

**A COMPARATIVE STUDY OF PRIMARY SCHOOL FOOD  
PROVISION PROGRAMS:  
A CASE OF KINONDONI AND ILALA MUNICIPALS**

**A COMPARATIVE STUDY OF PRIMARY SCHOOL FOOD  
PROVISION PROGRAMS:  
ACASE OF KINONDONI AND ILALA MUNICIPALS**

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**A Thesis Submitted in Partial Fulfillment of the Requirements for the Award  
of the Degree of Master of Public Administration (MPA)  
of Mzumbe University**

## **CERTIFICATION**

The undersigned certificate that he/she has read and hereby recommends for acceptance by the Mzumbe University as research paper title “A Comparative Study of Primary School Food Provision Programs: A case of Kinondoni and Ilala Municipals”, for partial fulfillment of the requirement for the Masters in Public Administration of Mzumbe University.

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## **ABSTRACT**

The purpose of the study was to Compare Study of Primary School Food Provision Programs in Kinondoni and Ilala Municipality.

One Hundred and fifty people include students; teachers and parents/Guardians in Kinondoni and Ilala Municipality, Dar es Salaam Region were interviewed face to face using structured questionnaire.

Literature review focused on the Comparative Study of Primary School Food Provision Programs worldwide down to Tanzania.

The study revealed a number of challenges to the Food provision programs. Some of the challenges include Lack/Limited Funds, Shortage of Staffs for supervision, Limited time as well as Heath Requirements.

The study concludes with recommendations for creating a reliable time table that can not affect general timetable for academic purposes and find extra source of income to cover the shortage of funds in order to have good program of food provision to all school.

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# **CHAPTER ONE**

## **INTRODUCTION AND BACKGROUND INFORMATION**

### **1.1 Introduction**

This chapter provides a general introduction of the study. It is in this chapter that I present the background of the research problem, statement of the problem, objectives of the study and research questions. It is also in this chapter where I present the significance of the study, as well as its limitation

### **1.2 Background to Research Problem**

Most of the children aged between five and 15 around the world live under difficult circumstances, which lead to a high dropout rate from school before they graduate primary level. Most of them are malnourished and are exposed to a large range of harmful, parasitic and infectious diseases (Shariff et. al, 2000). The health well-being of children is a fundamental issue in education. Indeed, active promotion of health is now seen as a priority for schools. The level of concern is illustrated by the fact that the world Health Organization has set up a global school health initiative. In countries around the world, the issue is being addressed through school health services, health education and school meal programs (WHO, 1997). School Food Programs (SFP) are being implemented all over the world. If in the developed world it is mostly due to concerns about obesity and quality of food provided to school children, in the developing world chronic hunger is the chief concern of public authorities and civil society regarding the public plate (Morgan and Sonnino, 2008).

For decades, international agencies such as the World Food Program and national governments in both developed and developing countries have spent millions of dollars on school feeding programs (WFP, 2005). The aiming of establishing these programs has been not only to curb hunger problems, but to also try to increase student turnover and eventually, performance (WHO, 1997). School feeding programs as social safety nets have been popular in developing countries as instruments to achieve the Millennium

Development Goals. These programs are frequently targeted towards populations that are food insecure and reside in areas with high concentrations of families from low socioeconomic status, or towards schools that have poor attendance and enrollment of students (UNESCO 2005).

In the developing world, the biggest concerns of existing SFPs are related to food availability for school children. School feeding programs are continuously increasing in popularity in developing countries, more strongly among those affected severely by child hunger and malnutrition. These programs aim to enhance the concentration span and learning capacity of school children by providing meals in schools to reduce short-term hunger that may otherwise impair children's performance (Jomaaet al., 2011). According to WFP (2004), school supplementary feeding programs are implemented with the aims of improving nutritional status, alleviating short term hunger, improving school attendance and class concentration and improving household food security among other reasons. It has been 16 years since the inception of the school feeding program in Namibia whose primary purpose is to supplement nutrition for needy children (MOE, 2007) to mitigate the effects of malnutrition on school going children.

Poor health and malnutrition are important underlying factors for low school enrolment, absenteeism, poor classroom performance as well as early school dropout (WHO, 1997). School feeding programs may help to ameliorate some of these problems. The goals of school feeding programs differ, but often include relieving short-term hunger (Allen 2001), improving micronutrient status (Allen 2001), growth (Allen 2001; Levinger 1986), cognition (Levinger 1986) and academic performance (Allen 2001; Levinger 1986) in both higher and lower-income countries. Worldwide, 115 million primary school aged children were 'out of school' in 2001/2002; most were from developing countries (UNESCO 2005) Therefore, in developing countries, school feeding also aims to increase school attendance and enrolment (Allen 2001, Levinger 1986) and to encourage students to stay in school longer.

Many countries have school feeding programs. For example, in 2004 the World Food Program alone had school feeding programs in 72 countries, covering 16.6 million

school children (WFP, 2005). But in Tanzania, these programs are yet to be established in majority of the school. Due to this, the researcher is attempting to conduct a study which will aim at assessing the benefits of having and not having these school feeding programs by studying two schools from each of the Kinondoni and Ilala Municipalities, among of those schools are *kijitonyama Kisiwani primary school* having feeding program and *Nakasangwe primary school* not having feeding program for Kinondoni Municipally, and for Ilala I will take *Ilala-Boma primary school* having feeding program and *Mtendeni primary* not having feeding program.

### **1.3 Statement of the Problem**

Food is considered essential for students (particularly young ones) as it provides them the daily activities and nutrients necessary for growth and development (FAO, 2008). School feeding programs are defined as interventions that deliver a meal or snack to children in the school setting, with the intent of improving attendance, enrolment, nutritional status and learning outcomes (Kearney, 2008). These programs are frequently targeted towards populations that are food insecure and reside in areas with high concentrations of families from low socioeconomic status, or towards schools that face poor attendance and enrollment of students (Lawson, 2012).

Several primary schools in the country have attempted to establish feeding programs, while others have not. Several reasons have been presented this two sided nature, both attempting to side on the factors responsible for both schools establishing and not establishing these programs. It is from this two-sided nature of the programs that researchers are attempting to study the effects of these two programs (providing and not providing foods). They seek to identify the benefits of each program and also the challenges affecting the adaption of those programs in schools to find solutions to mitigate the challenges and help schools adapt the favorable program.

## **1.4 Research Objectives**

### **1.4.1 Main Objective**

The main objective of this study was to compare primary schools food provision programs in Kinondoni and Ilala

### **1.4.2 Specific objectives**

- i) To identify the nature of the feeding programs being implemented in primary schools in Kinondoni and Ilala municipalities.
- ii) To compare the contributions of having and not having feeding programs in primary schools.
- iii) To identify the challenges hindering the adoption of feeding programs in schools

## **1.5 Main Research Questions**

- i) What is the nature of the school feeding programs in primary school?
- ii) What is the contribution of having and not having feeding programs in schools?
- iii) What are the challenges hindering the adoption of feeding programs in primary schools?

## **1.6 Significance of the study**

First and foremost, the study will serve as a source of review for the topic in question. This is due to the lack of published research on the topic. Hence it is through this research that vital information will be made available to people interested in learning about the topic. Second, the information generated from this study will be essential to both policy makers and schools staffs, as they will realize the importance of having such programs in their schools, and through the proper use of such information, the school feeding programs already being implemented in the country will be improved to meet the demand of both the students and the government.

Lastly, the study will be essential to primary school teachers and students as they will voice their opinions on the feeding programs in their respective schools. Once the

research is complete, the schools can work to improve their conditions according to the results of research or through other means they deem fit. It is through this research that the feeding programs at the researched schools will improve to further benefit the students.

### **1.7 Limitation of the study**

The first limitation is that the researcher was expecting to be affected by issues of time as the university timetable is set firmly in place. The researcher was constrained by the arranged timetable due to the different activities needed to be performed prior to submitting the final report. In order to solve this issue, the researcher prepared a research plan that includes all the necessary activities that need to be performed to ensure the timely, completion of each activity/task.

Another limitation is language; the researcher was expected to conduct his research in Kiswahili which is different from the language that is used to write the report. Misinterpretation of the questions and answers might occur hence misreporting of data and information to solve this issue the researcher had try to minimize the problem of misinterpretation by assisting the respondent if they fail to understand the questions.

The last limitation concerns the response rate and biased answers of the respondents. The researcher was expecting to encounter issue with the response rate of the respondents some of which did not return the questionnaires. Also some of the respondents were thought to provide wrong information. The nature of the research topic itself was thought to assess many sensitive issues concerning some people's jobs and efforts in school feeding programs, leading to the aforementioned problems.. To solve these problems, the researcher had assure the respondents that the intended research will be used only for academic purpose and any answers or comments made whatsoever will be treated as confidential anonymous information.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

This chapter presents information about the research topic. The researcher has defined several key terms that are essential in understanding problems being analyzed; then information concerning other research that has been conducted on the same subject lastly the research gap among previous and current studies will be analyzed in depth.

#### **2.2 Theoretical Literature Review**

##### **2.2.1 School Feeding Program**

School Feeding is the provision of food to school children (Bundy, et.al. 2009). In order to establish an efficient school feeding program, there are several essential steps to adhere to. According to Del Rosso (1999) there are seven major steps to identify how to develop school feeding programs that improve education. These steps are as follow;

- i) An agreement reached on policy and objectives that focus on how school feeding can improve education. The agreement reached outlines problems the feeding program needs to address, who will benefit from the program and what methods are feasible.
- ii) Develop target criteria to reach high-risk children. Targets are necessary to ensure that children who lack resources benefit from the school feeding program
- iii) Analyze and identify alternative financial options for schools such as food aid, the private sector, food selection, community support and sustainability
- iv) Develop appropriate guidelines for the ration composition and time of school meals. Managers should research the nutritional and health needs of children and develop ways in which the communities can participate.
- v) Identify potential bottlenecks in implementation.
- vi) Develop monitoring programs that look at program processes and

vii) Find opportunities to integrate interventions. If feeding programs at school are integrated with other school-based health interventions, (example, treating children for parasites) the overall health of the students will improve.

### **2.2.2 School Food Programs around the globe**

The United Nations has mandated its specialized agencies to establish co-operation agreement with member countries to eradicate poverty. These agencies such as the United Nations Development Program (UNDP) have broad international responsibilities in economic, social, cultural and health fields. Under the UN development assistance, UNDP has a mandate to promote higher standard of living, full employment, condition of economic and social progress and development. This is based on the belief that eliminating poverty and improving the wellbeing of people throughout the world are necessary factors in creating world peace. (UNDP Report 2003)

The UNDP is mandated to assist developing countries to work and create their own national poverty eradication strategies based on the local needs and priorities. UNDP therefore provides among other things funding for innovative pilot projects such as School Feeding Programs. This idea is in line with the September 2000 Millennium Development Goals

In the global North, on one hand, governments and the school community are concerned with the provision of food with high quality and locally “embedded” (Sonnino, 2009; Izumi et al., 2010). For instance by the introduction of the SFP in Rome, organic catering was seen as an ideal strategy to achieve the important goal that public authorities associate with the school meals system: guaranteeing and protecting children's health, which was mostly justified through the absence of pesticide residues in organic food (Sonnino, 2009). Therefore what is emerging in the specific case of Rome is an ‘economy of quality’ in which the economic relationships between producers and consumers are socially and environmentally embedded. In this sense, this economy of quality is an attempt to reconcile economic development with social justice and environmental stewardship, making part of the educational process of children, in

which they are challenged to see food as intrinsically connected to their educations, social and cultural aspects (Sonnino, 2009).

Similarly, in the UK, School Food procurement is presently in its “ecological era” (sustainability principle), which has grown out of a context of diet-related diseases, food scares and issues of ecological sustainability of food over the last two decades (Morgan, 2006).

In the developing world, on the other hand, the biggest concerns of existing SFPs are related to the food availability to school children. School feeding programs are continuously increasing in popularity in developing countries, more strongly among those affected severely by childhood hunger and malnourishment. These programs aim to enhance the concentration span and learning capacity of school children by providing meals in schools to reduce short-term hunger that may otherwise impair children’s performance (Jomaa et al., 2011). Currently, SFP exist in 70 of the 108 low- and lower-middle income countries, and most of them have been launched by the initiative of food aid programs such as the World Food Program (WFP) (Jomaa et al., 2011). In a detailed study about different SFPs, Jomaa et al. (2011) found out that there are three main common objectives that can be identified among the analyzed programs:

- i) To provide safety nets for families to absorb social and economic shocks. Since mostly poor families are the target population of such programs and poor families are more prone to all kinds of shocks, SFPs result as being important in lowering the impact of such events;
- ii) To improve the education and scholastic performance of school-aged children;
- iii) Enhance children’s nutrition and health status.
- iv) The first and last point do relate directly with food security, since the SFP can help the children and their families to reach better levels of nutrition. However, the second point is of less evidence, since higher enrolment, attendance and retention are necessary but insufficient components of improved education (Morgan and Sonnino, 2008).

