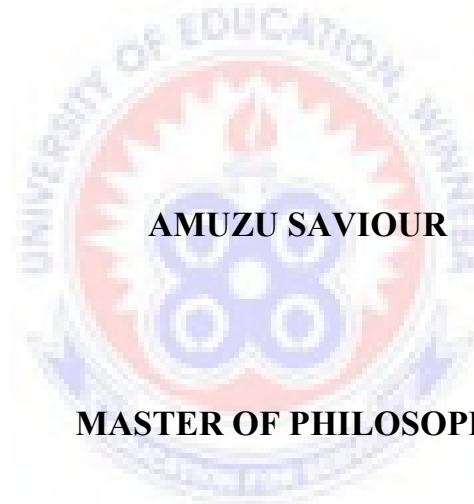


UNIVERSITY OF EDUCATION, WINNEBA

**INFLUENCE OF GHANA'S SCHOOL FEEDING PROGRAMME ON
ENROLMENT AND RETENTION OF BASIC SCHOOL PUPILS IN
WEST MAMPRUSI MUNICIPALITY OF THE NORTH EAST REGION**



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UNIVERSITY OF EDUCATION, WINNEBA

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MAMPRUSI MUNICIPALITY OF THE NORTH EAST REGION**



**A thesis in the Department of Social Studies,
Faculty of social sciences, submitted to the School of
Graduate Studies, in partial fulfilment
of the requirements for the award of the degree of
Master of Philosophy
(Social Studies)
in the University of Education, Winneba**

NOVEMBER, 2020

DECLARATION

Student's Declaration

I, Amuzu Saviour hereby declare that this thesis, with exception of quotations and references contained in published works which have all been identified and duly acknowledged, is entirely my own original work, and that it has not been submitted either in part or whole for another degree in this university or elsewhere

Signature

Date

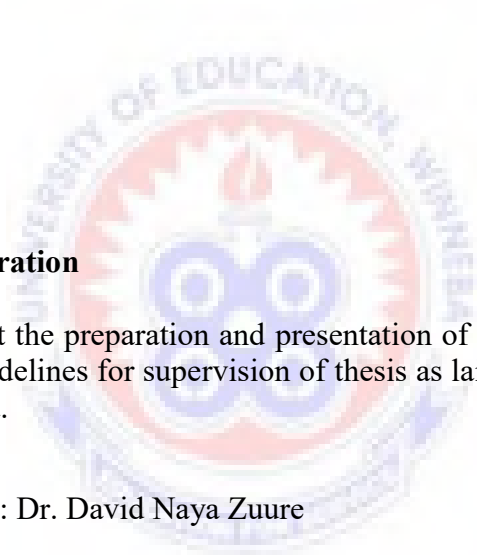
Supervisor's Declaration

I hereby declare that the preparation and presentation of this thesis was supervised in accordance with guidelines for supervision of thesis as laid down by the University of Education, Winneba.

Supervisor's Name: Dr. David Naya Zuure

Signature

Date



DEDICATIONS

This work is dedicated to Amuzu Precious Lisa, Amuzu Destiny Esme, Amuzu Redeemer Edwin, Amuzu Devine Kevin and to my mother. They are an inspiration to me.



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I owe a debt of gratitude to my supervisor Dr. David Naya Zuure for his useful guidance and suggestions. I am also indebted to a number of authors from whose work I have drawn valuable information. My special thanks go to my mum and entire family for their support in diverse ways. I want to express my sincere gratitude and appreciation also to all those who in diverse ways helped to bring this dream to fruition. Finally, glory, honour and praise to the Almighty Father for his guidance, protection and wisdom. This work would not have been without Him.



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LIST OF ABBREVIATIONS

| | |
|-----------|---|
| ADRA- | Dutch Development Agency |
| CAADP – | Comprehensive African Agricultural Development Programme |
| CRS – | Catholic Relief Service |
| DA – | District Assembly |
| DBE – | Diploma in Basic Education |
| DCE – | District Chief Executive |
| DIC – | District Implementation Committee |
| ECASARD – | Ecumenical Association for Sustainable Agriculture and Rural Development |
| ESPRR- | Education Sector Policy Review Report |
| FCUBE – | Free, Compulsory and Universal Basic Education |
| GAIN – | Ghana Agriculture Initiative Network |
| GCE „A“ – | General Certificate Examination „Advance“ |
| GES – | Ghana Education Service |
| GHI – | Global Hunger Index |
| GNAT – | Ghana National Association of Teachers |
| GPRS – | Ghana Poverty Reduction Strategy |
| GSFP – | Ghana School Feeding Programme |
| HND – | Higher National Diploma |
| IFDC – | International Centre for Soil Fertility and Agricultural Development |
| JAM – | Joint Aid Management |
| JHS – | Junior High School |
| KG – | Kindergarten |
| MIC- | Municipal Implementation Committee |

| | |
|-----------|---|
| MoE- | Ministry of Education |
| MOU- | Memorandum of Understanding |
| M. Ed. – | Master of Education |
| MDGs – | Millennium Development Goals |
| MLGRD – | Ministry of Local Government and Rural Development |
| MMDA’s- | Metropolitan Municipal and District Assemblies |
| MoE – | Ministry of Education |
| MOFA- | Ministry of Food and Agriculture |
| MoFARC &N | Ministry of Foreign Affairs, Regional Co-Operation and NEPAD |
| MoFEP – | Ministry of Finance and Economic Planning |
| MoH – | Ministry of Health |
| MoWCA – | Ministry of Women and Children Affairs |
| MSLC – | Middle School Leaving Certificate |
| NEPAD – | New Partnership for Africa’s Development |
| NGO – | Non-Governmental Organisation |
| PTA – | Parent Teacher Association |
| RCC – | Regional Co-ordinating Council |
| RCO – | Regional Co-ordination Office |
| SEND – | Social Enterprise Development Organization |
| SFP – | School Feeding Programme |
| SIC – | School Implementation Committee |
| SIGN – | School Feeding Initiative Ghana Netherlands |
| SMC – | School Management Committee |
| SNV – | Netherlands Development Organization |

- SFC – School Feeding Committee
- UNHTF – United Nations Hunger Task Force
- UNO – United Nations Organization
- WASSSCE – West Africa Senior Secondary School Certificate Examination
- WFP – World Food Programme
- WHO – World Health Organization
- WVI – World Vision International



ABSTRACT

After a decade of the GSFP implementation however, there are serious concerns from various stakeholders on the success of the programme and/ or the degree of achievement of its stated objectives. In the West Mamprusi Municipality in particular, not enough scientific studies have been conducted on the influence of the GSFP on enrolment and retention and this brings to the fore the need for this study to fill in the literature gap. This research work is an attempt to examine the implications of the GSFP on basic schools in the West Mamprusi Municipality of the North East Region of Ghana. The study examined the extent to which enrolment and retention were influenced by the SFPs. It focused on finding out what motivates pupils to enroll in certain basic schools, the influence of GSFP on pupils learning, and the presence of classrooms for pupils who attend GSFP schools. The work was a descriptive research of selected basic schools in the West Mamprusi Municipality of the North East Region of Ghana which were enjoying the GSFP. Pupils and teachers were used for this study. The population for pupils was two thousand and twenty-eight (2,028) out of which two hundred (200) pupils were randomly selected as the sample size. Twelve (12) teachers/head teachers were purposively selected to form part of the sample size. Questionnaire was the main research tool used whilst interview was used to back up the main research instrument. The research found out that the GSFP was a critical and major factor influencing basic school enrolment and retention in the schools under study, even though, the quality of teachers as well as good academic performance of schools were also mentioned as contributory factors. The study further found out that the presence of GSFP in basic schools had a positive effect on pupils' academic performance. The study concludes that the GSFP remains critical to the success of basic education and all efforts should be made to expand its structures and scope to the benefit of all schools. It is recommended therefore that, to alleviate hunger and improve concentration in classrooms, meals must be nutritionally balanced and provided on time, the implementation committees at the Municipality should continue to monitor the quality and quantity of the daily meals provided for pupils, information relating to school infrastructure like classrooms, kitchen and canteens (physical development) and the availability of text books and other teaching and learning materials must be given more attention, SFPs require constant monitoring and evaluation to provide input on the changing needs of the students as well as data on impacts and effectiveness.

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

Formal education and wage employment are the two critical factors that are strongly correlated with poverty reduction. In the words of Boateng, Boakye-Yiadom and Oduro (2000) there is a strong correlation between poverty and level of schooling. Therefore, any attempt by the Government(s) to increase access and quality education at the basic level and even beyond will be very much appreciated and lauded. This chapter provides the reader with the background to the study which looks at the concept of school feeding programme as an initiative of New Partnership for Africa's Development (NEPAD). The major partner, the Royal Netherland, and other donors of the programme have also been mentioned in the study.

The Ghana School Feeding Program (GSFP) started in 2005 as an initiative of the Comprehensive African Agricultural Development Program (CAADP). This initiative was conceptualized and subsequently implemented in the bid to enhance food security, abate poverty and hunger, boost domestic food production in deprived communities as well as increase access to basic education in Ghana.

The concept of the Ghana School Feeding Programme (GSFP) is to provide school-going-children in some selected public primary schools and kindergartens in the poorest areas of the country with one hot, nutritious meal per day, using locally-grown foodstuffs with the aim of spending 80% of the feeding costs in the local communities.

Generally, education is recognized as one of the basic human right across the world. Article 26 of the UN Charter asserts that, everyone has the right to education and that education should be free, at least in the elementary and fundamental stages of schooling (Human Rights Charter, 1945). Education forms the basis upon which economic, social and political development of any nation is founded and investing in education can help to foster economic growth, enhance productivity, contribute to national and social development and thereby reducing social inequality (World Bank, 2011). That is why it has been widely believed among educational economists that educational development would lead to accelerated economic growth, more wealth and income distribution, greater equality of opportunity, availability of skilled human power, a decline in population growth, long life, better health outcomes, low crime rates, national unity and political stability (Schultz, 2004).

Education plays a significant role in the development of many countries (Amon and Joviter, 2003). However, about 57 million children around the world are not going to school, most of these children are found on the African continent. It is contended that about 95% of children who live in low and lower-middle income countries do not get primary education, 44% in sub-Saharan Africa, 19% in South and West Asia and 14% in the Arab states (UNESCO, 2012).

Society expects that children and youth of Ghana who are the future leaders of the nation mature into responsible citizens who are capable and willing to contribute meaningfully to their own development as well as the development of the nation at large through various ways within their capacities. To this end, the expectation can only be realized through adequate basic education received in a conducive social environment during childhood. According to Hesse (1994) educated individuals are

better equipped to serve themselves and their society as individual family members, workers in the economy or leaders because education improves their intellectual skills, sense of social responsibility and an understanding of the modern world. Hence, Article 38 of the 1992 Constitution of Ghana requires Government(s) to provide access to Free Compulsory Universal Basic Education (FCUBE), and depending on the availability of resources, to Senior Secondary, Technical and Tertiary Education as well as life-long learning. Ghana government's commitments towards achieving her educational goals has been expressed in the following policy frameworks and reports; Ghana Poverty Reduction Strategy (GPRS I & II), Ghana Shared Growth and Development Agenda (GSGDA I & II and Agenda for jobs.

According to the Annual Ministerial Review (2007) following the positive results achieved from the implementation of GPRS I, government launched a successor national development policy framework – the Growth and Poverty Reduction Strategy (GPRS II) to be implemented over the period 2006-2009. Ghana is already on course to meet the targets of the MDGs, and acceleration of economic growth will permit us to implement them even more fully. For instance, in the case of basic education for all, government has undertaken not only to meet the numerical targets of the MDGs but also to put the lost quality back into the basic education that is offered to children in deprived and rural areas. Aside from this, government has gone beyond the MDGs and set educational targets that are more related to the manpower needs of a future middle-income Ghana than simply to the fundamental human right of our children to receive at least a basic-level of education from the society. The educational sector reform policy of government most sharply illustrates the intended change in strategic focus between GPRS I and GPRS II. The objectives of the UN's MDG compact, which are reflected in the original poverty reduction proposals of GPRS I, included

raising the access of all the nation's children and youth to a defined minimum of basic education, unhampered by the particular economic circumstances of their parents or guardians.

In an educational programme which was simply focused on poverty reduction, the standard way to meet this target was to improve and equalise access to a six-year basic education for all children up to the age of around 12 years. In Ghana's GPRS II it has been decided to eventually make school attendance obligatory for all children for 11 years -- from 4 to 15 -- including two years of Kindergarten, and three years of Junior High School with genuine secondary school content. The plan also includes improving the physical environment of schooling, and assuring the quality standards, especially in basic numeracy and literacy. The levels of teacher education are being rapidly improved; Curricula are being reshaped at every level so as to raise the standard targets of educational attainment for the bulk of Ghana's youth and to bring them eventually up to standards around the world. The reason for going so far beyond the internationally covenanted obligations in the provision of universal basic education as simply our children's human right is that government has absorbed the most important lesson of contemporary economic history. The lesson is that the single most crucial key to the attainment of economic success is the educational quality of a nation's work force. Government has accordingly decided that Ghana must nurture a workforce which is equipped with more than the basic levels of educational attainment, as defined in the MDG goals. This is so in order to support an economy which can then realistically aim to achieve rapid progress in the income status of its citizens.

The goal requires governments to ensure that by 2015, children (both boys and girls) everywhere will be able to complete a full course of primary schooling. The government of Ghana sought to achieve this goal by providing a constitutional legal backing and included it in its constitution as a legal requirement in 1992. Since then attempts to achieve this goal have included a major restructuring of the first and second cycle education in 1987 which reduced its duration from 17 years to 15 years. This was followed by a concept of free and compulsory basic education for every child of school going age to be realised through the introduction of a Free Compulsory Basic Education programme (fCUBE). To ensure the achievement of MDG 2 government developed and launched the Education Strategic Plan (ESP) in 2003 to facilitate among other things, the attainment of the targets of Universal Primary Completion earlier than the target year of 2015, and Gender Parity in schools by the end 2008. An important policy measure to enhance basic school enrolment was the provision of capitation grant programme, meant to make basic school free from any form of school fees. This has also been augmented by a school feeding programme to enhance the nutritional status of school children and promote access, retention and quality of education. To augment the supply of teachers in the remote areas and deprived districts, Local Governments (i.e. District Assemblies) have been made to sponsor trainee teachers who are expected to be posted back after training to the various districts that sponsored them. In order to ensure equity in the distribution of textbooks so as to improve quality of teaching and learning, the Ministry of education has initiated a textbook policy ratio of 1:1 in the three core subjects (English, Mathematics and Integrated Science), for all basic schools in the country. As a result of these efforts some progress has been made towards the achievement of

the MDG 2. Gross enrolment ratio has increased from 86.3% in 2003 to 93.7% in 2006.

The Ghana Shared Growth and Development Agenda (GSGDA I), was formulated as a successor to the Growth and Poverty Reduction Strategy (GPRS II) to be implemented over the period 2010-2013. The priority policy interventions to be implemented over the medium-term to ensure access to quality education are aimed at achieving the following objectives:

- increase inclusive and equitable access to, and participation in education at all levels;
 - promote the teaching and learning of science, mathematics and technology at all levels;
 - improve management of education service delivery;
 - improve quality of teaching and learning; and
 - ensure continued provision of life skills training and management.
- The key policy interventions to be implemented to increase inclusive and equitable access to, and participation in education at all levels include:
- remove the physical, financial and social barriers and constraints to access to education at all levels;
 - expand delivery modes including distance education, open schooling, transition education and competency-based training for Technical and Vocational Education and Training (TVET);
 - mainstream education of children with special needs;
 - roll-out a programme for the attainment of universal access to free secondary education;

- bridge the gender gap. The key policy measures to be implemented to promote the teaching and learning of science, mathematics and technology at all levels include:
- ensuring that tertiary institutions adhere to the national policy on 60:40 admission ratio in favour of science, mathematics and technology;
- expand the Mathematics, Science and Technology Scholarships Scheme (MASTESS) and use it to attract majority of students into science and science-biased courses;
- expand infrastructure and facilities in tertiary institutions to absorb the increasing number of qualified students;
- provide incentives for science, mathematics, technical and vocational teachers; and
- upgrade tools and equipment for teaching science, mathematics and technology subjects. The key policy measures to be implemented to improve management of education service delivery include:
- strengthen the capacity for education management;
- accelerate the implementation of the school and district report cards in all public basic schools and districts;
- ensure the efficient development, deployment and supervision of teachers;
- promote community participation in management of schools;
- introduce a programme to reward outstanding education service providers to boost morale in the sector; and
- strengthen institutional arrangements for enhancing the roles of CBOs and CSOs in advocacy.

The key policy measures to be implemented to improve the quality of teaching and learning include:

- provide adequate supply of teaching and learning materials;
- review and standardise curricula especially at the basic, TVET and Non-Formal Education levels;
- deploy adequate qualified teachers and improving teachers' time-on-task;
- expanding the Untrained Teachers Diploma Education (UTDE) programme;
- accelerate institutionalisation of the In-Service Education and Training (INSET) programme at the basic level;
- deepen the implementation of the national programme of education quality assessment and increase management capacity to support and implement it; and
- strengthen supervision and management in schools to constantly monitor quality with the support of district assemblies, communities and parents.

Better employment opportunities provide people with new, and often improved, sources of income. In this way, improving the quality and quantity of employment opportunities directly links economic growth to poverty reduction. Low-income households possess few assets of their own. Instead, the most abundant resource the poor have at their disposal is their labour (Islam *et al.*, 2004). A development strategy that more fully employs a country's human resources and raises the returns to labour becomes a powerful tool for reducing poverty. To realise this potential, development strategies cannot relegate employment to the margins of policy formulation. Employment must become a core objective of economic policy.

Agenda for jobs/Employment is a major link between economic growth and poverty reduction. When economic growth generates new or improved employment opportunities, particularly for low- and middle-income families, household incomes will rise across the board. Employment creation provides a direct channel for distributing the benefits of economic growth broadly throughout the population. Evidence from different parts of the world suggests that the greater the employment focus, the more effective economic growth becomes in fighting poverty (Khan 2001; Islam, 2004). The precise path to poverty reduction differs from country to country. However, most developing countries that have dramatically reduced their poverty levels have done so by improving employment opportunities. In these cases, low-income households have been able to participate in the improvements in the quality and quantity of paid work – for example, by improving agricultural productivity or increasing jobs in labour-intensive production. Numerous examples exist – Indonesia, Vietnam, Chile, Bangladesh, and South Korea, to name a few (Osmani, 2004; Khan, 2001). Economic growth alone cannot be counted on to generate significant improvements in employment and poverty reduction (Osmani, 2004, 2003). Countries from around the world have experienced periods of “jobless growth” in which output expands, but employment stagnates or declines. Similarly, in many economies, informal employment has grown much more rapidly than formal employment, even during periods of relatively rapid economic growth. Such “informalisation” represents a deterioration, on average, of the quality of remunerative work. For a country like Ghana, in which employment must be central to any effort to reduce poverty, the type of growth matters as much as the level of growth. Employment is not the only means of translating growth into poverty reduction. The additional resources that growth generates can be utilised to provide basic services to the poor – such as education and

health. Social provisioning is a necessary component of a comprehensive poverty-reduction strategy, insuring the supply of public goods and services necessary for human development. However, the development of a poverty-reduction strategy does not demand a stark choice between employment and social provisioning. An employment-intensive approach complements programmes aimed at meeting basic needs by improving the material resources low-income households have at their disposal. Generating decent work becomes a powerful instrument for achieving the common objective of human development. In this respect, an employment-targeted approach to economic development assists the attainment of the Millennium Development Goals (MDGs). The impact of employment is not restricted to poverty reduction, but supports other human development targets. For example, improving women's access to paid employment opportunities improves gender equity. Moreover, when women have access to independent sources of income, the distribution of resources within the household is often more equitable and child health and developmental outcomes frequently improve.

The implications are clear: appropriately designed employment policies – including those that explicitly address gender issues and avoid the “male breadwinner bias” (Elson & Caatay, 2000) – can have an enormous positive impact on human development and the attainment of the MDGs. 8. The establishment of an employment-intensive growth path for poverty reduction in Ghana requires the realisation of three interrelated components: A Growth Component - generating higher rates of economic growth. An Employment Component - insuring that economic growth produces a significant number of new employment opportunities and improves existing ones. A Poverty Focus - linking poor individuals and households to new and improved employment opportunities. The connections

between these three elements are straight-forward. Economic growth is necessary, but not sufficient. Growth must be employment-intensive. Moreover, the generation of new employment is not enough to guarantee poverty reduction. Policies must be designed such that the poor can take advantage of the new opportunities to make growth pro-poor.

In a study conducted by Mensah Addae (2000) cited in Konzabre (2018) under the caption “Education in Ghana: A Tool for Social Mobility”, he posited that in Ghana, education has always been highly treasured and has played a crucial role in the social advancement of society. He asserted further that education is there to make people part of the society. From the above, it can be deduced that the purpose of education is to improve the living conditions of people in the society. There is no doubt saying that improving the living conditions of people should start with the availability of food. This is particularly the case because in the words of Maslow (1943) humans are motivated through the provision of certain basic physiological needs like air, food and water. Article 25 of the 1992 Constitution of the Republic of Ghana guarantees every citizen the right to education, but this right can sometimes be curtailed by the inability of school-going-children to find food to eat. In the light of the above, it has become necessary to see the Ghana School Feeding Programme (GSFP) as one of the new reforms previous and current Governments have implemented in education which seek to provide pupils the energy and urge to learn through the food they eat in schools.

The 17 Sustainable Development Goals (SDGs) define global sustainable development priorities and aspirations for 2030 and seek to mobilize global efforts around a common set of goals and targets. The SDGs call for worldwide action

among governments, business and civil society to end poverty and create a life of dignity and opportunity for all, within the boundaries of the planet. Between 2000 and 2015, the Millennium Development Goals (MDGs) provided an important development framework and achieved success in a number of areas such as reducing poverty and improving health and education in developing countries. The Sustainable Development Goals (SDGs) succeed the MDGs, expanding the challenges that must be addressed to eliminate poverty and embracing a wide range of inter-connected topics across the economic, social and environmental dimensions of sustainable development.

The SDGs were born out of what is arguably the most inclusive process in the history of the United Nations, reflecting substantive input from all sectors of society and all parts of the world. Through the UN Global Compact alone, more than 1,500 companies provided input and guidance. The goals are universally applicable in developing and developed countries alike. Governments are expected to translate them into national action plans, policies and initiatives, reflecting the different realities and capacities their countries possess. While they primarily target governments, the SDGs are designed to rally a wide range of organizations, and shape priorities and aspirations for sustainable development efforts around a common framework. Most importantly, the SDGs recognize the key role that business can and must play in achieving them.

