GSFP	Ghana School Feeding Programme
IDT	Inpres Desa Terfringgal
JSS	Junior Secondary School
MLGRDE	Ministry of Local Government and Rural Development
MoESS	Ministry of Education, Science and Sports
MoFA	Ministry of Food and Agriculture
MoFEP	Ministry of Finance and Economic Planing
MoH	Ministry of Health
MOU	Memorandum of Understanding
NEPAD	New Partnership for Africa's Development
PNDC	Provisional National Defense Council
PSC	Programme Steering Committee
PTA	Parent Teacher Association

QUIPS	Quality Improvement in Primary
R/DPS	Regional/District Partner Supervisor
SFP	School Feeding Programme
SHEP	School Health Programme
SMC	School Management Committee
SND	Savelugu Nanton District
USAID	United States Agency for International
WFP	World Food Programme

CHAPTER ONE

INTRODUCTION

Background to the study

The second United Nations Millennium Development Goal is to achieve Universal Primary Education (UPE), more specifically, to “ensure that by 2015, children everywhere, boys and girls alike will be able to complete a full course of primary schooling”(World Bank, 2005: 15). Currently, there are more than 100 million children around the world of primary school age who are not in school. The majority of these children are in regions of sub-Saharan Africa and South Asia and within these countries, girls are at the greatest disadvantage in receiving access to education at the primary school level. Since the Millennium Development Goals were launched, there have been many successes. For example, China, Chile, Cuba, Singapore and Sri Lanka are all examples of developing countries that have successfully completed a campaign towards universal primary education. School access and attendance are factors that can determine the success of a child's education. Attendance promotes academic performance: lack of access to schooling can be extremely detrimental. In a study done to evaluate the relation between school attendance and performance, researchers found that attending less than 100% of classes tended to reduce scholastic performance (Cohn, 2006). When schools are easy to access children are more likely to get an education and consequently, have a financially stable future. An education is an investment for the future and there

is evidence to prove that not attending school on a regular basis will reduce academic performance and consequently a child's opportunity for success.

Despite important achievements, the world is currently not on course to achieve its target of universal primary education (UPE) by 2015. Currently, 56 million children could still be out of school in 2015 and girls will still lag behind boys in school enrolment and attendance. Sub-Saharan Africa is particularly affected as over a quarter of its children of primary school ages were out of school in 2007. It is estimated that there is a \$16.2 billion annual external financing gap between available domestic resources and what is needed to achieve the basic education goals in low income countries, with current aid levels addressing only 15% of that gap and resources are all too often not provided to those countries who need it most and the amounts pledged not fully honoured. Difficulties faced by donors in the sphere of achieving UPE, highlighted by researchers at the Overseas Development Institute, include:

- failings in aid architecture
- the evidence-based case for further investment in basic education has not been made strongly enough
- recipient governments are reluctant to borrow funds for the recurrent costs education entails.

There are approximately 300 million chronically hungry children in the world. One hundred million of them do not attend school, and two thirds of those not attending school are girls. World Food Programme's school feeding formula is simple: food attracts hungry children to school. An education broadens their options, helping to lift them out of poverty (FAO ,2010)

One successful method to ensuring that children attend school on a regular basis is through school feeding programme. Many different organizations fund school feeding programme, among them the World Food Programme and the World Bank. The idea of a school feeding programme is that children are provided with meals at school with the expectation that they will attend school regularly. School feeding programmes have proven a huge success because not only do the attendance rates increase, but in areas where food is scarce and malnutrition is extensive, the food that children are receiving at school can prove to be a critical source of nutrition. School meals have led to improved concentration and performance of children in school. Another aspect of school feeding programme is take home rations. When economic reasons, the need to care for the elderly or a family member suffering from HIV, or cultural beliefs keep a parent from sending their child (especially a female child) to school, these take home rations provide incentives to sending their children to school rather than to work.

The Catholic Relief Service (CRS) is an international non-governmental organization founded by United State of America that has been operating in Ghana since 1950's in the areas of support for schools, hospitals and teacher training colleges. The CRS assistance on School Feeding Programme (SFP) started throughout the country and later concentrated in the three Northern regions in the 1990s. The purpose of the SFP was to assist in improving the education of young children.-----
<http://www.crs.org>. However it is not clear whether the CRS-SFP has had any impact given the intended objective it set for itself most especially on pupils within Savelugu/Nanton District (SND).

Savelugu/Nanton district as part of the northern region has had its fair share of poverty within the whole region given the statistics that seven out of every ten are poor in the region (Ghana LSS, 2000). With unfavorable climatic conditions and unemployment, it is not therefore surprising that, the able bodied young men and women are moving to the urban centres especially Accra and Kumasi in search of unavailable jobs that had resulted in the menace that has now become known as “Kayayoo” syndrome in Ghana.

According to the Northern Regional Director of the Ghana Education Service (GES Tamale, 2008), out of the current school enrolment of 377,328, about 65,599 representing 14.8% are out of school. The worst affected group according to the Director is the girl child, as the enrolment figures of that group continue to dwindle annually. The Regional Director bemoaned the deteriorating enrolment of girls in the various institutions in the region, indicating that the gender parity index had decreased from 0.88 percent in the 2006/2007 academic year to 0.83 percent in the 2007/2008 school year (Daily Guide, May 2008).

School feeding within the district is therefore strategic and has the potential of turning the scales around as the people will be given an alternative to living and also quenches the burning desire for education. There is fair distribution of basic schools within the district with only two Senior Secondary Schools in the district.

Teacher representation though handicapped, is relatively fair with the average of four teachers per primary school given the national statistics as at 2007 (Northern Regional Consolidated Report Review Guide, April 2007). Educational development and access to education is indispensable to any

nation's development. In this respect, agents of both governmental and non-governmental agencies tried to ensure development and access to education. Savelugu/Nanton district where this study is focused is one of the poverty stricken and deprived districts in Ghana.

Background of catholic relief service school feeding programme

CRS/Ghana has been implementing School Feeding programme since 1958, in collaboration with the Catholic Church and thus had more of a humanitarian outlook to it. In 1997, however, CRS decided to streamline its SFP by making it more focused towards specifically increasing enrolment, attendance and retention, especially of girls in primary schools.

Prior to reaching this decision, CRS/Ghana had undertaken an extensive nationwide analysis of the food security situation, examining factors that are causing food insecurity, where the food insecure areas are and unmet needs as a result of food insecurity.

The three regions in the northern part of Ghana are cited in the Ghana Poverty Reduction Strategy 2 (GPRS 2) as still the regions experiencing extreme poverty. These are also the regions with the highest level of malnutrition and stunting among children, highest child morbidity and mortality rates, especially among girls. These guided CRS to limit its focus to the "poorest of the poor" regions of Ghana (CRS, GHANA 1991). The intense economic constraints faced by parents in the northern regions and opportunity costs of sending children, especially girls; to school have a dramatic impact on the demand for children's educational opportunities. According to the GPRS1, in 2000 the primary school enrolment rates in the three northern regions were

only 48 percent, significantly lower than the national average of 77.6 percent. A high percentage of the population remains illiterate. Despite the Government of Ghana's (GoG) Free and Compulsory Basic Education (FCUBE) policy, access to primary education remains a major constraint in the north.

The goal of CRS/Ghana's SFP is to increase school enrolment, attendance and retention of children, especially girls, in the north. Recognising that poverty represents a serious constraint to school enrolment, CRS/Ghana through its SFP, offsets the social and economic costs of education on parents. The SFP is the most extensive of all CRS/Ghana's activities. It reaches an average of 236,092 students per year, in all the thirty four districts of the three northern regions of Ghana. Food assistance is provided through USAID/Food for peace.

Suffice it to state that, probably, the Ghana government is venturing into school feeding at the opportune time given the fact that CRS and WFP are almost winding up their operations in school feeding as an aspect of their programmes and have started collaborating with government to make the exercise a success.

School feeding as a programme, dating back to the late 1950s might have certain relevance to the development of education in northern Ghana in particular but to restate the prime attention of this dissertation is to assess its contribution by CRS to basic schools in the savelugn/nanton district in northern region of Ghana.

Statement of the problem

Education has eluded many people in the northern region of Ghana and Savelugu/Nanton district in particular due to varied factors among which is poverty and the cost of education. The CRS intervened in the district as a way of ameliorating the circumstances of the people. Access to education has generally been difficult for the reasons stated though both parents and wards are all interested in education.

The CRS intervention has been on-going for some time now and its effect on the school children of the district needs to be evaluated so that its strengths and weaknesses could be documented by other districts

One of the interventions used to develop and promote education in the area is the school feeding initiated some decades ago. The focus of this study is to examine the role of school feeding in the development and access to education with specific reference to the role of Catholic Relief Service (CRS).

Objectives of the study

The general objective of the study was to evaluate the CRS intervention of the school feeding programme and its effect on access to education in the Savelugu/Nanton district.

The specific objectives of study seek to:

- Assess pupil's enrolment and retention over the period.
- Examine the relationship of school feeding to the pupils academic performance
- Assess the school feeding programme on house-holds
- Analyse the school feeding programme on the Girl-child

- Examine the challenges of school feeding in the development of the pupil.
- Provide recommendations to stakeholders

Research question

- How has enrolment and retention of pupils changed over time?
- What is the relationship between feeding programme and academic performance?
- What is the school feeding influence on households?
- What is the effect of school feeding on the Girl-child?
- What are the challenges confronting the programme?

Justification of the study

The study has become imperative since the CRS feeding programme has been implemented over a period of time. The intervention was intended to ameliorate the levels of poverty within the district and primarily, make basic education much more accessible to all. This study intends to investigate and appropriately advice those who wish to embark on this same path of intervention within the education sector, the way-forward.