Even though most of the arguments presented here present a very positive image about SFPs around the world, Jomaa et al. (2011) presents some results of failed experiences of SFPs. Case where supplemental services were missing showed a higher degree of failure of the whole program. For children in developing countries to fully benefit from the school feeding, supplemental services need to be offered at their schools with integrated interventions that include nutrition, health, and educational components. Successful school nutrition and feeding programs in developed countries have learned the importance of integrating nutrition education into these programs (Jomaa et al., 2011). In Brazil, for instance, in 2010, half of the children in the state of Pará in the Northern part of the country did not attend school because the schools did not provide food on a regular basis (Otsuki, 2011).

### **2.2.3 Importance of school feeding programs**

The primary assumption of school feeding programs is that education and learning depend on good nutrition (Briggs, 2008). School health and nutrition also addresses the critical health and nutrition factors that keep children out of school and reduce their ability to learn effectively, such as malnutrition and hunger (Save the Children USA, 2007). Bundy et.al, (2009) defined school feeding as the provision of food to schoolchildren. There are two main groups of school feeding approaches, namely ‘in-school feeding’ and ‘take-home rations’.

School supplementary feeding programs can therefore be implemented as in-school feeding, where the children eat the food in school or as take home rations, where the students take dry portions of food to consume at home. In-school feeding programs are better preferred for the students as their eating can be monitored and they consume the full amount of their daily ration. In take home rations however, the reality of having to share the food with family member’s results in the student not consuming adequate amounts of their daily ration.

School feeding programs are mainly implemented with the intention to achieve the following results:

i) Increase Enrollment and Attendance in schools

Food can act as a strong incentive for children to attend school on a regular basis. Girls especially benefit from this, as parents feel there are sufficient income-transfer benefits (Del Rosso, 1999). In many communities, girls are culturally disadvantaged such that in hardship situations, male children are given opportunity to go to school over girls. School supplementary feeding programs can provide a way in which parents can save money by spending less on food and thereby allow the girls to attend school. It is however important to establish that school meals do not replace food that has been part of the children's diet in the household, but rather add to what the family provides. In Jamaica providing breakfast to primary school students significantly increased school attendance. The students who benefit the most are those who are malnourished (Del Rosso, 1999).

ii) Alleviation of Short-Term Hunger in students

Much research has also been conducted on the effects of short-term hunger on learning capacity as well as in-school meals provided to students reduce short-term hunger (World Food Program (WFP), 2004). Many factors contribute to hunger among school children, including long distances children have to travel to school, cultural meal practices that include no or small breakfasts and lack of family time and resources to provide adequate meals to children before and/or during the school day. Many cultures do not provide breakfast. This means the child's last meal is in the evening. The possibilities of long travelling time mean the child starts the school day hungry and is unable to concentrate. The provision of even a small snack at the start of the day or mid-morning alleviates the short-term hunger and has been linked to increased awareness, activity and learning capacity (Briggs, 2008).

iii) Improve Nutritional Status in learners

The physical growth of a child is a result of a number of interconnected variables, especially in areas where poverty is endemic. Environmental factors, genetics, food

consumption patterns, health and illness, hygiene practices, lack of sanitation and the onset of puberty are but a few. Even though data collection on these variables has been inconsistent, some research indicated that undernourished children do benefit from school feeding programs (Bundy et al., 2009). The school supplementary feeding programs help to improve the nutritional status and health status of schoolchildren, as they learn better if they are not hungry (King and Burgess, 1995). Poorly fed schoolchildren who are provided nutrition meals have improved growth and school performance, as well as improved health to prevent anemia, and other nutritional deficiencies.

#### iv) Improve Micronutrient Status of learners

School supplementary feeding programs when designed with micronutrients in mind, can greatly improve micronutrient status. This is often referred to as hidden hunger as the effects are not always visible (Briggs, 2008). The three main micronutrients that supplementary feeding programs impact are iron, Vitamin A and iodine. All three are linked to mental and learning capacity. School supplementary feeding programs are designed in such a manner as to meet the micronutrient requirements of the learners. Micronutrient deficiency can occur at any age and is common in schoolchildren. Estimates suggest that in Sub-Saharan Africa and in India, half of the schoolchildren in poor communities are iron deficient. Intervention at school age offers direct benefits for the schoolchild, as current micronutrient deficiencies, unlike stunting and other long-term consequences of earlier malnutrition are rapidly reversible at any age (Bundy et al., 2007).

The most important micronutrient deficiencies of public health importance are vitamin A deficiency, iodine deficiency and iron anemia. In South Africa, a randomized placebo-controlled trial demonstrated that fortified biscuits reduced the prevalence of anemia and low urinary iodine in children ages 6–11 (Van Stuijvenberg et al., 1999). Additionally, a study conducted by the Global Alliance for Improved Nutrition (GAIN) provided 61,000 school-age children in India an iron-rich lunch through a school-based midday meal

program. The iron-rich meal came in the form of Ultra Rice – a manufactured, micronutrient packed, rice-shaped grain that is blended with traditional rice during the cooking process. The study showed a significant increase in the iron stores of children that consumed Ultra Rice compared to that of the control group. The children who consumed Ultra Rice also experienced a significant reduction in the incidence of morbidities compared to the control group during the study period (Buhl, 2010).

Other benefits of school supplementary feeding programs include:

- i) Increased attention and concentration of students producing a gain in cognitive function and learning. Nutrition affects the development of factors that encourage cognitive development before and after a child is enrolled in school. Conditions such as protein-energy malnutrition and other micronutrient deficiencies can have adverse effects on attention and concentration in school (Pollitt, 1984)
- ii) School supplementary feeding effectively reduces absenteeism and increases the duration of schooling, educational outcomes (performance, drop out, and repetition).
- iii) It increases community involvement in schools, particularly where programs depend on the community for preparing and serving meals for the children.
- iv) In addition, schools have the potential to reach out not only to students but also staff, teachers, parents and community members, including young people not attending school.

#### **2.2.4 Types of Feeding Programs for schools**

There are two forms of distribution of food in FFE programs: school feeding programs and take-home rations. School feeding programs (SFP) provide meals or snacks to school children on the site, whereas take-home rations (THR) are provided to school children for consumption at home. Under SFP, the food provided to school children can be either prepackaged or cooked on site.

The benefit of the food provided under the school feeding programs is conditional on the attendance of the child on that specific day. Thus an advantage of the SFP is that it serves as an incentive for children to attend school on a daily basis to receive a meal, whereas to receive the benefit of THR, students need only to attend a specified minimum number of days. The meals served at school may be nutritionally dense and can be easily fortified with additional nutrients that may be scarce in local diets, such as iron or vitamins A and E. Targeting is broad in that all children at the school are fed; it would be difficult to discern between children of different socio-economic status (SES) within a school setting and likely disruptive to the educational experience if some students were fed while others were not. Food may be cooked on site or in the form of prepackaged processed foods such as nutritional biscuits.

There are various ways in which food may be procured for the school feeding programs. Until the recent past, food for these programs often came from donations from developed countries in the form of food aid and delivered through organizations such as the World Food Program (WFP). More recently, there has been more emphasis on local (i.e., national or community level) procurement, as in the case of Burkina Faso (Upton et al. 2012). Local (national level) value-added production has also become more frequent in Bangladesh where wheat flour donated through WFP was processed by seven local firms in a competitive bidding process to produce the fortified biscuits used in the Bangladesh school feeding program (Ahmed 2004), while in the Brazilian HGSF model as much food as possible is sourced from local communities to keep down costs and support local agriculture. . Among the three options described in Table 1, SFP where children are served cooked meals on site has the greatest potential for supporting local community level agricultural activities through the procurement of fresh produce (and is thus most amenable to the ‘home grown school feeding’ model). In the case of THR and SFP based on pre-packaged snack or a beverage, the program may have to rely on a functional food processing sector at the regional or national level to meet the needs.

Take-home rations (THR) are usually conditional to meeting a minimum threshold of attendance, and are usually distributed monthly; in Burkina Faso, the WFP managed

program requires attendance of 90% for that month to receive the monthly ration (Kazianga et al. 2008). This type of program may be useful in targeting specific groups of children or families within a community, as the distribution may occur in a separate location from the school or may occur outside of regular school hours. In areas where enrollment and attendance of children is lower for girls, THR programs may be employed to boost their attendance (and thus promote education for girls). Some FFE programs may include both SFP and THR, and some SFPs may act as a possible THR when children are given pre-packaged foods that can be consumed at home and possibly shared with other family members. Households may decide to keep children from school based upon the direct and indirect costs of attending school. Direct costs include fees, books and supplies, uniforms and travel to school, while indirect costs are in the form of the opportunity costs of children's time. Rather than attending school, households may elect to have their children take care for other family members, engage in household chores, work on the family farm or business, or work in a wage earning job (Cheung and Perrotta 2010).

If the expected benefits of a child's education do not exceed the costs of attending school, then the household will not send their child to school (Adelman et al. 2009). For families that can afford to send only one or some of their children to school, the decision of which children to enroll in school may be determined by who the family feels has the highest expected returns to education, which in many cases means that girls are kept at home. Reducing the cost of schooling would increase enrollment and attendance rates for children in such circumstances (Martorell, 2011). In the case of a SFP, both a hungry child and parents will have an incentive for daily attendance, while for a THR program the parents have the incentive to send their children to school for at least the minimum amount of time required to receive the rations (which varies by program). The additional food provided from a THR program can be used to supplement the family's nutritional needs or sold for additional income. For households that benefit from SFPs, the meal provided at school is one fewer meal that the household needs to provide to their child.

From this perspective, both the SFP and THR help the families by subsidizing the cost (i.e., the opportunity cost) of sending their children to school (Lawson, 2012).

Bennett (2003) distinguishes between five types of SFPs, according to their different objectives:

- School feeding as an emergency intervention;
- School feeding as a developmental intervention to aid recovery;
- School feeding as a nutritional intervention;
- School feeding to improve child cognitive development; and
- School feeding and short- and long-term food security.

While the categories above are not mutually exclusive, they help to illustrate how SFPs are dependent on their context and timing, as well as showing how some SFPs have evolved historically. Bennett (2003) argues that conceptually one of the main difficulties with SFPs has been the mixing of objectives by proponents of school feeding. So, for instance, a SFP will be initiated in order to ensure that children are better able to concentrate at school, but the food provided might be in the form of a take-home ration, or might only provide late in the school day, so it does not benefit learners in the classroom.

- *School feeding as an emergency intervention*

In the acute stages of a crisis, for example where schools are not even running, SFPs are not a priority and are rather a supplement to the food aid that is provided at household level (Bennett, 2003). In a crisis situation children are often withdrawn from school in order to assist with income generation, and in this context an SFP can be useful as an incentive to encourage the re-enrolment of children. In addition, where schools are operational, an SFP can operate both as an indirect transfer (a school meal) and a direct transfer (a take-home ration). Several calamities once occurred can warrant the need of an emergency intervention. Such can include

- i) HIV/AIDS as an emergency: Bennett (2003) argues that the HIV/AIDS pandemic should be seen as a 'permanent emergency' (particularly in sub-Saharan Africa) because of the huge increase in the number of orphans and the withdrawal of children from school to assist in sibling care and income generation in households where a parent is sick or has died. In east and southern Africa one of the effects of HIV/AIDS is the increasing number of orphaned and vulnerable children and child-headed households. This has implications for food security, levels of childhood malnutrition and, in turn, the types of nutritional interventions that governments should implement in response.
  
- ii) School attendance and enrolment: In conditions of extreme poverty, seasonal difficulties (drought), or events such as HIV/AIDS, families generally consider it a low priority to get their children to attend school. So it's promising to see that a number of studies have found that school feeding programs lead to an increase in enrolment, attendance and even retention (Agarwal, Upadhyay, Tripathi and Agarwal, 1987; Ahmed and del Ninno, 2002; IOCC, 2002). With regard to enrolment, much of the focus of SFPs is on increasing the enrolment of girls, who in times of economic crisis or food emergency are usually the first to be withdrawn from school in order to assist with sibling care and to generate income. The benefits of increasing the enrolment and retention of girls are enormous. It has been shown how girls who go to school are likely to marry later, and have on average 2.9 children, as opposed to 6.5 for uneducated girls (Bennett, 2003). For every year of additional schooling for a girl, there is a resulting 5–10% decrease in mortality among her children (World Food Programme, 2001). In fact, the best evidence for the effectiveness of SFPs is in terms of increasing enrolment (Bundy, 2005; Jamison and Leslie, 1990). While school meals are an incentive for school attendance, it should be borne in mind that some of the difficulties of access to school are, in fact infrastructural. Porter and Blaufuss (2002) have shown for example how bad roads, inadequate or expensive transport, and the chores that

many children have to perform each day before they go to school commonly prevent children from attending school, particularly in rural areas.