Sustainable Development Goal 4 (SDG 4) is the education goal. It aims to “ensure inclusive and equitable quality education and promote lifelong learning opportunities by 2030 for all in the following ways;

- ensure that all girls and boys complete free, equitable and quality primary and secondary education leading to relevant and effective learning outcomes
- ensure that all girls and boys have access to quality early childhood development, care and pre-primary education so that they are ready for primary education
- ensure equal access for all women and men to affordable quality technical, vocational and tertiary education, including university
- substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship
- eliminate gender disparities in education and ensure equal access to all levels of education and vocational training for the vulnerable, including persons with disabilities, indigenous peoples, and children in vulnerable situations
- ensure that all youth and a substantial proportion of adults, both men and men, achieve literacy and numeracy
- ensure all learners acquire knowledge and skills needed to promote sustainable development, including among others through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship, and appreciation of cultural diversity and of cultures contribution to sustainable development
- build and upgrade education facilities that are child, disability and gender sensitive and provide safe, non-violent, inclusive and effective learning environments for all

- substantially expand globally the number of scholarships for developing countries in particular least developed countries, small island developing States and African countries for enrolment in higher education, including vocational training, and communications technology, technical, engineering and scientific programs in developed countries and other developing countries
- substantially increase the supply of qualified teachers, including through international cooperation for teacher training in developing countries, especially least developed countries, Small Island developing States.

(UN, 2015).

Ghana School Feeding Programme (GSFP) is among some of the pro-poor programmes initiated by government to increase enrolment levels in the basic schools. School feeding is an in-school meal adopted over the years which is intended to provide meals or snacks at school with the hope of reducing children's hunger during schooling days (Del Rosso, 1999). The World Food Programme (2004) asserted that it is a tool capable of enabling hundreds of millions of poor children worldwide to attend school both in developed and developing countries.

It is in light of the above that this study sought to assess the influence of the Ghana School Feeding Programme (GSFP) on enrolment and retention in the West Mamprusi Municipality in the North East Region.

The West Mamprusi Municipality of the North East Region is one of the 260 Metropolitan, Municipal and District Assemblies (MMDAs) in Ghana, and forms part of the 6 MMDAs in the North East Region. West Mamprusi Municipality is one of 45 new districts created in 1988 under the Government of Ghana's decentralization and was later replaced with LI 2061 in 2012. With its administrative capital as Walewale.

The Municipality is located within longitudes 0°35'W and 1°45'W and Latitude 9°55'N and 10°35'N. It has a total land size area of 2610.44 sq km. It shares boundaries with East Mamprusi Municipal and Gushegu Municipal to the east; North Gonja District, Savelugu Municipal and Kumbungu District to the south; Builsa North District, Kassena-Nankana Municipal and Bolgatanga Municipal (Upper East Region) to the north and; to the west, Mamprusi Moagduri District.

The population of West Mamprusi Municipal, according to the 2010 Population and Housing Census, is 121,117 and accounts for 4.9 percent of the region's total population. Males constitute 49.2 percent and females represent 50.8 percent. More than six in every ten (63.2%) of the population of the municipal lives in rural areas, while the remaining 36.8 percent lives in the urban areas. The municipal has a sex ratio of 96.8. The population of the municipal is youthful with about two-fifth (46.2%) of the population below 15 years depicting a broad base population pyramid which tapers off with a small number (6.5%) of elderly persons aged at least 60 years. The total age dependency ratio for the municipal is 102.6, the age dependency ratio for males is higher (109.8) than that of females (96.1).

Land in Walewale is owned by individual families whose control rest in the family head as the sole custodian. These lands belong to the Mamprugu skin and the divisional chief of the town acts as the resident trustee on behalf of the „Nayiri“. Title to lands is derived from the allodia superior title. Lesser interests are derived from this and one unique thing about this tenurial arrangement is that, ownership becomes perpetual after acquisition for housing purposes. Though still under the legal ownership of the skin, once the proper procedure of land acquisition for housing development is complete, the interest on land perpetuates. This however, does not

apply to agricultural lands. Here, no agricultural lands are sold, hired or leased for, at least, peasant farming. All that is required is to approach the landowner with “kola money” and a plot is offered. This system of ownership of land is friendly to all kinds of land development - either for residential purpose or otherwise. Despite the relaxed system of landownership, no stranger wishing to acquire land for any purpose in an area and Walewale for that matter, should under-rate the possible dangers. He should endeavour to contact the chief or a leading figurehead of the place for guidance. A lapse in this direction could jeopardize the intended development. Though the tenurial arrangement is conducive for any large-scale land development, it will do one a lot of good to investigate the title to land.

Education in West Mamprusi Municipality is under the authority of the Municipal Education Directorate headed by the Municipal Director of Education. Just like any other Municipal in the country, it is charged with the responsibility of providing quality pre-tertiary education and training for the improved human resource development of the country. The Municipal Directorate of Education is working towards providing the opportunity for all children of school going age to have access to equitable and quality education, capable of unearthing the innate skills and potentials with emphasis on children from the vulnerable groups. To ensure effective geographical access, and efficient education management, the Municipal has been divided into ten (10) circuits. The municipal has no tertiary institution, but can however boast of two (2) Public Senior High Schools, three (3) Private Senior High Schools, one (1) Vocational School, fifty (50) Junior High Schools, eighty-eight (88) Primary Schools and fifty-six (56) Kindergartens. The schools are distributed across the municipality. 38% of the teachers in the public basic schools are non professional teachers (Municipal Education Annual Statistics, 2010).

The study specifically looked at the enrolment figures of 2016/2017, 2017/2018 and 2018/2019 academic year. The enrolment figures for 2016/2017 and 2017/2018 academic years were the same. In both years, enrolment for boys stood at 933 and girls 1,012 bringing the total enrolment figures for both years to 1,945. For the 2018/2019 academic year, enrolment for boys was 1,078 and girls were 1,086 making a total enrolment figure of 2,164 for the year. There is a clear indication that there has been an increase in enrolment level from 1,945 in 2016/2017 and 2017/2018 academic year to 2,164 in 2018/2019 academic year. The increase in enrolment by 11.3% (219 pupils).

1.2 Statement of the Problem

Basic Education refers to the level of education in any country that constitutes the foundation stage to all children (Commonwealth Secretariat, 1991). Nelson Mandela stressed the importance of education when he opines that “education is a great engine of personal development. It is only through education, a daughter of a peasant can become a doctor, that the son of a mine worker can become the head of the mine, that the child of a farm worker can become the President of a great nation” (Mandela, 2000, p.559).

Governments in Ghana at different times and periods have recognized the relevance of education to the development of the nation’s human capital. In pursuing this, numerous educational policies have been implemented by government and non-governmental organizations/agencies. Examples are the Free Compulsory Universal Basic Education (FCUBE), World Food Programme (WFP), Catholic Relief Service (CRS), Northern Student Scholarship, Capitation Grant, Free Exercise Books and recently the Free School Uniforms for pupils in Basic Schools among others. These

policies are to create room for the poor, who because of their low incomes and the deprived nature of their environments find it hard to access basic education which is supposed to be free, compulsory and universal. However, the evidences are only limited to gross outcomes only. For instance, Integrated Social Development Center (ISODEC, 2015) argued that the GSFP has contributed to higher enrolment figures among all beneficiary schools throughout Ghana.

After a decade of the GSFP implementation however, there are serious concerns from various stakeholders on the success of the programme and/ or the degree of achievement of its stated objectives. In the West Mamprusi Municipality in particular, not enough scientific studies have been conducted on the influence of the GSFP on enrolment and retention and this brings to the fore the need for this study to fill in the literature gap. Even where attempts have been made to evaluate the programme's effect on enrolment, in many parts of the country, they have, more often than not left out retention. This study therefore intends to fill in the literature gap and propose strategies to improve enrolment and retention in basic schools in the West Mamprusi Municipality in the North East Region through the activities of the GSFP. This was done by taking a critical study of some selected GSFP schools in the West Mamprusi Municipality in the North East Region.

1.3 Purpose of the Study

The purpose of the study is to assess the impacts and consequences of GSFP on basic school education in West Mamprusi Municipality of the North East Region. The study specifically looked at the influence of GSFP on enrolment and retention of basic school children in the West Mamprusi Municipality of the North East Region

1.4 Objectives of the Study

The objectives of this study were as follows:

1. Assess whether enrolment in basic schools in the West Mamprusi Municipality is influenced by the GSFP.
2. Examine the relationship between the GSFP and retention of pupils in basic schools in West Mamprusi Municipality
3. Determine the challenges of GSFP on basic school education in the West Mamprusi Municipality

1.5 Research Questions

The study is intended to answer the following questions.

1. How is the enrolment of pupils in basic schools in West Mamprusi Municipality influenced by GSFP?
2. What is the relationship between the GSFP and retention of pupils in basic schools in West Mamprusi Municipality?
3. What are the challenges of the GSFP on basic school education in West Mamprusi Municipality?

1.6 Significance of the Study

In Ghana and elsewhere, national policies and decisions on education are largely the preserve of policy makers, politicians and government functionaries. Additionally, this study will give information to existing literature on the Ghana School Feeding Programme (GSFP). This will give government functionaries and policy makers“ reliable information to enable them streamline policies that will lead to the realization of the country“s educational goals in particular and the overall development of the nation. The research would also provide the Ministry of Education (MoE) and the

Ghana Education Service (GES) the opportunity to hear the story of GSFP from the perspective of the pupils.

The Ghana School Feeding Programme has been implemented to increase school enrolment and retention at the basic level. The results of this study will provide information for the assessment of the outcome of the programme. The study is also intended to add information to the socio-politico-economic discourse on the Ghana School Feeding Programme (GSFP). On daily basis, social commentators and political analysts inundate us with commentary on the programme with little or no scientific evidence. This study will afford them the opportunity to have a deeper insight into the issues pertaining to the Ghana School Feeding Programme (GSFP). Ultimately, social commentators and political analysts would be better informed to educate the Ghanaian public on issues that relate to the Ghana School Feeding Programme (GSFP).

Also, the study will contribute immensely to the work of some Non-Governmental Organizations (NGOs), World Food Programme (WFP), NEPAD, World Health Organization (WHO) and other bodies whose programmes, policies and activities are directly related to this research. Finally, the study is intended to serve as a reference material for researchers, teachers, and students who may use it for various purposes. In the national context, the research together with other researches in this field would not only help to monitor the GSFP success but also serve as a basis for improving quality education.

1.7 Delimitation

The scope of this research was limited to finding out the implications of GSFP on basic school enrolment and retention in the West Mamprusi Municipality in North East Region. The basic schools selected for this study were Nabari D/A Primary School, Daboya No.2 D/A Primary School, Guakodow D/A Primary School and Shilinga D/A Primary School. It is worth mentioning that this single educational research I have conducted cannot comprehensively cover all the issues pertaining to the implications of Ghana School Feeding Programme (GSFP) on basic school education in Ghana because these issues are multi-dimensional in nature. Additionally, the research is specifically focused on the implications of GSFP on basic school education using classroom accommodation, enrolment and retention as indicators.

1.8 Organization of the Study

This research work looks at the implications of GSFP on basic school enrolment and retention in the West Mamprusi Municipality in the North East Region. The research work is presented in five (5) chapters. Chapter one (1) introduces the study. It is subdivided into several sub-topics. These are background to the study, statement of the problem, purpose of the study, and objectives of the research. The rest are research questions, significance of the study, delimitation and organization of the research work. Chapter two (2) deals with reviewing of related literature of the study. The chapter looks at the theoretical framework of the literature review. The literature review is written under the following headings: poverty and education, education and the GSFP, school feeding as a nutritional intervention and academic performance, the development of SFPs in Ghana, school feeding programme in Ghana, governance of school feeding, organizational structure and development partners of the GSFP,

effectiveness of the GSFP, challenges of the programme, and implications of the programme for school enrolment and retention.

Chapter three (3) of this study concerns itself with methodology of the research. It discusses this under the following headings: research design, population and sample size, sample and sampling procedures, research instruments, method of data analysis, validity and reliability and ethical consideration and. Chapter four (4) has to do with the discussion and analysis of the results. The last chapter which is chapter five (5) contains the summary of the findings, conclusions and recommendations. The chapter is sub-divided into: introduction, summary of findings, conclusions, recommendations, contribution of the study to knowledge, limitation of the study and areas for future research.



CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This chapter presents a theoretical review of existing literature on the role of school feeding programmes on enrolment and retention of pupils. The review covers various issues related to how the GSFP have influenced school enrolment and retention in different places all over the world. Specific attention, however, is given to the role of the Ghana School Feeding Programme on enrolment and retention. Main areas covered by the review include poverty and education, education and the GSFP, school feeding as a nutritional strategy and academic performance, school feeding programmes in Ghana, school feeding and enrolment, effectiveness of the GSFP, challenges of the GSFP and implications of the GSFP on basic school enrolment and retention.

2.1 Theoretical Framework

According to Vitahl, Jansen and Jansen (2013) cited in Kamaludeen (2014) theoretical framework is a well-developed, coherent explanation of an event/phenomenon. Theories assist in interpreting and understanding events in the world. Similarly, the purpose of a theory is to provide tools for the interpretation of collected data, prevent the fragmentation of knowledge by ordering, giving the inquiry a focus, and providing theoretical explanations and deeper understanding of what is being investigated. This study adopted the Change Theory to assess the influence of GSFP on enrolment and retention issues in the schools under study.

2.1.1 The change theory

Change theory model is based around a 3-step process (Unfreeze-Transition-Freeze) that provides a high-level approach to change. It gives a change agent a framework to implement a change effort, which is always very sensitive and must be made as unified as possible. The 3 phases of the Kurt Lewin model provide guidance on how to go about getting people to change: a change agent will implement new processes and re-assign tasks, but change will only be effective if participants embrace it and help put it into practice (Lewin, 1935). This is seen in what the GSFP sought to do with the provision of food for pupils to attract them to school. When a structure has been in place for a while, habits and routine naturally set in. The organization as a whole will go in the right direction, so with the GSFP in place, the habit of going to school is developed and managers and implementers of the programme will also do what is right. People or processes may have strayed off course. For example, tasks that are not relevant or useful anymore are still being performed by force of habit, thus even with provision of food to students, they may want to stay out of school since they are used to absenting themselves under the pretense of hunger without anyone questioning the legitimacy of their reasons. Same can be said of the parents of the children who may also reassign the children instead of releasing them to school.

There could be managerial lapses. People might have learned to do things one way, without considering other more efficient methods. This behavior has to be checked, and thus the unfreezing nature of the theory. Unfreezing means getting people to gain perspective on their day-to-day activities, unlearn their bad habits, and open up to new ways of reaching their objectives (Lewin, 1935). This can possibly affect the whole or part of the stakeholders of the GSFP, so there is the need for continuous

communication and open door policy in order for the wheels of change to be set in motion.

Once team members prepare their minds and are desirous to change, change can start. The change process can be a very dynamic one if it is to be effective. It will probably take some time and involves a transition period. In order to gain efficiency, people will have to take on new tasks and responsibilities, which entails a learning curve. A change process has to be viewed as an investment, both in terms of time and the allocation of resources: after the new organization and processes have been rolled out, a certain chaos might ensue, but that is the price to pay in order to attain enhanced effectiveness within the structure. Change will only reach its full effect if it's made permanent (Lewin, 1935). Once the organizational changes have been made and the structure has regained its effectiveness, every effort must be made to cement them and make sure the new situation becomes the standard. Further changes will be made down the line, but once the structure has found a way to improve the way it conducts its operations, "freezing" will give the people the opportunity to thrive in the new environment and take full advantage of the change. In order not to get people going back to old habits, performance and reward system must be established, success must be celebrated and force-field analysis be made to remove all possible barriers.

2.1.2 Relevance of the theory of change to the study

Any successful programme creates change, and it comes as a result of the participants adopting solid knowledge of what works for others. The SFPs are run worldwide and therefore are characterized with successes and failures. The constructs/variables of the change theory are; problem, community needs/assets, desired results, strategies, influential factors and assumptions. Problem as in the case of this study is the

enrolment and retention and the influential factors are the availability of funds as enabling factor in the provision of meals, supervision and other related elements. Community needs/assets also have to do with the contribution(s) from the community in question accepting a change in their attitude towards enrolling their children who are school-going age in school. Additionally, local farmers are made to sell their farm produce to the school matrons. The desired result should reflect an increased enrolment and retention of school children in that community. The success story of other countries/organizations is adopted for the attainment of the objectives. All of the above elements can be summarized as implementation issues.

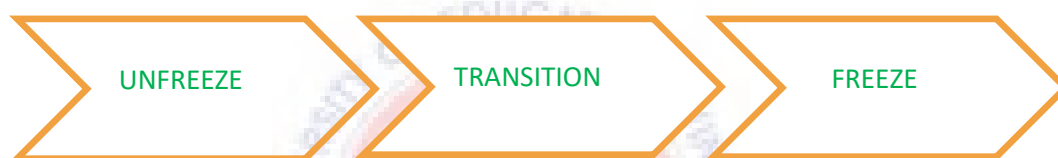


Figure 2.1: Theory of change model

Source: Kurt Lewin's model (1935)

Unfreeze are the forces that are striving to maintain the status quo, and dismantling the current mind set. This is usually by presenting a provocative problem or event to get people to recognize the need for change and to search for new solutions. Transition is a phase where new behaviors, values, and attitudes are adopted. This may be a period of some confusion as we switch from the old ways of doing things to a new one. Freeze is the final stage of crystallizing and the adaptation of ownership of the new concept.

The organization may revert to former ways of doing things at this point unless the changes are reinforced through freezing. This framework was relevant in this study particularly in assessing the impact of the GSFP in enrolment and retention of basic school pupils in the West Mamprusi Municipality.

2.2 Conceptual Framework

The conceptual framework is largely premised on the conceptual framework of the GSFP. The programme seeks to ultimately reduce poverty and improve food security. According to the GSFP District Operations Manual, the framework of the programme is as follows:

1. The strategy to feed school children with locally prepared food that is nutritionally adequate will focus spending on local foodstuffs thereby providing a ready market for local farm produce, leading to wealth creation for rural households.
2. With the ready market and increased household incomes the rural community will generate wealth.
3. With more incomes the community members can afford the additional food intake and other items needed to improve their nutritional status to eliminate short term hunger and malnutrition.
4. This will help to break the cycle of rural household and community poverty.
5. On the basis of the conceptual framework of the GSFP and the research topic at hand, the researcher developed a model to guide in the review of the literature. This model can be seen in the diagram below.

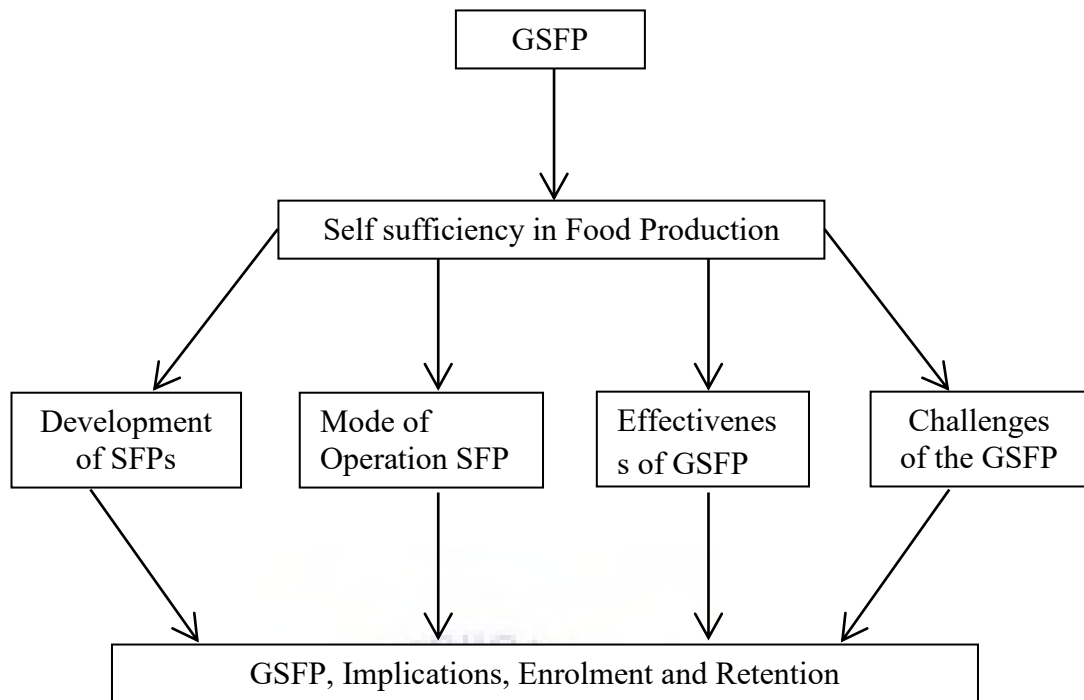


Figure 2.2: Model of conceptual framework of the literature review

Source: Researcher's Model (2019)

The literature review is largely premised along the following strands:

1. Overview of School Feeding Programme
2. Poverty and education
3. Education and the GSFP
4. School feeding as a nutritional intervention strategy
5. The Development of School Feeding Programmes.
6. School feeding programmes in Ghana
7. Operations of School Feeding in other Countries
8. Governance of School Feeding
9. Mode of operations of GSFP
10. School feeding programme and enrolment
11. The Influence of GSFP on retention

12. SFP, Cognitive Ability and Academic Improvement
13. Organizational Structure and development partners of the GSFP.
14. Effectiveness of the GSFP.
15. Implementation Challenges of the GSFP.
16. Implications of the GSFP on basic school enrolment and retention.

2.3 Overview of School Feeding Programme

The history of School Feeding Programme (SFP) dated back as early as 1930. This is the position and account of Tomlinson (2007). He reported that the development of SFP was initiated by the United Kingdom (UK) and the United States of America (USA) purposely to improving the growth of children. Another school of thought maintained that the revolution of SFP in Western Europe begun in the early 1700's and 1800's. Even though some areas in the USA were serving school meals from the mid 1800's, it was only the Netherlands that was known to have it as a comprehensive programme supported by national legislation. Later in the 1930's, the UK and the USA had also instituted the SFP as part of their national programmes (Kearney, 2008).

Besides, it is believed that some kind of SFP was practiced in Austria since 1940s through support from the USA. This was some kind of compensation and relief from the effect of World War II. Since then, school feeding programmes have become a key part of food assistance and relief emergency and development programmes (World Food Programme, 2010).

Inferring from the observation made by Bennett (2003), five (5) types of SFPs are identified according to their objectives:

1. School feeding to improve the cognitive development of children
2. School feeding as an emergency relief intervention
3. School feeding as a nutritional intervention
4. School feeding as a developmental intervention to aid recovery
5. School feeding and short and long-term food security

This classification can offer a good explanation on the historical evolution of SFP on time and context (Tomlinson, 2007). Irrespective of the objective of a particular intervention, they all have development goals with specific objectives as improving the quality and scope of education. This motive of SFP is what attracts the attention of many countries to either adopt it or sponsor its implementation elsewhere. Statistics have proved that about 368 million school children benefit from SFP in different places all over the world with annual expenditure/investment ranging between US\$47 billion and US\$75 billion (WFP, 2013).