Available literature as will be subsequently captured in chapter two of this dissertation have established correlation between proper feeding and total development of the child. It is established that before feeding programmes were introduced, the physical and cognitive development of the child greatly suffered affecting their educational development. Studies, as will be demonstrated subsequently, have manifested the overwhelming effect of

school feeding on the overall development of the child including physical, cognitive and access to education.

Organisation of the study

The dissertation is organized into five chapters. Chapter one is the introduction consisting of background to the study, problem statement, general objective, specific objectives, research questions and justification of the study; chapter two which is the literature review captures perspectives of related literatures to the study; chapter three is the methodology which is the research design, population, sampling and sampling techniques, data collection methods and sources of data, data analysis; chapter four deals with results and discussions; the final chapter that is chapter five has summary of the study, conclusion and recommendations.

The next chapter will review related literature to the dissertation. The literature to be reviewed will be considered both on available theories and empirical evidence.

CHAPTER TWO

REVIEW OF LITERATURE

Introduction

This chapter seeks to review related literature on school feeding programme from the perspective of relevant theories and empirical evidence and their relationships with educational development and the effect on pupils performance and by extension, households.

Poverty and education

Poverty is still a major challenge in schools in the developing world. Poverty results in hunger and children learning effectively if they are hungry could be a challenge. Malnourished children also have other problems that affect learning. The following quotation from UNICEF captures the situation well:

One third of the developing world's children suffer from protein-energy malnutrition. An estimated 250 000 children a year lose their eyesight because they lack vitamin A. At least 50 million children have impaired development because they lack iodine. Over half the pregnant women in the developing world suffer iron-deficiency anaemia. Millions of infants are exposed to illness, poor growth, and early death by the decline in breastfeeding. Approximately one third of the developing world's children are underweight (UNICEF 1994: 6 – 7). In trying to understand the gap in

academic achievement between white, middle-class students and their lower class counterparts in American schools, Rothstein (2004: 106) argues that “low income and skin colour themselves don’t influence academic achievement, but the collection of characteristics that define social-class differences inevitably influences that achievement”. These characteristics include things like different ways of parenting, disciplining, communicating and expectations. In the South African context poorer parents are likely to spend more time travelling to work, at work and generally work longer hours. Many poor parents do not have formal jobs, which add to the stress levels of the family. Rothstein (2004) also identifies other economic manifestations that impact on achievement of poor learners, these include:

- Poor vision because of health conditions
- Poor nutrition
- Less adequate paediatric health care
- Poor oral hygiene
- Inadequate housing for low income families
- Higher learner mobility

It is also interesting here to look at Lupton (2004) article on the effect that a disadvantaged context can have on teaching. Lupton is concerned with schools in disadvantaged contexts in Britain; she argues that these contexts impact on the organisation and processes of schools. One of the areas of impact is the wide range of abilities within each school, which places additional demands on teachers. Teachers in these circumstances tend to make use of telling rather than writing. Worksheets and copying exercises were also used more regularly in these classes.

Another area of impact in disadvantaged schools is material poverty. The lack of resources limits the range of extra-curricular activities. The assignment of homework had to be considered carefully as hardly any of the learners could be assumed to have learning resources like reference books or computers at home. Learners did not always arrive at lessons with basic equipment like pens or rulers, which meant that valuable lesson time was spent giving out or collecting stationery.

In addition to these external factors, Lupton (2004) argues, that poverty affects the emotional environment. The most distinctive feature of schools in disadvantaged areas according to Lupton was that these schools had a charged emotional environment. “The number of learners who were anxious, traumatised, unhappy, jealous, angry or vulnerable was reported to be much greater than in schools where parents were materially well off, less stressed themselves and more able to secure a stable and comfortable environment for their children” (Lupton 2004: 9).

Teaching in these contexts was draining and demanded more on a personal level than just teaching a subject. Teachers often had to deal with trauma, conflict and tears, and found it hard not to feel attached or drawn in too closely. Schools with very poor learners tended to have low overall attendance rates. Parent involvement in meetings and other school activities was low. Other day-to-day issues for teachers included having to cajole learners to complete homework and return books and equipment to class. Lupton (2004) notes that all of these issues together resulted in an ‘unpredictable working environment’. Something could happen at any time and lessons could not be relied upon to go according to plan. Learner mobility

also meant that it wasn't clear how many learners would be at school on any day.

In the South African context Harber and Davies (1997) noted that the following factors promoted learning in South African schools:

- Length of instructional programme
- School library activity
- Years of teacher training
- Textbooks and instructional material and learner feeding

Harber and Davies (1997) also note that in South Africa school feeding programmes had remarkable results. They also show that worm infestation is a further concern, and that this has an impact on nutrient absorption. Poor concentration, slowness to catch up and memory loss are other effects of worm infestation. Barbarin and Richter (2001) note that the ability of South African families to meet the basic food needs of their children has been severely constrained. One in five African children experience significant hunger regularly and suffer from moderate malnutrition. The average income per household at the time of the study was R1 812 per year. Fifty three percent of the people live below the poverty line.

School feeding schemes

This section examines how feeding schemes can address the problem of hunger in schools. Food aid has its origins in the disposal of surplus food in the post-World War II period. Food was distributed to parts of the world that still suffered from post war shortages. Since then the provision of food aid to improve food security has grown.

A debate has developed globally as to whether feeding schemes at school actually make any difference at all. One view is that there is little evidence to suggest that school feeding programmes have a positive impact on nutrition for participating children. In some instances parents may provide less food at home, and the school simply replaces a home meal rather than complementing the home diet. However, there is some evidence that providing breakfast rather than lunch may address this problem. However there are also the arguments that in impoverished settings even small attempts are worthwhile. The other argument against school feeding is that children are only better able to learn with school feeding if the educational inputs are improved (World Bank, 2005). The benefits in our view for providing food in impoverished communities outweigh the criticisms. One of the key advantages of school feeding programmes is that school attendance rates can improve (especially for girls) as parents motivate their children to attend schools. Tsang & Wheeler (1993) document that the problems of school quality are especially severe for learners from impoverished and economically disadvantaged backgrounds. In the rural areas of Thailand, for example, where learner malnutrition is high, the dropout rates between Grades 4 and 5 continue to be severe. Del Rosso (1999: 4-5) notes that school feeding programmes can:

- Alleviate hunger and increase the attention and concentration in learners and therefore improve learning.
- Motivate parents to send their children to school regularly and therefore reduce absenteeism and dropouts.

- Address micronutrient deficiencies like iron and iodine in school children. Improvements in nutrition can have an impact on cognition.
- Increase community involvement in schools especially where parents prepare and serve the meals

Nutrition and academic performance

The relationship between nutrition and academic performance has been well documented around the world. In particular, the negative effect of under nutrition. Among others, Alaimo et al. (2001) report that children aged between 6 and 11 in food insecure households scored lower on arithmetic tests, were more likely to have repeated a grade, and had difficulty getting along with other children. Taras (2005) who reviews research from published studies on the association between nutrition among school-aged children and their performance in school and on tests of cognitive functioning, finds the following: Children with iron deficiencies sufficient to cause anemia are at a disadvantage academically, unless they receive iron therapy. Students with mild iron deficiencies and no anemia do not routinely exhibit problems in cognition or academic performance. Food insufficiency is a serious problem affecting children's ability to learn. Offering a healthy breakfast is an effective measure to improve academic performance and cognitive functioning among undernourished populations. Eating breakfast, in contrast to fasting, may improve performance on the morning eaten. The long-term effects of eating breakfast on the performance of school children who do not have physical signs of severe undernourishment are less certain. In addition, Averett and Stifel (2007) who study the effects of childhood over and underweight on

cognitive functioning find that malnourished children tend to have lower cognitive abilities when compared to well nourished. Children who do not get enough to eat are likely to suffer from stunted growth and hinder mental development. Also, Kaestner and Grossman (2009) find that children in the top and bottom of the weight distribution have lower achievement test scores than children in the middle of the weight distribution. Boys and girls who are in the lowest (0-5 percentiles) tail of the weight distribution have achievement test scores that are approximately 4-6 percent (10% of a standard deviation) lower than similar children in the middle of the weight distribution. In fact they find more consistent evidence of a low weight effect than a high weight effect.

Impacts of school meals programmes

Three objectives are commonly associated with school feeding programmes (SFPs): (1) to increase school enrollment and attendance among school-age children; (2) to improve the nutritional status of children in school; and most importantly (3) to improve the cognitive or academic performance of these children (Levinger, 1986). Food for education programmes (FFE), including meals served in school and take-home rations conditional on school attendance, have recently received renewed attention as a policy instrument for achieving the Millennium Development Goals of universal primary education and the reduction of hunger in developing countries. These programmes attract children to school by providing nutritious meals in exchange for school participation. If children are undernourished, the programmes may also boost learning and cognitive development by improving

attention spans and nutrition. The attraction of these programs is their potential to improve both school participation and learning and cognitive outcomes by increasing the consumption of nutritious food by undernourished children (Adelman, 2008).

According to Adelman (2008), in-school meals programmes may also have an impact on cognitive development, though the size and nature of the effect vary greatly by programme, micronutrient content of the food, and the measure of cognitive development used. Most empirical findings suggest that school feeding programmes have a positive impact on learning achievement, as measured by increases in test scores and on dropout rates. Furthermore, the subject of the achievement test seems to matter. In general, school feeding does not seem to have the same impact on all subjects, even within a given study. Ahmed (2004), using an econometric specification to isolate the effects of the programme in Bangladesh, found that students in programme schools score 15.7 percent higher than did students in the control schools. He further decomposed this increase into the three subjects that make up the total score and found that the improvement was due mainly to an increase in the Mathematics test score. Tan, Lane, and Lassibille (1999) evaluated the impact of the school feeding programme in the Philippines, and they found that the impacts of the school feeding programme were not significant at the school level. Kremer and Vermeersch (2004) found that the treatment impact alone was not significantly different from zero. However, school meals increased test scores in schools where the teacher was experienced. This result was found by regressing the test score on both a treatment variable as well as a treatment variable interacted with the teacher's experience.