- *School feeding as a developmental intervention to aid recovery*

While there is little difference between using SFPs as an emergency measure versus using them as a form of developmental intervention, there is some heuristic value in distinguishing them. Many of the same principles that govern school feeding as an emergency measure govern school feeding as a form of developmental intervention. The main difference is that, in aiding recovery, the targeting becomes more refined (Bennett, 2003). Developmental SFPs have, as their focus, improving the livelihoods of particular groups that are vulnerable to food insecurity, and not simply (for example) improving school enrolment. The argument here is that, if increased enrolment is the aim, then using government funds to reduce or waive school fees would be a more cost-effective way of ensuring this than an SFP (Bennett, 2003). The SFP here might also include take-home rations, with the explicit focus being on income transfer within the community and not solely on school feeding. The focus here is on wider food security within the community and increasing the availability of, and their access to, food.

The principles underlying the use of an SFP as a developmental intervention include the fact that school feeding and take-home rations add to the food baskets of families, and thereby indirectly alleviate the costs of education. In the developmental approach, school feeding is also considered to be an impetus for the community – and possibly the private sector – to become involved in the implementation of SFPs (Bennett, 2003).

- *School feeding as a nutritional intervention*

To those unfamiliar with the concept of school feeding, it may seem like a form of nutritional intervention. School feeding has also been used a short-term intervention to increase the enrolment of girls and the retention of learners in schools. So, evidence for the nutritional benefits of school feeding is mixed, for the following reasons:

- i) School feeding is an ideologically sensitive and highly politicized arena, which makes the conducting of robust trials very difficult (Grantham-McGregor, 2005).
- ii) Poor nutrition and health complaints that contribute to poor school performance are also associated with a variety of socio-economic conditions, which, in turn, impact on school attendance. In times of crisis, controlling for all the possible covariates is almost impossible (Grantham-McGregor, 2005).
- iii) A further complicating factor is that many nutritional and growth difficulties have their origins during the first two years of life rather than during primary school years (Bennett, 2003). Mendez and Adair (1999) have shown that a child's ability to catch up early nutritional deficiency is limited after the age of two. In contrast, Del Rosso and Marek (1996) have argued that school-age children are, in fact, susceptible to a variety of nutritional difficulties, while Adair (1999) has shown how some catch up (following stunting) is possible between the ages of two and eight. There is also considerable evidence of the benefits of micronutrient supplementation for the growth of school-age girls and the reduction of later childbirth complications (Bennett, 2003).

- *School feeding and short- and long-term food security*

The link between school feeding and food security has usually been conceptualized in terms of how SFPs improve educational outcomes, which, in turn, help to improve literacy, enhance education (particularly among girls), ensure smaller families and improve household management. All of these improvements are linked to short- and long-term food security.

In his study of the impact of SFPs on short- and long-term food security, Hicks (1996) distinguishes between three variables of food security:

- The availability of food (such as crop yields and a diversity of food production);
- Access to food (which depend on household income, the control of resources by women and safety nets); and

- The utilization of food (referring to the nutritional status – protein, energy and micronutrient levels – of schoolchildren).

So, for example, Hicks argues that, with regard to availability, the short-term impact of SFPs on crop yields, diversity of food production and natural resource management are nil. However, if SFPs are targeted properly, they may have an impact on short-term food security by providing take-home rations as an income transfer to the household. With regard to utilization, short-term food security may be enhanced by improving the protein energy and micronutrient status of children, if the SFP is targeted properly and if the meal that is provided is appropriately fortified and has the necessary energy content. The benefits of long-term food security (with regard to availability, access and utilization) are all linked to improvements in literacy, numeracy and other educational variables.

### **2.2.5 School feeding programs and Education**

Poor health and malnutrition are important underlying factors for low school enrolment, absenteeism, poor classroom performance as well as early school dropout (WHO, 2005). Programs to achieve good health and nutrition at school age are therefore essential to the promotion of basic education for all children (WFP, 2004).

Good health and nutrition are not only essential inputs but also important outcomes of basic education of good quality. Children must be healthy and well-nourished in order to fully participate in education and gain its maximum benefits. Early childhood care programs and primary schools which improve children's health and nutrition can enhance the learning and educational outcomes of school children. Education of good quality can lead to better health and nutrition outcomes for children, especially girls, and for the next generation of children as well (Bundy et al., 2007)

An American study showed the benefits of providing breakfast to disadvantaged primary school students. Before the start of a school breakfast program, eligible (low-income) children scored significantly lower on achievement tests than those not eligible. Once in the program, however, the test scores of the children participating in the program

improved more than the scores of non-participants. The attendance of participating children also improved (Del Rosso, 1999).

Ensuring that children are healthy and able to learn is an essential component of an effective education system. This is especially relevant in efforts to achieve education for all in the most deprived areas. Increased enrolment and reduced absenteeism and drop-out bring more of the poorest and most disadvantaged children to school, many of whom are girls. It is those children who are often the least healthy and most malnourished, who have the most to gain educationally from improved health (Bundy et al., 2007) Effective school feeding programs that are developed as part of community partnerships provide one of the most cost-effective ways to reach adolescents and the broader community and are a sustainable means of promoting healthy practices. Improving the health and learning of school children through school-based nutrition programs is a concept which many countries have had decades of experience. These common experiences suggest an opportunity for concerted action by a partnership of agencies to broaden the scope of school feeding programs and make them more effective.

#### **2.2.6 Effective design of a successful school feeding program**

Del Rosso (1999) gives the following seven steps to help design a successful school feeding program:

- i) Consensus must first be built around a policy and objectives that focus on how school feeding can contribute to improving education and help to meet the nutrition and health needs of children. In this step, all players agree on what problems the program is intended to address, who the program will serve, and which models are feasible for implementation.
- ii) Thereafter, targeting criteria that focus on high-risk children and communities should be developed. Del Rosso (1999) argues that there is a built-in tendency towards universal coverage but that, in light of the fact that for most countries funding is finite, targeting should be an important component. Del Rosso (1999) is not referring to the targeting of individual children within a school but to economic (for example,

household income) and geographic (for example, a poverty map) targeting, as well as targeting nutritional status (for example, linked to malnutrition status for example), and gender (for example, girls).

- iii) Alternative financing and cost options for SFPs need to be identified. Del Rosso (1999) argues for attempts to ensure that the *cost effectiveness* of SFPs is calculated and not simply the *cost*, which alone says little about the actual value of an SFP.
- iv) The program should be explicit about guidelines for the composition of rations, as well as the timing of school meals. These issues should be calculated according to conditions in the education sector and the health and nutrition needs of school-aged children in that country.
- v) Potential bottlenecks in implementation need to be identified and resolved. This is particularly relevant to an SFP that is already in operation, and covers factors such as cooking practices and the management of private sector inputs.
- vi) The development and implementation of monitoring and evaluation systems are crucial to the success of an SFP. Del Rosso points out that, even though SFPs have been used for decades, there is a singular lack of data regarding their functioning and effectiveness.
- vii) Finally, SFPs should be integrated with other interventions that address the primary nutrition and health problems of school children

### **2.2.7 History and Development of School feeding Programs in Tanzania**

Tanzania has been concerned with the welfare and nutritional status of its people since independence (1961) but more so after the Arusha Declaration which contained a policy of “Ujamaa” and self-reliance, with a heavy accent on development of people who would in turn develop things (TANU, 1967). Although no explicit nutrition policy emerged till the eighties, the following three policies had a direct bearing on nutrition: (i) reduction of inequalities (ii) food security for all and (iii) provision of free social services (National Health Policy, 2003).

Balanced food of quality, safety and adequate nutritious food value and supply, is important and essential for the maintenance of physical and mental health. It is fundamental for a good nutritional state, which enables individuals, and families to lead socially and economically productive lives that will make individuals, households and community to contribute towards national economic development (Missano and Gwarasa, 2010).

In general, nutrition among primary school children is related to: Health status of the children i.e. Presence or absence of common child illnesses e.g. malaria, respiratory tract infections, diarrhea infections etc, This is due to the contribution of nutrition to body's immunity against diseases; Child's growth measured through anthropometric indicators; Child's cognitive performance (brain development and performance is influenced by good nutrition); Child's physical performance (body's physical activity depends on energy released from the food eaten); and School attendance rate i.e. It is unlikely for a sick or hungry child to attend school and classes regularly.

In Tanzania, 80% of schools are not providing any meals, also 45% of primary school children go to school hungry and about 50 -75% of school age children of different areas in the country do not get breakfast at home (ESRF, 2011). The history of school feeding in Tanzania shows that these activities have been under successful implementation since colonial era. A decade after independence these activities began to lose their popularity due to changing social and economic policies at macro-level. Currently short-term hunger as a result of lack of school feeding programs among school children is a significant problem. Accumulative evidence in the country shows that absenteeism in school, attention problem and early school dropouts especially in famine-prone regions are linked to short term hunger (Mamuya, 1999). Available information shows that during late 1970s most of these activities had been abandoned. In 1981/82 TFNC established community supportive project on school feeding programs which was launched in Singida and Dodoma (ESRF, 2011).

Currently, these school feeding program are active in few districts in Tanzania mainland. These school meals programs are those Community based programs and those supported

by Donors specifically World Food Programs (WFP). The permanent community based school feeding programs are practiced at Moshi rural and Hai Districts. The school feeding programs supported by WFP covers 12 Districts namely Ngorongoro, Kiteto, Simanyiro, Monduli, Dodoma urban, Dodoma Rural, Mpwapwa, Kondoa, Singida Urban, Singida rural, Manyoni and Iramba. WFP reached a total of 265,350 pupils in 250 schools in the 2007/2008 school year (Missano and Gwarasa, 2010).

Starting from 2011, a program which is jointly implemented by World food programs (WFP) and the Government of Tanzania through the Ministry of Education and Vocational Training was designed to support primary education in drought prone and pastoral areas and is known as Food-For-Education (FFE). The programs is being implemented in 13 drought-prone food insecure districts in five regions -Arusha, Manyara, Shinyanga, Dodoma and Singida. Districts covered include Bahi, Kondoa, Kiteto, Monduli, Longido, Ngorongoro, Loliondo and Karatu. The programs cover about 1,167 schools with a total enrolment in these schools reaching 600,000 children providing two daily meals. The Food for Education objectives include: contributing towards improvement of enrolment of boys and girls in the assisted schools, helping in stabilizing attendance at the assisted schools, reducing prolonged absenteeism and therefore reducing dropout rates, improving the attention (concentration) span and the learning capacity of the boys and girls in the assisted schools (ESRF, 2011).

Therefore the primary aim of school feeding in the country is to fight short-term hunger, which in turn will minimize the related problems. Among the main issues advocated are:

- Ensuring all school provide adequate mid-day meals on regular basis through support of the community/ village government.
- Ensuring food security for school feeding
- Parents and guardians required to provide breakfast to their children before they go to school or snack for rating while at school.
- Non-government organizations Civil Societies and Faith groups encouraged continuing support of school feeding activities.

### **2.2.8 Sociological Perspectives on School Meals and student Performance**

Sociologists have also suggested that both the practices of eating and food itself have a strong relationship to social order and ideas around subjectivity. Charles and Kerr maintain that:

*“Food practices can be regarded as one of the ways in which important social relations and divisions are symbolized, reinforced and reproduced on a daily basis (Charles and Kerr, 1988:2)”*

With an emphasis on the ways in which social relations are reproduced, sociological enquiry has tended to focus upon food practices within the private sphere rather than the public. Exceptions include eating out (Martens and Warde, 1997) and holiday food (Williams, 1997). The home and women’s work within it had traditionally attracted little critical interest from sociologists until feminist scholars began to redress this omission (Oakley, 1974). Sociological concerns around food and eating build on a body of work by feminist academics and consequently address the issue of gender and class relations and how these are reproduced through eating practices.

School meals discourse is permeated with concerns over the demise of the family meal, which masks far broader preoccupations with the role of the family, the condition of youth and the accompanying threat to social order (Teander, 1989). Indeed, fears that the family meal has been undermined stem, not from the intrinsic value ascribed to the family meal per se, but to its potential for the transmission and reproduction of social values. Where these values are not reinforced and reproduced, the social fabric of society is at risk.

There are three pathways by which school meals could affect student learning

First, in-school meals are a conditional transfer to children. Thus, school meals may induce families to enroll their children in school, to enroll their children sooner, or, conditional on enrollment, to encourage regular attendance. The availability of meals could also produce unexpected consequences, especially when not all schools provide free meals and when few rules govern school attendance zones and fees. For example, families may transfer between treated and untreated schools,

and rising demand for treated schools could increase fees (He, 2009; Vermeersch and Kremer, 2005) Researches in the various areas of the world confirms that enrollment rates are high due to meals provision. Some of these studies have went further suggesting that any increased enrollments due to school meals are likely the result of student sorting between schools. There is potentially greater scope for meals to increase regular attendance, conditional on enrollment.