As noted earlier, the implementation of any SFP has economic and social motives. Within the sub-Saharan region of Africa, low nutritional status of school children, hunger following from economic crises most often influence the initiation of school feeding by the country's own effort or qualified them as beneficiary for donor support. For instance, a decline in child nutrition and schooling in the sub-Saharan region of Africa has largely pointed to drought, while in the 1990's, economic crises in Indonesia led to an increase in the numbers of out-of-school children. Besides, Bangladesh in the 2008 crises has been compelled by its economic situation to withhold expenditure on education and address compelling challenges associated with

increasing food prices. These and other countries since 2008 have scaled up school feeding in reaction to a crisis.

This gives an indication that school feeding has a vital role to play in the event of an emergency, a social shock or conflict (WFP, 2013). It could be inferred from the foregoing discussion that SFP with its heavy investment requirement appears to be attributed to underdevelopment. This position is cogent as its implementation is often motivated by an unfavourable condition that requires immediate strategic decisions including the consideration of external financing. Many international donors, therefore, offer it as a grant to mostly the Third World countries. Even within the beneficiary country, consideration is often given to the most deprived segment of their population or social groups.

The extent to which SFPs target and reach the poor in programme countries raises concern. However, this concern is not generalised. The debate raise doubts on the success of SFP in terms of access. In Mali, for instance, this assertion is likely, because many children are not in school so they may not benefit from the SFP, whereas in Botswana there is a widespread success in school enrolment which is likely to guarantee that the programme will reach the target group (Bundy *et al.*, 2009). Thus, this brings to the fore the concerns about the role of SFP in enrolment. In Ghana, although the programme is designed and targeted at school children in poor communities, the practicality of it is still a challenge. The Annual Operating Plan of the GSFP indicates that coverage of the programme in the three poorest regions of the country is low; although efforts are underway to rectify the situation (GSFP AOP, 2011). If the trend remains so, the objectives of the programe can hardly be achieved.

It has been acknowledged since the evolution of SFP that not only are children motivated to get into school, but also because of the nutritional component associated with all similar interventions. Bundy *et al.* (2009) argue that worm infestations are usually common in children and high among children of school going age. This unfavourable phenomenon is known to have been affecting about 500 million school children, hence, making the deworming element beneficial in SFPs all over the world. Besides, they added that there is significant reduction in anaemia with deworming following the success stories of related programmes. In Djibouti, the SFP offers a package of deworming, Vitamin A supplements, health and hygiene education, water and sanitation facilities and nutritious school meals to beneficiaries.

The literature provides evidence from different countries that School Feeding Programmes are effective in reducing educational expenditure for both governments and households. The review also indicates that, School Feeding Programmes improve the nutritional status of school children in countries that have implemented it. However, while the influence of these programmes on enrolment has often been highlighted by the literature, that of attendance and retention of students have not been given much attention. This study will therefore, extend the research frontier to cover the role of School Feeding programme on students attendance and retention by drawing empirical evidences from the West Mamprusi Municipality.

2.4 Poverty and Education

Poverty is 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. UNICEF captures the situation well: One third (1/3) 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 anemia. 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, pp. 6 – 7).

In trying to understand the gap in the 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:

1. Poor vision because of health conditions
2. Poor nutrition
3. Less adequate pediatric health care
4. Poor oral hygiene
5. Inadequate housing for low income families
6. Higher learner mobility

It is also very critical and relevant 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 organization 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, traumatized, unhappy, jealous, angry or vulnerable was reported to be much greater than in schools where parents were materially well off, less stressed themselves and able to secure a stable and comfortable environment for their children” (Lupton 2004, p.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 was not 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:

1. Length of instructional programme
2. School library activity
3. Years of teacher training
4. Textbooks and instructional material and learner feeding

Harber and Davies (1997) also opined 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. They further noted that the ability of some 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 (50%) of the people live below the poverty line.

The literature provides evidence that Poverty is 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. This study will therefore, extend the research frontier of the literature by drawing empirical evidences from the West Mamprusi Municipality.

2.5 Education and the GSFP

Education universally is considered to be an important tool for national development. As a result, many economists have emphasized the impact education has on economic growth (Lucas, 1988; Barro, 1991), although other authorities have raised questions about the causal relationship between education and economic growth. Education has also been found to play a critical role in the adoption of new agricultural technologies in so many countries (Rosenzweig, 1996). Education is also seen as a means to improve health and reduce fertility (Strauss & Thomas, 2007), as well as an intrinsic good in itself (Sen, 2002). The phenomenon of SFPs is common to both the developing and industrialized countries. Many countries around the globe have SFPs running. For example, in 2004 the WFP alone had SFPs in 72 countries, covering 16.6 million school children. School Feeding is defined as the provision of food to school children (Bundy, 2009; Gelli, 2010). Generally, SFPs come in one of two basic modalities (Gelli, 2010):

1. In-school feeding, where children are fed in school; and
2. Take-home rations, where families are given food if their children attend school.

The In-school feeding can be divided into two common categories, these include, programs that provide meals, and programs that provide high-energy biscuits or snacks (Bundy, 2009). A take-home ration on the other hand is where a family is provided with uncooked food supply if their children attend school throughout the month or twenty (20) days in a month. Generally, the objectives of School Feeding Programmes are to provide meals or snacks to reduce short-term hunger in the classroom so that students can concentrate and learn better, and to attract children to school and have them attend regularly (Ahmed, 2004). Early malnutrition and/or

micronutrient deficiencies can adversely affect physical, mental, and social aspects of child health (Muthayya, 2009). The effects of malnutrition on physical health may include underweight, stunted growth, lowered immunity, and mortality. Early malnutrition and/or micronutrient deficiencies have been linked to poorer cognitive functioning (Scrimshaw, 1998; Worobey, 1999; Leslie, 1990). Short-term hunger can adversely affect attention and interest (Levinger, 1996; Read, 1973). Overnight and morning fasting (e.g. skipping breakfast) has been shown to adversely affect performance on cognitive tasks, particularly for children who are nutritionally at risk (Pollitt, 1995).

The GSFP was established in 2005 by the Government of Ghana and the Dutch Government as a means to boost domestic food production and increase school enrolment, attendance and retention among kindergarten and primary school children. However, the SFP started in September 2005, with 1,984 pupils, in 10 pilot schools, one in each region of Ghana. The programme, which received widespread praise when it was established, was inspired by the CAADP Pillar 3 of NEPAD under the recommendations of the UNHTF and part of government's efforts to attain the MDGs 1 and 2, which sought to eliminate extreme hunger, poverty and achieve universal basic education (Ghana News Agency, 2014). In August 2013, the National Coordinator of the programme, Mr. S.P. Adamu, disclosed that the programme is "now feeding 1,600,000 pupils from 4,920 public primary schools throughout the country and Four hundred thousand (400,000) more pupils are to benefit from the GSFP, beginning the 2013/2014 academic year" (Daily Graphic, 2013). The GSFP is the Ghanaian version of a HGSFP that has been mandated to provide pupils in selected public primary schools in the country with one hot, nutritious meal per school day, using locally-grown foodstuffs (Afoakwa, 2009).

It was a four-year programme (2007 to 2010) with funding from the Dutch and Ghana governments. The programme was expected to link the demand for food created by school feeding to the supply of food by small-scale farmers through local procurement mechanisms. Thus, the demand for home-grown food is expected to stimulate local market forces in such a way as to inspire small-scale farmers to expand production. The GSFP has wider implications for farmers in strengthening community food production and consumption systems through reduction in post-harvest losses, provision of a ready market for farm produce and incentives for increased production which will ultimately enhance food sovereignty (Quaye *et al.*, 2010).

It can be deduced from the literature established that GSFP are designed by implementing agencies to enhance school enrolment, nutrition and academic performance. Remarkable achievements have been demonstrated by the literature in the area of nutrition and enrolment in Ghana, the empirical literature concludes that the GSFP has wider implications for farmers in strengthening community food production and consumption systems through reduction in post-harvest losses, provision of a ready market for farm produce to improve children school enrolment and retention especially in the West Mamprusi Municipality.

2.6 School Feeding as a Nutritional Intervention Strategy

School Feeding Programmes are said to have three (3) major impacts (Bennett 2003; Hall, 2007). The first is the improvement of the nutritional status of school-going children and the reduction of malnutrition rates among school going-children. Second is the improvement of school enrolment, school attendance and cognitive performance, and also reduce the gender gap. Third is the effect of school feeding on the demand for locally produced foodstuffs. Since many of the nutritional and growth

problems occur in the first two (2) years of life, it is appropriate to say therefore that a life cycle approach is needed to improve nutritional status. Improving nutritional status is thought to require a range of interventions, varying from supplementary feeding for mothers and young children to school feeding and other food based strategies (Bennett, 2003; Hall, 2007).

This may indicate that school feeding programmes on their own may not be sufficient to improve nutritional status of school-going children. Several research however indicates an improvement of Body Mass Index (BMI) in primary school children participating in breakfast supplementation programmes up to about 0.62 (Ahmed 2004) and 0.23 and 0.28 in undernourished children and adequately nourished children respectively (Powell 1998). An evaluation of School Feeding Programme in Vietnam by Hall *et al.*, (2007) showed that children in the SFP schools gained significantly more weight (0.24 kg, $p=0.001$) and height (0.27 cm, $p=0.008$) than children in the control group, but these increases could also be attributable to seasonal variation in food consumption and occasional de-worming and not only the food supplements. Whether the improvement of nutritional status is due to improved nutrient intake through SFPs has not been studied into detail. A study by Meme *et al.* (1998) indicated a higher lunch time caloric intake in school-going children participating in a SFP compared to the control group, but no significant difference in stunting percentages could be determined.

Different studies however, have shown an increase in both Gross Primary School Enrolment Rates (GSPER) and Net Primary School Enrolment Rates (NSPER), an increase in school attendance rates and a reduction of drop-out rates compared to control schools (Ahmed, 2004; Bennett, 2003; Del Rosso, 1996; Powell, 1998). The

fact that poorly nourished children benefit cognitively from SFPs has also been demonstrated in several researches (Allen, 2001; Levitsky, 2005; Powell, 1998). In all these studies a significant increase was detected in school test-performance between under-nourished children receiving breakfast or lunch and children in the control group not receiving breakfast or lunch at school. Another aspect of SFPs is the reduction of the gap between girls and boys in education and nutritional status. Reducing the gender gap requires a greater increase in primary school enrolment of girls than boys and the difference between gross enrolment for boys and girls tends to be smaller in SFP-schools (Allen,2001). In Food for Education (FFE) schools in Bangladesh where take home rations were provided to children, a 44% increase in enrolment for girls and a 28% increase in boy enrolment was found (Ahmed 2004). Also the World Food Programme (WFP) found a 7% increase in net enrolment rate in Bolivian girls, when providing take home rations to girls showing a 90% attendance over a given time span (WFP 2006). Powell *et al.* indicated a greater improvement in height, weight and BMI was in girls than boys (Powell, 1998), which suggests that if girls are enrolled in schools, their benefit from a SFP is greater compared to boys. The last aspect of SFPs is that of boosting local food production. An evaluation of the pilot schools of the Ghana SFP by Berkeley University of California in 2006 indicated that the participation of the local farmers is limited and most food is procured at large town markets instead of in surrounding villages and farms, and therefore they conclude that the connection between local agriculture and the Ghana SFP was weak. In the review report of the World Food Programme (2006) it was suggested, that the use of locally grown food is expected to create additional demands of 2.0 million metric tonnes of maize for school feeding, 5.4 million metric tonnes for Food For School (FFS) take-home rations only, and 7.4 million metric tonnes for FFE (that is to

say, school feeding plus FFS take-home rations) for the entire Sub-Saharan Africa (WFP, 2006). The Catholic Relief Services also implements SFPs and recommends in its best practices the use of locally available vitamin and mineral rich foods, but does not give an indication of the extent of the use of these foods, nor of the consequences for the demand for these foods in the local community (Janke, 2001). At this moment, few empirical evidence is available that show the ability to help local farmers by using locally produced foods for SFPs (Ahmed, 2004).

Regarding nutrition and academic performance, the relationship between the two has been well documented around the world as well as the negative effects of under nutrition among others, Alaimo (2001) report that children aged between 6 and 11years 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 work 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 therefore 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. Also,

Averett and Stifel (2007) who studied 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. Further, Averett and Stifel (2007) 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.

The literature provides evidence of food insufficiency as a serious problem affecting children's ability to learn. The review further opined that offering a healthy breakfast is an effective measure to improve academic performance and cognitive functioning among undernourished populations. From the above review, eating breakfast, in contrast to fasting, may improve performance on the morning eaten.

2.7 The Development of School Feeding Programmes (SFPs)

School Feeding Programmes can be found in almost every part of the world. They are common to both developing and developed countries. The rationale behind school Feeding Programmes is to reduce short-term hunger among pupils so that they can concentrate in class and learn better. Del Rosso (1999) identified four objectives of School Feeding Programmes:

1. Alleviate short-term hunger in malnourished or otherwise well-nourished school children. When children are fed in school, it is most likely to increase

their attention and concentration thereby resulting in gains in cognitive function and learning.

2. Motivate Parents to enroll their children in schools and have them attend regularly. By making food available to pupils whilst in schools, they are compelled to avoid absenteeism and improve upon their stay in schools. This translates into improvement in some educational outcomes (performance and retention).
3. Address specific micronutrient deficiencies in school-age children. Deficiencies in iron and iodine are the most harmful types of malnutrition which affects cognition. According to Del Rosso (1999) “iron deficiency renders children listless, inattentive, and uninterested in learning”.
4. Increase community involvement in school administration. It is common knowledge that community participation in the affairs of schools gives parents the opportunity to be more aware of what goes on at schools.

The setting up of a School Feeding Programme entails some commitment, resources and time. In initiating or developing one, it is recommended that great care and attention is given to it if the programme is to improve education. In connection with the above, Del Rosso (1999) recommends that the following steps be followed when introducing a School Feeding Programme:

1. Build a consensus on policy and objectives that focus on how school feeding can effectively contribute to improving education and meeting the nutrition and health needs of school-age children.
2. Develop targeting criteria and mechanism that concentrate programme resources on high risk children and communities in terms of poverty and hunger.

3. Elaborate appropriate guidelines for ration composition and the timing of school meals.
4. Identify and address any potential bottlenecks in implementation: such as the availability of supplies and other resources, the appropriateness of cooking practices and the management of private sector inputs.
5. Develop monitoring systems that focus on programme processes, that is, how a programme is functioning, and institute an evaluation system to assess the impact of the programme on specific outcomes.
6. Integrate feeding programmes with other intervention that address the primary nutrition and health problems of the school-age population.

School Feeding Programmes in most countries are founded on certain basic principles. These Principles according to the Global Child Nutrition (2006) include the following:

1. The use of local foodstuff to feed the pupils which is produced by the local people
2. The realization of both health and nutritional needs in school feeding programmes. For instance, in most schools that are under the Ghana School Feeding Programme, de-worming tablets are occasionally administered to children alongside their usual meals/snacks.
3. Food served in school feeding programmes during break time is seen as snack and not full meal. As a result, the focus on these foods is on the ability of it to supplement by providing the daily requirements of calories and protein needed by the school-child.

Empirical literature has it that the rationale behind school Feeding Programmes is to reduce short-term hunger among pupils so that they can concentrate in class and learn better. The literature established that the setting up of a School Feeding Programme entails some commitment, resources and time. In view of the above, in initiating or developing one, it is recommended that great care and attention is given to it if the programme is to improve education.

2.8 School Feeding Programmes in Ghana

An attempt to introduce School Feeding in Ghana began in 1940 where children in the then Protectorate of the Northern Territories of the Gold Coast was provided with free meals in the boarding schools. However, the menu was not nutritionally balanced. Rice and beans were provided occasionally as a special meal (Imoru, 2010). In the 1950s, pupils of several Catholic primary and middle schools were given take-home rations of food aid. The objective was to improve the nutritional status of school going children and increase school enrolment and retention. The programme then was in line with government policy to accelerate the education and training of Ghanaians to fill job vacancies created by foreigners who had to leave the country after independence (Imoru, 2010).

Ghana is the first of 10 countries in Sub-Saharan Africa implementing a School Feeding Programme modelled to the guidelines of NEPAD as described in the CAADP. The formulation of the Ghana SFP started in the year 2004. It was preceded by a pilot programme, which was carried out from September to December 2005. (NEPAD, 2005). By 2010, the programme intends to serve about 1.04 million children in 138 districts of Ghana. (Ghana 2006; Ghana 2005) The long-term objective of the Ghana SFP is to contribute to poverty reduction and food security and

to increase school enrolment, attendance and retention. The SFP is based on locally grown food products, which should promote domestic food production and improve market access for resource-poor farmers. The government wants to achieve this objective through an increase in employment and income level of farmers at community and national level. In addition, greater availability, access and utilization of food crops and products at community level are assumed to enhance food security. By the end of the programme, it is expected that there will be: a real increase of 8% in income at national and community levels, an 8% increased employment at community level and a greater availability, access, utilization and stability of food crops at community level. This strategy complements the development strategies of the government of Ghana (Ghana, 2006).

Over time, World Food Programme (WFP) and Catholic Relief Services (CRS) became two lead agencies providing School Feeding Programmes (SFP) in the country; they are focusing particularly on the Northern Regions of Ghana due to its high incidence of poverty and food insecurity and inadequacy. World Food Programme has been involved in Ghana for almost forty (40) years. Other development partners involved in food assistance programmes include: World Vision, Adventist Development Relief Agency (ADRA), Dutch Development Agency (SNV) and Social Enterprise Development (SEND). The objectives of the SFPs of these organizations are not different from those in the 1950s, except that poverty, food insecurity and gender inequality and equity have become additional concerns for these organizations. The North is relatively poor and rural households, especially women and their young daughters, lack physical and economic access to food (WFP, 2007).

School feeding plays a significant role in the development of education in Ghana. Governments, Non-Governmental Organizations (NGOs) and stakeholders have made efforts to successfully feed the school child in Ghana over the past decades. International Business Development Programme (2015) revealed that some communities initiated their own school feeding programs using local produce.

This notwithstanding, a number of NGOs plays crucial roles in ensuring that the school going child in Ghana is well fed. Catholic Relief Services, World Vision, and Adventist Development and Relief Agency among others are some of the organizations that support the school feeding agenda of Ghana's school children. Kleiman (2010) asserts that school feeding ensures food security; hungry children are likely to be found in food insecure homes.

Partnership for Child Development (1999) points out that education and learning depend on good nutrition. School feeding in Ghana has achieved greater prominence by providing the nutritional needs of pupils (Kedze, 2013; Bukari *et al.*, 2015; Martens, 2007). School feeding aims vary from country to country (Aliyar *et al.*, 2012). School feeding programmes in Ghana have gained significant boost by increasing enrolment and reducing school drop-out rate (Duah, 2011; Martens, 2007; Kedze, 2013; Gyawu, 2012; Nkosha *et al.*, 2013; Alhassan, 2013). School feeding motivates children of lower income earners to constantly attend school every day. However, Alhassan (2013) cited in Mahama (2017) points out that schools that are not under the school feeding programmes have low enrolment and high rate of school drop-out in the Northern region of Ghana. School Feeding Programmes are targeted social safety nets that provide both educational and health benefits to the most

vulnerable children, thereby increasing enrollment rates, reducing absenteeism, and improving food security at the household level.

In response to increasing food and fuel prices in 2008, funds from the World Bank's Global Food Crisis Response Program and the subsequent pilot Crisis Response Window provided rapid assistance by supporting existing school feeding programmes and essentially linking access to both food and education for poor and vulnerable children living in highly food-insecure communities in the country. With a global turnover in excess of US\$100 billion and reaching hundreds of millions of schoolchildren, school feeding is clearly evident as a major social programme in most countries, including low, middle, and high-income countries. Ghana, a country located south of the Sahara is lucky to be one of the beneficiary countries (Global Food for Crisis Response Programme, 2008).

The Ghana School Feeding Programme (GSFP) commenced in most of the beneficiary communities on a pilot bases in September 2005 with ten schools, one in each region of the country. The GSFP was expanded to cover 200 schools in taking care of the nutritional needs of 69,000 pupils in all 138 districts of the country (Osei *et al.*, 2009). Subsequently, the GSFP began with nationwide coverage and by the end of first quarter of 2011 as Osei *et al.* (2009) indicated; the programme fed 713,590 children in all the beneficiary schools nationwide. More especially, Ghana adopted the GSFP as one of the Millennium Development Goals (MDGs) under the Ghana Poverty Reduction Strategy I and Ghana Poverty Reduction Strategy II which is expected to impact positively on school enrolment, attendance and retention.

As part of its support for educational development in Ghana, the WFP has included in its targets the Northern Regions of Ghana. WFP and GSFP signed a Memorandum of Understanding (MOU) in 2006 that outlines collaboration in the following areas:

- i. providing a fortified food basket to complement GSFP menus;
- ii. supporting district-level planning and implementing school feeding;
- iii. harmonizing planning and managing cash and food inputs at the district level;
- iv. testing procurement processes;
- v. building capacity of PTAs, SMCs and other stakeholders;
- vi. testing models for sustainable funding;
- vii. developing systems for monitoring and evaluation.

This development provided collaborative assistance for the implementation of the programme. The literature above provides evidence of School Feeding Programmes that have been implemented in the country. The GSFP is considered as one of the major interventions in terms of scope and this suggests the need to evaluate its effects on students' enrolment and retention in the West Mamprusi Municipality.

2.9 Operation of School Feeding Programme in other countries

The term school feeding has been used over the years to mean the provision of meals or snacks at school to reduce children's hunger during the school day (WFP, 2004). The phenomenon implies in-school meals only where children are provided with meals at school. School feeding has increasingly come to represent a more varied and comprehensive set of uses of food for the achievement of educational outcomes. Several countries have put in place stringent measures towards alleviating poverty. On the global scale, about 805.1 million people live in hunger or do not have enough food to eat (FAO *et al.*, 2014). The effort by governments and other stakeholders to

eliminate hunger has called for the introduction of school feeding programmes the world over. Different programmes come with specific missions such as increasing enrolment, retention, nutrition and performance. However, they all have a common objective of achieving universal basic education using the school feeding programme as a catalyst.

In a similar dimension, School Feeding Programmes seek to enhance food security and minimize hunger which is in connection with the United Nations Millennium Development Goals (ECASARD & SNV Ghana, 2009). Winch (2009) points out that school feeding are of crucial significance to national development. Aliyar *et al.* (2012) defined school feeding as the provision of food on – site or take – home which aims to increase school enrolment, attendance and retention, and exists as a social safety net for households with very low income. This implies that the aim of school feeding is to provide children of low income earners with nutritious meals to help sustain and maintain them in school. International Food Policy Research Institute (2014) stated clearly that proper nutrition is the foundation of human health. Good nutrition among young children equips their body to grow and develop well. It ensures effective learning in schools. School feeding is a key apparatus to improve food security, education and agricultural development. Calls have been made in recent times for countries to scale up their budgets towards developing agriculture and to connect school feeding programs towards national agricultural production (Global Child Nutrition Forum, 2010).