The evidence of the impact of school feeding on dropout rates is inconclusive. Several studies have found a positive effect of school feeding programmes, both in-school meals and take-home rations, on reducing the dropout rate (Ahmed, 2004; Ahmed and del Ninno, 2002). Unfortunately, these studies have problems in the approach used to identify causal impacts. On the other hand, Tan, Lane, and Lassibille (1999) have pre and post-intervention data for these schools, as well as for ten randomly selected control schools. The authors computed the DID estimates of the impact of the school feeding programme—the difference in the change in drop-out rate over time between the treatment groups and the control group at the school level. In this case, they could not identify any impact of either programme on the probability of a student dropping out.

School feeding and academic performance of pupils

Even though there have been studies to establish that school feeding affects enrolment in schools, much cannot be said same of performance of pupils. Stringent efforts have been however made to suggest that, empty stomach impedes proper learning and the reverse also holds. The New Partnership for Africa's Development (NEPAD), a vision and strategic framework adopted by African leaders in 2001, refers to education as an important step in reviving prosperity on the continent. NEPAD officials are working with partners such as the WFP to get every child into primary school by 2015 (Abuja, 2003). In a related study in the United States of America, it has been suggested that, feeding programmes that provide undernourished participants with an adequate diet, cognitive development

outcomes can be reasonably anticipated. These outcomes would include improved test scores, decreased repetition of grades, and, to the extent that school desertion is in part a response to academic difficulty, decreased dropout and absenteeism rates. The level of an individual's educational attainment is closely associated with a raft of development concerns including worker productivity, family health/nutrition status, income, fertility rates, propensity to modernize, and risk-taking. Thus, the SFP that demonstrably promotes improvements in students' academic performance and cognitive development is, from a developmental standpoint, potentially quite significant. The National Academy of Sciences was asked by President Carter in 1979 to determine what the research community could do to alleviate world malnutrition. In response to this invitation, a study team was formed and research objectives were identified. Investigation of the relationship between food intake and function was given the highest priority because of the consensus achieved in support of the view that malnutrition affects human capacities and behaviours in ways inimical to societal development. (Berkeley, 1980).

According to Engelbrecht (2005), children who are malnourished or even experiencing short-term hunger have limited capacities to learn. SFP's runs in some African countries as a means of bringing the benefits of good nutrition to the cognitive development of the child. Research findings suggest that the interactions of malnourished children with their environments make them less likely to seek out, utilize, and respond to available opportunities for learning and social interactions. Although in the late sixties and early seventies it was assumed by many researchers that the brain changes produced

by malnutrition led directly to an impairment of learning, which was often irreversible, more recent studies have led most investigators to abandon this position. Currently, the most widely accepted hypothesis is that malnutrition exerts its major influence on behavioural competencies through dysfunctional changes in attention, responsiveness, motivation, and emotionality, rather than through a more direct impairment of basic ability to learn. This situation implies hopeful prospects for reversibility or remediation (e.g., through an SFP with a cognitively oriented component attached to it), because it is possible to manipulate the child's environment--particularly the school segment -- to make his or her interaction with it more intellectually facilitative. Ratoosh (1959) argues that empirical evidence drawn from current research supports the view that improvement of a child's diet alone can lead only to small changes in cognitive and social development. Meaningful change in this area only occurs when dietary change is accompanied by enrichment of the child's psychological and social environment.

Without question, the cognitive abilities of a nation's citizenry are of utmost importance to planners. Worker productivity is so intimately linked to problem-solving skills and more generalized cognitive development that it is difficult to imagine how any high-level decision-maker could fail to be concerned with removing impediments to the optimal intellectual functioning of young people. School Feeding Programmes can be designed to improve external efficiency by reinforcing more broadly based development objectives. Programmes that encourage community participation, supplementation and eventual phase-out of donated commodities, local production of foodstuffs,

and consistency between SFP and nutrition education messages will have the greatest educational impact. (Akhter, 2004)

According to Engelbrecht (2005), like many other food intervention programmes, free meals are often seen as charity. But these meals benefit more than just the children who are fed at school. Feeding children at school benefits the community and society at large. This is known in economics as a “positive external effect” that is, when the activities of one person affects the wellbeing of another person(s) in a way that is not measurable directly.

With a positive externality, the benefits to society are greater than the private benefits to a specific person. When a child is educated, it is not just that child who benefits. Instead, the household, family and greater community benefits as well. There are benefits to society in terms of greater productivity, which lead to higher combined earnings and eventuality to greater economic growth. Higher levels of education are also, according to South African Economist, Philip Black, associated with lower birth and crime rates, thus reducing pressures on government to provide additional health care and police facilities. In a similar way, when one person has good health, it benefits more than just that person.

Childhood poverty is an important factor in persistent poverty and in the continuation of poverty across generations. Economists from the Childhood Poverty Research and Policy Centre in London argue that preventing poverty in childhood can help prevent the reinforcement of poverty across generations. Fighting childhood poverty today through school feeding programmes could mean that vicious cycles of poverty can be broken, as the children who benefit from government or community assistance today can be

more productive as adults in the future. This study intends to solicit information on this rather ignored subject to contribute to literature for future studies

Empirical literature on effects of school feeding

Effects of feeding on hunger and pupils performance

Deficiencies of iron and iodine are among the most harmful types of malnutrition with regard to cognition. Iron deficiency renders children listless, inattentive and uninterested in learning. Research literature suggests a causal link between iron deficiency anemia and less than optimal behavior for learning (Nokes, van den Bosch and Bundy, 1998). 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 schoolchildren : 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. In Jamaica providing breakfast to primary school students significantly increased attendance and arithmetic scores. The children who benefited most were those who were wasted, stunted, or previously malnourished (Grantham-McGregor, 1989). A U.S.A study showed the benefits of providing breakfast to disadvantaged primary school students. Before the start of a school breakfast programme, eligible (low-income) children scored significantly lower on achievement tests than those not eligible. Once in the programme, however, the test scores of the children participating in the programme

improved more than the scores of non-participants. The attendance of participating children also improved (Meyers, 1989).

In Peru, 23 malnourished and 29 well-nourished 9 to 11 years old boys were studied to assess the effects of breakfast on cognitive performance. Each boy served as his own control in a manner comparable to the Jamaica study cited above. Breakfast was a nutritionally fortified beverage and a baked grain product fortified with iron, similar to the meal provided in the government-sponsored schools breakfast programme. A series of cognitive tests were administered in an experimental setting. Speed in performing a short-term memory test and discrimination of geometric patterns were improved under the breakfast condition in both groups. The effect was more pronounced in the nutritionally disadvantaged children (Pollitt, Jacoby and Cueto, 1995). According to a study conducted in Ghana, in just over six months of implementation of school feeding, enrolment in pilot schools had risen by 20.3% compared to 2.8% in control (non – GSFP) schools in the same district. Equally, attendance was up by 39.9%, 5% and 13% in three pilot schools in the same communities/districts. All the schools enjoyed the capitation grants given to all primary schools to support their basic needs which rendered the task of attribution much easier. (GSFP, 2007).

School feeding scheme of the catholic relief services, school

All children who attend primary schools in programme communities are provided with a hot lunch, and children attending pre-schools in programme communities receive an early morning snack in addition to lunch. These meals are fortified with proteins and essential minerals and other

micronutrients necessary for children's health and energy to remain attentive and focused during school hours, to improve learning.

In particularly food-insecure areas, primary school girls who achieve an attendance rate of 90 percent or greater receive a monthly take-home food ration. This ration serves as a cash transfer to encourage sending girls to school. Also, this food serves as meals for the entire family, thus improving the health and nutritional status of the entire family.

Promotes skills based health and nutrition education and HIV/AIDS education to children with a special focus on personal hygiene. In partnership with Ghana Health service (GHS), Community water and Sanitation Agency (CWSA) CRS has developed a user-friendly SHEP Manual and IEC materials to guide teachers teach health and personal hygiene to children. Again in Collaboration with UNICEF, CRS de-worms twice a year, all school children in selected programme schools.

Feeding strategy

CRS/Ghana's school feeding programme is based on four main pillars or strategies namely, Partnerships and collaborations Taking due cognizance of the fact that CRS cannot do everything and be everywhere; it has established strategic partnerships with government ministries and other Non-Governmental Organisations (NGOs). On the national level, CRS/Ghana has a Memorandum of Understanding (MOU) with the Ministry Of Education, Sports and Ministry Of Health. These MOUs enables CRS/Ghana to form an alliance with the implementation bodies of these two ministries at both the regional and district levels – Ghana Education Service and Ghana Health

Service. In collaboration with the Region and District directors of Education, CRS selects a point person known as the GES/CRS Regional/District Partner Supervisor (R/DPS).

Their selection and appointment involve interviews and a whole lot of collaboration from the Regional and District Directors of Education. Thus it is this partnership which CRS relies upon for the implementation, monitoring and supervision of the feeding programme in the entire north. CRS' support to these supervisors is in two fold; logistical and capacity building through training. Logistically, CRS supports the partner supervisors with motor-bikes and accessories, fuel, calculators, stationery and per diem as they monitor, relay information and collect data, all in the process of implementing the programme. In addition to these R/DPSs, circuit supervisors are also trained in effective supervision, data collection, etc. these selected and trained circuit supervisors assist the R/DPSs to monitor the programme.