Second, there is evidence that short-term attention and memory are adversely affected by skipping breakfast. Laboratory experiments suggest that even “empty calories instead of a morning fast can improve short-term functioning among children and young adults (Pollitt, Cuetoand Jacoby, 1998). If energy sources contribute to more effective work during the school day, then they could produce sustained gains in test scores. In apparent recognition of this, Virginia schools increased the calories of school meals on high-stakes testing days, although this short-term response was more characteristic of a “gaming” response, rather than an investment in human capital (Fgilio and Winicki, 2005). Overall, this literature implies that the timing of meals during the school day is relevant to understanding the potential impact in the learning process of the students.

Third, sustained exposure to nutritious food could prevent or ameliorate malnutrition. Child nutrition, in turn, could affect learning via increased attendance, cognitive development, or academic achievement (see Glewwe, 2005or a review of the mostly non-experimental evidence). Nutritional gains could be blunted if supplemental calories or nutrients do not “stick” to children because households respond by reallocating across their members, but the best evidence suggests that at least half the calories and nutrients are actually received by children. Given this, it is possible that higher-calorie meals contribute to higher rates of obesity and worse child health (Schanzenbach, 2009).

### **2.2.9 Framework for an Effective School Supplementary Feeding Program**

The framework is the starting point for developing an effective school nutrition component in broader efforts to improve health status. Schools can effectively deliver some health and nutritional services, provided that the services are simple, safe and familiar, and address problems that are prevalent and recognized as important within the community (Del Rosso, 1999). If these criteria are met, then the community sees the school staff and school more positively, and the staff will perceive themselves as playing important roles. The school supplementary feeding programs can be very effective if undertaken under the following components:

i) Health-related school policies

Health policies in schools, including skills-based health education and the provision of some health services, can help promote the overall health, hygiene and nutrition of children. Policies regarding the health-related practices of teachers and students can reinforce health education (Briggs, 2008). Teachers can act as positive role models for their students, for example, by not smoking in school and eating healthy foods. The process of developing and agreeing upon policies draws attention to these issues. The policies are best developed by involving many levels, including the national level, and teachers, children, and parents at the school level.

ii) Provision of safe water and sanitation – the essential first steps towards a healthy physical, learning environment.

The school environment may damage the health and nutritional status of schoolchildren, particularly if it increases their exposure to hazards such as infectious diseases carried by the water supply. Hygiene education is meaningless without clean water and adequate sanitation facilities. It is a realistic goal in most countries to ensure that all schools have access to clean water and sanitation. By providing these facilities, schools can reinforce the health and hygiene messages,

and act as an example to both students and the wider community (Briggs, 2008). This in turn can lead to a demand for similar facilities from the community.

iii) Skills-based health education

This approach to health, hygiene and nutrition education focuses upon the development of knowledge, attitudes, values, and life skills needed to make and act on the most appropriate and positive health-related decisions (Bundy et al., 2007). Health in this context extends beyond physical health to include psycho-social and environmental health issues. Unhealthy social and behavioral factors not only influence lifestyles, health and nutrition, but also hinder education opportunities for a growing number of school-age children and adolescents.

iv) School based health and nutrition services

Schools can effectively deliver some health and nutritional services and address problems that are prevalent and recognized as important within the community. For example, micronutrient deficiencies and worm infections may be effectively dealt with by infrequent (six-monthly or annual) oral treatment; changing the timing of meals, or providing a snack to address short term hunger during school which is an important constraint on learning, can contribute to school performance and providing spectacles will allow some children to fully participate in class for the first time (Bundy et al., 2007). Supporting activities for these components include effective community partnerships, pupil awareness and participation and effective partnerships between teachers and health workers and between the education and health sectors as explained below:

- Effective community partnerships

Promoting a positive interaction between the school and the community is fundamental to the success and sustainability of any school improvement process. Community partnerships engender a sense of collaboration, commitment and communal ownership.

Such partnerships also build public awareness and strengthen demand. Within the school health component of such improvement processes, parental support and cooperation allows education about health to be shared and reinforced at home. The involvement of the broader community, the private sector, community organizations and women's groups can enhance and reinforces school health promotion and resources (MOHSS, 2008). These partnerships, which should work together to make schools more child-friendly, can jointly identify health issues that need to be addressed through the school and then help design and manage activities to address such issues.

- Pupil awareness and participation

Children must be important participants in all aspects of school health programs, and not simply the beneficiaries. Children who participate in health policy development and implementation efforts to create a safer and more sanitary environment, health promotion activities aimed at their parents' other children, and community members, learn about health through practical means (King and Burgess, 1995). This is an effective way to help young people acquire the knowledge, attitudes, values and skills needed to adopt healthy lifestyles.

- Effective partnerships between teachers and health workers and between the education and health sectors

The success of school health programs demands an effective partnership between Ministries of Education and Health, and between teachers and health workers. The health sector retains the responsibility for the health of the children, but the education sector is responsible for implementing, and often funding, the school based programs (MOHSS, 2008). These sectors need to identify responsibilities and present a coordinated action to improve health and learning outcomes from children. School health and nutrition also addresses the critical health and nutrition factors that keep children out of school and reducing their ability to learn effectively, such as malnutrition

and hunger (Save the Children USA, 2007). Bundy, Burbans, Grosh, Geli, Jukes, and Drake (2009) defined school feeding as the provision of food to schoolchildren.

#### **2.2.10 School feeding programs and Millennium Development Goals (MDGs)**

According to Garram Children's School (2010) school feeding contributes to the education and well-being of children. A hungry child does not grow, cannot learn as well and faces many health risks in the future. School feeding can bring children into school and out of hunger. Experience shows that properly designed and effectively implemented SFPs can:

- i) Alleviate short-term hunger in malnourished or otherwise well-nourished school children. This helps to increase the attention and concentration of students producing gains in cognitive function and learning.
- ii) Motivate parents to enroll their children in school and have them attend regularly. When programs effectively reduce absenteeism and increase the duration of schooling, educational outcomes (performance, dropout, and repetition) improve.
- iii) Address specific micronutrient deficiencies in school-age children. Most important of these are iodine and iron, which directly affect cognition. Meeting the iron and iodine needs of school-age children can translate into better school performance.
- iv) Increase community involvement in schools, particularly where programs depend on the community to prepare and serve meals to children. Schools with their communities behind them are more effective than schools with less community involvement.

School feeding responds directly to the Millennium Development Goals (MDGs) related to hunger and poverty (MDG 1), education (MDG 2) and gender equality (MDG 3), and indirectly to child mortality and maternal health (MDGs 4 and 5). Table below summarize this data through proving how school feeding programs relates to MDG's.

**Table 2.1: School feeding programs and Millennium Development Goals (MDGs)**

MDGs	Expected Impact Of School Feeding Programs	
Eradication of Extreme Hunger and Poverty	Reduction of child hunger	Poverty reduction in communities
Achieve Universal Primary Education	Increase in School Enrolment, Attendance, Retention, Completion and Achievement	
Gender Equality and Empowerment	Correct gender imbalance through increased girl-child enrolment in schools	
Reduce Child Mortality	Improved nutritional and health status of learners	
Improve Maternal Health	Improved income generation, nutrition and health education	
Combat HIV/AIDS, Malaria and TB	improved nutritional and health status of Orphans and Vulnerable Children (OVC) and Improved access to schools	
Ensure Environmental Sustainability	Improved Water Supply, Hygiene and Sanitation and Greening of Schools	
Promote Global Partnerships	Improved networking, team work and collaboration between the school and public/private sector	

**Source: Yunusa et.al, (2004)**

### **2.2.11 Challenges facing school feeding programs**

Several scholars have provided different assumptions on challenges that are facing school feeding programs. The major challenges that were mentioned by Kearney (2008) in his PhD. titled A Comparative Analysis of Five Different School Feeding Strategies in the Vaal Region were shortage of staffs for supervision; lack of limited funds; health requirements; limited time. These challenges were better elaborated in a paper by

Langer (2011) which was titled School Feeding Programs in Kenya: Transitioning to a Homegrown Approach. In Langer went further stressing that, the major challenge that face school feeding programs in majority of the country are two in particular lack of funds and limited time. In his difference, Langer argues that Lack of funds is due to lack of specified budget that the targeted school set to cater for that programs. In this, majority of the schools lack that funds hence this lead to failure of majority of establish programs.

For the aspect of limited time, Langer stipulated that in majority of the schools, the time set for schools hours usually end at 14:00 with thirty minutes breaks. Utilizing the 30 minute break to offer meals for student is not enough as due to large number of the student in the schools the time that will be used for this can be more than the 15 minute break that is set for the two time breaks. Due to this, majority of the school fails to adjust the time so as to fit school meal programs. Hence he argues that, time also is another challenge that hinder effective implementation of school feeding programs in different countries of the developing world.

### **2.3 Empirical Literature Review**

The first study by Kristjansson, et.al.(2006)Titled“School feeding for improving the physical and psychosocial health of disadvantaged students” determines the effectiveness of school feeding programs in improving physical and psychosocial health for disadvantaged school pupils. This study employed interviews and questionnaire as the major tools for data collection. This study concluded that Children who were fed at school attended school more frequently than those in control groups; this finding translated to an average increase of 4 to 6 days a year per child. For educational and cognitive outcomes, children who were fed at school gained more than controls on math achievement, and on some short-term cognitive tasks.

The second study by Duah in 2011 titled“implementation of Ghana school feeding program in the Asunafo south district”. determined the state of public awareness of the implementation of the GSFP and whether they consider it to be beneficial, to determine

whether the stakeholders know and play their respective roles in the implementation of the program; to find out whether the key stakeholders have been trained and whether they have been offered the necessary incentives to enhance the performance of their duty.; to determine whether the program has achieved the set objectives in education, health, agriculture and other related issues of social significance and if not what are the obstacles; and to determine how to overcome the implementation gaps in the program and difficulties in the implementation.

The research has revealed among other things that, of the three objectives, the educational dimension of the program has achieved more successes than the agricultural and health objectives, that the general public is aware and accepts GSFP as an effective policy, that GSFP has created employment for caterers and cooks, that 3 public institutions namely GES, Health and Agriculture Directorate have been brought together to make great strides in public policy. However, the program is not without problems. Among them are, inadequate teachers for the growing number of pupils, delay in the release of funds from central government and the lack of provision of poly-tanks with water and decent kitchens, low patronage of locally produced foodstuffs by caterers, inactive participation of stakeholders in the program.

The third study was conducted by Langinger in 2011 titled “School Feeding Programs in Kenya: Transitioning to a Homegrown Approach”. This study provided an in-depth analysis of the reason and the benefits that can be derived out of school feeding programs. Also, the study attempted to present the historical and background development of the feeding programs in Kenya as a country.

Another study by McEwan in 2013 titled “the impact of Chile’s school feeding program on education outcomes”, evaluated the impact of higher-calorie meals on the education outcomes of public, rural schools and their students in the end, the study concluded that the provision of school meals has a moderate effect on student attendance, little effect enrollment and anywhere from zero to small effects on measures of cognitive ability and achievement outcomes.

## **2.4 Research Gap**

Though several studies have been conducted on food provisioning in primary schools, a majority of these studies have been conducted in other countries. No study has been conducted in Tanzania that specifically concerns school feeding programs therefore, it is important to note the benefits of other studies or programs to conduct the same research in Tanzania. This Research is attempting to analyze the school feeding programs in country and also, through the understanding of this research Government, Schools, NGO's, and Communities can develop feasible beneficial programs for primary school students in Tanzania.

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

Research methodology is a way to systematically solve the research problem (Kothari: 2004:8). This chapter presents the methods and techniques used in collecting and analyzing the data for this study. It is in this chapter where the profile, population, sample size, method of sampling on the population, the instrument of the study, data collection procedure, data analysis, validity and reliability of the research instrument have been described.

#### **3.2 Research Design**

Research design according to Malhotra (2004) is a framework or blueprint for conducting research. It gives the detail procedures crucial for obtaining the necessary information to solve the research problem. Zikmund (2000) defines research design as a master plan that identifies the methods and procedures for collecting and analyzing the requirement information. A case study research design will be employed for this study. The researcher employed a case study because of its advantages which includes fully understanding of the behavior patterns of the concerned unit, it also facilitates intensive study which is generally not possible if other methods were employed, this method allows more than one data collection method to be used and also it facilitates the drawing of inferences and helps in maintaining the continuity of the research process.