Majority of the world population living in hunger are found in developing countries and sub Saharan Africa has become the home of about one – fourth of Under-nourished people (FAO *et al.*, 2014). Malnutrition among poor families hinders their

economic and social development. In the field of education, such families find it extremely difficult meeting educational expenditure and food necessary for child growth. Lawson (2012) points out that school feeding is common in developing countries where many families often fall short of resources to satisfy their basic needs. This discussion suggests that school feeding programme which is often facilitated by donors' interventions is a significant relief measure for such poor households. Many countries that have successfully implemented SFP began on a pilot basis. They include Indonesia, Bangladesh and Ghana. The programmes, though are implemented in different areas shared some similar characteristics such as targeting the poor, involvement of government and to some extent donor financing. Besides, they scaled up their operations after achieving success stories from pilot basis. In Indonesia, according to the National Development Planning Agency, the Government introduced a national SFP in the 1990s which was initiated and financed wholly by government. The main targets of the programme were children, schools, parents, and the broader village community (Studdert, *et al.*, 2004). It was initiated as a poverty reduction strategy and hence became an ingredient in their development plan. Del Rosso (1999), indicated that the model on SFP adopted by the Indonesian government created a platform for many other countries to follow. To ascertain the effectiveness of the programme in Indonesia, a pilot study of the programme was carried out in other regions of the country for possible expansion to the entire country (Del Rosso, 1999). As an economic growth strategy, the government of Indonesia guaranteed that locally grown commodities could be used in feeding the children (Central Coordinating Board for Child & Youth Improvement Program, 1996).

The package of food consisted of deworming and snacks for the children. As the role of the district level government was effective in implementation, movement of

programme funds went directly from the national level to a local bank, bypassing the provincial and district levels of government. This was to ensure that more of the allocated funds reached the targeted programme beneficiaries. Only the school principal could withdraw funds from the local bank and to do this he was required to present a menu plan signed by the village leader, the village midwife, and the heads of the local women's and school parents' associations (Studdert *et al.*, 2004). This process was designed to ensure that multiple local parties verified student numbers and were aware of the funds being provided for the program.

The menu plan was prepared at the village or sub-district level with technical advice from the Ministry of Health staff. This strategy of implementation resulted in lasting success, leading to more enrolment of children in school. In Bangladesh, feeding children in school is not an old phenomenon as compared to the case of Indonesia. In order to diminish hunger in the classroom as well as to promote school enrolment and retention rates, the Government of Bangladesh (GOB) and the World Food Programme (WFP) launched the School Feeding Program (SFP) in chronically food insecure areas of the country (Ahmed, 2004).

Ahmed further explained that this initiation started on pilot basis as at 2002 where milk and biscuits were given to children at school in a chosen district. The U.S. Department of Agriculture (USDA) made significant contribution in funding the programme during its initial stages.

In 1993, the Bangladesh government implemented the Food for Education (FFE) programme to increase primary school enrolment of children from poor families. The package of the FFE programme consisted of a monthly distribution of wheat to poor families in deprived communities whose children attended primary school. Literature

suggests that the FFE did raise primary school enrolment in all beneficiary communities (Ahmed, 2000). Later there was the Primary Education Stipend Program (PESP), which replaced the FFE program in 2002. This development could afford to offer cash assistance to poor families if they sent their children to primary school. At this point, even female students in secondary schools were covered as beneficiaries of the cash incentive. These conditional cash transfer programs aim to increase the enrolment and retention rates of students in primary and secondary schools throughout rural Bangladesh. A recent study indicates positive influence of these programs on educational attainment (Ahmed, 2004).

The literature established that SFP are designed by implementing agencies to enhance school enrolment, nutrition and academic performance. While remarkable achievements have been demonstrated by the literature in the area of nutrition and enrolment in different countries, the empirical literature lacks evidence of gender access gap analysis. Besides, the literature does not show the strategies that have been adopted by countries with School Feeding Programmes to influence girls' enrolment in basic schools in particular. The objectives of this study have therefore, included measures taken by management of the Ghana School Feeding Programme to improve female school enrolment, attendance and retention especially in the West Mamprusi Municipality.

2.10 Governance of School Feeding

The School Management Committee (SMC) and School Feeding Sub-Committee (SFC) directly manage the GSF program at the school level. Each school has an SMC that includes the head teacher as the secretary, a chairperson who is a parent, and other parents who are members. Schools have two separate bank accounts; (i) a

general-purpose account and (ii) instructional materials and supplies account. A third account is required for the school feeding programme. There are three bank signatories: the head teacher, the chairperson, and the treasurer. Schools have experience with financial management and procurement, and the MoE is basing their school feeding procurement model upon already existing structures for monitoring and evaluation and procurement that are used to purchase textbooks and other school supplies. General responsibilities are: (i) Standards and regulations are set by the MoE (nutritional requirements, storage and handling guidelines, etc.), as well as fundraising, advocacy, and coordination and implementation at the national level. (ii) Supervision, reporting, M & E, and technical assistance (trainings and advice in nutrition, storage, preparation, bookkeeping, etc.) occur at the district level. (iii) The head teacher keeps records, prepares a procurement plan, and confirms quantity and quality of commodities delivered, and signs for delivery. (iv) The SMC and SFC, led by the head teacher, manage the GSF program at the school level. Parents represented by the committees are responsible for overseeing the general management of the programme, which includes overseeing food deliveries, signing off on reports and delivery notes, and making procurement and management decisions. To access funding at the school level, three parties must sign for it (head teacher, SMC chairperson, and the SFC chairperson).

From the above criteria from the literature, the School Management Committee (SMC) and School Feeding Sub-Committee (SFC) directly manage the GSF program at the school level with the head teacher as the secretary, a chairperson who is a parent, and other parents who are members. This is what goes on across the country of which the West Mamprusi Municipality is one.

2.11 Mode of operation of the Ghana School Feeding Programme

The programme was born out of the New Partnership for African Development Hunger Task Force Initiative (NEPAD/HTFI) under the Comprehensive Africa Agricultural Development Programme (CAADP) of the African Union (AU). Ghana was selected as one of the initial nine focus countries in sub-Saharan Africa to pilot the programme. The Government of Ghana and NEPAD were to equally finance the programme; however, delays from NEPAD required the government to fully fund it. It started on a pilot basis from September to December in 2005 in ten districts, one from each of the ten regions, and was intended to last for five years (WFP, 2007). By August, 2006, the beneficiary schools increased to 200 in about 138 districts (International Business Development Program, 2015).

The Ghana School Feeding Programme is an initiative under the Comprehensive Africa Agricultural Development (CAADP) pillar 3 which intends to enhance food security and reduce hunger in line with the United Nation Millennium Development Goals (ECASRD and SNV Ghana, 2009). The rationale behind the Ghana School Feeding Programme is to provide pupils with one hot nutritious meal using home grown food crops on daily basis on every schooling day (Kedze 2013). Aliyar *et al.* (2012) points out that the use of home – grown food crops under the Ghana school feeding programme is to stimulate local economies through increase in demand for the produce. Gyawu (2012) argues that the Ghana school feeding programme met its aim of providing hot nutrition meals to pupils during schooling days and has therefore, increased enrolment and retained pupils in school. While agreeing with the arguments postulated by Gyawu (2012), Bukari *et al.* (2015) add that there is a positive link between the Ghana School Feeding Programme and academic performance. The implementation of the GSFP had its basic objectives as to feed

children in public primary schools and kindergartens with one hot nutritious meal prepared from locally grown foodstuffs on every school going day. The policy has other targets of achieving increased enrolment, increasing academic performance and boosting food production in the country (GSFP, 2007).

The health component involves the fact that pupils of the beneficiary schools are to be given good drinking water, de-wormed and fed in a good sanitary environment. In line with improvement of education, enrolment of pupils will improve so as to achieve universal basic education. In the agriculture sub sector, the patronage of locally produced goods will be increased and food production in the country will be improved resulting from farmer access to ready market. Programme implementation partner organizations such as Netherlands Development Co-operation (SNV), and World Food Programme (WFP) are to carry out training sessions for caterers and cooks to enhance their capacities. The recruitment of caterers and cooks as required by SNV is based on an academic qualification and standard for hygiene. (GSFP Pilot Programme Review Report, (2007-2010).

The GSFP has extensive targeting criteria for the selection of beneficiary communities. In several respects, the criteria are no different from targeting criteria used by WFP and other SFPs, except that WFP and the others target the north, while GSFP focuses on the whole nation. The GSFP criteria include:

1. willingness of a community to provide basic infrastructure (e.g. kitchen, store, dining room)
2. commitment of the District Assembly, demonstrated by its interest to sustain the programme;
3. poverty status of the district and community;

4. low school enrolment and/or attendance and gender parity index;
5. high drop-out rates;
6. low literacy levels;
7. presence of planned health and nutritional interventions or expansion of existing ones;
8. no participation in an already existing SFP; poor access to potable water;
9. high community spirit and management capability.

Using the above criteria, the Ministry of Education, Science and Sports (MOESS), working with the District Assemblies, developed an initial list of communities and schools that met the criteria of poverty, high drop-out rates and low literacy, of which West Mamprusi Municipal was included.

2.11.1 Implementing agencies of the GSFP

To achieve the objectives of the programme, roles were assigned to the following key stakeholders as follows;

1. The government made up of Cabinet and Parliament are responsible for passing the GSFP Bill to legitimize the operations of the programme and sourcing for funds;
2. The Ministry of Local Government and Rural Development (MLGRD), in collaboration with the Ministry of Education (MoE) is responsible for the implementation and supervision of the programme;
3. Ministry of Food and Agriculture (MoFA) is responsible for the achievement of the agricultural aspect objectives;
4. Ministry of Finance and Economic Planning (MoFEP) is responsible for the release of funds;

5. Ministry of Women and Children Affairs (MoWCA) is responsible for monitoring and supervision;
6. Ghana School Feeding Programme National Secretariat is responsible for the implementation of the policy at the national level.

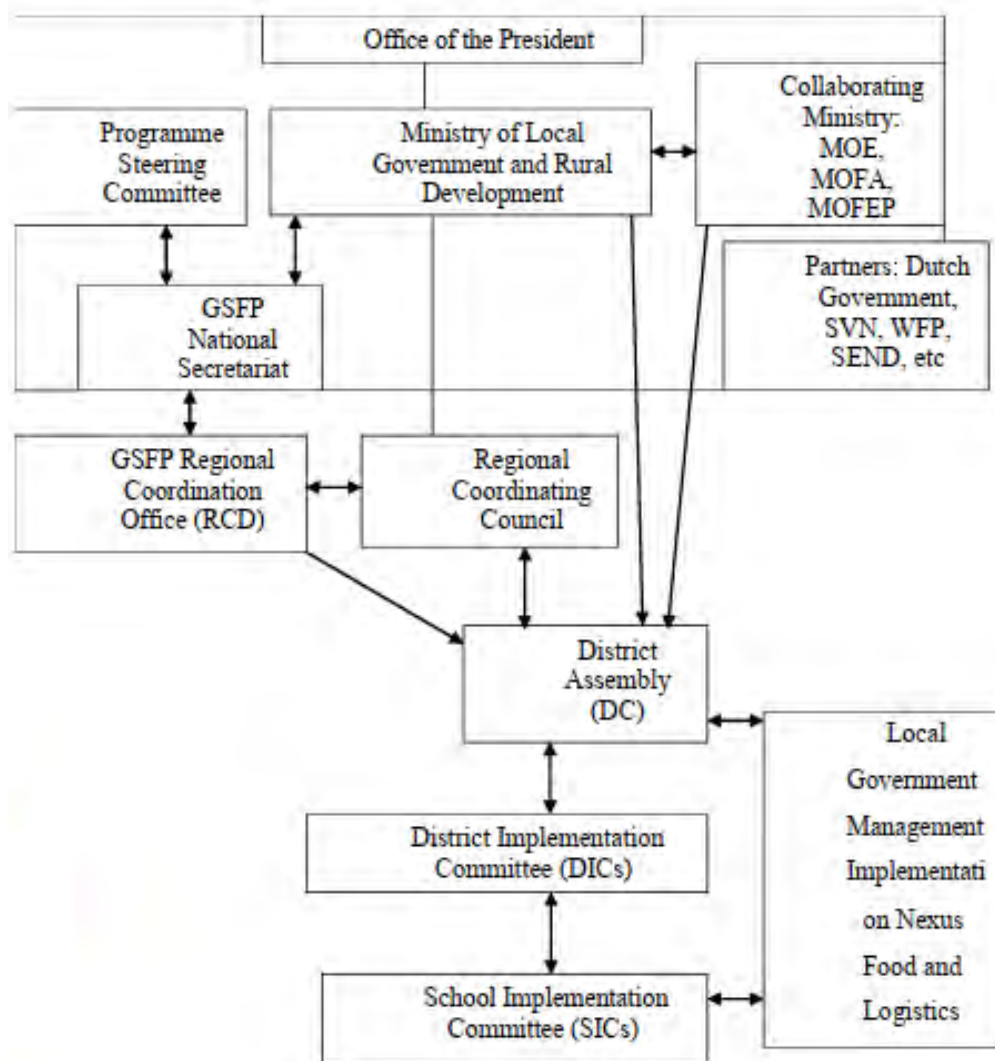


Figure 2.3: Actors and relationships of the GSFP

Source: GSFP Annual Operating Plan, 2008

Regional Coordinating Councils (RCCs) are to form the programme steering committee in every region. The RCCs are to plan and execute the programme with inputs from the national level. Each Assembly in collaboration with the District Implementation Committee (DIC) and School Implementation Committee (SIC) is to

manage and implement the programme at the local level. They are in charge of food procurement and logistic spending. The Ministry of Agriculture through the District Agriculture Directorate is to sensitize the farmers to produce and supply foodstuffs. The Directorate is also to provide training for farmers especially cooperative farmer groups and assist them to access loans to increase their productivity. The DICs are in charge of planning and monitoring of the programme in all the beneficiary schools whilst the SICs do the implementation and supervision in each school. Below is the structure showing actors of GSFP and their relationship (GSFP Annual Operating Plan, 2008).

According to the Ghana government, the institutional framework for implementation of GSFP is designed to avoid corruption, embezzlement and misapplication of funds.

The institutions responsible for the implementation are:

1. Ministry of Local Government and Rural Development
2. National Implementation Secretariat
3. District Implementation Committee [Metropolitan, Municipal and District Chief Executive (MMDCE) as chairman]
4. School Implementation Committee including PTA.

Other actors who play several roles in the GSFP are Send Foundation International, Centre for Social Fertility and Agric Development (IFDC), Ghana Agricultural Initiative (GAIN) and Plan Ghana International.

2.12 School Feeding Programme and Enrolment

According to Collins (2002) the term school enrolment means admission, enlisting, recruitment or signing in of students to undergo training. Studies on the evaluation of the impact of School Feeding provide several benefits that have changed human life

in different places. Economic, social and health impacts have been outlined by several empirical studies. Solid empirical evidence of the impact of school feeding programmes on educational outcomes proves that school feeding increases school enrolment and attendance by reducing drop-out (Ahmed, 2004; Dreze & Kingdon, 2001; Lazmaniah *et al.*, 1999). These studies have justified that feeding in schools serves as pull factors for poor families as it reduces home expenditure on food. Besides, the quality of food given at school in many instances meets the nutritional requirement compared with those prepared by poor families. Consequently, families are motivated to get their children enrolled because of the immediate benefits. There is also significant evidence that such interventions go beyond traditional educational outcomes by providing a wider range of short and long-term social and economic impacts.

According to their assessment reports, school feeding was regarded as one of the programmes eligible for support from the US\$1.2 billion Global Food Crisis Response Facility established in 2008 to address the global food and financial crises (Grosh *et al.*, 2008). This means that among all possible food assistance interventions, school feeding represents a unique opportunity by providing multiple benefits at both the outcome/short-term and the impact/long-term levels.

The implications of these findings is that, in period of economic crises, disasters and vulnerability, school feeding can minimize the effect through the provision of relief items (food) for the most affected and vulnerable groups (learners)

From a different perspective, School feeding leads to increased time spent in school, through increased enrolment and attendance and decreased drop-out rates (Ahmed, 2004). Parents are therefore motivated to enroll their children in school and have them

attend regularly. Furthermore, when programmes succeed in reducing absenteeism and increase the duration of schooling, educational outcomes such as performance, dropout, and repetition inter alia get improved (Del Rosso, 1999). This position may be convincing especially in deprived areas of northern Ghana where some families cannot afford three square meals per day. Children have to attend school regularly to meet the quantity of food requirement per day.

In the Ghanaian case, Duah (2011) points out that one of the major aims of the Ghana School Feeding programme is to increase enrolment and retention in the basic school level. It is to serve as a means that will attract school children to be in school every day and be consistent throughout the stages of learning. Thus, improved feeding increase enrolment and reduce school drop-out.

The observation made by Musah and Imoro (2015) in the Garu-Tempene district in the Upper East Region of Ghana points out that the GSFP has succeeded in increasing enrolment among participating schools. In the same vein, Abotsi (2013) concluded that the programme has not only improved enrolment, but also attendance and retention. Abotsi observed that the reverse in terms of these achievements has taken place in non-participating schools. The Ghana School Feeding Programs has improved the health status of the learners. It has got the components needed for growth and development. The Ghana school feeding programme has increased dietary diversity of the diet of children in school. The programme has attained its own recommendation for protein and energy intake. However, iron intake is low while vitamin A intake is enough (Martens, 2007).

According to Alhassan (2013), Nkosha *et al.* (2013) and Duah (2011) school feeding programmes cannot be seen as the only factor that influences enrolment in Ghana's schools but other factors, such as, high pupil to teacher ratio, classroom accommodation, inadequate furniture, teacher pupil relationship, teacher absenteeism, cultural beliefs, among others, should be considered.

2.13 The Influence of School Feeding Programmes on Retention

In general the Ghana School Feeding Programme has influenced positively on the attendance and retention of pupils in the basic schools. Kedze (2013) states that the School Feeding Programme has gained prominence for its multi – roles in developing countries. What the writer meant is that enrolment alone is not the only challenge of achieving universal basic education but regular attendance and drop-out rates. The feeding programme, according to Kedze, motivates children to be present at schools as attendance is a necessary condition for access to the food. This is true within the Ghanaian context. Bukari *et al.* (2015) points out that there exists a positive link between the Ghana School Feeding Programme and academic performance. This revelation suggests that the school feeding programme has met its aims. Mohammed (2014) posits that the significant increase in enrolment is due to the fact that the School Feeding Programme motivates the pupils to stay in school and study leading to an improved universal basic education in the country. Mohammed (2014) therefore, suggests that though the one hot meal per school days is significant, pupils should be given snacks as supplements.

The author maintains that the importance of the nation school feeding programme must not under any circumstance be undermined. The national school feeding programme promotes and supports: the right to food, the right to education, local

development and economic growth, food and nutrition security, gender enhancement and participation (Global Child Nutrition Forum, 2014). These efforts mark significant steps towards educational development in the country through achievement of universal basic education.

The empirical review has provided evidence on the effects of school feeding interventions on enrolment. The literature also provides that school feeding programmes leads to increase in attendance and reduction of drop-out rates in beneficiary schools in different places. These findings will serve as basis for comparing the influence of the GSFP on enrolment, attendance and retention of pupils in basic schools in the West Mamprusi Municipality

2.14 SFP, Cognitive Ability and Academic Improvement

A study conducted by Simeon and Grantham-McGregor (1989) examined the effect of breakfast on cognitive functions among 90 children aged 9-10 years with different nutritional status. The study examined the effects of omitting breakfast on the cognitive functions of three groups of children: stunted, non-stunted control, and previously severely malnourished. Using a crossover design, the investigators tested each child on two mornings one week apart (where the first week the child had received breakfast and the second had not). In order to have greater control over the experiment, children's meals on the previous evening were standardized and children subsequently fasted until they received the treatment breakfast or the placebo. Fluency and digit span tests were conducted and results showed that there was a detrimental effect of missing breakfast. Results also indicated that cognitive functions were more vulnerable in poorly nourished children.

In Jamaica, a study was conducted to investigate the short-term effects of giving breakfast on cognitive performance in primary school children who were mildly undernourished as compared with adequately nourished children. The experiment took place in four primary schools in rural Jamaica. Children were randomly assigned to a group provided with breakfast or a quarter of an orange as a placebo. Researchers then administered four cognitive tests (visual search, digit span, verbal fluency and speed-of-information-processing tests). After a few weeks the treatments were reversed and the tests repeated. Undernourished children's performance improved significantly on a test of verbal fluency when they received breakfast. Adequately nourished children did not experience any significant improvement (Chandler et al. 1995). These and the findings of Simeon and Grantham-McGregor (1989) indicate that targeting of school meals to undernourished children should achieve greater impact in terms of improving children's cognitive ability.

However, results from a study in Chile did not find omission of school breakfast to be detrimental to cognitive performance (Lopez et al. 1993). This research examined 279 children from low socioeconomic backgrounds and categorized as normal, wasted or stunted. No consistent association was found between school breakfast and performance in short-term visual memory, problem solving, or attention tasks in any of the three nutritional groups. Results suggested that, given a motivating short-term task and maintaining routine conditions, missing breakfast does not affect the cognitive performance of children. However, the researchers had no control over the food intake the night before the experiment as children stayed at home.

Jacoby (2002) explores the existence of an “intra-household flypaper effect” by which in-school intake of calories from SF snacks and meals “stick” to the child. Based on an experimental design and rigorous econometric analysis, the study assessed the impact of an SF program on child calorie intake in the Philippines. The empirical results confirm the existence of an intra-household flypaper effect, where virtually all calories from SF food remain with the participating child.

To Ahmed (2004), iron and iodine are critical for cognitive development. Iron deficiencies may render children inattentive and uninterested in learning. Iron supplementation was shown to improve IQ scores of previously iron deficient children (Seshadri & Gopaldas, 1989). Evidence also shows that children who suffer from iodine deficiencies are more likely to perform poorly than those without iodine deficiency (Del Rosso, 1999). To counter the harmful effects of micronutrient malnutrition, some school feeding programs provide fortified food. The provision of such food was shown to increase the dietary intake of micronutrients. For example, in Peru, researchers studied the effect of a breakfast program that included iron-fortified rations. The program significantly increased dietary intakes of iron by 46 percent, besides increasing energy and protein by 25 percent and 28 percent, respectively (Jacoby *et al.*, 1996).

Besides studies based on experimental design, some studies have examined school feeding programs directly to determine the impact on academic performance. In 22 out of 30 provinces in Burkina Faso, the success rate on a national exam for sixth grade pupils was higher for schools that had school feeding programs. Other studies of the determinants of academic achievement in Benin, Burkina Faso and Togo found that a school meal was positively related to children’s performance on year-end tests.

In Benin, children in schools with canteens scored 5 points higher on second-grade tests than did children in schools without canteens (WFP 2010).

Ahmed (2004) investigated the relationship between hunger (as opposed to malnutrition) and intellectual performance. Citing research by Keys, he hypothesized a relationship between hunger "a psychological and physiological state resulting from insufficient food intake to meet immediate energy needs" and a classroom behavioral pattern characterized by irritability, apathy, and similar dysfunctions. Individual children in the sample survey who came to school without breakfast were identified and their performance on the Raven test was compared with average performance for the school.