At the school level, teachers and head teachers are also supported with regular periodic trainings in record keeping, marking of registers, food management, issuing of food for cooking, de-worming of children, teaching good health and hygiene practices to children and community members, and good community relationships.

Community control and ownership of the programme remain strategies to the success of the CRS school feeding programme. As such the programme adopts a purely demand and supply approach to the selection of school/communities. A community, represented by the SMC, PTA, Chief and elders, writes to CRS through the DDE. A joint team of GES and CRS visits the school to assess it using a jointly developed criterion. A qualified school is

then given one year to mobilize their support to the programme. The community support include providing a kitchen, store, cook, cooking utensils, water, security and safety for the food. Within the one year of mobilization, CRS and GES visits the school to engage in various sensitizations regarding their role and responsibility in the programme, as well as discussing pertinent education issues such as low enrollment, and attendance, the importance of education, low girl enrollment, parents' responsibility to educating their wards, etc. Once a school/community has met all the criteria and is selected, a formal agreement is signed between the leaders of the community, District GES and CRS.

Thereafter, community participation in the direct implementation is enhanced with the establishment of a Community Food Management Committee (CFMC). To support the CFMCs to function properly, their capacities are built through training and community sensitization. Trainings are structured to focus on compliance issues, relationships among structures within the communities (SMCs, PTAs, etc) and food management and accountability. To ensure their efficient and maximum participation, documents have been simplified for their use.

Monitoring and supervision is conducted by both GES and CRS officials and looks at physical compliance issues, record keeping, food stock against food issuance, to the more intricate information on enrolment and attendance as it pertains to performance professionally designed and management data base. Various data collection forms and trainings are used to obtaining quality, accurate and reliable information and data that meets' the

guidelines and trust of the donor-United States Agency for International Development (USAID).

Achievements;

During the 2005/2006 academic year, the enrolment of girls from 226 Take Home Ration (THR) sampled schools (out of 365) went up to 53,700. This was about a 10.5% improvement over what was achieved in 2005 and also 20.9% improvement over the 2003 baseline. General enrolment in just 656 sampled primary schools out of the total 840 schools, increased from the 153,952 in 2004/2005 to 171,240 in 2005/2006. Enrolment thus increased by a margin of 10.2% over the 2004/2005 year and 14% over the 2003 baseline. Attendance 64.0% of the THR schools maintained an average girls attendance of at least 84%. Comparatively this is higher than last year's 53% by 11.0% and 39.5% higher than the 2003 baseline of 24.5%. 86.2% of 2006, 656 sampled primary schools representing 78% of the 40 schools maintained and average general attendance of at least 80%. This is an increase of 8.2% over 2005's achievement, and 104.4% increase over the baseline in 2003 of 26.4%

Retention: 80% of girls in CRS feeding programme schools are retained, while 77% of boys are retained (CRS/GHANA).

Behaviour Change From a baseline of 42.8%, an evaluation in 2006 indicated that 79% of pupils in CRS' school feeding schools had increased their knowledge and practice of appropriate health and hygiene behaviours.

De-worming: 86% of school children who attend school regularly were de-wormed twice in 2006. The concept of school feeding by the CRS in Ghana dates back to around 1950's as an intervention to compliment the efforts of

government at the basic school level to develop education and encourage access and enrolment in the northern part of Ghana in particular. The school feeding by the CRS basically has two forms; first is the “on site feeding” where the food is prepared on the school premises and served among the pupils to be eaten on the school premises during break time. The second is the “take home ration” which is given specifically to the girl child to encourage girl child education. These two components put together makes up the school feeding by the CRS.

The school feeding by the CRS is generally not spread across all schools in the north but spread across literally all districts in the northern region with certain parameters guiding the selection of beneficiary schools.

The policy of CRS as an organisation, is to supply beneficiary schools with food stuffs as the ingredients and whiles other accompanying commodities such as water and fire wood are the responsibilities of the pupils and the parents alike. The rationale is to make the programme more community owned than a spoon fed charity programme whose sustainability might not be guaranteed.

Strengths of CRS/Ghana

For over half a century, CRS has operated in the three northern regions of Ghana, reaching out to the most deprived and hardest-to-reach people. Over this time it has acquired vast experience in understanding the geopolitical, socio-economic, ethnic, religious and linguistic issues that impinge on education and general development of the area. It has also, more importantly, been accepted by the communities and is regarded with trust and confidence.

CRS involves its beneficiary schools, communities and districts not only in the implementation of programmes but in the design, continuous monitoring and training to build the capacities of its partners to ensure sustainability of programmes.

Since 1958, CRS has demonstrated its ability to implement USAID programmes in education and health. These have no doubt involved the disbursement of huge sums of funds. As a result of CRS competence in implementing these projects, it secured a 5-year funding grant of nearly \$6 million to implement the QUIPS Project, and in 2003 it received approval for its five-year \$80 million Development Assistance Programme (DAP) focusing on health and education. CRS currently employs thirty staff working in education programmes (QUIPS and school feeding), who have exceptional academic and professional qualifications and experience, having taught, managed and supervised at various levels of the country's educational system, as well as worked directly with the GES. Additionally, most of the staff members are natives of the geographical area within which CRS operates. This presents an added advantage of a better understanding, appreciation and respect of the cultural and traditional practices of beneficiary communities, an element crucial to being accepted.

There is a technical advisor on education for the West African sub-region, who receives supervisory support and guidance from the education team at CRS Headquarters in Baltimore. These regional and Headquarters-based teams provide technical and professional support to Ghana's education programmes. Aside the CRS, other agencies like the World Food Programme

(W F P) has taken to similar programme with a slight twist in the form but primarily of the same objective as the CRS. The government of Ghana through the local government ministry has from 2005 taken after the CRS and WFP in school feeding with a much broader scope and more comprehensive in implementation in furtherance of the New Partnership for Africa's Development (NEPAD) agenda to eradicate poverty and guarantee access to basic education in Ghana.

Effects of school feeding on girl – child education

In Pakistan a WFP-assisted programme provides an income transfer of one or two tins of oil to families whose girls attend school for 20 days a month. In participating schools enrollment increased by 76% compared to 14% in the province. Attendance also increased from 76 to 93% in participating schools (WFP, 1995f). In Bhutan, a similar programme that provides an additional meal for girls has increased attendance in lower grades and newer schools. School enrollment has not changed since demand for school already outstrips supply (WFP, 1994a). In Niger, where school enrollment is one of the lowest in the world, a WFP- assisted programme is providing, in some areas, the equivalent of the total daily recommended food intake in three meals a day, as well as a take-home ration to attract nomadic girls to school. Evidence shows that when school canteens have been closed immediate and high absenteeism follows and children are withdrawn from school. Often the school year cannot start in some nomadic areas until the food stocks have arrived (WFP, 1996b).

In the 1990s, the Government of Indonesia introduced a national school-feeding programme that was planned and funded entirely with government resources. The programme was ambitious, with broad goals that targeted children, schools, parents, and the broader village community. The programme was part of the national poverty alleviation strategy of the Sixth Five-Year Development Plan for Indonesia, using school feeding as a community-level entry point. The mechanisms for programme delivery were innovative as compared with other Indonesian government programmes and in the context of school-feeding programs internationally. Pilot programme trials were conducted in six provinces in 1991–92. Following evaluation of these trials, national implementation started in 1996 for approximately 2.1 million primary schoolchildren in more than 16,000 schools in villages designated as poor according to the Inpres Desa Tertinggal (IDT) or “Presidential Instruction for Villages Left Behind” programme criteria.

These criteria identified villages with economic growth less than the regional average according to a list of 36 indicators of village infrastructure and household socioeconomic factors. By 1998, the schools in all IDT villages were mandated to implement the school-feeding programme. Implementation of the school-feeding programme involved the provision of a mid-morning snack three days a week through the school year, for a total of 108 snacks a year. Programme guidelines stipulated that the snack must not include the local staple food in order to avoid the impression that the food was a main meal that replaced a meal children would otherwise receive at home. The effect was the children ate with question.

School feeding programme in Brazil and its effect

Brazil is the largest country in Latin America with its territory of 8.5 million square kilometers and the population of 186.4 million (2005). In Brazil, the economic inequality is characterised by the stark regional income disparities. Brazil is a federal republic, consisting of 5,561 municipalities in 26 states and the Federal District (2005). Statistically, the states are classified into five regions (North, Northeast, Centre-west, Southeast, and South). The tropical North and semi-arid Northeast are the poorest regions in the country, whereas the Southeast and South are the richest. The Southeast generates 56% of GDP whilst the North generates only 5%. On average, a person in the South earns R\$12,167 and in the Southeast R\$11,855; this drops to R\$6,180 in the North and R\$4,676 in the Northeast (R\$1=USD0.32, June 2004) (IBGE, 2004).

The School Feeding Programme in Brazil has been placed in such framework of food security policy in Brazil, aiming to reduce the number of malnourished children and also to improve the school enrolment rate. In recent years, the need for provision of healthy and good quality food for children began to be debated since nearly 40% of the population are overweight (and 5% are obese) in Brazil (FAO, 2005a). In particular, in the richer South and Southeast, the health concern regarding to school meals has been expressed by many municipalities to improve the population's "eating habit" (MEC/INEP, 2007). The National School Feeding Programme (PNAE), popularly known as Merenda Escolar or Alimentação Escolar, has been implemented since the 1950s in Brazil. It started as a national school feeding campaign, which operated in some schools in the states of Bahia, Pernambuco (the Northeast),

Pará (the North) and Espírito Santo (the Southeast). In 1955, this campaign was integrated into the First National Food and Nutritional Programme (Programa Nacional de Alimentação e Nutrição – PRONAN).