#### **3.3 Population of study**

Population is the entire group of events, individuals or people that is the focus of the study who may be everyone in the country, or those in a particular location, or a special ethnic, economic or age group, eligible for a data collection investigation (Cogill, 2003). In simple terms Population refers to the total of the items about which information is desired. The attributes that are the object of study are referred to as characteristics and

the units possessing them are called as elementary units. The populations for this study were taken from four primary schools in Dar Es Salaam and it included two schools from Ilala and Kinondoni Municipality. These areas of study were selected due to their large numbers of primary schools which were essential for data collection. Also the areas are selected due to researcher familiarity, convenience and desirability to the researcher in terms of the nature of the study, as well as financial and time constraints. The school that were involved in this study were Kijitonyama Kisiwani primary school which has 1000 students and 20 teachers; Nakasangwe Primary school which has 700 students and 27 teachers; Ilala-Boma Primary school which had 1200 students and 30 teachers and Mtendeni Primary school which had 800 students and 34 teachers.

### 3.4 Sample, Sample size and sampling procedure

#### 3.4.1 Sample and sample size

A sample is a small group of subjects drawn from the population in which the researcher is interested in gaining information and drawing conclusions from (Kothari, 2004). Sample size is the part of the population selected to represent the whole population. Moreover sample enables the researcher to achieve objectives with reduced resources. A sample for this study was 150 respondents comprised of primary school students, teachers, NGO's and Parents, which were selected from the two municipalities. Below is the table which presents this sample.

**Table 3.1: Respondents sample size**

Sex	Frequency				Percentage
	Kinondoni		Ilala		
	Presence of meals	Non presence of meals	Presence of meals	Non presence of meals	
Male	29	21	25	16	60.7
Female	22	13	13	11	39.3
<b>Total</b>	<b>150</b>				<b>100</b>

**Source:** Field data (2014)

### **3.4.2 Sampling Procedures**

This involves the techniques to which the sample was drawn from the population.

In this research, both random and non-random sampling methods were used. Judgmental non-random sampling was used where the selection of the sample size and respondent is based on the judgment of the researcher taking into account that, those selected are the key individuals who can give information required for the study. In this case, School board and teachers of each school as well as those who have direct involvement with school feeding programs and other initiatives, which accounts for 40 respondents.

Random sampling was used in selecting students. In this, each student had an equal chance to be selected for an interview. The researcher used simple random technique to pick 110 students out of 3700 total number of all school that is Kijitonyama Kisiwani, Nakasangwe, Ilala-boma and Mtendeni primary school, to be involved in the data collection process. The use of random sampling was due to the fact that the researcher wanted to provide an equal chance to all the respondents (students) to be involved in the research.

### **3.5 Data collection Methods**

Data collection involves all processes that deal with acquiring data from the population targeted. Data for this study were collected from primary and secondary sources. The primary data were collected from the respondents through administration of questionnaires, interviews and observations whilst the secondary data was obtained from publications as well as various non-published research on the topic. The data collection methods that were used include observations, interviews and questionnaires.

#### **3.5.1 Interviews**

Interview is the data collection method which involves presentation of oral-verbal stimuli and reply in terms of oral-verbal responses. This can be used through personal interviews and, if possible, through telephone interview (Kothari, 2004). Interview as research tool is advantageous because: it is a highly flexible tool that allows a more

permissive atmosphere than other techniques (Young, 2001). Also, through interviews the questions not readily grasped by interviewees can be rephrased, or repeated with proper emphasis and explanations when necessary. Also the interviewer has a greater opportunity to appraise the accuracy and validity of replies as contradictory statements can be followed up and possible reasons for contradictions can be learned.

The respondents were interviewed through face-to-face questioning. The face-to-face interviewing method was applied whereby the researcher used both the structured questions and unstructured ones. This method enables the researcher to get the inner feelings of the respondents which for this case were parents and teachers. The questions were semi-structured in which individuals' responses were given attention and structured questions were employed to allow the researcher to ask questions concerning the subject matter. Interviews were conducted to the parents and teachers.

### **3.5.2 Questionnaire**

Kothari (2004) described this method as having advantages that include; being free from bias, respondent having more time to give well thought answers and respondent that are not easily reachable can also be reached conveniently.

Questionnaires both open-ended and close-ended questions were administered to Ward Executive Officers and primary school students. The respondents were given chance to fill in the questionnaire forms and to be collected later by the researcher.

The questionnaires were divided into two parts. Part one was covering the background of respondents with respect to their ages, sexes, and professions. The collection of such demographic descriptions are necessary since in the view of the researcher, they would influence responses of respondents hence knowing them would ease the process of understanding the relationship between the demographic characteristics and the answers made to the research questions. Part two of the questionnaire was designed to solicit information from respondents through both close and open-ended questions.

Close-ended question were employed to obtain information relevant to the study. This made the study more focused and specific in terms of measurement and time reduction. The importance of closed ended question lies in their ability to minimize bias and checking of differences in responses to determine the benefits of school feeding programs in primary schools. Open-ended questionnaires were used to obtain qualitative data for the research. These questions are effective since they opened doors to different unclassified responses and enabled the respondents to give their own justifications for their answers.

### **3.5.3 Documentary reviews**

Right from the onset of a research process to its completion, it is not a matter of voluntary decision but a compulsory condition that one has to review relevant literature on the subject he/she intends to study. (Kothari, 2004) points out that, the most crucial importance about this method as it saves time and money in terms of data collection and also gives further insight on the research topic in general.

### **3.6 Data Analysis plan**

Both qualitative and quantitative analysis was employed in order to provide a clear picture on the benefits of school feeding programs in primary schools. In terms of Quantitative approaches, simple Tables, charts, and or graphs to be used to show percentages and frequencies in distribution of analyzed samples. All quantitative data were analyzed by using SPSS and Excel program. This was done by coding all the responses in order to produce simple frequencies and percentages. Qualitative data was analyzed by using categorical indexing approach (Mason, 2003:150-164). Categorical indexing is based on the idea that the researcher applies a uniform set of indexing categories systematically and consistently to their data.

## **CHAPTER FOUR**

### **PRESENTATION AND RESEARCH OF FINDINGS**

#### **4.1 Introduction**

This chapter presents the result and findings obtained with the respect to study problems and study objectives in general. The data summary was based on primary data collected from the selected sample of the respondents

#### **4.2 Demographic characteristics of the respondents**

During data collection, the researcher was interested to establish various demographic characteristics so as to provide a clear description of the people that were involved in the research. Below is the description of each of the item which was answered by the respondents in the section of demographic characteristics

##### **4.2.1 Sex of the respondents**

Sample surveys and interview were conducted in Dar es Salaam in Ilala and Kinondoni municipal whereby the respondents' demographic characteristics were grouped on the basis of sex, age, level of education and occupation. The sample consisted of 91 males (60.7%) and 59 females (39.3%). Further analysis showed that, the out of 91 male respondents 50 came from Kinondoni while 41 came from Ilala. For the Female side, out of all 59 that were questioned, 35 came from Kinondoni and other 24 came from Ilala. Table (4.1) below presents this data.

**Table 4.1: Sex of the respondent**

Sex	Frequency				Percentage
	Kinondoni		Ilala		
	Presence of meals	Non-presence of meals	Presence of meals	Non-presence of meals	
Male	29	21	25	16	60.7
Female	22	13	13	11	39.3
<b>Total</b>	<b>150</b>				<b>100</b>

*Source: Field data (2014)*

#### **4.2.2 Age of the respondents**

In terms of age, the minimum age category ranged from 10-20 whereby the maximum category was from 51 and above. In this aspect 94 (49 Kinondoni, 45 Ilala) people who are equal to 62.7% of all the respondents were aged between 10-20. Another 14 (6 Kinondoni, 8 Ilala) people who are equal to 9.3% of all the respondents were aged between 21 and 30. Between 31 and 40 there were 20 (9 Kinondoni, 11 Ilala) people who in percentage were equal to 13.3 of all the respondents, another 9 (6 Kinondoni, 3 Ilala) people who were equal to 4.6% aged between 41-50 and the remaining age group which was 50 and above contained 15 (10 Kinondoni, 5 Ilala) people which is similar to 10%. Below table (4.2) represent this data.

**Table 4.2: Respondent's Age**

Age	Number of respondents				%
	Kinondoni		Ilala		
	Presence of meals	Non-presence of meals	Presence of meals	Non-presence of meals	
10-20	30	19	25	20	62.7
21-30	5	1	8	0	9.3
31-40	5	4	4	7	13.3
41-50	3	1	1	2	4.7
51 and above	5	5	5	0	10
<b>Total</b>	<b>150</b>				<b>100</b>

**Source:** *Field Data (2014)*

#### **4.2.3 Education Level of the respondents**

During data collection process the researcher was interested in establishing the education level of the respondents that was involved in the research. In this, 113 (75.3%) respondents had primary education; 8 (5.3%) respondents had secondary education; 10 (6.7%) had certificate education; 8 (5.3%) had diploma degree; 8 (5.3%) First degree and the remaining 3 (2%) had Master's degree. Below is the table summarizing this data with further indication of respondents from the two wards involved.

**Table 4.3 Education level of the respondents**

Level of Education	Number of respondent				Percentage (%)
	Kinondoni		Ilala		
	Presence of meals	Non-presence meals	Presence of meal	Non-presence meals	
Primary Education	25	28	33	27	75.3
Secondary Education	3	1	3	1	5.3
Certificate Education	2	3	3	2	6.7
Diploma Degree	2	2	3	1	5.3
First Degree	1	2	5	0	5.3
Master's Degree	2	0	1	0	2
<b>Total</b>	<b>150</b>				<b>100</b>

**Source:** *Field data (2014)*

#### 4.2.4 Respondent's position at school

The choice for this, include a Student, a Teacher and a Parent. The results in this were as follows; 45(23 Kinondoni, 22Ilala) (58.7%) were students; 43(21 Kinondoni, 22Ilala) (36%) were teachers and the remaining 8(4 Kinondoni, 5Ilala) (5.3%) were Parents.

**Table 4.4: Respondents position at school**

Position	Frequency				Percentage
	Kinondoni		Ilala		
	Presence of meals	Non-presence meals	Presence of meals	Non-presence meals	
Students	23	22	21	22	58.7
Teacher	17	13	11	13	36
Parent	2	1	1	4	5.3
<b>Total</b>	<b>150</b>				<b>100</b>

**Source:** *Field data (2014)*

### 4.3 Presence of meals at school

The major focus that the researcher aimed to achieve with this question was the general respondents answer on the presence of the meals at school. The question was simple, requiring a simple Yes or NO answer on the existence of meals at school. The results for this section were as follows

Out of all respondents interviewed, 114 (76%) selected Yes as their answers, 26 (17.3%) said No and the remaining 10 (6.7%) said I don't know. Further analysis of the respondents' answers indicates that, out of all respondents questioned, those who said Yes (114), 65 came from Kinondoni and 49 came from Ilala. Out of those who said No (26), 18 came from Kinondoni and 8 came from Ilala. While those who said I don't know were equal (5) from each of the wards. Below table (4.4) represents this data.

**Table 4.5: Response answer on presence of meals at school**

Response	Number				Percentage
	Kinondoni		Ilala		
	Presence of meals	Non presence of meals	Presence of meals	Non-presence of meals	
Yes	31	34	27	22	76
No	11	7	5	3	17.3
I don't know	2	3	1	4	6.7
<b>Total</b>	<b>150</b>				<b>100</b>

*Source: Field data (2014)*

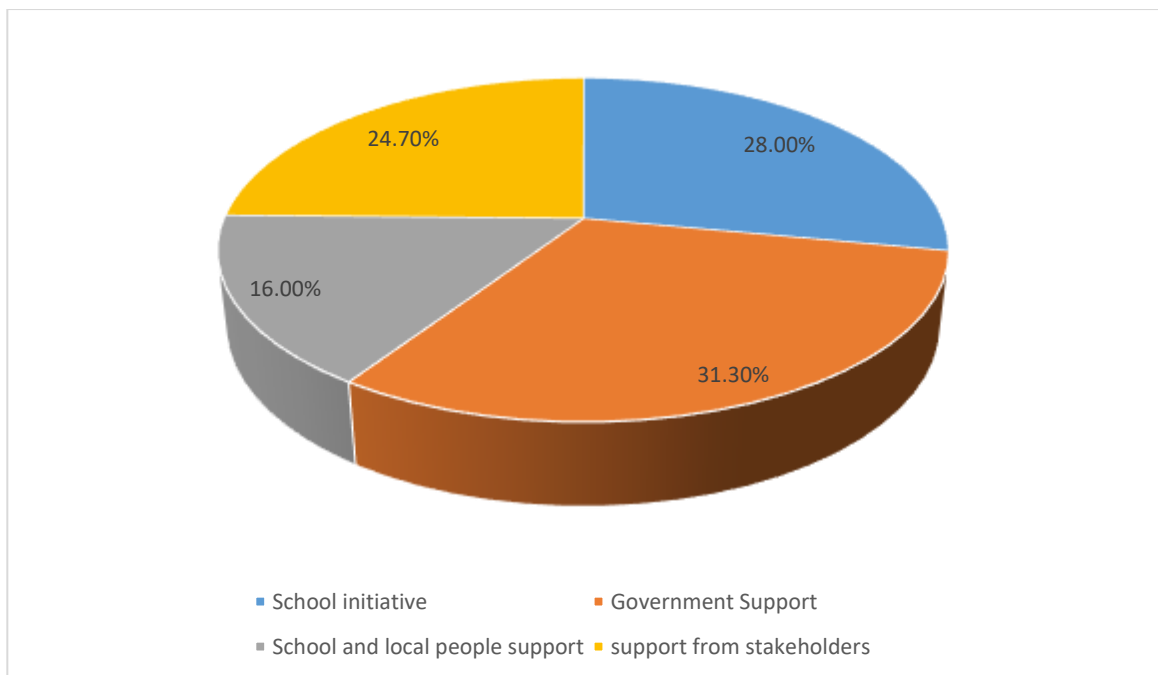
### 4.4 Organization of the school feeding program

The question for this section was to examine the way school feeding program is organized in the selected schools. In order to provide answers for this, the responders were given choices which included School initiatives; Government support; School and

local people support and Support from stakeholders. To provide answers to this, the respondent's selection was as described below.