It was observed that within the SFP-schools, there was a highly significant difference between the performance levels of the two groups. Children who came to school without breakfast did markedly worse than their less hungry counterparts. On the non-program side, however, there was no significant difference between the two groups. According to Levinger (1986), no explanation of this finding for non-program schools is offered. He stated that perhaps the inclusion of more private schools (with their attendant higher quality of education) in the non-program sample is the cause. If so, this, too, would suggest that quality of the learning environment and diet interact in the determination of a child's intellectual ability. When the environment is developmentally rich, the intellectual stimulation available can compensate for some of the effects of hunger and, quite possibly, malnutrition. This finding also highlights the need to research whether school breakfasts should be offered instead of or in addition to lunches.

However, there is some controversy over the effectiveness of school feeding programs. According to the World Food Program “Research and experience show that when food is provided at school, hunger is immediately alleviated, and school attendance often doubles within one year” (WFP, 2005). However, experts at a School Feeding/Food for Education Stakeholders meeting in 2000 concluded that there is little evidence for nutritional benefits of school feeding and that school feeding only enhances learning when other improvements in school quality are made (World Bank, 2006). Macintyre argued that school feeding programs address a symptom, rather than the root causes of hunger and that they may be stigmatizing (McIntyre 1992). For example, a study in Ethiopia found that differences in food availability and access had limited effect on the differences observed in child nutritional status (Pelletier *et al.*, 1995). This could be because a child’s nutritional status is a function of not only the quality and quantity of the dietary intake but also a function of morbidity, child caring and feeding practices, and household variables such as income and parental education. Further, in developing countries, poor health status of children is exacerbated by poor and inadequate: health facilities and services, immunization, safe water and sanitation, and health education programs. Some reviews even show that food-based interventions alone have little measurable impact on nutritional status, morbidity or mortality levels except in crisis situations (Clay & Stokke, 2000).

According to Osei *et al.* (2009), the effects of the capitation grant on education outcome in Ghana. The objective was to assess how the capitation grant has impacted on the Basic Education Certificate Examination (BECE) pass rates, gross enrollment ratios and gender difference in pass rates. The study used data from the Ghana Education Service for all 138 educational districts in Ghana between 2003 and 2007.

Using regression analysis, the study found that; the capitation grant has not had significant impact on BECE pass rates in Ghana, no significant relationship existed between capitation grant and gross enrollment, and capitation grant has not impacted on bridging the gap between the BECE pass rates for male and female. Again, one important concern in school feeding studies is that, in poor families, the home diet may be reduced for children who are receiving food at school: this is termed “substitution”. For example, a survey on school feeding in Malawi showed that 77% of children reported that they get less food at home when they receive school meals. This is substantiated by caregivers; 82% of caregivers reported that substitution was occurring. When there is extra food, it is used to benefit other household members, particularly children (Galloway, 2006).

The SFP evaluation, 2003: Household Survey, Bangladesh page 28 indicated that total energy intakes of SFP participating students increase with their household income. Consequently, average adequacy of children from relatively high income households is 12.7 percentage points higher than that of children from lower-income households. There is evidence that SFP participating students share SF biscuits with other household members, mostly with their younger siblings (Ahmed, 2004).

2.15 Organizational Structure of the GSFP

The Ghana School Feeding Programme (GSFP) is an initiative of the comprehensive African Agriculture Development Programme (CAADP) pillar three, of the New Partnership for Africa’s Development (NEPAD), which seeks to enhance food security and reduce hunger in line with the millennium Development Goals on hunger, poverty and malnutrition.

In 2005, upon the recommendation of the New Partnership for Africa's Development, the Government of Ghana took a decision to implement the Ghana School Feeding Programme with support from the World Food Programme. The Ghana School Feeding Programme is strategically implemented to increase domestic food production as well as household incomes and food security in deprived communities and to spend eighty percent (80%) of the feeding costs of school children in the local economy. (Gyarko, 2011)

2.16 Programme Implementation and Development Partners

The Ministry of Local Government and Rural Development has the oversight responsibility or is the supervising ministry of the Programme at the national level. The Ghana School Feeding Programme National Secretariat works under the supervision of the Ministry of Local Government and Rural Development in Partnership with other ministries. These include Ministry of Education, Ministry of Food and Agriculture, Ministry of Health, Ministry of Finance and Economic Planning, Ministry of Foreign Affairs, Regional co-operation and NEPAD and Ministry of Women and Children. At the national level also, there is a Programme Steering Committee which monitors the work of the programme at the national secretariat (Gyarko, 2011).

In the words of Gyarko (2011), the school feeding programme has other lower structures actively involved in its implementation. These include the Regional level structures, the District level structures as well as the community / school level structures. At the Regional level, the GSFP Regional co-ordination office works closely with the Regional Coordinating Council (RCC) to implement the programme at that level.

2.16.1 District level structures

At the District Level, there is a District Implementation Committee (DIC) which operates under the District Assembly. The committee has the following composition.

The District Chief Executive (DCE) as Chairperson

- i. the District Directors of Education, Health and Agriculture
- ii. Two representatives of the Social Services Sub-committee of the District Assembly
- iii. One Traditional ruler
- iv. One opinion leader
- v. One District Assembly Officer as Secretary

The District Implementation Committees in the words of Gyarko (2011) perform the following functions:

- i. Ensure the preparation of menu with the involvement of the District nutrition officer
- ii. Ensure that the correct pupil enrolment figures are submitted by the District
- iii. Encourage agriculture extension officers to assist local farmers to produce for the GSFP
- iv. Ensure that they carry out periodic de-worming exercise of the school children
- v. Ensure that funds received are disbursed on time to caterers
- vi. Ensure that schools selected meet the eligibility criteria
- vii. Monitor GSFP activities in the district
- viii. Prepare term and annual reports on GSFP activities in the district. Gyarko (2011)

2.16.2 Community / school level structures

The School Implementation committee (SIC) is the structure at the community level that oversees the school feeding activities. The committee has the following membership:

- i. Parents Teachers Association (PTA) Representative as chairperson
- ii. Head Teacher as Secretary
- iii. One representative of School Management Committee (SMC)
- iv. One Traditional ruler
- v. One Assembly member
- vi. School prefects (both male and female)

Basically the SIC performs the following functions:

- i. Provide oversight and direct supervision of the GSFP in the school.
- ii. Report on the GSFP in the school to the DIC
- iii. Prepare reports on the feeding activities at the end of each term and year.
- iv. Liaise with the DIC to develop a locally driven menu to provide nutritionally adequate meals.
- v. Provide oversight and direct supervision of appointed caterers or matrons entrusted with cooking and feeding.
- vi. Follow up on recommendations, actions and decisions of the GSFP National Secretariat. Gyarko (2011)

2.16.3 Strategic partners

The Ghana School Feeding Programme has a lot of strategic partners who assist and support its activities through funding, providing technical support and direct school feeding. Afoakwa (2006) identifies these partners as the Netherlands Government,

World Food Programme (WFP), Netherlands Development Organization (SNV), Social Enterprise Development Organization (SEND), School Feeding Initiative Ghana Netherlands (SIGN), International Centre for Soil Fertility and Agricultural Development (IFDC), Ghana Agriculture Initiative New work (GAIN), and World Vision International (WVI). The diagram below shows the organizational structure of the GSFP.

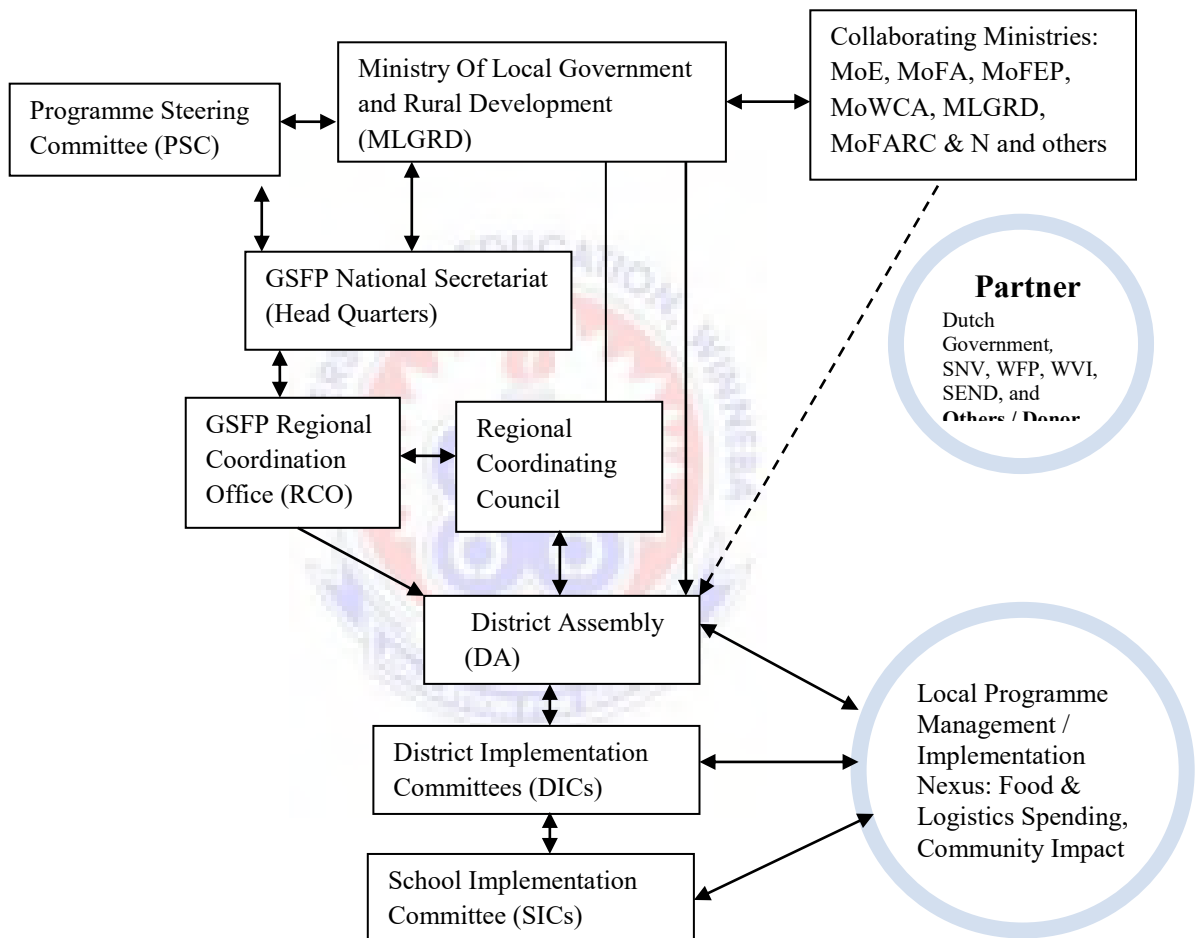


Figure 2.4: (Organogram of the GSFP)

Source: Gyarko (2011)

2.17 Effectiveness of the GSFP

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).

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 research findings suggest that school feeding programmes have a positive impact on learning achievement, as measured by increases in test scores and on dropout rates. 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 programme has proved to be an effective strategy for increasing enrolment, attendance, retention and even performance in schools in the country. The GSFP is part of Ghana's efforts towards the United Nations' Millennium Development Goals on hunger, poverty and primary education. It is an initiative of the comprehensive, African Agriculture Development Programme (CAADP), Pillar 3 of the New Partnership for African Development (NEPAD). A review of the pilot phase of the programme conducted in May/June 2006 revealed that in just over six months of its implementation, enrolment in pilot schools had risen by 20.3 percent compared to 2.8 percent in non-GSFP schools in the same districts (GSFP, 2006).

It was reported in the Daily Graphic that the Ghana School Feeding Programme has reduced poverty and increased enrolment in some primary schools in the Volta Region especially the Akatsi District where it was even observed that the programme has reduced poverty and ensured food security in the area.

The report further said that the programme has also boosted domestic food production and reduced hunger and malnutrition. The stakeholders made the observation at a sensitization workshop that was meant to address some of the challenges in the implementation of the programme. By the end of 2009, Government had pumped in

over GH¢ 45 million cedis for the School Feeding Programme and had extended the programme to every district in Ghana and this rapidly increased the school enrolment because of the benefits gained from the programme (Ghana Daily Graphic, 18th December, 2009 p. 25).

The empirical review has provided evidence on the effects of school feeding interventions on enrolment. The literature also provides that school feeding programmes leads to increase in attendance and reduction of drop-out rates in beneficiary schools in different places. These findings will serve as basis for comparing the influence of the GSFP on enrolment and retention of pupils in basic schools in the West Mamprusi Municipality.

2.18 Implementation Challenges of the GSFP

The Ghana School Feeding Programme has failed to meet its stated objectives. The programme has essentially failed to meet objective three in particular i.e. to boost domestic food production, as well as part of objective one that is to reduce malnutrition. What the programme has largely done is to reduce hunger by feeding school children. In the view of many commentators, school feeding is a welfare issue which suggest that the current location and housing of the GSFP is misplaced, thus rendering implementation of such a programme complex. Stated differently, the institutional framework of the programme is clearly misplaced. (Gyarko, 2011)

Ideally, the Ministry of Employment and Social Welfare which is responsible for social welfare and the Ministry of Health should have been granted the oversight responsibilities. The Ministry of Health has a specific mandate to monitor the country's health status, formulate strategies and design programmes to address health problems of the country. In addition, the Ministry also has a role to implement,

monitor and evaluate all health issues in connection with the SFP. Therefore, it is the Ministry of Health that has the capacity to measure the health and nutrition levels of school children in the country. This makes it imperative for this ministry also to be granted oversight responsibilities of all issues related to the health of the school children. These are the areas which the Ministry of Local Government and Rural Development has encroached upon. Although it has no capacity to handle such issues, it currently has the oversight responsibilities of the GSFP. The GSFP from all indications has to partner with the MoE, MoH, and MoFA if it is to succeed. However, it is obvious that effective collaboration with these technical ministries is a major challenge. A common aspect of this challenge has to do with communication on GSFP issues both within and across the three technical ministries. For instance, the District Directors of Health, Education and Agriculture have bits and pieces of information about GSFP but do not communicate this across to GSFP offices or line ministries. (Gyarko, 2011)

Another intractable challenge has to do with the inability to link GSFP to local agriculture production. Even where linkage exists, its desired impact is nothing to write home about. It is common knowledge that most farmers and GSFP caterers are not linked hence the dream of GSFP boosting domestic food production remains a mirage. Alfa and Fyn (2011) reported that apart from selected communities in the Ga East District and certain parts of the Northern sector of Ghana, where some positive linkages have been achieved, the status of the relationship between farmers and caterers in many beneficiary communities are not known fueling the general belief that farmers in these communities are not linked to their local caterers and therefore do not derive direct benefits from the school feeding programme. Funding also remains the most difficult challenge to the GSFP. The GH ¢ 0.40 per child per meal is

woefully inadequate considering the current economic conditions prevailing in the country. This amount cannot appropriately provide a balanced nutritious meal for the school going child. Even as we bemoan the feeding amount per every meal, it is true to add that these monies are not released in good time to the caterers thereby making them to feed pupils on credit. The danger in this is that quality and quantity of the food may be compromised. Also, some funds are either nonexistent or very little for other important aspects of the programme such as monitoring, sensitization and general administrative duties. For the programme to be effective there is the need to source funding for both the feeding and other operational activities of the programme.

Alfa and Fyn (2011, p7)

The targeting and selection of beneficiary schools also remain a major challenge to Ghana's School Feeding Programme. According to GSFP official statistics, the largest beneficiaries of the programme are Greater Accra, Ashanti and Brong Ahafo Regions. They together command 60% of the total number of pupils who are benefiting from the programme. This problem is further compounded by the fact that the cities of Accra and Kumasi alone take the largest chunk of this 60%, although they may not deserve that percentage per the selection criteria. Conversely, Northern, Upper East and Upper West Regions which are considered the poorest in Ghana have only 15% of the total number of pupils benefiting from the programme. Admittedly, some dynamics and power come to play in the process of targeting and selecting beneficiary schools. However, it must be noted that the situation where a huge number of „unqualified“ schools are roped into the programme at the expense of „qualified“ schools is surely detrimental to the attainment of the programme objectives.

The reliance on external support poses a threat to the programme. This is particularly so because there are several existing cases/examples of withdrawal from School Feeding Programmes by external donors. Examples of countries that experience donor withdrawal include Botswana (1966-1972) Cape Verde (1979-1995) and Namibia (1991-1997). Alfa and Fyn (2011)

Some members of the public mainly parents whose children are in primary schools and kindergartens have expressed concerns about the kind and quality of food being served children under the GSFP (Alfa and Fyn 2011). They are also worried about the environment within which some of the food are prepared and served. The parents are particularly worried about the health of their children because in cases where some schools have acute water problems, some of the plates are not usually washed/ washed well before food is served. According to these parents while some of the foodstuffs or ingredients are not of good quality, the surroundings of some of these cooking areas are not equally hygienic. A visit to some to some GSFP schools will reveal that some of the kitchen personnel need to be given some serious training in cleanliness. Alfa and Fyn (2011)

2.19 Implications of GSFP on Enrolment and Retention

In the words of Del Rosso (1999), “the number of days a child attends school is related to performance and cognition”. It can therefore be inferred that poor health and malnourishment affect pupils’ enrolment and attendance. In Ghana, malnourished children are not enrolled in school at early stage or may not attend school at all and even if they are enrolled they may not complete. A number of 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 60's and early 70's it was assumed by many researchers that the brain changes produced by malnutrition led directly to an impairment of learning, which often was 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 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 just small changes in cognitive and social development. Meaningful change in this area 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 nation planners. Workers 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. (Ahmed,

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.

According to several studies conducted, SFPs have a positive impact on school enrolment and attendance. It is worth of re-stating that one of the immediate objectives of the GSFP is to increase enrolment, attendance and retention. According to Imoru (2010) cited in Konzabre (2018), a national inventory of GSFP by SNV Ghana in 2008 revealed that the programme has positively led to an increase in initial enrolment and retention of most schools in Ghana. Overall, enrolment in the primary schools had increased by 12.8% and enrolment in the Kindergarten by 23.1%. The study further revealed that some schools especially in Northern East Regions saw an increase in enrolment of 100%.

The increase in enrolment does not translate to a corresponding increase in either number of teachers or classroom space. This phenomenon undoubtedly, endangers the quality of education in the country. There is therefore the conscious need for government to consider providing additional teachers, classrooms, textbooks and

desks to schools that are under the GSFP. Another study that was conducted by William Lambers in 2009 entitled “Ending Child Hunger: School Feeding in Ghana” credited school meals with increasing enrolment, attendance and retention rates. This reflected in the GSFP record in 2006/ 2007 academic year, when national enrolment increased by 21%. Enrolment rates in WFP-assisted schools in West Mamprusi Municipal increased by 14%.

Apart from SFPs, one can also observe that there are other initiatives that have possible and positive effects in improving enrolment and attendance as well as retention. These include the provision of free school uniforms and exercise books, increasing the capitation grants of pupils, and instituting take-home rations among others. The take-home ration in particular is the single most compelling reason why parents are now willing to send their children especially to school. In order to qualify for take-home ration, children have to attend school for a minimum of 80% of the month. This has led to regular attendance resulting in higher academic performance thereby qualifying more children into high schools. Several educational assessments have confirmed that food assisted programmes like the WFP take-home ration were instrumental in propelling the attainment of gender parity in primary education in Upper East and Upper West Regions. Out of the ten regions in Ghana, these two had the highest gender parity ratios in 2006/ 2007.

Just as it has been established that the GSFP seeks to promote self-sufficiency in food production, official statistics from the GSFP in 2011 and a national inventory of GSFP by SNV Ghana in 2008 make the situation complex. In Brong Ahafo Region, only 5% of its households have difficulty with food needs compared to 40% and 23% of households in Upper East and Upper West respectively. Conversely, Brong Ahafo

has more schools enrolled on the programme than the two poor Upper Regions. This phenomenon obviously does not augur well for the realization of the programme intended outcomes. .

2.20 Empirical Literature on the Effects of School Feeding

The 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 restless, inattentive and uninterested in learning. The number of hungry school-age children is unknown, but is likely to be a significant problem in various circumstances. Myriad of 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. 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, 2001).

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).

2.21 Summary

The related reviewed literature looks at the theoretical and conceptual frameworks of the study. Under the theoretical review, research showed that the GSFP is capable of increasing school enrolment and retention since the food served in school serves as a motivation for pupils to be in school. The outcome of this research is supported by Lambers (2009) when he opined that SFPs are credited with increased enrolment and retention. It is also seen that mere attendance to school does not automatically translate into high academic performance. The conceptual framework of the literature review looks at development of SFPs with a specific focus on the GSFP. It further looks at the history of SFPs and gives some highlights on best practices existing in other countries that also have SFPs. The conceptual framework continues with the School feeding programmes in Ghana, School feeding programme and enrolment as well as organizational structure of the GSFP. The review also emphasized on the systems and structures put in place for the smooth implementation of the school feeding programme. The programme implementation partners and other development or donor partners either at the local, national or international level are discussed.

Having looked at the key actors of the school feeding programme, the review went further to assess poverty and education. It came out that poverty is still a major challenge in schools in the developing countries. Poverty results in hunger and children learning effectively if they are hungry could be a challenge. The literature review examines how feeding schemes can address the problem of hunger in schools. Research from published works 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. On the effectiveness of the GSFP programme, it specifically looked at the coverage or scope of the programme and gains the GSFP has made. The study identified several gains the programme has made across the length and breadth of the country. For instance, the GSFP made some gains by reducing poverty and increasing enrolment in some basic schools in Akatsi District of the Volta Region. A discussion of the implementation challenges facing the GSFP follows. The study identifies poor institutional linkages, poor targeting of beneficiary schools, funding and over reliance on donor/ external support among others as challenges facing the GSFP.

The review also looked at the GSFP and its implications on basic school enrolment and retention. It presents a relationship that exists between the presence of GSFP in schools and increase in enrolment, retention and attendance by pupils.

Finally, on empirical literature on effects of school feeding on hunger and pupils academic performance, it came out that deficiencies of iron and iodine are among the most harmful types of malnutrition with regard to cognition. Iron deficiency renders children restless, inattentive and uninterested in learning. The literature suggests a causal link between iron deficiency, anemia and less than optimal behavior for learning.

CHAPTER THREE

METHODOLOGY

3.0 Introduction

This chapter addresses the procedure of carrying out the research. The chapter basically focuses on what, where, how and when to collect data for the purpose of analysis whilst observing and maintaining ethical standards. The remaining parts of this chapter concerns itself with the method that I adapted to scientifically and analytically gathers and process data. The chapter further discusses the research design, population for the study, sample and sampling procedures, methods of data collection, ethical consideration and methods of data analysis.