In the 1960s, the Ministry of Health and UNICEF provided powder milk and other nutrients to pre-schools in the draught-stricken Northeast. This initiative was integrated fully to the national social protection policy of the Military Government, which launched the renewed national school feeding campaign administered by the Ministry of Education and its regional secretariats. In Brazil, more and more of the food for schools is procured from local sources such as local wholesalers, producers' cooperatives, or school and community gardens. School feeding across the world has some variance albeit, with greater similarities. Depending on who is writing and what the orientation is, there are varying literature to the school feeding programme and for time and space constraints, just a few literature as above is adduced to help give guidance to the topic of the thesis work. In the subsequent chapter, the methods for data collection in relation to the field of study, both primary and secondary, shall be discussed.

CHAPTER THREE

METHODOLOGY

Introduction

In this chapter discussions will be made of the study area and the varied instruments used for gathering data for the purpose of the study including the plan adopted for the research, research design, population and sampling techniques and the time frame within which data collection and analysis.

Study area

Savelugu/Nanton District is one of the eighteen (18) administrative districts of the Northern Region. It was established by PNDC Law 207 under the Legislative Instrument of 1988. It was carved out of the then Western Dagomba District Council, which included Tolon/Kumbungu and Tamale Metropolitan Assembly. SND is located in the Northern Region of Ghana. It shares boundaries with West Mamprusi in the North, Karaga to the East, Tolon/Kumbungu in the West and Tamale Metropolitan Assembly to the South. The District's total land area is 1790.70 sq. km.

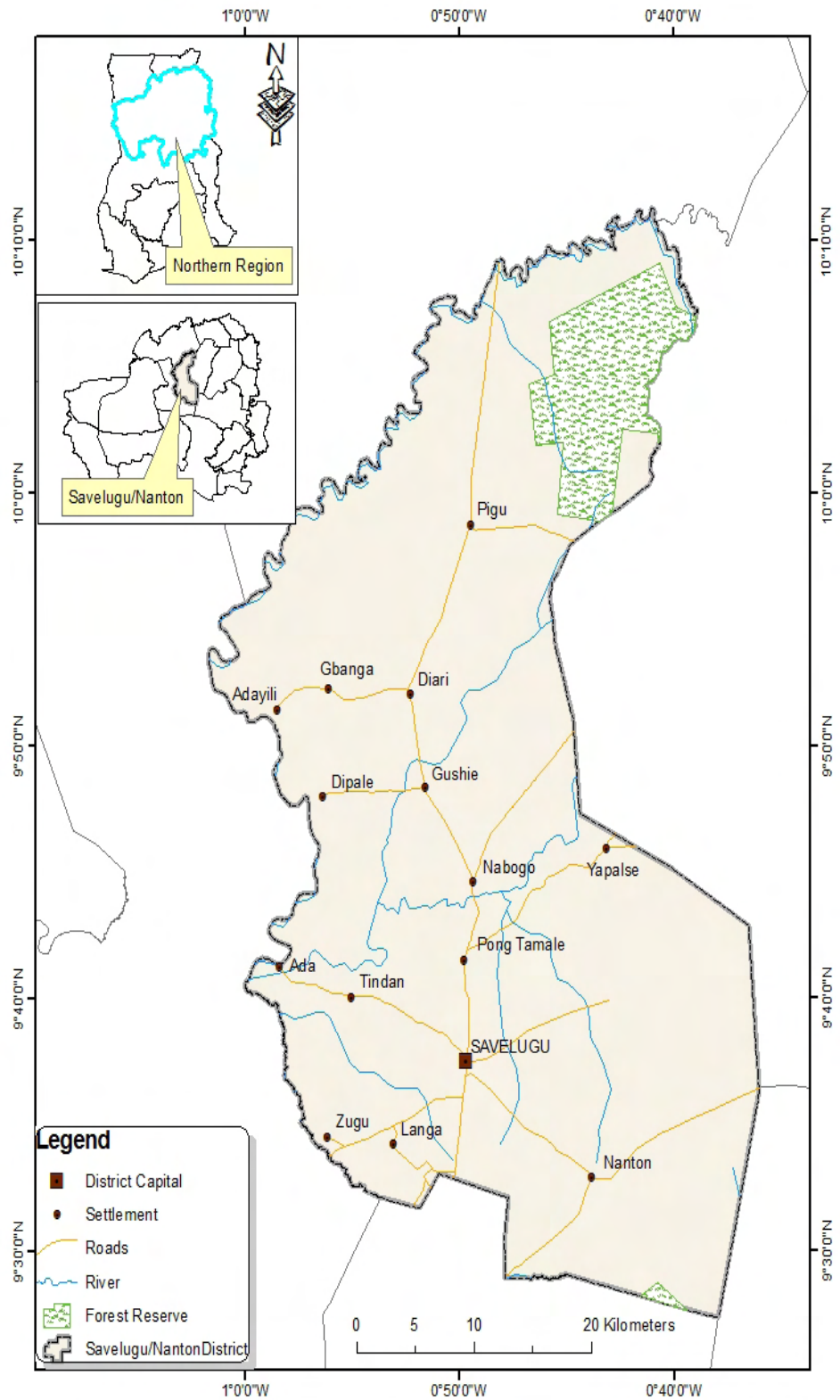


Figure 1: Savelugu/Nanton District Map

SND Profile, 2007

Demographic characteristics

Population size and density

The population of the district was 91,415 (2000 population census). With a growth rate of 3%, the projected population as at March 2006 is about 109,442. This is broken down into 49% male and 51% female. With a land area of 1790.7 sq. km., the population density is about 61 Persons per sq. km.

Household Characteristics

Households are predominantly male-headed. The proportion of female-headed households was 3.1%. In 2004, it rose to about 3.6% and subsequently to about 5.5% in 2005. The average household size is 8.7 with the smallest household comprising one member and the largest household having 47 members.

Human settlement patterns

There are 149 communities in the district. The communities are administratively demarcated into one urban/town Council (Savelugu, the district capital) and five Area Councils, namely, Nanton, Diare, Pong-Tamale, Moglaa and Tampion. The 143 other communities could be described as rural. Nearly 80% of the populace resides in these rural communities and 20% in the few urban towns.

Education

The district is zoned into eight educational circuits for administrative purposes namely Savelugu East, Savelugu West, Pong-Tamale, Diare, Nanton,

Tampion, Zoggu and Moglaa. There are 51 pre-schools, 81 primary and 18 JSS within the Savelugu/Nanton District. The Junior Secondary Schools service the two Senior Secondary Schools located at Savelugu and Pong-Tamale within the Savelugu/Nanton District. There is also a school for the deaf and a veterinary college located in Savelugu and Pong-Tamale respectively. The DA has been pursuing various interventions to create an enabling environment to improve education delivery. Some of such actions are infrastructure provisions such as the construction of school blocks, provision of furniture, teacher accommodation, teacher trainee sponsorship, teacher motivation, a school feeding programme and provision of teaching and learning materials. The impacts of these actions have been an increase in enrolment.

Enrolment

Gross Primary Enrolment (GPR) increased from 68.4% in 2002/2003 academic year to 79.9% for 2005/2006 academic year. The increase in enrolment had gender disparities. Though enrolment of the girl child similarly increased, the rate of increase for the boy child was more than the girl child.

Transition rates

There is significant increase in transition rates. Despite a decrease in 2004, progress is being made in Transition from P6-JSS1. Transition for the girl child is better from P6-JSS1 as compared to from JSS-SSS. There is a reverse situation from the JSS-SSS since fewer girls attained Aggregate 6-30 at BECE, the cut off aggregate for qualification into SSS.

Gender parity

There exists a gender parity gap. The situation emanates from poor retention of the girl child in school especially at the JSS level. The possible reason for this situation could be that at the JSS level, the girl child begins performing the multiple domestic roles such as fetching water, cooking, washing sweeping and cleaning just to mention a few in the family and thus has little time for academic work. It appears impossible to prevent the girl child from performing the roles. Thus, the action being pursued is to support the girl child perform domestic roles without compromising with her education. It is for this reason that with support from UNICEF, the district is providing means of transport for the girl child by providing them with bicycles which could be used to fetch water and quickly get to school and get back home early to perform domestic roles. As part of the intension of the CRS, “take-home ration” is given to the Girl-Child based on attendance at the end of the term. This is expected to reduce the level of absenteeism of the Girl-Child.

Teaching staff situation

The current teacher situation in the District is 370 trained and 264 untrained teachers. The total pupil-teacher ratio is 1:36 as against a national ratio of 1:28 for the basic level. There are more male than female teachers. This thwarts DA efforts to use female teachers as role models to improve on girl child education in the District. It is only at the pre - school level that there are more female than male teachers (SND profile, 2009)

Research design

This study was undertaken to evaluate the CRS school feeding programme on pupils' academic performance within the district. In this study the Single Subject research design was adopted. In social work research, single subjects can be pupils, groups, communities and so on. Single subject designs are employed to examine the impact or effect of a policy or intervention on such groups, individuals or systems (Rubin and Barbie, 1997). In this study, pupils/households/schools are considered as a group that the study used to respond to questionnaire. Again, according to York (1998), the single subject can be an individual client, or a community, or an institution, or some other entity, provided that group would be the subject of the data analysis.

Here, there is no measurement/base line data before the implementation of the programme. It is the post test design because measurement is done only after the programme implementation to assess the effect of the intervention (CRS school feeding programme) on the target group (pupils/households). Rubin and Barbie use pre test to mean research to collect baseline data and pro test to mean research to assess the impact or changes as a result of an intervention. (Rubin and Barbie, 1997). Therefore, this research design is post test because it is carried out after the implementation of the CRS SFP to assess its likely effect on the well being of pupils/households. Both qualitative and quantitative data were gathered. The qualitative data were mainly explanations, reasons, views and opinions and suggestions. Quantitative data that were gathered were mainly income levels of respondents, rations received from CRS for pupils and the on-site feeding

programme of pupils. For purposes of reliability and validity some base line information was collected from the Ghana Education Service (District Office) and the CRS to support the data gathered from the schools and the households.