The results in this were as follows; 42 (28%) selected school initiatives; 47 (31.3%) selected government support; 24 (16%) selected school and local support while the remaining 37 (24.7%) selected support from stakeholders. This data can be presented diagrammatically as in figure 4.1 below.

**Figure 4.1: Respondents answers on organization of school meal**



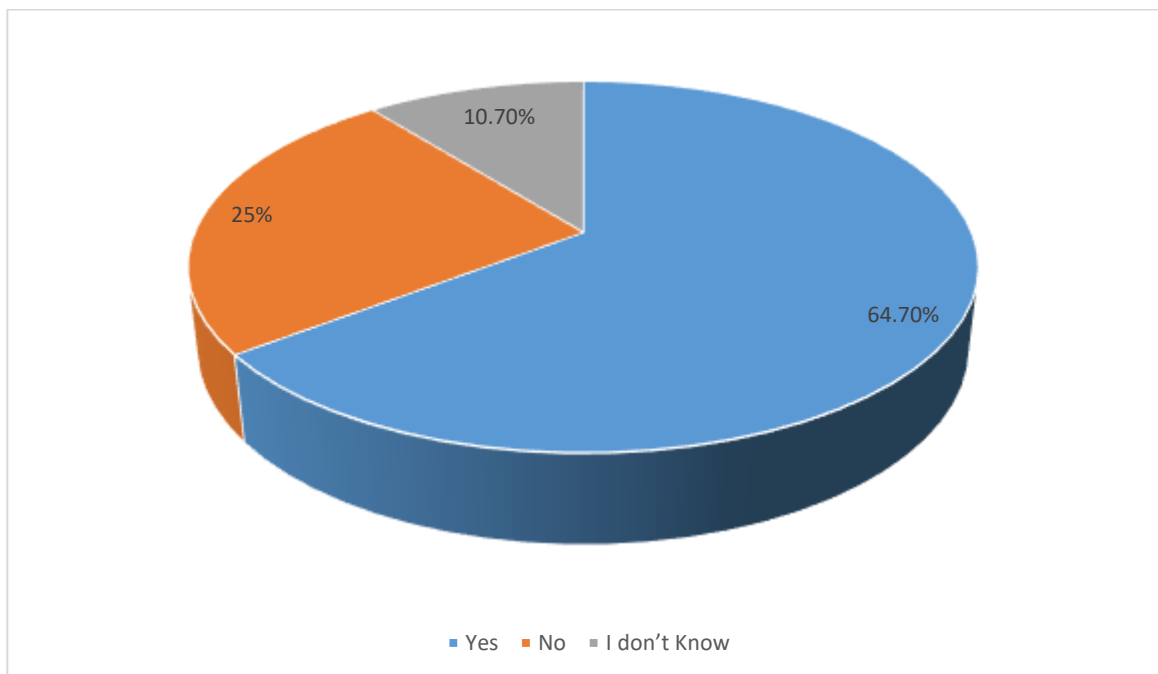
**Source:** Field Data (2014)

#### **4.5 Sufficiency of the Meals Provided**

In order to establish the size and the nature of the meal to students, the researcher was interested in asking respondents on their perception over the meals provided at school. In this, the question was: Do you think school children get enough food while in school?, the respondents had three answer choices to select out of this in order to come up with the response Yes, No and I don't know.

Out of all respondents interviewed 97 (64.7%) said Yes; 37 (24.7%) said No and the remaining 16 (10.7%) said I don't know. Generally, analysis of the observed data showed the respondents from Ilala in huge percentage selected yes compared to those of Kinondoni. Further analysis indicates that those respondents from school offering foods in both schools were the one dominating compared to the respondents from non-food offering schools. Majority of the non-offering school selected either No or I don't know for the aspects of the answers which is different from the respondents from food offering school where most of them selected yes and few of them No as their answer for this provided question.

**Figure 4.2: Respondents answer on the sufficiency of meals provided**



**Source:** Field Data (2014)

#### **4.6 Importance of school meals**

In order to establish the importance of school meals, the researcher asked the respondents on “do you think school meals are important?” and to provide answers for

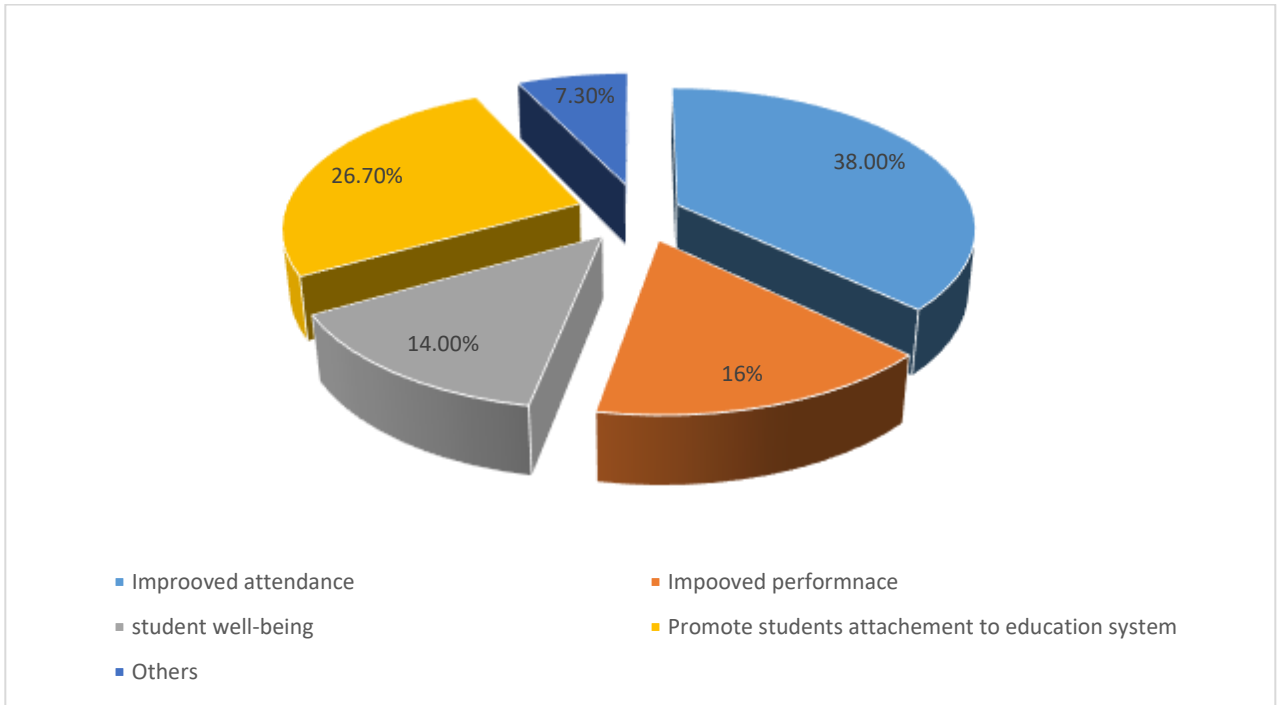
this, the respondents had to choose between as simple yes or no. the results in this were as follows;

Out of all 150 respondents that were visited, 105 (70%) said Yes that is from both schools Ilala and Kinondoni while the remaining 45 (30%) said No also come from ilala and Kinondoni. From there, the researcher asked the respondents to justify why did they choose their answers. In this, those who said yes were supposed to select several statements that emphasize their points likewise to those who said no. Further analysis indicates that, large respondents from Kinondoni were the one that answered yes for this. In this, out of all 105 respondents who said yes, 56 were coming from Kinondoni and the remaining 49 were the ones coming from Ilala. This indicates that, 70% of the respondents who said yes came from Kinondoni. Simple conclusion from this data is that, large percentages of schools in Kinondoni provide meals compared to schools that Non- provide meals in Ilala.

For those who said yes, the researcher provided the respondents with several statements on which they were supposed to choose from. In this the statements included: Improved attendance; improved performance; Student wellbeing; Promote students attachment to education system and others.

The results for this section were as followed, 57 (38%) respondents choose improved attendance; 24 (16%) respondents improved performance; 21 (14) respondents choose students wellbeing; 37 (24.7%) choose it Promote students attachment to education system and the remaining 11 (7.3%) selected others. This data is summarized below in figure 4.3.

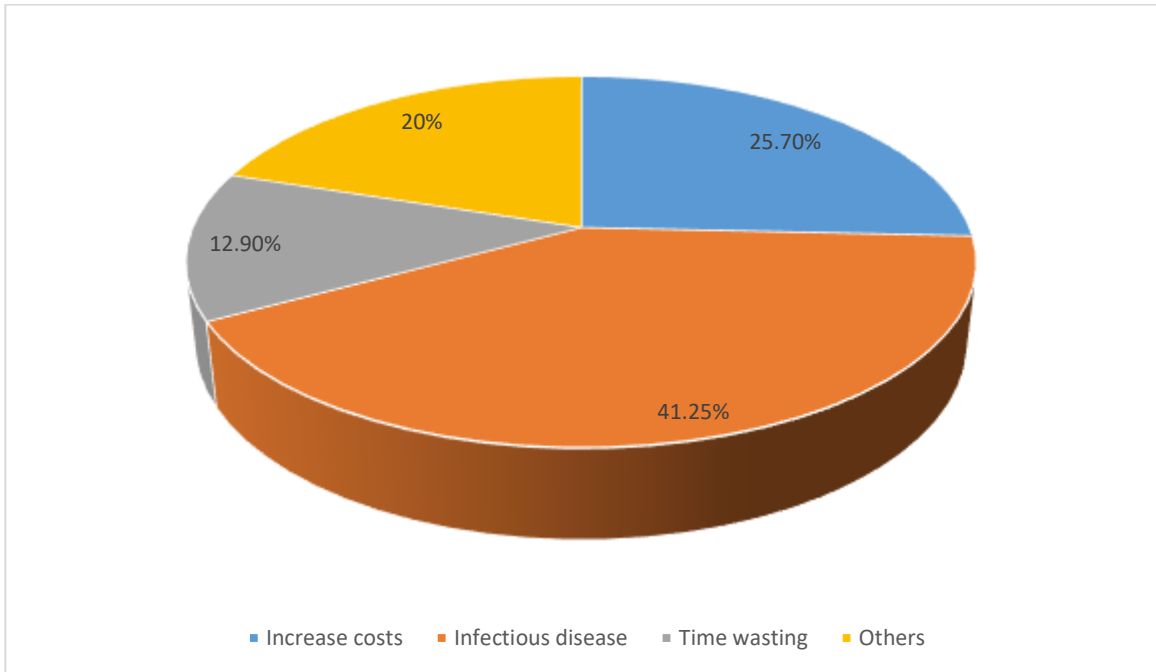
**Figure 4.3: Importance of school meals**



**Source:** Field Data (2014)

Those who said no did also have some answers on which they were supposed to choose from. Their answers include: Increase costs; Infectious diseases; Time wasting and others (specify). In this, 38(25.7%) said they increase costs; 62(41.2%) selected infectious diseases; 20(12.9%) selected time wasting and the remaining 30 (20%) selected others. This data can be presented diagrammatically as follows;