3.1 Research Approach

The study adopted the mixed methods approach in social research. According to Gray (2009 p.199) the mixed methods approach in social research “include at least one quantitative method and one qualitative method, where neither type...is inherently linked to any particular inquiry paradigm.” In the view of (Creswell *et al.*, 2013, p.212) mixed methods involves “the collection or analysis of both quantitative and qualitative data in a single study in which the data are collected concurrently or sequentially, are given a priority, and involve the integration of data at one or more stages in a process of research.” In studying a phenomenon such as the GSFP the researcher would come across various respondents whose responses could be motivated by several contextual dictates and subjective perceptions. In order words, knowledge may not be seen as objective. The adoption of a qualitative approach therefore assisted the researcher to eschew possible bias and rather appreciate the phenomenon through the lenses of the respondents and mediating such responses with

his own experiences. However, there were other aspects of the impact of the GSFP which required objective measuring or quantifying in order to make definitive statements or conclusions about the volume or extent of effect (or lack of effect) believed to have been occasioned by the GSFP, hence the choice of the quantitative approach as a complementary force. Similarly, the quantitative approach allowed the researcher “identify relationships between variables” related to the GSFP and thus permitted generalizing some of the observations or findings (Gray, 2009). In effect the mixed approach was deemed to be appropriate for the study because the weaknesses of one approach are compensated for by the strengths of the other (Creswell, 2013). Gray, 2009) provides further proof of the significance of the mixed method approach when he asserts that “using mixed methods allows researchers to simultaneously generalize from a sample to a population and to gain a richer, contextual understanding of the phenomenon being researched” (Gray, 2009, p.204).

3.2 Research Design

The research design was the descriptive type. The descriptive research design is chosen because the research sought to discover some relationships that exist between the GSFP and basic school enrolment and retention. Agyedu, Donkor and Obeng (1999) hold similar view when they asserted that descriptive research design “involves some type of comparison or contrast and attempts to discover relationships between existing variables”. They further opined that descriptive design is concerned with hypothesis formulation and testing, the analysis of the relationships between non- manipulated variables, and the development of generalizations. This design helped me to meet the objectives of the research and draw some meaningful generalizations and conclusions from the study.

3.3 Population and Sample

The population of the study was made up of all pupils in primary schools who are enjoying the GSFP in the West Mamprusi Municipality. A total of sixteen (16) schools made up of 6,339 pupils formed the population. Out of this number, four (4) schools with pupils' populations as follows (Nabari D/A Primary, Daboya No.2 D/A Primary, Guakodow D/A Primary & Shilinga D/A Primary) were selected for the study with a sample population of 2,028 pupils. The four (4) basic schools were rural schools. The reason for purposively selecting those schools was largely to assess the impact the GSFP had on such rural schools. The rest of the twelve (12) schools were within the urban centre. Out of the total sample population, two hundred (200) pupils were selected for the study. Fifty (50) pupils were selected from each school. Apart from the pupils, a total of twelve (12) teachers/head teachers were also selected for the study. Two (2) teachers including one (1) head teacher were drawn from each of the four (4) schools selected for the study.

3.4 Sample and Sampling Procedures

The study purposively targeted four (4) rural GSFP schools in the West Mamprusi Municipality. Admittedly, not all the GSFP schools within the municipality could be investigated. This was because twelve (12) out of the sixteen (16) GSFP schools were found within the urban center or municipality, as a result, the four (4) GSFP schools in the rural areas had to be purposively sampled for this study.

Simple random sampling method was used to get the two hundred (200) pupils whilst purposive sampling was used to get the teachers/head teachers. For the random sampling, numbers one to fifty (1-50) were written on pieces of papers and mixed with blank pieces of papers to tally with the pupils' population from P4, P5 and P6 for

each school. The pupils who picked numbers ranging from one to fifty formed the sample selection from each of the four (4) schools. These pupils were used for the study. On the part of the teachers' head teachers, the two (2) teachers who were in-charge of the GSFP in their respective schools as well as the head teachers were automatically selected for the study. The essence of this was to get expert knowledge and information on issues pertaining to the GSFP in those schools.

3.5 Instruments for Data Collection

The instruments used for the data collection were open-ended-questionnaire and semi-structured- interview. Questionnaires were used for the study because they are very effective for securing information about practices and conditions and for inquiring into the opinions and attitudes of the subjects. Two sets of questionnaires were used; one for the pupils made up of 10 questions and the other one for the teachers' head teachers also made up of 10 questions. The questionnaire aimed at soliciting information on the perception and attitude of pupils/teachers towards the GSFP and the impact and or implication of the GSFP on basic school education. The interview guide contained 10 items for both pupils and teachers. The items were to a large extent the same for both pupils and teachers in terms of the content.

The prepared questionnaire was subject to a pilot study on a sample of the population for the study. The pupils and teachers who were selected for the sample study did not form part of the actual study. Five (5) copies of the questionnaires each for the pupils and the teachers were used to test run the study. This was done to find out how the pupils/teachers would understand the items, their mode of responses and to determine if the questionnaires met the purpose and objectives of the study. Based on the

success of the pilot study, the questionnaire was later administered. This was done in order to ensure the validity and reliability of the instruments.

3.6 Data Analysis

I used two main types of data in this research work. These are primary and secondary data. The primary data included those that came from the open-ended questionnaires, interviews and registers from the schools under study which formed the basis for the analysis. The secondary data involved data that I collected from the review of relevant newspapers, websites, books, journals and magazines, which had some literature on the research topic. The data collection phase focused on the impact the Ghana School Feeding Programme had on some selected primary schools in the West Mamprusi Municipality of the North East Region of Ghana.

The instruments were developed from the research questions I framed for the study. The data I gathered from the use of the open-ended items in the questionnaire were analyzed using descriptive statistics. Descriptive statistics are a set of numbers that are transformed into indices that describe or characterize the data. They help to summarize, organize and reduce large numbers and observations. In most cases, the reduction results are a few numbers derived from mathematical formula used to represent all observations in each interest group.

These open-ended items were analyzed with the use of percentages. The responses were coded and analyzed manually. The results were subsequently coded using numerical values. As indicated earlier, the interview was to elicit further responses to back up the responses from the questionnaire. Therefore, the responses from the interview conducted were transcribed and analyzed using content analysis.

3.7 Validity and Reliability

For purposes of validity and reliability, I subjected the questionnaire and interview protocol to four (4) of my colleagues for their scrutiny, suggestions and comments. As a result of this, some items that were ambiguous were dropped and some other items modified. I read through the items carefully and related them to the objective of the research.

I again used the test retest method to ascertain the trustworthiness of the instruments. To this end, the questionnaire was administered to ten (10) pupils twice within an interval of two (2) weeks. The responses of the pupils on the two occasions were correlated. The correlation co-efficient showed that the questionnaires were valid and reliable.

3.8 Ethical Considerations

In every aspect of human behaviour and endeavour, we are often guided by ethics. Therefore, all relevant principles of conduct that are considered ethical by stakeholders of the research were considered. To this end, the following specific issues were addressed.

- i. Permission was sought from the West Mamprusi municipal Education office and head teachers of the schools where this study was to be conducted.
- ii. Permission was sought from parents of participants.
- iii. Before the administration of the research instruments, participants were briefed on the purpose of the research and how they could go about answering items in the instruments.
- iv. I as well made satisfactory introduction of myself which helped clear doubts in the minds of the participants

- v. Personal anonymity and confidentiality were assured all participants regarding any responses, they might give. To this end, personal information like names of participants was intentionally omitted during the data gathering stage.



CHAPTER FOUR

RESULTS AND DISCUSSION

4.0 Introduction

This chapter addresses the discussion and analysis of the results. In this chapter, the researcher takes a close examination of the results in order to come out with findings or interpret the results.

4.1 Demographic Features of Participants

The research considered a sample size of two hundred and twelve (212) participants, made up of teachers and pupils. Two hundred (200) of the participants were made up of pupils from four (4) different GSFP schools. Twelve (12) teachers (three (3) from each of the GSFP schools) also formed part of the study. The rural schools where the research was conducted include Nabari D/A Primary, Daboya No.2 D/A Primary, Guakodow D/A Primary and Shilinga D/A Primary. The GSFP was started in the four (4) schools under study in 2015/2016 academic year.

All the teachers were interviewed (using semi-structured questions) and also made to answer an open-ended- questionnaire each. On the part of the pupils, all the two hundred (200) answered the open-ended-questionnaire but only ten (10) pupils from each school were interviewed. One hundred and nine (109) pupils were boys whilst ninety-one (91) pupils were girls. The participants (pupils) were ten (10) years old and beyond as illustrated in Table 4.1 below.

Table 4.1: Age distribution of pupils in GSFP schools in West Mamprusi

| Municipality | | | | | | |
|---------------------|-----------------|-----------|-----------|-----------|-----------------|--------------|
| Age | Below 10 | 10 | 11 | 12 | Above 12 | Total |
| Number of pupils | 0 | 10 | 60 | 20 | 110 | 200 |

Source: Field Survey (2019)

The age distribution of pupils sends a signal that majority of pupils (participants) were in primary five (5) since 45% (90 pupils) were between 10 and 12 years and 55% (110 pupils) of participants were over 12 years.

On the part of the teachers, eight (8) were male while four (4) were females. The ages of the teachers can be described as a youthful one because eight (8) of the teachers were below 30 years whilst no teacher attained 51 years or more. See the details on table 4.2 below.

Table 4.2: Age distribution of teachers in GSFP schools in West Mamprusi

| Municipality | | | | | | |
|---------------------|-----------------|---------------|----------------|---------------|-----------------|--------------|
| Age | Below 30 | 30- 40 | 41 - 50 | 50 -60 | Above 60 | Total |
| Number of teachers | 8 | 3 | 1 | 0 | 0 | 12 |

Source: Field Survey (2019)

Many of the teachers I interviewed had Diploma in Basic Education (DBE) Certificate. One (1) teacher each had Post-Secondary Teachers Certificate „A“, Higher National Diploma (HND), two (2) teachers had first University degree respectively whilst eight (8) out of the twelve (12) teachers had DBE. As indicated earlier in the previous chapter, two instruments namely, questionnaire and interview were used to gather the data for the study. The questionnaire was the major instrument used whilst the interview served as a back up to the questionnaire. Most of the findings and results

of this study were derived/ obtained from the responses of the questionnaires while the interviews were used to substantiate some of the findings of the questionnaire.

4.2 Enrolment Levels of Pupils

As part of the study, data were collected on the enrolment of pupils of the target schools in 2015/2016 academic year before the roll out of the GSFP. It also looked at the enrolment figures of 2016/2017, 2017/2018 and 2018/2019 academic year when the GSFP had started. Table 4.3 shows the enrolment figures before the roll out of the GSFP in the selected schools, while tables 4.4, 4.5 and 4.6 show the enrolment figures of selected schools in 2016/2017, 2017/2018 and 2018/2019 respectively when the GSFP was in place.

Table 4.3: Enrolment figures in 2015/2016 academic year before GSFP

| Name of School | Boys | Girls | Total |
|-----------------------|-------------|--------------|--------------|
| Nabari D/A Primary | 233 | 201 | 443 |
| Daboya D/A Primary | 143 | 161 | 304 |
| Guakodow D/A Primary | 98 | 101 | 199 |
| Shilinga D/A Primary | 110 | 100 | 210 |
| Total | 584 | 563 | 1,156 |

Source: Field survey (2019)

Table 3.4 shows enrolment figures 2015/2016 academic year before the roll out of the GSFP. From the table it can be seen that total enrolment for the selected schools is 1,156. Enrolment for boys was 586 while that of girls were 563.

Table 4.4: Enrolment figures in 2016/2017 academic year

| Name of School | Boys | Girls | Total |
|-----------------------|-------------|--------------|--------------|
| Nabari D/A Primary | 460 | 401 | 861 |
| Daboya D/A Primary | 213 | 321 | 534 |
| Guakodow D/A Primary | 120 | 130 | 250 |
| Shilinga D/A Primary | 140 | 160 | 300 |

| | | | |
|--------------|------------|--------------|--------------|
| Total | 933 | 1,012 | 1,945 |
|--------------|------------|--------------|--------------|

Source: Field survey (2019)

2017/2018 academic year

| Name of School | Boys | Girls | Total |
|-----------------------|-------------|--------------|--------------|
| Nabari D/A Primary | 460 | 401 | 861 |
| Daboya D/A Primary | 213 | 321 | 534 |
| Guakodow D/A Primary | 120 | 130 | 250 |
| Shilinga D/A Primary | 140 | 160 | 300 |
| Total | 933 | 1,012 | 1,945 |

Table 4.6 Enrolment figures in 2018/2019 academic year

| Name of School | Boys | Girls | Total |
|-----------------------|--------------|--------------|--------------|
| Nabari D/A Primary | 500 | 418 | 918 |
| Daboya D/A Primary | 253 | 327 | 580 |
| Guakodow D/A Primary | 148 | 150 | 298 |
| Shilinga D/A Primary | 177 | 191 | 368 |
| Total | 1,078 | 1,086 | 2,164 |

Source: Field survey (2019)

From Tables 4.3 and 4.4, it can be seen that, there was an increase in enrolment level in 2016/2017 academic year when the GSFP started over the 2015/2016 academic year before the roll out of the GSFP in the selected schools from 1,156 in 2015/2016 academic year to 1,945 in the 2016/2017 an increase in enrolment by 68%. However, in 2016/2017 and 2017/2018 academic years, the enrolment figures were the same. This is because in those two academic years, there was neither an increase nor a decrease in the enrolment figures for those academic years. Meanwhile, there has been an increase in enrolment level from 1,945 in 2017/2018 academic year to 2,164 in 2018/2019 academic year. There was an increase in enrolment by 11.3% (219 pupils).

One interesting revelation from the enrolment figures for the academic years is the critical role of the GSFP in bringing about increase in enrolment in the schools under

study. This is supported by Lambers (2009) when he opined that SFPs are credited with increased enrolment and retention. . Also, Imoru (2010) cited in Konzabre (2018) said that a national inventory of GSFP by SNV Ghana in 2008 revealed that the programme has positively led to an increase in initial enrolment and retention of most schools in Ghana.

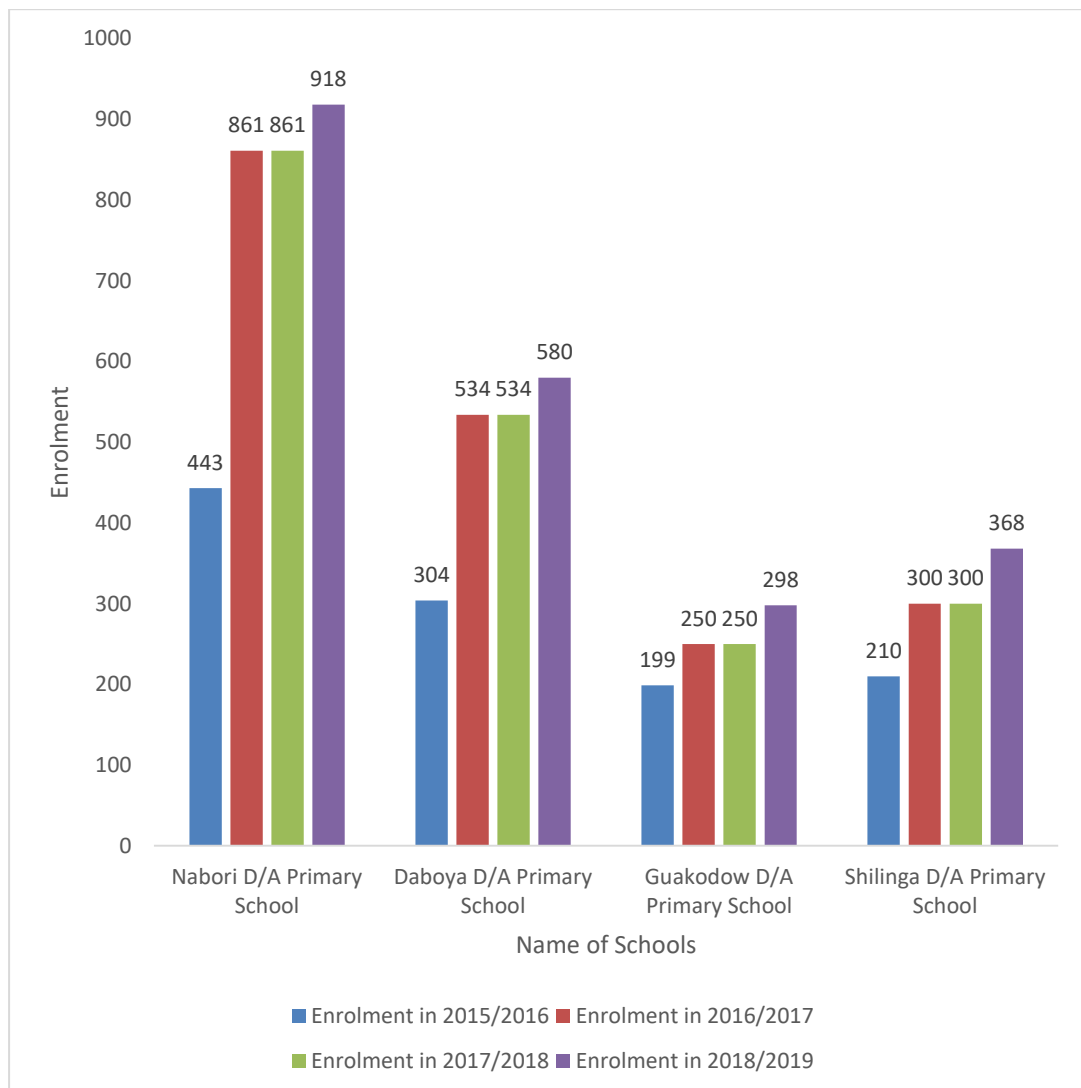


Figure 2.5: Compound bar graph

Figure 2.5 above gives further explanations on the enrolment figures in the schools under study. The graph shows enrolment figures for 2015/2016 academic year before the roll out of the GSFP. From the graph it can be seen that in the 2015/2016

academic year, Nabare D/A Primary School had a pupil population of four hundred and forty three (443), Daboya D/A Primary School had three hundred and four pupils, Guakudow D/A Primary School also had a pupil population of one hundred and ninety nine (199) and Shillinga D/A Primary School had two hundred and ten (210) making a total enrollment of 1,156. In the 2016/2017 academic year, Nabare D/A Primary School had a pupil population of eight hundred and sixty one (861), Daboya D/A Primary School had a pupil population of five hundred and thirty four (534), Guakodow D/A Primary School had two hundred and fifty (200) pupils whilst Shillinga D/A Primary School had three hundred (300) pupils making a total of one thousand nine hundred and forty five (1,945). This incidentally did not change in the preceding academic year as the figure remained same in the 2017/2018 academic year. Meanwhile, there has been an increase in enrolment level from one thousand nine hundred and forty five (1,945) in 2017/2018 academic year to two thousand one hundred and sixty four (2,164) in 2018/2019 academic year. This means there was an increase in enrolment by two hundred and nineteen (219) pupils in 2018/2019 academic year more than 2016/2017, 2017/2018 academic years respectively.

4.3 Retention Levels of Pupils

The study also looked at the retention of pupils in GSFP schools. Data were collected on retention of pupils for the 2016/2017, 2017/2018 and 2018/2019 academic years from the selected GSFP schools. Table 4.7, 4.8 and 4.9 show the retention figures of 2016/2017, 2017/2018 and 2018/2019 academic years respectively.

Table 4.7: Retention of pupils in GSFP schools in 2016/ 2017 academic year

| Name of School | Number of pupils at the start of year | Number of pupils at the end of year | Number of pupils who dropped out | Percentage of pupils retained at the end of year |
|-----------------------|--|--|---|---|
| Nabari D/A Primary | 861 | 811 | 50 | 94.2 |
| Daboya D/A Primary | 534 | 504 | 30 | 94.4 |
| Guakodow D/A Primary | 250 | 223 | 27 | 89.2 |
| Shilinga D/A Primary | 300 | 278 | 22 | 92.7 |
| Total | 1,945 | 1,816 | 129 | 93.4 |

Source: Field survey (2019)

Table 4.8: Retention of pupils in GSFP schools in 2017/ 2018 academic year

| Name of School | Number of pupils at the start of year | Number of pupils at the end of year | Number of pupils who dropped out | Percentage of pupils retained at the end of year |
|-----------------------|--|--|---|---|
| Nabari D/A Primary | 861 | 811 | 50 | 94.2 |
| Daboya D/A Primary | 534 | 504 | 30 | 94.4 |
| Guakodow D/A Primary | 250 | 223 | 27 | 89.2 |
| Shilinga D/A Primary | 300 | 278 | 22 | 92.7 |
| Total | 1,945 | 1,816 | 129 | 93.4 |

Source: Field survey (2019)

Table 4.9: Retention of pupils in GSFP schools in 2018/ 2019 academic year

| Name of School | Number of pupils at the start of year | Number of pupils at the end of year | Number of pupils who dropped out | Percentage of pupils retained at the end of year |
|-----------------------|--|--|---|---|
| Nabari D/A Primary | 918 | 913 | 05 | 99.5 |
| Daboya D/A Primary | 580 | 572 | 08 | 98.6 |
| Guakodow D/A Primary | 298 | 296 | 02 | 99.3 |

| | | | | |
|----------------------|--------------|--------------|-----------|-------------|
| Shilinga D/A Primary | 368 | 368 | 00 | 100 |
| Total | 2,164 | 2,149 | 15 | 99.3 |

From Source: Field survey (2019) it is seen that total number of students admitted at the beginning of the academic years was 1,945. The number dropped by 129 pupils to 1,816 at the end of the academic years (2016/2017 and 2017/ 2018). From further investigations, it came out that of the 129, 9 of the pupils died, 20 of them dropped out of school and the rest of the 100 went on transfer with their parents. This resulted in 6.6% being recorded as the dropout rate against 93.4% for overall retention rate. Even though the drop out figure may seem small, it is considered significant because the ideal situation is to achieve 100% retention of pupils in schools. On the other hand, Table 4.9 results show that 2,164 pupils were enrolled at the beginning of the 2018/ 2019 academic year. At the end of the year, the figure dropped marginally by 15 pupils to 2,149. The dropout rate for the year was 0.7%. It is therefore clear from the table that total retention stood at 99.3%. A comparison of Tables 4.7, 4.8 and 4.9 shows that retention of pupils had improved tremendously from 93.4% in 2016/2017, 2017/ 2018 academic years to 99.3% in 2018/ 2019 academic year. The improvement in retention within the period under review was investigated through interviews. The interviews generally revealed that retention of pupils and the GSFP had a direct and positive correlation. This means that the presence of the GSFP resulted in the increment in retention in the 2018/ 2019 academic year.

4.4 Enrolment of Pupils in Basic Schools in West Mamprusi Municipality

On the question of how the enrolment of pupils in basic schools in West Mamprusi Municipality is influenced by GSFP, the research conducted showed major and different stance between the teachers and their pupils. Most teachers (75%) agreed that the presence of a free meal in schools was enough motivation for pupils to enroll

in GSFP schools. Per the responses of teachers from the questionnaire, none agreed that the enrolment of pupils to their schools could be attributed to good academic performance of the schools. Few teachers 17% attributed the enrolment of pupils to their schools to the fact that the schools were closed to the homes of pupils and 8% said the presence of good teachers in those schools were contributory factors. When the Head teacher of Shilinga D/A Primary School was asked of his views of what could influence the enrolment of pupils in his school, he replied “In my view, the number one reason is the presence of the GSFP even though other reasons could also influence enrolment”.