Population of the study

The study considered pupils in the Savelugu/Nanton district as part of the study population. According to the 2000 population and housing census, the total population of the district is 91,415 and an average household of 8.7. There are 81 basic schools with an enrolment of 15,276 in the district. The source of information for the purpose of this study is the district population and the schools available as the sample frame. It is out of this that the sample was taken for the study.

Sampling and sampling procedure

The study used a number of sampling techniques to select the respondents for the data collection. The sampling took into consideration the peculiar characteristics of the population from which the sample was taken to ensure it's representativeness of the population. This means that sample has the same characteristics as the population from which it was taken. This is necessary for the purposes of validity and generalization of the findings of the study (Marlow, 1998).

Probability sampling

The district was divided into eight educational circuits and considered by the study as strata. The district is basically agrarian and poverty issues are

pervasive. There is homogeneity among the households in terms of socio-economic characteristics. Systematic random sampling was also used to select the respondents from the circuits as detailed in the sampling procedure below.

Considering the vastness of the district and the total of thirty six schools benefiting from the CRS FP the researcher could not cover the entire teaching population from whom information is to be elicited using the questionnaire. Therefore the researcher used cluster sampling to select the six circuits and schools through probability sampling. All the circuits were numbered and put in a box where each circuit had a fair chance of being selected. Six (6) circuits were randomly picked from the box. The six circuits that were selected included: Pong Tamale, Nanton, Diare, Moglaa, Zoggu and Tampion and Savelugu East and West circuits. In selecting the schools, each school under circuit was marked with the designation “S” and “NS”. Where “S” means selected and “NS” means not selected. A woman was asked to do the picking. At the end of the exercise, the results were: Pong-Tamale (3), Diare (2), Moglaa (3), Nanton (4), Tampion(1) Zoggu(3). Savelugu (4) In all, one hundred respondents were systematically selected from the totality of the circuits. For every school selected, a minimum of five teachers were interviewed. Considering the fact that Savelugu is the district capital, both Savelugu west and east circuits were put together as one and four schools systematically selected.

Six research assistants were recruited to assist the data collection process. They were trained and a pre test survey conducted. Some of the questions were clarified and a few others added to make it comprehensive.

Table 1 shows the number of respondents and the localities where they were selected

Table 1: Selection of respondents from circuits and schools

Circuit	School	Number of respondent
Savelugu east/ west	Nyoglo AME Pri, Tibali L/A	
	Pri, Boggu-Kpendua E/A Pri,	20
	Kanshegu E/A Pri	
Nanton	Zieng E/A Pri, Kpachelo E/A	
	Pri, Kpanp E/A Pri,	20
	Sahakpaligu AME	
Moglaa	Duko Ang Pri, Tarikpaa L/A	
	Pri, Janjori-Kukuo AME	15
Diare	Pigu E/A Pri, Kadia L/A Pri	10
Tampion	Tinkurugu Methodist Pri,	5
	Pong Ang Pri	
Pong-Tamale	Nabogu R/C Pri, Yapalsi Ang	10
	Pri, Sandu E/A Pri, Yung L/A	
	Pri,	
Zoggu	Nyelo R/C Pri, Yong D/A Pri	20
Total		100

Source: Field survey, 2007

Research instruments

The main mode of gathering information/data was through the use of interview schedules. This was complemented with the use of semi-structured

questionnaire and interview guides. The Semi-structured questionnaires were used to collect data from the teachers in the selected schools while the interview guide was used in eliciting information from the GES and households within the respective circuits. The questionnaires were made up of both close ended and open-ended questions. Respondents were requested to tick or provide explanation where necessary. All the questions with alternative responses in the questionnaire were pre coded.

There was a literature review of existing texts in libraries, reports and from Internet sources.

Data collection

This study gathered data from both primary and secondary sources. Primary data was basically gathered from the schools and the households in the district. Secondary information was also gathered from the GES, the CRS, in libraries and in both published and non-published sources.

Secondary Information;

Secondary information were found in books from libraries, journals, reports, articles as well as information from the internet sources. Data collection and analysis for the purposes of this dissertation were done primarily in 2007/2008 from both field and appropriate institutions.

Types of data

The types of data gathered included qualitative and quantitative data. Quantitative data included income levels of household heads, school enrolment and retention of pupils and quantity of foodstuffs to pupils. Qualitative data were also gathered which included: views and opinions on poverty levels, the implementation of the CRS SFP, causes of poor enrolment and retention of pupils in schools and suggestions to guide future programmes.

Field challenges

This dissertation was not conducted without some field challenges as that was inevitable. The challenges primarily started with my access to information from the regional secretariat through to the district programme officer including parents of pupils to be interviewed. The task were arduous but with tenacity, the apparent challenges were overcome

Data analysis

The analysis was done using both computerized and manual methods. The data was analyzed using the Statistical Package for Social scientists (SPSS). In this package, tables, percentages, graphs, figures are used to explain relationships between variables. Qualitative analysis was also used to explain opinions, views, reasons, causes as well as suggestions to support the quantitative tools of analysis.

Chapter four which is the next chapter will be analyzing and discussing findings of data collected from the field.

CHAPTER FOUR

RESULTS AND DISCUSSION

Introduction

This chapter will be dealing with information gathered from the field through the use of questionnaire, interview guide and observation of things as they appear in the field to the researcher reflecting the specific objectives of this dissertation.

Background characteristics of respondent

Demographic characteristics on age and gender of respondents (teachers) are provided in this section.

The age bracket for both male and female that responded to the questionnaire fell between twenty one and forty years. Thirty of the 90 males are between the ages of 31 and 35 years while 6 of the 10 females are between the ages of 21 and 25. The respondents were fairly young with appropriate energy to handle the pupils.

According to the International Labour Organisation, the active working class is between 15 and 59. However, search for higher education puts the entry point at 20 years. In the case of gender of the respondents, males constituted 90 percent while the female counterparts constituted 10 percent. For the sociologist, these could have certain bearing on the up-bringing of the

pupils but for the purposes of this study, the researcher shall not dwell much on that as it is inconsequential to the purpose and objectives of the study.

Number of children benefiting from CRS school feeding

Accounting for the specific number of pupils on the feeding programme appeared very controversial as both the CRS regional secretariat and District Focal Person (DFP) gave different figures. The difference in the figures was explained to be emanating from the continuing increase in the enrolment as pupils enrolled at different times of the term. The CRS takes periodic statistics from the DFP who is with the GES for its records. Given this background, the researcher found it safe to reach out to the statistical department of GES through the DFP at the district level for the number of pupils benefiting from the feeding programme. The number of pupils benefiting from the programme as at September 2008 when the CRS feeding programme came to an end were three thousand six hundred and one (3,601). Out of this total, boys were two thousand and ten (2,010) as the girls were one thousand five hundred and ninety one (1,591) given a ratio of 13 males to 10 females.

Effect of feeding on enrolment and retention

To assess the impact of these two independent variables, the researcher assessed the trend over a period for the evidence. The pointers on the variables were positive.

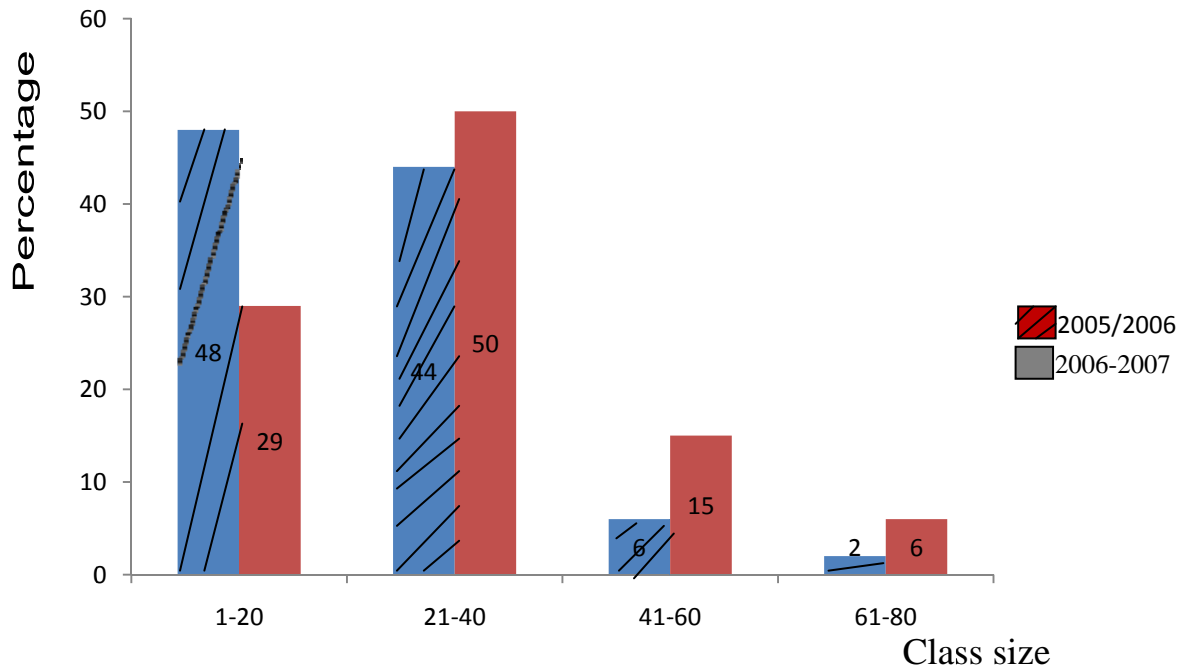


Figure 2: Composite graph showing the differences in class size between two academic years

Source: Field Survey, 2007

From figure 2, it is observed that, with the exception of class size 1 – 20, school enrolment for 2006/2007 was higher than the previous academic year (2005/2006). Generally, there was a decline in 2005/2006 academic year as the class size increases. . It is obvious from the analysis that there was a trend increase in the enrolment from the previous year.