**Figure 4.4: Respondents answers on problems with school meals**



**Source:** Field Data (2014)

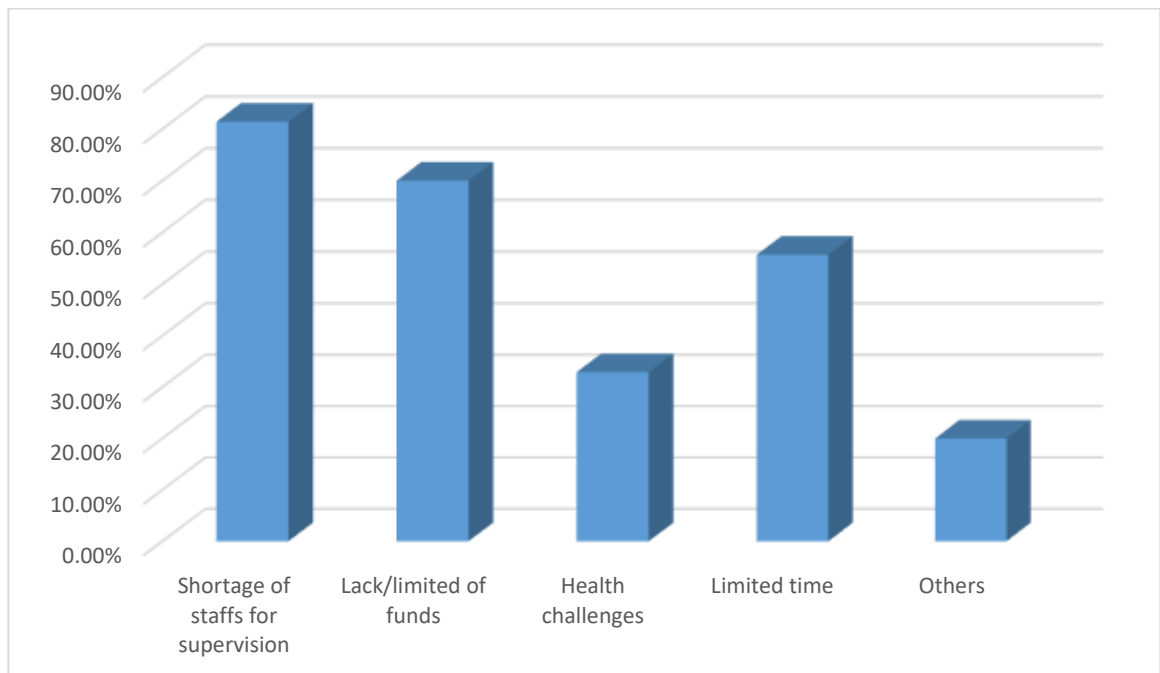
#### **4.7 Challenges facing the implementation of school meals**

From there, the researcher was interested in establishing the challenges that the schools are faced in establishing the school meals. In this, the researcher gave the respondents some option on which they were supposed to choose from. Such options included Shortage of staffs for supervision; Lack/limited funds; Health requirements; Limited time and others (specify). The results for this section were as follows;

Out of all 150 respondents interviewed, 57 (81.4%) selected shortage of staffs for supervision as the challenge facing the schools, this included 30 respondent from Kinondoni and 27 from Ilala; 49 (70%) selected lack/limited funds, this included 20 respondent from Kinondoni and 29 from Ilala; 23 (32.9%) selected health requirement as the challenge, this included 10 respondent from Kinondoni and 13 from Ilala; 39 (55.7%) selected limited time as the challenge, this included 20 respondent from Kinondoni and 19 from Ilala while the remaining 14 (20%) which included 8

respondent from Kinondoni and 6 from Ilala selected other as the challenge facing the meal programs at school.

**Figure 4.5: Challenges facing the implementation of school meal programs**



**Source:** Field Data (2014)

## **CHAPTER FIVE**

### **INTERPRETATION AND DISCUSSION OF FINDINGS**

#### **5.1 Introduction**

This section seeks to interpret the recovered data so as to give it meaning in relation to the study objective. The chapter study by doing a thoroughly interpretation of the demographic characteristics, then a researcher was followed by the discussion of the research objectives in relations to the data obtained. Below is the description of such results.

#### **5.2 Demographic characteristics**

During data collection, the researcher was interested to establish the nature and type of the respondents that were involved in the research. In this, it was realized that, majority of the respondents that were involved in the research were the students. This was realized by the question which the researcher wanted to establish respondent's position at school. Data collected shows that out of all 150 respondents that were involved in the research, 58 (38.6%) were students; 49 (32.6%) were teachers and the remaining 43 (28.8%) were Parents. This indicates the information that was established from these people was informative as they are all the respondents seemed to have some understanding of the school programs in the established school.

The researcher also was interested in establishing sex, age and level of education of the respondents. In this, starting with the sex/gender of the respondents, majority of the respondents that were involved were male. For this case, 91(60.7%) were males and the remaining 59(39.3%) were females.

For the aspect of the age, the researcher categorized the ages into several groups with the minimum age category ranged from 10-20 where by the maximum category was from 51 and above. Analysis of the age groups showed that the majorities of the respondents are 94 people (49 Kinondoni, 45 Ilala), people who are equal to 62.7% of all the respondents

were aged between 10-20. Another 14 (6 Kinondoni, 8 Ilala) people who are equal to 9.3% of all the respondents were aged between 21 and 30. Between 31 and 40 there were 20 (9 Kinondoni, 11 Ilala) people who in percentage were equal to 13.3 of all the respondents, another 9 (6 Kinondoni, 3 Ilala) people who were equal to 4.6% aged between 41-50 and the remaining age group which was 50 and above contained 15(10 Kinondoni, 5 Ilala) people which is similar to 10%.

The education of the respondents was also categorized in several groups to see the nature of education that the respondents who were involved in the research had. In this the researcher divided the education level from Primary to Master's education. In this majority of the respondents had primary education 113(75.3%) which is fair as the large number of the respondents for this research were the students. The education level with the least respondent was the Master's degree, which in this case had 3(2%) of the respondents from Ilala and Kinondoni. In terms of differences in answers, majority of the primary education holders were giving out simple answers on the manner, compared to those with higher level of education. Although, this was thought as a common phenomenon as majority of the primary education holder were students while the rest with higher education were either parents or teachers who under normal situations must have better understanding than the students.

In general, the large number of the respondents that were questioned for this study came from Ilala that is 60 people (. Despite the reduced number of the respondents for this study, respondents from Kinondoni also provided crucial information that was of great importance in establishing the basis and the conclusion for this study. Apart from that, presence of meals school in both wards dominated in terms of numbers of respondents that were involved in this research compared to those schools that are Non presence of meals.

### **5.3 Research Question 1: What is the nature of the school feeding programs?**

In this research question, the major aim was to establish the nature of the school meal programs for those schools that do have school meals. To start with, the researcher was keen to establish among the respondent that were questioned, which ones had meal programs and which ones did not have these programs. An analysis of this showed that, 76% selected yes that means 65 from Kinondoni and 49 students from Ilala as their answers, 17.3% said No, that is 18 from Kinondoni and 8 from Ilala and the remaining 6.7% said I don't know, that is 5 from Kinondoni and 5 from Ilala. A point to note with this is that very few percent of the schools do provide meals at schools. The researcher went further asking the respondents to point out why they think it has been difficult to establish these programs at school; most of them they answer is because of the financial problem.

Basically, majority of them concurred with the 2009 ILO report which identified financial constraints as the key factors hindering the establishment of school feeding programs. But despite these other factors such as poor planning and shortage of staffs were also highlighted as the key factors hindering the establishment of school feeding programs.

Then the researcher saw the need of establishing what really means by the school meal programs. In this, majority of the respondents answering this questioned defined school meals programs as “*Kitendo cha shule husika kutoa mlo kwa wanafunzi*” Which literary translates into “*a situation where a school provide meals to its students*”

However, an observable difference between the definitions was obtained when the researcher went further analyzing the nature of the meals themselves. In this, it was realized not all school provide same meals, 47% of the questioned school provided full tea and afternoon meals to students, while the remaining 53% provided only one meal which in most cases was 10:00 porridge/tea. Hence in presenting their definitions of meals programs, there was a minor different in terms of what comprises the school

feeding programs in their respective schools. This data concurs with Duah (2011) research, which argued that, the basic two types of feeding programs in African countries is the normal one which provide the 10:00 tea/porridge and 14:00 lunch or the second one which involves the provision of 10:00 porridge/ tea.

After this, the researcher saw the need of establishing the organization of the feeding programs for the schools that were thought of having these meal programs. The first item that the researcher established was the means to which this, school feeding program were organized. To provide answers for this the researcher gave the respondents some option on which they were supposed to choose from. Such options were School initiatives; Government support; School and local people support and Support from stakeholders. The results in this were as follows; 10 (14.2%) selected school initiatives; 13 (18.6%) selected government support; 18 (25.7%) selected school and local support while the remaining 29 (41.4%) selected support from stakeholders.

A point to note here is that, the proper establishment of these school feeding programs requires a lots of preparations in terms of both financial and non-financial attributes. Hence looking at the organization of these programs, the huge supports come either from the government, local people or other stakeholders. Hence this means in order to establish effective meals provision programs, the school must establish a proper means on obtaining addition resources for running the program, as the programs requires lots of resources in order to be in place. This data, agrees with what Briggs(2008) proposed in his study. In his research which led to a book titled “*school feeding programs: challenges and perspective*”, Briggs, devoted the whole chapter to explain on the various challenges that faces school feeding programs. One of the major points that Briggs pointed was the issue of funding. According to him, funding of these programs has become a problem to the extent that, effective implementation requires the huge support from both government and the non-government organization.

Duah (2001) in doing research in primary schools for Ghana confirms this. In his study he argues that, despite the school feeding programs being supported by school boards, in order to effectively implement the programs, schools receive further help from the Dutch government and the World Health Organization (WHO). Also other funds come from central government in order to add more support from the existing funds from donors. Basically, a point to note from this data is that, both the donors and government must be able to support the SFP in the two wards in order to make the programs effective. Lack of support from this usually results in failure of the programs due to the expensiveness nature of the programs as highlighted by the above mentioned scholars.

Another issue that the researcher was keen to establish was the sufficiency of the meals provided. In this, the researcher asked the respondents if the meals provided were sufficient. The results for this showed that, 21.4% said Yes; 70% said No and the remaining 6 (8.6%) said I don't know. A point to note here is that the respondents were not happy with the nature of the meals that were provided as school menu, either due to shortage in terms of necessary ingredients or due to size. In order to make the provided school meals, the sufficiency of the meals provided should be a key ingredient as in all cases, the objective of the meals provided is to cater for both psychological and physiological needs of the meals for school kids. In order to further provide solution for this, the researcher went further asking the respondents the type of food that they will prefer in order to fulfill their desire to have food at schools. In this majority of them show the need of having two meals per day that is one at 10:00hrs as either in form of porridge or tea, and another at 13:30 or 14:00 in form of strong lunch so as the students can continue for few more hours before going home.

#### **5.4 Research question 2: What are the effects of having and not having feeding programs in schools?**

After establishing the nature of the school feeding programs in the school that has food. The researcher saw the need to ask the respondents on the effects that can be generated by

either having or not having these programs at school. The reasons for establishing this is as to the question posed by Kumar 2009, that “an important question is if the meals are important, why all school don’t establish them?” Hence the researcher also saw the need of establishing the effects from both angles so as to see whether these programs in general have advantages or disadvantages.

To start with the researcher asked the respondents “do you think school meals are important?” the results for this showed that 105(70%)said yes while the remaining 45(30%)said no. Further description of the data showed that out of those who said Yes 105, 56 came from Kinondoni and49 came from Ilala, while those who said No 45 23 came from Ilala and 22 came from Kinondoni. Basically, the general interpretation of this data indicates that, not all the respondents showed the importance of having such meals at school. This can be attributed either due to lack of school meals or due to presence of incomplete school meals.

But majority of the respondents seemed to agree that there are importance’s of having these school meals. This is due to the existence of more than 70% of the respondents who selected yes to the question on whether they think there are nay importance’s of school feeding programs. Basically, presence of huge people who agree with importance of school feeding programs concurs with various literatures that have discussed the importance of various school feeding programs. Such scholars include Bennett (2003) who argues that SFPs in principle improve educational outcomes such as increasing the number of years a learner will spend in school. This has important implications for other health issues because, the longer children stay in school, the less susceptible they are to certain problems, for example, contracting HIV or becoming pregnant teens, and Del Rosso and Marek (1996) state that at least fifteen studies have demonstrated that chronic hunger both in the past and in the present diminishes cognitive development, and that even temporary hunger is associated with poor cognitive development. Hence provision of meals will help in improving children’s cognitive abilities.

However, the researcher saw the need of asking the respondents the reasons as to why they have selected the answers they have selected. In this both respondents (those who said No and those who said yes) were supposed to defend their answers. And in order to do so, the researcher gave the respondents some options and they were supposed to pick an answer from them.

For those who said yes the school feeding programs were important the options to choose from included Improved attendance; improved performance; Student wellbeing; Promote students attachment to education system and others. The answers for this showed that majority of the respondents believed having school meals to school among other improved performance and school attendance. This was showed by high number of the respondents who selected these two as the major benefits that a school can obtain once having a feeding program at school.