The views by the teachers are not very different from my opinion when I admitted in page 1 of this study that improving the living conditions of people should start with the availability of food. This position is supported by Maslow (1943) when he asserted that humans are motivated first through the provision of certain basic needs like food and others. A class five (5) pupil of Nabari D/A Primary School confirmed the fact that he was enrolled into that school due to the presence of the GSFP when he said “I came to this school because they are giving us food”.

Few pupils 15% and 25% respectively responded that they were enrolled in those schools primarily because either the teachers in those schools were good or the schools were performing well academically. Some of the students (7.5%) admitted that the proximity of their houses to their schools had an influence in their choice of school. Most of the participants (47.5%) agreed with the teachers that the GSFP had an influence in their enrolment. It was only during the interview session that one class six pupil of Guakodow D/A Primary admitted that he was enrolled in that school due to the nearness of the school to his house. He added that he did not hail from that

community but was staying there and the only school which was closer to his house was Guakodow D/A Primary School. The responses of participants are supported by literature. According to Imoru (2010) cited in Konzabre (2018), a national inventory of GSFP by SNV Ghana in 2008 revealed that the programme has positively led to an increase in initial enrolment and retention of most schools in Ghana. Details of participants' views on what influences enrolment of pupils in certain GSFP schools are contained in Tables 4.10 and 4.11.

Table 4.10: What influences enrolment of pupils in GSFP Schools (Pupils' Responses)

| Reason | Number of pupils | .% |
|-------------------------------------|-------------------------|------------|
| Nearness of the house to the school | 15 | 7.5 |
| Presence of free meal | 95 | 47.5 |
| Presence of good teachers | 30 | 15 |
| Good academic performance of school | 50 | 25 |
| Others | 10 | 5 |
| Total | 200 | 100 |

Source: Field survey (2019)

Table 4.11: What influences enrolment in GSFP Schools (Teachers' responses)

| Reason | Number of pupils | % |
|-------------------------------------|-------------------------|------------|
| Nearness of the house to the school | 02 | 17 |
| Presence of free meal | 09 | 75 |
| Presence of good teachers | 01 | 8 |
| Good academic performance of school | 00 | 00 |
| Others | 00 | 00 |
| Total | 12 | 100 |

Source: Field survey (2019)

From Table 4.10 and 4.11, it can be concluded that there is variance between the responses from teachers and that of the pupils over what influences a child's enrolment in a GSFP school. Whilst most teachers say it is due to presence of a free meal, the pupils attribute it to presence of good teachers, and good academic performance of the schools.

When the responses of both teachers and pupils were put together the following results were obtained.

Table 4.12: Teachers/pupils responses on what influences pupils' enrolment in GSFP schools

| Reason | Number of pupils | Percentage (%) |
|-------------------------------------|-------------------------|-----------------------|
| Closeness of the home to the school | 17 | 8 |
| Availability of free meal | 104 | 49 |
| Presence of good teachers | 31 | 15 |
| Good academic performance of school | 50 | 23 |
| Others | 10 | 5 |
| Total | 212 | 100.00 |

Source: Field survey (2019)

The figures above from the Table 4.12 indicate that most pupils 49% got enrolled into the GSFP schools primarily because of the availability of free meals. 23% felt that those schools were performing well academically. 15% of participants viewed the motivation of pupils to enroll in GSFP schools to the presence of good teachers. It can be observed that some of the participants attribute the enrolment of pupils to GSFP schools to each of these responses or options; presence of a free meal, presence of good teachers and good academic performance of school.

In tandem with the above findings, the research further revealed that most pupils took breakfast before going to school. Of the two hundred (200) pupils under study, 75% (150 pupils) responded that they usually eat breakfast at home before going to school. In other to confirm the veracity of the responses from pupils, they were asked whether they could eat 3 square meals at home on days that school is not in session. One thirty (130) pupils or 65% said they always ate on non-school days whilst seventy (70) pupils or 35% said they sometimes ate. From the discourse, no pupil admitted that he/she has never ate three times a day before. The results are illustrated on the table 4.13 and 4.14 below.

Table 4.13: Pupils who take breakfast at home before going to School

| Frequency | Number of pupils | Percentage (%) |
|--------------|------------------|----------------|
| Always | 150 | 75 |
| Some times | 45 | 22.5 |
| Not at all | 05 | 2.5 |
| Total | 200 | 100.0 |

Source: Field survey (2019)

Table 4.14: Pupils who take three square meals on days' school is not in session

| Frequency | Number of pupils | Percentage (%) |
|--------------|------------------|----------------|
| Always | 130 | 65 |
| Some times | 70 | 35 |
| Not at all | 00 | 00 |
| Total | 200 | 100 |

Source: Field survey (2019)

4.5 Challenges of GSFP on Basic School Education in West Mamprusi

Municipality

The challenges of GSFP on basic education were examined in the following sub-strands

- i. Teaching and learning challenges
- ii. Teacher requirement challenges
- iii. Infrastructural challenges



4.5.1 Teaching and learning challenges

On challenges of the GSFP in basic school education on teaching and learning, the teachers said “the GSFP has brought increased in enrolment and regular attendance of pupils to school”. They added further that when the schools had not joined the GSFP, a number of the pupils in their school used to go back to their houses to take meals during school hours, and some of the pupils did not return again which affected their learning but now when the pupils come to school they stay throughout the school hours. Most of the head teachers interviewed alluded to the views of their teachers. This is in line with the observation made by Bukari et al (2015) in the Garu-Tempene District in the Upper East Region of Ghana when they pointed out that the GSFP has succeeded in increasing enrolment among participating schools. This also corroborates the findings of Ahmed (2004) that, provision of meals increases concentration and quality learning. Ahmed (2000) and Akanbi (2011) said provision of school meals does not only attract children to school but also it makes them attend regularly. The views of the head teachers and teachers are supported by Del Rosso (1999) when he said “when children are fed in school, it is most likely to increase their attention and cognitive function and learning”. To this extent, the very objectives of the GSFP were re-emphasized by the respondents.

4.5.2 Teacher requirement challenges

On the challenges of the GSFP on teacher requirement, the teachers said that before the GSFP was rolled out, teacher pupil ratio was 1 teacher to 40 pupils . They however alluded that, the increase in enrolment as a result of GSFP means additional work to them since it does not automatically lead to an increase in the number of teachers. This means that there are not enough teachers to manage the pupils in their learning needs. According to the teachers, 1 teacher used to teach between 52 and 59 pupils in

a class in the 2016/2017, 2017/2018 academic year, but in this 2018/2019 academic year, they are teaching between 64 and 68 pupils in a class. The implication is that the teacher in charge of the class will have a lot of work to do as far as teaching and marking of exercises are concerned.

4.5.3 Infrastructural challenges

On the implication of GSFP on infrastructure, Headmaster of Guakodow D/A Primary School recounted how his school suffered a drop in pupils' population when Catholic Relief Service (CRS), a school feeding programme pulled out. He attributed the decrease in enrolment of pupils in his school to the pull out of CRS programme. He again said "the drop or increase in pupils' enrolment in my school have a direct correlation with the absence or presence of GSFP". He however alluded that an increase in the enrolment figures had led to overcrowding in his school. This view was corroborated by most of the participants.

The views of these participants are corroborated by the research conducted by Imoru (2010) when he opined that a national inventory of GSFP by SNV Ghana in 2008 revealed that the programme impacted positively to an increase in initial enrolment of most schools. Overall, enrolment in the primary schools had increased by 12.8% and enrolment in the Kindergarten by 23.1% by then. Lambers (2009) credited school meals with increasing enrolment, attendance and retention rates. This study finding reflected in the GSFP official record in 2006/ 2007 academic year, when national enrolment increased by 21%. Clearly, the views of the participants of this research are supported by existing literature as demonstrated above.

However, some few participants remarked that the increase in enrolment cannot only be credited to GSFP because other factors come into play. They cited natural

population increase, absence of school fees payment and parents' high level of education awareness as contributory factors. A GSFP teacher at Daboya D/A Primary School said "whilst I admit that the GSFP is helping to increase enrolment, it is also true to say that population increase and the fact that parents are now interested in education could lead to the increment in the numbers we are seeing these days". The view of this teacher and others are not significantly different from my opinion. In Chapter two, I observed that whilst I credit enrolment and retention to GSFP, other initiatives are equally capable of boosting the enrolment and attendance of pupils in schools. These include the provision of free uniforms and exercise books, and free education at the basic level. On the issue of whether the presence of the GSFP can contribute significantly to an improvement in learning by pupils, most of the participants answered in the affirmative. Table 4.15 provides details of pupils' responses

Table 4.15: Impact of GSFP on pupils' learning

| Response | Number of participants | Percentage (%) |
|-----------------|-------------------------------|-----------------------|
| Yes | 186 | 87.5 |
| No | 22 | 10.42 |
| Undetermined | 4 | 2.08 |
| Total | 212 | 100.00 |

Source: Field survey (2019)

From table 4.15, over 87.5% of participants said that the GSFP had some positive effect in pupils' learning whilst 10.42% of participants said the GSFP had no impact in learning. Only four persons (2.08 %) did not know whether the GSFP had impact or not. The results presented in table 4.12 show that learning depends largely on the ability of one to satisfy his/her physiological needs (food and others) first as espoused by Abraham Maslow in his theory of motivation. The ability of SFPs to influence

learning and promote academic performance is further supported by Del Rosso (1999). He identified four objectives of SFPs; they include the fact that when children are fed in school, it is most likely to increase their attention and concentration resulting in some gains in cognitive function and learning (Del Rosso, 1999). His views on SFPs are adequately in line with the results of the research.

A class six pupil of Daboya D/A Primary School said “whenever I eat food in school, it helps me to listen attentively to my teachers and that helps me to understand the lesson taught”. From her statement, it can be deduced that when pupils eat food, they are more likely to pay attention to their teachers during lesson, and more likely to understand what is taught better.

An interview with some participants who were teachers also showed that the GSFP had some influence in improving learning or academic performance. All the twelve (12) participants confirmed that the programme culminated in some marginal increase in pupils performance during school performance and monitory test.

4.6 Presence of Classrooms in GSFP Schools

According to the Ministry of Environment Science and Technology Town and Country Planning Department (2011:36) the maximum class size is mandatory and must not be exceeded, while the minimum is discretionary. a) Nursery 40 pupils (Min.) - 50 pupils (Max.) b) Primary Up to 40 pupils (Min.) - 45 pupils (Max.) c) Junior Secondary School 35 students (min.) - 40 students (Max.) d) Senior Secondary School 30 students (min.) - 35 students (Max.) e) Training School Up to 25 students (min.) - 32 students (Max.) f) Others Up to 25 students (min) - 30 students (Max)

2.2.2 Floor Area Per P.

Floor Area Per Pupil/Student The smaller figures are a mandatory minimum standard.

a) Nursery 1.4 m² to 1.8 m². (including outdoor space) b) Primary 1.4 m² Minimum

c) Junior Sec. School 1.5 m² Minimum d) Senior Sec. School 1.5 m² Minimum e)

Training School 1.5 m² Minimum.

On the issue of presence of classrooms to contain the pupils in GSFP schools for any meaningful lessons delivery, the study revealed the following results as contained in table 4.16 below.

Table 4.16: Presence of classrooms to accommodate pupils

| Response | Number of participants | Percentage (%) |
|-----------------|-------------------------------|-----------------------|
| Yes | 58 | 31 |
| No | 104 | 56 |
| Undetermined | 25 | 13 |
| Total | 187 | 100.00 |

Source: Field survey (2019)

From table 4.16, it can be seen that total number of participants was 187 instead of 212. The reason is that twenty-five (25) participants did not answer that question. Also, twenty-five (25) participants thus, 13% did not know whether their classrooms were spacious enough to accommodate pupils or not. Some of the participants had no idea about the ideal class size that should contain pupils at the basic level. 31% agreed that there was availability of classroom space to accommodate pupils. However, a large number of participants 56% pupils said that there were no classrooms to accommodate pupils.

A survey on the number of pupils in each of the twenty-four (24) classrooms that formed part of the schools under this study show the following results.

Table 4.17: Class sizes of GSFP schools

| Class size | Number classroom | Percentage (%) |
|-------------------|-------------------------|-----------------------|
| 30 & Below | 06 | 25:00 |
| 31 - 40 | 04 | 16.67 |
| 41 - 50 | 02 | 08.33 |
| Above 50 | 12 | 50:00 |
| Total | 24 | 100.00 |

Source: Field survey (2019)

It is important to state that according to the Ghana Education Service (GES) regulations, the ideal class size for primary schools is 36 – 46 pupils, to ensure effective teaching and learning as well as supervision. On the basis of GES ideal class size, and Table 4.17 results, over 50% of classrooms are overcrowded in GSFP schools in the West Mamprusi Municipality. A further survey on whether those schools had enough teachers to manage the pupils in their learning needs showed 52.08% responding in the negative. This further confirmed my earlier submission on the number of pupils each class contained in relation to the ideal class size.

4.7 Summary

The study sampled two hundred (200) pupils and twelve (12) teachers/headteachers from four (4) rural GSFP schools in West Mamprusi Municipal. Data were collected on pupils' enrolment for 2016/2017, 2017/2018 and 2018/ 2019 academic years. The results showed an increase in enrolment in 2018/ 2019 over the 2016/2017, 2017/ 2018 academic year. On retention of pupils, the data collected in 2018/ 2019 academic year showed a 6.6% increase over the 2016/2017, 2017/2018 academic year figures. The study also revealed that the presence of free meals (GSFP) had influenced enrolment and retention in the schools under study. However, the research conducted also showed that the presence of good teachers and a fairly good academic performance of the schools under study influenced enrolment and retention positively.

Additionally, the provision of free uniforms, free exercise books, capitation grants and free education at the basic level also accounted for the increment in enrolment and retention of school- going children in West Mamprusi Municipality.

On the influence of the GSFP on learning, the responses from participants showed that it has some positive impacts on pupils learning. The outcome of the study is supported by Del Rosso (1999) when he said “when children are fed in school, it is most likely to increase their attention and cognitive function and learning”. To this extent, the very objectives of the GSFP were re-emphasized by the participants. Generally, participants said that the programme keeps pupils in school, improves their academic work and to a large extent increases enrolment and retention of pupils in the Municipality.



CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.0 Introduction

In this chapter, the findings and conclusions drawn from the study are presented. Specifically, the chapter looks at the summary of findings, conclusions, recommendations, contribution of the study to knowledge, limitation of the study and areas for further research.

5.1 Summary of Findings

The summary of findings of the study were stated in the following sub-branches

- i. Enrolment and retention
- ii. Implications of GSFP on basic schools
- iii. Availability of classrooms in GSFP schools

5.1.1 Enrolment and retention

Teachers and pupils credited the influence in enrolment and retention of pupils in schools to the presence of the GSFP. Seventy-five percent (75%) of teachers and forty-seven. five (47.5%) of pupils respectively attributed enrolment and retention to the presence of the food pupils eat under the GSFP. Contrary to the above, some pupil's 15% and 25% respectively responded that, other factors such as the presence of good teachers in the schools and/ or the fact that those schools were performing fairly well academically also influenced to a large extent enrolment and retention in the schools.

It appears from the analysis that the GSFP actually had an influence on enrolment and retention. This corroborates the findings of Ahmed (2000) and Akanbi (2011) said provision of school meals does not only attract children to school but also it makes them attend regularly. The GSFP also had a major impact on school retention of students. This conclusion was drawn based on the views of respondents.

5.1.2 Implications of GSFP on basic school

Available enrolment statistics collected revealed that in 2016/2017, 2017/2018 academic year, total enrolment stood at 1,945. This figure marginally increased by 219 to 2,164 in 2018/ 2019. Those schools therefore witnessed an average of 11.3% increment in enrolment. On retention, the 2016/2017, 2017/ 2018 academic year rate stood at 93.4% whilst in 2018/ 2019 the rate was 99.03%. An increment of 6.6% was therefore witnessed during the period under review. The implication is that the teacher in charge of the class will have a lot of work to do as far as marking of exercises are concerned.

On the impact of the programme on learning, the study showed positive impacts on learning. 87.5% of participants said the GSFP had positive consequences on learning. This could possibly be due to lack of hunger. This is in line with Grantham McGregor et al (2001), who found out that provision of meal, engages children in learning thereby leading to high educational achievement. This also corroborates the findings of Ahmed (2004) that, provision of meals increases concentration and quality learning

5.1.3 Availability of classrooms in GSFP schools

On the above issue, 56% of participants said there was availability of classrooms for pupils in their respective schools whilst 31% said classroom accommodation was a problem and therefore unavailable. A good percentage (13%) of respondents did not

answer the question. As a result, an additional survey was made on the number of pupils in each class using the GES approved teacher-pupil ratio as a guide. It came out that only 30% of the classrooms were crowded.

5.2 Conclusions

From the study conducted, one can conclude that what influences pupils' enrolment and retention most in public basic schools is the presence of the GSFP. However, the study also revealed that the enrolment and retention of pupils could be influenced by good and quality teachers as well as good academic performance of the schools. On the implications of the programme on basic school enrolment and retention, the conclusion drawn is that there is a direct and positive relationship between the presence of the GSFP in a school and the enrolment and retention of pupils in that school. Since the presence of the GSFP leads to an increment in enrolment and retention, it will be prudent to replicate the programme in all public basic schools. This is particularly very important owing to the fact that this research has proven that the food pupils eat in schools contribute significantly to a positive improvement in their learning.

5.3 Recommendations

Based on the findings and other issues that emerged from the study, I made the following recommendations in order to strengthen the programme so that it achieves its desired objectives.

- i. Since the presence of the GSFP leads to an increment in enrolment and retention, it will be prudent to replicate the programme in all public basic schools. This is particularly very important owing to the fact that this research has proven that the

food pupils eat in schools contribute significantly to a positive improvement in their learning.

- ii. The implementation committees at the Municipality should continue to monitor the quality and quantity of the daily meals provided for pupils. This is necessary since the quality of the food such as its nutritional value is a factor motivating parents to enroll and keep their girls in school.
- iii. Furthermore, information relating to school infrastructure like classrooms, kitchen and canteens (physical development) and the availability of text books and other teaching and learning materials must be given more attention. If the immediate objectives of a SFP is to decrease shortterm hunger and thereby increase learning capacity, this will mean nothing if the school does not have adequate facilities and teaching resources. Without textbooks and teaching materials, the children will have nothing to learn and the quality of education will then be compromised. Most of the participants who were teachers, thought that overcrowding is impeding delivery of lessons therefore there is the need to equip them with time management skills in order to contain the situation. It is also important for the teachers to have refresher courses on teaching methods and knowledge on the rights of children as far as education is concerned. This eases tension and collision hence promotes healthy union in the learning environment.
- iv. Successful SFPs require constant monitoring and evaluation to provide input on the changing needs of the students as well as data on impacts and effectiveness. As already mentioned, baseline data (assessment needs) indicators should be collected periodically to determine progress. Consultations with parents, staff, teachers and students may also be required at various stages to address changing needs, concerns and issues associated with implementation. Government is

ambitious to expand the GSFP coverage instead of ensuring that what is currently running is managed well. The GSFP is generally not cost efficient in many respects. Notable among them is, the holistic feeding of the school children. Some of the school children do not like the meal for reason best known to them. It will be best if baseline data is gathered on the socio-economic status of the family of each child to determine need levels. The experience of other countries revealed significant weaknesses in the area of monitoring and evaluation. It is therefore important to break the failing system (theory of change) if we want to progress with the GSFP. Detailed monitoring and evaluation plans that are designed should be adhered to. Consequently, transition to sustainable local/national programs need revisiting as they evolve.

- v. For the programme to succeed there is the need for Government to provide additional teachers, classrooms to schools under the GSFP.
- vi. School Feeding Monitoring Committees (SFMC) must be strengthened as authorities to whom right-holders could make a claim. Duty bearers are obligated to fulfill contract terms and should be held accountable for their performance. The committees should consist of students, parents and teachers. Students, teachers and parents could make claims relating to a number of items such as food quality that would be predetermined in the SFP policy

5.4 Limitations of the Study

Every research conducted naturally comes with some limitations and this research could not have been different. I faced the challenge of people not willing to give me information especially during the data collection phase of the study. In some schools even with an introduction letter/ permit letter, it became very difficult to solicit information from respondents. It took my tactical ability to convince respondents to

give information. Also, one could only get the participants at a particular period of time (between 8am and 1pm only on weekdays) to collect data. As a result, a lot of time was spent in the data gathering process coupled with the fact that the researcher himself was a practicing teacher and needed to be in class for his usual lessons.

The researcher had to visit schools several times before the relevant data could be collected. Also, the researcher printed volumes of materials which assisted him in the conduct of the study.

5.5 Suggestions for Further Research

Although the study was successful in terms of fulfilling its objectives, there were some areas identified where future researchers can explore into. These areas are as follows:

- i. Impact of the GSFP on local farmers' household incomes.
- ii. Contribution of GSFP to employment in Ghana.
- iii. Safety of food prepared under this GSFP in basic schools in Ghana.
- iv. Influence of GSFP on local food production in Ghana.

REFERENCES

- Abotsi, A. K. (2013). *Expectations of school feeding programme: Impact on school enrolment, attendance and academic performance in elementary Ghanaian schools*. Accra: Ghana Academy of Arts.
- Addae-Mensah, T. (2000). *Education in Ghana: A tool for social mobility or social stratification*. Accra: Ghana Academy of Arts.
- Adelman, S., Gilligan, D. O., & Lehrer, K. (2008). *How effective are food for education programs?* Washington D.C: International Food Policy Research Institute.
- Afoakwa, O. E. (2009). *Home grown school feeding programme – The Ghanaian Model as Icon for Africa*. University of Ghana, Legon – Accra, Ghana.
- Agyedu, R., Donkor, F., & Obeng, I. G. (1999). *Teach yourself research*. (Unpublished)
- Ahmed, A. U. (2000). *Targeted distribution, in out of the shadow of famine: Evolving food markets and food policy in Bangladesh*. Baltimore: Johns Hopkins University Press.
- Ahmed, A. U. (2004). *Impact of feeding children in school: Evidence from Bangladesh*. Washington, D.C International food policy research institute:
- Akanbi, G. O. (2011). Home Grown School Feeding and Health Programme in Nigeria: An innovative approach to boosting enrolment in public primary schools – a study of Osun State 2002 – 2010
- Alaimo (2001). Food insufficiency, family income, and health in US preschool and school aged children: *American Journal of Public Health*.
- Alhassan, E. (2013). *Gender access gap: Factors affecting gender disparity in enrolment and attendance in basic schools in the Northern Region of Ghana*. A Thesis submitted to the University of Ghana, Legon in partial fulfillment of the requirement for the award of Doctor of Philosophy (Sociology) Degree (unpublished).
- Aliyar, R., Gelli, A., & Hamdani, S. (2012). A review of nutritional guidelines and menu compositions for school feeding programs in 12 countries. Second draft.
- Allen LH, Gillespie S.R. (2001). What Works? *A review of the efficacy and effectiveness of nutrition interventions*. ACC/SCN and Asian Development Bank.
- Alpha, T., & Fyn, Y. (2011). *The success of Ghana School Feeding Programme*. (Unpublished).