Using the academic progression, with the class size of 61 – 80, the enrolment increased from 2 to 6 percent putting credence to the theory that School Feeding leads to increase in enrolment (Ahmed, 2004). Comments by teachers concerning attendance tended to concur with the objective of study. WFP programme evaluations also suggest those positive outcomes such as reduced dropout, improved learning, and improved behaviour. (Kristjansson et al., 2006; Chandler 1995; Ahmed 2004).

Collaborating the findings as in above other authorities have suggested that school feeding improves education by increasing school enrolment/attendance, improve cognitive development, reduce gender imbalance in access to education, and by extension, enhancing children's future income-earning potentials (Hicks, 1996; Levinger, 1996; Del Rosso, 1999; Bennett, 2003; Tomlinson, 2007a). The results as in above settles the researchers research question on the impact of the feeding programme on enrolment of the pupils within the SND and the assertion by authorities that SF and Take-Home rations, used in combination, can increase school attendance by up to 30 percent, which in turn enhances learning opportunities and narrows the gender gap. (Bennett 3003; WFP 2006e; Powell et al., 1983).

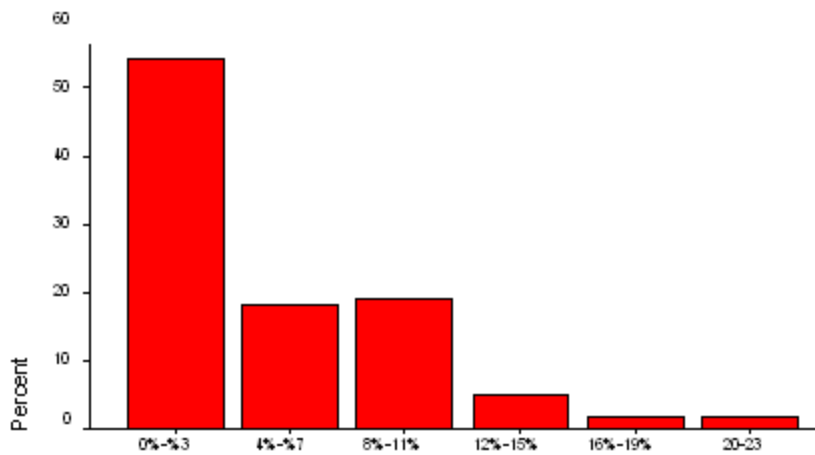


Figure 3: Drop out rate in 2006/2007

Source: Field survey, 2007

From figure 3 the last three stages of 2005/2006 academic year saw a trend decline in drop-out rates compared to 2005/2006 academic year. The last three years of the basic school scale's down in respect of drop-outs. The reasons assigned to the drop-out rates scaling down are not farfetched.

Following the positive impact of School Feeding on retention, the researcher sought to find out what other variable(s) could be enhanced as an adjunct to the feeding programme. Other factors elicited from respondents that could contribute to the impact on retention of pupils. Poor children are enrolling and staying in school, enticed by the daily meals they received.

The study suggested some variables that could impact on the retention of pupils to the respondents and below are the responses that were elicited.

Table 2: Differences in drop – out rate

Reasons	Frequency	Percent
Because of CRS, SFP	43	43.0
Because of Phasing out of the CRS, SFP	17	17.0
Awareness of parents of the importance of education	16	16.0
Parents changing of settlement	7	7.0
Parents using pupils on farm	8	8.0
Lack of guidance and counseling	6	6.0
Rural-urban migration	1	1.0
Missing system	2	2.0
Total	100	100.0

Source: Field survey, 2007

The question to find out was which among the variables above impacts more positively on retention. School Feeding had 43% of the respondents agreeing that the CRS SFP has affected enrolment positively. According to a review document on the SFP by the government of Ghana: “the GSFP has led to increased enrolment and attendance rates. For example, a review of the

GSFP pilot in 2006 estimated that enrolment rose by 20.3% in GSFP schools as compared to non-GSFP schools. Similarly, attendance rose by 39.9%, 5% and 13% in three pilot schools compared to 9%, 0.5% and 19% in non-GSFP schools in the same districts.” (GSFP 2007). The respondents also expressed the fear that, the phasing out of the feeding programme could affect retention and 17% of the respondents held that view. At the time of gathering the information for the purposes of this dissertation, the feeding programme of the CRS was to be phased-out and the question is what happens to the retention of the enrolment increases or what alternative is there to sustain the increased enrolment?

Relationship between school feeding and academic performance

As one of the objectives of this dissertation, this aspect intends to explore possible correlation that exists between school feeding and academic performance of the pupils.

The field study was to find out the accounts for academic progression of the pupil.

Table 3: Reasons for the academic progression

Reasons	Frequency	Percent
Teachers motivates pupils to attend school regularly	26	26.0
CRS school feeding programme	58	58.0
Good teaching and learning	16	16.0
Total	100	100.0

Source: Field survey, 2007

After ascertaining the increases in enrolment as a result of SF, the researcher sought to find out what accounts for academic progression of the pupils. The variables as in the table sought to ask the respondents, which of them impacts most on the academic performance of the pupil.

According to the respondents, 58% agreed that SF has a positive relationship with the academic performance of the pupil, 26% of the respondents attributed it to teacher motivation, 16% of believed good teaching and learning has positive relationship with the academic performance of the pupil. Over all, the respondents agreed that there exist a relationship between SF and the academic performance of the pupil. Thus, the SFP demonstrably promotes improvements in students' academic performance and cognitive development. School feeding programmes, where learners are fed meals or snacks at school, are a way to reduce short-term hunger and improve the nutrition of children so that they can concentrate, understand and perform academically. This agrees with Taras (2005) assertion that, offering a healthy breakfast is an effective measure to improve academic performance and cognitive functioning among under nourished populations. In a related study in the United States of America, it had been suggested that, feeding programmes that provide undernourished participants with an adequate diet, cognitive development outcomes can be reasonably anticipated. These outcomes would include improved test scores, decreased repetition of grades, and, to the extent that school desertion is in part a response to academic difficulty, decreased dropout and absenteeism rates. Good nutrition thus affects cognitive development of the child (Averett et al, 2007).

SFP and access to education for the girl-child

As part of the objectives of this research work, the researcher sought to ascertain whether the SFP has enhanced the access of the girl-child to education. Literature available and empirical evidence attest to the suggestion that SFP's does enhance general enrolment and by extension, the girl-child's. Evidence suggests that SFPs may be most effective in meeting their attendance-related objective in settings where attendance is not already high and where children come from rural, relatively low socioeconomic backgrounds. Several of the studies also point to the need for programme regularity to achieve an impact on children's school-going habits. Going to field, the responses gathered suggested significant effect on the enrolment of the girl-child and other auxiliary attendant effects such as retention and academic. Sixty percent of the respondents suggested the SFP affects the enrolment of the girl-child, 20% suggested the SFP affects the retention of the girl-child and 10% suggested the SFP affects the academic performance of the girl-child.

Figure 4 is a pictorial view of the responses of the respondents to the question posed on the impact of the SFP on the enrolment of the girl-child.

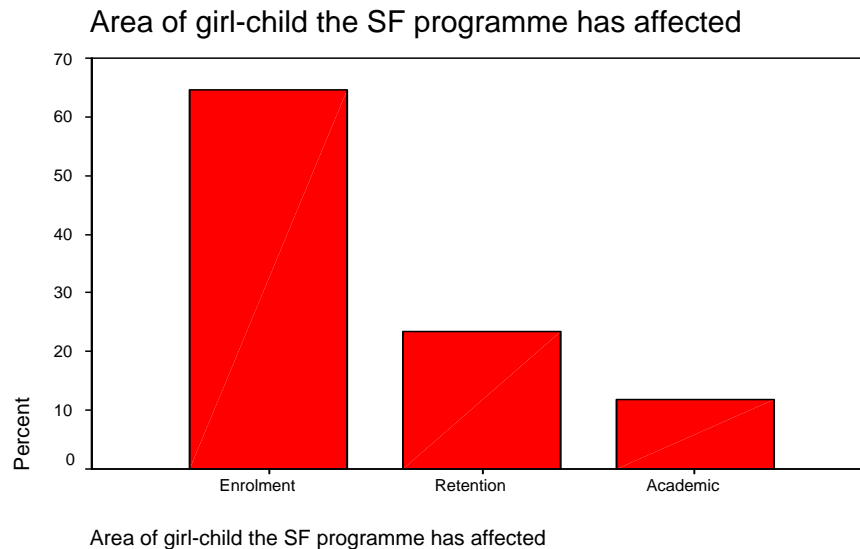


Figure 4: Area of girl-child the SF programme has affected

Source: Field survey, 2007

The figure shows high enrolment among the girl child with lower retention and still lower academic performance. The girl-child like any other pupil is expected to be influenced by school feeding to attend school. It has been widely accepted that, school feeding programmes lead to greater enrolment in school and improve the ability to learn. In these ways school meal lead to the positive external effects associated with education and health. However it seems the feeding programme has more effect on girl child enrolment that on the academic outcome. This may be due to traditional nous that detracts the girl-child education to high levels. Aside the on-site feeding by the CRS, the combined effect of the take-home ration and the package for well attended pupil made schooling attractive to most idling pupil including the girl-child. Around the world about 300 million children are continually hungry and 100 million of them, mostly girls, do not attend school. These are the findings of the International Food Policy Research Institute – an

organisation dedicated to finding “sustainable solutions for ending hunger and poverty”. (Ahmed 2004)

Effect of CRS School feeding on house-holds

Recapping some portions of the CRS programme profile as captured in the first chapter of the dissertation regarding the take home ration, it states; “In particularly food-insecure areas, primary school girls who achieve an attendance rate of 90 percent or greater receive a monthly take-home food ration. This ration serves as a cash transfer to encourage families to support sending girls to school. Also, food serves as meals for the entire family, thus improving the health and nutritional status of the entire family” (CRS, Ghana). This could be some palpable relationship that could be drawn between the feeding programme and the house-hold however; there are some studies that equally draw this conclusion. “Like many other food intervention programmes, free school meals are often seen as charity. But these meals benefit more than just the children who are fed at school. Feeding children at school benefits the community and society at large. This is known in economics as a “*positive external effect*” (Engelbrecht 2005, page 1). A positive external effect occurs when the activities of one person affects the wellbeing of another person(s) in a way that is not measured directly. With a positive externality the benefits to society are greater than the private benefits to a specific person. When a child is educated, it is not just that child who benefits. Instead the household, family and greater community benefit as well.