A total of 52.9% of the respondents were the one who believed having school meals program at school boost both attendance and performance. The respondents provided an assumption that, providing the school with meals gives them a proper reason to attend school, and also since it has been explained as hunger lead to poor performance (ILO, 2009; UNICEF, 2001; Kumar 2009), hence providing the students with food helps them to improve their performance as they will be studying with full stomach which is also a good advantages for performance. Some respondents argued “*Uwepo wa chakula shuleni ni muhimu kwa afty a ya wanafunzi, pia huboresha uelewa na usikivu kwa wanafunzi*” This translates into “presence of meals is essential to overall health and in improving students understanding and concentration”.

For those who said No, the researcher also gave them some option on which they were supposed to choose one from them so as to establish the disadvantages that can be obtained. In this, the option included: Increase costs; Infectious diseases; Time wasting and others. Majority of these respondent selected increased costs and infectious diseases

as the two major factors that cause dissatisfaction with the school feeding programs. To them, these are the disadvantages that a school feeding programs can bring over as the running of the programs is very expensive, also due to the students being young, a minor mistake in the process of preparing the food will results into a general problem in the health of the student themselves including the spread of infection diseases. Some of the answers provided by the respondents in this were “*Unajua kuwa na chakula shuleni kunaongeza gharama, pia kwa upande mwingine inaleta shida kiafya kutokana na ugumu uliopo katika kuandaa chakula cha watu wengi*” This literally translates to what the respondents has been arguing that school meals increase cost and they also lead to disease problems due to presence of people due to various diseases.

Despite the existence of the respondents that believed there exists a disadvantages of having school feeding programs, a point to note is that, the disadvantages mentioned are basically, theoretically, as their occurrences depends on the weaknesses, as one expects if the foods are poorly prepared this can results into infectious diseases, but what happens when everything is in place?. A point to note here is that, the basic disadvantage that can be generated from these programs is increased in costs as in most case the costs of running the programs are increasing over time due to various reasons including the increasing enrolment of the students. Overall, the first observation that was obtained in this, the respondents from schools with meals where very positive about the effects that were generated through having meals.

Basically, the respondents from schools with meal program seem to provide positive answers concerning the needs of meals in schools. One observable fact was that, even the schools with no meals, they were very positive about the presence of these meals in schools. Some of the respondents went further pointing out that, the schools with no meals are faced with challenges that hinder them from establishing these programs. Basically, to them the advantages generated from having meals are many compared to the advantages of not having meals.

## **5.5 What are the challenges hindering the adoption of feeding programs in primary schools?**

After establishing the effects of the school feeding programs, the researcher was able to identify the presence of group of respondents that do believe in the advantages that can be generated with the school feeding programs however, they believe there are some challenges that hinder the adoption of these school feeding programs. These challenges are as follows;

### **i) Shortage of staffs for supervision**

This was among the few factors that were mentioned by the respondents as causing a drawback towards the proper adoption of the school feeding program. In this, majority of the respondents were under the impression that, the organization of the school feeding programs require the presence of a certain number of staffs whose duty will be to oversee the smooth undertaking of the program. This requirement leads to the creating or formulation of the need of large number of staffs that will be responsible for this supervision. Due to this lack of supervision staffs, majority of the schools have failed to establish these programs or those who have managed to establish school feeding g programs have resulted into the failure of such programs due to the shortage of staffs for supervising these programs. This data concurs with what Kearney (2008) proposed in his study of Vaal region, where despite the effective implementation of the school feeding program, it was faced by the problem of shortage of staffs to supervise the established problem.

### **ii) Lack/limited funds**

Another problem that was mentioned by the respondents was the problem of fund shortage. In this, the respondents were pointing out that, in establishing these programs there is a need for a certain amount of financial resources as there will be the need of various items that are essential in running and smooth operation of the programs. Hence due to limited in terms of addition funds, it has become next to impossible for majority

of the school to establish these programs. In asking those schools which have managed to do so, it was realized that majority of them are organizing these programs with lots of resources coming from an outside sources such as government or other private stakeholders. Basically, this data concurs with what different scholars such as Kristjansson, et.al.(2006) and Langiger, 2011, who all have highlighted lack or limited of funds as the major problem facing majority of the school feeding programs.

### **iii) Health requirements**

The respondents were also under the impression that health requirements are other challenges that hinders the establishment of these feeding programs in schools. This data concurs with the data by (Kearney, 2008; Langinger, 2011). In this, the respondents argued that, in order to have feeding programs in place, there are some health requirements from both responsible ministry and the parents themselves. Basically, there requirements are usually to manage or maintain the eruption of various diseases that are usually the results of poor planning or poor management. Due to this, these requirements were mentioned as forcing the organizers to improve lots of things which in one way or another are usually a problem to most schools that are starting, hence posing as challenges to the establishment of these programs.

### **iv) Limited time**

Although not by many respondents, time was also mentioned as among the factors that pose as a challenge in the establishment of these school feeding programs. In this, the respondents were under the impression that looking on the time available for studying and eating, it is impossible to fit in another one hour for meals, due to this, time seems to be a problem as the existing time does not accommodate extra activity. This concurs with Langinger (2011) who stipulated that in majority of the schools, the time set for schools hours usually end at 14:00 with thirty minutes breaks. In order to do so, there is a need to add another hour in the normal school time so as to be able to accommodate the time that is going to be taken by the meal breaks.

## **CHAPTER SIX**

### **SUMMARY, CONCLUSION AND RECOMMENDATIONS**

#### **6.1 Introduction**

This chapter presents the summary of the findings of the study. The way the conclusions are presented relates to the objectives established at the beginning of the research. Also it is in this chapter where the summary of the research and research recommendations are presented.

#### **6.2 Summary of findings**

The main objective of this study was to compare the effects of feeding programs between schools that have and those that do not have the program. In order to achieve this objective, the study had several specific objectives which reduced the main objective into simple objectives that are also achievable. These objectives included; to identify the nature of the feeding programs being implemented in the primary schools located in Kinondoni and Ilala municipalities; to compare the effects of having and not having feeding programs in primary schools and; to identify the challenges hindering the adoption of feeding programs in schools. Achieving these objectives would have been hard without having research questions that the researcher hoped to answer. These questions included; What is the nature of the school feeding programs?; What are the effects of having and not having feeding programs in schools?; and What are the challenges hindering the adoption of feeding programs in primary schools?.

In order to collect data for this research, the researcher utilized questionnaires, interviews and documentary reviews as data collection methods. Data from primary sources (questionnaires and interviews) gave the researcher an on-site observation which was directly obtained from responders themselves who has first-hand information of the organization of the data. In terms of documentary reviews, this method was essential as

it gave the research more information on the organization, management and the general practice of feeding programs from other regions of the world.

In terms of findings the study had three objectives. First objective which was the nature of the school feeding programs, the research established that, the majority of the respondents are aware of these schools feeding programs. Also different forms of programs such as government funded and community funded were established. Also the researcher identified the overall organization of these school feeding programs in the schools where they exist.

In objective number two which aimed at establishing the effects of having and not having feeding programs in schools. In this it was realized that, having school meals is essential in reducing dropouts, increasing child concentration and reduce overall health challenges resulting from poor feeding habits. While there was no significant challenges that was sought to be brought about by the presence of school feeding programs, though some respondents mentioned increasing costs and health challenges as some of the effects that can be brought about by the presence of school feeding programs.

In third objective which was a challenge hindering the adoption of feeding programs in primary schools, The challenges that was highlighted included; a) Shortage of staffs for supervision; Lack/limited funds; Health requirements; and Limited time.

### **6.3 Conclusion**

The importance of meals to students cannot be emphasized enough to come up with its proper benefits, this is due to the fact that, meals programs do not only solve the physical challenges, they can also be used to solve the psychological problems that are in most cases associated with lack of meals in school (UNICEF 1997). Due to lack of researches on meals in school, this study took the topic as the focus of research. The study major focus was to address the importance of food programs in school, in doing so

the study conducted a questionnaire survey to different people, and in the end this study comes up with the following conclusions.

- Majority of government primary schools do not have meal programs. Those that have meals program it either due to support from outside donors and government or through local people around these schools. A point which is coming out of this is that the huge number of the respondents did agree the school feeding programs are expensive to the extent that, the school themselves cannot afford unless these is support from outside sources.
- It is well known that meals programs are essential in both the students' performance and well-being in the schools. The provision of the meals to students in schools has been explained as to increase both students' performance and their overall performance. In this, the meals are important in terms of helping the student to be fit to undertake their studies as per intended curricular.
- The schools that have not established these meals programs are interested in establishing these meals, however it due to the existence of various challenges that hinders them to adopt these programs. Although the major challenge of fund already is being mentioned, other challenges include shortage of time and staffs and challenges that are posed by health requirements.

#### **6.4 Recommendations**

Due to the several challenges that are facing school programs this study recommends the following:

##### **Creating a reliable time table**

In this, it was argue that the current available time make it impossible to fix in the different meals time. Hence due to this, the researcher think if the school can establish a

well-planned timetable, the same time which was allocated for the normal children break would be planned in a manner that enable the students to get more time to eat and then continue with other activities without affecting the general arranged time table. Or in other alternative, the school can adjust at least to have afternoon classes, where instead of congesting the normal time; the school can add more hours in the afternoon after lunch were students can get more time to eat at the same time not affecting the general timetable for academic purposes.

### **Proper utilization of the existing staffs**

In this, the researcher argues on the point mentioned by the respondents that shortage of staffs can also be a challenge hindering effective adoption of the school feeding programs. In order to solve this problem, the researcher think the school can effectively utilize the existing staffs in a manner that can accommodate every person. Or in another sense, the school can utilize other people who will be helping the school in performing that activity without using money to perform those activities. Hence with this, the school can establish the program by using cheap laborers but at the same time that are effective.

### **Finding extra source for income**

One of the major challenges that were mentioned by the huge number of the respondents was the shortage of funds to support these programs. Several reasons can be attributed to this shortage of funds, however, it since it is not the focus, and the focus here will be to suggest some measures which once implanted can solve the problem of lack of funds. In this, the school can use various different means such as fund raising, grants and even seek for contributions from various organizations. Basically, the researcher assumes that with a good plan in mind various organization including World Bank and world health organization are ready to help any school that is interested in establish such kind of programs. Apart from this,

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## APPENDICES

### 1. Interview Appendix

#### A. Interview guide

- i) What do you understand school feeding programs?
- ii) What do you think are the advantages and disadvantages of school feeding programs?
- iii) Can u name any challenge facing the establishment of school feeding programs?
- iv) If asked on possible ways to tackle the challenges facing school feeding programs. What will you say?
- v) What are your general views on school feeding programs?

### 2. Questionnaire Appendix

#### Part A: Demographic Characteristics

1. Sex:
  - i) M ( )
  - ii) F
  
2. Age
  - i) Education Level
  
3. What is your position at school?
  - i) Student
  - ii) Teacher ( )
  - iii) Parent

***Part B: Benefits of School Feeding Programs***

1. Do you have meals at school?
  - i) Yes
  - ii) No
  
2. If Yes (why) and If No (Why)
  - i) .....
  - ii) .....
  - iii) .....
  - iv) .....
  - v) .....

***Part C: Nature of school feeding programs***

1. If yes to question above (No 3), how is your program organized?
  - i) School initiatives
  - ii) Government support
  - iii) School and local people support
  - iv) Support from stakeholders
  
2. How much food do you get from the school every day?  
.....  
.....
  
3. Do you think school children get enough food while in school?
  - i) Yes
  - ii) No
  - iii) I don't know

4. If not, why?

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

5. Do you think there is any importance of having meals at school?

- i) Yes
- ii) No

6. If yes (Why) and

- i) Improved attendance
- ii) Improved performance
- iii) Student well being
- iv) Promote students attachment to education system
- v) Others  
(specify).....

7. If No (Why)

- i) Increase costs
- ii) Infectious diseases
- iii) Time wasting
- iv) Others (specify) .....

8. What type of meals do you have (if you have meals)

.....  
.....

9. Do you think these meals are sufficient?
  - i) Yes
  - ii) No
  - iii) I don't know
  
10. If you don't have meals, what type of meal will u require once you do?  
 .....
  
11. What is your opinion regarding the school feeding program?  
 .....

***Part D: Challenges of School feeding programs***

1. What do you think are the challenges facing implementing school feeding programs in your school?
  - i) Shortage of staffs for supervision
  - ii) Lack/limited funds
  - iii) Health requirements
  - iv) Limited time
  - v) Others (specify) .....
  
2. What measures do you think can be taken to curb the challenges facing the implementation of school feeding programs?
  - i) Employ more people
  - ii) Subsidies from the government
  - iii) Seeking contributions from parents
  - iv) Increasing classes time to accommodate the long foods breaks
  - v) Others (specify) .....

3. What kind of measures are undertaken to improve the performance of school feeding program?

- i) .....
- ii) .....
- iii) .....
- iv) .....

4. What are the associated problems with School feeding, if any?

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

**Thank you**