- Amon & Joviter (2003). *School enrolment, performance and access to education in Tanzania*. Centre for International Governance Innovation
- Annual Ministerial Review (2007). *Strengthening efforts for the eradication of poverty and hunger*.
- Averett, S., & Stifel, C. (2004). *Food for thought: The cognitive effects of childhood malnutrition in the United States*. California: Sage.
- Bennett J, Strevens A. (2003). *Review of school feeding projects*. Department for International Development.
- Boateng, Kwabia, L., Boakye-Yiadom & AbenaOduro. (2000). “*Poverty in Ghana*” Final Report, AERC, Nairobi, Mimeo.
- Bukari, M., Hajara, I. P. N., & Oloruntoba, A. (2015) *School feeding programme in Ghana: Factors affecting academic performance among public primary school pupils in Garu- Tempane District*. International Journal of Innovation and Applied Studies
- Bundy, D., Burbano. C., Grosh, M. G. A., Jukes, M., & Drake, L. (2009). *Rethinking school feeding: Social safety nets. Child development and the education sector*. Washington DC: The International Bank for Reconstruction and Development/The World Bank.
- Central Coordinating Board for Child & Youth Improvement Program (1996). *General guidelines for the national school-feeding program*. Jakarta: Central Coordinating Board for Child and Youth Improvement Program
- Chandler, K. (1995). *School breakfast improves verbal fluency in undernourished Jamaican children, Community and International Nutrition*.
- Clay, E. & Olav S. (2000). *Food aid and human security*. London: Frank Cass Publishers. Comparisons of the Total Design Method (TDM), a traditional cost-compensation model, and tailored design competition: evidence from a randomized evaluation, *World Bank Policy Research Working Paper, WPS3523*
- Commonwealth Secretariat (1991). *Decentralizing the education system, quality in basic education*. Commonwealth Education Programme
- Constitution of the Republic of Ghana. (1992). Accra: Ghana Publishing Corporation.
- Creswell, W.J. (2013). *Qualitative inquiry and research design: choosing among five approaches*. SAGE Publications Inc.

- Del Rosso, M. J. (1999). *School feeding programs: Improving the effectiveness and increasing the benefit to education. A guide for programme managers*. Retrieved 13-02-2019
<http://www.schoolsandhealth.org/Documents/Improving%20effectiveness%20and%20increasing%20the%20benefit%20to%20education%20-DelRosso-June99.pdf>
- Dreze, J., & Kingdon, G. G. (2001). School participation in rural India. *Review of Development Economics*, 5(1), 1-24.
- Duah, F. A. (2011) *Implementation of Ghana School feeding programme in Asunafo South District*. A thesis submitted to the Institute of Distance Learning, Kwame Nkrumah university of Science and Technology in partial fulfillment of the requirement for the Degree of Commonwealth Executive Masters of Public Administration. (Unpublished)
- ECASARD & SNV Ghana, (2009). *Ghana School Feeding Programme (GSFP) Initiative and the Farmers Dream*. A survey on the role of Farmer Based Organizations (FBOs) in the implementation of Ghana School Feeding Programme (GSFP) in Greater Accra Region
- Elson, Diane & Caatay, Nilufer (2000), "The social content of macroeconomic policies," *World Development*, 28(7): 1347-64.
- Engelbrecht, P., & Oswald, M. (2005). *Trialing the index inclusion*. Stellabosch: unpublished Research Report
- FAO, IFAD & WFP, (2014). *The state of food insecurity in the world 2014. Strengthening the enabling environment for food security and nutrition*. Rome, FAO.
- Galloway, R., Kristjansson, E., Gelli, A., Meir, U., Espejo, F., & Bundy, D. (2006). School feeding: Costs and outcomes. *Food and Nutrition Bulletin*, 30, 171–82.
- Gelli, A., Meir, U., & F. Espejo (2010). Does provision of food in school increase girls' enrollment? Evidence from schools in Sub-Saharan Africa. *Food and Nutrition Bulletin*, 28(2), 149–55.
- Ghana Daily Graphic (2009). *School feeding programme report*. (News Article)
- Ghana Daily Graphic (2013). *School feeding programme report*. (News Article)
- Ghana News Agency (2014). *School feeding program under threat*. [News Article] Ghana School Feeding Programme 2014.
- Ghana School Feeding Programme, (2005). *District operations manual*. Accra: Edo Printing Press.

- Ghana School Feeding Programme, (2006). *A review of the pilot phase of the programme*. (Unpublished).
- Ghana School Feeding Programme. *Annual Operating Plan 2011*.
<http://www.signschoolfeeding.org/dynamic/downloads/AOP%202011%20final%20draft.pdf>2005; 26:286-87.
- Global Child Nutrition Foundation (2010): *Accra communiqué*
- Global Child Nutrition. (2006). *School feeding programme in Indonesia (school feeding programme experienced in East Java Province)*. Retrieved 12-07-2019
<http://www.gncf.org/library/country-reports/indonesia/2006-indonesia-school-feeding-programme.pdf>
- Grantham-McGregor, S. M., & Ani, C. (2001). A review of studies on the effect of iron deficiency on cognitive development in children. *Journal of Nutrition*, 131(2), 649S– 6 S.
- Gray, E. D. (2009). *Doing researching the real world*. Los Angeles: Sage Publication Inc.
- Grosh, M., Del Nimo, C., Tesliuc, E., & Ouerghi, A. (2008). *For protection and promotion: The design and implementation of affective safety nets*. World Bank Publications.
- Gyarko, F. Y. (2011, August). *Retargeting of Ghana school feeding Programme beneficiary schools: Role of the key stakeholders*. Paper presented at the National Conference of key stakeholders of the GSFP, Prempeh Hall, Kumasi.
- Gyawu, B. C. (2012). *The nature of community participation in Ghana school feeding programme in the Bekwai Municipal Assembly*. A dissertation submitted to the University of Ghana, Legon, in partial fulfillment of the requirement for the award of Master of Arts Social Policy Studies Degree.
- Hall, A., Hahn, T. T. M., Farley, K., Quynh, T. P. N., & Valdivia, F. (2007). An evaluation of the impact of a school nutrition programme in Vietnam. *Public Health Nutrition*, 10, 819-826.
- Harber, C. & Davies, L. (2007). *School management and development in developing countries*. The Post Bereautic School. London: Cassel
- Hesse, M. (1994). Education and teachers. The teachers' newsletter of Ghana. *National Association of Teachers*, 4(2), 8-10.
- Imoru, A. (2010). *Ghana school feeding programme wobbles on in three Northern Regions*. Retrieved 14-04-2019
<http://rumnet.wordpress.com/2010/03/02/ghana-school-feeding-programme-gsf/>

- Internal Business Development Programme (2015). *Analysis of regional scalability of school feeding programs using locally-produced foods in Ghana*. UC Berkeley – Haas School of Business International Business Development Program in Collaboration with the United Nations Hunger Task Force
- International Food Policy Research Institute (2014). *Action and accountability to accelerate worlds progress on nutrition*. Washington DC: World Bank.
- Islam, Rizwanul (2004), *The nexus of growth, employment, and poverty reduction: an empirical analysis, (mimeo.)* Recovery and Reconstruction Department, International Labour Office, Geneva.
- ISODEC (2015). *Report on education*.
- Jacoby, H.G. (2002). Is there an intra-household „flypaper effect“? Evidence from a school feeding programme. *Economic Journal*, 112, 196–221.
- Janke C. (2001). *Food and education: Background considerations for policy and programming*. Education Development Centre Inc.
- Kamaludeen, H. (2014). *The impact of the Ghana school feeding programme on enrollment, attendance and retention in Ga South Municipal Schools*. Thesis submitted to the University of Ghana, Legon in Partial fulfillment of the requirement for the award of M.Phil Public Administration Degree
- Kearney, J. E. (2008). *A comparative analysis of five different school feeding strategies in the Vaal Region*’.
- Kedze, S. (2013). *The distortive effects of Ghana school feeding programme on primary education delivery. The Case of Adentan Municipality*. A research paper presented in partial fulfillment of the requirement for obtaining the degree of Masters of Arts in Development Studies
- Khan, Azizur Rahman, (2001). *Employment policies for poverty reduction, ” Issues in Employment and poverty, discussion Paper 1, Recovery and Reconstruction Office*. International Labour Office, Geneva.
- Kleinman, R. (2010). *Ending childhood hunger: The role of school feeding programs*. Massachusetts General Hospital for Children. Harvard Medical School
- Konzabre, J. G. (2018). The Impact of Ghana’s School Feeding Programme on Enrolment and Retention of Pupils in Talensi District in Upper East Region. *International Journal of Education*, 6(6), 33-40.
- Kremer & Vermeersch (2004). *School meals, educational achievement and school competition. evidence of randomized evaluation*. Harvard University School

- Lambers, W. (2009). *Ending child hunger: School feeding in Ghana*. Retrieved 14-02-2019 <http://voices.yahoo.com/ending-child-hunger-school-feeding-ghana-2666476.html>
- Lassibille *et al.*, (1999). Student outcomes in Phillipines elementary schools: An evaluation of four experiments. *The World Bank Economic Review*. 13, 3
- Lawson, K. (2012). *Impact of school feeding programs on educational, nutritional and agricultural development Goals: A systematic review of the literature*.
- Lazmaniah, M., & de la Mothe, M. R. (2009). *The multiple impacts of school feeding: a new approach for reaching sustainability*. Omamo, Gentilini and Sandström (eds), 217-30
- Leslie, J. & Jamison, T. (1990) *Health and nutrition considerations in education planning. Educational consequences of health problems among school-age children. Food and Nutrition Bulletin*, 12, 191–203.
- Levinger, B. (1986). *School feeding programs in developing countries: An analysis of actual and potential impact*. AID Evaluation Special Study 30. Washington, DC: US Agency for International Development
- Levinger, B. (1996). *School feeding programs in less developed countries: An analysis of actual and potential impact*. Washington D.C.: Bureau for Food and Voluntary Aid
- Levitsky, D. A. (2005). The future of school feeding programmes. *Food and Nutrition Bulletin*, 26, 286-87.
- Lewin, K. (1935). *A dynamic theory of personality*. New York: McGraw-Hill.
- Lopez, I., De Andraca, C. G., Perales, E., Heresi, M., Castillo, M., & Colombo, M. (1993). Breakfast omission and cognitive performance of normal, wasted and lunch program in Brazil. *Food and Nutrition Bulletin* 13(3).
- Lucas, R et al (1991). On the mechanics of development planning. *Journal of Monetary Economics*, 23.
- Lupton, Ruth. (2004). *Schools in disadvantaged areas: recognizing context and raising quality*. Case paper (76). Centre for analysis of social exclusion. London School of Economics and Political Science, London UK
- Mahama, S. (2017). *The impact of Ghana school feeding Programme on female enrolment, attendance and retention in the Wa Municipality of the Upper East Region of Ghana*. Thesis Submitted to the Department of Social, Political and Historical studies, university for development studies in partial fulfillment of the requirement for the award of Master of Philosophy Degree in Social Administration

- Mandela, N. (2000). *Reflections on Ten Years of Basic Education in South Africa's Second Decade of Democracy*.
- Martens, T. (2007). *Impact of the Ghana school feeding programme in 4 districts in Central Region, Ghana*. A report prepared as a partial fulfilment for the award of Msc degree. Division of Human Nutrition of Wageningen University.
- Maslow, A. (1943). *A theory of motivation*. Retrieved 17-03-2019 <http://www.google.com.gh/search?site=&source=hp&q=abraham+maslow+theory+of+needs&btnK=Google+Search>
- McIntyre, L. & Dayle, J. B. (1992). Exploratory analysis of children's nutrition programs in Canada. *Social Science and Medicine*, 35, 1123–9.
- Meme, M. M., Kogi-Makau, W., Muroki, N. M., & Mwadime, R. K. (1998). *Energy and protein intake and nutritional status of primary school children 5 to 10 years of age in schools with and without feeding programmes in Nyambene District, Kenya*. Food and Nutrition
- Ministry of Science and Technology and Country Planning (2011). *Zoning guidelines & planning standards*
- Mohammed, A., & Sakara, F. (2014). Assessing Ghana School Feeding Programme on the Enrolment of beneficiary schools in the Tamale Metropolitan Assembly of Northern Ghana. *International Journal of Economics, Commerce and Management*, II(10), United Kingdom.
- Muthayya, S., Eilander, A., Transler, C., Thomas, T., van der Knaap, H. C., Srinivasan, K., van Klinken, B. J., Osendarp, S. J., Kurpad, A. V. (2009). Effect of fortification with multiple micronutrients and n-3 fatty acids on growth and cognitive performance in Indian Schoolchildren: the CHAMPION (Children's Health and Mental Performance Influenced by Optimal Nutrition) Study. *The American Journal of Clinical Nutrition*, 89, 1766–75.
- NEPAD Secretariat (2005). *CAADP Summary for the Southern Africa Regional Implementation Planning meeting*.
- Nkosaha, C., Luchenbe, M., & Chakufyali, P. N. (2013). *Journal of International Education in Education*, 15(3)
- Osei, R. D., Owusu, G. A., Asem, F. E., & Afutu-Kotey, R. L. (2009). *Effects of capitation grant on education outcomes in Ghana*. Institute of Statistical Social and Economic Research, Legon-Accra, Ghana. 18.
- Osmani, S. R. (2004). *The employment nexus between growth and poverty: an Asian perspective*, (mimeo.) Report prepared for the Swedish International Development Agency (SIDA), Stockholm and the United Nations Development Programme (UNDP), New York.

- Osmani, S.R. (2003), *Exploring the employment nexus: Topics in employment and poverty, (mimeo.)* Report prepared for the Task Force on the joint ILO-UNDP Programme on Employment and Poverty.
- Partnership for Child Development (1999). Short Stature and the age of enrolment in Primary School: Studies in two African Countries. *Social Science and Medicine*, 48, 675-68.
- Pelletier, D. L., Deneke, K., Kidane, Y., Haile, B., & Negussie, F. (1995). The food–first bias and nutritional policy: Lessons from Ethiopia. *Food Policy* 20(4).
- Pollit, E. (1995). Does breakfast make a difference in school? *Journal of the American Dietetic Association*, 95(10), 1134–1139.
- Powell, C., Walker, S. P., Chang, S. M., & Grantham-McGregor, S. M. (1998). Nutrition and education: A randomized trial of the effects of breakfast in rural primary school children. *American Journal of Clinical Nutrition*, 68, 873–879.
- Quaye, W., Essegbey, G., Frempong, G., & Ruivenkamp, G. (2010). Understanding the concept of school feeding programme. *International Review of Sociology*, 20(3), 427-444.
- Ratoosh, P. & Churchman, C. W. (1959). *Measurement*. London: Cambridge University Press
- Read, M.S. (1973). Malnutrition, hunger, and behavior. II. Hunger, school feeding programs, and behavior. *Journal of American Dietetic Association*, 63(4), 386–391.
- Rothstein, R. (2004). *Class and schools: Using social, economic, and educational reforms to close the black-white gap*. Teachers College, Columbia University
- Rozensweig, M. (1996). *Assessing education and the mystery of its missing benefits*. The Jakarta Post, January 24, 2005, Centre for Strategic and International Studies (CSIS), Jakarta, Indonesia.
- Schultz, P. (2004). School subsidies for the poor: Evaluating the Mexican Progresa Poverty Program. *Journal of Development Economics*, 74(1), 199-250.
- Scrimshaw, N. S. (1998). Malnutrition, brain development, learning, and behaviour. *Nutrition Research*, 18(2), 351–379.
- Sen, A. (2002). *An introduction to school feeding programme*. Pratiche Education Report.
- Seshadri, S. & Gopaldas, T. (1989). Impact of iron supplementation on cognitive functions of pre-school and school–age children: The Indian experience. *American Journal of Clinical Nutrition*, 50(Suppl).

- Strauss, J. & Thomas, D. (2007). Health, nutrition, and economic development. *Journal of Economic Literature*, 36(2), 766-817.
- Studdert, L. J., Soekirman, Rasmussen, K. M., & Jean-Pierre, H. (2004). Community based school feeding during Indonesia's economic crisis: Implementation, benefits, and sustainability. *Food and Nutrition Bulletin*, 25(2).
- Taras, H. (2005). *Nutrition and students' performance at school*. School Health 7, 199-213
- Tomlinson, M. (2007). *School feeding in east and southern Africa: improving food sovereignty or photo opportunity?* Equinet Discussion Paper Number 46.
- UN Global Compact (2015)
- UN Human Rights Charter (1945)
- UNESCO (2012). Youth and Skills: Putting Education to Work. 10th Edition of Education for All Global Monitoring Report. UNESCO Publishing. Second Edition.
- UNICEF (1994). *UNICEF multiple indicator cluster survey*, pp. WWW.CHILDINFO.ORG.
- Vithal, R., Jansen, J. D., & Jansen, J. (2013). *Designing your first research proposal: A manual for researchers in education and the social sciences*. Claremont: Juta & Company.
- WFP, (2004). *Improving food and nutrition security through food for education Programs in Africa 2004*.
- WFP, (2006). *School feeding programs: Why they should be scaled up now*
- Winch, R. (2009). *International approaches to school feeding: Country experiences from Mali, Chile, and India*. Mickey Leland International Hunger Fellow, Global Child Nutrition Foundation.
- World Bank (2006). *Malawi Poverty and Vulnerability Assessment*. World Bank.
- World Bank (2011). *Repositioning nutrition as central to development*. World Bank.
- World Food Programme (2010). *Home grown school feeding: A framework to link school/feeding with local agricultural production*. Rome: Via Cesare Giulio Viola 68/70-00148.
- Worobey, J., & Worobey, H. S. (1999). The impact of a two-year school breakfast program for preschool aged children on the nutrient intake and pre-academic performance. *Child Study Journal*, 29, 113-129.

APPENDICES

APPENDIX A

Questionnaire for Teachers

UNIVERSITY OF EDUCATION, WINNEBA

FACULTY OF SOCIAL SCIENCES

DEPARTMENT OF SOCIAL STUDIES

This questionnaire is seeking your opinion in an effort to solicit information to write a thesis on the topic “INFLUENCE OF GHANA’S SCHOOL FEEDING PROGRAMME ON ENROLMENT AND RETENTION OF BASIC SCHOOL PUPILS IN THE WEST MAMPRUSI MUNICIPALITY”. Your opinion is therefore, needed for academic purpose only and will be treated confidentially.

Instruction: Please either tick or fill the blank spaces provided where appropriate.

1. What considerations will make pupils decide to enroll in your school?

The school is close to their homes

Because they will get free meal or lunch

Teachers in your school are good

The school has been performing well academically

None of the above

If none of the above, please explain:

.....
.....
.....

2. Would you say there is any difference in terms of academic performance of your school now as compared to the time you were not under school feeding programme?

Very positive difference Positive difference Negative difference Very negative difference No difference at all

3. Would you say the presence of the Ghana School Feeding Programme in your school has contributed to improvement in learning by pupils?

Strongly agree Agree Disagree
Strongly disagree Undetermined

4. How will you rank the gains of the feeding programme?

Very good Good Poor Very Poor No gain

5. How will you describe the problems the school feeding programme is facing?

Very serious problems Serious problems Few problems No problems

6. Do you think your classrooms are spacious and conducive enough for learning?

Yes No Undetermined

7. Do you think the teachers on your staff are enough to cater for the learning needs of your pupils? Yes No

8. Do you think there is any relationship between increase in pupils' population and increase in school infrastructure (classrooms)? Positive relationship

Negative relationship No relationship undetermined

9. What is/are your view(s) about the school feeding programme in your school?

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.....

10. What will you suggest if done will contribute to improvement of the programme
and
Learning generally?

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.....

Thank you very much for your kind responses.



APPENDIX B

Questionnaire for Pupils

UNIVERSITY OF EDUCATION, WINNEBA

FACULTY OF SOCIAL SCIENCES

DEPARTMENT OF SOCIAL STUDIES

This questionnaire is seeking your opinion in an effort to solicit information to write a thesis on the topic “INFLUENCE OF GHANA’S SCHOOL FEEDING PROGRAMME ON ENROLMENT AND RETENTION OF BASIC SCHOOL PUPILS IN THE WEST MAMPRUSI MUNICIPALITY” Your opinion is therefore, needed for academic purpose only and will be treated confidentially. Please do not write your name on the paper.

Instruction: Please either tick or fill the blank spaces in the following questions.

1. How often do you eat breakfast from your house before coming to school?

Always Sometimes Never

2. When school is not in session (during vacation and weekends) do you eat three (3) times a day? Always Sometimes Never

3. What informed your decision to enroll in this school?

The school is closed to my house Because I will get free meal / snack

The teachers in this school are good The school is performing well

None of the above

If your answer to question 3 is none of the above, tell us what informed you to enroll in this school.

.....
.....
.....

4. Would you say the school feeding food you eat at school helps you to learn better?

Yes No I cannot tell

5. How many of you are in the classroom?

6. Does the school have enough classrooms to take care/contain all the pupils in the various classes? Yes No I do not know

7. Will you consider your school as a good school because of the presence of school feeding programme? Yes No I cannot tell

8. Will you say you have enough teachers in your school to teach you?

Yes No I do not know

9. Generally, what do you think about the school feeding programme or the food you eat in school?

.....
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.....

10. What suggestions will you offer to help make the programme or the food good for you to eat?

.....
.....
.....

Thank you very much for your kind responses.

APPENDIX C

Semi-Structured Interview Guide for Teachers

UNIVERSITY OF EDUCATION, WINNEBA

FACULTY OF SOCIAL SCIENCES

DEPARTMENT OF SOCIAL STUDIES

1. What do you think about the school feeding programme?
2. Are there any differences in pupils' enrolment and retention in your school from being a non-feeding school to a feeding one?
3. What is the behaviour of pupils before and after feeding?
4. Are there some lessons learnt from the school feeding programme? What are they?
5. Will you say the programme has recorded some gains? Which are they?
6. Are there some challenges in carrying out the programme in your schools?
7. How many pupils are in a class?
8. How many teachers do you have in your school? Are they enough to accommodate the pupils' capacity?
9. Will you attribute any change in pupils' enrolment to the presence of school feeding programme in your school?
10. What measures will you suggest when adopted will contribute to the improvement of the school feeding programme and learning as a whole?

THANK YOU

APPENDIX D

Semi-Structured Interview Guide for Pupils

UNIVERSITY OF EDUCATION, WINNEBA

FACULTY OF SOCIAL SCIENCES

DEPARTMENT OF SOCIAL STUDIES

1. What factors influenced you to be in school?
2. What do you think about this school?
3. What attracted you to this school and not other schools?
4. Which of these places do you normally experience hunger the most? At school or at home. Why?
5. What do you think about the school feeding programme in your school?
6. Is there anything you like about the school feeding programme? What?
7. What do you dislike about the feeding programme?
8. How many are you in the classroom?
9. What will you suggest should be changed in the feeding programme?
10. What advice will you give to help improve the programme?

THANK YOU