There are benefits to society in terms of greater productivity, which lead to higher combined earnings and eventually to greater economic growth.

Higher levels of education are also, according to South African Economist Philip Black, associated with lower birth and crime rates, thus reducing pressures on government to provide additional health care and police facilities. In a similar way, when one person has good health, it benefits more than just that person.”The above statement looks at the positive multiplier effect of school feeding programme from the economist point of view. Speaking to some house-holds within the beneficiary communities, similar testimonies were given albeit with some little variations.

First of all, some house-holds see the feeding programme as coming to spare the parent of the burden of feeding one or more persons depending on the number of beneficiary pupils from a house-hold. Also, the foods that are shared among the pupils at the end of the term are not consumed by just the individual but the entire house-hold. The recommendation that has been suggested by the researcher as part of this research work shall be deferred for mention and discussion in the next chapter. These recommendations shall be geared towards measures to adopt in all feeding programmes with emphasis on on-site feeding that is generally wide spread. The concluding chapter that comes after the preceding chapter will make a summary of the work, make recommendations for the way-forward and conclude on the dissertation.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Introduction

This chapter presents the summary of findings, research conclusions and recommendations to the study. The study set out to evaluate the attendant results of the CRS school feeding programme on the academic performance of the pupils of Savelugu/Nanton district. In order to address these objectives, a number of research questions were posed and a sample of hundred (100) teachers in the beneficiary schools were taken.

Summary of findings

The controversy over the number of actual beneficiaries pupils notwithstanding, critical analysis shows that the number of people benefiting from the CRS SF programme, stood at three thousand six hundred and one (3,601). Out of this total, boys were two thousand and ten (2,010) as the girls were one thousand five hundred and ninety one (1,591), giving a ratio of 13:10

Regarding enrolment and retention in those feeding schools, the majority of responses suggested a positive impact of the programme on those variables. Drop-out rates decrease as enrolment increases over the years.

Evaluating the possible linkage between feeding and academic performance of pupils, the respondents however believed the feeding programme had positive bearings on the pupil's performance. As asserted in

many literatures, the responses were significantly positive. Fifty eight percent of the respondents agreed to a relationship between the two variables. Qualitative nutrition is linked to the cognitive development of the child and these relates to the academic performance of the child.

Furthermore, the study established that, the feeding programme impacts positively on the girl child especially in areas of retention and access to education. According to respondents, enrolment and of the girl child are critical areas that the feeding programme impacts' positively. Special rations are given to the girl child with high attendance.

The study unearthed positive external economic effect of the feeding programme on parents as savings are made and income transferred to other programmes as a result of the CRS feeding programme in affected schools. Parents whose children attend the schools are spared "chop money". The rations given to the pupils may also consumed by the households.

Conclusions

Based on the summary of findings the following conclusions are drawn;

- The feeding programme has impacted positively on enrolment and retention figures in Savelugu/Nanton district basic schools.
- The feeding programme has a relationship with the academic progression of the pupils. The feeding programme is reported to have enhanced the cognitive development and academic progression of the pupil.

- The feeding programme has enhanced the enrolment and retention of the girl child in the beneficiary schools.
- The feeding programme has positive external economic effects on the household and parents in particular. Parents make savings as households benefit from the take-home rations given to pupils.

Recommendations

The following recommendations are made based on the preceding summary of findings and conclusions;

- The programme implementation should be discriminated to target poor but needy pupils to achieve the desired results.
- Educational infrastructure must be expanded to contain the rising enrolment figures.
- The cooking environment must be hygienic so quality and nutritious foods could be guaranteed. The cooks should be hygienically certified to ensure good and quality food is prepared and served for the children so appropriate cognitive development and academic performance to be achieved.
- Enough educational drives should be given to attract more girls into the feeding schools especially those within the community.
- For the sustainability of the feeding programme, reliable and guaranteed source of funding is required. The spirit of volunteerism among beneficiary communities and school farms or gardens should be encouraged.

- There should be an exit strategy for any sponsored feeding programmes. The exit strategy should be gradual for easy transition.

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APPENDICES

APPENDIX A

QUESTIONNAIRE

This questionnaire seeks information on the impact of Catholic Relief Service (CRS) school feeding (SF) on the pupils of Savelugu/Nanton district for an academic exercise and as such, any information elicited will be treated as confidential. So, please feel free and express your opinion(s) about the issues.

You are at liberty to answer or skip any question you deem fit, however, your utmost response to all questions with sincerity will greatly enhance the result of these academic exercise in partial fulfillment to my masters programme with the above named institution.

Please tick where applicable or provide suitable answer in the space provided against specific questions. You could add a paper where the space provided is not adequate.

Module A: Personal Information

1: Name of respondent

2: Age 21-25 26-30 31-35 36-40

3: Sex Male Female

4: Class taught. KG P1 P2 P3 P4 P5 P6

5: How long have you been teaching in this school? 1 – 5 6 – 10

11 – 15 other specify

Module B: Description of Institution

6: Name of school

7: Name of Head teacher

8: School code

9: Circuit

10: District

Module C: General Background

CRS SF IMPACT ON ENROLNMENT

11: What was your class size in 2006/2007 academic year?

.....

12: What was the class size from the previous academic year?

.....

13: If there is a difference, what accounted for the difference?

.....

14: When was CRS SP introduced in the school?

.....

15: Is the CRS SP is still on or phased out?

.....

16: If phased out, when was of phased out?

.....

IMPACT OF CRS SF ON PUPILS RETENTION

17: What was the drop-out rate 2006/2007 academic year?

.....

18: What was the drop-out rate the previous academic year?

.....

19: If there is any difference, what accounts for the difference?

.....

IMPACT OF CRS SF ON ATTENDANCE

20: How will you describe the punctuality of the pupils satisfactory Good

Bad Very Good S Satisfactory

21: How will you scale the academic progression of your pupils 1---5

6---10 11---15 16---20

22: What accounts for your answer in (q21).

.....

23: How will you describe your answer above?

.....

IMPACT OF CRS SF ON PUPILS ACADEMIC PERFORMANCE

24: Do you think the CRS SP affected the pupil in any way

Yes No

25: Which aspect of the child do you think the CRS SP affect

Academic enrolment retention Punctuality

26: Do you think the CRS SF has academic impact? Yes No

27: What is your account before and when the SF was introduced

.....

28: How will you scale the performance of the pupils

1---10 11---20 21---30 31---40

IMPACT OF CRS SF ON THE GIRL-CHILD

29: Do you think the CRS SF affected the girl-child? Yes No

30: Which area of the girl-child has the SF affected? Enrolment

Retention Academic

31: What was the number of girls at the beginning of the term.
.....

32: What is the number of girls at the end of the term.
.....

33: In a sentence, what is your general impression on the CRS SP?

34: Will you recommend that a similar programme replaces the CRS
SP in the event that it is phased out? Yes No

35: If Yes, why.

APPENDIX B

INTERVIEW SCHEDULE WITH CRS OFFICIAL--- TAMALE, IN PURSUIT OF THESIS WORK ON THE IMPACT OF CRS FEEDING PROGRAMME ON THE PUPILS OF SAVELUGU NANTON DISTRICT (SND)

PLEASE FEEL FREE TO WRITE AS MUCH AS POSSIBLE

- Please give a brief background of CRS
- When did CRS come to Ghana and Northern region in particular
- What was/were the motivation(s)
- Which particular areas are the focuses of the CRS aside the feeding programme. Please elaborate
- Please give what motivated the feeding programme by the CRS
- Was there a baseline study before the start of the feeding programme
- If yes, what was the account for Savelugu Nanton district (SND)
- How many schools were beneficiaries of the feeding programme in Northern region and SND in particular?
- Has there been any impact assessment of the feeding programme.
- If yes, please state the account of those schools under the programme in SND
- Did your outfit have any specific programme for the girl-child in the beneficiary schools.
- If yes, please elaborate
- Have you had any impact assessment on the above and kindly share the results if any

- When did the CRS wound up on the feeding programme in the region and the SND in particular and WHY
- Given your experience in the feeding programme, what will be your general recommendation and specifically to those now in the feeding programme in Ghana and SND in particular.

PLEASE SHARE ANY RELATED INFORMATION THAT MIGHT NOT HAVE BEEN ASKED. ANY RELATED LITERATURE COULD BE ADDED.

NAME OF OFFICER.....

RANK.....